Migratory Bird Program Training Survey

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1. Background

As part of a strategic review of the training offered to support the migratory bird program, employees were asked about their training experience and needs for various aspects of their job. The purpose of the survey is to assist the Migratory Bird Program Training Advisory Group to effectively plan future training efforts.

Respondents were asked about the importance of 21 different aspects of their job, their effectiveness in the performance of each aspect, what types of training they had received in that aspect, and if they needed more training in this area.

In addition, respondents were asked if they use an Individual Development Plan to plan for acquiring new skills and development opportunities, how satisfied they are with the training opportunities they have, and if there is any other aspect of their job for which they could use training.

The survey was administered via email. Employees linked to a webpage to complete the questionnaire on-line. Non-respondents were sent 2 reminder emails (at approximately 1-week intervals). Where possible, followup phone calls were made to non-respondents prior to the second reminder email.

The Migratory Bird Program Training Survey began on April 1, 2009. Data collection ended on May 1, 2009.

2. Response rates

The sampling frame was all members of the Migratory Bird Program, a total of 260 persons. The survey was a census of these 260 persons.

Responses were received from 205 persons (79%). 191 of these were useful responses. Of the 14 non-useful responses, 6 persons were not part of the Migratory Bird Program, 3 had retired, 1 had not yet entered on duty, 1 was out of the office during the collection period of the survey, and 3 said that the questions in the survey did not apply to them. No one refused to participate in the survey.

70 persons responded to the initial email (all useful). 51 more persons responded to the first reminder email (50 useful and 1 non-useful). Telephone calls were made to 102 of the 139 non-respondents (37 persons could not be reached by phone). 34 persons were spoken to, and 68 were left messages. Of the 34 persons spoken to, 3 were persons for whom the survey questions did not apply, and 31 agreed to complete the questionnaire (28 did and 3 remained non-response). The 68 messages left resulted in 38 useful responses. It was determined that 10 of the persons who could not be reached by phone should not have been in the sample to begin with. 5 persons who could not be reached by phone did respond to the final reminder email.

Table 1. Response rates

	Number sent	Useful responses	Non-useful responses	Non-response	Useful response rate
Initial email	260	70	0	190	27%
1st reminder email	190	50	0	139	26%
Phone followup	112	66	14	33	67%
2nd reminder email	27	5	0	22	19%
Total	260	191	14	55	78%

Table 2. Response rates, by grade

Grade	Number sent	Useful responses	Non-useful responses	Non-response	Useful response rate
GS 5-9	48	32	4	12	73%
GS 11-13	172	127	6	39	77%
GS 14-15	36	32	0	4	89%
Contractor	4	0	4	0	-
Total	260	191	14	55	78%

Table 3. Response rates, by region

Region	Number sent	Useful responses	Non-useful responses	Non-response	Useful response rate
1	10	7	1	2	78%
2	17	14	1	2	88%
3	20	15	0	5	75%
4	28	24	0	4	86%
5	16	14	0	2	88%
6	17	15	1	1	94%
7	35	27	2	6	82%
8	8	4	4	0	100%
9	109	71	5	33	68%
Total	260	191	14	55	78%

Table 4. Response rates, by function class

Function	Number sent	Useful responses	Non-useful responses	Non-response	Useful response rate
Biology	119	88	4	27	77%
Management	29	25	0	4	86%
Permits	21	20	0	1	95%
Outreach	6	3	2	1	75%
Administration	39	26	3	10	72%
Coordination	19	13	3	3	81%
Information mgmt.	11	6	1	4	60%
BioStatistics	16	10	1	5	67%
Total	260	191	14	55	78%

Note: The 8 function classes were constructed from a more detailed list of employee function by combining similar functions. The intent is to form groups of employees who are roughly similar in terms of their training needs. That is, employees within a function class are likely to have training needs similar to other employees within that class, and less similar to employees in other classes.

The function class of **Biology** was constructed by combining the following more detailed functions:

- Aircraft Pilot, Biology
- Biological Consultation
- Biology

- Biology, ACJV
- Biology, Aircraft Observer
- Biology, Biometrics
- Biology, GIS
- Biology, Grant Administration
- Biology, Gulf Coast JV
- Biology, Gulf Coast JV GIS/Remote Sensing
- Biology, Habitat
- Biology, Operations Specialist
- Biology, Outreach
- Biology, Outreach, Education
- Biology, Regulations
- Biology, Sonoran JV Team Leader
- Biology, Supervisor
- Gamebird Management Specialist
- Grant Administration (4 of 5)
- Inter-disciplinary MB Management Specialist
- Regulations
- Science Coordinator, ACJV

The function class of **Management** was constructed by combining the following more detailed functions:

- Biology, Supervisor, Management
- JV Coordinator, Management
- Management
- Program Analysis (1 of 5)

The function class of **Permits** was constructed by combining the following more detailed functions:

- Lead Permit Examiner & Budget
- Permits
- Wildlife Compliance Specialist

The function class of **Outreach** was constructed by combining the following more detailed functions:

- Biology, Ornithology, Sonoran JV
- Communications, Coordination
- Education and Outreach

- Outreach and Communications
- Outreach and Communications (SFBJV)

The function class of **Administration** was constructed by combining the following more detailed functions:

- Administration
- Development/Management
- Grant Administration (1 of 5)
- Harvest Assessment (1 of 5)
- Program Analysis (2 of 5)

The function class of **Coordination** was constructed by combining the following more detailed functions:

- Coordination
- Coordination (SFBJV)
- Coordinator, Biology
- JV (SFBJV)
- JV Coordination (Gulf Coast)
- JV Coordinator (LMV)
- JV Coordinator (Atl. Coast)
- JV Coordinator (CVJV)
- JV Coordinator (IMW)
- JV Coordinator (PPJV)
- JV Coordinator (RBJV)
- JV Coordinator (SDJV)
- JV Coordinator (Sonoran)
- Program Analysis (2 of 5)

The function class of **Information Management** was constructed by combining the following more detailed functions:

- Data Administrator
- Information Technology
- Natural Resource Planner
- Natural Resource Specialist

The function class of **BioStatistics** was constructed by combining the following more detailed functions:

- Harvest Assessment (7 of 8)
- Population Modeling

The extent of non-response bias is not known, but is probably small. The overall non-response rate is relatively low (22%). This means that, even if non-respondents differ systematically in opinion from respondents, there are too few non-respondents to have a very large effect on the aggregate percentages.

In addition, non-response rates tend to be roughly similar by grade, by region, and by function class – though somewhat higher for region 9 and the function classes of Information Management and BioStatistics. This means that no demographic group is badly over-represented in the remaining non-response.

There is some evidence that the opinions of non-respondents may not differ systematically from those of the respondents. Just under two-thirds of the respondents completed the questionnaire upon receipt of the email, while the others did so only after receiving a telephone reminder. Without the reminder, most of these would have remained non-response. The persons who responded only after a telephone reminder can be thought of as being intermediate between the email responders and the remaining non-response. If the telephone responders systematically differed in opinions from the email responders, this would suggest that the remaining non-response may also differ systematically.

There are some differences between the email and telephone responders; email respondents are more likely to report being either very satisfied or dissatisfied with their training opportunities. However, responses from the 2 groups are broadly very similar. This suggests that the remaining non-respondents might also not differ greatly from the respondents.

Table 5. Comparison of Email and Telephone Responders

	Email	Phone
Function class - % of total		
Biology	49	41
Management	11	17
Permits	12	8
Outreach	2	0
Administration	13	15
Coordination	5	11
Info. Mgmt.	3	3
BioStatistics	5	6
Years of Experience - %		
0-2	20	17
3-5	25	20
6-10	19	29
> 10	36	34
Region - %		
1	6	0
2	7	8
3	9	6
4	11	15
5	8	6
6	8	8
7	14	15
8	3	0
9	34	42
Satisfaction with training - %		
Very satisfied	13	6
Satisfied	59	81
Dissatisfied	28	13

	Email	Phone
Part of your job - % Yes		
Coordinate outside FWS	90	89
Engage public	39	39
Prioritize projects	74	70
Coordinate within FWS	80	73
Collaborate with partners	78	66
Outreach	54	57
Non-English language	22	20
Facilitator	46	35
Communicate	99	97
Collaborative prob. solving	78	74
GIS technology	46	44
Landscape context	75	68
Climate change	57	53
Population ecology	64	65
Latest IT	77	70
Bird conservation plans	56	44
Bird disease	27	28
Models	46	42
Statistical techniques	49	50
Strategic habitat conserv.	59	58
Leadership	77	86

3. Demographic Information

Respondents were asked to classify themselves in 4 different ways. The 4 types of demographic information sought were:

- Where do you fit in the organization?
- How many years of experience do you have with the Migratory Bird Program?
- What are your areas of responsibility?
- Do you use an Individual Development Plan (IDP) to plan for acquiring new skills and development opportunities?

For the question: "Where do you fit in the organization?", possible responses were:

- Washington Office / Division of Migratory Bird Habitat Conservation
- Regional Office
- Field Office
- Other

For the question: "How many years of experience do you have with the Migratory Bird Program?", possible responses were:

- Less than 1 year
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 to 10 years
- More than 10 years

For the question: "What are your areas of responsibility?", possible responses were:

- Population Monitoring
- Population Analysis
- Population Research
- Population Management
- Habitat Planning
- Habitat Conservation/Restoration
- Habitat Technical Assistance
- Habitat Assessment
- Permits
- Legal compliance other than permits
- Hunting Regulations
- Coordination and Partnerships
- Consultation/Technical Assistance
- Communications and Outreach
- Improving Recreational Opportunities
- Administrative/Fiscal Support

- Management/Supervision
- Climate Change Study

For the question, “Do you use an Individual Development Plan (IDP) to plan for acquiring new skills and development opportunities?”, possible responses were:

- Yes
- No

Where do you fit in the organization?

Table 6. Organizational level

Level	Number	Percent
Washington Office	56	30
Regional Office	88	46
Field Office	39	21
Other	7	4

Persons who reported “Other” were asked to specify the other organizational level. 6 of the 7 did.

- A Joint Venture
- GCJV
- Joint Venture
- Joint Venture Office
- Joint Venture Office
- JV

How many years of experience do you have with the Migratory Bird Program?

Table 7. Years in Migratory Bird Program

Experience	Number	Percent
Less than 1 year	12	6
1 year	7	4
2 years	17	9
3 years	22	12
4 years	7	4
5 years	15	8
6 to 10 years	43	23
More than 10 years	66	35

For the purpose of analysis in the remainder of this report, the first 6 choices for years of experience have been collapsed into 2 broader categories.

- Less than 1 year, 1 year, and 2 years are collapsed into 0-2 years
- 3 years, 4 years, and 5 years are collapsed into 3-5 years

Table 8. Years of experience in Migratory Bird Program

Experience	Number	Percent
0 to 2 years	36	19
3 to 5 years	44	23
6 to 10 years	43	23
More than 10 years	66	35

What are your areas of responsibility?

Table 8. Areas of responsibility

Area of responsibility	Number	Percent
Population monitoring	85	45
Population analysis	59	31
Population research	47	25
Population management	63	33
Habitat planning	45	24
Habitat conservation/restoration	43	23
Habitat technical assistance	22	12
Habitat assessment	39	20
Permits	39	20
Other legal compliance	18	9
Hunting regulations	32	17
Coordination and partnerships	90	47
Consultation/technical assistance	62	33
Communications and outreach	65	34
Improving recreation opportunities	10	5
Administrative/fiscal support	39	20
Management/supervision	51	27
Climate change study	20	11

Do you use an IDP to plan for acquiring new skills and development opportunities?

Table 9. Use an IDP?

Use an IDP?	Number	Percent
Yes	132	70
No	57	30

The persons who don't use an IDP to plan for acquiring new skills and development activities are concentrated in region 9 and among the function classes of Outreach, Info Mgmt, and BioStatistics. They tend to be persons at higher grade levels and with more years of experience.

Table 10. Use IDP by demographic groups

	Number		Percent	
	Yes	No	Yes	No
Region				
1	7	0	100	0
2	10	4	71	29
3	11	4	73	27
4	19	5	79	21
5	13	1	93	7
6	15	0	100	0
7	19	7	73	27
8	4	0	100	0
9	34	36	49	51
Grade level				
GS 5-9	28	3	90	10
GS 11-13	84	42	67	33
GS 14-15	20	12	63	38
Years of experience				
0-2	31	5	81	19
3-5	31	13	70	30
6-10	27	16	63	37
> 10	42	22	66	34
Function class				
Biology	61	26	70	30
Management	17	8	68	32
Permits	18	2	90	10
Outreach	1	2	33	67
Administration	22	3	88	12
Coordination	11	2	85	15
Info Mgmt	1	5	17	83
BioStatistics	1	9	10	90

4. Satisfaction

Respondents were asked: "How satisfied are you with the training opportunities you have to support your Migratory Bird work?" Possible responses were:

- Very satisfied
- Satisfied
- Dissatisfied
- Very dissatisfied
- No opinion

The tables that follow include only those responses that expressed an opinion.

The mean is the arithmetic average of the responses, where very satisfied =1, satisfied = 2, dissatisfied = 3, and very dissatisfied = 4. The median is the satisfaction of the mid-most response (where half the respondents are more satisfied, and half are less satisfied). The mode is the most frequently expressed level of satisfaction. The standard deviation measures the dispersion of the responses.

Simple satisfaction is the sum of satisfied and very satisfied. Simple dissatisfaction is the sum of dissatisfied and very dissatisfied.

Table 11. Satisfaction with training

Rating	Number	Percent		Statistics	
Very satisfied	17	11		No. of responses	161
Satisfied	107	66		Mean	2.15
Dissatisfied	33	20		Median	2
Very dissatisfied	4	2		Mode	2
				Std. Dev.	0.63

Satisfaction with training is significantly lower for Permits, and significantly higher for Management, Administration, and Coordination. There are too few responses for the classes of Outreach and Info Mgmt for comparisons to be meaningful.

Table 12. Satisfaction with training, by function class, number of responses

Function class	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Biology	6	47	20	1	53	21
Management	3	17	1	0	20	1
Permits	4	6	7	3	10	10
Outreach	0	1	0	0	1	0
Administration	2	18	1	0	20	1
Coordination	2	7	0	0	9	0
Info Mgmt	0	3	2	0	3	2
BioStatistics	0	8	2	0	8	2
Total	17	107	33	4	124	37

Table 13. Satisfaction with training, by function class, percent of responses

Aspect	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Biology	8	64	27	1	72	28
Management	14	81	5	0	95	5
Permits	20	30	35	15	50	20
Outreach	0	100	0	0	100	0
Administration	10	86	5	0	95	5
Coordination	22	78	0	0	100	0
Info Mgmt	0	60	40	0	60	40
BioStatistics	0	80	20	0	80	20
Total	11	66	20	2	77	23

Table 14. Satisfaction with training, by function class, summary statistics

Aspect	No. of responses	Mean	Median	Mode	Standard deviation
Biology	74	2.22	2	2	0.60
Management	21	1.90	2	2	0.44
Permits	20	2.45	2.5	3	1.00
Outreach	1	2.00	2	2	-
Administration	21	1.95	2	2	0.38
Coordination	9	1.78	2	2	0.44
Info Mgmt	5	2.40	2	2	0.55
BioStatistics	10	2.20	2	2	0.42
Total	161	2.15	2	2	0.63

Satisfaction is somewhat lower in regions 2 and 5. There are too few responses from region 8 for comparisons to be meaningful.

Table 15. Satisfaction with training, by region, number of responses

Region	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
1	1	4	2	0	5	2
2	1	6	3	1	7	4
3	1	10	2	1	11	3
4	2	14	3	0	16	3
5	1	8	3	2	9	5
6	4	7	3	0	11	3
7	5	14	5	0	19	5
8	0	3	0	0	3	0
9	2	41	12	0	43	12
Total	17	107	33	4	124	37

Table 16. Satisfaction with training, by region, percent of responses

Aspect	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
1	14	57	29	0	71	29
2	9	55	27	9	64	36
3	7	71	14	7	79	21
4	11	74	16	0	84	16
5	7	57	21	14	64	36
6	29	50	21	0	79	21
7	21	58	21	0	79	21
8	0	100	0	0	100	0
9	4	75	22	0	78	22
Total	11	66	20	2	77	23

Table 17. Satisfaction with training, by region, summary statistics

Aspect	No. of responses	Mean	Median	Mode	Standard deviation
1	7	2.14	2	2	0.69
2	7	2.36	2	2	0.81
3	14	2.21	2	2	0.70
4	19	2.05	2	2	0.52
5	14	2.43	2	2	0.85
6	14	1.93	2	2	0.73
7	24	2.00	2	2	0.66
8	3	2.00	2	2	0
9	55	2.18	2	2	0.48
Total	161	2.15	2	2	0.63

Satisfaction with training is significantly higher for GS 14-15 employees.

Table 18. Satisfaction with training, by grade level, number of responses

Grade level	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
GS 5-9	6	17	4	3	23	7
GS 11-13	7	71	27	1	78	28
GS 14,15	4	19	2	0	23	2
Total	17	107	33	4	124	37

Table 19. Satisfaction with training, by grade level, percent of responses

Grade level	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
GS 5-9	20	57	13	10	77	23
GS 11-13	7	67	26	1	74	26
GS 14,15	16	76	8	0	92	8
Total	11	66	20	2	77	23

Table 20. Satisfaction with training, by grade level, summary statistics

Grade level	No. of responses	Mean	Median	Mode	Standard deviation
GS 5-9	30	2.13	2	2	0.86
GS 11-13	106	2.21	2	2	0.56
GS 14,15	25	1.92	2	2	0.49
Total	161	2.15	2	2	0.63

Satisfaction is significantly higher in the Field Offices. There are too few responses in the "Other" category for comparisons to be meaningful.

Table 21. Satisfaction with training, by organizational level, number of responses

Org level	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Wash. Office	2	33	9	0	35	9
Reg. Office	11	47	20	4	58	24
Field Office	3	25	2	0	28	2
Other	1	1	2	0	2	2
Total	17	107	33	4	124	37

Table 22. Satisfaction with training, by organizational level, percent of responses

Org level	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Wash. Office	5	75	20	0	80	20
Reg. Office	13	57	24	5	71	298
Field Office	10	83	7	0	93	7
Other	25	25	50	0	50	50
Total	11	66	20	2	77	23

Table 23. Satisfaction with training, by organizational level, summary statistics

Org level	No. of responses	Mean	Median	Mode	Standard deviation
Wash. Office	44	2.16	2	2	0.48
Reg. Office	82	2.21	2	2	0.73
Field Office	30	1.97	2	2	0.41
Other	4	2.25	2.5	3	0.96
Total	161	2.15	2	2	0.63

There are no significant differences in satisfaction by years of experience.

Table 24. Satisfaction with training, by years of experience, number of responses

Years	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
0 to 2	3	16	7	0	19	7
3 to 5	7	25	5	2	32	7
6 to 10	2	26	10	0	28	10
More than 10	5	38	11	2	43	13
Total	17	107	33	4	124	37

Table 25. Satisfaction with training, by years of experience, percent of responses

Years	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
0 to 2	12	62	27	0	73	27
3 to 5	18	64	13	5	82	18
6 to 10	5	69	26	0	74	26
More than 10	9	68	20	4	77	23
Total	11	66	20	2	77	23

Table 26. Satisfaction with training, by years of experience, summary statistics

Years	No. of responses	Mean	Median	Mode	Standard deviation
0 to 2	26	2.15	2	2	0.61
3 to 5	39	2.05	2	2	0.72
6 to 10	38	2.21	2	2	0.53
More than 10	56	2.18	2	2	0.64
Total	161	2.15	2	2	0.63

Satisfaction is significantly lower for employees with responsibility in the areas of Permits, Improving Recreation, and Climate Change Study. Satisfaction is significantly higher for employees with responsibility in the area of Mgmt/supervision.

Table 27. Satisfaction with training, by area of responsibility, number of responses

Area of responsibility	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple sat.	Simple dissat.
Population monitoring	7	51	18	1	58	19
Population analysis	5	36	18	1	41	12
Population research	3	28	10	1	31	11
Population mgmt	1	40	12	1	41	13
Habitat planning	3	26	5	1	29	6
Habitat conservation	3	24	6	1	27	7
Habitat tech assistance	3	12	3	1	15	4
Habitat assessment	4	21	6	1	25	7
Permits	5	17	8	3	22	11
Other legal compliance	1	10	4	0	11	4
Hunting regulations	1	22	5	1	23	6
Coordination/partnerships	3	57	13	1	60	14
Consultation/tech assist	3	35	14	1	38	15
Communications/outreach	4	36	14	1	40	15
Improving recreation	0	5	2	1	5	3
Admin/fiscal support	4	24	6	1	28	7
Mgmt/supervision	6	32	4	0	68	4
Climate change study	2	10	6	0	12	6
Total	17	107	33	4	124	37

Table 28. Satisfaction with training, by area of responsibility, percent of responses

Area of responsibility	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple sat.	Simple dissat.
Population monitoring	9	66	23	1	75	25
Population analysis	9	68	21	2	77	23
Population research	7	67	24	2	74	26
Population mgmt	2	74	22	2	76	24
Habitat planning	9	74	14	3	83	17
Habitat conservation	9	71	18	3	79	21
Habitat tech assistance	16	63	16	5	79	21
Habitat assessment	13	66	19	3	78	22
Permits	13	53	25	9	66	34
Other legal compliance	7	67	27	0	73	27
Hunting regulations	3	76	17	3	79	21
Coordination/partnerships	4	77	18	1	81	19
Consultation/tech assist	6	66	26	2	72	28
Communications/outreach	7	66	26	2	73	27
Improving recreation	0	63	25	13	63	38
Admin/fiscal support	11	69	17	3	80	20
Mgmt/supervision	14	76	10	0	90	10
Climate change study	11	56	33	0	67	33
Total	11	66	20	2	77	23

Table 29. Satisfaction with training, by area of responsibility, summary statistics

Area of responsibility	No. of responses	Mean	Median	Mode	Standard deviation
Population monitoring	77	2.17	2	2	0.59
Population analysis	53	2.15	2	2	0.60
Population research	42	2.21	2	2	0.61
Population mgmt	54	2.24	2	2	0.51
Habitat planning	35	2.11	2	2	0.58
Habitat conservation	34	2.15	2	2	0.61
Habitat tech assistance	19	2.11	2	2	0.74
Habitat assessment	32	2.13	2	2	0.66
Permits	33	2.27	2	2	0.84
Other legal compliance	15	2.20	2	2	0.56
Hunting regulations	29	2.21	2	2	0.56
Coordination/partnerships	74	2.16	2	2	0.50
Consultation/tech assist	53	2.25	2	2	0.59
Communications/outreach	55	2.22	2	2	0.60
Improving recreation	8	2.50	2	2	0.76
Admin/fiscal support	35	2.11	2	2	0.63
Mgmt/supervision	42	1.95	2	2	0.49
Climate change study	18	2.22	2	2	0.65
Total	161	2.15	2	2	0.63

There is no significant difference in satisfaction based on the use or non-use of an IDP.

Table 30. Satisfaction with training, by use IDP, number of responses

Use IDP?	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Yes	15	74	21	3	89	24
No	2	33	11	1	35	12
Total	17	107	33	4	124	37

Table 31. Satisfaction with training, by use IDP, percent of responses

Use IDP?	Very satisfied	Satisfied	Dissat.	Very dissat.	Simple satisfaction	Simple dissat.
Yes	13	66	19	3	79	21
No	4	70	23	2	74	26
Total	10	67	20	3	77	23

Table 32. Satisfaction with training, by use IDP, summary statistics

Use IDP?	No. of responses	Mean	Median	Mode	Standard deviation
Yes	113	2.11	2	2	0.65
No	47	2.23	2	2	0.56
Total	161	2.15	2	2	0.63

5. Aspects of Job, and Training for Each

Respondents were asked about 21 different aspect of job performance. The 21 aspects were:

1. Coordinate with other federal/state/NGO bird conservation organizations
2. Engage the public in policy and program improvements, including asking our customers how we can improve service
3. Prioritize your projects in order of conservation importance
4. Coordinate within the Service (other regions or other programs) for national consistency in policies and procedures
5. Collaborate with partners on projects of mutual interest (for example, State wildlife action plans, wind towers, seabird by catch, etc.)
6. Increase public awareness of the value of bird conservation through outreach efforts
7. Communicate in languages other than English to serve your customers or partners
8. Serve as a facilitator to assist diverse groups toward better communication and problem solving
9. Communicate effectively through listening, speaking, and writing skills
10. Engage in collaborative problem solving with those that disagree with you
11. Use GIS technologies
12. Answer biological questions in a broad, landscape context
13. Assess impacts of climate change to species and habitat
14. Apply population ecology principles to your problem solving and decisions
15. Adapt work to use latest information management systems (IT)
16. Develop and implement bird conservation plans
17. Recognize, plan for, and respond to bird disease
18. Use models in conservation design and planning
19. Apply statistical techniques to support the assessment of wildlife populations or habitat management activities
20. Apply any element of Strategic Habitat Conservation in your work
21. Provide leadership

For each of the 21 aspects of job performance, respondents were asked a series of 8 questions. The 8 questions were:

- Is this part of your job?
- How important is this for doing your job successfully?
- How important do you think this will be for doing your job successfully in 3-5 years?
- How effective are you currently in the performance of this?
- Have you received training for this aspect of job performance?
- If YES, how was the training provided?
- Do you feel you need more training in this area?
- Comments on this?

For the question, “Is this part of your job?”, possible responses were:

- Yes
- No

For the questions, “How important is this for doing your job successfully?” and “How important do you think this will be for doing your job successfully in 3-5 years?”, possible responses were on a scale of 1 to 4, where:

- 1 = Critical
- 4 = Not important

For the question, “How effective are you currently in the performance of this?”, possible responses were on a scale of 1 to 4, where:

- 1 = Highly effective
- 4 = Ineffective

For the question, “Have you received training for this aspect of job performance?”, possible responses were:

- Yes
- No

For the question, “If YES, how was the training provided?”, possible responses were:

- NCTC classroom training
- Classroom training other than NCTC
- On-line training
- Journals or books
- Details and special projects
- On-the-job training
- Coaching
- Helped by a mentor outside the Service
- Written guidance
- Job aids

For the question, “Do you feel that you need more training in this area?”, possible responses were:

- Yes
- No

Aspect #1 : Coordinate with other federal/state/NGO bird conservation organizations

Coordinate with other organizations is part of most employees' jobs (90%).

It is significantly less likely to be part of the jobs of:

- Function class: Administration, Information Management
- Area of responsibility: Admin/fiscal support
- Grade level: GS 5-9
- Years of experience: 0 to 2

Almost all employees consider it an important part of their current job (95%).

- 68% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for Outreach to 100% for BioStatistics

Almost all employees think it will be an important part of their job in the future (95%).

- 71% think it will be "Critical"
- Responses for "Important Now" and "Important in the Future" are almost identical

Almost all employees think they are currently effective at this (93%).

- The % of those thinking themselves ineffective at this is slightly higher for the Biology function group
- 27% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 0% for Outreach to 53% for Permits

Just under half of the respondents said they had received training in this (47%).

- Significantly less likely to have received training are the function classes: Outreach, Information Management, and Coordination

Of those who had received training:

- Most had On-the-job training (93%)
- 21% had NCTC classroom training, and 15% other classroom training

A minority said they needed more training in this (38%).

Desire for more training in this is somewhat higher among:

- Function class: Biology, Permits, BioStatistics
- Grade level: GS 11-13
- Years of experience: 0 to 2
- Region: 4

Table 1-1. Is Coordinate with other organizations part of your job?

	Number	Percent
Yes	171	90
No	20	10

Table 1-2. Who has Coordinate with other organizations as part of their job?

	Number	Percent
Function class		
Biology	84	96
Management	25	100
Permits	18	90
Outreach	3	100
Administration	14	54
Coordination	13	100
Info Mgmt	4	67
BioStatistics	10	100
Area of responsibility		
Population monitoring	84	99
Population analysis	58	98
Population research	47	100
Population mgmt	63	100
Habitat planning	45	100
Habitat conservation	42	98
Habitat tech assistance	22	100
Habitat assessment	39	100
Permits	34	87
Other legal compliance	18	100
Hunting regulations	32	100
Coordination/partnerships	90	100
Consultation/tech assist	62	100
Communications/outreach	64	99
Improving recreation	10	100
Admin/fiscal support	28	72
Mgmt/supervision	41	100
Climate change study	20	100

	Number	Percent
Region		
1	6	86
2	14	100
3	14	93
4	22	92
5	12	86
6	13	87
7	23	85
8	4	100
9	63	89
Grade level		
GS 5-9	21	66
GS 11-13	118	93
GS 14-15	32	100
Organizational level		
Wash. Office	49	88
Reg. Office	79	90
Field Office	35	90
Other	7	100
Years of experience		
0 to 2	28	78
3 to 5	40	91
6 to 10	40	93
More than 10	61	92
Total	171	90

Table 1-3. Coordinate with other organizations : Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	116	68		No. of responses	170
2	45	27		Mean	1.37
3	9	5		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.58

Table 1-4. Coordinate with other organizations : Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	120	71		No. of responses	170
2	41	24		Mean	1.35
3	8	5		Median	1
4 = Not important	1	1		Mode	1
				Std. Dev.	0.60

Table 1-5 Coordinate with other organizations : Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	45	27		No. of responses	169
2	112	66		Mean	1.80
3	12	7		Median	2
4 = Ineffective	0	0		Mode	2
				Std. Dev.	0.55

Table 1-6. Coordinate with other organizations : Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	56	20	8	0	76	8
Management	17	8	0	0	25	0
Permits	13	4	1	0	17	1
Outreach	0	3	0	0	3	0
Administration	7	6	0	0	13	0
Coordination	11	2	0	0	13	0
Info Mgmt	2	2	0	0	4	0
BioStatistics	10	0	0	0	10	0
Total	116	45	9	0	161	9

Table 1-7. Coordinate with other organizations : Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	67	24	10	0	90	10
Management	68	32	0	0	100	0
Permits	72	22	6	0	94	6
Outreach	0	100	0	0	100	0
Administration	54	46	0	0	100	0
Coordination	85	15	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	100	0	0	0	100	0
Total	68	27	5	0	95	5

Table 1-8. Coordinate with other organizations : Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	84	1.43	1	1	0.66
Management	25	1.32	1	1	0.48
Permits	18	1.33	1	1	0.59
Outreach	3	2.00	2	2	0
Administration	13	1.46	1	1	0.52
Coordination	13	1.15	1	1	0.38
Info Mgmt	4	1.50	1.5	1 or 2	0.58
BioStatistics	10	1.00	1	1	0
Total	170	1.37	1	1	0.58

Table 1-9. Coordinate with other organizations : Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	58	19	7	0	77	7
Management	19	6	0	0	25	0
Permits	13	3	1	1	16	2
Outreach	0	3	0	0	3	0
Administration	7	6	0	0	13	0
Coordination	11	2	0	0	13	0
Info Mgmt	2	2	0	0	4	0
BioStatistics	10	0	0	0	10	0
Total	120	41	8	1	161	9

Table 1-10. Coordinate with other organizations : Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	69	23	8	0	92	8
Management	76	24	0	0	100	0
Permits	72	17	6	6	89	11
Outreach	0	100	0	0	100	0
Administration	54	46	0	0	100	0
Coordination	85	15	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	100	0	0	0	100	0
Total	71	24	5	1	95	5

Table 1-11. Coordinate with other organizations : Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	84	1.39	1	1	0.64
Management	25	1.24	1	1	0.44
Permits	18	1.44	1	1	0.86
Outreach	3	2.00	2	2	0
Administration	13	1.46	1	1	0.52
Coordination	13	1.15	1	1	0.38
Info Mgmt	4	1.50	1.5	1 or 2	0.58
BioStatistics	10	1.00	1	1	0
Total	170	1.35	1	1	0.60

Table 1-12. Coordinate with other organizations : Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	20	54	10	0	74	10
Management	2	22	1	0	24	1
Permits	9	7	1	0	16	1
Outreach	0	3	0	0	3	0
Administration	4	9	0	0	13	0
Coordination	6	7	0	0	13	0
Info Mgmt	1	3	0	0	4	0
BioStatistics	3	7	0	0	10	0
Total	45	112	12	0	157	12

Table 1-13. Coordinate with other organizations : Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	24	64	12	0	88	12
Management	8	88	4	0	96	4
Permits	53	41	6	0	94	6
Outreach	0	100	0	0	100	0
Administration	31	69	0	0	100	0
Coordination	46	54	0	0	100	0
Info Mgmt	25	75	0	0	100	0
BioStatistics	30	70	0	0	100	0
Total	27	66	7	0	93	7

Table 1-14. Coordinate with other organizations : Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	84	1.88	2	2	0.59
Management	25	1.96	2	2	0.35
Permits	17	1.53	1	1	0.62
Outreach	3	2.00	2	2	0
Administration	13	1.69	2	2	0.48
Coordination	13	1.54	2	2	0.52
Info Mgmt	4	1.75	2	2	0.50
BioStatistics	10	1.70	2	2	0.48
Total	169	1.80	2	2	0.55

Table 1-15. Coordinate with other organizations : Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	41	49	43	51
Management	13	52	12	48
Permits	10	56	8	44
Outreach	0	0	3	100
Administration	7	50	7	50
Coordination	4	31	9	69
Info Mgmt	0	0	4	100
BioStatistics	5	50	5	50
Total	80	47	91	53

Table 1-16. Coordinate with other organizations : Method of training

Method	Number	Percent
NCTC classroom training	17	21
Other classroom training	12	15
On-line training	3	4
Journals or books	9	11
Details/special projects	22	28
On-the-job training	74	93
Coaching	21	26
Mentor outside the Service	10	13
Written guidance	11	14
Job aids	3	4

Table 1-17. Coordinate with other organizations : Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	38	46	44	54
Management	6	25	18	75
Permits	7	44	9	45
Outreach	0	0	3	100
Administration	2	15	11	85
Coordination	3	23	10	77
Info Mgmt	2	50	2	50
BioStatistics	4	40	6	60
Total	62	38	103	62

Table 1-18. Who needs more training in Coordinate with other organizations?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	38	45	46
Mgmt	6	25	25
Permits	7	41	44
Outreach	0	0	0
Admin	2	11	15
Coordination	3	23	23
Info Mgmt	2	33	50
BioStatistics	4	40	40
Grade level			
GS 5-9	7	27	35
GS 11-13	47	40	41
GS 14-15	8	26	26
Years of experience			
0-2	14	45	52
3-5	15	36	39
6-10	16	40	41
> 10	16	26	28

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	43	50
2	5	36	36
3	5	36	36
4	12	57	60
5	4	33	33
6	3	21	25
7	5	21	23
8	1	25	25
9	24	36	39
Organizational level			
Wash Office	17	33	36
Reg. Office	26	33	34
Field Office	14	39	41
Other	4	57	57

20 respondents said Coordinate with other organizations is NOT part of their job.

Table 1-19. NOT part of job responses for Coordinate with other organizations

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	9	1 or 2	0	0	3.78
Important Future?	9	1 or 2	3	33	3.11
Effective?	8	1 or 2	3	38	3.00
Received training?	13	Yes	1	8	
Need training?	11	Yes	1	9	

48 persons commented on the aspect of Coordinate with other organizations.

From those for whom this is part of their job:

Biology function group:

- Any quality training that would improve my ability to effectively coordinate with partners resulting in positive impacts to conservation delivery (on-the-ground) would be welcomed and useful .
- As a PIF coordinator, this is an important aspect of my job. All I lack is time to do it better and more frequently.
- Guidance at critical junctions, maybe - but not necessarily formal training.
- have done this whole career, before coming to FWS
- I answered yes in answer to this question - but only at the field level. If this question was directed to encompass on a higher level, then my answer should have been no. Difficult to answer either yes or no as to whether I need more training. I see coordination with other agencies results from mandates/goals that are common to both agencies. Having contacts with other agencies is necessary for coordination to occur. I do not see how classroom training could enhance this. Rather on the job training as relates to specific projects with which one is involved.
- I believe this is a very broad aspect of job performance throughout the Migratory Bird Program that includes many of the numbered aspects that follow.
- I consider my training on personality types and communication styles to be a liberal application in coordination training.
- I don`t feel I need more training to coordinate, just more information on what other organizations are doing, so I know better which projects/goals are in accord with ours.
- I must admit I`m not clear what training for this competency would look like. Also I have learned to do this on-the-job, but I wouldn`t really consider that training rather than necessity. I figure it out and do the best I can based on what I already know. Basically this requires knowing initiatives/committees/working groups/meetings and appropriate organizational contacts (interagency relationships) and the motivation to outreach as appropriate and make contacts to facilitate this coordination. My best guess at how to train this would be on-the-job training or some other form of job aid that guides the employee on "who`s who".
- I think that having the right personality and using common sense is 75% of coordinating with partners. The rest you learn by doing.
- I would like to add "details and special projects" as an area where I receive training.
- I`m not sure how it would be done, but I`d be interested if it seemed like it would help me do my job better.
- I`ve been doing this for 13 years. with no real training, just doing. I feel like I could be the trainer.
- It is good to keep current on all aspects of the job. I`ve been here a long time, and welcome ways to update my skills.

- Just started job 2 months ago. Expect to have opportunities for training.
- NCTC courses that would help me are not available when I can take them.
- no formal training -- partnerships not always fully encouraged
- On this, and on a number of the coordination & communication questions, it`s not so much that training would make a great deal of difference. It`s more a question of recognition by management that the job would be better carried out by improvements in coordination and communication.
- The course offered by NCTC about funding and partnerships would be extremely useful to me. I was signed up for the May course but had to cancel due to conflicts. I would like to see the course offered again.

Management function group:

- Cooperation and coordination is essential to every relationship. This is a life skill learned at an early age.
- I believe we can always improve our coordination with our partners, whether we need training to do this is another question.
- learned by doing over a career spanning more than three decades
- Much of this performance is based on people skills that the incumbent has. I believe these skills are better learned on the job from experience rather than from formal training.
- No, just more time on the job
- This is a key part of our work with Migratory Birds
- We need training on coordination with private industry.
- While more training is not needed, it would be helpful to have a central database that contains all partners and organizations with information on how they partner with the Service and which programs the partners are active.

Permits function group:

- I developed the Customer Service mechanisms on my own.
- Overall there is no "standard" training manual for Permits - the last manual was compiled in 1997 and is outdated. I`m currently updating the "permit type" procedures/instructions for new employee BUT done as needed due to staff and resource constraints - low process (I do not plan to be full time employee for the next 3-5 years)
- Still missing some very important aspects of the job, hopefully I will pickup.
- The ability to provide correct information verbally with outside agencies is critical part of our position. Classroom training would be ideal for new hires.
- Time and $$ seem to be an issue for us in permits. The right type of training is always beneficial.
- Training received in my previous private sector positions and via my J.D.

Administration function group:

- All I do is coordinate with the other Federal/State/NGO partners for payments/invoices that they submit for payment in reference to Cooperative Agreements/Grants. I make sure the invoices are correct and I coordinate with them to let them know when they have mistakes with their account balance, etc.
- Always to keep up with changes in my department
- conflict resolution and partnerships management types of training would be helpful
- I don`t coordinate but I do work with these individuals from time to time.
- On the job training has been sufficient to meet the needs of this field office.
- Primarily deal with the agreement side of issues. Such as preparing acquisition requests, payments, etc.

Coordination function group:

- best learned through experience
- Had not thought about getting training for this.
- I think coordination is often something learned through experience and dependent on personality (open to possibility, good listener, flexible). Coordination requires exposure to these partners, but the venues for exchange are not necessarily what I would consider training.
- I`ve been coordinating all sorts of projects/programs for years. And I`ve had informal training and training with jobs before FWS not specifically with Fed, state, NGO in mind. this wouldn`t be my priority for training but new tips would be interesting. do you address facilitation below? I could use Facilitation about level 3.

Information Management function group:

- All Mig Bird staff, JVs included could probably use more training in working with other entities. Gaining an understanding of partner roles/responsibilities, their involvement in a voluntary organization, and their point of view would help with partnership building and maintaining a vibrant partnership. Don`t think there is any mandatory training for new JV staff on this or refresher courses for existing staff.

BioStatistics function group:

- formal methods for dealing with multi-objective management problems formal methods in elicitation and conflict resolution
- I would like to take a course in Project development or management.
- there`s always room for improvement

From those for whom this is NOT part of their job:

- I measure water for water rights issues. I do not have much to do with migratory birds.
- It does not apply to permits.

Aspect #2 : Engage the public in policy and program improvements, including asking our customers how we can improve service

Engage the public is part of less than half of employees' jobs (40%).

It is significantly more likely to be part of the jobs of:

- Function class: Management, Permits
- Area of responsibility: Habitat tech assistance, Permits, Other legal compliance, Improving recreation, Mgmt/supervision
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:

- Function class: Administration, Info mgmt., BioStatistics
- Organizational level: Field office

The only function classes for which there are enough responses to make comparisons meaningful are: Biology, Management, Permits.

Most employees consider it an important part of their current job (84%).

- 34% consider it "Critical"
- The % who consider it "Critical" ranges from 20% for Biology to 50% for Permits

Most employees think it will be an important part of their jobs in the future (88%).

- 43% think it will be "Critical"
- The % who think it will be "Critical" ranges from 30% for Biology to 52% for Management

A majority of employees think they are currently effective at this (78%).

- 14% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 5% for Management to 29% for Permits

Less than half of the respondents said they had received training in this (38%).

Of those who had received training:

- Most had On-the-job training (87%).
- 14% had NCTC classroom training, and 32% other classroom training

A minority said they needed more training in this (39%).

Desire for more training in this is significantly higher among:

- Years of experience: 6 to 10

Desire for more training is significantly lower among:

- Organizational level: Field office

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (16 of 114 = 14%).

Table 2-1. Is Engage the public part of your job?

	Number	Percent
Yes	75	40
No	114	60

Table 2-2. Who has Engage the public as part of their job?

