

JOE WITT

MAY: Hi, this is Roxanne May. I'm sitting down with Joe Witt. He's a biologist here at the NCTC, and he's going to talk to us a little bit about eagles today and just give us a little bit of general information.

So what do you have for us, Joe?

WITT: Well, I guess most things is what do you think about the bald eagle? Or where do you think it should be in the scheme of things? I think it should be up front and very important because it's the symbol of the United States. It's an emblem. It's on our coins. It's on our dollars. It's the emblem over the President's chair, top of the food chain. Really important. So what do you think you should think about the bald eagle as a common person? What's the common person think of the bald eagle?

MAY: What makes an eagle unique?

WITT: Besides its white head? Being on top of the food chain. It's a predator. It's a raptor. It's a -- it's, again, one of the most -- largest birds in the United States, certainly the Lower 48 and Upper 48, very important part of the ecology of the river systems. If we didn't have the bald eagle, we could get -- the shores would be cluttered with dead fish. They help clean up the fish. They help take care of the system. They're part of the bigger picture.

MAY: And, you know, the one thing that makes me wonder, they live in this area, what is their habitat, and do they live in the same nest in the same area year after year?

WITT: Luckily, most times they are -- they kind of wed for life. They marry

for life. And when one mate dies, they'll find another. And they love to be in big trees.

You know, what's needed by bald eagles is stands of trees, big large trees, that they can nest in, that they can roost in, that they can perch in and that they can fly over. It's kind of like -- why -- why are they unique is that they have special behaviors. They like to -- special mating rituals. They search the rivers. Once they find a mate, they do some really neat things. They fly above the river and they clasp talons. They clasp talons with each other and they cartwheel down, and just before they hit the water, they break apart, and they do a lot of -- they do this quite frequently. I have never had the opportunity to see it, but that's what they usually do.

So, you know, they have behaviors. They have habitat needs. And one of the things they need a lot of is peace and quiet.

MAY: Just like us, huh?

WITT: Need a little time, need a little time to yourself. Because they don't deal well with humans. They don't -- they don't sit on the couch and watch TV. They just can't do that. They like to avoid humans more than anything. And they do best without humans.

That's one of the reasons -- one of the reasons why the bird became endangered during the last century. During the last century, also the bird became -- had problems with their eggs. They got too thin. They broke. And then they also had people shooting them. So, you know, our forefathers kind of took potshots at them and killed them. And so they suffered from a lot of heavy mortality due to shooting, poisons in the water.

Something we don't have any more in our system here is DDT. DDT is gone from the United States and Canada and Mexico. So that was a big, big influence on the bird and affected a lot of other birds, peregrine falcons, osprey, affected them all the same way. Populations got so low that at one time there was less than 100 birds in the Lower 48.

For example, it's recovered since DDT was removed and was protected for -- like along the Chesapeake Bay there was -- in the '70s, there were 71 pairs, and in a matter of 20 years, it went up to 600 -- bird pairs. It recovered because we got rid of the garbage. We started taking care of our environment. If we don't take care of our environment, we lose things, and this is a perfect example of it.

MAY: Because they were on the endangered species list, right, and now they're taken off that list?

WITT: Yeah, about a year or so ago it was taken off because the numbers increased on the Lower 48, and there's only one location where it's still listed as an endangered species, and that's in the Sonoran Desert in Arizona, because the population has not recovered to the point where it's doing well enough. The populations have done really well, like I say, in places like the Chesapeake Bay, they've quadrupled in 20 years, in a matter of a short period of time. So it's done really well, and, again, they reproduce better. They average -- they started -- when they're under the influence of DDT, they were making -- having less than one baby per year. Take away the DDT and they're up to one and a half easy. So just a matter of small numbers and increased the population. And also became so great that some of the birds from Florida are coming up to Virginia, and they're populating the Virginia coastlines.

The numbers are so good that I remember -- or once about five years ago I was along the Potomac River South of D.C., quite a bit south of D.C., and we were surveying the river, and within an hour and a half I saw 105 bald eagles, in a short period -- I was so busy counting birds, I could not believe it.

MAY: That's incredible.

WITT: 105 birds in just a little bit over an hour.

MAY: Were they hunting for fish when you saw them --

WITT: They were fishing. They were perching. They were checking things out. It was a spring survey along the Virginia coast, and that's a part of the river where the river is about two miles wide. It's a little bit wider than that what we have here. It's a huge number of birds.

MAY: How do they hunt? And what basically do they hunt for?

WITT: The basic -- they hunt for fish primarily, but occasionally they'll eat a mammal or even a snake, but, again, they kind of like perch along the river and check what's going by. They'll swoop down and kind of pick a fish that's kind of coming up to the top of the water, and they'll -- and, again, they'll also eat carrion. So -- dead food. So that's where it's kind of important. They eat live fish and carrion, so they help the ecosystem clean itself as well as take a few fish here and there. Of course, fishermen get a little upset, but, you know, hey, you got -- this is -- this is their world as well as our world.

