



U.S. Fish & Wildlife Service

National Conservation Training Center

Conserving the Nature of America

CSP1100 - Coldwater Fish Culture

Course Code	CSP1100
Course Title	Coldwater Fish Culture
Description	<p>Coldwater Fish Culture is an introductory course developed to explore all husbandry activities associated with coldwater fish culture. The curriculum follows the entire life cycle of a fish lot in a hatchery setting. Participants will explore the various techniques and calculations most often used in the aquaculture industry, including egg enumeration and handling, egg incubation, hatching methods, sac-fry care, managing fish from fry to catchable size, methods in brood stock management, and fish stocking. Participants will also investigate topics affecting fish behavior, including biological and environmental conditions, stress and pathogens, basic water chemistries, and various units used for egg incubation and fish rearing. Participants will calculate egg and fish inventories, determine rearing capacities, project fish growth, develop feed schedules, and understand the parameters affecting fish distribution and stocking. The course curriculum includes a balance of applied fisheries science and the practical art of fish culture.</p> <p>Objectives:</p> <p>Upon completion of this course, participants will be able to:</p> <ul style="list-style-type: none">• Enumerate both green and eyed eggs;• Identify and accurately record critical data needed to complete a lot history form;• Complete an accurate sample count and inventory;• Calculate fish growth and project fish size;• Project a weekly feed ration;• Calculate and develop a 90-day feed order;• Calculate density and flow indexes and use them to predict when to thin a lot of fish;• Recognize the signs and causes of stress in fish; and• Describe the advantages and disadvantages of the various techniques, equipment, and rearing units used in coldwater fish culture throughout the U.S. <p>Target Audience: Fishery biologists, fish culturists, biological technicians, aquatic animal husbandry caretakers, and other non-supervisory hatchery employees with less than 5 years of work experience.</p>
Delivery Method	Instructor Led
Non-FWS Fee	\$2,390.00
Instructional Hours	72
Credits/CEUs	7.0
Course Content Contact	Matthew Patterson: matthew_patterson@fws.gov; (304) 876-7473
Curriculum Category	Aquatic Species Biology and Conservation
Course Frequency	Once per year
Registration Link	Register in DOI Learn
College Credit Name	Semester Hours
College Credit Value	2

Schedule: CSP1100 - Coldwater Fish Culture

Start	End	Session Information	Location	Session Contact
7/6/2020	7/17/2020	For registration questions: sharon_howard@fws.gov For course content questions: matthew_patterson@fws.gov	Troutdale, OR	Sharon Howard; sharon_howard@fws.gov