	Number	Percent
Function class		
Biology	30	34
Management	21	84
Permits	14	70
Outreach	2	67
Administration	2	8
Coordination	5	39
Info Mgmt	0	0
BioStatistics	1	10
Area of responsibility		
Population monitoring	29	34
Population analysis	18	31
Population research	14	30
Population mgmt	29	46
Habitat planning	16	36
Habitat conservation	19	44
Habitat tech assistance	15	68
Habitat assessment	17	44
Permits	25	64
Other legal compliance	11	61
Hunting regulations	15	47
Coordination/partnerships	40	44
Consultation/tech assist	31	50
Communications/outreach	38	59
Improving recreation	7	70
Admin/fiscal support	14	36
Mgmt/supervision	33	65
Climate change study	7	35

	Number	Percent
Region		
1	3	43
2	8	57
3	6	40
4	7	29
5	6	43
6	8	53
7	7	26
8	2	50
9	28	39
Grade level		
GS 5-9	10	31
GS 11-13	40	32
GS 14-15	25	78
Organizational level		
Wash. Office	24	43
Reg. Office	42	48
Field Office	6	15
Other	3	43
Years of experience		
0 to 2	13	36
3 to 5	21	48
6 to 10	16	37
More than 10	25	38
Total	75	40

Table 2-3. Engage the public: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	25	34		No. of responses	74
2	37	50		Mean	1.84
3	11	15		Median	2
4 = Not important	1	1		Mode	2
				Std. Dev.	0.72

Table 2-4. Engage the public: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	32	43		No. of responses	74
2	33	45		Mean	1.72
3	7	10		Median	2
4 = Not important	2	3		Mode	2
				Std. Dev.	0.75

Table 2-5 Engage the public: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	10	14		No. of responses	74
2	48	65		Mean	2.12
3	13	18		Median	2
4 = Ineffective	3	4		Mode	2
				Std. Dev.	0.68

Table 2-6. Engage the public: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	6	20	3	1	26	4
Management	7	11	3	0	18	3
Permits	7	3	4	0	10	4
Outreach	1	1	0	0	2	0
Administration	1	0	0	0	1	0
Coordination	3	1	1	0	4	1
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	1	0	0	1	0
Total	25	37	11	1	62	12

Table 2-7. Engage the public: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	20	67	10	3	87	13
Management	33	52	14	0	86	14
Permits	50	21	29	0	71	29
Outreach	50	50	0	0	100	0
Administration	100	0	0	0	100	0
Coordination	60	20	20	0	80	20
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	100	0	0	100	0
Total	34	50	15	1	84	16

Table 2-8. Engage the public: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	30	1.97	2	2	0.67
Management	21	1.81	2	2	0.68
Permits	14	1.79	1.5	1	0.89
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	1	1.00	1	1	-
Coordination	5	1.60	1	1	0.89
Info Mgmt	-	-	-	-	-
BioStatistics	1	2.00	2	2	-
Total	74	1.84	2	2	0.72

Table 2-9. Engage the public: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	9	18	2	1	27	3
Management	11	8	2	0	19	2
Permits	7	4	2	1	11	3
Outreach	1	1	0	0	2	0
Administration	1	0	0	0	1	0
Coordination	3	1	1	0	4	1
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	1	0	0	1	0
Total	32	33	7	2	65	9

Table 2-10. Engage the public: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	30	60	7	3	90	10
Management	52	38	10	0	90	10
Permits	50	29	14	7	79	21
Outreach	50	50	0	0	100	0
Administration	100	0	0	0	100	0
Coordination	60	20	20	0	80	20
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	100	0	0	100	0
Total	43	45	10	3	88	12

Table 2-11. Engage the public: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	30	1.83	2	2	0.70
Management	21	1.57	1	1	0.68
Permits	14	1.79	1.5	1	0.98
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	1	1.00	1	1	-
Coordination	5	1.60	1	1	0.89
Info Mgmt	-	-	-	-	-
BioStatistics	1	2.00	2	2	-
Total	74	1.72	2	2	0.75

Table 2-12. Engage the public: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	3	20	5	2	23	7
Management	1	16	4	0	17	4
Permits	4	7	3	0	11	3
Outreach	0	1	0	1	1	1
Administration	0	1	0	0	1	0
Coordination	2	2	1	0	4	1
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	1	0	0	1	0
Total	10	48	13	3	58	16

Table 2-13. Engage the public: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	10	67	17	7	77	23
Management	5	76	19	0	81	19
Permits	29	50	21	0	79	21
Outreach	0	50	0	50	50	50
Administration	0	400	0	0	100	0
Coordination	40	40	20	0	80	20
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	100	0	0	100	0
Total	14	65	18	4	78	22

Table 2-14. Engage the public: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	30	2.20	2	2	0.71
Management	21	2.14	2	2	0.48
Permits	14	1.93	2	2	0.73
Outreach	2	3.00	3	2 or 4	1.41
Administration	1	2.00	2	2	-
Coordination	5	1.80	2	1 or 2	0.84
Info Mgmt	-	-	-	-	-
BioStatistics	1	2.00	2	2	-
Total	74	2.12	2	2	0.68

Table 2-15. Engage the public: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	14	47	16	53
Management	12	57	9	43
Permits	8	57	6	43
Outreach	0	0	2	100
Administration	1	50	1	50
Coordination	1	20	4	80
Info Mgmt	-	-	-	-
BioStatistics	1	100	0	0
Total	37	49	38	51

Table 2-16. Engage the public: Method of training

Method	Number	Percent
NCTC classroom training	5	14
Other classroom training	12	32
On-line training	1	3
Journals or books	4	11
Details/special projects	7	19
On-the-job training	32	87
Coaching	6	16
Mentor outside the Service	3	8
Written guidance	2	5
Job aids	0	0

Table 2-17. Engage the public: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	13	43	17	57
Management	7	37	12	63
Permits	4	44	5	56
Outreach	0	0	2	100
Administration	-	-	-	-
Coordination	2	40	3	60
Info Mgmt	-	-	-	-
BioStatistics	1	100	0	0
Total	27	41	39	59

Table 2-18. Who needs more training in Engage the public?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	13	19	43
Mgmt	7	30	37
Permits	4	33	44
Outreach	0	0	0
Admin	-	-	-
Coordination	2	20	40
Info Mgmt	-	-	-
BioStatistics	1	14	100
Grade level			
GS 5-9	3	14	43
GS 11-13	15	16	42
GS 14-15	9	30	39
Years of experience			
0-2	4	16	33
3-5	8	24	42
6-10	10	26	63
> 10	5	11	26

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	1	25	100
2	3	30	43
3	0	0	0
4	3	17	43
5	2	18	33
6	2	20	40
7	2	10	33
8	2	67	100
9	12	21	44
Organizational level			
Wash Office	10	21	44
Reg. Office	16	25	46
Field Office	1	4	17
Other	0	0	0

114 respondents said Engage the public is NOT part of their job.

Table 2-19. NOT part of job responses for Engage the public

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	60	1 or 2	0	0	3.53
Important Future?	60	1 or 2	7	12	3.33
Effective?	52	1 or 2	11	21	3.10
Received training?	79	Yes	7	9	
Need training?	78	Yes	16	21	

24 persons commented on the aspect of Engage the public.

From those for whom this is part of their job:

Biology function group:

- Again, while training would help, there needs to be a shift in the institutional view of communicating with our customers.

Management function group:

- Always room for improvement. Mostly learned through watching others, not true mentoring/coaching. Limited by being able to follow through time wise with these important questions.
- Coaching about consulting with tribes and refresher on writing survey questions.
- I haven`t taken the Bleiker training and need to do that.
- Is there an over all strategy for this for the Service? Do we know what our `customers` think?
- Learned from on the job training (OJT).
- My interpretation of this question is that "the public" is the greater conservation community who is interested in our work and not necessarily every person on the street.
- This question is difficult to answer. We develop and update Federal regulations, on which we solicit public input. We also meet with members of the public to hear their concerns about migratory bird issues. However, we may not solicit public input on many aspects of our work.

Permits function group:

- due to vast knowledge required for Permits administration (40 plus TYPES of activities under MBTA and BGEPA) - not sure what, other than OJT by senior would work.
- This was an on-the-job task. Coaching was not in a pleasant or an optimistic attitude. Classroom training would be ideal for new hires.
- Time and $$ seem to be an issue for us in permits. The right type of training is always beneficial.
- Training received in my previous private sector positions and via my J.D.
- Use the "e-CFR" and WO email guidance along with public MB USFWS websites to assist the public.

Outreach function groups

- It would be nice to get public feedback but it is not allowed and/or highly discouraged.

Coordination function group:

- my responses are focused on public policy engagement

BioStatistics function group:

- again, there`s always room for improvement

From those for whom this is NOT part of their job:

- Disregard the ratings for importance and my effectiveness.
- I don`t work with the public except as citizen scientists.
- I would be interested in something with minimal $ and time commitment - such as a web course - more for self-interest and to understand others` jobs better
- If there is a single way that this should be accomplished within the FWS or Gov`t in general then I think this should be a course or written guidance.
- My position does not include setting policy or changing the program. Thus I do not need training in this area.
- Outreach training is helpful to anyone that has minimal contact with public.
- Part of good customer service is quality control. Every employee who has contact with the public should get feedback on their customer service skills. In permits, we deal with people who can be unhappy about being "regulated" and we deal with legal matters. Because of this, it is important to provide excellent customer service without compromising the agency.
- Working with the public on the NEPA process. The conduct of public hearings and integrating the input (comments) into policy proposals.

Aspect #3 : Prioritize your projects in order of conservation importance

Prioritize projects is part of most employees' jobs (73%).

It is significantly more likely to be part of the jobs of:

- Function class: Coordination, BioStatistics, Management
- Region: 2
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Administration, Permits
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the function class of Information Management for comparisons to be meaningful.

Most employees consider it an important part of their current job (91%).

- 45% consider it "Critical"
- The % who consider it "Critical" ranges from 18% for Permits to 59% for Management
- Considered significantly less important by function class: Permits

Most employees think it will be an important part of their jobs in the future (92%).

- 49% think it will be "Critical"
- The % who think it will be "Critical" ranges from 18% for Permits to 64% for Management
- Thought significantly less important in future by function class: Permits

Most employees think they are currently effective at this (86%).

- 18% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 0% for BioStatistics to 33% for Coordination

Less than half of the respondents said they had received training in this (41%).

Of those who had received training:

- Most had On-the-job training (86%).
- 14% had NCTC classroom training, and 16% other classroom training

A minority said they needed more training in this (43%).

Desire for more training in this is significantly higher among:

- Function class: Permits

Table 3-1. Is Prioritize projects part of your job?

	Number	Percent
Yes	138	73
No	52	27

Table 3-2. Who has Prioritize projects as part of their job?

	Number	Percent
Function class		
Biology	72	83
Management	22	88
Permits	11	55
Outreach	0	0
Administration	9	35
Coordination	12	92
Info Mgmt	3	50
BioStatistics	9	90
Area of responsibility		
Population monitoring	79	94
Population analysis	53	91
Population research	43	94
Population mgmt	57	92
Habitat planning	41	93
Habitat conservation	38	88
Habitat tech assistance	21	96
Habitat assessment	37	95
Permits	23	59
Other legal compliance	14	78
Hunting regulations	28	88
Coordination/partnerships	80	90
Consultation/tech assist	53	86
Communications/outreach	50	77
Improving recreation	9	90
Admin/fiscal support	19	49
Mgmt/supervision	41	80
Climate change study	16	84

	Number	Percent
Region		
1	5	71
2	14	100
3	12	80
4	16	67
5	9	69
6	9	60
7	21	78
8	3	75
9	49	69
Grade level		
GS 5-9	12	38
GS 11-13	98	78
GS 14-15	28	88
Organizational level		
Wash. Office	36	64
Reg. Office	62	71
Field Office	32	82
Other	7	100
Years of experience		
0 to 2	24	67
3 to 5	35	80
6 to 10	28	68
More than 10	49	74
Total	138	73

Table 3-3. Prioritize projects: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	62	45		No. of responses	138
2	64	46		Mean	1.64
3	12	9		Median	2
4 = Not important	0	0		Mode	2
				Std. Dev.	0.64

Table 3-4. Prioritize projects: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	67	49		No. of responses	137
2	59	43		Mean	1.60
3	10	7		Median	2
4 = Not important	1	1		Mode	1
				Std. Dev.	0.66

Table 3-5 Prioritize projects: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	24	18		No. of responses	137
2	94	69		Mean	1.96
3	19	14		Median	2
4 = Ineffective	0	0		Mode	2
				Std. Dev.	0.56

Table 3-6. Prioritize projects: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	34	35	5	0	69	5
Management	13	7	2	0	20	2
Permits	2	4	5	0	6	5
Outreach	-	-	-	-	-	-
Administration	4	4	1	0	8	1
Coordination	5	7	0	0	12	0
Info Mgmt	2	1	0	0	3	0
BioStatistics	2	6	1	0	8	1
Total	62	64	12	0	126	12

Table 3-7. Prioritize projects: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	47	49	4	0	96	0
Management	59	32	9	0	91	9
Permits	18	36	45	0	55	45
Outreach	-	-	-	-	-	-
Administration	44	44	11	0	89	11
Coordination	42	58	0	0	100	0
Info Mgmt	67	33	0	0	100	0
BioStatistics	22	67	11	0	89	11
Total	45	46	9	0	91	9

Table 3-8. Prioritize projects: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	72	1.57	2	2	0.58
Management	22	1.50	1	1	0.67
Permits	11	2.27	2	3	0.79
Outreach	-	-	-	-	-
Administration	9	1.67	2	1 or 2	0.71
Coordination	12	1.58	2	2	0.52
Info Mgmt	3	1.33	1	1	0.58
BioStatistics	9	1.89	2	2	0.60
Total	138	1.64	2	2	0.64

Table 3-9. Prioritize projects: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	37	31	3	0	68	3
Management	14	6	2	0	20	2
Permits	2	5	3	1	7	4
Outreach	-	-	-	-	-	-
Administration	5	3	1	0	8	1
Coordination	5	6	1	0	11	1
Info Mgmt	2	1	0	0	3	0
BioStatistics	2	7	0	0	9	0
Total	67	59	10	1	126	11

Table 3-10. Prioritize projects: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	52	44	4	0	96	4
Management	64	27	9	0	91	9
Permits	18	45	27	9	64	36
Outreach	-	-	-	-	-	-
Administration	56	33	11	0	89	11
Coordination	42	50	8	0	92	8
Info Mgmt	67	33	0	0	100	0
BioStatistics	22	78	0	0	100	0
Total	49	43	7	1	92	8

Table 3-11. Prioritize projects: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	71	1.52	1	1	0.58
Management	22	1.45	1	1	0.67
Permits	11	2.27	2	2	0.91
Outreach	-	-	-	-	-
Administration	9	1.56	1	1	0.73
Coordination	12	1.67	2	2	0.65
Info Mgmt	3	1.33	1	1	0.58
BioStatistics	9	1.78	2	2	0.44
Total	137	1.60	2	1	0.66

Table 3-12. Prioritize projects: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	12	51	8	0	63	8
Management	3	15	4	0	18	4
Permits	3	4	4	0	7	4
Outreach	-	-	-	-	-	-
Administration	1	6	2	0	7	2
Coordination	4	8	0	0	12	0
Info Mgmt	1	1	1	0	2	1
BioStatistics	0	9	0	0	9	0
Total	24	94	19	0	118	19

Table 3-13. Prioritize projects: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	17	72	11	0	89	11
Management	14	68	18	0	82	18
Permits	27	36	36	0	64	36
Outreach	-	-	-	-	-	-
Administration	11	67	22	0	78	22
Coordination	33	67	0	0	100	0
Info Mgmt	33	33	33	0	67	33
BioStatistics	0	100	0	0	100	0
Total	18	69	14	0	86	14

Table 3-14. Prioritize projects: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	71	1.94	2	2	0.53
Management	22	2.05	2	2	0.58
Permits	11	2.09	2	2 or 3	0.83
Outreach	-	-	-	-	-
Administration	9	2.11	2	2	0.60
Coordination	12	1.67	2	2	0.49
Info Mgmt	3	2.00	2	1, 2, 3	1.00
BioStatistics	9	2.00	2	2	0
Total	137	1.96	2	2	0.56

Table 3-15. Prioritize projects: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	31	43	41	57
Management	10	45	12	55
Permits	4	44	5	56
Outreach	-	-	-	-
Administration	5	56	4	44
Coordination	2	17	10	83
Info Mgmt	0	0	3	100
BioStatistics	4	44	5	56
Total	56	41	80	59

Table 3-16. Prioritize projects: Method of training

Method	Number	Percent
NCTC classroom training	8	14
Other classroom training	9	16
On-line training	0	0
Journals or books	8	14
Details/special projects	11	20
On-the-job training	48	86
Coaching	14	25
Mentor outside the Service	6	11
Written guidance	8	14
Job aids	0	0

Table 3-17. Prioritize projects: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	26	37	44	63
Management	9	41	13	59
Permits	5	71	2	29
Outreach	-	-	-	-
Administration	4	44	5	56
Coordination	5	42	7	58
Info Mgmt	2	67	1	33
BioStatistics	5	63	3	38
Total	56	43	75	57

Table 3-18. Who needs more training in Prioritize projects?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	26	34	37
Mgmt	9	36	41
Permits	5	56	71
Outreach	-	-	-
Admin	4	29	44
Coordination	5	42	42
Info Mgmt	2	33	67
BioStatistics	5	56	63
Grade level			
GS 5-9	5	29	50
GS 11-13	40	38	43
GS 14-15	11	36	39
Years of experience			
0-2	10	37	42
3-5	16	43	50
6-10	11	30	41
> 10	18	35	39

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	50	60
2	7	54	54
3	4	31	33
4	6	35	43
5	4	44	50
6	3	25	38
7	4	19	20
8	2	68	67
9	23	38	48
Organizational level			
Wash Office	18	38	51
Reg. Office	23	34	40
Field Office	11	34	36
Other	3	43	43

52 respondents said Prioritize projects is NOT part of their job.

Table 3-19. NOT part of job responses for Engage the public

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	18	1 or 2	0	0	3.61
Important Future?	18	1 or 2	2	11	3.44
Effective?	16	1 or 2	4	25	3.06
Received training?	27	Yes	2	7	
Need training?	23	Yes	2	9	

24 persons commented on the aspect of Prioritize projects.

From those for whom this is part of their job:

Biology function group:

- Again, difficult to answer yes or no as to whether I need more training. Projects I am involved in - are already prioritized at a higher level; and I conduct the projects how they have already been given priority; but I do provide input on how I would prioritize some projects. So, possibly, I should have answered the initial question no rather than yes.
- But once again, my prioritization process is based on professional judgment. The best way to inform this or train it would be to create some mechanism to convey or identify exactly what is the highest conservation importance. So maybe it is a decision making analysis of some sort, but this seems too labor intensive when professional judgment can be used.
- I believe "conservation importance" is a coarse filter for prioritizing "projects" (annual, quarterly, weekly, daily work plan)throughout the Migratory Bird Program; however, the realities of such things as political, departmental, agency, and societal mandates and deadlines are often the ultimate determinater of priority.
- I think our team should focus more on this, but that is not so much a training issue as a "how we could better work together to do our job" issue.
- I think we need more discussion among all members of the organization to prioritize our projects and clarify the use of the data and the value of the data to its intended use.
- I`m always looking for more info on prioritizing things. not a high priority though.
- Priorities will vary with direct knowledge of the conservation issue or species, versus political obligations/pressure - which could misdirect conservation efforts and priorities. Who would be defining `conservation priorities`?
- What`s needed is more information on what the priorities are.

Management function group:

- I believe these to be OJT-based skills.
- More training is not needed - more information - updates on what the Service priorities are and how these fit into the various programs. How do we interact with each other to accomplish these priorities?
- The program as a whole needs to prioritize work. There is too much that needs to be done and we have limited staff. This training is probably more important for staff.
- Tough to answer as job is ruled by crisis management with priority setting process hopefully providing guidance along the way but not always. Has always been an important component of most of my positions in FWS

- While prioritizing work (projects) in order of conservation importance should be our goal we must often defer to prioritizing in order of political or organizational importance.

Permits function group:

- I have learned to prioritize by Permit type (Scientific Collecting, Depredation) and defer to or consult with Regional biologists.
- In Permits we have to some how balance the conservations of birds with the needs (safety) of people like with airports. We have to insure through working with others externally and internally that the populations and take are in balance like with depredation or scientific collecting. And then the conservation use for recreational use ie falconry, taxidermy, education. I guess what I am trying to say is we have to look at many aspects of "working with people for the conservation of the birds" trying to make sure there is a balance with no complaints and within 30 days of receiving request. With a high percentage of our customers thinking they should have them within the same week they send them to us. The balance can be tricky and the training is hard for me to put a finger on.
- Some permits need to be prioritized e.g. airports depredation permits before taxidermy permits.
- This application was at one time within 90 days of receipt - now GPRA requires within 30 days to issue. As an examiner - the importance is decided as individual applications are received. Classroom training would be ideal for new hires.
- Training received in my previous private sector positions and via my J.D.

Administration function group:

- Priority and time management issues are important to any successful station.

Coordination function group:

- I think it would be useful to find the time and take some of the training in decision-making. There are so many conservation needs, it can be difficult to prioritize.
- I`d like to see how others prioritize landscape elements, species, habitats, sites. but probably not my highest training need.
- SDM

Information management function group:

- It would be beneficial to offer or require personal organization/improvement training, something like "7 habits of highly effective people". I think all employees could improve their efficiency and effectiveness through better work habits and organization.

From those for whom this is NOT part of their job:

- Typically, high priorities are readily identified, and unfortunately "conservation importance" is but one aspect of whether a particular project or work activity is a "priority." Assignments, policy directives, requests for assistance and time sensitivity are other factors that enter into how and when to engage in a particular project.

Aspect #4 : Coordinate within the Service (other regions or other programs) for national consistency in policies and procedures

Coordinate within the Service is part of most employees' jobs (77%).

It is significantly more likely to be part of the jobs of:

- Function class: Permits, Management, Coordination
- Region: 1, 3
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:

- Function class: Administration, BioStatistics
- Region: 7
- Years of experience: 0 to 2

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management.

Most employees consider it an important part of their current job (86%).

- 44% consider it "Critical"
- The % who consider it "Critical" ranges from 31% for Biology to 65% for Permits

Most employees think it will be an important part of their jobs in the future (87%).

- 45% think it will be "Critical"
- The % who think it will be "Critical" ranges from 33% for Administration to 70% for Management

A majority of employees think they are currently effective at this (80%).

- 19% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 8% for Coordination to 40% for BioStatistics

Less than half of the respondents said they had received training in this (44%).

Of those who had received training:

- Most had On-the-job training (86%).
- 13% had NCTC classroom training, and 13% other classroom training

A minority said they needed more training in this (38%).

Desire for more training in this is significantly higher among:

- Grade level: GS 5-9

Table 4-1. Is Coordinate within Service part of your job?

	Number	Percent
Yes	148	77
No	43	23

Table 4-2. Who has Coordinate within Service as part of their job?

	Number	Percent
Function class		
Biology	65	74
Management	24	96
Permits	20	100
Outreach	2	67
Administration	15	58
Coordination	12	92
Info Mgmt	4	67
BioStatistics	6	60
Area of responsibility		
Population monitoring	65	77
Population analysis	42	71
Population research	32	68
Population mgmt	49	78
Habitat planning	38	84
Habitat conservation	36	84
Habitat tech assistance	21	96
Habitat assessment	33	85
Permits	37	95
Other legal compliance	18	100
Hunting regulations	28	88
Coordination/partnerships	75	83
Consultation/tech assist	53	86
Communications/outreach	54	83
Improving recreation	10	100
Admin/fiscal support	29	74
Mgmt/supervision	48	94
Climate change study	18	90

	Number	Percent
Region		
1	7	100
2	12	86
3	15	100
4	18	75
5	11	79
6	13	87
7	16	59
8	4	100
9	52	73
Grade level		
GS 5-9	23	72
GS 11-13	95	75
GS 14-15	30	94
Organizational level		
Wash. Office	42	75
Reg. Office	74	84
Field Office	27	69
Other	5	71
Years of experience		
0 to 2	25	69
3 to 5	36	82
6 to 10	32	74
More than 10	54	82
Total	148	77

Table 4-3. Coordinate within Service: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	64	44		No. of responses	147
2	63	43		Mean	1.73
3	16	11		Median	2
4 = Not important	4	3		Mode	1
				Std. Dev.	0.76

Table 4-4. Coordinate within Service: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	66	45		No. of responses	146
2	61	42		Mean	1.68
3	18	12		Median	2
4 = Not important	1	1		Mode	1
				Std. Dev.	0.71

Table 4-5 Coordinate within Service: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	28	19		No. of responses	146
2	89	61		Mean	2.03
3	25	17		Median	2
4 = Ineffective	4	3		Mode	2
				Std. Dev.	0.69

Table 4-6. Coordinate within Service: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	20	36	5	3	56	8
Management	15	6	3	0	21	3
Permits	13	5	1	1	18	2
Outreach	0	2	0	0	2	0
Administration	6	6	3	0	12	3
Coordination	7	2	3	0	9	3
Info Mgmt	0	3	1	0	3	1
BioStatistics	3	3	0	0	6	0
Total	64	63	16	4	127	20

Table 4-7. Coordinate within Service: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	31	56	8	5	88	13
Management	63	25	13	0	88	13
Permits	65	25	5	5	90	10
Outreach	0	100	0	0	100	0
Administration	40	40	20	0	80	20
Coordination	58	17	25	0	75	25
Info Mgmt	0	75	25	0	75	25
BioStatistics	50	50	0	0	100	0
Total	44	43	11	3	86	14

Table 4-8. Coordinate within Service: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	64	1.86	2	2	0.75
Management	24	1.50	1	1	0.72
Permits	20	1.50	1.5	1	0.83
Outreach	2	2.00	2	2	0
Administration	15	1.80	2	1 or 2	0.78
Coordination	12	1.67	1	1	0.89
Info Mgmt	4	2.25	2	2	0.50
BioStatistics	6	1.50	1.5	1 or 2	0.55
Total	147	1.73	2	1	0.76

Table 4-9. Coordinate within Service: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	24	32	8	0	56	8
Management	16	6	1	0	22	1
Permits	11	6	2	1	17	3
Outreach	0	2	0	0	2	0
Administration	5	7	3	0	12	3
Coordination	7	2	3	0	9	3
Info Mgmt	0	3	1	0	3	1
BioStatistics	3	3	0	0	6	0
Total	66	61	18	1	127	19

Table 4-10. Coordinate within Service: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	38	50	13	0	88	13
Management	70	26	4	0	96	4
Permits	55	30	10	5	85	15
Outreach	0	100	0	0	100	0
Administration	33	47	20	0	80	20
Coordination	58	17	25	0	75	25
Info Mgmt	0	75	25	0	75	25
BioStatistics	50	50	0	0	100	0
Total	45	42	12	1	87	13

Table 4-11. Coordinate within Service: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	64	1.75	2	2	0.67
Management	23	1.35	1	1	0.57
Permits	20	1.65	1	1	0.88
Outreach	2	2.00	2	2	0
Administration	15	1.87	2	2	0.74
Coordination	12	1.67	1	1	0.89
Info Mgmt	4	2.25	2	2	0.50
BioStatistics	6	1.50	1.5	1 or 2	0.55
Total	146	1.68	2	1	0.71

Table 4-12. Coordinate within Service: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	6	42	13	3	48	16
Management	9	11	4	0	20	4
Permits	5	11	3	1	16	4
Outreach	1	1	0	0	2	0
Administration	4	8	3	0	12	3
Coordination	1	10	1	0	11	1
Info Mgmt	0	3	1	0	3	1
BioStatistics	2	3	0	0	5	0
Total	28	89	25	4	117	29

Table 4-13. Coordinate within Service: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	9	66	20	5	75	25
Management	38	46	17	0	83	17
Permits	25	55	15	5	80	20
Outreach	50	50	0	0	100	0
Administration	27	53	20	0	80	20
Coordination	8	83	8	0	92	8
Info Mgmt	0	75	25	0	75	25
BioStatistics	40	60	0	0	100	0
Total	19	61	17	3	80	20

Table 4-14. Coordinate within Service: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	64	2.20	2	2	0.67
Management	24	1.79	2	2	0.72
Permits	20	2.00	2	2	0.80
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	15	1.93	2	2	0.70
Coordination	12	2.00	2	2	0.43
Info Mgmt	4	2.25	2	2	0.50
BioStatistics	5	1.60	2	2	0.55
Total	1.46	2.03	2	2	0.69

Table 4-15. Coordinate within Service: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	27	42	37	58
Management	11	46	13	54
Permits	9	47	10	53
Outreach	1	50	1	50
Administration	8	53	7	47
Coordination	2	17	10	83
Info Mgmt	2	50	2	50
BioStatistics	4	80	1	20
Total	64	44	81	56

Table 4-16. Coordinate within Service: Method of training

Method	Number	Percent
NCTC classroom training	8	13
Other classroom training	8	13
On-line training	5	8
Journals or books	4	6
Details/special projects	13	20
On-the-job training	55	86
Coaching	16	25
Mentor outside the Service	3	5
Written guidance	19	30
Job aids	2	3

Table 4-17. Coordinate within Service: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	28	44	35	56
Management	6	25	18	75
Permits	7	41	10	59
Outreach	0	0	2	100
Administration	6	40	9	60
Coordination	3	25	9	75
Info Mgmt	2	67	1	33
BioStatistics	1	20	4	80
Total	53	38	88	62

Table 4-18. Who needs more training in Coordinate within Service?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	28	39	44
Mgmt	6	24	25
Permits	7	41	41
Outreach	0	0	0
Admin	6	32	40
Coordination	3	23	25
Info Mgmt	2	50	67
BioStatistics	1	17	20
Grade level			
GS 5-9	11	48	55
GS 11-13	35	33	39
GS 14-15	7	23	23
Years of experience			
0-2	10	36	44
3-5	18	47	51
6-10	11	31	36
> 10	14	25	28

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	2	29	29
2	4	31	33
3	5	36	36
4	8	44	47
5	4	33	40
6	3	21	25
7	5	25	33
8	2	50	50
9	20	35	40
Organizational level			
Wash Office	18	38	44
Reg. Office	26	33	37
Field Office	6	22	24
Other	3	50	60

43 respondents said Coordinate within Service is NOT part of their job.

Table 4-19. NOT part of job responses for Coordinate within Service

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	13	1 or 2	0	0	3.54
Important Future?	13	1 or 2	0	0	3.46
Effective?	12	1 or 2	1	8	3.17
Received training?	22	Yes	1	5	
Need training?	18	Yes	2	11	

32 persons commented on the aspect of Coordinate within Service.

From those for whom this is part of their job:

Biology function class:

- Coordination within the FWS seems to be a chronic problem. Not sure how to improve this through training unless there actually exists guidance on how to do this coordination, and if so, we need to know about it and enforce it.
- Could use workshops within Service between Service programs to improve coordination.
- Cross-program and within coordination within the Service is very poor and frustrating. It often feels that each region just does it`s own thing and then we learn about some initiative from D.C. It can be humiliating and disabling. There seems to be a strong disconnect from upper level management to the on-the-ground folks especially between regions and D.C.
- I am unfamiliar with many aspects of my own organization, including other programs where partnerships may be able to be developed. I attended new employee orientation in 1994, and that was the last time I received a thorough overview of the Service initiatives. Our regional office has changed dramatically in the last several years and it has become increasingly difficult to keep up with the programs and personnel changes.
- I believe this could be accomplished with on-the-job-training.
- I can always improve on partnership building and communication skills.
- I think it`s a problem that there are major inconsistencies among regions and yet relatively little communication among regions to learn from each other about the strengths and weaknesses of the different approaches (e.g., how Mig. Bird staff are used, implementing SHC, etc.).
- I`m always looking for more info on prioritizing things. not a high priority though.
- It is good to learn how to play well with others. It is important to provide consistent policies and procedures nationwide.
- NCTC does not offer specific training to meet this need.
- On this, and on a number of the coordination & communication questions, it`s not so much that training would make a great deal of difference. It`s more a question of recognition by management that the job would be better carried out by improvements in coordination and communication. Again, while training would help, there needs to be a shift in the institutional view of communicating with our customers.
- still not a lot of cross program coordination
- We don`t need training, we just need to do a better job of national consistency.
- We need more guidance to determine our allocation of time and budget to assist in the work of other divisions, such as Ecological Services, Endangered Species

Management function class:

- part of my job is that we need to understand what the policies and procedures are.
- Staff in some parts of the program need guidance and training (particularly permits).
- This is a big black hole if we are looking at this as a training need. Never seen any training that addresses this.

Permits function class:

- Again, what kind of training? There are many areas that regions can be consistent and there are regional issues with species and numbers thereof that require regional differences. We work hard to be consistent where we can and we work hard to meet our customer needs all in line with conservation and protecting the resources.
- All permit people should go to the annual meeting not just the leads.
- Attend bi-annual permit chiefs meetings to discuss/develop national policy.
- Continually work the National Permits Coordinator WO to work toward the goal of national consistency.
- I hope to remedy that situation ASAP.
- Information is given only to Lead individuals - and most of the time that information is not provided to the examiners. Classroom training would be ideal for new hires.
- It continues to be frustrating when time and resources are spent to develop national consistency and then not all regions implement them, even after agreeing to do so. There appears to be a lack of accountability regarding this.
- It takes 2-3 YEARS just to get a handle on what MBO permits does - and it takes "hands on" coordination with HQ (our Coordinator not necessarily our Supervisor - HQ does not have Regional office (field) experience and pretty oblivious to FIELD (battle) problems.
- There is no training currently for doing any type of permits except to read the regulations and look at other permits.
- Training received in my previous private sector positions and via my J.D.

Administration function class:

- Regional or national coordination would be very beneficial for my job duties. I have had no contact with any of the other Regions when it comes to coordinating consistencies in policy or procedures. I don`t even have an org chart to see who my counterparts are.

Coordination function class:

- I think coordination is often something learned through experience and dependent on personality (open to possibility, good listener, flexible). Coordination requires

exposure to these partners, but the venues for exchange are not necessarily what I would consider training.

Information management function class:

- Coordination within the Service and with other groups is a given in this job. I think all staff whose job entails a great deal of collaboration with other programs could improvement on personal/group interaction, group effectiveness, etc.

BioStatistics function class

- I`ve gotten enough experience through my job to feel I do a sufficient enough job.

From those for whom this is NOT part of their job:

- Would need training in this area - only if my job changed to include those responsibilities.

Aspect #5 : Collaborate with partners on projects of mutual interest (for example, State wildlife action plans, wind towers, seabird by catch, etc.)

Collaborate with partners is part of most employees' jobs (74%).

It is significantly more likely to be part of the jobs of:
- Function class: BioStatistics, Coordination
- Region: 2

It is significantly less likely to be part of the jobs of:
- Function class: Permits, Administration
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management.

Most employees consider it an important part of their current job (92%).
- 63% consider it "Critical"
- The % who consider it "Critical" ranges from 57% for Administration and Management to 70% for Permits

Most employees think it will be an important part of their jobs in the future (94%).
- 65% think it will be "Critical"
- The % who think it will be "Critical" ranges from 57% for Administration to 70% for Permits

Most employees think they are currently effective at this (86%).
- 19% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 10% for BioStatistics to 33% for Coordination

Less than half of the respondents said they had received training in this (41%).

Of those who had received training:
- Most had On-the-job training (93%).
- 9% had NCTC classroom training, and 11% other classroom training

A minority said they needed more training in this (44%).

Desire for more training in this is significantly higher among:
- Region: 4

Desire for more training in this is significantly lower among:
- Function class: Administration, Coordination

Table 5-1. Is Collaborate with partners part of your job?

	Number	Percent
Yes	140	74
No	50	26

Table 5-2. Who has Collaborate with partners as part of their job?

	Number	Percent
Function class		
Biology	75	85
Management	21	84
Permits	10	50
Outreach	2	67
Administration	7	28
Coordination	12	92
Info Mgmt	3	50
BioStatistics	10	100
Area of responsibility		
Population monitoring	78	92
Population analysis	53	90
Population research	43	92
Population mgmt	58	92
Habitat planning	45	100
Habitat conservation	38	88
Habitat tech assistance	22	100
Habitat assessment	38	97
Permits	23	59
Other legal compliance	16	89
Hunting regulations	29	91
Coordination/partnerships	87	97
Consultation/tech assist	58	94
Communications/outreach	58	89
Improving recreation	10	100
Admin/fiscal support	19	50
Mgmt/supervision	42	82
Climate change study	19	95

	Number	Percent
Region		
1	5	71
2	14	100
3	12	80
4	16	70
5	9	64
6	12	80
7	20	74
8	4	100
9	48	68
Grade level		
GS 5-9	10	32
GS 11-13	102	80
GS 14-15	28	88
Organizational level		
Wash. Office	36	64
Reg. Office	65	74
Field Office	31	82
Other	7	100
Years of experience		
0 to 2	24	67
3 to 5	34	77
6 to 10	33	77
More than 10	47	72
Total	140	74

Table 5-3. Collaborate with partners: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	88	63		No. of responses	140
2	41	29		Mean	1.46
3	10	7		Median	1
4 = Not important	1	1		Mode	1
				Std. Dev.	0.66

Table 5-4. Collaborate with partners: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	91	65		No. of responses	140
2	41	29		Mean	1.41
3	7	5		Median	1
4 = Not important	1	1		Mode	1
				Std. Dev.	0.62

Table 5-5 Collaborate with partners: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	27	19		No. of responses	140
2	93	66		Mean	1.96
3	18	13		Median	2
4 = Ineffective	2	1		Mode	2
				Std. Dev.	0.62

Table 5-6. Collaborate with partners: Importance, Now, by Function Cl ss, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	49	20	5	1	69	6
Management	12	7	2	0	19	2
Permits	7	2	1	0	9	1
Outreach	1	1	0	0	2	0
Administration	4	2	1	0	6	1
Coordination	8	4	0	0	12	0
Info Mgmt	1	1	1	0	2	1
BioStatistics	6	4	0	0	10	0
Total	88	41	10	1	129	11

Table 5-7. Collaborate with partners: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	65	27	7	1	92	8
Management	57	33	10	0	90	10
Permits	70	20	10	0	90	10
Outreach	50	50	0	0	100	0
Administration	57	29	14	0	86	14
Coordination	67	33	0	0	100	0
Info Mgmt	33	33	33	0	67	33
BioStatistics	60	40	0	0	100	0
Total	63	29	7	1	92	8

Table 5-8. Collaborate with partners: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	75	1.44	1	1	0.68
Management	21	1.52	1	1	0.68
Permits	10	1.40	1	1	0.70
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	7	1.57	1	1	0.49
Coordination	12	1.33	1	1	1.00
Info Mgmt	3	2.00	2	1, 2, 3	0.52
BioStatistics	10	1.40	1	1	
Total	140	1.46	1	1	0.46

Table 5-9. Collaborate with partners: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	52	19	4	0	71	4
Management	13	7	1	0	20	1
Permits	7	2	0	1	9	1
Outreach	1	1	0	0	2	0
Administration	4	2	1	0	6	1
Coordination	7	5	0	0	12	0
Info Mgmt	1	1	1	0	2	1
BioStatistics	6	4	0	0	10	0
Total	91	41	7	1	132	8

Table 5-10. Collaborate with partners: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	69	25	5	0	95	5
Management	62	33	5	0	95	5
Permits	70	20	0	10	90	10
Outreach	50	50	0	0	100	0
Administration	57	29	14	0	86	14
Coordination	58	42	0	0	100	0
Info Mgmt	33	33	33	0	67	33
BioStatistics	60	40	0	0	100	0
Total	65	29	5	1	94	6

Table 5-11. Collaborate with partners: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	75	1.36	1	1	0.58
Management	21	1.43	1	1	0.60
Permits	10	1.50	1	1	0.97
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	7	1.57	1	1	0.79
Coordination	12	1.42	1	1	0.52
Info Mgmt	3	2.00	2	1, 2, 3	1.00
BioStatistics	10	1.40	1	1	0.52
Total	140	1.41	1	1	0.62

Table 5-12. Collaborate with partners: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	13	51	9	2	64	11
Management	5	12	4	0	17	4
Permits	2	5	3	0	7	3
Outreach	1	1	0	0	2	0
Administration	1	5	1	0	6	1
Coordination	4	8	0	0	12	0
Info Mgmt	0	2	1	0	2	1
BioStatistics	1	9	0	0	10	0
Total	27	93	18	2	120	20

Table 5-13. Collaborate with partners: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	17	68	12	3	85	15
Management	24	57	19	0	81	19
Permits	20	50	30	0	70	30
Outreach	50	50	0	0	100	0
Administration	14	71	14	0	86	14
Coordination	33	67	0	0	100	0
Info Mgmt	0	67	33	0	67	33
BioStatistics	10	90	0	0	100	0
Total	19	66	13	1	86	14

Table 5-14. Collaborate with partners: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	75	2.00	2	2	0.64
Management	21	1.95	2	2	0.67
Permits	10	2.10	2	2	0.74
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	7	2.00	2	2	0.58
Coordination	12	1.67	2	2	0.49
Info Mgmt	3	2.33	2	2	0.58
BioStatistics	10	1.90	2	2	0.32
Total	140	1.96	2	2	0.62

Table 5-15. Collaborate with partners: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	30	40	45	60
Management	11	55	9	45
Permits	4	50	4	50
Outreach	0	0	2	100
Administration	3	43	4	57
Coordination	2	17	10	83
Info Mgmt	0	0	3	100
BioStatistics	6	60	4	40
Total	56	41	81	59

Table 5-16. Collaborate with partners: Method of training

Method	Number	Percent
NCTC classroom training	5	9
Other classroom training	6	11
On-line training	0	0
Journals or books	7	13
Details/special projects	14	25
On-the-job training	52	93
Coaching	13	23
Mentor outside the Service	7	13
Written guidance	5	9
Job aids	2	4

Table 5-17. Collaborate with partners: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	36	52	33	48
Management	7	35	13	65
Permits	3	50	3	50
Outreach	0	0	2	100
Administration	1	17	5	83
Coordination	2	18	9	82
Info Mgmt	2	100	0	0
BioStatistics	3	38	5	62
Total	54	44	70	56

Table 5-18. Who needs more training in Collaborate with partners?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	36	47	52
Mgmt	7	29	35
Permits	3	33	50
Outreach	0	0	0
Admin	1	7	17
Coordination	2	18	18
Info Mgmt	2	40	100
BioStatistics	3	38	38
Grade level			
GS 5-9	4	24	57
GS 11-13	40	39	44
GS 14-15	10	32	37
Years of experience			
0-2	10	37	46
3-5	18	51	60
6-10	12	32	39
> 10	13	27	33

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	50	60
2	3	25	25
3	4	33	40
4	10	59	71
5	3	33	33
6	4	36	40
7	7	32	37
8	0	0	0
9	20	34	47
Organizational level			
Wash Office	15	31	44
Reg. Office	22	33	39
Field Office	13	46	50
Other	4	57	57

50 respondents said Collaborate with partners is NOT part of their job.

Table 5-19. NOT part of job responses for Collaborate with partners

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	15	1 or 2	0	0	3.50
Important Future?	15	1 or 2	1	7	3.47
Effective?	14	1 or 2	2	14	3.21
Received training?	26	Yes	1	4	
Need training?	26	Yes	2	8	

22 persons commented on the aspect of Collaborate with partners.

From those for whom this is part of their job:

Biology function class:

- Any quality training that would improve my ability to effectively coordinate with partners resulting in positive impacts to conservation delivery (on-the-ground) would be welcomed and useful .
- do this everyday
- I answered yes in answer to this question - but only at the field level. If this question was directed to encompass on a higher level, then my answer should have been no. As to whether I feel I need more training in this area, difficult to answer either yes or no. I see collaboration with other agencies results from mandates/goals that are common to both agencies. Having contacts with other agencies is necessary for collaboration to occur. I do not see how classroom training could enhance this. Rather on the job training as relates to specific projects with which one is involved. And these responses are based on the field level at which I am involved.
- I think the most important growth area would be expanding the partnerships between the USFWS and NRCS, to better use Farm Bill programs to achieve bird population goals. Better integration with State wildlife action plans and SWGs would not be a bad idea either.
- Maybe. But who has the time?
- Mostly analytical training, to bring us up to speed on the IT tools available, such as statistical software, spatial analysis (GIS and extensions).
- On this, and on a number of the coordination & communication questions, it`s not so much that training would make a great deal of difference. It`s more a question of recognition by management that the job would be better carried out by improvements in coordination and communication. Again, while training would help, there needs to be a shift in the institutional view of communicating with our customers.
- You have to rely on yourself to make those critical connections with little guidance from the Service. It can be daunting and inefficient.

Management function class:

- An aspect learned by trial and error and learning from supervisors by example. What formal training?
- I feel like I`m a really good regulator, which is a major part of my job. Good regulators make bad partners with those that they regulate.
- More specific to that "getting to yes" or that "win/win" aspect of collaboration.
- Not more training, there are issues that cannot be agreed upon that have nothing to do with training. More information and communication within the Service is needed to be most effective as possible.