MAY: As far as the eagle's size, what is their basic standard size for a male and a female? And which one is more dominant?

WITT: The female is about 25 percent larger than the male. She's got a lot more work to do. Every year she's got to put out some -- put out some eggs

and protect the eggs and -- but, you know, primarily, she's about 25 percent bigger. They both share nesting responsibilities. You know, they switch off and on, but she's a little bigger.

The nests can get quite large. They can be up -- they can be as large as four to six feet wide, and they also live quite long, too. They go from 15 to 25 years of age. The adults weigh about 8 to 14 pounds. The bigger birds are up in Alaska, though. They're a little bigger up there. The wing spans go from about five to eight feet. And then the nest, again, the nests are four to six feet in diameter, but they can be three feet deep.

MAY: And how many eggs do they usually lay in that nest? What is kind of like the norm for a regular eagle?

WITT: Norm is between one and three, but three is unusual. Right now at our eagle nest we have three eggs that she's incubating.

MAY: That's the NCTC nest?

WITT: Yes, the NCTC nest has got three. That's a little bit on the large size. That's a lot of work. That's a lot of feeding. But also what happens is sometimes the fledglings in the nest get kind of cranky and occasionally they may push one out of the nest.

So this year we got three eggs. Last year the nest failed. The year before that they fledged three. So that was a good year. Last year was a bad year. So you can have -- it varies how many successful nests can be.

Again, if you look back at the pre--- the DDT times, about 50 percent of the nests were successful. Now, you can average around 80 percent of the nests are successful. But still, it's never a hundred percent. If it was a hundred

percent, they probably would overpopulate the rivers and the lakes.

MAY: And all three of them, fledglings, actually very unusual, right?

WITT: Yeah, it's really very unusual and kind of neat.

MAY: Yes, exactly. How old are the baby eagles when they usually fledge from the nest?

WITT: Well, you know, I got to go all the way back in the laying time. When the female lays the egg, it's usually one a day, and then she'll lay a second one, then a third one. Then you look at hatching time. You're looking at about 35 days to hatch. And then sometimes they'll hatch in sequence, too. One maybe one day, another another day, and a third day. But they usually try to kind of put it together so they're about the same. And you can always look at a nest and see the early days, the one that hatched last.

Then when you give them another about 90 days after that, they start fledging, after they hatched, you have to talk about 90 days. And then they stick around the nest for another four -- maybe three to four months after that, and you may not see them at the nest. May be in the evening when they come back. But they're within half a mile of the nest itself. So the nest is maybe, oh, 500 feet from the river here. So we have river frontage -- probably about three miles of river frontage. So, you know, you could have to -- if you're looking for the fledgling, you'd have to spend a lot of time. Time is what you really need to do.

And there's several locations along the Potomac River where you can see more bald eagles than other places. If you go upriver from NCTC, you see less of them. You see a few ospreys. Because there's a lot of development. There's a lot of housing up there. Again, if you go way downriver, there's a lot of forests

that are not urbanized as much and you'll see a lot more eagles. Again, there's a refuge on the Potomac River called Mason Neck National Wildlife Refuge, and it is the first refuge designated for bald eagles in the United States. And that was because of the eagle being an endangered species. And you go down that part of Virginia and you can -- and at the refuge you can see them quite frequently.

But, again, you can go out and spend a day and maybe not see them. But if you know where to go and are patient, there's a lot of places where you can see bald eagles.

MAY: It's actually pretty cool stuff, Joe. It has to be a pretty neat thing to really study these. Is there anything you would like to add to let everyone know about?

WITT: Again, it is neat and it's fun, but it also can be kind of dangerous, because people that study bald eagles -- a friend of mine out in Oregon was flying in a fixed wing plane and crashed while surveying bald eagles. Also, there are places that you can go during the winter and see bald eagles. They have winter roosts. And there's a special one up in Oregon near Klamath Falls, and during the winter, during February every year, they have a festival. You go out to the festival, they have papers on this, papers on that, these kind -- different kind of entertainments, but in the morning, what you would go -- a location along the highway, and everybody would park, get their binoculars out and they would count bald eagles coming out of the winter roosts, which is a forested habitat on the National Forest there, and they would just count bald eagles and just see all these eagles at one time.

What I like about it most is I would like to, if I may, quote somebody. This

person was the President back in the '60s when it was endangered, and he was very concerned about the eagle, and his name was President John Fitzgerald Kennedy, and he wrote: "The Founding Fathers made an appropriate choice when they selected the bald eagle as an emblem of the nation. The fierce beauty and the proud independence of this great bird appropriately symbolizes strength and freedom of America."

MAY: Touching stuff, isn't it?

WITT: Touching.

MAY: Well, Joe, I really want to thank you for taking the time and talking with us. I think everyone is going to find your stuff really interesting.

WITT: Maybe we can spend some time on the river together and we can start counting birds together.

MAY: And there you go. I'll do it.

WITT: Cool.

MAY: Thanks, Joe.