- Part of the training need for collaboration is how to work better with industry, and get industry to the table to help be part of the solution.

Permits function class:

- I will be doing more after formal training is over.
- more biological - defer or coordinate with Regional biologist when needed
- Time and $$ seem to be an issue for us in permits. The right type of training is always beneficial. Again, what kind of training? There are many areas that regions can be consistent and there are regional issues with species and numbers thereof that require regional differences. We work hard to be consistent where we can and we work hard to meet our customer needs all in line with conservation and protecting the resources.
- Training received in my previous private sector positions and via my J.D.
- When new examiners are hired - there are no current standard operating procedures (SOP) for the specific permit types. This is essential when new regulations are implemented. A new examiner needs an environment where criticism or hostility is not part of the OJT or coaching. Classroom training would be ideal for new hires.
- Working with Ecological Services biologists and other staff biologists now on Special Purpose Utility permits (a new permit type that is evolving).

Coordination function class:

- I think on-the-job training is key, but with a solid mentoring program, of which the Service lacks. Our "leaders" are great at saying one thing, then their actions (or inaction as the case is) tell a different story
- Insofar as keeping up to date on issues and developments can be considered training.

BioStatistics function class:

- Again, a project management class would be helpful here

Aspect #6 : Increase public awareness of the value of bird conservation through outreach efforts

Outreach is part of just over half of employees' jobs (55%).

It is significantly more likely to be part of the jobs of:

- Function class: Management, Outreach, Coordination
- Area of responsibility: Habitat tech assistance, Communications/outreach, Mgmt/supervision
- Region: 8
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:

- Function class: Information management, Administration
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management, BioStatistics.

A majority of employees consider it an important part of their current job (76%).

- 38% consider it "Critical"
- The % who consider it "Critical" ranges from 26% for Biology to 56% for Administration

A majority of employees think it will be an important part of their jobs in the future (79%).

- 49% think it will be "Critical"
- The % who think it will be "Critical" ranges from 40% for Biology to 58% for Permits

A majority of employees think they are currently effective at this (65%).

- 19% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 0% for Administration to 27% for Coordination

Just under half of the respondents said they had received training in this (47%).

Of those who had received training:

- Most had On-the-job training (87%).
- 30% had NCTC classroom training, and 28% other classroom training

A minority said they needed more training in this (43%).

Desire for more training in this is significantly higher among:

- Grade level: GS 5-9

- Region: 4, 8
- Organizational level: Other

Desire for more training in this is significantly lower among:

- Region: 1, 3, 5

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (7 of 48 = 15%).

Table 6-1. Is Outreach part of your job?

	Number	Percent
Yes	104	55
No	86	45

Table 6-2. Who has Outreach as part of their job?

	Number	Percent
Function class		
Biology	43	49
Management	23	92
Permits	12	60
Outreach	3	100
Administration	9	35
Coordination	11	92
Info Mgmt	0	0
BioStatistics	3	30
Area of responsibility		
Population monitoring	50	60
Population analysis	33	56
Population research	27	59
Population mgmt	36	58
Habitat planning	26	58
Habitat conservation	27	63
Habitat tech assistance	18	82
Habitat assessment	24	62
Permits	23	59
Other legal compliance	9	50
Hunting regulations	19	59
Coordination/partnerships	58	63
Consultation/tech assist	39	64
Communications/outreach	50	78
Improving recreation	7	70
Admin/fiscal support	21	54
Mgmt/supervision	38	75
Climate change study	14	70

	Number	Percent
Region		
1	4	57
2	8	57
3	8	53
4	14	58
5	9	64
6	8	53
7	14	54
8	3	75
9	36	51
Grade level		
GS 5-9	13	41
GS 11-13	66	52
GS 14-15	25	78
Organizational level		
Wash. Office	28	50
Reg. Office	51	59
Field Office	19	49
Other	5	71
Years of experience		
0 to 2	18	50
3 to 5	28	64
6 to 10	25	58
More than 10	33	51
Total	104	55

Table 6-3. Outreach: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	39	38		No. of responses	103
2	39	38		Mean	1.90
3	21	20		Median	2
4 = Not important	4	4		Mode	1 or 2
				Std. Dev.	0.86

Table 6-4. Outreach: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	51	49		No. of responses	104
2	31	30		Mean	1.76
3	18	17		Median	2
4 = Not important	4	4		Mode	1
				Std. Dev.	0.88

Table 6-5 Outreach: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	20	19		No. of responses	104
2	48	46		Mean	2.20
3	31	30		Median	2
4 = Ineffective	5	5		Mode	2
				Std. Dev.	0.81

Table 6-6. Outreach: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	11	18	11	2	29	13
Management	10	10	3	0	20	3
Permits	5	4	3	0	9	3
Outreach	2	1	0	0	3	0
Administration	5	1	1	2	6	3
Coordination	4	4	3	0	8	3
Info Mgmt	-	-	-	-	-	-
BioStatistics	2	1	0	0	3	0
Total	39	39	21	4	78	25

Table 6-7. Outreach: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	26	43	26	5	69	31
Management	44	44	13	0	87	13
Permits	42	33	25	0	75	25
Outreach	67	33	0	0	100	0
Administration	56	11	11	22	67	33
Coordination	36	36	27	0	73	27
Info Mgmt	-	-	-	-	-	-
BioStatistics	67	33	0	0	100	0
Total	38	38	20	4	76	24

Table 6-8. Outreach: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	42	2.10	2	2	0.85
Management	23	1.70	2	1 or 2	0.70
Permits	12	1.83	2	1	0.84
Outreach	3	1.33	1	1	0.58
Administration	9	2.00	1	1	1.32
Coordination	11	1.91	2	1 or 2	0.83
Info Mgmt	-	-	-	-	-
BioStatistics	3	1.33	1	1	0.58
Total	103	1.90	2	1 or 2	0.86

Table 6-9. Outreach: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	17	16	8	2	33	10
Management	13	7	3	0	20	3
Permits	7	2	2	1	9	3
Outreach	2	1	0	0	3	0
Administration	5	2	1	1	7	2
Coordination	5	2	4	0	7	4
Info Mgmt	-	-	-	-	-	-
BioStatistics	2	1	0	0	3	0
Total	51	31	18	4	82	22

Table 6-10. Outreach: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	40	37	19	5	77	23
Management	57	30	13	0	87	13
Permits	58	17	17	8	75	25
Outreach	67	33	0	0	100	0
Administration	56	22	11	11	78	22
Coordination	46	18	36	0	64	36
Info Mgmt	-	-	-	-	-	-
BioStatistics	67	23	0	0	100	0
Total	49	30	17	4	79	21

Table 6-11. Outreach: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	43	1.88	2	1	0.88
Management	23	1.57	1	1	0.73
Permits	12	1.75	1	1	1.06
Outreach	3	1.33	1	1	0.57
Administration	9	1.78	1	1	1.09
Coordination	11	1.91	2	1	0.94
Info Mgmt	-	-	-	-	-
BioStatistics	3	1.33	1	1	0.58
Total	104	1.76	2	1	0.88

Table 6-12. Outreach: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	9	17	14	3	26	17
Management	2	12	9	0	14	9
Permits	3	6	3	0	9	3
Outreach	2	1	0	0	3	0
Administration	0	4	3	2	4	5
Coordination	3	6	2	0	9	2
Info Mgmt	-	-	-	-	-	-
BioStatistics	1	2	0	0	3	0
Total	20	48	31	5	68	36

Table 6-13. Outreach: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	21	40	33	7	60	40
Management	9	52	39	0	61	39
Permits	25	50	25	0	75	25
Outreach	67	33	0	0	100	0
Administration	0	44	33	22	44	56
Coordination	27	55	18	0	82	18
Info Mgmt	-	-	-	-	-	-
BioStatistics	33	67	0	0	100	0
Total	19	46	30	5	65	35

Table 6-14. Outreach: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	43	2.26	2	2	0.88
Management	23	2.30	2	2	0.64
Permits	12	2.00	2	2	0.74
Outreach	3	1.33	1	1	0.58
Administration	9	2.78	3	2	0.83
Coordination	11	1.91	2	2	0.70
Info Mgmt	-	-	-	-	-
BioStatistics	3	1.67	2	2	0.58
Total	104	2.20	2	2	0.81

Table 6-15. Outreach: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	18	42	25	58
Management	11	50	11	50
Permits	6	60	4	40
Outreach	2	67	1	33
Administration	4	44	5	56
Coordination	4	36	7	64
Info Mgmt	-	-	-	-
BioStatistics	2	67	1	33
Total	47	47	54	53

Table 6-16. Outreach: Method of training

Method	Number	Percent
NCTC classroom training	14	30
Other classroom training	13	28
On-line training	3	6
Journals or books	17	36
Details/special projects	21	45
On-the-job training	41	87
Coaching	11	23
Mentor outside the Service	6	13
Written guidance	7	15
Job aids	4	9

Table 6-17. Outreach: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	18	43	24	57
Management	8	36	14	64
Permits	5	56	4	44
Outreach	0	0	3	100
Administration	6	67	3	33
Coordination	4	36	7	64
Info Mgmt	-	-	-	-
BioStatistics	2	67	1	33
Total	43	43	56	57

Table 6-18. Who needs more training in Outreach?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	18	26	43
Mgmt	8	33	36
Permits	5	38	56
Outreach	0	0	0
Admin	6	38	67
Coordination	4	31	36
Info Mgmt	-	-	-
BioStatistics	2	33	67
Grade level			
GS 5-9	10	46	83
GS 11-13	25	26	40
GS 14-15	8	27	33
Years of experience			
0-2	10	38	59
3-5	10	29	39
6-10	12	32	48
> 10	11	22	36

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	1	14	25
2	3	30	43
3	2	18	25
4	9	50	64
5	1	9	11
6	3	27	50
7	7	35	50
8	2	50	67
9	15	27	44
Organizational level			
Wash Office	13	29	48
Reg. Office	19	28	40
Field Office	7	23	37
Other	4	67	80

86 respondents said Outreach is NOT part of their job.

Table 6-19. NOT part of job responses for Outreach

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	37	1 or 2	0	0	3.51
Important Future?	37	1 or 2	6	16	3.19
Effective?	34	1 or 2	4	12	3.12
Received training?	52	Yes	7	14	
Need training?	48	Yes	7	15	

27 persons commented on the aspect of Outreach.

From those for whom this is part of their job:

Biology function class:

- As an agency, we need to increase public awareness of the value of bird conservation, and as such it is part of all of our jobs to do this. However, we do have external affairs department and outreach staff to do this primarily. As a biologist, I do not have time to do this as well as conduct my basic monitoring/research efforts.
- feel we need to hire an expert in this
- I answered yes to this question, only because I am involved with public awareness on an informal basis - not as a formal directive in my performance plan. Hard not to be involved with the public at least to some extent in my current position. Again, would prefer to answer `possibly`, as to whether if I feel I need more training. Involved with this only minimally i.e., chance encounters while doing field work; telephone conversations with people who call in; volunteering at booths during exhibits - on an occasional basis.
- Public engagement will become more and more critical- should be an important aspect of every MBP employee`s job.
- this is important in terms of public support for govt actions
- This is largely individual on-job training, and varies with individual experience and skills. I think what is lacking is encouragement and support for this function within the Mig Bird organization.
- training on the importance and the power of outreach is needed by our upper management so that outreach gets more than just lip service

Management function class:

- However, believe as a program we need to regularly interpret the social science behind successful outreach i.e., ground our outreach plans and outreach programs in the science behind outreach.
- just need more time and resources
- Need more tools to better perform my job - more updated computer programs, more funding and more support from administration.
- This is important for the mbp but certainly not all staff. We suffer from loss of recognition at the regional and field level at all levels including management. I think we are doing ok with the public but always room for improvement. To be effective we need more dedicated staff at the local levels.
- This would be a good one to develop a class-room curriculum for NCTC or elsewhere, to train people on what materials are available, and how to use them.
- Training is more appropriate for staff.
- Would like to be able to update my own webpage.

Permits function class:

- National including WO communication continues to improve.
- Outreach is self-administered (??) - I attend regional meetings when possible and try to keep up with changes (and complaints)
- Permits are a first line of contact with the general public we educate every person we talk with as to the aspects of conservation and regulations and the importance. Sometime they care and sometimes they care more about the $$ of damage being done by birds not to mention planes and strikes and the possible loss of lives. Again it is a balance... not sure on the training aspects again. Most of us in permits honestly learn this by on-the-job-training.

Administration function group:

- I believe all Service employees connect with the public and any additional training offered as to how to be more effective and/or get the information out to the public is important.
- Outreach is important as it relates to public awareness of who we are and what we do.
- Public outreach is a critical aspect of conservation by way of changing public attitudes in ways that promote more conservation-friendly public values. Tho outreach plays a part in my job, and at times I develop and deliver outreach materials, this is not an essential part of my job.
- Thankfully, opportunities are being presented to allow me to work with the public at my location at the University`s Forest Preserve and also with the migration of the whooping cranes through Alabama for the first time last year. I would like to take a course or two at NCTC such as "Connecting People to Nature Through Birding" or "Public Outreach and Education" when my schedule and travel funds allow this to happen.
- while bird conservation is not specifically related to my performance measures, gaining and sharing bird knowledge goes w/ the overall job.

Coordination function group:

- our program has an outreach specialist, so I don`t do this.
- With increased capacity for outreach in R9 Mig Birds, I am hoping to rely on others to lead on public awareness activities, crafting messages and venues built around the input I provide.

BioStatistics function group:

- we are working to promote bird conservation through a website and it would be very helpful to acquire training on how best to reach and teach an audience such as the general public

From those for whom this is NOT part of their job:

- Not really sure if this is part of my job description.
- our program has an Education and outreach Coordinator, so I tend to let her do this.

Aspect #7 : Communicate in languages other than English to serve your customers or partners

Communicate non-English is part of few employees' jobs (21%).

It is significantly more likely to be part of the jobs of:

- Function class: Coordination
- Area of responsibility: Climate change study
- Region: 2
- Years of experience: 6 to 10

It is significantly less likely to be part of the jobs of:

- Function class: Administration
- Area of responsibility: Improving recreation
- Region: 3, 5, 8
- Years of experience: 3 to 5

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Administration, Information Management, BioStatistics.

Just over half of employees consider it an important part of their current job (60%).

- 23% consider it "Critical"
- It is not considered "Critical" by an employee in any function group other than Biology.

A majority of employees think it will be an important part of their jobs in the future (75%).

- 38% think it will be "Critical"
- The % who think it will be "Critical" ranges from 33% for Coordination to 50% for Permits

Few employees think they are currently effective at this (28%).

- 10% consider themselves "Highly effective"
- The % considering themselves "Ineffective" ranges from 25% for Permits to 75% for Coordination

Less than a third of the respondents said they had received training in this (30%).

Of those who had received training:

- None had On-the-job training (0%).
- 0% had NCTC classroom training, and 78% other classroom training

Most said they needed more training in this (77%).

Desire for more training in this is significantly higher among:

- Function group: Coordination

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (16 of 104 = 15%).

Table 7-1. Is Communicate non-English part of your job?

	Number	Percent
Yes	40	21
No	151	79

Table 7-2. Who has Communicate non-English as part of their job?

	Number	Percent
Function class		
Biology	20	23
Management	5	20
Permits	4	20
Outreach	1	33
Administration	2	8
Coordination	6	46
Info Mgmt	1	17
BioStatistics	1	10
Area of responsibility		
Population monitoring	23	27
Population analysis	15	25
Population research	13	28
Population mgmt	14	22
Habitat planning	12	27
Habitat conservation	16	37
Habitat tech assistance	6	27
Habitat assessment	9	23
Permits	8	21
Other legal compliance	2	11
Hunting regulations	4	13
Coordination/partnerships	22	24
Consultation/tech assist	14	23
Communications/outreach	16	25
Improving recreation	0	0
Admin/fiscal support	6	15
Mgmt/supervision	8	16
Climate change study	9	45

	Number	Percent
Region		
1	1	14
2	7	50
3	1	7
4	3	13
5	1	7
6	2	13
7	5	19
8	0	0
9	20	28
Grade level		
GS 5-9	4	13
GS 11-13	31	24
GS 14-15	5	16
Organizational level		
Wash. Office	15	27
Reg. Office	17	19
Field Office	8	21
Other	0	0
Years of experience		
0 to 2	8	22
3 to 5	3	7
6 to 10	16	37
More than 10	13	20
Total	40	21

Table 7-3. Communicate non-English: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	9	23		No. of responses	40
2	15	38		Mean	2.20
3	15	38		Median	2
4 = Not important	1	3		Mode	2 or 3
				Std. Dev.	0.82

Table 7-4. Communicate non-English: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	15	38		No. of responses	40
2	15	38		Mean	1.88
3	10	25		Median	2
4 = Not important	0	0		Mode	1 or 2
				Std. Dev.	0.79

Table 7-5 Communicate non-English: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	4	10		No. of responses	40
2	7	18		Mean	3.15
3	8	20		Median	4
4 = Ineffective	21	53		Mode	4
				Std. Dev.	1.05

Table 7-6. Communicate non-English: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	8	4	8	0	12	8
Management	0	3	2	0	3	2
Permits	0	2	2	0	2	2
Outreach	0	1	0	0	1	0
Administration	0	2	0	0	2	0
Coordination	1	3	1	1	4	2
Info Mgmt	0	0	1	0	0	1
BioStatistics	0	0	1	0	0	1
Total	9	15	15	1	24	16

Table 7-7. Communicate non-English: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	40	20	40	0	60	40
Management	0	60	40	0	60	40
Permits	0	50	50	0	50	50
Outreach	0	100	0	0	100	0
Administration	0	100	0	0	100	0
Coordination	17	50	17	17	67	33
Info Mgmt	0	0	100	0	0	100
BioStatistics	0	0	100	0	0	100
Total	23	38	38	3	60	40

Table 7-8. Communicate non-English: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	20	2.00	2	1 or 3	0.92
Management	5	2.40	2	2	0.55
Permits	4	2.50	2.5	2 or 3	0.58
Outreach	1	2.00	2	2	-
Administration	2	2.00	2	2	0
Coordination	6	2.33	2	2	1.03
Info Mgmt	1	3.00	3	3	-
BioStatistics	1	3.00	3	3	-
Total	40	2.20	2	2 or 3	0.82

Table 7-9. Communicate non-English: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	8	6	6	0	14	6
Management	2	2	1	0	4	1
Permits	2	2	0	0	4	0
Outreach	0	1	0	0	1	0
Administration	1	1	0	0	2	0
Coordination	2	2	2	0	4	2
Info Mgmt	0	0	1	0	0	1
BioStatistics	0	1	0	0	1	0
Total	15	15	10	0	30	10

Table 7-10. Communicate non-English: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	40	30	30	0	70	30
Management	40	40	20	0	80	20
Permits	50	50	0	0	100	0
Outreach	0	100	0	0	100	0
Administration	50	50	0	0	100	0
Coordination	33	33	33	0	67	33
Info Mgmt	0	0	100	0	0	100
BioStatistics	0	100	0	0	100	0
Total	38	38	25	0	75	25

Table 7-11. Communicate non-English: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	20	1.90	2	1	0.85
Management	5	1.80	2	1 or 2	0.84
Permits	4	1.50	1.5	1 or 2	0.58
Outreach	1	2.00	2	2	-
Administration	2	1.50	1.5	1 or 2	0.71
Coordination	6	2.00	2	1, 2, 3	0.89
Info Mgmt	1	3.00	3	3	-
BioStatistics	1	2.00	2	2	-
Total	40	1.88	2	1 or 2	0.79

Table 7-12. Communicate non-English: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	3	1	3	13	4	16
Management	1	1	1	2	2	3
Permits	0	3	0	1	3	1
Outreach	0	0	1	0	0	1
Administration	0	0	1	1	0	2
Coordination	0	1	1	4	1	5
Info Mgmt	0	1	0	0	1	0
BioStatistics	0	0	1	0	0	1
Total	4	7	8	21	11	29

Table 7-13. Communicate non-English: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	15	5	15	65	20	80
Management	20	20	20	40	40	60
Permits	0	75	0	25	75	25
Outreach	0	0	100	0	0	100
Administration	0	0	50	50	0	100
Coordination	0	17	17	75	17	83
Info Mgmt	0	100	0	0	100	0
BioStatistics	0	0	100	0	0	100
Total	10	18	20	53	28	73

Table 7-14. Communicate non-English: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	20	3.30	4	4	1.13
Management	5	2.80	3	4	1.30
Permits	4	2.50	2	2	1.00
Outreach	1	3.00	3	3	-
Administration	2	3.50	3.5	3 or 4	0.71
Coordination	6	3.50	4	4	0.84
Info Mgmt	1	2.00	2	2	-
BioStatistics	1	3.00	3	3	-
Total	40	3.15	4	4	1.05

Table 7-15. Communicate non-English: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	3	15	17	85
Management	3	60	2	40
Permits	0	0	3	100
Outreach	0	0	1	100
Administration	0	0	2	100
Coordination	2	33	4	67
Info Mgmt	1	100	0	0
BioStatistics	0	0	1	100
Total	9	23	30	77

Table 7-16. Communicate non-English: Method of training

Method	Number	Percent
NCTC classroom training	0	0
Other classroom training	7	78
On-line training	0	0
Journals or books	2	22
Details/special projects	0	0
On-the-job training	0	0
Coaching	0	0
Mentor outside the Service	1	11
Written guidance	0	0
Job aids	0	0

Table 7-17. Communicate non-English: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	18	90	2	10
Management	3	60	2	40
Permits	1	33	2	67
Outreach	0	0	1	100
Administration	2	100	0	0
Coordination	5	83	1	17
Info Mgmt	0	0	1	100
BioStatistics	1	100	0	0
Total	30	77	9	23

Table 7-18. Who needs more training in Communicate non-English?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	18	25	90
Mgmt	3	13	60
Permits	1	9	33
Outreach	0	0	0
Admin	2	13	100
Coordination	5	42	83
Info Mgmt	0	0	0
BioStatistics	1	25	100
Grade level			
GS 5-9	2	11	50
GS 11-13	25	26	83
GS 14-15	3	10	60
Years of experience			
0-2	4	15	50
3-5	3	10	100
6-10	11	29	69
> 10	12	25	100

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	1	33	100
2	5	42	71
3	1	9	100
4	3	18	100
5	0	0	0
6	1	9	100
7	5	28	100
8	-	-	-
9	14	25	70
Organizational level			
Wash Office	10	22	67
Reg. Office	12	19	75
Field Office	8	29	100
Other	-	-	-

151 respondents said Communicate non-English is NOT part of their job.

Table 7-19. NOT part of job responses for Communicate non-English

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	94	1 or 2	0	0	3.87
Important Future?	94	1 or 2	5	5	3.61
Effective?	84	1 or 2	5	6	3.71
Received training?	104	Yes	10	10	
Need training?	104	Yes	16	15	

37 persons commented on the aspect of Communicate non-English.

From those for whom this is part of their job:

Biology function class:

- I have taken it upon myself to try and brush up on my nonEnglish language skills; there is no support for this aspect of my job; rather I would say it is discouraged in my organization
- I need to learn to speak Spanish since I work with biologists from Latin America. However, my job is in Alaska and thus hard to justify the time to do this.
- I think most people should possess this skill prior to working in the service and be selected for positions based upon having this skill. However in some special instances I could see the need to train personnel in a foreign language. I am not in one of those instances.
- I would love to see language training offered at NCTC or online. It would be extremely useful to me to communicate in Spanish.
- In order to reach the critical audiences we need to be able to communicate to them. Speaking their language and demonstrating that we are willing to make the effort to come to them would go a long way. We are simply going to miss those critical audiences if we don`t start acknowledging that not everyone speaks english and is a white american. Diversity is key.
- It is my highest priority to be more fluent in Spanish, as we are a binational program. I have had 4 semesters of spanish at a local college and various other CDs, workbooks, time spent in Latin America. I`m at the point where I need immersion for a period of time.
- Offering training in Spanish or French would assist DMBM who have to deal with international partners to administer our Migratory Bird Treaty responsibilities.
- Spanish
- Spanish would be a great and useful tool to help me communicate with my Mexican and Latin American colleagues.
- Spanish, for meetings in Mexico with Mexican partners.

Management function class:

- I am very active with conservation issues in Mexico and work with an effective network of Mexican government officials and NGOs. Fortunately most of my Mexican associates speak much better English than I do Spanish. Still, I would feel much more confident if was fluent in Spanish.
- Looking toward the future, we will need to provide our information to the public in multiple languages.
- The Service should offer foreign language training, particularly Spanish.

Permits function class:

- So far in 15+ years this has not been an issue. I can see where it would and will be.
- The area we support has a very diverse population.
- The country is becoming increasingly more multi-lingual. It would behoove of The Service and the conservation community in general to provide language training to carry out our mission.
- The only time this type of situation would occur if a non-English speaking person called with a question. I personally know some Spanish and Sign Language - so I would be able to communicate in a limited capacity.

Administration function class:

- Spanish Immersion or interactive Spanish language classes would be exremely helpful in work with Latin American countries.

Coordination function class:

- get translation when needed
- I feel that not being fluent or even verbally conversant in Spanish is hindering my effectiveness working with international partners. I have taken some classes on my own and can read and write simple correspondence. I would love if there was some provision for improving this during work hours.
- I have taken several spanish courses, but I would rank Spanish Immersion as the highest priority need for my job!! Not just more classes, but time in Mexico in an immersion program.
- Spanish immersion badly needed.

From those for whom this is NOT part of their job:

- 7. TYPO
- Again, I would prefer to answer `possibly` as to if I feel I need more training in this area. Being able to communicate in languages such as Spanish (Mexico) or Russian would possibly allow me to participate in surveys in those countries. However, there is only so much time and at this point, do not see it as a priority given my other responsibilities.
- Have not had to deal with anyone that didn`t speak English.
- I generally am not in situations where I need to communicate in other languages. This is probably more important for my staff.
- I speak/write fluent Spanish & French. By the way, communicate is misspelled in Question 7.
- I would like some provisions for training in spanish.

- In the past I participated in projects in spanish-speaking areas, and relied on previous language training (high school spanish) and my own initiative for improvement and currency. There was no encouragement or training offered by the Service.
- It would be nice to be able to take some introduction courses in Spanish or French since we deal with Quebec and Mexico agencies quite a bit in our job.
- Personal choice to have more training, not job required. Just a good thing to do to reach out to our partners. How about requiring anyone doing international work takes a minimum of one year of foreign language. Now how`s that for a job requirement?
- Spanish would be most useful; perhaps some type of immersion course that combines language with work on international bird conservation issues or projects; conservation exchange programs are a possibility
- The question misspelled "communicate" by omitting the "n".
- This is not part of my job at the moment but I hope to work more with programs that require it.
- Training would be needed if the 3-5 year prediction is correct.
- Working knowledge of Spanish would be helpful, but not necessary.
- Would be great for information exchange with Mexico, however, not a priority.

Aspect #8 : Serve as a facilitator to assist diverse groups toward better communication and problem solving

Facilitation is part of less than half of employees' jobs (42%).

It is significantly more likely to be part of the jobs of:

- Function class: Management
- Area of responsibility: Habitat tech assistance
- Organizational level: Other

It is significantly less likely to be part of the jobs of:

- Function class: Administration, Information management
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management.

A majority of employees consider it an important part of their current job (81%).

- Almost everyone who does not consider it important is in the Biology functional class
- 34% consider it "Critical"
- The % who consider it "Critical" ranges from 20% for BioStatistics to 56% for Management

Most employees think it will be an important part of their jobs in the future (86%).

- Almost everyone who does not think it will be important is in the Biology functional class
- 36% think it will be "Critical"
- The % who think it will be "Critical" ranges from 20% for BioStatistics to 60% for Permits

A majority of employees think they are currently effective at this (65%).

- 13% consider themselves "Highly effective"
- The % considering themselves "Ineffective" ranges from 19% for Management to 60% for Administration

Just over half of the respondents said they had received training in this (53%).

Of those who had received training:

- Most had On-the-job training (86%).
- 29% had NCTC classroom training, and 41% other classroom training

A majority said they needed more training in this (74%).

Desire for more training in this is significantly lower among:

- Years of experience: >10

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (14 of 67 = 21%).

Table 8-1. Is Facilitation part of your job?

	Number	Percent
Yes	80	42
No	110	58

Table 8-2. Who has Facilitation as part of their job?

	Number	Percent
Function class		
Biology	40	46
Management	16	64
Permits	5	25
Outreach	1	33
Administration	5	20
Coordination	7	54
Info Mgmt	1	17
BioStatistics	5	50
Area of responsibility		
Population monitoring	35	42
Population analysis	27	47
Population research	21	46
Population mgmt	27	44
Habitat planning	29	64
Habitat conservation	27	63
Habitat tech assistance	17	77
Habitat assessment	23	59
Permits	14	36
Other legal compliance	7	39
Hunting regulations	15	48
Coordination/partnerships	51	57
Consultation/tech assist	30	49
Communications/outreach	30	46
Improving recreation	7	70
Admin/fiscal support	13	34
Mgmt/supervision	29	58
Climate change study	12	60

	Number	Percent
Region		
1	2	29
2	6	43
3	4	27
4	12	50
5	6	43
6	7	47
7	10	39
8	3	75
9	30	42
Grade level		
GS 5-9	4	13
GS 11-13	57	45
GS 14-15	19	59
Organizational level		
Wash. Office	26	46
Reg. Office	35	40
Field Office	13	34
Other	6	86
Years of experience		
0 to 2	18	50
3 to 5	20	46
6 to 10	23	55
More than 10	19	29
Total	80	42

Table 8-3. Facilitation: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	27	34		No. of responses	79
2	37	47		Mean	1.86
3	14	18		Median	2
4 = Not important	1	1		Mode	2
				Std. Dev.	0.75

Table 8-4. Facilitation: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	29	36		No. of responses	80
2	40	50		Mean	1.80
3	9	11		Median	2
4 = Not important	2	3		Mode	2
				Std. Dev.	0.74

Table 8-5 Facilitation: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	10	13		No. of responses	78
2	41	53		Mean	2.26
3	24	31		Median	2
4 = Ineffective	3	4		Mode	2
				Std. Dev.	0.73

Table 8-6. Facilitation: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	11	10	12	1	27	13
Management	9	7	0	0	16	0
Permits	2	2	0	0	4	0
Outreach	0	1	0	0	1	0
Administration	2	3	0	0	5	0
Coordination	2	3	2	0	5	2
Info Mgmt	0	1	0	0	1	0
BioStatistics	1	4	0	0	5	0
Total	27	37	14	1	64	15

Table 8-7. Facilitation: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	28	40	30	3	68	33
Management	56	44	0	0	100	0
Permits	50	50	0	0	100	0
Outreach	0	100	0	0	100	0
Administration	40	60	0	0	100	0
Coordination	29	43	29	0	71	29
Info Mgmt	0	100	0	0	100	0
BioStatistics	20	80	0	0	100	0
Total	34	47	18	1	81	19

Table 8-8. Facilitation: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	40	2.08	2	2	0.83
Management	16	1.44	1	1	0.51
Permits	4	1.50	1.5	1 or 2	0.58
Outreach	1	2.00	2	2	-
Administration	5	1.60	2	2	0.55
Coordination	7	2.00	2	2	0.82
Info Mgmt	1	2.00	2	2	-
BioStatistics	5	1.80	2	2	0.45
Total	79	1.86	2	2	0.75

Table 8-9. Facilitation: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	12	20	7	1	32	8
Management	9	7	0	0	16	0
Permits	3	1	0	1	4	1
Outreach	0	1	0	0	1	0
Administration	2	3	0	0	5	0
Coordination	2	3	2	0	5	2
Info Mgmt	0	1	0	0	1	0
BioStatistics	1	4	0	0	5	0
Total	29	40	9	2	69	11

Table 8-10. Facilitation: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	30	50	18	3	80	20
Management	56	44	0	0	100	0
Permits	60	20	0	20	80	20
Outreach	0	100	0	0	100	0
Administration	40	60	0	0	100	0
Coordination	29	42	29	0	71	29
Info Mgmt	0	100	0	0	100	0
BioStatistics	20	80	0	0	100	0
Total	36	50	11	3	86	14

Table 8-11. Facilitation: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	40	1.93	2	2	0.76
Management	16	1.44	1	1	0.51
Permits	5	1.80	1	1	1.30
Outreach	1	2.00	2	2	-
Administration	5	1.60	2	2	0.55
Coordination	7	2.00	2	2	0.82
Info Mgmt	1	2.00	2	2	-
BioStatistics	5	1.80	2	2	0.45
Total	80	1.80	2	2	0.74

Table 8-12. Facilitation: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	3	20	15	1	23	16
Management	5	8	3	0	13	3
Permits	2	2	0	0	4	0
Outreach	0	1	0	0	1	0
Administration	0	2	1	2	2	3
Coordination	0	5	2	0	5	2
Info Mgmt	0	0	1	0	0	1
BioStatistics	0	3	2	0	3	2
Total	10	41	24	3	51	27

Table 8-13. Facilitation: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	8	51	39	3	59	41
Management	31	50	19	0	81	19
Permits	50	50	0	0	100	0
Outreach	0	100	0	0	100	0
Administration	0	40	20	40	40	60
Coordination	0	71	29	0	71	29
Info Mgmt	0	0	100	0	0	100
BioStatistics	0	60	40	0	60	40
Total	13	53	31	4	65	35

Table 8-14. Facilitation: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	39	2.36	2	2	0.67
Management	16	1.88	2	2	0.72
Permits	4	1.50	1.5	1 or 2	0.58
Outreach	1	2.00	2	2	-
Administration	5	3.00	3	2 or 4	1.00
Coordination	7	2.29	2	2	0.49
Info Mgmt	1	3.00	3	3	-
BioStatistics	5	2.40	2	2	0.55
Total	78	2.26	2	2	0.73

Table 8-15. Facilitation: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	18	45	22	55
Management	13	81	3	19
Permits	3	75	1	25
Outreach	0	0	1	100
Administration	0	0	5	100
Coordination	3	43	4	57
Info Mgmt	0	0	1	100
BioStatistics	5	100	0	0
Total	42	53	37	47

Table 8-16. Facilitation: Method of training

Method	Number	Percent
NCTC classroom training	12	29
Other classroom training	17	41
On-line training	2	5
Journals or books	12	29
Details/special projects	10	24
On-the-job training	36	86
Coaching	12	29
Mentor outside the Service	8	19
Written guidance	2	5
Job aids	0	0

Table 8-17. Facilitation: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	31	80	8	21
Management	10	63	6	38
Permits	2	67	1	33
Outreach	0	0	1	100
Administration	4	80	1	20
Coordination	5	71	2	29
Info Mgmt	1	100	0	0
BioStatistics	4	80	1	20
Total	57	74	20	26

Table 8-18. Who needs more training in Facilitation?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	31	44	80
Mgmt	10	44	63
Permits	2	17	67
Outreach	0	0	0
Admin	4	29	80
Coordination	5	42	71
Info Mgmt	1	25	100
BioStatistics	4	57	80
Grade level			
GS 5-9	2	11	50
GS 11-13	43	45	80
GS 14-15	12	41	63
Years of experience			
0-2	14	52	78
3-5	16	47	84
6-10	18	50	78
> 10	9	20	53

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	1	25	50
2	4	36	80
3	4	31	100
4	11	58	92
5	5	50	83
6	4	40	67
7	7	37	70
8	1	25	33
9	20	37	69
Organizational level			
Wash Office	18	40	72
Reg. Office	23	35	70
Field Office	11	42	85
Other	5	71	83

110 respondents said Facilitation is NOT part of their job.

Table 8-19. NOT part of job responses for Facilitation

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	54	1 or 2	0	0	3.57
Important Future?	54	1 or 2	6	11	3.33
Effective?	47	1 or 2	6	13	3.28
Received training?	69	Yes	6	9	
Need training?	67	Yes	14	21	

22 persons commented on the aspect of Facilitation.

From those for whom this is part of their job:

Biology function class:

- I mainly facilitate meetings where there is little discord. I have had a couple of facilitator training classes outside of FWS. This is a moderate priority.
- In rural Alaska I often find myself explaining and/or defending our activities as necessary for resource management and minimally disturbing to wildlife populations and activities of subsistence and other resource users. I have had to pretty much wing it relying on my own experience, skills and last minute "cramming" to accomplish this.
- It`s not a big need but would not be a bad idea.
- On this, and on a number of the coordination & communication questions, it`s not so much that training would make a great deal of difference. It`s more a question of recognition by management that the job would be better carried out by improvements in coordination and communication. Again, while training would help, there needs to be a shift in the institutional view of communicating with our customers.
- Reaching diverse audiences is going to be huge in the next several years as the demograpahics of the U.S. evolve. I think this concept is key to our success at conservation.
- Yes, facilitation training would be useful in this role.

Management function class:

- As we work with different segments of society and even with folks within our offices or across regions with differing views, facilitation skills has become very important. Facilitation would be a useful course offering.
- I could always use more training on this subject.
- No formal training required but certainly could continue to improve. NCTC already offers excellent classes in this regard.
- Not more training - but again more information and support.

Permits function class:

- As a supervisory, I feel I do this every day.
- I could always use training for update/upgrade my communication skills.
- MBO Permits currently has a liaison (Resee Collins in R4) who deals with NGOs. meetings with other Regional NGO as needed - if situations/problems arise

Administration function class:

- Facilitation skills are essential for many positions within the Mig Bird program. Our staff are regularly looked to for leadership in meetings, workshops and other collaborative efforts among our partners.
- I plan on taking some NCTC courses in the future.

Coordination function class:

- Keeping up on what`s new in facilitation is always good, a priority but not my highest priority.
- My graduate program in Conservation Biology had an emphasis on facilitating exchange between stakeholders and problem-solving. I feel I would benefit from some formal training in methods (the sticky-note technique just doesn`t cut it!)

Information management function class:

- It is apparent in working with partners that our organization`s role is to help common and diverse groups/partners start to work together to reach common goals. Too often, each group has its own goals that it wants the others to adopt or change to meet its needs. Rather the groups need to identify what is the best solution to the problem/issue at hand and work together to solve the issue. Helping to facilitate this collaboration is a skill most employees are not trained for. Most FWS Mig Birds staff are wildlife or natural science trained, meaning they are trained to work or critters not people. Either training needs to make up this discrepancy or wider ranges of people be considered for coordinator/coordination/facilitation roles.

From those for whom this is NOT part of their job:

- Again it is important to learn how to play well with others.
- I obtained my Alternative Dispute Resolution certification while in law school.
- I use the services of trained facilitators when needed.
- Training need solely based on future prediction.

Aspect #9 : Communicate effectively through listening, speaking, and writing skills

Communication is part of almost all employees' jobs (98%).

Almost all employees consider it an important part of their current job (99%).

- 84% consider it "Critical"
- The % who consider it "Critical" ranges from 50% for Information Management to 100% for Management and Outreach

Almost all employees think it will be an important part of their jobs in the future (99%).

- 85% think it will be "Critical"
- The % who consider it "Critical" ranges from 50% for Information Management to 100% for Management and Outreach

Most employees think they are currently effective at this (95%).

- 31% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 17% for Information Management to 67% for Outreach

Almost two thirds of the respondents said they had received training in this (64%).

- Significantly less likely to have received training is function class Coordination

Of those who had received training:

- Most had On-the-job training (80%).
- 24% had NCTC classroom training, and 64% other classroom training

Just under half of employees said they needed more training in this (46%).

Desire for more training in this is significantly higher among:

- Region: 1, 4

Desire for more training in this is significantly lower among:

- Function class: Outreach, Coordination
- Region: 2, 5, 6, 8

Table 9-1. Is Communication part of your job?

	Number	Percent
Yes	188	98
No	3	2

Table 9-2. Who has Communication as part of their job?

	Number	Percent
Function class		
Biology	87	99
Management	25	100
Permits	19	95
Outreach	3	100
Administration	25	96
Coordination	13	100
Info Mgmt	6	100
BioStatistics	10	100
Area of responsibility		
Population monitoring	85	100
Population analysis	59	100
Population research	47	100
Population mgmt	63	100
Habitat planning	45	100
Habitat conservation	43	100
Habitat tech assistance	22	100
Habitat assessment	39	100
Permits	38	97
Other legal compliance	18	100
Hunting regulations	31	97
Coordination/partnerships	89	99
Consultation/tech assist	61	98
Communications/outreach	64	99
Improving recreation	10	100
Admin/fiscal support	38	97
Mgmt/supervision	51	100
Climate change study	20	100

	Number	Percent
Region		
1	7	100
2	14	100
3	15	100
4	24	100
5	13	93
6	15	100
7	26	96
8	4	100
9	70	99
Grade level		
GS 5-9	30	94
GS 11-13	126	99
GS 14-15	32	100
Organizational level		
Wash. Office	56	100
Reg. Office	86	98
Field Office	38	97
Other	7	100
Years of experience		
0 to 2	36	100
3 to 5	43	98
6 to 10	42	98
More than 10	65	99
Total	188	98

Table 9-3. Communication: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	155	84		No. of responses	184
2	28	15		Mean	1.16
3	1	1		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.39

Table 9-4. Communication: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	157	85		No. of responses	185
2	26	14		Mean	1.16
3	2	1		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.40

Table 9-5 Communication: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	58	31		No. of responses	185
2	117	63		Mean	1.74
3	10	5		Median	2
4 = Ineffective	0	0		Mode	2
				Std. Dev.	0.55

Table 9-6. Communication: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	75	11	0	0	86	0
Management	25	0	0	0	25	0
Permits	16	2	1	0	18	1
Outreach	3	0	0	0	3	0
Administration	15	8	0	0	23	0
Coordination	10	2	0	0	12	0
Info Mgmt	3	3	0	0	6	0
BioStatistics	8	2	0	0	10	0
Total	155	28	1	0	183	1

Table 9-7. Communication: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	87	13	0	0	100	0
Management	100	0	0	0	100	0
Permits	84	11	5	0	95	5
Outreach	100	0	0	0	100	0
Administration	65	35	0	0	100	0
Coordination	83	17	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	80	20	0	0	100	0
Total	84	15	1	0	99	1

Table 9-8. Communication: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	86	1.13	1	1	0.34
Management	25	1.00	1	1	0
Permits	19	1.21	1	1	0.54
Outreach	3	1.00	1	1	0
Administration	23	1.35	1	1	0.49
Coordination	12	1.17	1	1	0.39
Info Mgmt	6	1.50	1.5	1 or 2	0.55
BioStatistics	10	1.20	1	1	0.42
Total	184	1.16	1	1	0.39

Table 9-9. Communication: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	75	11	0	0	86	0
Management	25	0	0	0	25	0
Permits	16	2	1	0	18	1
Outreach	3	0	0	0	3	0
Administration	16	6	1	0	22	1
Coordination	11	2	0	0	13	0
Info Mgmt	3	3	0	0	6	0
BioStatistics	8	2	0	0	10	0
Total	157	26	2	0	183	2

Table 9-10. Communication: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	87	13	0	0	100	0
Management	100	0	0	0	100	0
Permits	84	11	5	0	95	5
Outreach	100	0	0	0	100	0
Administration	73	26	4	0	96	4
Coordination	85	15	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	80	20	0	0	100	0
Total	85	14	1	0	99	1

Table 9-11. Communication: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	86	1.13	1	1	0.34
Management	25	1.00	1	1	0
Permits	19	1.21	1	1	0.54
Outreach	3	1.00	1	1	0
Administration	23	1.35	1	1	0.57
Coordination	13	1.15	1	1	0.38
Info Mgmt	6	1.50	1.5	1 or 2	0.55
BioStatistics	10	1.20	1	1	0.42
Total	185	1.16	1	1	0.40

Table 9-12. Communication: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	24	58	4	0	82	4
Management	8	15	2	0	23	2
Permits	9	8	2	0	17	2
Outreach	2	1	0	0	3	0
Administration	7	15	1	0	22	1
Coordination	5	8	2	0	13	0
Info Mgmt	1	5	2	0	6	0
BioStatistics	2	7	1	0	9	1
Total	58	117	10	0	175	10

Table 9-13. Communication: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	28	67	5	0	95	5
Management	32	60	8	0	92	8
Permits	47	42	11	0	89	11
Outreach	67	33	0	0	100	0
Administration	30	65	4	0	96	4
Coordination	38	62	0	0	100	0
Info Mgmt	17	83	0	0	100	0
BioStatistics	20	70	10	0	90	10
Total	31	63	5	0	95	5

Table 9-14. Communication: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	86	1.77	2	2	0.52
Management	25	1.76	2	2	0.60
Permits	19	1.63	2	1	0.68
Outreach	3	1.33	1	1	0.58
Administration	23	1.74	2	2	0.54
Coordination	13	1.62	2	2	0.51
Info Mgmt	6	1.83	2	2	0.41
BioStatistics	10	1.90	2	2	0.59
Total	185	1.74	2	2	0.55

Table 9-15. Communication: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	54	63	32	37
Management	19	76	6	24
Permits	14	74	5	26
Outreach	3	100	0	0
Administration	15	60	10	40
Coordination	5	39	8	61
Info Mgmt	4	67	2	33
BioStatistics	6	60	4	40
Total	120	64	67	36

Table 9-16. Communication: Method of training

Method	Number	Percent
NCTC classroom training	29	24
Other classroom training	77	64
On-line training	11	9
Journals or books	33	28
Details/special projects	29	24
On-the-job training	96	80
Coaching	26	22
Mentor outside the Service	12	10
Written guidance	25	21
Job aids	8	7

Table 9-17. Communication: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	43	52	39	48
Management	10	40	15	60
Permits	8	50	8	50
Outreach	0	0	3	100
Administration	8	36	14	64
Coordination	3	25	9	75
Info Mgmt	3	50	3	50
BioStatistics	6	60	4	40
Total	81	46	95	54

Table 9-18. Who needs more training in Communication?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	43	52	52
Mgmt	10	40	40
Permits	8	47	50
Outreach	0	0	0
Admin	8	35	36
Coordination	3	25	25
Info Mgmt	3	50	50
BioStatistics	6	60	60
Grade level			
GS 5-9	14	52	56
GS 11-13	55	46	46
GS 14-15	12	39	39
Years of experience			
0-2	13	37	37
3-5	23	50	54
6-10	21	51	53
> 10	24	42	43

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	5	71	71
2	4	31	31
3	7	50	50
4	14	64	64
5	3	23	25
6	4	31	31
7	10	40	42
8	1	25	25
9	33	49	49
Organizational level			
Wash Office	27	50	50
Reg. Office	33	40	41
Field Office	16	46	47
Other	4	57	57

3 respondents said Communication is NOT part of their job.

Table 9-19. NOT part of job responses for Communication

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	1	1 or 2	0	0	3.00
Important Future?	1	1 or 2	0	0	3.00
Effective?	1	1 or 2	0	0	3.00
Received training?	3	Yes	0	0	
Need training?	3	Yes	1	33	

33 persons commented on the aspect of Communication.

From those for whom this is part of their job:

Biology function class:

- Communication is at the foundation of almost every job aspect (e.g., coordinate with others, engage the public, coordinate within the Service, collaborate with partners, increase public awareness, ...). Self assessment is important, but one`s effectiveness and need for training must also be assessed by the employee`s supervisor.
- Could use brush-up writing class.
- Could use training on public speaking.
- DOI Learn courses helped to some degree improve my skills, but could have been better.
- Good communication skills are basic to overall interpersonal relationships - both on the job and off. Writing skills are essential for me in report and manuscript writing. Believe additional structured training would be beneficial. Specifically, as to writing, believe that training received that is specific to a particular project/report one is working on would be of the most benefit (i.e., on-the-job training).
- I say yes only because this skillset is perhaps the single most important skillset for all employees to possess. It probably couldn`t hurt to have everyone constantly aspiring to improve how effectively they communicate. How you cater to all the various skill levels to achieve this is more complicated. Seems you would need to employ a variety of the training methods above. But certainly online courses could accomplish a lot (powerpoint training, email etiquette, etc.).
- Not a priority. I have had several classes before joining the FWS.
- One can always improve these skills and such training should be mandatory for any Service employee working with the public which basically means everybody. You need to be able to effectively listen and communicate with your audience if you are going to instill change.
- Peer review (within and outside the service) serves as continued training.
- Some additional training in developing presentation would be useful.
- technical and business writing class would be nice
- the public speaking part is largely a matter of experience, which is painful for many people to acquire, but should be encouraged, and probably hasn`t been encouraged enough. This has improved recently.

Management function class:

- A major part of oral communication is understanding others' perspectives. It has been very helpful for me to use Myers-Briggs instruments, DISC analysis, etc.
- again- three decades of on the job experience.
- Good one for NCTC curriculum development.

- More tools would be helpful and training for using the tools if needed - up to date computer programs - social networking and other forms of communications - more access to tools like producing videos, TV and radio spots, etc.
- One could always improve speaking and writing skills. These skill sets differ by context (ie, audience).
- Only thing left to apply is a personal trainer.
- This is a skill learned from K-12.

Permits function class:

- A person can always benefits with courses that provide additional skills for better communication, listening and writing skills.
- Dealing with the public effectively and efficiently would greatly help me in my job. I guess telephone skills are the most important for me to learn. I get too easily irritated with the same people calling asking the same questions. Where`s my permit, you`ve cashed my check? They don`t want to hear we have a backlog of permit applications and renewals to process. maybe organizational skills with the permitting process would be extremely helpful. Each person does it differently but exactly how should it be done so that if you died tomorrow someone else could carry on in your job. Also I don`t think it is at all helpful for someone in permits to telework every day of the month except three days (when they come into the office). It's just not that kind of a job. I guess what I`m saying is that communication within our goup is a big concern also.
- have templates (masters) for standard correspondence, have templates (masters) as Power Point Presentations for SOME types of permits
- I have a B.A. in English Literature as well as a Juris Doctorate. I am very adept at communicating through a variety of means. All of the positions I held in the private sector required me to be an efficient and effective communicator and listener.
- I need more practice.
- Let`s face it most of us have to communicate with others daily. Yes it really should be effective... Time for others is key and common sense is essential.

Administration function class:

- good over-all skills to have and use
- I am an administrative assistant for MBSP in R6. I assist with travel arrangements/vouchers, timekeeping, filing and other general administrative needs.

Coordination function class:

- Except for Spanish language training. I feel that not being fluent or even verbally conversant in Spanish is hindering my effectiveness working with international partners. I have taken some classes on my own and can read and write simple

correspondence. I would love if there was some provision for improving this during work hours.

Information Management function class:

- I believe training in this area can always be useful.
- Much of the work in this job is not only doing science & projects but communicating and conveying the results of that work to wider audiences. Again skills most wildlife trained professionals are not trained in. This is an area most people, regardless of profession, could use improvement in anyway.

BioStatistics function class:

- Always....it`s very important in today’s society to be able to communicate effectively.
- facilitation and elicitation skills
- I highly recommend Jon Hooper`s course on "Natural Resources Communication Workshop".

Aspect #10 : Engage in collaborative problem solving with those that disagree with you

Collaborative problem solving is part of a majority of employees' jobs (77%).

It is significantly more likely to be part of the jobs of:

- Function class: Management
- Area of responsibility: Mgmt/supervision, Climate change study
- Grade level: GS 14-15
- Organizational level: Other

It is significantly less likely to be part of the jobs of:

- Function class: Administration
- Area of responsibility: Admin/fiscal support
- Region: 3, 5
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach

Most employees consider it an important part of their current job (84%).

- 34% consider it "Critical"
- The % who consider it "Critical" ranges from 20% for Coordination to 56% for Permits

Most employees think it will be an important part of their jobs in the future (86%).

- 39% think it will be "Critical"
- The % who think it will be "Critical" ranges from 20% for Coordination to 63% for Permits

A majority of employees think they are currently effective at this (79%).

- 16% consider themselves "Highly effective"
- The % considering themselves "Highly effective" ranges from 0% for Administration to 31% for Permits

Just under half of the respondents said they had received training in this (48%).

- Significantly more likely to have received training in this for function class: BioStatistics, Management, Information Management
- Significantly less likely to have received training in this for function class: Coordination

Of those who had received training:

- A majority had On-the-job training (71%).
- 32% had NCTC classroom training, and 41% other classroom training

A majority said they needed more training in this (62%).

Desire for more training in this is significantly higher among:

- Region: 4
- Organizational level: Other

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (5 of 29 = 17%).

Table 10-1. Is Collaborative problem solving part of your job?

	Number	Percent
Yes	145	77
No	44	23

Table 10-2. Who has Collaborative problem solving as part of their job?

	Number	Percent
Function class		
Biology	70	80
Management	23	92
Permits	16	84
Outreach	2	67
Administration	12	48
Coordination	10	77
Info Mgmt	4	67
BioStatistics	8	80
Area of responsibility		
Population monitoring	66	78
Population analysis	47	80
Population research	39	83
Population mgmt	55	87
Habitat planning	37	82
Habitat conservation	34	79
Habitat tech assistance	19	86
Habitat assessment	30	77
Permits	30	79
Other legal compliance	17	94
Hunting regulations	30	94
Coordination/partnerships	77	86
Consultation/tech assist	51	82
Communications/outreach	59	91
Improving recreation	10	100
Admin/fiscal support	25	66
Mgmt/supervision	48	94
Climate change study	19	95

	Number	Percent
Region		
1	6	86
2	11	85
3	10	67
4	19	83
5	9	64
6	13	87
7	21	78
8	3	75
9	53	75
Grade level		
GS 5-9	16	52
GS 11-13	99	79
GS 14-15	30	94
Organizational level		
Wash. Office	41	73
Reg. Office	72	83
Field Office	24	63
Other	7	100
Years of experience		
0 to 2	31	86
3 to 5	32	73
6 to 10	36	84
More than 10	44	69
Total	145	77

Table 10-3. Collaborative problem solving: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	49	34		No. of responses	143
2	71	50		Mean	1.83
3	21	15		Median	2
4 = Not important	2	1		Mode	2
				Std. Dev.	0.72

Table 10-4. Collaborative problem solving: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	55	39		No. of responses	143
2	68	48		Mean	1.76
3	20	14		Median	2
4 = Not important	0	0		Mode	2
				Std. Dev.	0.68

Table 10-5 Collaborative problem solving: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	23	16		No. of responses	142
2	89	63		Mean	2.08
3	26	18		Median	2
4 = Ineffective	4	3		Mode	2
				Std. Dev.	0.67

Table 10-6. Collaborative problem solving: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	20	37	10	2	57	12
Management	10	11	2	0	21	2
Permits	9	6	1	0	15	1
Outreach	0	1	1	0	1	1
Administration	3	6	2	0	9	2
Coordination	2	6	2	0	8	2
Info Mgmt	1	2	1	0	3	1
BioStatistics	4	2	2	0	6	2
Total	49	71	21	2	120	23

Table 10-7. Collaborative problem solving: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	29	54	15	3	83	17
Management	44	48	9	0	91	9
Permits	56	38	6	0	94	6
Outreach	0	50	50	0	50	50
Administration	27	55	18	0	82	18
Coordination	20	60	20	0	80	20
Info Mgmt	25	50	25	0	75	25
BioStatistics	50	25	25	0	75	25
Total	34	50	15	1	84	16

Table 10-8. Collaborative problem solving: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	69	1.91	2	2	0.74
Management	23	1.65	2	2	0.65
Permits	16	1.50	1	1	0.63
Outreach	2	2.50	2.5	2 or 3	0.71
Administration	11	1.91	2	2	0.70
Coordination	10	2.00	2	2	0.67
Info Mgmt	4	2.00	2	2	0.82
BioStatistics	8	1.75	1.5	1	0.89
Total	143	1.83	2	2	0.72

Table 10-9. Collaborative problem solving: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	24	34	11	0	58	11
Management	11	12	0	0	23	0
Permits	10	5	1	0	15	1
Outreach	0	1	1	0	1	1
Administration	3	6	2	0	9	2
Coordination	2	6	2	0	8	2
Info Mgmt	1	2	1	0	3	1
BioStatistics	4	2	2	0	6	2
Total	55	68	20	0	123	20

Table 10-10. Collaborative problem solving: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	35	49	16	0	84	16
Management	48	52	0	0	100	0
Permits	63	31	6	0	94	6
Outreach	0	50	50	0	50	50
Administration	27	55	18	0	82	18
Coordination	20	60	20	0	80	20
Info Mgmt	25	50	25	0	75	25
BioStatistics	50	25	25	0	75	25
Total	39	48	14	0	86	14

Table 10-11. Collaborative problem solving: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	69	1.81	2	2	0.69
Management	23	1.52	2	2	0.51
Permits	16	1.44	1	1	0.63
Outreach	2	2.50	2.5	2 or 3	0.71
Administration	11	1.91	2	2	0.70
Coordination	10	2.00	2	2	0.67
Info Mgmt	4	2.00	2	2	0.82
BioStatistics	8	1.75	1.5	1	0.89
Total	143	1.76	2	2	0.68

Table 10-12. Collaborative problem solving: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	10	44	12	3	54	15
Management	5	12	6	0	17	6
Permits	5	7	4	0	12	4
Outreach	0	2	0	0	2	0
Administration	0	9	1	1	9	2
Coordination	1	7	2	0	8	2
Info Mgmt	1	3	0	0	4	0
BioStatistics	1	5	1	0	6	1
Total	23	89	26	4	112	30

Table 10-13. Collaborative problem solving: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	15	64	17	4	78	22
Management	22	52	26	0	74	26
Permits	31	44	25	0	75	25
Outreach	0	100	0	0	100	0
Administration	0	82	9	9	82	18
Coordination	10	70	20	0	80	20
Info Mgmt	25	75	0	0	100	0
BioStatistics	14	71	14	0	86	14
Total	16	63	18	3	79	21

Table 10-14. Collaborative problem solving: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	69	2.12	2	2	0.70
Management	23	2.04	2	2	0.71
Permits	16	1.94	2	2	0.77
Outreach	2	2.00	2	2	0
Administration	11	2.27	2	2	0.65
Coordination	10	2.10	2	2	0.57
Info Mgmt	4	1.75	2	2	0.50
BioStatistics	7	2.00	2	2	0.58
Total	142	2.08	2	2	0.67

Table 10-15. Collaborative problem solving: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	27	39	43	61
Management	17	74	6	26
Permits	9	56	7	44
Outreach	0	0	2	100
Administration	4	33	8	67
Coordination	2	20	8	80
Info Mgmt	3	75	1	25
BioStatistics	7	88	1	13
Total	69	48	76	52

Table 10-16. Collaborative problem solving: Method of training

Method	Number	Percent
NCTC classroom training	22	32
Other classroom training	28	41
On-line training	3	4
Journals or books	7	10
Details/special projects	14	20
On-the-job training	49	71
Coaching	16	23
Mentor outside the Service	6	9
Written guidance	3	4
Job aids	0	0

Table 10-17. Collaborative problem solving: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	42	64	24	36
Management	1	61	9	39
Permits	9	64	5	36
Outreach	0	0	2	100
Administration	7	58	5	42
Coordination	5	50	5	50
Info Mgmt	2	67	1	33
BioStatistics	6	75	2	25
Total	85	62	53	38

Table 10-18. Who needs more training in Collaborative problem solving?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	42	53	64
Mgmt	14	56	61
Permits	9	60	64
Outreach	0	0	0
Admin	7	37	58
Coordination	5	39	50
Info Mgmt	2	50	67
BioStatistics	6	67	75
Grade level			
GS 5-9	11	48	73
GS 11-13	57	51	61
GS 14-15	17	53	57
Years of experience			
0-2	19	61	66
3-5	23	56	74
6-10	21	53	60
> 10	22	41	52

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	4	57	67
2	6	46	55
3	6	46	60
4	15	71	83
5	7	64	78
6	5	42	46
7	9	38	45
8	1	33	50
9	32	51	63
Organizational level			
Wash Office	26	51	65
Reg. Office	40	53	59
Field Office	13	39	57
Other	6	86	86

44 respondents said Collaborative problem solving is NOT part of their job.

Table 10-19. NOT part of job responses for Collaborative problem solving

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	20	1 or 2	0	0	3.45
Important Future?	20	1 or 2	0	0	3.45
Effective?	18	1 or 2	4	22	3.00
Received training?	29	Yes	1	3	
Need training?	29	Yes	5	17	

20 persons commented on the aspect of Collaborative problem solving.

From those for whom this is part of their job:

Biology function class:

- I think everyone needs training in this area. I don`t feel I need the training any more than everyone does.
- Need more SDM classes
- On-line training would be appropriate considering level of importance of this topic to my performance.
- There have been recent announcements for such training by email, but to happen it needs to be encouraged, as it is difficult to fit into an already tight schedule.

Management function class:

- I especially need more negotiation training.
- I need to take a dispute resolution course.
- Need to take the Bleiker training.
- Skills could be taught and practiced in a classroom setting.
- Would like to take full NCTC course on Strategic Decision Making.

Permits function class:

- Being able to work in an environment that is uplifting and pleasant is also a good thing. When there is conflict (which can be on a weekly basis) it is essential for a person to know how to handle that type of person and know that there are places to confide in the situation which surrounds them.
- Can be a daily thing in permits. People not agreeing with regs, etc. And as a supervisor I get to deal with all or most of these issues.
- I obtained my Alternative Dispute Resolution certification while in law school.

Administration function class:

- collaborative problem solving relates to all
- I plan on taking some courses in the future.
- I think this is a highly important skill to have, but I think that most disagreements I experience in my job are not fundamental disagreements in principle, philosophy or values. The disagreements tend to occur in the details and don`t normally represent critical dissentions where lots of negotiating skill and sensitivity are warranted. They tend to work themselves out and are often between individuals who already know and respect each other, and have a collaborative inter-relationship to begin with.

Collaboration function class:

- My graduate program in Conservation Biology had an emphasis on facilitating exchange between stakeholders and problem-solving. I feel I would benefit from some formal training in methods (the sticky-note technique just doesn`t cut it!)

BioStatistics function class:

- Again, you can`t obtain enough training in this subject area
- formal methods for dealing with multi-objective management problems formal methods in elicitation and conflict resolution

From those for whom this is NOT part of their job:

- ...those who disagree with you.
- I answered no to this question because this is not a formal responsibility of my position, but I view this as part of one`s job on an everyday basis on an informal basis. Ability for better inter-personal skills would benefit everyone and the program.

Aspect #11 : Use GIS technologies

GIS is part of less than half of employees' jobs (45%).

It is significantly more likely to be part of the jobs of:

- Function class: BioStatistics, Biology
- Area of responsibility: Habitat assessment
- Region: 1
- Grade level: GS 11-13
- Organizational level: Field Office, Other

It is significantly less likely to be part of the jobs of:

- Function class: Management, Permits, Administration
- Area of responsibility: Permits, Admin/fiscal support, Mgmt/supervision
- Region: 6
- Grade level: GS 5-9, GS 14-15

There are too few responses in the following function classes for comparisons to be meaningful: Permits, Outreach

A majority of employees consider it an important part of their current job (69%).

- 25% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for Coordination to 43% for BioStatistics

A majority of employees think it will be an important part of their jobs in the future (71%).

- 30% think it will be "Critical"
- The % who think it will be "Critical" ranges from 0% for Coordination to 43% for BioStatistics

A majority of employees think they are currently effective at this (69%).

- 12% consider themselves "Highly effective"
- Those considering themselves "Highly effective" are almost all in the Biology function class

A majority of the respondents said they had received training in this (71%).

Of those who had received training:

- A majority had On-the-job training (77%).
- 21% had NCTC classroom training, and 77% other classroom training

A majority said they needed more training in this (71%).

Desire for more training in this is significantly higher among:

- Function class: Biology
- Region: 2, 4, 7
- Organizational level: Field Office

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (23 of 70 = 33%).

Table 11-1. Is GIS part of your job?

	Number	Percent
Yes	86	45
No	104	55

Table 11-2. Who has GIS as part of their job?

	Number	Percent
Function class		
Biology	55	63
Management	5	20
Permits	2	10
Outreach	2	67
Administration	4	16
Coordination	7	54
Info Mgmt	3	50
BioStatistics	8	80
Area of responsibility		
Population monitoring	56	66
Population analysis	42	71
Population research	32	68
Population mgmt	35	56
Habitat planning	33	73
Habitat conservation	26	61
Habitat tech assistance	14	64
Habitat assessment	30	77
Permits	7	18
Other legal compliance	6	33
Hunting regulations	15	47
Coordination/partnerships	50	57
Consultation/tech assist	31	50
Communications/outreach	33	51
Improving recreation	2	20
Admin/fiscal support	7	18
Mgmt/supervision	12	24
Climate change study	12	60

	Number	Percent
Region		
1	5	71
2	7	50
3	5	33
4	13	54
5	5	36
6	4	27
7	16	59
8	2	50
9	29	41
Grade level		
GS 5-9	4	13
GS 11-13	76	60
GS 14-15	6	19
Organizational level		
Wash. Office	21	38
Reg. Office	30	34
Field Office	28	72
Other	6	86
Years of experience		
0 to 2	14	39
3 to 5	24	55
6 to 10	18	42
More than 10	28	43
Total	86	45

Table 11-3. GIS: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	20	25		No. of responses	80
2	35	44		Mean	2.13
3	20	25		Median	2
4 = Not important	5	6		Mode	2
				Std. Dev.	0.86

Table 11-4. GIS: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	24	30		No. of responses	80
2	33	41		Mean	2.04
3	19	24		Median	2
4 = Not important	4	5		Mode	2
				Std. Dev.	0.86

Table 11-5 GIS: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	9	12		No. of responses	78
2	45	58		Mean	2.26
3	19	24		Median	2
4 = Ineffective	5	6		Mode	2
				Std. Dev.	0.75

Table 11-6. GIS: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	12	24	10	4	36	14
Management	2	2	1	0	4	1
Permits	1	1	0	0	2	0
Outreach	0	0	2	0	0	2
Administration	1	1	2	0	2	2
Coordination	0	4	2	1	4	3
Info Mgmt	1	1	1	0	2	1
BioStatistics	3	2	2	0	5	2
Total	20	35	20	5	55	25

Table 11-7. GIS: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	24	48	20	8	72	28
Management	40	40	20	0	80	20
Permits	50	50	0	0	100	0
Outreach	0	0	100	0	0	100
Administration	25	25	50	0	50	50
Coordination	0	57	29	14	57	43
Info Mgmt	33	33	33	0	67	33
BioStatistics	43	29	29	0	71	29
Total	25	44	25	6	69	31

Table 11-8. GIS: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	50	2.12	2	2	0.87
Management	5	1.80	2	1 or 2	0.84
Permits	2	1.50	1.5	1 or 2	0.71
Outreach	2	3.00	3	3	0
Administration	4	2.25	2.5	3	0.96
Coordination	7	2.57	2	2	0.79
Info Mgmt	3	2.00	2	1, 2, 3	1.00
BioStatistics	7	1.86	2	1	0.86
Total	80	2.13	2	2	0.86

Table 11-9. GIS: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	15	22	10	3	37	13
Management	2	3	0	0	5	0
Permits	2	0	0	0	2	0
Outreach	0	0	2	0	0	2
Administration	1	1	2	0	2	2
Coordination	0	4	2	1	4	3
Info Mgmt	1	1	1	0	2	1
BioStatistics	3	2	2	0	5	2
Total	24	33	19	4	57	23

Table 11-10. GIS: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	30	44	20	6	74	26
Management	40	60	0	0	100	0
Permits	100	0	0	0	100	0
Outreach	0	0	100	0	0	100
Administration	25	25	50	0	50	50
Coordination	0	57	29	14	57	43
Info Mgmt	33	33	33	0	67	33
BioStatistics	43	29	29	0	71	29
Total	30	41	24	5	71	29

Table 11-11. GIS: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	50	2.02	2	2	0.87
Management	5	1.60	2	2	0.55
Permits	2	1.00	1	1	0
Outreach	2	3.00	3	3	0
Administration	4	2.25	2.5	3	0.96
Coordination	7	2.57	2	2	0.79
Info Mgmt	3	2.00	2	1, 2, 3	1.00
BioStatistics	7	1.86	2	1	0.90
Total	80	2.04	2	2	0.86

Table 11-12. GIS: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	8	24	13	4	32	17
Management	1	3	1	0	4	1
Permits	0	2	0	0	2	0
Outreach	0	1	1	0	1	1
Administration	0	2	1	1	2	2
Coordination	0	5	2	0	5	2
Info Mgmt	0	3	0	0	3	0
BioStatistics	0	5	1	0	5	1
Total	9	45	19	5	54	24

Table 11-13. GIS: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	16	49	27	8	65	35
Management	20	60	20	0	80	20
Permits	0	100	0	0	100	0
Outreach	0	50	50	0	50	50
Administration	0	50	25	25	50	50
Coordination	0	71	29	0	71	29
Info Mgmt	0	100	0	0	100	0
BioStatistics	0	83	17	0	83	17
Total	12	58	24	6	69	31

Table 11-14. GIS: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	49	2.27	2	2	0.84
Management	5	2.00	2	2	0.71
Permits	2	2.00	2	2	0
Outreach	2	2.50	2.5	2 or 3	0.71
Administration	4	2.75	2.5	2	0.96
Coordination	7	2.29	2	2	0.49
Info Mgmt	3	2.00	2	2	0
BioStatistics	6	2.17	2	2	0.41
Total	78	2.26	2	2	0.75

Table 11-15. GIS: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	41	75	14	25
Management	4	80	1	20
Permits	1	50	1	50
Outreach	1	50	1	50
Administration	3	75	1	25
Coordination	4	57	3	43
Info Mgmt	2	67	1	33
BioStatistics	5	63	3	38
Total	61	71	25	29

Table 11-16. GIS: Method of training

Method	Number	Percent
NCTC classroom training	13	21
Other classroom training	47	77
On-line training	16	26
Journals or books	15	25
Details/special projects	5	8
On-the-job training	47	77
Coaching	8	13
Mentor outside the Service	5	8
Written guidance	5	8
Job aids	2	3

Table 11-17. GIS: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	43	81	10	19
Management	2	40	3	60
Permits	2	100	0	0
Outreach	2	100	0	0
Administration	3	75	1	25
Coordination	3	43	4	57
Info Mgmt	2	67	1	33
BioStatistics	3	38	5	63
Total	60	71	24	29

Table 11-18. Who needs more training in GIS?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	43	54	81
Mgmt	2	8	40
Permits	2	18	100
Outreach	2	100	100
Admin	3	23	75
Coordination	3	25	43
Info Mgmt	2	40	67
BioStatistics	3	38	38
Grade level			
GS 5-9	3	11	75
GS 11-13	54	51	73
GS 14-15	3	10	50
Years of experience			
0-2	10	36	77
3-5	16	41	67
6-10	12	32	67
> 10	20	43	74

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	2	33	40
2	6	55	86
3	2	15	40
4	11	52	85
5	2	20	40
6	3	27	75
7	13	57	81
8	2	100	100
9	19	33	70
Organizational level			
Wash Office	13	18	65
Reg. Office	21	31	70
Field Office	22	69	79
Other	4	57	67

104 respondents said GIS is NOT part of their job.

Table 11-19. NOT part of job responses for GIS

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	56	1 or 2	0	0	3.63
Important Future?	57	1 or 2	7	12	3.35
Effective?	53	1 or 2	3	6	3.66
Received training?	70	Yes	19	27	
Need training?	70	Yes	23	33	

39 persons commented on the aspect of GIS.

From those for whom this is part of their job:

Biology function class:

- Am attending training in May in Cookville, TN
- At present, get support from GIS specialists for most of what I need. Would very much like to be more proficient at it myself - but do not know if I have the time to accomplish this. Again, I believe on-the-job training relating to a specific project that one is working on would be of the most benefit. A good overall education in the subject would be good, but again time is of the essence. And if you do not continue to use the skills learned consistently, the tendency is to lose the information learned. My `classroom training other than NCTC` was a 2-day course.
- I had training opportunity but had work conflict. Expect to get training in this arena in next year or so.
- I have had GIS training, but many years ago. I recently was schedule to take a course, but I was unable to attend. I will now try to reschedule this course or another one.
- In my position I do not directly use GIS, but need to understand the utility and limitations of GIS and be able to communicate with GIS technicians. Most training I have had in the past has been very hands on, which has actually not been very applicable to my position. Courses/training that focuses on emerging issues, new developments, potential use of GIS in conservation planning would probably be more useful.
- Initially self trained 15 years ago while doing PhD. Have maintained an adequate level of competency. Others will probably require training in new technology as it arises.
- More training/mentorship on specific projects.
- Most of the training I have had is through tutorials and self-solicited mentoring from colleagues within our organization. A class sometime would be useful, especially in transitioning from ARCVIEW to ARCGIS, for which I have found available tutorials inadequate.
- one of those skills that if you don`t use consistently the technology seems to outpace you; has been on my IDP for the past several years but is a low priority; it would be great if we had a trained GIS person willing to do these projects that we could just go to
- ongoing need - much help is provided through service GIS network
- The importance of this to my job, as reported above, is based upon the current job description more than where I think the position may be headed.
- this would be a high priority for me. I have had a college course and one class with a GIS person from the Regional office.
- Training prior to MBM program
- While I do not use GIS personally, I work with others within FWS and with outside partners who use GIS as a tool for bird conservation planning. I also

occasionally review proposals that involve GIS work, so I have to have an understanding of its utility for bird issues.
- would like more training with statistical analysis extensions
- Yes and no. I use GIS a lot, but have someone else do the actual GIS work that I direct. I don`t have time to do everything, and this is a specialized skill that is a full-time job in itself. I have to go after `soft money` to pay for someone to do this - no support from FWS. It's a real gap. I think I`m good at understanding how to use GIS, but can`t spend the time to learn the programs as well, beyond basics. Nor could I devote enough time to that one aspect of my work.

Coordination function class:

- maybe my second highest priority
- tasks now performed by other staff

Information Management function class:

- continual training is always necessary for this type of job as software capabilities and GIS methods improve over time
- Per response to previous questions, we can all improve at our jobs by more training in communication, personal effectiveness, etc. However, technology skills are critical to keep updated for those of us who use it on a day to day basis. The traditional 40 hours of training a year is insufficient for GIS/technology users, especially when that encompasses all types of training an employee receives not just technology. The GIS/technology field moves so fast that more training is needed just to maintain basic skills, let alone learn new and innovative ways to solve problems. Also, to take advantage of the improvements in software packages to help solve long-standing modeling issues, it is imperative that staff receive training on new software, how to develop models, and how to critically think and create new ways using technology to solve existing or old problems. Cannot overstate the improvements needed for GIS and modeling training within the FWS.

BioStatistics function class:

- Sure, I would love more training in this, but there are others in my office that have the expertise and therefore would perform the task I need completed rather than myself.

From those for whom this is NOT part of their job:

- Access to staff who a really good at GIS is very important.
- Does not apply to our job in permits.
- I do not have GIS capability on my computer. I need access to ArcGIS and some further training.

- I have not completed the on-line course and believe a classroom setting would be better because it is harder to make time in the office.
- I understand the technology and its applications through seminars. I think it would be good to get some training in actual use of some of the simpler programs (Arc View)
- Most if not all of Permits time is in the office.
- My staff need this tool.
- not my role
- Not really part of my job, but it should be. To a great extent, we rely on our other Branches for GIS support.
- Only if I feel a need to access desktop GIS decision tools.
- The FWS is horribly behind in its application of GIS at a national level. It sounds like field offices are probably the most advanced, yet they are likely working in vacuums. Generally I think R9 employees must understand GIS if we are to succeed at strategic habitat conservation. They probably do not need to use it every day, but certainly it should be more readily available and a more widely accepted IT tool and function at a national level. Most of my expertise came from graduate school training, not training with the FWS. At the very least we should consider having one (two?) GIS technicians in the Arlington MB office. Nevertheless an update to my training via a course wouldn`t hurt even though I do not need it on a day-to-day basis for my job.
- The use of geospatial data technologies is common to landscape-scale bird conservation. The application of spatial data technologies to develop decision support tools requires considerable skills/expertise. End users of the GIS products need a general understanding of the methodologies, but do not need the level of training necessary to develop the product(s).
- This is currently not part of our job but it should be and I think that additional training will help facilitate the use of GIS with my current position.
- This may be something to explore for future projects.
- training needs are from a big picture point of view to ensure keeping up with tools available for staff
- We have people that specialize in GIS
- What is GIS technologies?
- Would be helpful in understanding its usefulness in applications of habitat modeling for bird populations.

Aspect #12 : Answer biological questions in a broad, landscape context

Landscape context is part of a majority of employees' jobs (73%).

It is significantly more likely to be part of the jobs of:
- Function class: Biology, Management, Coordination, BioStatistics
- Region: 2
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:
- Function class: Permits, Administration, Information Management
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management

Most employees consider it an important part of their current job (87%).
- 45% consider it "Critical"
- The % who consider it "Critical" ranges from 25% for BioStatistics to 55% for Coordination

Most employees think it will be an important part of their jobs in the future (88%).
- 53% think it will be "Critical"
- The % who think it will be "Critical" ranges from 29% for Permits to 57% for Administration

A majority of employees think they are currently effective at this (80%).
- 23% consider themselves "Highly effective"
- The % who consider themselves "Highly effective" ranges from 0% for Administration to 45% for Coordination.

Just over half of the respondents said they had received training in this (58%).

Of those who had received training:
- Most had On-the-job training (87%).
- 13% had NCTC classroom training, and 43% other classroom training

Just over half said they needed more training in this (55%).

Desire for more training in this is significantly higher among:
- Function class: Biology

Desire for more training in this is significantly lower among:
- Function class: BioStatistics
- Years of experience: >10

Table 12-1. Is Landscape context part of your job?

	Number	Percent
Yes	138	73
No	52	27

Table 12-2. Who has Landscape context as part of their job?

	Number	Percent
Function class		
Biology	80	92
Management	22	88
Permits	7	35
Outreach	0	0
Administration	8	31
Coordination	11	85
Info Mgmt	2	33
BioStatistics	8	80
Area of responsibility		
Population monitoring	80	94
Population analysis	57	97
Population research	46	98
Population mgmt	61	97
Habitat planning	44	98
Habitat conservation	41	95
Habitat tech assistance	22	100
Habitat assessment	39	100
Permits	22	56
Other legal compliance	15	83
Hunting regulations	28	90
Coordination/partnerships	81	91
Consultation/tech assist	53	87
Communications/outreach	49	77
Improving recreation	10	100
Admin/fiscal support	19	49
Mgmt/supervision	44	86
Climate change study	20	100

	Number	Percent
Region		
1	5	71
2	12	86
3	11	73
4	16	67
5	9	64
6	11	73
7	20	77
8	4	100
9	50	70
Grade level		
GS 5-9	9	28
GS 11-13	100	79
GS 14-15	29	91
Organizational level		
Wash. Office	39	70
Reg. Office	61	70
Field Office	30	77
Other	7	100
Years of experience		
0 to 2	24	67
3 to 5	33	75
6 to 10	32	74
More than 10	47	72
Total	138	73

Table 12-3. Landscape context: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	61	45		No. of responses	137
2	58	42		Mean	1.69
3	17	12		Median	2
4 = Not important	1	1		Mode	1
				Std. Dev.	0.71

Table 12-4. Landscape context: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	72	53		No. of responses	137
2	48	35		Mean	1.61
3	16	12		Median	1
4 = Not important	1	1		Mode	1
				Std. Dev.	0.72

Table 12-5 Landscape context: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	31	23		No. of responses	137
2	79	58		Mean	1.97
3	27	20		Median	2
4 = Ineffective	0	0		Mode	2
				Std. Dev.	0.65

Table 12-6. Landscape context: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	38	31	11	0	69	11
Management	9	9	4	0	18	4
Permits	2	4	1	0	6	1
Outreach	-	-	-	-	-	-
Administration	2	5	0	0	7	0
Coordination	6	5	0	0	11	0
Info Mgmt	2	0	0	0	2	0
BioStatistics	2	4	1	1	6	2
Total	61	58	17	1	119	18

Table 12-7. Landscape context: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	48	39	14	0	86	14
Management	41	41	18	0	82	18
Permits	29	57	14	0	86	14
Outreach	-	-	-	-	-	-
Administration	29	71	0	0	100	0
Coordination	55	45	0	0	100	0
Info Mgmt	100	0	0	0	100	0
BioStatistics	25	50	13	13	75	25
Total	45	42	12	1	87	13

Table 12-8. Landscape context: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	80	1.66	2	1	0.71
Management	22	1.77	2	1 or 2	0.75
Permits	7	1.86	2	2	0.69
Outreach	-	-	-	-	-
Administration	7	1.71	2	2	0.49
Coordination	11	1.45	1	1	0.52
Info Mgmt	2	1.00	1	1	0
BioStatistics	8	2.13	2	2	0.99
Total	137	1.69	2	1	0.71

Table 12-9. Landscape context: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	43	27	10	0	70	10
Management	11	7	4	0	18	4
Permits	2	4	1	0	6	1
Outreach	-	-	-	-	-	-
Administration	4	3	0	0	7	0
Coordination	6	5	0	0	11	0
Info Mgmt	2	0	0	0	2	0
BioStatistics	4	2	1	1	6	2
Total	72	48	16	1	120	17

Table 12-10. Landscape context: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	54	34	13	0	88	13
Management	50	32	18	0	82	18
Permits	29	57	14	0	86	14
Outreach	-	-	-	-	-	-
Administration	57	43	0	0	100	0
Coordination	55	45	0	0	100	0
Info Mgmt	100	0	0	0	100	0
BioStatistics	50	25	13	13	75	25
Total	53	35	12	1	88	12

Table 12-11. Landscape context: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	80	1.59	1	1	0.71
Management	22	1.68	1.5	1	0.78
Permits	7	1.86	2	2	0.69
Outreach	-	-	-	-	-
Administration	7	1.43	1	1	0.54
Coordination	11	1.45	1	1	0.52
Info Mgmt	2	1.00	1	1	0
BioStatistics	8	1.88	1.5	1	1.13
Total	137	1.61	1	1	0.72

Table 12-12. Landscape context: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	17	45	18	0	62	18
Management	5	13	4	0	18	4
Permits	2	4	1	0	6	1
Outreach	-	-	-	-	-	-
Administration	0	6	1	0	6	1
Coordination	5	6	0	0	11	0
Info Mgmt	0	2	0	0	2	0
BioStatistics	2	3	3	0	5	3
Total	31	79	27	0	110	27

Table 12-13. Landscape context: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	21	56	23	0	78	23
Management	23	59	18	0	82	18
Permits	29	57	14	0	86	14
Outreach	-	-	-	-	-	-
Administration	0	86	14	0	86	14
Coordination	45	55	0	0	100	0
Info Mgmt	0	100	0	0	100	0
BioStatistics	25	38	38	0	63	38
Total	23	58	20	0	80	20

Table 12-14. Landscape context: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	80	2.01	2	2	0.67
Management	22	1.95	2	2	0.65
Permits	7	1.86	2	2	0.69
Outreach	-	-	-	-	-
Administration	7	2.14	2	2	0.38
Coordination	11	1.55	2	2	0.52
Info Mgmt	2	2.00	2	2	0
BioStatistics	8	2.13	2	2 or 3	0.84
Total	137	1.97	2	2	0.65

Table 12-15. Landscape context: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	46	58	34	43
Management	14	64	8	36
Permits	3	50	3	50
Outreach	-	-	-	-
Administration	5	71	2	29
Coordination	5	45	6	55
Info Mgmt	1	50	1	50
BioStatistics	5	63	3	37
Total	79	58	57	42

Table 12-16. Landscape context: Method of training

Method	Number	Percent
NCTC classroom training	10	13
Other classroom training	35	43
On-line training	5	6
Journals or books	37	47
Details/special projects	20	25
On-the-job training	69	87
Coaching	11	14
Mentor outside the Service	17	22
Written guidance	7	9
Job aids	1	1

Table 12-17. Landscape context: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	46	61	30	39
Management	9	45	11	55
Permits	4	82	1	20
Outreach	-	-	-	-
Administration	3	38	5	62
Coordination	5	45	6	55
Info Mgmt	2	100	0	0
BioStatistics	1	20	4	80
Total	70	55	57	45

Table 12-18. Who needs more training in Landscape context?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	46	58	61
Mgmt	9	39	45
Permits	4	31	80
Outreach	-	-	-
Admin	3	19	38
Coordination	5	42	45
Info Mgmt	2	40	100
BioStatistics	1	17	20
Grade level			
GS 5-9	5	24	63
GS 11-13	54	52	59
GS 14-15	11	37	41
Years of experience			
0-2	15	58	68
3-5	16	43	53
6-10	21	57	70
> 10	17	32	40

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	50	60
2	4	33	36
3	7	50	64
4	10	50	63
5	5	46	56
6	5	42	56
7	8	36	40
8	1	33	33
9	27	49	63
Organizational level			
Wash Office	21	48	62
Reg. Office	29	42	52
Field Office	16	46	53
Other	4	57	57

52 respondents said Landscape context is NOT part of their job.

Table 12-19. NOT part of job responses for Landscape context

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	17	1 or 2	0	0	3.76
Important Future?	17	1 or 2	3	18	3.47
Effective?	14	1 or 2	1	7	3.64
Received training?	26	Yes	2	8	
Need training?	28	Yes	2	7	

26 persons commented on the aspect of Landscape context.

From those for whom this is part of their job:

Biology function class:

- a moderate priority.
- I have taken a Conservation Biology class at NCTC and am a long-time member of the Society for Conservation Biology.
- In some ways, my training in this has been life-long learning about bird biology -- undergraduate and graduate school helped put in scientific context.
- More workshops would be helpful, to understand the state-of-the-science, models and tools available, etc.
- need to keep current
- Need training in collecting our data and applying the results appropriately and effectively within the context of the current political and legal landscape. We need to spend more time determining and understanding the questions and developing specific objectives to be addressed before designing projects and collecting data.
- Not certain, how to answer this question as to if it is a part of my job or not. Will state that my job is biologist / pilot - - only to let the committee better interpret my responses as to whether this is part of my job.
- This is an area where it is important to keep up to date on current science and thinking.
- This is critically important to the work of the JV and thus my delivery to partners and although I am somewhat engaged in this process within the JV it is as key a responsibility as other team members.
- Training prior to working in MBM program
- We all need more training in broad-scale strategic conservation training.

Management function class:

- All landscape conservation will now need to be looked at in terms of assessing the current and future impacts of climate change.
- I have staff who provide me the detailed information.
- Learn directly from the experts in the field, on staff, or from partners.
- need communication from Service about Service priorities and program application.
- SHC course would hopefully contribute to this

Permits function class:

- As part of the permit staff, I get asked all sorts of biological questions that I can usually answer that I have picked up from my biologist husband. If I can`t answer

their question, I send them to a biologist. Permits staff could certainly benefit from training in this area.

- The only time that we may answer a biological question is when we search the protected species from the MBTA list in 50 CFR 10. I did not receive any type of training for this - but see this as necessary when questions from incoming calls for MBTA list of birds.
- We have our biologists that have to do the bio reviews. Communication and understanding from them of Regional issues/needs are very critical to my job. My effectiveness with knowing they are the experts in this area is very effective and could stand up with species and numbers if questioned. I do not directly do the biology, but it is very important to our jobs.

Administration function class:

- It would be difficult to imagine a training opportunity that could teach someone in conceptual terms how to approach biological problems by considering them from multiple spatial scales. Finding the "proper" (or best) spatial scale from which to frame and contemplate a particular ecological problem seems to simply require open-mindedness and critical thought.

Coordination function class:

- My role in this context is to understand capabilities and abilities of the practitioners. My job is as an administrator....
- need more courses in landscape ecology
- Yes, it is good to know the resource, although I do not feel that as a Coordinator that I need to be an expert. It is important to know what I do not know, and also how to find others who can fill those gaps. I`d like more field training to allow me to relate to on-the-ground practices.

From those for whom this is NOT part of their job:

- I do receive questions from individuals and provide the answer if I know it; otherwise, I locate an individual who will have the answer.
- I received my training in this while serving as a legal intern with the Regulatory Branch of the U.S. Army Corps of Engineers.
- staff work

Aspect #13 : Assess impacts of climate change to species and habitat

Climate change is part of just over half of employees' jobs (56%).

It is significantly more likely to be part of the jobs of:

- Function class: Coordination, Biology
- Area of responsibility: Climate change, Habitat planning, Habitat tech assistance
- Region: 8, 2
- Organizational level: Other

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Permits, Administration, Information Management
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Permits, Outreach, Information Management

A majority of employees consider it an important part of their current job (67%).

- 21% consider it "Critical"
- The % who consider it "Critical" ranges from 17% for BioStatistics to 38% for Administration

Most employees think it will be an important part of their jobs in the future (90%).

- 49% think it will be "Critical"
- The % who think it will be "Critical" ranges from 40% for Coordination to 64% for Management

Only a few employees think they are currently effective at this (27%).

- Only 3% consider themselves "Highly effective"
- 18% consider themselves "Ineffective"

Only a few of the respondents said they had received training in this (22%).

Of those who had received training:

- A majority had On-the-job training (74%).
- None had NCTC classroom training, and 17% other classroom training

Most said they needed more training in this (81%).

Desire for more training in this is significantly higher among:

- Years of experience: 0 to 2
- Organizational level: Other

Desire for more training in this is significantly lower among:

- Function class: Administration

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (13 of 49 = 27%).

Table 13-1. Is Climate change part of your job?

	Number	Percent
Yes	106	56
No	84	44

Table 13-2. Who has Climate change as part of their job?

	Number	Percent
Function class		
Biology	63	72
Management	14	56
Permits	3	15
Outreach	0	0
Administration	8	31
Coordination	10	77
Info Mgmt	2	33
BioStatistics	6	67
Area of responsibility		
Population monitoring	66	79
Population analysis	47	81
Population research	40	85
Population mgmt	47	76
Habitat planning	40	91
Habitat conservation	35	81
Habitat tech assistance	20	91
Habitat assessment	34	87
Permits	13	33
Other legal compliance	11	61
Hunting regulations	19	59
Coordination/partnerships	67	75
Consultation/tech assist	47	76
Communications/outreach	40	62
Improving recreation	7	70
Admin/fiscal support	15	39
Mgmt/supervision	29	57
Climate change study	19	95

	Number	Percent
Region		
1	3	43
2	11	79
3	8	53
4	14	58
5	7	50
6	9	60
7	16	59
8	4	100
9	34	49
Grade level		
GS 5-9	5	16
GS 11-13	84	67
GS 14-15	17	53
Organizational level		
Wash. Office	27	49
Reg. Office	43	49
Field Office	29	74
Other	6	86
Years of experience		
0 to 2	20	56
3 to 5	24	56
6 to 10	25	58
More than 10	35	53
Total	106	56

Table 13-3. Climate change: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	22	21		No. of responses	105
2	48	46		Mean	2.17
3	30	29		Median	2
4 = Not important	5	5		Mode	2
				Std. Dev.	0.81

Table 13-4. Climate change: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	52	49		No. of responses	106
2	43	41		Mean	1.63
3	9	9		Median	2
4 = Not important	2	2		Mode	1
				Std. Dev.	0.72

Table 13-5 Climate change: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	3	3		No. of responses	106
2	26	25		Mean	2.88
3	58	55		Median	3
4 = Ineffective	19	18		Mode	3
				Std. Dev.	0.73

Table 13-6. Climate change: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	12	27	18	5	39	23
Management	3	5	6	0	8	6
Permits	0	3	0	0	3	0
Outreach	-	-	-	-	-	-
Administration	3	3	2	0	6	2
Coordination	2	7	1	0	9	1
Info Mgmt	1	0	1	0	1	1
BioStatistics	1	3	2	0	4	2
Total	22	48	30	5	70	35

Table 13-7. Climate change: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	19	44	29	8	63	37
Management	21	36	43	0	57	43
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	38	38	25	0	75	25
Coordination	20	70	10	0	90	10
Info Mgmt	50	0	50	0	50	50
BioStatistics	17	50	33	0	67	33
Total	21	46	29	5	67	33

Table 13-8. Climate change: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	63	2.26	2	2	0.87
Management	14	2.21	2	3	0.80
Permits	3	2.00	2	2	0
Outreach	-	-	-	-	-
Administration	8	1.88	2	1 or 2	0.84
Coordination	10	1.90	2	2	0.57
Info Mgmt	2	2.00	2	1 or 3	1.41
BioStatistics	6	2.17	2	2	0.75
Total	105	2.17	2	2	0.81

Table 13-9. Climate change: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	31	26	5	1	57	6
Management	9	4	1	0	13	1
Permits	0	3	0	0	3	0
Outreach	-	-	-	-	-	-
Administration	4	2	1	1	6	2
Coordination	4	5	1	0	9	1
Info Mgmt	1	1	0	0	2	0
BioStatistics	3	2	1	0	4	1
Total	52	43	9	2	95	11

Table 13-10. Climate change: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	49	41	8	2	90	10
Management	64	29	7	0	93	7
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	50	25	13	13	75	25
Coordination	40	50	10	0	90	10
Info Mgmt	50	50	0	0	100	0
BioStatistics	50	33	17	0	83	17
Total	49	41	9	2	90	10

Table 13-11. Climate change: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	63	1.62	2	1	0.71
Management	14	1.43	1	1	0.65
Permits	3	2.00	2	2	0
Outreach	-	-	-	-	-
Administration	8	1.88	1.5	1	1.13
Coordination	10	1.70	2	2	0.68
Info Mgmt	2	1.50	1.5	1 or 2	0.71
BioStatistics	6	1.67	1.5	1	0.82
Total	106	1.63	2	1	0.72

Table 13-12. Climate change: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	2	20	30	11	22	41
Management	1	1	11	1	2	12
Permits	0	1	0	2	1	2
Outreach	-	-	-	-	-	-
Administration	0	2	2	4	2	6
Coordination	0	1	9	0	1	9
Info Mgmt	0	0	1	1	0	2
BioStatistics	0	1	5	0	1	5
Total	3	26	58	19	29	77

Table 13-13. Climate change: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	3	32	48	18	35	65
Management	7	7	79	7	14	86
Permits	0	33	0	67	33	67
Outreach	-	-	-	-	-	-
Administration	0	25	25	50	25	75
Coordination	0	10	90	0	10	90
Info Mgmt	0	0	50	50	0	100
BioStatistics	0	17	83	0	17	83
Total	3	25	55	18	27	73

Table 13-14. Climate change: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	63	2.79	3	3	0.77
Management	14	2.86	3	3	0.66
Permits	3	3.33	4	4	1.16
Outreach	-	-	-	-	-
Administration	8	3.25	3.5	4	0.89
Coordination	10	2.90	3	3	0.32
Info Mgmt	2	3.50	3.5	3 or 4	0.71
BioStatistics	6	2.83	3	3	0.41
Total	106	2.88	3	3	0.73

Table 13-15. Climate change: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	15	24	48	76
Management	5	36	9	64
Permits	0	0	2	100
Outreach	-	-	-	-
Administration	1	13	7	88
Coordination	0	0	10	100
Info Mgmt	0	0	2	100
BioStatistics	2	33	4	67
Total	23	22	82	78

Table 13-16. Climate change: Method of training

Method	Number	Percent
NCTC classroom training	0	0
Other classroom training	4	17
On-line training	5	22
Journals or books	8	35
Details/special projects	4	17
On-the-job training	17	74
Coaching	2	9
Mentor outside the Service	4	17
Written guidance	2	9
Job aids	0	0

Table 13-17. Climate change: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	49	82	11	18
Management	12	86	2	14
Permits	2	100	0	0
Outreach	-	-	-	-
Administration	4	57	3	43
Coordination	8	80	2	20
Info Mgmt	2	100	0	0
BioStatistics	5	83	1	17
Total	82	81	19	19

Table 13-18. Who needs more training in Climate change?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	49	65	82
Mgmt	12	48	86
Permits	2	17	100
Outreach	-	-	-
Admin	4	31	57
Coordination	8	67	80
Info Mgmt	2	40	100
BioStatistics	5	71	83
Grade level			
GS 5-9	4	22	80
GS 11-13	66	65	82
GS 14-15	12	40	82
Years of experience			
0-2	20	74	100
3-5	19	53	79
6-10	19	53	79
> 10	23	47	74

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	2	40	67
2	8	73	73
3	6	43	75
4	12	63	86
5	6	60	86
6	4	40	67
7	11	52	69
8	3	75	75
9	30	54	94
Organizational level			
Wash Office	23	51	92
Reg. Office	28	42	70
Field Office	24	75	83
Other	6	100	100

84 respondents said Climate change is NOT part of their job.

Table 13-19. NOT part of job responses for Climate change

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	34	1 or 2	0	0	3.56
Important Future?	34	1 or 2	8	24	3.03
Effective?	29	1 or 2	0	0	3.59
Received training?	47	Yes	2	4	
Need training?	49	Yes	13	27	

33 persons commented on the aspect of Climate change.

From those for whom this is part of their job:

Biology function class:

- A moderate priority
- An NCTC course or university-based course on assessing climate change impacts on birds/ wildlife could be useful
- Definitely need to approach the cutting edge of applications of climate change predictions. Need synthesis of these predictions at regional scales.
- I think the big emphasis needs to be on thinking of climate change in concert with all the other stressors and limiting factors for bird populations.
- I would to see specific changes made to DOI ie: solar powered offices, electric cars, hydrogen fuel cell cars,. I want specific direction from the govt on how we can help stop global warming. Refuges need to go solar powered. We need to set an example for the rest of the world.
- It is clearly going to be an emphasis in the future, so it needs to be integrated into everything we do.
- NCTC should develop a course on this topic
- Not certain, how to answer this question as to if it is a part of my job or not. Will state that my job is biologist / pilot - - only to let the committee better interpret my responses as to whether this is part of my job.
- Not sure how you will teach/train this, since it isn`t entirely clear that anybody knows this for all the circumstances that MBP deals with, but this should be a priority for Migratory Birds capability building needs.
- Region 3 had a good webinar series on climate change, but I was unable to make many of the sessions because of workload conflicts. I would probably be better served by an NCTC class that I could give 100% of my attention to.
- This is a growing priority, particularly within Alaska and other northern environments, that should be addressed as an aspect of most projects
- This is a new area for me and I am trying to see how to incorporate it effectively into what I do.
- This is an odd question. How do you train someone to `assess climate change impact`? I went back to school to get my phD to become a better scientist - does that count? Mostly, this was not `on the job`, rather on my own, although I was able to continue the field work (again, mostly via soft money) through FWS.

Management function class:

- All Service employees will need to perform their work with a consideration of climate change impacts, and yet most of us don`t know or understand what those impacts will be, and how to mitigate for them.
- Basic professional biological/ecological skills should be sufficient for this task.
- I need climate change fundamentals training.

- There are lots of workshops focusing on climate change now. But, this is a critical area that all staff need to better understand and start thinking about how we assess climate impacts to migratory birds.
- we aren`t prepared to actually assess the impacts of climate change but are developing the capacity to do so
- Where do I start. If nothing else, having access to staff that can do this will be very important but I see that outside the MBP responsibility per se.

Permits function class:

- At this time this is an indirect part of my job, but will have direct impacts.

Administration function class:

- I think the ineffectiveness here is simply the extreme uncertainty in our understanding of how climate influences wildlife thru a variety of biotic and abiotic mechanisms. I don`t know that training in assessing impacts of climate change could make one more effective until our ability to predict climatic shifts, and their consequent influence on weather, hydrology, human land-use patterns, etc. Only then can we begin to assess how wildlife might be affected.

Coordination function class:

- maybe more just seeing what and how other people are doing. Scientific meetings can fill this need too.
- This is my #1 training need. I need to better understand how to effectively provide leadership to our JV partnership on climate change impacts, assessments, and development of adaptations.
- Training and understanding to the degree that I can coordinate these assessments and their application to management.

Information Management function class:

- More training is needed on climate change and impacts on species & habitats if simply to change the current mindset of working on species and habitats to restore them to some past levels. What should possibly be considered is what future conditions will be and how can we sustain populations at desirable levels given future constraints. Not, we need to return to some past status. The world is changing it is unrealistic to think we can turn back the clock. Basic point here is we could all use an update on our approach to addressing climate change and to incorporate it into our work efforts.

BioStatistics function class:

- knowledge of similar programs USGS and FWS are working toward, knowledge of data, and current analysis/modeling approaches
- maybe, but it is not such a critical part of my job. Therefore, I might opt for other training opportunities rather than something like addressing the impact of climate change on particular species or landscapes. I still think this is a very critical and training still needs to be provided to those that will be directly affected within their job.

From those for whom this is NOT part of their job:

- Climate change is going to have a big impact on our world. Every employee should be well informed and prepared to answer questions and to make it applicable to his own job.
- Everyone should have training in this - even outside of the Service!
- I participated in the online climate change course arranged by Teresa Woods of Region 3 with Indiana University. I am also a board member for a sustainable agriculture group and we address climate change issues on a regular basis.
- Need to be able to communicate with others about this issue.
- staff work
- This would be an interesting course of how climate change correspond with bird species.

Aspect #14 : Apply population ecology principles to your problem solving and decisions

Population ecology is part of a majority of employees' jobs (64%).

It is significantly more likely to be part of the jobs of:
- Function class: BioStatistics, Biology, Management, Coordination
- Region: 2

It is significantly less likely to be part of the jobs of:
- Function class: Outreach, Permits, Administration, Information Management
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management

A majority of employees consider it an important part of their current job (84%).
- 45% consider it "Critical"
- The % who consider it "Critical" ranges from 17% for Administration to 63% for BioStatistics

Most employees think it will be an important part of their jobs in the future (88%).
- 51% think it will be "Critical"
- The % who think it will be "Critical" ranges from 33% for Administration to 63% for BioStatistics

A majority of employees think they are currently effective at this (77%).
- 18% consider themselves "Highly effective"
- Only 4% consider themselves "Ineffective"

Just over half of the respondents said they had received training in this (55%).

Of those who had received training:
- A majority had On-the-job training (78%).
- 12% had NCTC classroom training, and 70% other classroom training

Just over half said they needed more training in this (58%).

Desire for more training in this is significantly higher among:
- Function class: Biology, BioStatistics

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (5 of 34 = 15%).

Table 14-1. Is Population ecology part of your job?

	Number	Percent
Yes	122	64
No	68	36

Table 14-2. Who has Population ecology as part of their job?

	Number	Percent
Function class		
Biology	74	84
Management	20	80
Permits	4	20
Outreach	0	0
Administration	6	23
Coordination	10	77
Info Mgmt	0	0
BioStatistics	8	89
Area of responsibility		
Population monitoring	78	93
Population analysis	55	95
Population research	46	98
Population mgmt	60	97
Habitat planning	41	93
Habitat conservation	39	91
Habitat tech assistance	21	96
Habitat assessment	36	92
Permits	18	46
Other legal compliance	15	83
Hunting regulations	28	88
Coordination/partnerships	74	83
Consultation/tech assist	56	90
Communications/outreach	49	75
Improving recreation	9	90
Admin/fiscal support	15	39
Mgmt/supervision	39	77
Climate change study	18	90

	Number	Percent
Region		
1	4	57
2	12	86
3	9	60
4	13	54
5	9	64
6	8	53
7	19	70
8	3	75
9	45	64
Grade level		
GS 5-9	4	13
GS 11-13	92	73
GS 14-15	26	81
Organizational level		
Wash. Office	35	64
Reg. Office	54	61
Field Office	27	69
Other	5	71
Years of experience		
0 to 2	22	61
3 to 5	25	58
6 to 10	31	72
More than 10	43	65
Total	122	64

Table 14-3. Population ecology: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	55	45		No. of responses	122
2	47	39		Mean	1.72
3	19	16		Median	2
4 = Not important	1	1		Mode	1
				Std. Dev.	0.75

Table 14-4. Population ecology: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	62	51		No. of responses	122
2	45	37		Mean	1.61
3	15	12		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.70

Table 14-5 Population ecology: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	22	18		No. of responses	122
2	72	59		Mean	2.09
3	23	19		Median	2
4 = Ineffective	5	4		Mode	2
				Std. Dev.	0.73

Table 14-6. Population ecology: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	37	26	10	1	63	11
Management	6	10	4	0	16	4
Permits	2	2	0	0	4	0
Outreach	-	-	-	-	-	-
Administration	1	3	2	0	4	2
Coordination	4	4	2	0	8	2
Info Mgmt	-	-	-	-	-	-
BioStatistics	5	2	1	0	7	1
Total	55	47	19	1	102	20

Table 14-7. Population ecology: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	50	35	14	1	85	15
Management	30	50	20	0	80	20
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	17	50	33	0	67	33
Coordination	40	40	20	0	80	20
Info Mgmt	-	-	-	-	-	-
BioStatistics	63	25	13	0	88	13
Total	45	39	16	1	84	16

Table 14-8. Population ecology: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	74	1.66	1.5	1	0.76
Management	20	1.90	2	2	0.72
Permits	4	1.50	1.5	1 or 2	0.58
Outreach	-	-	-	-	-
Administration	6	2.17	2	2	0.75
Coordination	10	1.80	2	1 or 2	0.79
Info Mgmt	-	-	-	-	-
BioStatistics	8	1.50	1	1	0.76
Total	122	1.72	2	1	0.75

Table 14-9. Population ecology: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	41	25	8	0	66	8
Management	8	10	2	0	18	2
Permits	2	2	0	0	4	2
Outreach	-	-	-	-	-	-
Administration	2	2	2	0	4	2
Coordination	4	4	2	0	8	2
Info Mgmt	-	-	-	-	-	-
BioStatistics	5	2	1	0	7	1
Total	62	45	15	0	107	15

Table 14-10. Population ecology: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	55	34	11	0	89	11
Management	40	50	10	0	90	10
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	33	33	33	0	67	33
Coordination	40	40	20	0	80	20
Info Mgmt	-	-	-	-	-	-
BioStatistics	63	25	13	0	88	13
Total	51	37	12	0	88	12

Table 14-11. Population ecology: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	74	1.55	1	1	0.69
Management	20	1.70	2	2	0.66
Permits	4	1.50	1.5	1 or 2	0.58
Outreach	-	-	-	-	-
Administration	6	2.00	2	1, 2, 3	0.89
Coordination	10	1.80	2	1 or 2	0.79
Info Mgmt	-	-	-	-	-
BioStatistics	8	1.50	1	1	0.76
Total	122	1.61	1	1	0.70

Table 14-12. Population ecology: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	16	40	15	3	56	18
Management	2	14	4	0	16	4
Permits	1	1	1	1	2	2
Outreach	-	-	-	-	-	-
Administration	0	4	1	1	4	2
Coordination	1	8	1	0	9	1
Info Mgmt	-	-	-	-	-	-
BioStatistics	2	5	1	0	7	1
Total	22	72	23	5	94	28

Table 14-13. Population ecology: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	22	54	20	4	76	24
Management	10	70	20	0	80	20
Permits	25	25	25	25	50	50
Outreach	-	-	-	-	-	-
Administration	0	67	17	17	67	33
Coordination	10	80	10	0	90	10
Info Mgmt	-	-	-	-	-	-
BioStatistics	25	63	13	0	88	13
Total	18	59	19	4	77	23

Table 14-14. Population ecology: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	74	2.07	2	2	0.76
Management	20	2.10	2	2	0.55
Permits	4	2.50	2.5	1,2,3,4	1.29
Outreach	-	-	-	-	-
Administration	6	2.50	2	2	0.84
Coordination	10	2.00	2	2	0.47
Info Mgmt	-	-	-	-	-
BioStatistics	8	1.88	2	2	0.64
Total	122	2.09	2	2	0.73

Table 14-15. Population ecology: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	45	61	29	39
Management	10	50	10	50
Permits	1	33	2	67
Outreach	-	-	-	-
Administration	3	50	3	50
Coordination	3	30	7	70
Info Mgmt	-	-	-	-
BioStatistics	5	63	3	38
Total	67	55	54	45

Table 14-16. Population ecology: Method of training

Method	Number	Percent
NCTC classroom training	8	12
Other classroom training	47	70
On-line training	2	3
Journals or books	43	64
Details/special projects	13	19
On-the-job training	52	78
Coaching	8	12
Mentor outside the Service	14	21
Written guidance	8	12
Job aids	3	5

Table 14-17. Population ecology: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	46	63	27	37
Management	8	42	11	58
Permits	2	67	1	33
Outreach	-	-	-	-
Administration	3	60	2	40
Coordination	4	40	6	60
Info Mgmt	-	-	-	-
BioStatistics	5	63	3	38
Total	68	58	50	42

Table 14-18. Who needs more training in Population ecology?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	46	59	63
Mgmt	8	35	42
Permits	2	22	67
Outreach	-	-	-
Admin	3	21	60
Coordination	4	33	40
Info Mgmt	-	-	-
BioStatistics	5	63	63
Grade level			
GS 5-9	2	11	50
GS 11-13	56	53	62
GS 14-15	10	36	42
Years of experience			
0-2	13	46	59
3-5	13	36	54
6-10	21	57	68
> 10	21	42	48

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	60	75
2	6	50	50
3	4	29	44
4	7	39	54
5	3	27	33
6	3	27	50
7	11	55	58
8	0	0	0
9	31	53	72
Organizational level			
Wash Office	26	57	79
Reg. Office	24	35	46
Field Office	14	45	52
Other	3	50	60

68 respondents said Population ecology is NOT part of their job.

Table 14-19. NOT part of job responses for Population ecology

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	23	1 or 2	0	0	3.65
Important Future?	23	1 or 2	3	13	3.48
Effective?	21	1 or 2	2	10	3.57
Received training?	34	Yes	5	15	
Need training?	34	Yes	5	15	

17 persons commented on the aspect of Population ecology.

From those for whom this is part of their job:

Biology function class:

- a moderately high priority
- Advanced degrees in ecology will be more frequently required in the future
- Again, grad. school, now so long ago that a refresher course on principles would serve me well. But, if I had to prioritize, this would not rate high.
- Can always use training to stay current in new techniques and methods.
- I have attended some worthwhile training workshops on Program MARK, Occupancy Estimation, Habitat Selection, etc.
- It seems there has been a narrow view traditionally in our organization that focuses on population trajectory alone with no ecological context. This has come under recent (and some past) criticism: "nearly all populations change constantly within various time scales. Whether or not we can detect changes and determine statistical significance depend largely on our monitoring/assessment techniques, sample sizes, etc. The question is whether or not the changes we detect are relevant to the health and survival of populations, communities and ecosystems.
- Modeling
- need to keep current
- Refresher on survival modeling
- Support for attending professional meetings would help. I deal with a lot of international conservation issues, yet an overseas trip for a biologist is looked at with suspicion. Sometimes I have to foot the bill myself, because it’s important for me to keep up with others in my field and related fields.
- would like to go back to school and take graduate course of study

Management function class:

- Just need access to staff who are up to speed on modeling and research design
- More important for my staff. They need to be able to summarize succinctly for managers at my level.

Permits function class:

- Through our Biologists. Permits we issue allowing certain species and numbers thereof is critical. We are responsible for entering take data into the data base to help look at take and populations.

Administration function class:

- In my job responsibilities, only a fundamental understanding of population dynamics and principal concepts is necessary to be effective.

Coordination function class:

- I had academic training in aspects of population ecology and try to draw on these in problem solving. I would like to continue my education, though I do not aspire to be an expert in any ecological field.
- not the highest priority

Aspect #15 : Adapt work to use latest information management systems (IT)

Latest IT is part of a majority of employees' jobs (75%).

It is significantly more likely to be part of the jobs of:

- Function class: Coordination, Information Management, Permits

It is significantly less likely to be part of the jobs of:

- Area of responsibility: Other legal compliance
- Region: 5, 8

There are too few responses in the following function classes for comparisons to be meaningful: Outreach

A majority of employees consider it an important part of their current job (75%).

- 39% consider it "Critical"
- The % who consider it "Critical" ranges from 8% for Coordination to 67% for Information Management and BioStatistics

A majority of employees think it will be an important part of their jobs in the future (82%).

- 46% think it will be "Critical"
- The % who think it will be "Critical" ranges from 15% for Coordination to 67% for Permits, Administration, Information Management, and BioStatistics

A majority of employees think they are currently effective at this (63%).

- 11% consider themselves "Highly effective"
- The % who consider themselves "Highly effective" ranges from 0% for BioStatistics to 25% for Administration
- Significantly less effective is the function class: Management

A majority of the respondents said they had received training in this (63%).

Of those who had received training:

- None had On-the-job training (0%).
- 9% had NCTC classroom training, and 48% other classroom training

A majority said they needed more training in this (62%).

Desire for more training in this is significantly higher among:

- Years of experience: 0 to 2
- Organizational level: Other

Desire for more training in this is significantly higher among:

- Function class: Information Management
- Grade level: GS 5-9

Desire for more training in this is significantly lower among:

- Function class: Management
- Grade level: GS 14-15
- Years of experience: 0 to 2
- Region: 1, 4
- Organizational level: Other

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (5 of 28 = 18%).

Table 15-1. Is Latest IT part of your job?

	Number	Percent
Yes	141	74
No	49	26

Table 15-2. Who has Latest IT as part of their job?

	Number	Percent
Function class		
Biology	63	72
Management	16	64
Permits	18	90
Outreach	2	67
Administration	17	65
Coordination	13	100
Info Mgmt	6	100
BioStatistics	6	67
Area of responsibility		
Population monitoring	66	79
Population analysis	47	81
Population research	37	79
Population mgmt	46	74
Habitat planning	37	84
Habitat conservation	35	81
Habitat tech assistance	17	77
Habitat assessment	33	85
Permits	32	82
Other legal compliance	10	56
Hunting regulations	24	75
Coordination/partnerships	68	76
Consultation/tech assist	48	77
Communications/outreach	50	77
Improving recreation	6	60
Admin/fiscal support	24	62
Mgmt/supervision	37	73
Climate change study	15	75

	Number	Percent
Region		
1	6	86
2	11	79
3	11	73
4	18	75
5	7	50
6	9	60
7	21	78
8	2	50
9	56	80
Grade level		
GS 5-9	23	72
GS 11-13	97	77
GS 14-15	21	66
Organizational level		
Wash. Office	43	78
Reg. Office	60	68
Field Office	31	80
Other	6	86
Years of experience		
0 to 2	22	61
3 to 5	29	67
6 to 10	33	77
More than 10	55	83
Total	141	74

Table 15-3. Latest IT: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	54	39		No. of responses	139
2	50	36		Mean	1.88
3	32	23		Median	2
4 = Not important	3	2		Mode	1
				Std. Dev.	0.84

Table 15-4. Latest IT: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	63	46		No. of responses	138
2	50	36		Mean	1.74
3	23	17		Median	2
4 = Not important	2	1		Mode	1
				Std. Dev.	0.79

Table 15-5 Latest IT: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	15	11		No. of responses	138
2	72	52		Mean	2.32
3	43	31		Median	2
4 = Ineffective	8	6		Mode	2
				Std. Dev.	0.75

Table 15-6. Latest IT: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	19	21	21	1	40	22
Management	5	7	3	1	12	4
Permits	10	6	2	0	16	2
Outreach	1	1	0	0	2	0
Administration	10	4	2	0	14	2
Coordination	1	9	3	0	10	3
Info Mgmt	4	1	0	1	5	1
BioStatistics	4	1	1	0	5	1
Total	54	50	32	3	104	35

Table 15-7. Latest IT: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	31	34	34	2	65	35
Management	31	44	19	6	75	25
Permits	56	33	11	0	89	11
Outreach	50	50	0	0	100	0
Administration	63	25	13	0	88	13
Coordination	8	69	23	0	77	23
Info Mgmt	67	17	0	17	83	17
BioStatistics	67	17	17	0	83	17
Total	39	36	23	2	75	25

Table 15-8. Latest IT: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	62	2.06	2	2 or 3	0.85
Management	16	2.00	2	2	0.89
Permits	18	1.56	1	1	0.71
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	16	1.50	1	1	0.73
Coordination	13	2.15	2	2	0.56
Info Mgmt	6	1.67	1	1	1.21
BioStatistics	6	1.50	1	1	0.84
Total	139	1.88	2	1	0.84

Table 15-9. Latest IT: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	23	25	14	0	48	14
Management	7	7	1	1	14	2
Permits	12	3	3	0	15	3
Outreach	1	1	0	0	2	0
Administration	10	3	2	0	13	2
Coordination	2	9	2	0	11	2
Info Mgmt	4	1	0	1	5	1
BioStatistics	4	1	1	0	5	1
Total	63	50	23	2	113	25

Table 15-10. Latest IT: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	37	40	23	0	77	23
Management	44	44	6	6	88	13
Permits	67	17	17	0	83	17
Outreach	50	50	0	0	100	0
Administration	67	20	13	0	87	13
Coordination	15	69	15	0	85	15
Info Mgmt	67	17	0	17	83	17
BioStatistics	67	17	17	0	83	17
Total	46	36	17	1	82	18

Table 15-11. Latest IT: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	62	1.85	2	2	0.77
Management	16	1.75	2	1 or 2	0.86
Permits	18	1.50	1	1	0.79
Outreach	2	1.50	1.5	1 or 2	0.71
Administration	15	1.47	1	1	0.74
Coordination	13	2.00	2	2	0.58
Info Mgmt	6	1.67	1	1	1.21
BioStatistics	6	1.50	1	1	0.84
Total	138	1.74	2	1	0.79

Table 15-12. Latest IT: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	5	32	19	5	37	24
Management	1	5	9	1	6	10
Permits	3	10	5	0	13	5
Outreach	0	2	0	0	2	0
Administration	4	9	3	0	13	3
Coordination	1	6	6	0	7	6
Info Mgmt	1	4	1	0	5	1
BioStatistics	0	4	0	2	4	2
Total	15	72	43	8	87	51

Table 15-13. Latest IT: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	8	53	31	8	61	39
Management	6	31	56	6	38	63
Permits	17	56	28	0	72	28
Outreach	0	100	0	0	100	0
Administration	25	56	19	0	81	19
Coordination	8	46	46	0	54	46
Info Mgmt	17	67	17	0	83	17
BioStatistics	0	67	0	33	67	33
Total	11	52	31	6	63	37

Table 15-14. Latest IT: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	61	2.39	2	2	0.76
Management	16	2.63	3	3	0.72
Permits	18	2.11	2	2	0.68
Outreach	2	2.00	2	2	0
Administration	16	1.94	2	2	0.68
Coordination	13	2.38	2	2 or 3	0.65
Info Mgmt	6	2.00	2	2	0.63
BioStatistics	6	2.67	2	2	1.03
Total	138	2.32	2	2	0.75

Table 15-15. Latest IT: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	37	60	25	40
Management	10	63	6	38
Permits	10	63	6	38
Outreach	1	50	1	50
Administration	12	71	5	29
Coordination	8	62	5	38
Info Mgmt	4	67	2	33
BioStatistics	5	83	1	17
Total	87	63	51	37

Table 15-16. Latest IT: Method of training

Method	Number	Percent
NCTC classroom training	8	9
Other classroom training	42	48
On-line training	33	38
Journals or books	14	16
Details/special projects	5	6
On-the-job training	0	0
Coaching	12	14
Mentor outside the Service	6	7
Written guidance	23	26
Job aids	4	5

Table 15-17. Latest IT: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	36	60	24	40
Management	5	31	11	69
Permits	11	79	3	21
Outreach	1	50	1	50
Administration	11	73	4	27
Coordination	7	54	6	46
Info Mgmt	5	100	0	0
BioStatistics	5	83	1	17
Total	81	62	50	38

Table 15-18. Who needs more training in Latest IT?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	36	49	60
Mgmt	5	22	31
Permits	11	69	79
Outreach	1	33	50
Admin	11	58	73
Coordination	7	54	54
Info Mgmt	5	100	100
BioStatistics	5	71	83
Grade level			
GS 5-9	16	64	84
GS 11-13	58	55	64
GS 14-15	7	24	33
Years of experience			
0-2	7	27	35
3-5	19	51	66
6-10	22	61	71
> 10	33	56	66

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	2	33	33
2	5	45	56
3	4	29	36
4	11	58	69
5	4	36	67
6	5	38	63
7	11	52	58
8	1	50	50
9	38	61	70
Organizational level			
Wash Office	29	58	67
Reg. Office	29	41	54
Field Office	21	64	75
Other	2	33	33

49 respondents said Latest IT is NOT part of their job.

Table 15-19. NOT part of job responses for Latest IT

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	24	1 or 2	0	0	3.63
Important Future?	24	1 or 2	4	17	3.29
Effective?	23	1 or 2	3	13	3.39
Received training?	32	Yes	2	6	
Need training?	28	Yes	5	18	

32 persons commented on the aspect of Latest IT.

From those for whom this is part of their job:

Biology function class:

- Again, uncertain if I answered this question correctly in saying this is part of my job. "IT" is not a part of my job description, but I believe proficiency in IT systems would improve efficiency in the performance of my job (i.e., data management, etc).
- I don`t know if this is a training issue. My perception is that the FWS (and Mig Birds) is woefully behind the curve in allowing us to utilize the exploding array of communication and IT tools that the general public have access to. We cannot currently: instant message, skype, blog, facebook, youtube, twitter or basically any other tool except for in some cases computer-to-computer conferencing. Of course we make do with telephones, some internet access and email, but that`s like living in the mid 90s.
- I hire people for this function.
- I resent the need, but that doesn`t make it go away -- no one can work in an office environment without this.
- I would rely on some one else to do this for me
- just need to keep current -- need DOI policy to change to allow for unrestricted use and easy access to different IT programs; need their willingness and support to allow us to be effective in our jobs -- the biggest stumbling block is the IT group themselves
- My take on this is that available formal IT training is largely irrelevant to our work (more relevant to business applications). As an ""older"" employee, my most valuable training has come one-on-one from colleagues who had a stronger, more recent exposure to university-level IT training and can pass it on in a way that is specific to our work. Unfortunately, work schedules and demands severely limit the time these individuals have to spend sharing knowledge with colleagues.

- SPITS issues permits therefore employees who work with it should be thoroughly trained on how to use it by a trainer. Right now it`s on the job training with a lot of hear say on how to use it.
- The service makes me take IT courses annually, so I must need more training.
- Yes, but our outreach coordinator, usually handles this

Management function class:

- Continue with keeping workforce up to date with IT.
- DMBM It capabilities are incredibly slow in keeping up with new advances in technology. We are entirely overburdened with IT security to point that it decreases significantly from potential productivity.

- I think I know enough to do my job effectively, I don`t need to be an expert in most IT programs.

Permits function class:

- Computer training is always important.
- I am very comfortable with technology and its transmutations and applications.
- I was Computer Science major.
- Need more resources (trained staff) to be more efficient in IT usage.
- When new updates are required - email from Washington Office are provided for the data system we currently use.
- Working on getting more of our system electronically. New version of our data base is supposed to be out in May. Constant upgrades and changes.

Administration function class:

- This training need represents a constantly shifting target, but "information overload", lack of awareness of information management tools, unfamiliarity with metadata clearinghouses and similar information related problems are a constant frustration I hear expressed.

Coordination function class:

- I assume you mean information technologies beyond just management... I think there are a number of communication tools and tools for information compilation and analyses that I am not taking full advantage of. Would like more IT training AND IT SUPPORT (from IT specialists).
- I need Access training.
- need technical staff wit these skills

Information Management function class:

- Any form of IT training is always welcome.
- We could all use more training to better utilizing IT resources to cut down on unnecessary travel by using web-meeting services and improve communication & data sharing.
- Would like an intense programming class (something that`s going to used in the future.

BioStatistics function class:

- folks continue to need training in this if it is a part of their job
- In my current position we are expected to use the best available methods to solve complex wildlife problems. In some cases, the necessary tool doesn`t exist to solve the problem, thus, it may be necessary to develop one. Current training

opportunities are limited to basic tools that could be used for simple problem solving (excel, GIS, Program R (web-based basic introduction). More opportunities for exposure to other tools/languages that may useful for developing solutions to complex or difficult problem efficiently are necessary.

From those for whom this is NOT part of their job:

- Again, disregard responses on importance & effectiveness. This should be designed so clicking the same spot again deletes the response.
- More important for my staff.
- Need general training on what is available and what it can be applied to -- not how to use it myself.
- Personally not as important as having access to staff who are competent in data management

Aspect #16 : Develop and implement bird conservation plans

Bird conservation plans is part of just over half of employees' jobs (52%).

It is significantly more likely to be part of the jobs of:

- Function class: Coordination
- Area of responsibility: Habitat planning, Habitat tech assistance
- Region: 8, 2
- Organizational level: Other

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Permits, Administration, Information Management
- Area of responsibility: Permits, Admin/fiscal support
- Region: 9
- Grade level: GS 5-9
- Organizational level: Washington Office

There are too few responses in the following function classes for comparisons to be meaningful: Permits, Outreach, Information Management

Most employees consider it an important part of their current job (92%).

- Significantly less likely to be considered important by function class BioStatistics
- 59% consider it "Critical"
- The % who consider it "Critical" ranges from 17% for BioStatistics to 100% for Coordination

Almost all employees think it will be an important part of their jobs in the future (96%).

- 59% think it will be "Critical"
- The % who think it will be "Critical" ranges from 17% for BioStatistics to 100% for Coordination

A majority of employees think they are currently effective at this (81%).

- Significantly more likely to consider themselves effective by function class Coordination
- 24% consider themselves "Highly effective"

Just under half of the respondents said they had received training in this (47%).

Of those who had received training:

- Almost all had On-the-job training (98%).
- 7% had NCTC classroom training, and 20% other classroom training

A minority said they needed more training in this (42%).

Desire for more training in this is significantly higher among:

- Function class: Biology
- Years of experience: 0 to 2
- Organizational level: Other

Desire for more training in this is significantly lower among:

- Function class: Coordination
- Years of experience: >10
- Region: 8
- Organizational level: Washington Office

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (7 of 52 = 14%).

Table 16-1. Is Bird conservation plans part of your job?

	Number	Percent
Yes	98	52
No	91	48

Table 16-2. Who has Bird conservation plans as part of their job?

	Number	Percent
Function class		
Biology	54	62
Management	16	64
Permits	3	15
Outreach	0	0
Administration	7	27
Coordination	10	77
Info Mgmt	2	33
BioStatistics	6	67
Area of responsibility		
Population monitoring	59	70
Population analysis	42	72
Population research	37	79
Population mgmt	50	81
Habitat planning	41	93
Habitat conservation	35	81
Habitat tech assistance	22	100
Habitat assessment	33	85
Permits	13	33
Other legal compliance	11	61
Hunting regulations	22	69
Coordination/partnerships	71	80
Consultation/tech assist	45	73
Communications/outreach	39	60
Improving recreation	10	100
Admin/fiscal support	15	40
Mgmt/supervision	36	71
Climate change study	17	85

	Number	Percent
Region		
1	4	57
2	11	79
3	8	53
4	14	58
5	7	50
6	10	67
7	14	52
8	4	100
9	26	38
Grade level		
GS 5-9	4	13
GS 11-13	73	58
GS 14-15	21	66
Organizational level		
Wash. Office	19	35
Reg. Office	51	58
Field Office	20	51
Other	7	100
Years of experience		
0 to 2	15	42
3 to 5	24	57
6 to 10	26	61
More than 10	31	47
Total	98	52

Table 16-3. Bird conservation plans: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	58	59		No. of responses	98
2	32	33		Mean	1.49
3	8	8		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.65

Table 16-4. Bird conservation plans: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	58	59		No. of responses	98
2	36	37		Mean	1.45
3	4	4		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.58

Table 16-5 Bird conservation plans: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	23	24		No. of responses	97
2	56	57		Mean	1.98
3	1	16		Median	2
4 = Ineffective	3	3		Mode	2
				Std. Dev.	0.72

Table 16-6. Bird conservation plans: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	34	17	3	0	51	3
Management	10	3	3	0	13	3
Permits	0	3	0	0	3	0
Outreach	-	-	-	-	-	-
Administration	1	6	0	0	7	0
Coordination	10	0	0	0	10	0
Info Mgmt	2	0	0	0	2	0
BioStatistics	1	3	2	0	4	2
Total	58	32	8	0	90	8

Table 16-7. Bird conservation plans: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	63	32	6	0	94	6
Management	63	19	19	0	81	19
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	14	86	0	0	100	0
Coordination	100	0	0	0	100	0
Info Mgmt	100	0	0	0	100	0
BioStatistics	17	50	33	0	67	33
Total	59	33	8	0	92	8

Table 16-8. Bird conservation plans: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	54	1.43	1	1	0.60
Management	16	1.56	1	1	0.80
Permits	3	2.00	2	2	0
Outreach	-	-	-	-2	-
Administration	7	1.86	2	1	0.38
Coordination	10	1.00	1	1	0
Info Mgmt	2	1.00	1	2	0
BioStatistics	6	2.17	2		0.75
Total	98	1.49	1	1	0.65

Table 16-9. Bird conservation plans: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	35	18	1	0	53	1
Management	10	4	2	0	14	2
Permits	0	3	0	0	3	0
Outreach	-	-	-	-	-	-
Administration	1	6	0	0	7	0
Coordination	9	1	0	0	10	0
Info Mgmt	2	0	0	0	2	0
BioStatistics	1	4	1	0	5	1
Total	58	36	4	0	94	4

Table 16-10. Bird conservation plans: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	65	33	2	0	98	2
Management	63	25	13	0	88	13
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	14	86	0	0	100	0
Coordination	90	10	0	0	100	0
Info Mgmt	100	0	0	0	100	0
BioStatistics	17	67	17	0	83	17
Total	59	37	4	0	96	4

Table 16-11. Bird conservation plans: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	54	1.37	1	1	0.53
Management	16	1.50	1	1	0.73
Permits	3	2.00	2	2	0
Outreach	-	-	-	-	-
Administration	7	1.86	2	2	0.38
Coordination	10	1.10	1	1	0.32
Info Mgmt	2	1.00	1	1	0
BioStatistics	6	2.00	2	2	0.63
Total	98	1.45	1	1	0.58

Table 16-12. Bird conservation plans: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	13	32	7	1	45	8
Management	2	9	4	1	11	5
Permits	0	0	2	1	0	3
Outreach	-	-	-	-	-	-
Administration	0	7	0	0	7	0
Coordination	8	2	0	0	10	0
Info Mgmt	0	2	0	0	2	0
BioStatistics	0	4	2	0	4	2
Total	23	56	15	3	79	18

Table 16-13. Bird conservation plans: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	25	60	13	2	85	15
Management	13	56	25	6	69	31
Permits	0	0	67	33	0	100
Outreach	-	-	-	-	-	-
Administration	0	100	0	0	100	0
Coordination	80	20	0	0	100	0
Info Mgmt	0	100	0	0	100	0
BioStatistics	0	67	33	0	67	33
Total	24	57	16	3	81	19

Table 16-14. Bird conservation plans: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	53	1.92	2	2	0.68
Management	16	2.25	2	2	0.78
Permits	3	3.33	3	3	0.58
Outreach	-	-	-	-	-
Administration	7	2.00	2	2	0
Coordination	10	1.20	1	1	0.42
Info Mgmt	2	2.00	2	2	0
BioStatistics	6	2.33	2	2	0.52
Total	97	1.98	2	2	0.72

Table 16-15. Bird conservation plans: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	29	54	25	46
Management	7	44	9	56
Permits	0	0	2	100
Outreach	-	-	-	-
Administration	3	43	4	57
Coordination	3	30	7	70
Info Mgmt	0	0	2	100
BioStatistics	4	67	2	33
Total	46	47	51	53

Table 16-16. Bird conservation plans: Method of training

Method	Number	Percent
NCTC classroom training	3	7
Other classroom training	9	20
On-line training	1	2
Journals or books	16	35
Details/special projects	18	39
On-the-job training	45	98
Coaching	8	17
Mentor outside the Service	7	15
Written guidance	8	17
Job aids	1	2

Table 16-17. Bird conservation plans: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	27	54	23	46
Management	5	31	11	69
Permits	1	50	1	50
Outreach	-	-	-	-
Administration	1	14	6	86
Coordination	2	20	8	80
Info Mgmt	2	100	0	0
BioStatistics	1	20	4	80
Total	39	42	53	58

Table 16-18. Who needs more training in Bird conservation plans?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	27	40	54
Mgmt	5	22	31
Permits	1	8	50
Outreach	-	-	-
Admin	1	7	14
Coordination	2	17	20
Info Mgmt	2	40	100
BioStatistics	1	14	20
Grade level			
GS 5-9	1	5	25
GS 11-13	33	34	49
GS 14-15	5	17	24
Years of experience			
0-2	9	38	69
3-5	10	29	44
6-10	11	32	44
> 10	8	16	28

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	2	40	50
2	4	33	36
3	4	31	57
4	7	37	50
5	2	20	33
6	4	31	44
7	6	33	46
8	0	0	0
9	10	20	40
Organizational level			
Wash Office	5	12	28
Reg. Office	18	28	39
Field Office	10	33	50
Other	5	71	71

91 respondents said Bird conservation plans is NOT part of their job.

Table 16-19. NOT part of job responses for Bird conservation plans

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	36	1 or 2	0	0	3.64
Important Future?	36	1 or 2	4	11	3.39
Effective?	32	1 or 2	3	9	3.44
Received training?	51	Yes	4	8	
Need training?	52	Yes	7	14	

19 persons commented on the aspect of Bird conservation plans.

From those for whom this is part of their job:

Biology function class:

- Any quality opportunities to receive training on delivery of any of the established bird conservation plans would definitely be beneficial.
- I am one of 3-4 people articulating the SHC model for the Service.
- I think workshops would be helpful, especially those that build and strengthen between the bird initiatives and the FWS-MB and joint venture staff across the country.
- This is a peripheral function -- My job provides important factual/status data, but is rarely involved in developing actual conservation plans. However we occasionally get involved in reviewing land management conservation plans (CCP refuge plans)
- This is what I`ve done for the past 13 years. I could teach this!
- Training in implementation is critical for the mig bird program, but NOT for developing plans - we do that just fine.
- Very critical to my job.

Management function class:

- An overview of existing national and regional plans could be helpful.
- I rely on my scientific staff and technical committee of partners to do most of this work.

Permits function class:

- Not yet, but training is on the schedule.
- Through our Biologists.
- A course or other training on conservation planning in general (not just birds) would be a very useful course.

Coordination function class:

- Bird conservation planning is a huge part of my job. It is a stretch to say I was actually trained in this, but I would like training or guidance in integrating across plans and assessing their implementation.
- This is a core element of a JV Coordinator`s duties. Could always use additional training on this subject.
- This is my FWS life. I would think I could teach this, and basically have for the last 10 years.

From those for whom this is NOT part of their job:

- Although not previously part of my job, may have relevance in the near future.
- More important for my staff.
- This is not part of my job - although the data I collect is used in `developing and implementing bird conservation plans`.
- Though need to understand plans and be able to communicate them to others.

Aspect #17 : Recognize, plan for, and respond to bird disease

Bird disease is part of only a few employees' jobs (27%).

It is significantly more likely to be part of the jobs of:

- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Coordination, Information Management
- Region: 3, 8
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Coordination, Information Management, BioStatistics

Just over half of employees consider it an important part of their current job (55%).

- 20% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for Administration to 40% for Management

Just over half of employees think it will be an important part of their jobs in the future (55%).

- 16% think it will be "Critical"
- The % who think it will be "Critical" ranges from 0% for Administration to 30% for Management

Just under half of employees think they are currently effective at this (49%).

- 12% consider themselves "Highly effective"
- 16% consider themselves "Ineffective"

Just under half of the respondents said they had received training in this (48%).

Of those who had received training:

- A majority had On-the-job training (79%).
- 8% had NCTC classroom training, and 63% other classroom training

A minority said they needed more training in this (38%).

Desire for more training in this is significantly higher among:

- Grade level: GS 5-9

Table 17-1. Is Bird disease part of your job?

	Number	Percent
Yes	51	27
No	138	73

Table 17-2. Who has Bird disease as part of their job?

	Number	Percent
Function class		
Biology	27	31
Management	10	40
Permits	4	20
Outreach	0	0
Administration	7	27
Coordination	1	8
Info Mgmt	0	0
BioStatistics	2	22
Area of responsibility		
Population monitoring	37	44
Population analysis	27	47
Population research	24	51
Population mgmt	30	50
Habitat planning	11	25
Habitat conservation	13	30
Habitat tech assistance	10	46
Habitat assessment	12	31
Permits	11	28
Other legal compliance	11	61
Hunting regulations	16	50
Coordination/partnerships	30	34
Consultation/tech assist	29	47
Communications/outreach	25	39
Improving recreation	7	70
Admin/fiscal support	11	28
Mgmt/supervision	19	38
Climate change study	14	70

	Number	Percent
Region		
1	2	29
2	5	36
3	1	7
4	7	29
5	3	21
6	4	27
7	10	37
8	0	0
9	19	28
Grade level		
GS 5-9	3	9
GS 11-13	34	27
GS 14-15	14	45
Organizational level		
Wash. Office	14	26
Reg. Office	25	28
Field Office	8	21
Other	3	43
Years of experience		
0 to 2	11	31
3 to 5	6	14
6 to 10	13	31
More than 10	20	30
Total	51	27

Table 17-3. Bird disease: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	10	20		No. of responses	51
2	18	35		Mean	2.33
3	19	37		Median	2
4 = Not important	4	8		Mode	3
				Std. Dev.	0.89

Table 17-4. Engage the public: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	8	16		No. of responses	51
2	20	39		Mean	2.35
3	20	39		Median	2
4 = Not important	3	6		Mode	2 or 3
				Std. Dev.	0.82

Table 17-5 Engage the public: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	6	12		No. of responses	51
2	19	37		Mean	2.55
3	18	35		Median	3
4 = Ineffective	8	16		Mode	2
				Std. Dev.	0.90

Table 17-6. Engage the public: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	5	11	9	2	16	11
Management	4	2	4	0	6	4
Permits	1	2	1	0	3	1
Outreach	-	-	-	-	-	-
Administration	0	2	4	1	2	5
Coordination	0	1	0	0	1	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	0	1	1	0	2
Total	10	18	19	4	28	23

Table 17-7. Bird disease: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	19	41	33	7	59	41
Management	40	20	40	0	60	40
Permits	25	50	25	0	75	25
Outreach	-	-	-	-	-	-
Administration	0	29	57	14	29	71
Coordination	0	100	0	0	100	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	0	50	50	0	100
Total	20	35	37	8	55	46

Table 17-8. Bird disease: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	27	2.30	2	2	0.87
Management	10	2.00	2	1 or 3	0.94
Permits	4	2.00	2	2	0.82
Outreach	-	-	-	-	-
Administration	7	2.86	3	3	0.69
Coordination	1	2.00	2	2	-
Info Mgmt	-	-	-	-	-
BioStatistics	2	3.50	3.5	3 or 4	0.71
Total	51	2.33	2	3	0.89

Table 17-9. Bird disease: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	4	10	12	1	14	13
Management	3	5	2	0	8	2
Permits	1	2	1	0	3	1
Outreach	-	-	-	-	-	-
Administration	0	2	4	1	2	5
Coordination	0	1	0	0	1	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	0	1	1	0	2
Total	8	20	20	3	28	23

Table 17-10. Bird disease: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	15	37	44	4	52	48
Management	30	50	20	0	80	20
Permits	25	50	25	0	75	25
Outreach	-	-	-	-	-	-
Administration	0	29	57	14	29	71
Coordination	0	100	0	0	100	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	0	50	50	0	100
Total	16	39	39	6	55	45

Table 17-11. Bird disease: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	27	2.37	2	3	0.79
Management	10	1.90	2	2	0.74
Permits	4	2.00	2	2	0.82
Outreach	-	-	-	-	-
Administration	7	2.86	3	3	0.69
Coordination	1	2.00	2	2	-
Info Mgmt	-	-	-	-	-
BioStatistics	2	2.50	3.5	3 or 4	0.71
Total	51	2.35	2	2 or 3	0.82

Table 17-12. Bird disease: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	2	11	11	3	13	14
Management	3	3	3	1	6	4
Permits	1	0	2	1	1	3
Outreach	-	-	-	-	-	-
Administration	0	3	2	2	3	4
Coordination	0	1	0	0	1	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	1	0	1	1	1
Total	6	19	18	8	25	26

Table 17-13. Bird disease: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	7	41	41	11	48	52
Management	30	30	30	10	60	40
Permits	25	0	50	25	25	75
Outreach	-	-	-	-	-	-
Administration	0	43	29	29	43	57
Coordination	0	100	0	0	100	0
Info Mgmt	-	-	-	-	-	-
BioStatistics	0	50	0	50	50	50
Total	12	37	35	16	49	51

Table 17-14. Bird disease: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	27	2.56	3	2 or 3	0.80
Management	10	2.20	2	1, 2, 3	1.03
Permits	4	2.75	3	3	1.26
Outreach	-	-	-	-	-
Administration	7	2.86	3	2	0.90
Coordination	1	2.00	2	2	-
Info Mgmt	-	-	-	-	-
BioStatistics	2	3.00	3	2 or 4	1.41
Total	51	2.55	3	2	0.90

Table 17-15. Bird disease: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	17	63	10	37
Management	10	40	6	60
Permits	0	0	3	100
Outreach	-	-	-	-
Administration	2	29	5	71
Coordination	0	0	1	100
Info Mgmt	-	-	-	-
BioStatistics	1	50	1	50
Total	24	48	26	52

Table 17-16. Bird disease: Method of training

Method	Number	Percent
NCTC classroom training	2	8
Other classroom training	15	63
On-line training	1	4
Journals or books	10	42
Details/special projects	4	17
On-the-job training	19	79
Coaching	4	17
Mentor outside the Service	1	4
Written guidance	5	21
Job aids	0	0

Table 17-17. Bird disease: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	7	28	18	72
Management	4	40	6	60
Permits	3	100	0	0
Outreach	-	-	-	-
Administration	2	29	5	71
Coordination	1	100	0	0
Info Mgmt	-	-	-	-
BioStatistics	1	50	1	50
Total	18	38	30	63

Table 17-18. Who needs more training in Bird disease?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	7	13	28
Mgmt	4	17	40
Permits	3	25	100
Outreach	-	-	-
Admin	2	13	29
Coordination	1	9	100
Info Mgmt	-	-	-
BioStatistics	1	20	50
Grade level			
GS 5-9	3	33	100
GS 11-13	10	12	32
GS 14-15	5	17	36
Years of experience			
0-2	4	17	40
3-5	1	3	17
6-10	5	16	39
> 10	8	18	44

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	0	0	0
2	1	10	20
3	1	9	100
4	4	25	57
5	1	10	33
6	1	8	33
7	1	6	11
8	-	-	-
9	9	18	50
Organizational level			
Wash Office	7	17	50
Reg. Office	8	14	35
Field Office	3	11	38
Other	0	0	0

138 respondents said Bird disease is NOT part of their job.

Table 17-19. NOT part of job responses for Bird disease

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	63	1 or 2	0	0	3.67
Important Future?	63	1 or 2	4	6	3.56
Effective?	59	1 or 2	6	10	3.46
Received training?	86	Yes	11	13	
Need training?	86	Yes	6	7	

16 persons commented on the aspect of Bird disease.

From those for whom this is part of their job:

Biology function class:

- I have repeatedly requested opportunities to take this type of training and be involved in the working groups and have never had the opportunities. have had it on my IDP but no training has been available/I have been preempted by others in the office. since there is little information flow it is difficult to pick up new skills and develop interests
- We are involved in AI monitoring for selected species, and as wide-ranging field observers of bird populations we are in a position to detect die-offs and other indications of disease problems. We have had mandatory training in collecting and safe handling of AI specimens. We are also frequently involved in Oil spill response & esp damage assessment. I have attended a Service sponsored wildlife disease seminar -- many years ago, and could use a refresher in recognizing various wildlife diseases.

Management function class:

- Not all is part of my job - I need to be able to respond (proactive and reactive) to the public about the issue of disease.

Permits function class:

- Through permits. Up-to-date information as it comes to us.

Administration function class:

- Minimal part of job . . . mainly respond to disease issues but don`t pro-actively plan for them.

Coordination function class:

- Disease issues are part of my job just to the extent that I need to understand where diseases may be limiting waterbirds and what coordination and support is needed to address the issue.

BioStatistics function class:

- knowledge of service wide programs on surveillance and mitigation

From those for whom this is NOT part of their job:

- AI
- An avian influenza outbreak will dramatically change my answers
- I answered no to this question because it is not specifically stated as part of my job description. But being in the field, I believe that I am responsible for reporting any observation of bird diseases and responding as directed.
- I will need the capacity to plan for the prevention of the spread of bird diseases by dispersing birds on the landscape. I don`t need training in recognizing symptoms or field collection.
- I worked on a special detail planning for Avian Influenza, so have a good understanding of the potential impacts to bird populations and their habitats such as Refuges.
- More important for my staff.
- only as far as recognizing trends (rehabilitation)
- staff work
- This strikes me as a very narrow element of bird conservation that I expect is a job aspect of very few in the Migratory Bird Program.

Aspect #18 : Use models in conservation design and planning

Models is part of just under half of employees' jobs (45%).

It is significantly more likely to be part of the jobs of:
- Function class: Biology, Coordination
- Region: 2
- Organizational level: Other

It is significantly less likely to be part of the jobs of:
- Function class: Outreach, Permits, Administration
- Area of responsibility: Permits, Admin/fiscal support
- Region: 1
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Permits, Outreach, Information Management

Most employees consider it an important part of their current job (83%).
- 46% consider it "Critical"
- The % who consider it "Critical" ranges from 22% for Management to 100% for BioStatistics

Most employees think it will be an important part of their jobs in the future (88%).
- 57% think it will be "Critical"
- The % who think it will be "Critical" ranges from 33% for Management to 100% for BioStatistics

Just over half of employees think they are currently effective at this (51%).
- 13% consider themselves "Highly effective"
- Significantly more likely to consider themselves effective is function class of BioStatistics

A majority of the respondents said they had received training in this (63%).

Of those who had received training:
- A majority had On-the-job training (67%).
- 29% had NCTC classroom training, and 52% other classroom training

A majority said they needed more training in this (77%).

Desire for more training in this is significantly higher among:
- Grade level: GS 11-13
- Organizational level: Field Office, Other

Desire for more training in this is significantly lower among:

- Years of experience: >10
- Region: 2
- Organizational level: Regional Office

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (12 of 60 = 20%).

Table 18-1. Is Models part of your job?

	Number	Percent
Yes	84	45
No	104	55

Table 18-2. Who has Models as part of their job?

	Number	Percent
Function class		
Biology	54	62
Management	9	38
Permits	2	10
Outreach	0	0
Administration	5	19
Coordination	8	62
Info Mgmt	2	33
BioStatistics	4	44
Area of responsibility		
Population monitoring	56	68
Population analysis	45	79
Population research	37	80
Population mgmt	42	68
Habitat planning	38	86
Habitat conservation	32	74
Habitat tech assistance	18	82
Habitat assessment	32	82
Permits	12	31
Other legal compliance	10	56
Hunting regulations	17	53
Coordination/partnerships	60	67
Consultation/tech assist	40	65
Communications/outreach	32	50
Improving recreation	8	80
Admin/fiscal support	11	28
Mgmt/supervision	26	52
Climate change study	16	84

	Number	Percent
Region		
1	2	29
2	10	71
3	8	53
4	13	54
5	5	36
6	8	53
7	11	41
8	2	50
9	25	37
Grade level		
GS 5-9	2	6
GS 11-13	68	54
GS 14-15	14	47
Organizational level		
Wash. Office	19	36
Reg. Office	35	40
Field Office	22	56
Other	7	100
Years of experience		
0 to 2	19	53
3 to 5	20	47
6 to 10	17	41
More than 10	27	42
Total	84	45

Table 18-3. Models: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	39	46		No. of responses	84
2	31	37		Mean	1.73
3	12	14		Median	2
4 = Not important	2	2		Mode	1
				Std. Dev.	0.80

Table 18-4. Models: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	48	57		No. of responses	84
2	26	31		Mean	1.55
3	10	12		Median	1
4 = Not important	0	0		Mode	1
				Std. Dev.	0.70

Table 18-5 Models: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	11	13		No. of responses	84
2	32	38		Mean	2.42
3	36	43		Median	2
4 = Ineffective	5	6		Mode	3
				Std. Dev.	0.80

Table 18-6. Models: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	24	21	7	2	45	9
Management	2	3	4	0	5	4
Permits	1	1	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	2	3	0	0	5	0
Coordination	4	3	1	0	7	1
Info Mgmt	2	0	0	0	2	0
BioStatistics	4	0	0	0	4	0
Total	39	31	12	2	70	14

Table 18-7. Models: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	44	39	13	4	83	17
Management	22	33	44	0	56	44
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	40	60	0	0	100	0
Coordination	50	38	13	0	88	13
Info Mgmt	100	0	0	0	100	0
BioStatistics	100	0	0	0	100	0
Total	46	37	14	2	83	17

Table 18-8. Models: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	54	1.76	2	1	0.82
Management	9	2.22	2	3	0.83
Permits	2	1.50	1.5	1 or 2	0.71
Outreach	-	-	-	-	-
Administration	5	1.60	2	2	0.55
Coordination	8	1.63	1.5	1	0.74
Info Mgmt	2	1.00	1	1	0
BioStatistics	4	1.00	1	1	0
Total	84	1.76	2	1	0.80

Table 18-9. Models: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	30	18	6	0	48	6
Management	3	3	3	0	6	3
Permits	1	1	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	3	2	0	0	5	0
Coordination	5	2	1	0	7	1
Info Mgmt	2	0	0	0	2	0
BioStatistics	4	0	0	0	4	0
Total	48	26	10	0	74	10

Table 18-10. Models: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	56	33	11	0	89	11
Management	33	33	33	0	67	33
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	60	40	0	0	100	0
Coordination	63	25	13	0	88	13
Info Mgmt	100	0	0	0	100	0
BioStatistics	100	0	0	0	100	0
Total	57	31	12	0	88	12

Table 18-11. Models: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	54	1.56	1	1	0.69
Management	9	2.00	2	1, 2, 3	0.87
Permits	2	1.50	1	1 or 2	0.71
Outreach	-	-	-	-	-
Administration	5	1.40	1	1	0.55
Coordination	8	1.50	1	1	0.76
Info Mgmt	2	1.00	1	1	0
BioStatistics	4	1.00	1	1	0
Total	84	1.55	1	1	0.70

Table 18-12. Models: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	7	19	25	3	26	28
Management	0	3	5	1	3	6
Permits	0	2	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	0	4	1	0	4	1
Coordination	2	1	4	1	3	5
Info Mgmt	0	1	1	0	1	1
BioStatistics	2	2	0	0	4	0
Total	11	32	36	5	43	41

Table 18-13. Models: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	13	35	46	6	48	52
Management	0	33	56	11	33	67
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	0	80	20	0	80	20
Coordination	25	13	50	13	38	63
Info Mgmt	0	50	50	0	50	50
BioStatistics	50	50	0	0	100	0
Total	13	38	43	6	51	49

Table 18-14. Models: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	54	2.44	3	3	0.79
Management	9	2.78	3	3	0.67
Permits	2	2.00	2	2	0
Outreach	-	-	-	-	-
Administration	5	2.20	2	2	0.45
Coordination	8	2.50	3	3	1.07
Info Mgmt	2	2.50	2.5	2 or 3	0.71
BioStatistics	4	1.50	1.5	1 or 2	0.58
Total	84	2.42	2	3	0.80

Table 18-15. Models: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	35	65	19	35
Management	6	67	3	33
Permits	1	100	0	0
Outreach	-	-	-	-
Administration	2	40	3	60
Coordination	3	38	5	63
Info Mgmt	1	50	1	50
BioStatistics	4	100	0	0
Total	52	63	31	37

Table 18-16. Models: Method of training

Method	Number	Percent
NCTC classroom training	15	29
Other classroom training	27	52
On-line training	8	15
Journals or books	24	46
Details/special projects	8	15
On-the-job training	35	67
Coaching	6	12
Mentor outside the Service	11	21
Written guidance	5	10
Job aids	1	2

Table 18-17. Models: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	40	80	10	20
Management	5	56	4	44
Permits	0	0	1	100
Outreach	-	-	-	-
Administration	4	80	1	20
Coordination	6	86	1	14
Info Mgmt	2	100	0	0
BioStatistics	2	67	1	33
Total	59	77	18	23

Table 18-18. Who needs more training in Models?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	40	59	80
Mgmt	5	24	56
Permits	0	0	0
Outreach	-	-	-
Admin	4	27	80
Coordination	6	55	86
Info Mgmt	2	40	100
BioStatistics	2	40	67
Grade level			
GS 5-9	0	0	0
GS 11-13	52	57	84
GS 14-15	7	26	50
Years of experience			
0-2	15	58	88
3-5	15	48	88
6-10	14	42	82
> 10	14	31	56

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	0	0	0
2	7	58	70
3	2	17	29
4	13	65	100
5	5	50	100
6	4	33	67
7	9	50	90
8	1	100	100
9	18	38	78
Organizational level			
Wash Office	14	35	78
Reg. Office	19	30	59
Field Office	19	70	95
Other	7	100	100

104 respondents said Models is NOT part of their job.

Table 18-19. NOT part of job responses for Models

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	44	1 or 2	0	0	3.68
Important Future?	45	1 or 2	3	7	3.49
Effective?	42	1 or 2	2	5	3.57
Received training?	58	Yes	6	10	
Need training?	60	Yes	12	20	

28 persons commented on the aspect of Models.

From those for whom this is part of their job:

Biology function class:

- Again, workshops on this would be helpful, similar to comments above.
- Although I don`t actually use models, I need to understand how they are used and what models are available. I think many R9 employees and Mig. Bird employees might not actually need to use them, unless you work in the PHAB, but they need to understand them. These questions don`t seem to get at that angle of training.
- Having time to attend more classes would help. Also, having programmer/statistical assistance is necessary.
- I am one of the 3-4 people in the Service who are leading in articulating these concepts.
- Need intro course on Bayesian Stats
- Only in the context of using them toward delivery. Am not responsible for development of models.
- The more the better.
- There is a clear difference between "use" and "develop" models in conservation design and planning.
- This is another area that is familiar in concept to most biologists but application is fuzzy at best for those older folks who attended college before these techniques were in wide use. I attended a modeling class at the RO, which was helpful, but much of which was inaccessible due to lack of prerequisite skills in use of statistical software, and suffered due to lack of any opportunities for followup application of the techniques.
- This would be a high priority. I did take a modeling class for my MS.
- Work with others in using the data I collect to develop models for population management.
- would like to go back to school and take graduate course of study

Management function class:

- Again I rely on my science staff to do this work, but I do need a working understanding of the models.
- If I were to be asked to develop the models I would need more training. My job is more related to applying the information that has been developed by others.

Permits function class:

- Through others. This would be important for populations and take thereof.

Administration function class:

- A lot of the model-oriented work I`m involved with periodically requires specific workshops to address particular needs associated with the use of models and modeling in bird conservation. Prob a need for basic courses on use, applicability and development of models for bird conservation.

Coordination function class:

- Again, as an Administrator, I use the results of the models. The data and resulting models/tools are critical to our success.
- This would be a high priority.

Information Management function class:

- It is difficult to convey the critical importance modeling plays in mig bird/habitat conservation and management. This is probably one of the biggest deficiencies in my professional development and overall needs for the Mig Bird program in general. A significant improvement would be to have better modeling training specific to conservation design and habitat conservation aspects. Current modeling training is often focused on population modeling. Habitat modeling is just as critical and not much is offered or made available to staff specific to wildlife habitat modeling and predictive habitat modeling.

From those for whom this is NOT part of their job:

- Again, need access to staff who are competent and can explain in plain english
- As person that interacts with people using and developing models and their products; it is critical to gain a better understanding on how they are developed and their limitations.
- I don`t develop or apply models, but the work I do depends on others` work with models and I`d like to understand them better"
- I don`t directly use models (certainly not spatial models) directly, but I would like assistance in understanding their power and limitations.
- I`ve counted on others for modeling work. Modeling becoming very important.
- More important for my staff. I need them to effectively communicate major points to me.
- need general information
- need to understand all of this.
- possibly a bit more of a refresher course might assist me as I work within the Population & Habitat Assessment Branch where folks deal with pop. models on a daily basis

Aspect #19 : Apply statistical techniques to support the assessment of wildlife populations or habitat management activities

Statistical techniques is part of just under half of employees' jobs (49%).

It is significantly more likely to be part of the jobs of:

- Function class: Biology, BioStatistics
- Area of responsibility: Population analysis, Population research
- Region: 7, 8
- Organizational level: Field Office

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Permits, Administration, Management
- Area of responsibility: Permits, Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Permits, Outreach, Information Management

A majority of employees consider it an important part of their current job (79%).

- 41% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for Coordination to 83% for BioStatistics

Most employees think it will be an important part of their jobs in the future (84%).

- 46% think it will be "Critical"
- The % who think it will be "Critical" ranges from 0% for Coordination to 83% for BioStatistics

Half of employees think they are currently effective at this (50%).

- 15% consider themselves "Highly effective"
- Significantly more likely to consider themselves effective in function class of BioStatistics

A majority of the respondents said they had received training in this (73%).

Of those who had received training:

- A majority had On-the-job training (70%).
- 6% had NCTC classroom training, and 80% other classroom training

Most said they needed more training in this (81%).

Desire for more training in this is significantly higher among:

- Function class: Biology, BioStatistics
- Grade level: GS 11-13

- Region: 7

Desire for more training in this is significantly lower among:

- Function class: Administration, Management
- Region: 8

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (9 of 61 = 15%).

Table 19-1. Is Statistical techniques part of your job?

	Number	Percent
Yes	92	49
No	94	51

Table 19-2. Who has Statistical techniques as part of their job?

	Number	Percent
Function class		
Biology	60	69
Management	8	33
Permits	2	10
Outreach	0	0
Administration	5	21
Coordination	8	62
Info Mgmt	3	50
BioStatistics	6	67
Area of responsibility		
Population monitoring	68	83
Population analysis	52	91
Population research	40	87
Population mgmt	51	82
Habitat planning	31	71
Habitat conservation	24	56
Habitat tech assistance	15	68
Habitat assessment	28	72
Permits	10	26
Other legal compliance	11	61
Hunting regulations	24	75
Coordination/partnerships	53	60
Consultation/tech assist	46	75
Communications/outreach	32	50
Improving recreation	8	80
Admin/fiscal support	10	27
Mgmt/supervision	21	43
Climate change study	13	68

	Number	Percent
Region		
1	4	57
2	9	64
3	5	33
4	7	30
5	4	29
6	7	47
7	20	74
8	3	75
9	33	49
Grade level		
GS 5-9	4	13
GS 11-13	74	59
GS 14-15	14	47
Organizational level		
Wash. Office	24	46
Reg. Office	37	42
Field Office	26	68
Other	4	57
Years of experience		
0 to 2	17	47
3 to 5	18	42
6 to 10	21	50
More than 10	34	54
Total	92	49

Table 19-3. Statistical techniques: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	38	41		No. of responses	92
2	35	38		Mean	1.83
3	16	17		Median	2
4 = Not important	3	3		Mode	1
				Std. Dev.	0.83

Table 19-4. Statistical techniques: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	42	46		No. of responses	92
2	35	38		Mean	1.72
3	14	15		Median	2
4 = Not important	1	1		Mode	1
				Std. Dev.	0.76

Table 19-5 Statistical techniques: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	14	15		No. of responses	92
2	32	35		Mean	2.41
3	40	43		Median	2.5
4 = Ineffective	6	7		Mode	3
				Std. Dev.	0.83

Table 19-6. Statistical techniques: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	27	22	9	2	49	11
Management	3	2	3	0	5	3
Permits	1	1	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	1	3	1	0	4	1
Coordination	0	5	2	1	5	3
Info Mgmt	1	1	1	0	2	1
BioStatistics	5	1	0	0	6	0
Total	38	35	16	3	73	19

Table 19-7. Statistical techniques: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	45	37	15	3	82	18
Management	38	25	38	0	63	38
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	20	60	20	0	80	20
Coordination	0	63	25	13	63	38
Info Mgmt	33	33	33	0	67	33
BioStatistics	83	17	0	0	100	0
Total	41	38	17	3	79	21

Table 19-8. Statistical techniques: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	60	1.77	2	1	0.83
Management	8	2.00	2	1 or 3	0.93
Permits	1	1.50	1.5	1 or 2	0.71
Outreach	-	-	-	-	-
Administration	5	2.00	2	2	0.71
Coordination	8	2.50	2	2	0.76
Info Mgmt	3	2.00	2	1, 2, 3	1.00
BioStatistics	6	1.17	1	1	0.41
Total	92	1.83	2	1	0.83

Table 19-9. Statistical techniques: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	29	22	9	0	51	9
Management	4	1	3	0	5	3
Permits	1	1	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	2	2	1	0	4	1
Coordination	0	6	1	1	6	2
Info Mgmt	1	2	0	0	3	0
BioStatistics	5	1	0	0	6	0
Total	42	35	14	1	77	15

Table 19-10. Statistical techniques: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	48	37	15	0	85	15
Management	50	13	38	0	63	38
Permits	50	50	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	40	40	20	0	80	20
Coordination	0	75	13	13	75	25
Info Mgmt	33	67	0	0	100	0
BioStatistics	83	17	0	0	100	0
Total	46	38	15	1	84	16

Table 19-11. Statistical techniques: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	60	1.67	2	1	0.73
Management	8	1.88	1.5	1	0.99
Permits	2	1.50	1.5	1 or 2	0.71
Outreach	-	-	-	-	-
Administration	5	1.80	2	1 or 2	0.84
Coordination	8	2.38	2	2	0.74
Info Mgmt	3	1.67	2	2	0.58
BioStatistics	6	1.17	1	1	0.41
Total	92	1.72	2	1	0.76

Table 19-12. Statistical techniques: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	10	20	28	2	30	30
Management	1	3	2	2	4	4
Permits	0	2	0	0	2	0
Outreach	-	-	-	-	-	-
Administration	0	2	2	1	2	3
Coordination	0	3	5	0	3	5
Info Mgmt	0	1	1	1	1	2
BioStatistics	3	1	2	0	4	2
Total	14	32	40	6	46	46

Table 19-13. Statistical techniques: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	17	33	47	3	50	50
Management	13	38	25	25	50	50
Permits	0	100	0	0	100	0
Outreach	-	-	-	-	-	-
Administration	0	40	40	20	40	60
Coordination	0	38	63	0	38	63
Info Mgmt	0	33	33	33	33	67
BioStatistics	50	17	33	0	67	33
Total	15	35	43	7	50	50

Table 19-14. Statistical techniques: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	60	2.37	2.5	3	0.80
Management	8	2.63	2.5	2	1.06
Permits	2	2.00	2	2	0
Outreach	-	-	-	-	-
Administration	5	2.80	3	2 or 3	0.84
Coordination	8	2.63	3	3	0.52
Info Mgmt	3	3.00	3	2, 3, 4	1.00
BioStatistics	6	1.83	1.5	1	0.98
Total	92	2.41	2.5	3	0.83

Table 19-15. Statistical techniques: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	45	76	14	24
Management	7	88	1	13
Permits	1	100	0	0
Outreach	-	-	-	-
Administration	2	40	3	60
Coordination	4	50	4	50
Info Mgmt	1	33	2	67
BioStatistics	6	100	0	0
Total	66	73	24	27

Table 19-16. Statistical techniques: Method of training

Method	Number	Percent
NCTC classroom training	4	6
Other classroom training	53	80
On-line training	10	15
Journals or books	39	59
Details/special projects	13	20
On-the-job training	46	70
Coaching	9	14
Mentor outside the Service	16	24
Written guidance	8	12
Job aids	1	2

Table 19-17. Statistical techniques: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	52	88	7	12
Management	5	63	3	38
Permits	1	100	0	0
Outreach	-	-	-	-
Administration	2	50	2	50
Coordination	5	63	3	38
Info Mgmt	2	67	1	33
BioStatistics	5	83	1	17
Total	72	81	17	19

Table 19-18. Who needs more training in Statistical techniques?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	52	68	88
Mgmt	5	23	63
Permits	1	9	100
Outreach	-	-	-
Admin	2	14	50
Coordination	5	42	63
Info Mgmt	2	33	67
BioStatistics	5	63	83
Grade level			
GS 5-9	3	15	75
GS 11-13	63	61	89
GS 14-15	6	21	43
Years of experience			
0-2	15	56	88
3-5	14	40	78
6-10	18	50	90
> 10	24	47	75

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	60	75
2	7	64	78
3	5	38	100
4	5	28	71
5	3	30	75
6	5	39	83
7	16	80	89
8	1	33	33
9	27	47	82
Organizational level			
Wash Office	20	43	83
Reg. Office	27	42	77
Field Office	20	61	80
Other	4	67	100

94 respondents said Statistical techniques is NOT part of their job.

Table 19-19. NOT part of job responses for Statistical techniques

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	46	1 or 2	0	0	3.74
Important Future?	47	1 or 2	1	2	3.64
Effective?	43	1 or 2	2	5	3.58
Received training?	58	Yes	14	24	
Need training?	61	Yes	9	15	

33 persons commented on the aspect of Statistical techniques.

From those for whom this is part of their job:

Biology function class:

- A refresher course or two on stats would be a good idea.
- Always can use more training, especially because acceptable methods change. However, again - you need a team that assists each other. I can`t do it all alone, and the expertise needed to do a good job requires people who are good in specific areas.
- Always emerging
- always need stats, but a moderate priority
- An up-to-date NCTC or university-based course on bird monitoring techniques and count techniques with study design, applying appropriate statistical methods, and statistical limitations could be helpful
- have had statistical classes on my IDP and have taken as available -- still feel need for more and then use of training -- have been extremely lucky in that my supervisor is extremely competent and can assist and/or direct me to resources when I ask questions. one of the places in which I feel the ojt has been extremely successful and well supported
- I feel that for an "old timer" I have a good general sense for study design requirements, appropriate types of tests for different problems and questions, and sources of and how to avoid bias. However, I am way behind in the actual nuts and bolts of statistics, and use of various statistical and spreadsheet software in analysis I generally rely on colleagues more current and trained in these techniques.
- I have attended some worthwhile training workshops on Program MARK, Occupancy Estimation, Habitat Selection, etc.
- I taught Wildlife Statistical techniques at 2 Universities
- I would like to renew my competence in statistical analysis but don`t think it`s realistic. I will need to rely on my staff for these functions. They need these training opportunities to stay current. I`ve become an administrator first and a practicing scientist second.
- Need intro course on Bayesian Stats
- The field of wildlife biology has evolved to where statistical rigor is required. Rely mostly on others for their statistical expertise, but would like to become more proficient in statistics. Time again is a factor. Playing the devil`s advocate, however, perhaps the emphasis given statistics in wildlife biology might be ill-directed. Trying to make wildlife biology, that is not exact, an exact science, might be an effort in futility and of questionable benefit to the resource overall.
- This is important but I rely on contractors to help with this aspect of my job.
- Workshops and online seminars that detail current approaches and state of the science are very helpful.
- would like to go back to school and take graduate course of study

Management function class:

- Great opportunity to offer refresher courses for statistical analysis techniques.
- My college level courses were taken many years ago, but some of my staff are very good statisticians.
- Ugh!

Permits function class:

- Through others. This would be important for populations and take thereof.
- Coordination function class:
- not the highest priority, knowing stats is always good
- science staff need these skills

BioStatistics function class:

- Currently, training available is limited to basic statistical techniques in the analysis of data.
- limited review of BASIC statistics, AIC use, NOT Bayesian and
- time series analyses Bayesian methods

From those for whom this is NOT part of their job:

- again, possibly a bit more of a refresher course might assist me as I work within the Population & Habitat Assessment Branch where folks deal with pop. models on a daily basis
- Clear difference between "apply statistical techniques" and "interpret statistics
- Counted on others for statistical analyses.
- I have a little statistical training, and like modeling, doubt that I will have to conduct statistical analyses personally. As with all the above topics, I do want to be conversant and understand what the numbers are saying.
- Important to understand statistics but not be an expert in applying them analytically. We rely on other experts for that.
- More important for my staff.
- Rely on science staff for this.
- staff work

Aspect #20 : Apply any element of Strategic Habitat Conservation in your work

Strategic Habitat Conservation is part of just over half of employees' jobs (59%).

It is significantly more likely to be part of the jobs of:

- Function class: Management, Coordination
- Area of responsibility: Habitat planning, Habitat tech assistance
- Region: 8, 2
- Organizational level: Other

It is significantly less likely to be part of the jobs of:

- Function class: Outreach, Permits, Administration, Information Management
- Area of responsibility: Permits, Admin/fiscal support
- Region: 7
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach, Information Management

Most employees consider it an important part of their current job (85%).

- 40% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for BioStatistics to 70% for Coordination

Most employees think it will be an important part of their jobs in the future (88%).

- 50% think it will be "Critical"
- The % who think it will be "Critical" ranges from40% for BioStatistics to 70% for Coordination

A majority of employees think they are currently effective at this (72%).

- 18% consider themselves "Highly effective"
- The % who consider themselves "Highly effective" ranges from 0% for Permits and BioStatistics to 30% for Coordination

Half of the respondents said they had received training in this (50%).

Of those who had received training:

- Most had On-the-job training (80%).
- 11% had NCTC classroom training, and 43% other classroom training

About half said they needed more training in this (49%).

Desire for more training in this is significantly higher among:

- Region: 8

- Organizational level: Other

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (12 of 42 = 29%).

Table 20-1. Is Strategic Habitat Conservation part of your job?

	Number	Percent
Yes	110	59
No	77	41

Table 20-2. Who has Strategic Habitat Conservation as part of their job?

	Number	Percent
Function class		
Biology	59	68
Management	19	79
Permits	5	25
Outreach	1	33
Administration	8	32
Coordination	10	77
Info Mgmt	2	33
BioStatistics	6	67
Area of responsibility		
Population monitoring	56	68
Population analysis	40	70
Population research	34	74
Population mgmt	45	73
Habitat planning	43	98
Habitat conservation	38	88
Habitat tech assistance	22	100
Habitat assessment	33	85
Permits	16	41
Other legal compliance	12	67
Hunting regulations	20	63
Coordination/partnerships	71	80
Consultation/tech assist	45	73
Communications/outreach	44	69
Improving recreation	7	70
Admin/fiscal support	18	47
Mgmt/supervision	37	74
Climate change study	17	90

	Number	Percent
Region		
1	4	57
2	12	86
3	10	67
4	18	75
5	9	64
6	9	60
7	10	37
8	4	100
9	34	51
Grade level		
GS 5-9	6	19
GS 11-13	82	65
GS 14-15	22	73
Organizational level		
Wash. Office	28	54
Reg. Office	47	53
Field Office	27	69
Other	7	100
Years of experience		
0 to 2	21	58
3 to 5	27	64
6 to 10	25	60
More than 10	35	54
Total	110	59

Table 20-3. Strategic Habitat Conservation: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	44	40		No. of responses	110
2	49	45		Mean	1.78
3	14	13		Median	2
4 = Not important	3	3		Mode	2
				Std. Dev.	0.77

Table 20-4. Strategic Habitat Conservation: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	55	50		No. of responses	110
2	42	38		Mean	1.64
3	11	10		Median	1.5
4 = Not important	2	2		Mode	1
				Std. Dev.	0.74

Table 20-5 Strategic Habitat Conservation: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	20	18		No. of responses	110
2	59	54		Mean	2.11
3	30	27		Median	2
4 = Ineffective	1	1		Mode	2
				Std. Dev.	0.70

Table 20-6. Strategic Habitat Conservation: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	24	25	8	2	49	10
Management	7	9	3	0	16	3
Permits	1	3	1	0	4	1
Outreach	0	1	0	0	1	0
Administration	4	3	1	0	7	1
Coordination	7	3	0	0	10	0
Info Mgmt	1	1	0	0	2	0
BioStatistics	0	4	1	1	4	2
Total	44	49	14	3	93	17

Table 20-7. Strategic Habitat Conservation: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	41	42	14	3	83	17
Management	37	47	16	0	84	16
Permits	20	60	20	0	80	20
Outreach	0	100	0	0	100	0
Administration	50	38	13	0	88	13
Coordination	70	30	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	2	67	17	17	67	33
Total	40	45	13	3	85	15

Table 20-8. Strategic Habitat Conservation: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	59	1.80	2	2	0.81
Management	19	1.79	2	2	0.71
Permits	5	2.00	2	2	0.71
Outreach	1	2.00	2	2	-
Administration	8	1.63	1.5	1	0.74
Coordination	10	1.30	1	1	0.48
Info Mgmt	2	1.50	1.5	1 or 2	1.71
BioStatistics	6	2.50	2	2	1.84
Total	110	1.78	2	2	0.77

Table 20-9. Strategic Habitat Conservation: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	29	22	7	1	51	8
Management	12	5	2	0	17	2
Permits	1	3	1	0	4	1
Outreach	0	1	0	0	1	0
Administration	5	3	0	0	8	0
Coordination	7	3	0	0	10	0
Info Mgmt	1	1	0	0	2	0
BioStatistics	0	4	1	1	4	2
Total	55	42	11	2	97	13

Table 20-10. Strategic Habitat Conservation: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	49	37	12	2	86	14
Management	63	26	11	0	89	11
Permits	20	60	20	0	80	20
Outreach	0	100	0	0	100	0
Administration	63	38	0	0	100	0
Coordination	70	30	0	0	100	0
Info Mgmt	50	50	0	0	100	0
BioStatistics	0	67	17	17	67	33
Total	50	38	10	2	88	12

Table 20-11. Strategic Habitat Conservation: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	59	1.66	2	1	0.76
Management	19	1.47	1	1	0.72
Permits	5	2.00	2	2	0.71
Outreach	1	2.00	2	2	-
Administration	8	1.38	1	1	0.52
Coordination	10	1.30	1	1	0.48
Info Mgmt	2	1.50	1.5	1 or 2	0.71
BioStatistics	6	2.50	2	2	0.84
Total	110	1.64	1.5	1	0.74

Table 20-12. Strategic Habitat Conservation: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	11	31	16	1	42	17
Management	5	7	7	0	12	7
Permits	0	2	3	0	2	3
Outreach	0	1	0	0	1	0
Administration	1	6	1	0	7	1
Coordination	3	7	0	0	10	0
Info Mgmt	0	2	0	0	2	0
BioStatistics	0	3	3	0	3	3
Total	20	59	30	1	79	31

Table 20-13. Strategic Habitat Conservation: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	19	53	27	2	71	29
Management	26	37	37	0	63	37
Permits	0	40	60	0	40	60
Outreach	0	100	0	0	100	0
Administration	13	75	13	0	88	13
Coordination	30	70	0	0	100	0
Info Mgmt	0	100	0	0	100	0
BioStatistics	0	50	50	0	50	50
Total	18	54	27	1	72	28

Table 20-14. Strategic Habitat Conservation: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	59	2.12	2	2	0.72
Management	19	2.11	2	2 or 3	0.81
Permits	5	2.60	3	3	0.55
Outreach	1	2.00	2	2	-
Administration	8	2.00	2	2	0.54
Coordination	10	1.70	2	2	0.48
Info Mgmt	2	2.00	2	2	0
BioStatistics	6	2.50	2.5	2 or 3	0.55
Total	110	2.11	2	2	0.70

Table 20-15. Strategic Habitat Conservation: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	28	47	31	53
Management	11	58	8	42
Permits	1	25	3	75
Outreach	0	0	1	100
Administration	5	63	3	38
Coordination	3	33	6	67
Info Mgmt	1	50	1	50
BioStatistics	5	83	1	17
Total	54	50	54	50

Table 20-16. Strategic Habitat Conservation: Method of training

Method	Number	Percent
NCTC classroom training	6	11
Other classroom training	23	43
On-line training	3	6
Journals or books	13	24
Details/special projects	9	17
On-the-job training	43	80
Coaching	12	22
Mentor outside the Service	6	11
Written guidance	15	28
Job aids	1	2

Table 20-17. Strategic Habitat Conservation: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	28	51	27	49
Management	8	44	10	56
Permits	3	75	1	25
Outreach	1	100	0	0
Administration	3	38	5	63
Coordination	3	30	7	72
Info Mgmt	2	100	0	2
BioStatistics	3	50	3	50
Total	51	49	53	51

Table 20-18. Who needs more training in Strategic Habitat Conservation?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	28	39	51
Mgmt	8	35	44
Permits	3	27	75
Outreach	1	33	100
Admin	3	21	38
Coordination	3	25	30
Info Mgmt	2	40	100
BioStatistics	3	43	50
Grade level			
GS 5-9	3	17	50
GS 11-13	39	39	51
GS 14-15	9	31	43
Years of experience			
0-2	11	41	58
3-5	12	34	46
6-10	12	36	50
> 10	15	31	46

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	0	0	0
2	4	33	33
3	5	42	56
4	11	55	61
5	3	27	33
6	2	20	33
7	3	17	33
8	3	75	75
9	20	37	61
Organizational level			
Wash Office	18	41	67
Reg. Office	18	28	43
Field Office	10	33	37
Other	5	71	71

77 respondents said Strategic Habitat Conservation is NOT part of their job.

Table 20-19. NOT part of job responses for Strategic Habitat Conservation

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	28	1 or 2	0	0	3.50
Important Future?	28	1 or 2	5	18	3.11
Effective?	25	1 or 2	0	2	3.60
Received training?	38	Yes	2	5	
Need training?	42	Yes	12	29	

25 persons commented on the aspect of Strategic Habitat Conservation.

From those for whom this is part of their job:

Biology function class:

- `strategic habitat conservation ` sounds more political than biological. This is something more done in the Ecological Services branch.
- I articulated these concepts in summary documents for the first time for the Service.
- I think everyone needs more help with this.
- I`d like to see more of what other people are doing, but I could probably teach this. Have used it in Bird Plans since before it was adopted by the FWS.
- Not certain, how to answer this question as to if it is a part of my job or not. Will state that my job is biologist / pilot - - only to let the committee better interpret my responses as to whether this is part of my job.
- SHC is just a formalized method of general conservation planning
- the SHC model should be intuitive -- however it has been made an initiative so the message is lost/diluted

Management function class:

- I believe that my lengthy professional experience and degrees in Biology and Ecology are sufficient to allow a high level of performance in SHC.
- I have enough knowledge for my level. This is more important for my staff.
- I should take the SHC course
- I think Joint Ventures have a better understanding of SHC than most Service programs.
- need ongoing communication about SHC - need regular updates.
- We are still learning the SHC conservation business model and thus effectiveness will take time

Permits function class:

- Through others. This would be important for populations and take thereof.

Administration function class:

- Theoretically, all of us should be working in a way that promotes bird conservation by aligning our individual efforts according to a larger strategy that involves all the elements of a strategic conservation framework. Understanding how to understand and align one`s efforts in the context of a larger strategy (and understanding the principles of such strategies) would seem to be a paramount need to effectively promote bird conservation.

Coordination function class:

- Always.
- I could probably teach this too.
- This is sort of a weird question, because I believe my job is to ensure strategic conservation (habitat or non-habitat realms). I believe I am the "arrows" in the SHC cycle. I don`t think I need too much more explanation of the concept.
- training in science behind elements esp. landscape ecology

Information Management function class:

- If SHC is going to be this guiding principle for the FWS, then continued training to shift staff thought processes and work principles using SHC as a template is probably needed.

BioStatistics function class:

- If this continues to be something the Service regards as a high priority then I guess it would be appropriate for me to obtain more training in it.

From those for whom this is NOT part of their job:

- I attended the first SHC Workshop last week. If SHC is to play part in our Program`s objectives, then any training offered would be welcome.
- I still don`t really know what this is and how we are supposed to apply it to our jobs.

Aspect #21 : Provide leadership

Leadership is part of a majority of employees' jobs (80%).

It is significantly more likely to be part of the jobs of:
- Function class: Management, Coordination, BioStatistics
- Area of responsibility: Mgmt/supervision
- Region: 8
- Grade level: GS 14-15

It is significantly less likely to be part of the jobs of:
- Function class: Administration
- Area of responsibility: Admin/fiscal support
- Grade level: GS 5-9

There are too few responses in the following function classes for comparisons to be meaningful: Outreach

Most employees consider it an important part of their current job (89%).
- 52% consider it "Critical"
- The % who consider it "Critical" ranges from 0% for Information Management to 88% for Management

Most employees think it will be an important part of their jobs in the future (92%).
- 57% think it will be "Critical"
- The % who think it will be "Critical" ranges from 25% for Information Management to 88% for Management

Most employees think they are currently effective at this (85%).
- 13% consider themselves "Highly effective"
- Only 1% consider themselves "Ineffective"

About half of the respondents said they had received training in this (54%).

Of those who had received training:
- A majority had On-the-job training (76%).
- 49% had NCTC classroom training, and 51% other classroom training

A majority said they needed more training in this (60%).

Desire for more training in this is significantly higher among:
- Organizational level: Other

Desire for more training in this is significantly lower among:
- Function class: Administration, Management

- Region: 3, 7

There is also a desire for training expressed by a significant minority of employees for whom this is NOT part of their job (6 of 20 = 30%).

Table 21-1. Is Leadership part of your job?

	Number	Percent
Yes	151	80
No	38	20

Table 21-2. Who has Leadership as part of their job?

	Number	Percent
Function class		
Biology	70	81
Management	25	100
Permits	13	65
Outreach	2	67
Administration	13	52
Coordination	13	100
Info Mgmt	5	83
BioStatistics	10	100
Area of responsibility		
Population monitoring	72	85
Population analysis	50	85
Population research	40	85
Population mgmt	55	87
Habitat planning	43	96
Habitat conservation	41	95
Habitat tech assistance	20	91
Habitat assessment	35	92
Permits	31	82
Other legal compliance	17	94
Hunting regulations	27	84
Coordination/partnerships	85	94
Consultation/tech assist	52	84
Communications/outreach	59	91
Improving recreation	9	90
Admin/fiscal support	24	63
Mgmt/supervision	50	100
Climate change study	19	95

	Number	Percent
Region		
1	6	86
2	10	71
3	12	80
4	21	88
5	11	79
6	10	67
7	18	67
8	4	100
9	59	86
Grade level		
GS 5-9	13	42
GS 11-13	107	84
GS 14-15	31	100
Organizational level		
Wash. Office	48	89
Reg. Office	68	77
Field Office	27	69
Other	7	100
Years of experience		
0 to 2	27	75
3 to 5	37	96
6 to 10	33	79
More than 10	52	79
Total	151	80

Table 21-3. Leadership: Importance, Now

Rating	Number	Percent		Statistics	
1 = Critical	77	52		No. of responses	148
2	55	37		Mean	1.60
3	14	10		Median	1
4 = Not important	2	1		Mode	1
				Std. Dev.	0.72

Table 21-4. Leadership: Importance, In the Future

Rating	Number	Percent		Statistics	
1 = Critical	84	57		No. of responses	147
2	51	35		Mean	1.52
3	11	8		Median	1
4 = Not important	1	1		Mode	1
				Std. Dev.	0.67

Table 21-5 Leadership: Effectiveness

Rating	Number	Percent		Statistics	
1 = Highly effective	19	13		No. of responses	147
2	106	72		Mean	2.03
3	20	14		Median	2
4 = Ineffective	2	1		Mode	2
				Std. Dev.	0.57

Table 21-6. Leadership: Importance, Now, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	31	28	9	2	59	11
Management	22	3	0	0	25	0
Permits	9	2	1	0	11	1
Outreach	0	1	1	0	1	1
Administration	4	7	1	0	11	1
Coordination	9	4	0	0	13	0
Info Mgmt	0	4	0	0	4	0
BioStatistics	2	6	2	0	8	2
Total	77	55	14	2	132	16

Table 21-7. Leadership: Importance, Now, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	44	40	13	3	84	16
Management	88	12	0	0	100	0
Permits	75	17	8	0	92	8
Outreach	0	50	50	0	50	50
Administration	36	55	9	0	91	9
Coordination	69	31	0	0	100	0
Info Mgmt	0	100	0	0	100	0
BioStatistics	20	60	20	0	80	20
Total	52	37	10	1	89	11

Table 21-8. Leadership: Importance, Now, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	70	1.74	2	1	0.79
Management	25	1.12	1	1	0.33
Permits	12	1.33	1	1	0.65
Outreach	2	2.50	2.5	2 or 3	0.71
Administration	12	1.75	2	2	0.62
Coordination	13	1.31	1	1	0.48
Info Mgmt	4	2.00	2	2	0
BioStatistics	10	2.00	2	2	0.67
Total	148	1.60	1	1	0.72

Table 21-9. Leadership: Importance, In the Future, by Function Class, number of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	35	27	7	1	62	8
Management	22	3	0	0	25	0
Permits	10	2	0	0	12	0
Outreach	0	1	1	0	1	1
Administration	4	6	1	0	10	1
Coordination	9	4	0	0	13	0
Info Mgmt	1	3	0	0	4	0
BioStatistics	3	5	2	0	8	2
Total	84	51	11	1	135	12

Table 21-10. Leadership: Importance, In the Future, by Function Class, percent of responses

Function class	1 Critical	2	3	4 Not imp.	Simple import.	Simple unimport.
Biology	50	39	10	1	89	11
Management	88	12	0	0	100	0
Permits	83	17	0	0	100	0
Outreach	0	50	50	0	50	50
Administration	36	55	9	0	91	9
Coordination	69	31	0	0	100	0
Info Mgmt	25	75	0	0	100	0
BioStatistics	30	50	20	0	80	0
Total	57	35	8	1	92	8

Table 21-11. Leadership: Importance, In the Future, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	70	1.63	1.5	1	0.73
Management	25	1.12	1	1	0.33
Permits	12	1.17	1	1	0.39
Outreach	2	2.50	2.5	2 or 3	0.71
Administration	11	1.73	2	2	0.65
Coordination	13	1.31	1	1	0.48
Info Mgmt	4	1.75	2	2	0.50
BioStatistics	10	1.90	2	2	0.74
Total	147	1.52	1	1	0.67

Table 21-12. Leadership: Effectiveness, by Function Class, number of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	5	52	11	1	57	12
Management	6	16	2	0	22	2
Permits	4	6	2	1	10	3
Outreach	0	2	0	0	2	0
Administration	1	10	1	0	11	1
Coordination	3	9	1	0	12	1
Info Mgmt	0	3	1	0	3	1
BioStatistics	0	8	2	0	8	2
Total	19	106	20	2	125	22

Table 21-13. Leadership: Effectiveness, by Function Class, percent of responses

Function class	1 High effect.	2	3	4 Ineffective	Simple effect.	Simple ineffect.
Biology	7	75	16	1	83	17
Management	25	67	8	0	92	8
Permits	31	46	15	8	77	23
Outreach	0	100	0	0	100	0
Administration	8	83	8	0	92	8
Coordination	23	69	8	0	92	8
Info Mgmt	0	75	25	0	75	25
BioStatistics	0	80	20	0	80	20
Total	13	72	14	1	85	15

Table 21-14. Leadership: Effectiveness, by function class, summary statistics

Function class	No. of responses	Mean	Median	Mode	Standard deviation
Biology	69	2.12	2	2	0.53
Management	24	1.83	2	2	0.57
Permits	13	2.00	2	2	0.91
Outreach	2	2.00	2	2	0
Administration	12	2.00	2	2	0.43
Coordination	13	1.85	2	2	0.56
Info Mgmt	4	2.25	2	2	0.50
BioStatistics	10	2.20	2	2	0.42
Total	147	2.03	2	2	0.57

Table 21-15. Leadership: Received training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	32	46	38	54
Management	23	92	2	8
Permits	9	69	4	31
Outreach	1	50	1	50
Administration	6	46	7	54
Coordination	5	38	8	62
Info Mgmt	2	40	3	60
BioStatistics	4	40	6	60
Total	82	54	69	46

Table 21-16. Leadership: Method of training

Method	Number	Percent
NCTC classroom training	40	49
Other classroom training	42	51
On-line training	12	15
Journals or books	24	29
Details/special projects	28	34
On-the-job training	62	76
Coaching	30	37
Mentor outside the Service	18	22
Written guidance	14	17
Job aids	4	5

Table 21-17. Leadership: Need more training?

Function class	YES		NO	
	Number	Percent	Number	Percent
Biology	39	59	27	41
Management	11	44	14	56
Permits	8	80	2	20
Outreach	1	50	1	50
Administration	6	46	7	54
Coordination	10	77	3	23
Info Mgmt	4	80	1	20
BioStatistics	6	75	2	25
Total	85	60	57	40

Table 21-18. Who needs more training in Leadership?

	Number	Percent	
		Of Total	Of Job = YES
Function class			
Biology	39	51	59
Mgmt	11	44	44
Permits	8	57	80
Outreach	1	33	50
Admin	6	35	46
Coordination	10	77	77
Info Mgmt	4	80	80
BioStatistics	6	75	75
Grade level			
GS 5-9	8	38	67
GS 11-13	64	58	65
GS 14-15	13	42	42
Years of experience			
0-2	18	62	72
3-5	25	64	69
6-10	16	44	52
> 10	25	45	52

	Number	Percent	
		Of Total	Of Job = YES
Region			
1	3	43	50
2	5	46	56
3	3	23	27
4	16	76	80
5	8	73	73
6	7	50	78
7	7	33	41
8	3	75	75
9	33	55	60
Organizational level			
Wash Office	27	57	61
Reg. Office	37	49	59
Field Office	14	44	52
Other	6	86	86

38 respondents said Leadership is NOT part of their job.

Table 21-19. NOT part of job responses for Leadership

Question	Number of responses	Answer given	Number	Percent	Mean
Important Now?	13	1 or 2	0	0	3.46
Important Future?	13	1 or 2	4	31	2.77
Effective?	13	1 or 2	2	15	3.08
Received training?	19	Yes	3	16	
Need training?	20	Yes	6	30	

28 persons commented on the aspect of Leadership.

From those for whom this is part of their job:

Biology function class:

- a moderate priority.
- Because I have supervisory responsibilities, I took NCTC`s course in Applied Supervision several years ago. It provided me with some useful information that relates to leadership. For example, we did Briggs-Meyers personality assessments and they have implications for how one should or should not try to lead certain kinds of people or groups.
- Continual leadership development is critical.
- I just graduated from SUTL. We can all use more training in how to be effective at leadership.
- I participated in the Stepping Up To Leadership program and found it incredibly useful. I would like to eventually be accepted to Advanced Leadership Development Program.
- I plan to apply for the Advanced Leadership program once I have additional time working for FWS.
- Mostly I provide leadership in field work based on my extensive experience in a broad variety of environments and techniques.
- rather than being given more training we need the opportunity to practice leadership skills; I have had some fantastic training but am now expected to sit back and be under the supervisors` thumbs. Leadership in the FWS at my level is not supported in action.

Management function class:

- Applied training in different situations
- But specific to collaboration and working with difficult people.
- Could always use more training in this area.
- EXPERIENCE
- I`ve been through ALDP and have also coached SUTL, as well as taken other supervisory/leadership courses. I may still take the week-long course offered by NCTC as a refresher.
- Seems to me that either you`ve got it, or you don`t. No classroom situation is going to provide much information or skill-building opportunity that will stick. I believe this is acquired through OJT and maturation.

Permits function class:

- A lot of my training was pre-federal employment.

- I am a supervisory. Leadership, prioritizing and decision making is a daily activity.
- I am the supervisor of a very difficult staff.
- Provide TRAINING (extensive) in a non-Supervisory role.
- Yes; plan to take an NCTC course in the next year on Basic Leadership.

Administration function class:

- As it relates to budget/administrative duties
- I have plans to apply for future training.

Coordination function class:

- As a coordinator of an initiative, I need to lead, even if from behind. I think I would like additional training in leadership skills, especially where leadership is necessary despite lack of authority or funding"
- Attending Leadership Academy at NCTC this summer.
- maybe, not the highest priority

Information Management function class:

- All staff in a current leadership role or who will be performing more leadership activities in the future could probably use training on how to be a more effective leader.
- I would benefit from training that would provide additional skills in chairing meetings and/or leading training sessions. I might also like to explore project management courses.

From those for whom this is NOT part of their job:

- I have on occasion provided some assistance when a question arose and an answer was necessary
- Would like to have the option of `possibly` in answer to whether I feel I need more training in this area. Leadership provided in current position only on an informal basis and not on a formal basis.

6. Comparisons Across Job Aspects

For the remainder of this report, responses are classified according to the following scale:

- All = 100%
- Most = 85 to 99%
- A Majority = 61 to 84%
- Around Half = 40 to 60%
- Only a Few = 1 to 39%
- None = 0%

Across ALL employees, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 10, 12, 14, 15, 21
- Around Half : 2, 6, 8, 11, 13, 16, 18, 19, 20
- Only a Few : 7, 17

Table 33. Part of job, by aspect, all employees

Job aspect	Number		Percent	
	Yes	No	Yes	No
1. Coordinate other org.	171	20	90	10
2. Engage public	75	114	40	60
3. Prioritize projects	138	52	73	27
4. Coordinate in FWS	148	43	77	23
5. Collaborate partners	140	50	74	26
6. Outreach	104	76	55	45
7. Non-English	40	151	21	79
8. Facilitation	80	110	42	58
9. Communication	188	3	98	2
10. Problem solving	145	44	77	23
11. GIS	86	104	45	55
12. Landscape context	138	52	73	27
13. Climate change	106	84	56	44
14. Population ecology	122	68	64	36
15. Latest IT	141	49	74	26
16. Bird conserv. plans	98	91	52	48
17. Bird disease	51	138	27	73
18. Models	84	104	45	55
19. Stat. techniques	92	94	49	51
20. Strat. Hab. Conserv.	110	77	59	41
21. Leadership	151	38	80	20

Across the BIOLOGY function class, these aspects are part of the job of:

- Most : 1, 5, 9, 12
- A Majority : 3, 4, 10, 11, 13, 14, 15, 16, 18, 19, 20, 21
- Around Half : 6, 8
- Only a Few : 2, 7, 17

Table 34. Part of job, by aspect, Biology function class

Job aspect	Number	Percent
1. Coordinate other org.	84	96
2. Engage public	30	34
3. Prioritize projects	72	83
4. Coordinate in FWS	65	74
5. Collaborate partners	75	85
6. Outreach	43	49
7. Non-English	20	23
8. Facilitation	40	46
9. Communication	87	99
10. Problem solving	70	80
11. GIS	55	63
12. Landscape context	80	92
13. Climate change	63	72
14. Population ecology	74	84
15. Latest IT	63	72
16. Bird conserv. plans	54	62
17. Bird disease	27	31
18. Models	54	62
19. Stat. techniques	60	69
20. Strat. Hab. Conserv.	59	68
21. Leadership	70	81

Across the MANAGEMENT function class, these aspects are part of the job of:

- All : 1, 9, 21
- Most : 3, 4, 6, 10, 12
- A Majority : 2, 5, 8, 14, 15, 16, 20
- Around Half : 13, 17
- Only a Few : 7, 11, 18, 19

Table 35. Part of job, by aspect, Management function class

Job aspect	Number	Percent
1. Coordinate other org.	25	100
2. Engage public	21	84
3. Prioritize projects	22	88
4. Coordinate in FWS	24	96
5. Collaborate partners	21	84
6. Outreach	23	92
7. Non-English	5	20
8. Facilitation	16	64
9. Communication	25	100
10. Problem solving	23	92
11. GIS	5	20
12. Landscape context	22	88
13. Climate change	14	56
14. Population ecology	20	80
15. Latest IT	16	64
16. Bird conserv. plans	16	64
17. Bird disease	10	40
18. Models	9	38
19. Stat. techniques	8	33
20. Strat. Hab. Conserv.	19	79
21. Leadership	25	100

Across the PERMITS function class, these aspects are part of the job of:

- All : 4
- Most : 1, 9, 15
- A Majority : 22, 10, 21
- Around Half : 3, 5, 16
- Only a Few : 7, 8, 11, 12, 13, 14, 16, 17, 18, 19, 20

Table 36. Part of job, by aspect, Permits function class

Job aspect	Number	Percent
1. Coordinate other org.	18	90
2. Engage public	14	70
3. Prioritize projects	11	55
4. Coordinate in FWS	20	100
5. Collaborate partners	10	50
6. Outreach	12	60
7. Non-English	4	20
8. Facilitation	5	25
9. Communication	19	95
10. Problem solving	16	84
11. GIS	2	10
12. Landscape context	7	35
13. Climate change	3	15
14. Population ecology	4	20
15. Latest IT	18	90
16. Bird conserv. plans	3	15
17. Bird disease	4	20
18. Models	2	10
19. Stat. techniques	2	10
20. Strat. Hab. Conserv.	5	25
21. Leadership	13	65

Across the OUTREACH function class, these aspects are part of the job of:

- All : 1, 6, 9
- A Majority : 2, 4, 5, 10, 11, 15, 21
- Only a Few: 7, 8, 20
- None : 3, 12, 13, 14, 16, 17, 18, 19

Table 37. Part of job, by aspect, Outreach function class

Job aspect	Number	Percent
1. Coordinate other org.	3	100
2. Engage public	2	67
3. Prioritize projects	0	0
4. Coordinate in FWS	2	67
5. Collaborate partners	2	67
6. Outreach	3	100
7. Non-English	1	33
8. Facilitation	1	33
9. Communication	3	100
10. Problem solving	2	67
11. GIS	2	67
12. Landscape context	0	0
13. Climate change	0	0
14. Population ecology	0	0
15. Latest IT	2	67
16. Bird conserv. plans	0	0
17. Bird disease	0	0
18. Models	0	0
19. Stat. techniques	0	0
20. Strat. Hab. Conserv.	1	33
21. Leadership	2	67

Across the ADMINISTRATION function class, these aspects are part of the job of:

- Most : 9
- A Majority : 15
- Around Half : 1, 4, 10, 21
- Only a Few : 2, 3, 5, 6, 7, 8, 11, 12, 13, 14, 16, 17, 18, 19, 20

Table 38. Part of job, by aspect, Administration function class

Job aspect	Number	Percent
1. Coordinate other org.	14	54
2. Engage public	2	8
3. Prioritize projects	9	35
4. Coordinate in FWS	15	58
5. Collaborate partners	7	28
6. Outreach	9	35
7. Non-English	2	8
8. Facilitation	5	20
9. Communication	25	96
10. Problem solving	12	48
11. GIS	4	16
12. Landscape context	8	31
13. Climate change	8	31
14. Population ecology	6	23
15. Latest IT	17	65
16. Bird conserv. plans	7	27
17. Bird disease	7	27
18. Models	5	19
19. Stat. techniques	5	21
20. Strat. Hab. Conserv.	8	32
21. Leadership	13	52

Across the COORDINATION function class, these aspects are part of the job of:

- All : 1, 9, 15, 21
- Most : 3, 4, 5, 6, 12
- A Majority : 10, 13, 14, 16, 18, 19, 20
- Around Half : 7, 8, 11
- Only a Few : 2, 17

Table 39. Part of job, by aspect, Coordination function class

Job aspect	Number	Percent
1. Coordinate other org.	13	100
2. Engage public	5	39
3. Prioritize projects	12	92
4. Coordinate in FWS	12	92
5. Collaborate partners	12	92
6. Outreach	11	92
7. Non-English	6	46
8. Facilitation	7	54
9. Communication	13	100
10. Problem solving	10	77
11. GIS	7	54
12. Landscape context	11	85
13. Climate change	10	77
14. Population ecology	10	77
15. Latest IT	13	100
16. Bird conserv. plans	10	77
17. Bird disease	1	8
18. Models	8	62
19. Stat. techniques	8	62
20. Strat. Hab. Conserv.	10	77
21. Leadership	13	100

Across the INFORMATION MANAGEMENT function class, these aspects are part of the job of:

- All : 9, 15
- A Majority : 1, 4, 10, 21
- Around Half : 3, 5, 11, 19
- Only a Few : 7, 8, 12, 13, 16, 18, 20
- None : 2, 6, 14, 17

Table 40. Part of job, by aspect, Information Management function class

Job aspect	Number	Percent
1. Coordinate other org.	4	67
2. Engage public	0	0
3. Prioritize projects	3	50
4. Coordinate in FWS	4	67
5. Collaborate partners	3	50
6. Outreach	0	0
7. Non-English	1	17
8. Facilitation	1	17
9. Communication	6	100
10. Problem solving	4	67
11. GIS	3	50
12. Landscape context	2	33
13. Climate change	2	33
14. Population ecology	0	0
15. Latest IT	6	100
16. Bird conserv. plans	2	33
17. Bird disease	0	0
18. Models	2	33
19. Stat. techniques	3	50
20. Strat. Hab. Conserv.	2	33
21. Leadership	5	83

Across the BIOSTATISTICS function class, these aspects are part of the job of:

- All : 1, 5, 9, 21
- Most : 3, 14
- A Majority : 10, 11, 12, 13, 15, 16, 19, 20
- Around Half : 4, 8, 18
- Only a Few : 2, 6, 7, 17

Table 41. Part of job, by aspect, BioStatistics function class

Job aspect	Number	Percent
1. Coordinate other org.	10	100
2. Engage public	1	10
3. Prioritize projects	9	90
4. Coordinate in FWS	6	60
5. Collaborate partners	10	100
6. Outreach	3	30
7. Non-English	1	10
8. Facilitation	5	50
9. Communication	10	100
10. Problem solving	8	80
11. GIS	8	80
12. Landscape context	8	80
13. Climate change	6	67
14. Population ecology	8	89
15. Latest IT	6	67
16. Bird conserv. plans	6	67
17. Bird disease	2	22
18. Models	4	44
19. Stat. techniques	6	67
20. Strat. Hab. Conserv.	6	67
21. Leadership	10	100

Across Region 1, these aspects are part of the job of:

- All : 4, 9
- Most : 1, 10, 15, 21
- A Majority : 3, 5, 11, 12
- Around Half : 2, 6, 13, 14, 16, 19, 20
- Only a Few : 7, 8, 17, 18

Table 42. Part of job, by aspect, Region 1

Job aspect	Number	Percent
1. Coordinate other org.	6	86
2. Engage public	3	43
3. Prioritize projects	5	71
4. Coordinate in FWS	7	100
5. Collaborate partners	5	71
6. Outreach	4	57
7. Non-English	1	14
8. Facilitation	2	29
9. Communication	7	100
10. Problem solving	6	86
11. GIS	5	71
12. Landscape context	5	71
13. Climate change	3	43
14. Population ecology	4	57
15. Latest IT	6	86
16. Bird conserv. plans	4	57
17. Bird disease	2	29
18. Models	2	29
19. Stat. techniques	4	57
20. Strat. Hab. Conserv.	4	57
21. Leadership	6	86

Across Region 2, these aspects are part of the job of:

- All : 1, 3, 5, 9
- Most : 4, 10, 12, 14, 20
- A Majority : 13, 15, 16, 18, 19, 21
- Around Half : 2, 6, 7, 8, 11
- Only a Few : 17

Table 43. Part of job, by aspect, Region 2

Job aspect	Number	Percent
1. Coordinate other org.	14	100
2. Engage public	8	57
3. Prioritize projects	14	100
4. Coordinate in FWS	12	86
5. Collaborate partners	14	100
6. Outreach	8	57
7. Non-English	7	50
8. Facilitation	6	43
9. Communication	14	100
10. Problem solving	11	85
11. GIS	7	50
12. Landscape context	12	86
13. Climate change	11	79
14. Population ecology	12	86
15. Latest IT	11	79
16. Bird conserv. plans	11	79
17. Bird disease	5	36
18. Models	10	71
19. Stat. techniques	9	64
20. Strat. Hab. Conserv.	12	86
21. Leadership	10	71

Across Region 3, these aspects are part of the job of:

- All : 4, 9
- Most : 1
- A Majority : 3, 5, 10, 12, 15, 20, 21
- Around Half : 2, 6, 13, 14, 16, 18
- Only a Few : 7, 8, 11, 17, 19

Table 44. Part of job, by aspect, Region 3

Job aspect	Number	Percent
1. Coordinate other org.	14	93
2. Engage public	6	40
3. Prioritize projects	12	80
4. Coordinate in FWS	15	100
5. Collaborate partners	12	80
6. Outreach	8	53
7. Non-English	1	7
8. Facilitation	4	27
9. Communication	15	100
10. Problem solving	10	67
11. GIS	5	33
12. Landscape context	11	73
13. Climate change	8	53
14. Population ecology	9	60
15. Latest IT	11	73
16. Bird conserv. plans	8	53
17. Bird disease	1	7
18. Models	8	53
19. Stat. techniques	5	33
20. Strat. Hab. Conserv.	10	67
21. Leadership	12	80

Across Region 4, these aspects are part of the job of:

- All : 9
- Most : 1, 21
- A Majority : 3, 4, 5, 10, 12, 15, 20
- Around Half : 6, 8, 11, 13, 14, 16, 18
- Only a Few : 2, 7, 17, 19

Table 45. Part of job, by aspect, Region 4

Job aspect	Number	Percent
1. Coordinate other org.	22	92
2. Engage public	7	29
3. Prioritize projects	16	67
4. Coordinate in FWS	18	75
5. Collaborate partners	16	70
6. Outreach	14	58
7. Non-English	3	13
8. Facilitation	12	50
9. Communication	24	100
10. Problem solving	19	83
11. GIS	13	54
12. Landscape context	16	67
13. Climate change	14	58
14. Population ecology	13	54
15. Latest IT	18	75
16. Bird conserv. plans	14	58
17. Bird disease	7	29
18. Models	13	54
19. Stat. techniques	7	30
20. Strat. Hab. Conserv.	18	75
21. Leadership	21	88

Across Region 5, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 6, 10, 12, 14, 20, 21
- Around Half : 2, 8, 13, 15, 16
- Only a Few : 7, 11, 17, 18, 19

Table 46. Part of job, by aspect, Region 5

Job aspect	Number	Percent
1. Coordinate other org.	12	86
2. Engage public	6	43
3. Prioritize projects	9	69
4. Coordinate in FWS	11	79
5. Collaborate partners	9	64
6. Outreach	9	64
7. Non-English	1	7
8. Facilitation	6	43
9. Communication	13	93
10. Problem solving	9	64
11. GIS	5	36
12. Landscape context	9	64
13. Climate change	7	50
14. Population ecology	9	64
15. Latest IT	7	50
16. Bird conserv. plans	7	50
17. Bird disease	3	21
18. Models	5	36
19. Stat. techniques	4	29
20. Strat. Hab. Conserv.	9	64
21. Leadership	11	79

Across Region 6, these aspects are part of the job of:

- All : 9
- Most : 1, 4, 10
- A Majority : 5, 12, 16, 21
- Around Half : 2, 3, 6, 8, 13, 14, 15, 18, 19, 20
- Only a Few : 7, 11, 17

Table 47. Part of job, by aspect, Region 6

Job aspect	Number	Percent
1. Coordinate other org.	13	87
2. Engage public	8	53
3. Prioritize projects	9	60
4. Coordinate in FWS	13	87
5. Collaborate partners	12	80
6. Outreach	8	53
7. Non-English	2	13
8. Facilitation	7	47
9. Communication	15	100
10. Problem solving	13	87
11. GIS	4	27
12. Landscape context	11	73
13. Climate change	9	60
14. Population ecology	8	53
15. Latest IT	9	60
16. Bird conserv. plans	10	67
17. Bird disease	4	27
18. Models	8	53
19. Stat. techniques	7	47
20. Strat. Hab. Conserv.	9	60
21. Leadership	10	67

Across Region 7, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 5, 10, 12, 14, 15, 19, 21
- Around Half : 4, 6, 11, 13, 16, 18
- Only a Few : 2, 7, 8, 17, 20

Table 48. Part of job, by aspect, Region 7

Job aspect	Number	Percent
1. Coordinate other org.	23	85
2. Engage public	7	26
3. Prioritize projects	21	78
4. Coordinate in FWS	16	59
5. Collaborate partners	20	74
6. Outreach	14	54
7. Non-English	5	19
8. Facilitation	10	39
9. Communication	26	96
10. Problem solving	21	78
11. GIS	16	59
12. Landscape context	20	77
13. Climate change	16	59
14. Population ecology	19	70
15. Latest IT	21	78
16. Bird conserv. plans	14	52
17. Bird disease	10	37
18. Models	11	41
19. Stat. techniques	20	74
20. Strat. Hab. Conserv.	10	37
21. Leadership	18	67

Across Region 8, these aspects are part of the job of:

- All : 1, 4, 5, 9, 12, 13, 16, 20, 21
- A Majority : 3, 6, 8, 10, 14, 19
- Around Half : 2, 11, 15, 18
- None : 7, 17

Table 49. Part of job, by aspect, Region 8

Job aspect	Number	Percent
1. Coordinate other org.	4	100
2. Engage public	2	50
3. Prioritize projects	3	75
4. Coordinate in FWS	4	100
5. Collaborate partners	4	100
6. Outreach	3	75
7. Non-English	0	0
8. Facilitation	3	75
9. Communication	4	100
10. Problem solving	3	75
11. GIS	2	50
12. Landscape context	4	100
13. Climate change	4	100
14. Population ecology	3	75
15. Latest IT	2	50
16. Bird conserv. plans	4	100
17. Bird disease	0	0
18. Models	2	50
19. Stat. techniques	3	75
20. Strat. Hab. Conserv.	4	100
21. Leadership	4	100

Across Region 9, these aspects are part of the job of:

- Most : 1, 9, 21
- A Majority : 3, 4, 5, 10, 12, 14, 15
- Around Half : 6, 8, 11, 13, 19, 20
- Only a Few : 2, 7, 16, 17, 18

Table 50. Part of job, by aspect, Region 9

Job aspect	Number	Percent
1. Coordinate other org.	63	89
2. Engage public	28	39
3. Prioritize projects	49	69
4. Coordinate in FWS	52	73
5. Collaborate partners	48	68
6. Outreach	36	51
7. Non-English	20	28
8. Facilitation	30	42
9. Communication	70	99
10. Problem solving	53	75
11. GIS	29	41
12. Landscape context	50	70
13. Climate change	34	49
14. Population ecology	45	64
15. Latest IT	56	80
16. Bird conserv. plans	26	38
17. Bird disease	19	28
18. Models	25	37
19. Stat. techniques	33	49
20. Strat. Hab. Conserv.	34	51
21. Leadership	59	86

Across Grade level GS 5-9, these aspects are part of the job of:

- Most : 9
- A Majority : 1, 4, 15
- Around Half : 6, 10, 21
- Only a Few : 2, 3, 5, 7, 8, 11, 12, 13, 14, 16, 17, 18, 19, 20

Table 51. Part of job, by aspect, Grade level GS 5-9

Job aspect	Number	Percent
1. Coordinate other org.	21	66
2. Engage public	10	31
3. Prioritize projects	12	38
4. Coordinate in FWS	23	72
5. Collaborate partners	10	32
6. Outreach	13	41
7. Non-English	4	13
8. Facilitation	4	13
9. Communication	30	94
10. Problem solving	16	52
11. GIS	4	13
12. Landscape context	9	28
13. Climate change	5	16
14. Population ecology	4	13
15. Latest IT	23	72
16. Bird conserv. plans	4	13
17. Bird disease	3	9
18. Models	2	6
19. Stat. techniques	4	13
20. Strat. Hab. Conserv.	6	19
21. Leadership	13	42

Across Grade level GS 11-13, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 10, 12, 13, 14, 15, 20, 21
- Around Half : 6, 8, 11, 16, 18, 19
- Only a Few : 2, 7, 17

Table 52. Part of job, by aspect, Grade level GS 11-13

Job aspect	Number	Percent
1. Coordinate other org.	118	93
2. Engage public	43	32
3. Prioritize projects	98	78
4. Coordinate in FWS	95	75
5. Collaborate partners	102	80
6. Outreach	66	52
7. Non-English	31	24
8. Facilitation	57	45
9. Communication	126	99
10. Problem solving	99	79
11. GIS	76	60
12. Landscape context	100	79
13. Climate change	84	67
14. Population ecology	92	73
15. Latest IT	97	77
16. Bird conserv. plans	73	58
17. Bird disease	34	27
18. Models	68	54
19. Stat. techniques	74	59
20. Strat. Hab. Conserv.	82	65
21. Leadership	107	84

Across Grade level GS 14-15, these aspects are part of the job of:

- All : 1, 9, 21
- Most : 3, 4, 5, 10, 12
- A Majority : 2, 6, 14, 15, 16, 20
- Around Half : 8, 13, 17, 18, 19
- Only a Few : 7, 11

Table 53. Part of job, by aspect, Grade level GS 14-15

Job aspect	Number	Percent
1. Coordinate other org.	32	100
2. Engage public	25	78
3. Prioritize projects	28	88
4. Coordinate in FWS	30	94
5. Collaborate partners	28	88
6. Outreach	25	78
7. Non-English	5	16
8. Facilitation	19	59
9. Communication	32	100
10. Problem solving	30	94
11. GIS	6	19
12. Landscape context	29	91
13. Climate change	17	53
14. Population ecology	26	81
15. Latest IT	21	66
16. Bird conserv. plans	21	66
17. Bird disease	14	45
18. Models	14	47
19. Stat. techniques	14	47
20. Strat. Hab. Conserv.	22	73
21. Leadership	31	100

Across Washington Office organizational level, these aspects are part of the job of:

- All : 9
- Most : 1, 21
- A Majority : 3, 4, 5, 10, 12, 14, 15
- Around Half : 2, 6, 8, 13, 19, 20
- Only a Few : 7, 11, 16, 17, 18

Table 54. Part of job, by aspect, Organizational level Washington Office

Job aspect	Number	Percent
1. Coordinate other org.	49	88
2. Engage public	24	43
3. Prioritize projects	36	64
4. Coordinate in FWS	42	75
5. Collaborate partners	36	64
6. Outreach	28	50
7. Non-English	15	27
8. Facilitation	26	46
9. Communication	56	100
10. Problem solving	41	73
11. GIS	21	38
12. Landscape context	39	70
13. Climate change	27	49
14. Population ecology	35	64
15. Latest IT	43	78
16. Bird conserv. plans	19	35
17. Bird disease	14	26
18. Models	19	36
19. Stat. techniques	24	46
20. Strat. Hab. Conserv.	28	54
21. Leadership	48	89

Across Regional Office organizational level, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 10, 12, 14, 15, 21
- Around Half : 2, 6, 8, 13, 16, 18, 19, 20
- Only a Few : 7, 11, 17

Table 55. Part of job, by aspect, Organizational level Regional Office

Job aspect	Number	Percent
1. Coordinate other org.	79	90
2. Engage public	42	48
3. Prioritize projects	62	71
4. Coordinate in FWS	74	84
5. Collaborate partners	65	74
6. Outreach	51	59
7. Non-English	17	19
8. Facilitation	35	40
9. Communication	86	98
10. Problem solving	72	83
11. GIS	30	34
12. Landscape context	61	70
13. Climate change	43	49
14. Population ecology	54	61
15. Latest IT	60	68
16. Bird conserv. plans	51	58
17. Bird disease	25	28
18. Models	35	40
19. Stat. techniques	37	42
20. Strat. Hab. Conserv.	47	53
21. Leadership	68	77

Across Field Office organizational level, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 23, 4, 5, 10, 11, 12, 13, 14, 15, 19, 20, 21
- Around Half : 6, 16, 18
- Only a Few : 2, 7, 8, 17

Table 56. Part of job, by aspect, Organizational level Field Office

Job aspect	Number	Percent
1. Coordinate other org.	35	90
2. Engage public	6	15
3. Prioritize projects	32	82
4. Coordinate in FWS	27	69
5. Collaborate partners	31	82
6. Outreach	19	49
7. Non-English	8	21
8. Facilitation	13	34
9. Communication	38	97
10. Problem solving	24	63
11. GIS	28	72
12. Landscape context	30	77
13. Climate change	29	74
14. Population ecology	27	69
15. Latest IT	31	80
16. Bird conserv. plans	20	51
17. Bird disease	8	21
18. Models	22	56
19. Stat. techniques	26	68
20. Strat. Hab. Conserv.	27	69
21. Leadership	27	69

Across Other organizational level, these aspects are part of the job of:

- All : 1, 3, 5, 9, 10, 12, 16, 18, 20, 21
- Most : 8, 11, 13, 15
- A Majority : 4, 6, 14
- Around Half : 2, 17, 19
- None : 7

Table 57. Part of job, by aspect, Organizational level Other

Job aspect	Number	Percent
1. Coordinate other org.	7	100
2. Engage public	3	43
3. Prioritize projects	7	100
4. Coordinate in FWS	5	71
5. Collaborate partners	7	100
6. Outreach	5	71
7. Non-English	0	0
8. Facilitation	6	86
9. Communication	7	100
10. Problem solving	7	100
11. GIS	6	86
12. Landscape context	7	100
13. Climate change	6	86
14. Population ecology	5	71
15. Latest IT	6	86
16. Bird conserv. plans	7	100
17. Bird disease	3	43
18. Models	7	100
19. Stat. techniques	4	57
20. Strat. Hab. Conserv.	7	100
21. Leadership	7	100

Across 0 to 2 years of experience, these aspects are part of the job of:

- All : 9
- Most : 10
- A Majority : 1, 3, 4, 5, 12, 14, 15, 21
- Around Half : 6, 13, 16, 18, 19, 20
- Only a Few : 2, 7, 11, 17

Table 58. Part of job, by aspect, Years of experience 0 to 2

Job aspect	Number	Percent
1. Coordinate other org.	28	78
2. Engage public	13	36
3. Prioritize projects	24	67
4. Coordinate in FWS	25	69
5. Collaborate partners	24	67
6. Outreach	18	50
7. Non-English	8	22
8. Facilitation	18	50
9. Communication	36	100
10. Problem solving	31	86
11. GIS	14	39
12. Landscape context	24	67
13. Climate change	20	56
14. Population ecology	22	61
15. Latest IT	22	61
16. Bird conserv. plans	15	42
17. Bird disease	11	31
18. Models	19	53
19. Stat. techniques	17	47
20. Strat. Hab. Conserv.	21	58
21. Leadership	27	75

Across 3 to 5 years of experience, these aspects are part of the job of:

- Most : 1, 9, 21
- A Majority : 3, 4, 5, 6, 10, 12, 15, 20
- Around Half : 2, 8, 11, 13, 14, 16, 18, 19
- Only a Few : 7, 17

Table 59. Part of job, by aspect, Years of experience 3 to 5

Job aspect	Number	Percent
1. Coordinate other org.	40	91
2. Engage public	21	48
3. Prioritize projects	35	80
4. Coordinate in FWS	36	82
5. Collaborate partners	34	77
6. Outreach	28	64
7. Non-English	3	7
8. Facilitation	20	46
9. Communication	43	98
10. Problem solving	32	73
11. GIS	24	55
12. Landscape context	33	75
13. Climate change	24	56
14. Population ecology	25	58
15. Latest IT	29	67
16. Bird conserv. plans	24	57
17. Bird disease	6	14
18. Models	20	47
19. Stat. techniques	18	42
20. Strat. Hab. Conserv.	27	64
21. Leadership	37	86

Across 6 to 10 years of experience, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 10, 12, 14, 15, 16, 21
- Around Half : 6, 8, 11, 13, 18, 19, 20
- Only a Few : 2, 7, 17

Table 60. Part of job, by aspect, Years of experience 6 to 10

Job aspect	Number	Percent
1. Coordinate other org.	40	93
2. Engage public	16	37
3. Prioritize projects	28	68
4. Coordinate in FWS	32	74
5. Collaborate partners	33	77
6. Outreach	25	58
7. Non-English	16	37
8. Facilitation	23	55
9. Communication	42	98
10. Problem solving	36	84
11. GIS	18	42
12. Landscape context	32	74
13. Climate change	25	58
14. Population ecology	31	72
15. Latest IT	33	77
16. Bird conserv. plans	26	61
17. Bird disease	13	31
18. Models	17	41
19. Stat. techniques	21	50
20. Strat. Hab. Conserv.	25	60
21. Leadership	33	79

Across more than 10 years of experience, these aspects are part of the job of:

- Most : 1, 9
- A Majority : 3, 4, 5, 10, 12, 14, 15, 21
- Around Half : 6, 11, 13, 16, 18, 19, 20
- Only a Few : 2, 7, 8, 17

Table 61. Part of job, by aspect, Years of experience more than 10

Job aspect	Number	Percent
1. Coordinate other org.	61	92
2. Engage public	25	38
3. Prioritize projects	49	74
4. Coordinate in FWS	54	82
5. Collaborate partners	47	72
6. Outreach	33	51
7. Non-English	13	20
8. Facilitation	19	29
9. Communication	65	99
10. Problem solving	44	69
11. GIS	28	43
12. Landscape context	47	72
13. Climate change	35	53
14. Population ecology	43	65
15. Latest IT	55	83
16. Bird conserv. plans	31	47
17. Bird disease	20	30
18. Models	27	42
19. Stat. techniques	34	54
20. Strat. Hab. Conserv.	35	54
21. Leadership	52	79

Table 62. Importance, by aspect

Job aspect	Importance Now			Importance Future			Change		
	Mean	Sim. Imp.	% Crit.	Mean	Sim. Imp.	% Crit.	Mean	Sim. Imp.	% Crit.
1. Coordinate other org.	1.37	95	68	1.35	95	71	2	0	3
2. Engage public	1.84	84	34	1.72	88	43	12	4	9
3. Prioritize projects	1.64	91	45	1.60	92	49	4	1	4
4. Coordinate in FWS	1.73	86	44	1.68	87	45	5	1	1
5. Collaborate partners	1.46	92	63	1.41	94	65	5	2	2
6. Outreach	1.90	76	38	1.76	79	49	14	3	11
7. Non-English	2.20	60	23	1.88	75	38	32	15	15
8. Facilitation	1.86	81	34	1.80	86	36	6	5	2
9. Communication	1.16	99	84	1.16	99	85	0	0	1
10. Problem solving	1.83	84	34	1.76	86	39	7	2	5
11. GIS	2.13	69	25	2.04	71	30	9	2	5
12. Landscape context	1.69	87	45	1.61	88	53	8	1	8
13. Climate change	2.17	67	21	1.63	90	49	54	23	28
14. Population ecology	1.72	84	45	1.61	88	51	11	4	6
15. Latest IT	1.88	75	39	1.74	82	46	14	7	7
16. Bird conserv. plans	1.49	92	59	1.45	96	59	1	4	0
17. Bird disease	2.33	55	20	2.35	55	16	-2	0	-4
18. Models	1.76	83	46	1.55	88	57	22	5	11
19. Stat. techniques	1.83	79	41	1.72	84	46	11	5	5
20. Strat. Hab. Conserv.	1.78	85	40	1.64	88	50	14	3	10
21. Leadership	1.60	89	52	1.52	92	57	8	3	5

There are 4 job aspects for which at least 90% of those who have it as part of their job think it is important for doing their job successfully, and at least 50% think it is critical.

- #9 – Communication : 99% and 84%
- #1 – Coordinate other org. : 95% and 68%
- #5 – Collaborate partners : 92% and 63%
- #16 – Bird conserve. plans : 92% and 59%

The job aspects considered least important are:

- #17 – Bird disease : 55% and 20%
- #7 – Non-English : 60% and 23%
- #13 – Climate change : 67% and 21%
- #11 – GIS : 69% and 25%

There are 5 job aspects for which at least 90% think it will be important in the future for doing their job successfully, and at least 50% think it will be critical.

- #9 – Communication : 99% and 85%
- #1 – Coordinate other org. : 95% and 71%

- #5 – Collaborate partners : 94% and 65%
- #16 – Bird conserve. plans : 96% and 59%
- #21 – Leadership : 92% and 57%

The job aspects thought to be least important in the future are:

- #17 – Bird disease : 55% and 16%
- #11 – GIS : 71% and 30%

The largest increases in perceived importance in the future are for the job aspects of:

- #13 – Climate change : Mean decrease by 0.54, Simple sat increase by 23%
- #7 – Non-English : Mean decrease by 0.32, Simple sat increase by 15%
- #18 – Models : Mean decrease by 0.22, Simple sat increase by 11%

Only 1 job aspect is expected to be less important in the future than it is at present:

- #17 – Bird disease : Mean increase by 0.02, Critical decrease by 4%

Received Training

For most job aspects, between 40% and 60% of those for whom the aspect is part of their job report having received training in it.

Significantly more likely to have received training for the aspects of:

- #19 – Stat techniques : 73%
- #11 – GIS : 71%

Somewhat more likely to have received training for the aspects of:

- #9 – Communication : 64%
- #15 – Latest IT : 63%
- #18 – Models : 63%

Significantly less likely to have received training for the aspects of:

- #13 – Climate change : 22%
- #7 – Non-English : 23%

Table 63. Received training, by aspect

Job aspect	Number		Percent	
	Yes	No	Yes	No
1. Coordinate other org.	80	91	47	53
2. Engage public	37	38	49	51
3. Prioritize projects	56	80	41	59
4. Coordinate in FWS	64	81	44	56
5. Collaborate partners	56	81	41	59
6. Outreach	47	54	47	53
7. Non-English	9	30	23	77
8. Facilitation	42	37	53	47
9. Communication	120	67	64	36
10. Problem solving	69	76	48	52
11. GIS	61	25	71	29
12. Landscape context	79	57	58	42
13. Climate change	23	82	22	78
14. Population ecology	67	54	55	45
15. Latest IT	87	51	63	37
16. Bird conserv. plans	46	51	47	53
17. Bird disease	24	26	48	52
18. Models	52	31	63	37
19. Stat. techniques	66	24	73	27
20. Strat. Hab. Conserv.	54	54	50	50
21. Leadership	82	69	54	46

NCTC Classroom Training

As a % of those receiving training:
- 0 to 25% = 16 aspects
- 26 to 50% = 5 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 14 aspects
- 11 to 20% = 6 aspects
- 21 to 30% = 1 aspect
- > 30% = 0 aspects

NCTC classroom training is most common for the aspects of:
- #21 – Leadership : 49% of those receiving training; 26% of those with the aspect
- #18 – Models : 29% of those receiving training; 18% of those with the aspect

No one received NCTC classroom training for the aspects of:
- #7 – Non-English
- #13 – Climate change

Table 64. Received training, by aspect, NCTC classroom training

Job aspect	Training? = YES		NCTC classroom training		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	17	21	10
2. Engage public	37	49	5	14	7
3. Prioritize projects	56	41	8	14	6
4. Coordinate in FWS	64	44	8	13	6
5. Collaborate partners	56	41	5	9	4
6. Outreach	47	47	14	30	14
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	12	29	15
9. Communication	120	64	29	24	16
10. Problem solving	69	48	22	32	15
11. GIS	61	71	13	21	15
12. Landscape context	79	58	10	13	7
13. Climate change	23	22	0	0	0
14. Population ecology	67	55	8	12	7
15. Latest IT	87	63	8	9	6
16. Bird conserv. plans	46	47	3	7	3
17. Bird disease	24	48	2	8	4
18. Models	52	63	15	29	18
19. Stat. techniques	66	73	4	6	4
20. Strat. Hab. Conserv.	54	50	6	11	6
21. Leadership	82	54	40	49	26

Other Classroom Training

As a % of those receiving training:
- 0 to 25% = 6 aspects
- 26 to 50% = 7 aspects
- 51 to 75% = 5 aspects
- 76 to 100% = 3 aspects

As a % of those with the aspect:
- 0 to 10% = 6 aspects
- 11 to 20% = 4 aspects
- 21 to 30% = 6 aspects
- > 30% = 5 aspects

Other classroom training is most common for the aspects of:
- #19 – Stat techniques : 80% of those receiving training; 59% of those with the aspect
- #11 – GIS : 77% of those receiving training; 55% of those with the aspect

Other classroom training is least common for the aspects of:
- #5 – Collaborate partners : 11% of those receiving training; 4% of those with the aspect
- #4 – Coordinate in FWS : 13% of those receiving training; 6% of those with the aspect
- #13 – Climate change : 17% of those receiving training; 4% of those with the aspect

Table 65. Received training, by aspect, Other classroom training

Job aspect	Training? = YES		Other classroom training		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	12	15	7
2. Engage public	37	49	12	32	16
3. Prioritize projects	56	41	9	16	7
4. Coordinate in FWS	64	44	8	13	6
5. Collaborate partners	56	41	6	11	4
6. Outreach	47	47	13	28	13
7. Non-English	9	23	7	78	18
8. Facilitation	42	53	17	41	22
9. Communication	120	64	77	64	41
10. Problem solving	69	48	28	41	19
11. GIS	61	71	47	77	55
12. Landscape context	79	58	35	43	26
13. Climate change	23	22	4	17	4
14. Population ecology	67	55	47	70	39
15. Latest IT	87	63	42	48	30
16. Bird conserv. plans	46	47	9	20	9
17. Bird disease	24	48	15	63	30
18. Models	52	63	27	52	33
19. Stat. techniques	66	73	53	80	59
20. Strat. Hab. Conserv.	54	50	23	43	21
21. Leadership	82	54	42	51	28

On-line Training

As a % of those receiving training:
- 0 to 25% = 19 aspects
- 26 to 50% = 2 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 18 aspects
- 11 to 20% = 2 aspects
- 21 to 30% = 1 aspect
- > 30% = 0 aspects

On-line training is most common for the aspects of:
- #15 – Latest IT : 38% of those receiving training; 24% of those with the aspect
- #11 – GIS : 26% of those receiving training; 19% of those with the aspect

No one received on-line training for the aspects of:
- #5 – Collaborate partners
- #7 – Non-English

Table 66. Received training, by aspect, On-line training

Job aspect	Training? = YES		On-line training		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	3	4	2
2. Engage public	37	49	1	3	1
3. Prioritize projects	56	41	0	0	0
4. Coordinate in FWS	64	44	5	8	3
5. Collaborate partners	56	41	0	0	0
6. Outreach	47	47	3	6	3
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	2	5	3
9. Communication	120	64	11	9	6
10. Problem solving	69	48	3	4	2
11. GIS	61	71	16	26	19
12. Landscape context	79	58	5	6	4
13. Climate change	23	22	5	22	5
14. Population ecology	67	55	2	3	2
15. Latest IT	87	63	33	38	24
16. Bird conserv. plans	46	47	1	2	1
17. Bird disease	24	48	1	4	2
18. Models	52	63	8	15	10
19. Stat. techniques	66	73	10	15	11
20. Strat. Hab. Conserv.	54	50	3	6	3
21. Leadership	82	54	12	15	8

Journals or books

As a % of those receiving training:
- 0 to 25% = 10 aspects
- 26 to 50% = 9 aspects
- 51 to 75% = 2 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 9 aspects
- 11 to 20% = 8 aspects
- 21 to 30% = 2 aspects
- > 30% = 2 aspects

Journals or books is most common for the aspects of:
- #19 – Stat techniques : 59% of those receiving training; 43% of those with the aspect
- #14 – Pop ecology : 64% of those receiving training; 36% of those with the aspect

Journals or books is least common for the aspects of:
- #4 – Coordinate in FWS : 6% of those receiving training; 3% of those with the aspect
- #10 – Problem solving : 10% of those receiving training; 5% of those with the aspect
- #1 – Coord other org : 11% of those receiving training; 5% of those with the aspect
- #2 – Engage public : 11% of those receiving training; 5% of those with the aspect

Table 67. Received training, by aspect, Journals or books

Job aspect	Training? = YES		Journals or books		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	9	11	5
2. Engage public	37	49	4	11	5
3. Prioritize projects	56	41	8	14	6
4. Coordinate in FWS	64	44	4	6	3
5. Collaborate partners	56	41	7	13	5
6. Outreach	47	47	07	36	17
7. Non-English	9	23	2	22	5
8. Facilitation	42	53	12	29	15
9. Communication	120	64	33	28	18
10. Problem solving	69	48	7	10	5
11. GIS	61	71	15	25	17
12. Landscape context	79	58	37	47	27
13. Climate change	23	22	8	35	8
14. Population ecology	67	55	43	64	36
15. Latest IT	87	63	14	16	10
16. Bird conserv. plans	46	47	16	35	16
17. Bird disease	24	48	10	42	20
18. Models	52	63	24	46	29
19. Stat. techniques	66	73	39	59	43
20. Strat. Hab. Conserv.	54	50	13	24	12
21. Leadership	82	54	24	29	16

Details/special projects

As a % of those receiving training:
- 0 to 25% = 17 aspects
- 26 to 50% = 4 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 12 aspects
- 11 to 20% = 8 aspects
- 21 to 30% = 1 aspects
- > 30% = 0 aspects

Details/special projects is most common for the aspects of:
- #6 – Outreach : 45% of those receiving training; 21% of those with the aspect
- #16 – Bird cons plans : 39% of those receiving training; 19% of those with the aspect
- #21 – Leadership : 34% of those receiving training; 19% of those with the aspect

Details/special projects is least common for the aspects of:
- #7 – Non-English : No one
- #15 – Latest IT : 6% of those receiving training; 4% of those with the aspect
- #11 – GIS : 8% of those receiving training; 6% of those with the aspect

Table 68. Received training, by aspect, Details/special projects

Job aspect	Training? = YES		Details/special projects		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	22	28	13
2. Engage public	37	49	7	19	9
3. Prioritize projects	56	41	11	20	8
4. Coordinate in FWS	64	44	13	20	9
5. Collaborate partners	56	41	14	25	10
6. Outreach	47	47	21	45	21
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	10	24	13
9. Communication	120	64	29	24	16
10. Problem solving	69	48	14	20	10
11. GIS	61	71	5	8	6
12. Landscape context	79	58	20	25	15
13. Climate change	23	22	4	17	4
14. Population ecology	67	55	13	19	11
15. Latest IT	87	63	5	6	4
16. Bird conserv. plans	46	47	18	39	19
17. Bird disease	24	48	4	17	8
18. Models	52	63	8	15	10
19. Stat. techniques	66	73	13	20	14
20. Strat. Hab. Conserv.	54	50	9	17	8
21. Leadership	82	54	28	34	19

On-the-job training

As a % of those receiving training:
- 0 to 25% = 2 aspects
- 26 to 50% = 0 aspects
- 51 to 75% = 4 aspects
- 76 to 100% = 15 aspects

As a % of those with the aspect:
- 0 to 10% = 2 aspects
- 11 to 20% = 1 aspects
- 21 to 30% = 0 aspects
- > 30% = 18 aspects

No one received on-the-job training for the aspects of:
- #7 – Non-English
- #15 – Latest IT

On-the-job training is significantly less common for the aspect of:
- #13 – Climate change : 74% of those receiving training; 16% of those with the aspect

Table 69. Received training, by aspect, On-the-job training

Job aspect	Training? = YES		On-the-job training		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	74	93	43
2. Engage public	37	49	32	87	43
3. Prioritize projects	56	41	48	86	35
4. Coordinate in FWS	64	44	55	86	38
5. Collaborate partners	56	41	52	93	38
6. Outreach	47	47	41	87	41
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	36	86	46
9. Communication	120	64	96	80	51
10. Problem solving	69	48	49	71	34
11. GIS	61	71	47	77	55
12. Landscape context	79	58	69	87	51
13. Climate change	23	22	17	74	16
14. Population ecology	67	55	52	78	43
15. Latest IT	87	63	0	0	0
16. Bird conserv. plans	46	47	45	98	46
17. Bird disease	24	48	19	79	38
18. Models	52	63	35	67	42
19. Stat. techniques	66	73	46	70	51
20. Strat. Hab. Conserv.	54	50	43	80	40
21. Leadership	82	54	62	76	41

Coaching

As a % of those receiving training:
- 0 to 25% = 18 aspects
- 26 to 50% = 3 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 13 aspects
- 11 to 20% = 8 aspects
- 21 to 30% = 0 aspects
- > 30% = 0 aspects

Coaching is most common for the aspects of:
#21 – Leadership : 37% of those receiving training; 20% of those with the aspect

Coaching is least common for the aspects of:
#7 – Non-English : No one
#13 – Climate change : 9% of those receiving training; 2% of those with the aspect

Table 70. Received training, by aspect, Coaching

Job aspect	Training? = YES		Coaching		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	21	26	12
2. Engage public	37	49	6	16	8
3. Prioritize projects	56	41	14	25	10
4. Coordinate in FWS	64	44	16	25	11
5. Collaborate partners	56	41	13	23	9
6. Outreach	47	47	11	23	11
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	12	29	15
9. Communication	120	64	26	22	14
10. Problem solving	69	48	16	23	11
11. GIS	61	71	8	13	9
12. Landscape context	79	58	11	14	8
13. Climate change	23	22	2	9	2
14. Population ecology	67	55	8	12	7
15. Latest IT	87	63	12	14	9
16. Bird conserv. plans	46	47	8	17	8
17. Bird disease	24	48	4	17	8
18. Models	52	63	6	12	7
19. Stat. techniques	66	73	9	14	10
20. Strat. Hab. Conserv.	54	50	12	22	11
21. Leadership	82	54	30	37	20

Mentor outside the Service

As a % of those receiving training:
- 0 to 25% = 21 aspects
- 26 to 50% = 0 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 16 aspects
- 11 to 20% = 5 aspects
- 21 to 30% = 0 aspects
- > 30% = 0 aspects

Mentor outside the Service is most common for the aspects of:
#19 – Stat techniques : 24% of those receiving training; 18% of those with the aspect

Mentor outside the Service is least common for the aspects of:
#17 – Bird disease : 4% of those receiving training; 2% of those with the aspect
#4 – Coordinate in FWS : 5% of those receiving training; 2% of those with the aspect

Table 71. Received training, by aspect, Mentor outside the Service

Job aspect	Training? = YES		Mentor outside the Service		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	10	13	6
2. Engage public	37	49	3	8	4
3. Prioritize projects	56	41	6	11	4
4. Coordinate in FWS	64	44	3	5	2
5. Collaborate partners	56	41	7	13	5
6. Outreach	47	47	6	13	6
7. Non-English	9	23	1	11	3
8. Facilitation	42	53	8	19	10
9. Communication	120	64	12	10	6
10. Problem solving	69	48	6	9	4
11. GIS	61	71	5	8	6
12. Landscape context	79	58	17	22	13
13. Climate change	23	22	4	17	4
14. Population ecology	67	55	14	21	12
15. Latest IT	87	63	6	7	4
16. Bird conserv. plans	46	47	7	15	7
17. Bird disease	24	48	1	4	2
18. Models	52	63	11	21	13
19. Stat. techniques	66	73	16	24	18
20. Strat. Hab. Conserv.	54	50	6	11	6
21. Leadership	82	54	18	22	12

Written guidance

As a % of those receiving training:
- 0 to 25% = 18 aspects
- 26 to 50% = 3 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 17 aspects
- 11 to 20% = 4 aspects
- 21 to 30% = 0 aspects
- > 30% = 0 aspects

Written guidance is most common for the aspects of:
- #4 – Coordinate in FWS: 30% of those receiving training; 13% of those with the aspect
- #15 – Latest IT : 26% of those receiving training; 17% of those with the aspect
- #20 – Strat hab cons : 28% of those receiving training; 14% of those with the aspect

Written guidance is least common for the aspects of:
- #7 – Non-English : No one
- #10 – Problem solving : 4% of those receiving training; 2% of those with the aspect
- #2 – Engage public : 5% of those receiving training; 3% of those with the aspect
- #8 – Facilitation : 5% of those receiving training; 3% of those with the aspect

Table 72. Received training, by aspect, Written guidance

Job aspect	Training? = YES		Written guidance		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	11	14	6
2. Engage public	37	49	2	5	3
3. Prioritize projects	56	41	8	14	6
4. Coordinate in FWS	64	44	19	30	13
5. Collaborate partners	56	41	5	9	4
6. Outreach	47	47	7	15	7
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	2	5	3
9. Communication	120	64	25	21	13
10. Problem solving	69	48	3	4	2
11. GIS	61	71	5	8	6
12. Landscape context	79	58	7	9	5
13. Climate change	23	22	2	9	2
14. Population ecology	67	55	8	12	7
15. Latest IT	87	63	23	26	17
16. Bird conserv. plans	46	47	8	17	8
17. Bird disease	24	48	5	21	10
18. Models	52	63	5	10	6
19. Stat. techniques	66	73	8	12	9
20. Strat. Hab. Conserv.	54	50	15	28	14
21. Leadership	82	54	14	17	9

Job aids

As a % of those receiving training:
- 0 to 25% = 21 aspects
- 26 to 50% = 0 aspects
- 51 to 75% = 0 aspects
- 76 to 100% = 0 aspects

As a % of those with the aspect:
- 0 to 10% = 21 aspects
- 11 to 20% = 0 aspects
- 21 to 30% = 0 aspects
- > 30% = 0 aspects

Job aids is most common for the aspects of:
- #6 – Outreach : 9% of those receiving training; 4% of those with the aspect
- #19 – Stat techniques : 7% of those receiving training; 4% of those with the aspect

No one received job aids for the aspects of:
#2 – Engage public, #3 – Prioritize projects, #7 – Non-English, #8 – Facilitation, #10 – Problem solving, #13 – Climate change, #17 – Bird disease

Table 73. Received training, by aspect, Job aids

Job aspect	Training? = YES		Job aids		
	Number	Percent	Number	Percent of Train = Yes	Percent of Job = Yes
1. Coordinate other org.	80	47	3	4	2
2. Engage public	37	49	0	0	0
3. Prioritize projects	56	41	0	0	0
4. Coordinate in FWS	64	44	2	3	1
5. Collaborate partners	56	41	2	4	1
6. Outreach	47	47	4	9	4
7. Non-English	9	23	0	0	0
8. Facilitation	42	53	0	0	0
9. Communication	120	64	8	7	4
10. Problem solving	69	48	0	0	0
11. GIS	61	71	2	3	2
12. Landscape context	79	58	1	1	1
13. Climate change	23	22	0	0	0
14. Population ecology	67	55	3	5	2
15. Latest IT	87	63	4	5	3
16. Bird conserv. plans	46	47	1	2	1
17. Bird disease	24	48	0	0	0
18. Models	52	63	1	2	1
19. Stat. techniques	66	73	1	2	1
20. Strat. Hab. Conserv.	54	50	1	2	1
21. Leadership	82	54	4	5	3

Need More Training

0 to 25% = 0 aspects
26 to 50% = 10 aspects
51 to 75% = 7 aspects
76 to 100% = 4 aspects

Most likely to report needing more training in the aspects of:
#13 – Climate change : 81%
#19 – Stat techniques : 81%
#18 – Models : 77%
#7 – Non-English : 77%

Least likely to report needing more training in the aspects of:
#17 – Bird disease : 38%
#4 – Coordinate in FWS : 38%
#1 – Coordinate other org : 38%

Table 74. Need more training, by aspect

Job aspect	Number		Percent	
	Yes	No	Yes	No
1. Coordinate other org.	62	103	38	62
2. Engage public	27	39	41	59
3. Prioritize projects	56	75	43	57
4. Coordinate in FWS	53	88	38	62
5. Collaborate partners	54	70	44	56
6. Outreach	43	56	43	57
7. Non-English	30	9	77	23
8. Facilitation	57	20	74	26
9. Communication	81	95	46	54
10. Problem solving	85	53	62	38
11. GIS	60	24	71	29
12. Landscape context	70	57	55	45
13. Climate change	82	19	81	19
14. Population ecology	68	50	58	42
15. Latest IT	81	50	62	38
16. Bird conserv. plans	39	53	42	58
17. Bird disease	18	30	38	63
18. Models	59	18	77	23
19. Stat. techniques	72	17	81	19
20. Strat. Hab. Conserv.	51	53	49	51
21. Leadership	85	57	60	40

7. Comments

Respondents were asked: “Are there any other aspects of your job performance for which you could use training.”

34 persons made comments.

Biology function class:

- Dealing successfully with outdoors media staff. 2. Development of basic communication skills to facilitate coordination with partners.
- bird monitoring design, I do this already but I need the graduate level course.
- Coaching in prioritization of tasks, time management, etc.
- Grants and grant writing Data management Internet design and management
- I believe folks who work in this program are already highly trained, most have Ph.D.`s and do not greatly benefit from week long courses targeted at overviews of complex topics.
- I have only been on the job for two months. I expect to take advantage of opportunities in training in areas of leadership, partnership coordination, GIS, modeling, etc. However, I do believe that while many of these are an important aspect of my program, partners and contractors that I work with will deal with some of these things (GIS, modeling).
- I would like to be able to remain a FWS employee while entering into graduate school to do PhD research relevant to the work we do. Seems the USGS has mechanisms to support this type of training/research/advancement, but the FWS does not.
- In-reach to the bureaucracy and ways to help employees make the journey easier through administrative purgatory.
- Just that in general I could use more training on modern methodology for counting birds/monitoring bird populations with an emphasis on nongame birds.
- Yes - program budgeting, PART measures and Congressional Operations (OUT 8196) which currently has a 2-year waiting list. It isn`t easy being a new hire coming in from a state agency and trying to figure out the Federal budgeting process. Any additional training along those lines would be very helpful.

Management function class:

- Administration. We are overwhelmed with administrative duties. We are replacing biology with training, contracting, budgeting etc.
- Dealing with difficult co-workers (not in a supervisor/subordinate relationship).
- I seriously need a little more training in conversational Spanish.
- Probably statistical analysis
- refreshers in field activities and techniques.
- Understanding multicultural perspectives on nature and conservation. Recruiting and retaining a diverse workforce.

- We should all increase our level of understanding and ability to implement SHC processes. Many programs are resisting this. If we are to lead the way (as we have to date) we should include this in our IDP - myself included.

Permits function class:

- As an entry level staff person looking to upgrade my position, I am always looking for opportunities to increase my knowledge and marketability.
- NCTC should develop a "Permits" training course; most Permit Examiners have to learn via OJT and there is no structured INDOC training program for new hires.
- Permits staff need to have training on all the different permits that we issue, ie, types of permits, criteria to look for before issuing and many more. Customer service training is very important to Permits as we are the face of government to many people who have bird problems.

Outreach function class:

- new technologies

Administration function class:

- Conducting effective and efficient meetings (face-to-face and internet-based meetings); Partnership building and strengthening; basic ecological modeling-theory and practice; effective grant writing; webpage development and maintenance; technical expertise information on a variety of habitats and species.
- Continuous update/refresher training is needed in areas of using the current programs we encounter: FPPS, FFS, BTS, GovTrip, QuickTime, etc. FPPS - personnel actions, FFS - payments, BTS - Station Funds tracking, GovTrip - scheduling travel, QuickTime - payroll. All these areas are paramount in assisting station employees
- Refresher courses in the budget tracking system, FFS and FPPS are always a plus in an administrative position with the Service.
- Refresher courses related to financial, i.e, Budget Tracking System, Federal Finance System are always beneficial every other year or every two years. If possible, IDEAS Courses would be beneficial if offered more than once a year with smaller groups of people to allow more questions and one on one training.

Coordination function class:

- Bird Monitoring protocols, graduate level. So I can teach them to others and advise. I need to be able to recommend methodologies to partners that have varying questions.
- Is there training in "Accepting that there is more to do in a day than could ever possibly be done?" I don`t think it`s a matter of time-management, I think it is the field of voluntary conservation! Thank you for this opportunity to provide input.

- It was not clear to me if the questions pertained to my skill sets and needs or if it was my responsibility to assure they were available and used within the program I administer. I responded that I did not have specific skills in several areas...yet I rely on staff and partnership capabilities that do have them to successfully administer my program.
- Outreach, event planning and leadership are always areas where we can improve in the Duck Stamp Office.
- Policy. Could eventually use some training in public policy development.
- Yes, and this would apply to other Mig Bird people. I`m surprised that there`s nothing in this survey that addresses monitoring. That`s a big part of the Migratory Bird program and there are some real training needs for monitoring. For example: 1) survey design considerations, and 2) some sort of identification manual for birds from an aerial observer's perspective.

Information Management function class:

- GIS, modeling, personal improvement training, and communicating with groups - in that order.

BioStatistics function class:

- Could use training in all aspects of software. Training center in Denver closed so that is not an option anymore.
- What about training for folks that are new to the Mig Bird Program or the gov`t in general? Or they don`t even have to be new employees. I know we have the FWS Employee foundations course, but it is does not address items like how to use the gov`t credit card, govtrip, quicktime, travel do`s and dont`s, how to surf the Intranet and what resources are available for us to use, Lotus Notes training & capabilities, etc. An employee(s) wastes countless hours on admin tasks that should never have been an issue if we had the proper training to begin with.

Respondents were asked: “Is there anything else you’d like to say to the Migratory Bird Training Advisory Group?”

55 persons made comments.

Biology function class:

- Because of ridiculous, insulting, repetitive "required training" programs, training has become a dirty word. Change your group name. I do not want training, but I am open to help from more skilled or experienced colleagues in trying to be more effective in accomplishing my job assignments. Occasional specialized workshops given by scientists from universities and Wildlife Coop Units at our FWS regional office have been very useful in helping to introduce new developments in scientific methods and technology. Subjects have included aspects of statistics, population estimation, habitat selection, adaptive harvest management, population viability analysis, etc.
- Being in my first year of employment I would like to see more classes/training be offered to those of us who are new to the service. I hear about classes but that is about as far as it gets.
- bring back the shorebird class
- Change ALDP from a fall startup course to starting in January with the bulk of the classroom and detail time completed by October 1.
- Communication within Mig Birds needs much improvement. Every region has its specific issues but there seems to be a big disconnect between D.C. and the regional level. Even at the office level communication is thin. How can we communicate effectively with the publics we are trying to work with if we cannot communicate with each other? Furthermore, I think each biological project should be required to have a specific section on communications to the communities where research was conducted. We often go in and do a survey without speaking to the communities that are living with those resources. I think there are many lost opportunities where we could really foster relationships that are going to prove essential in the future.
- Continuing to offer occasional classes outside the NCTC campus will greatly assist in fulfilling my training needs. Webcast courses, such as those offered by USGS, would also be advantageous if made available.
- Encourage short-term details or shadowing assignment across branches and divisions to give a broader understanding of various aspects of FWS activities relating to birds.
- for the "have you received training" question. I read it to mean it was limited to only FWS offerings. I have taken courses before I came to FWS. I have gotten information or training through attending professional societies paper sessions and workshops, other meetings. Many of the bird meetings do have some sort of training offering. Night classes at the local community college, etc. and on my own. I have never been to NCTC. I think the GIS class (2days) was the only FWS sponsored training in the last 13 years. I had ""boot camp"" when I started 18 years ago though, but that`s the extent of FWS training in biology and leadership.

I answered many of the how effective are you questions with the second bubble, I feel that I can always be more effective and that there is always more to learn.

- Given the current level of administrative hell we live in (which does include a lot of training, although not what I would consider valuable training), there is little time to get any work done. Any additional mandatory training would not be looked upon favorable. I would value the opportunity to take some of the modeling/statistical training but would not advise making it mandatory.
- I am overloaded with administrivia. First, we lost our GIS and statistical support. Then we were expected to do all the administrative stuff, and keep up with ever-changing budget/contracting/credit card issues, and now do our own travel. I spend time writing proposals to get soft money grants so I can do actual work, and then have to manage those funds. Where is the time to do the work I should be doing, let alone get training in my field of expertise?
- I found it frustrating in trying to determine how to answer some of the questions as to whether they were a part of my job. Perhaps this frustration is due to my ignorance of the MBM Strategic Plan. I state that my job is pilot / biologist only to help the committee better assess my answers and if I interpreted the questions correctly. As biologist / pilot, my answers to all the questions are mostly in reference to my job at the field level (data collection, analysis, reporting, etc.). Some general thoughts re training in general. Training and education are essential to job performance, but one could do training and nothing else. A person has only so much time, and a compromise has to be made between being a generalist (being fair to good at many things) or a specialist (being great at a few things). The support available within MBM (i.e,. statistics, GIS, etc.) factors into which way one leans. The amount of training conducted / received also needs to be a compromise between maximizing the performance and return of MBM`s employees through training versus paralyzing the program with continuous training to the point that projects are not conducted and we lose sight of our ultimate goal of benefitting the resource.
- I support the effort to survey USFWS MB program staff to determine what our training needs are. This is proactive
- I suspect you will find, if you probe, that training is desired by many, but difficult to fit into the schedule.
- I think detail assignments are a great way to learn more about FWS, and other offices in FWS. However, for people who are new to federal service, the process for developing a detail and setting one up are unclear. Experienced employees seem to understand the process but I remain unclear even after 18 months of service. I`d appreciate some help in developing guidelines or strategies for putting together detail assignments and then how to write a justification for it.
- I would also like to see more opportunities for leadership training, enrolling in the Advanced Leadership Development Program, or steps for becoming a National Conservation Leadership Institute Fellow. We have a very small program, but very effective and influential. We are also looking at a significant turnover within the Migratory Bird Program through retirements over the next few years. We should have people developing leadership skills alongside those who are in other Service programs and state agencies to ensure that we maintain broad

perspectives and critical partnerships as we all move forward. Transitional efficiency is going to be a very important need. Thanks for asking.

- I would say that I have encountered a significant portion of co-workers who do not know how to use excel or powerpoint as effectively as they should. That often means those who do know how to use it have to help them.
- It would be good to have more, better, fuller communications among regions and branches (e.g., Popn and Habitat branches), between the bird initiatives and Joint Ventures, etc. Some regions do a better job of this than others, apparently, but we could all benefit from it.
- Legislative information sharing is an important part of my job, and I didn`t see any reference to it on your survey. Thank you for the opportunity to participate.
- Many of the job aspects in Part 2 of the survey are not limited to staff of the Migratory Bird Program. Is the focus of the Training Advisory Group to assess training needs related to Program staff or the Program?
- Not quite sure why I was pressed to fill this out. I have very little to do with migratory birds being a Hydrologic Technician, which is why I deleted it in the first place. I hope I didn't throw the survey off too much.
- Regular technical training is needed to keep staff up to date on current techniques of data management, analysis, and modeling. Details or special assignments should be more widely encouraged so that we receive more on the job training and broaden our scope of collaborators.
- The needs of the Division of Migratory Bird Management employees needs to be better considered when scheduling the Migratory Bird training courses that NCTC offers. Alternatives need to be available so necessary training can be completed even if funding or duties preclude employees from attending classroom training. On-line, self study or webinar offerings of courses need to be considered as alternatives to travel and classroom teaching. Many courses seem to be locked into a certain time frame or location that precludes employees from participating due to funding or job responsibilities.
- Training can and should be available for all employees; however, it should be left to employees to determine the type and kind of training that would most benefit them in the execution of their job duties. Required/mandatory training is something that does not serve employees or the Service well.
- We need less technical training and more "training" on managing the program as a whole. We are much too focused on technical issues and less on how we can work better nationally, regionally, and across the game-nongame divide. We should be a leader in the Service in implementing a dual career track ladder for technical specialists and management specialists.
- We need to go back to our foundations and develop basic training courses on migratory bird resources and their conservation and management. The NCTC Migratory Bird Treaty Act Course does a great job of helping put that foundation in place, but we need to build on these basic principles for each discipline. For example the Waterfowl Ecology Course does a good job of covering biological principles used in waterfowl management, but we need to take the next step in defining the role for the FWS and then implementing programs in collaboration with our partners.

- We need to have a specific scientific writing class offered on-line so we do not have to travel to NCTC.
- Yes, when the new SPITS program is up and running, to provide formal training from a certified training to show how to use the program properly.
- You did not address any training aspects for population monitoring (eg. banding, aerial observation, bird id, etc...)! Which a key component of our mission and is lacking, other than on the job and mentoring. It seemed that this survey is geared towards folks that work in the office and sit behind a desk.

Management function class:

- Communication and partnership skills are very important for all staff in the program. These skills are just as important as technical skills.
- Hi.
- I believe that most of our younger, professional FWS employees have a good foundation in computer skills and analytical techniques but will need training in understanding the decision-making process in FWS and other Interior agencies. Some of us more-experienced personnel are not as skilled in computer statistical analyses, etc. but can rely on younger staff for those aspects of our jobs while mentoring younger staff on the institutional aspects of accomplishing their jobs.
- This was a difficult task, so thanks for your efforts.
- you should conduct this survey periodically.

Permits function class:

- I believe that the Migratory Bird Division needs to do a much better job of developing its employees and encouraging and enhancing their career growth. I believe this is especially important for those in non-biological positions such as myself because we often feel undervalued, unappreciated and marginalized. There are backgrounds and skills other than biology that are useful to this program and to the Service as a whole.
- I would like to see training and education on all the different types of permits that we issue. Type of permit, qualifications for, disqualifying circumstances, inspections, coordinating with the States on permit issues, communicating with the permittee, processing the permit, issuing the permit, copies to whom, filing, retrieving files, old files, etc.
- Training is extremely limited for non-biological types. What is it you are trying to accomplish here? Training for biological personnel or for the overall Mig Bird group? There is not much to offer in regards to career growth for non-bio types so it would be nice to offer training for career growth and advancement for "support" people.
- You overlooked the permits group entirely in this survey. It didn`t apply to almost anything that we do - like customer service, which is the most important part of our job. Keeping people happy when they have a problem with birds is our number 1 concern. There is no training out there for us. We usually learn from one another or the SOP that the person before you left behind to help!

Outreach function class:

- enjoy
- I realize that the Migratory Bird Program has many biological activities but this survey doesn`t take into account some important program activities and jobs such as administration, communications, budget, marketing, etc. The results may yield useful information on training for our biologists, which is certainly important, but I`m not sure that non-biologists will see any benefit, which is disappointing.
- It wasn`t clear to me that if i answered "no" if i needed to continue with any parts of the question.

Administration function class:

- How about a Migratory Bird 101 for new persons: short overview of the program, how things work, who to ask, what specific program(s) biologists are responsible for, specific policies, etc.
- I think some coordination/communication among the Migratory Bird management analysts/administrative officers would be very beneficial to the Program overall.
- Increase the number of web-based and online training opportunities to reduce travel costs and the time spend away from our duty stations. Improve communication amongst all regions (Migratory Birds Programs)of the Service dealing with like issues and topics (ie listserves, monthly conference calls, monthly activity reports by region and field station). Create a career ladder structure within the migratory Bird Program that allows for mentoring of younger biologists in the Migratory Bird Program (most staff are higher graded wildlife biologist (GS-11,12,13). It would be good to have GS-7 and 9 wildlife biologist in the Migratory Program working closely with higher graded wildlife biologists to learn the "ropes".
- Most of the questions did not apply to my position.
- Provide some general training about the program to support staff. Although daily interaction with biologists provide some insight, it would be ideal if there was general training to familiarize existing and new support staff with the mission and projects of the MB program as well as how the program fits in the big USFWS picture.
- Some of these questions where quite hard to answer if you are not directly related to the Migratory Bird Program and do not have a general biological degree as part of your educational background.
- Thank you for conducting the survey!
- this is my second stab at submitting this survey...hope you receive it!!
- Training provided is definitely advantageous to the employee and benefits are many. I think administrative staff may benefit from outreach training such as “Connecting people to Nature through Birding" and other similar courses since we are in contact with the public in our office setting and when we attend meetings and events. Having a very supportive supervisor has allowed me to

enroll in classes and acquire more knowledge to provide to the public when questions come through my office.

Coordination function class:

- I am actually quite satisfied with the opportunities for training...I`m not satisfied with how I`ve not taken advantage of these opportunities to a great degree. I am often too focused on my current output at work to set aside time to improve my performance in the future.
- Need for basic info. on mig. bird ecology and programs for non mig. bird staff. Need for more training in landscape ecology, SDM, modeling, monitoring, statistics for Mig. Bird staff
- Thanks for the work put into this! In my opinion, the survey would have been more helpful as both a self assessment and one of others: ask the supervisors to complete the survey on their employees and ask the employees to do it on their supervisor. What about the need for supervision training? What about the ECQ`s? The Directorate is woefully lacking people who came up through Mig Birds, so we should be looking at how to prepare those interested in that step.

Information Management function class:

- If the Mig Bird program is going to have staff working on GIS and modeling then more directed training needs to be provided. Likely this training will not come from NCTC unless outside instructors are brought in like Tony Starfield for population and decision modeling. The modeling and GIS fields are too specific and fast moving to set a course curriculum and then only offer the class twice a year. Service and DOI in general need better directed training towards habitat modeling. Population modeling is being offered multiple places but not habitat from my limited experience.

BioStatistics function class:

- I would really like to take the Migratory Bird Act course offered through NCTC but it is offered in the spring during survey season when I cannot leave the office. We`ve asked NCTC to offer this course at Patuxent or in the fall but so far that has not happened. It`s frustrating.
- If field staff continue to be expected to complete complex fiscal contracting/agreement procedures, training should be provided. Preferably, field staff would communicate needs and fiscal officers would either complete fiscal vehicles/agreements or provide in-depth guidance - not happening now.