



U.S. Fish & Wildlife Service

# National Conservation Training Center

*Conserving the Nature of America*

## CSP1140 - Freshwater Fish Culture

Course Code	<b>CSP1140</b>
Course Title	<b>Freshwater Fish Culture</b>
Description	<p>This course is designed to familiarize participants with the basic principles, concepts and methods for the production of non-salmonid, freshwater fishes. Course topics will include collecting brood stock, spawning, egg handling, larval development, fish health management, the basics of both intensive and extensive fish culture, pond fertilization and management, harvest procedures, marking and tagging, and transport and stocking. Hands-on laboratory exercises will include egg bisection to determine developmental stage, egg enumeration, calculating the larval development index, fry counts, zooplankton sampling and identification, gut content analysis, sampling counts, and water quality analysis.</p> <p><b>OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>• Enumerate green and eyed eggs</li> <li>• Discuss water chemistry analyses and corrective measures for optimum water quality</li> <li>• Determine the developmental stage of a green egg</li> <li>• Calculate concentrations for both eggs and fish treatments</li> <li>• Diagnose and correct problems in the pond culture environment</li> <li>• Control water quality, vegetation, and unwanted organisms in the pond culture environment</li> <li>• Recognize normal and abnormal fish behavior and the common signs of fish disease.</li> <li>• Complete a gut content analysis to determine what fish are eating in the pond</li> <li>• Collect, identify, and enumerate various zooplankton.</li> <li>• Describe intensive and extensive fish culture methods for various species.</li> <li>• Harvest and transport fish to stocking sites in good condition.</li> <li>• Maintain hatchery production records.</li> </ul> <p><b>TARGET AUDIENCE:</b></p> <p>Anyone interested in the culture of freshwater fishes.</p>
Delivery Method	Instructor Led
Non-FWS Fee	\$1,195.00
Instructional Hours	36
Credits/CEUs	3.0
Course Content Contact	Matthew Patterson; <a href="mailto:matthew_patterson@fws.gov">matthew_patterson@fws.gov</a> ; (304) 876-7473; <a href="mailto:matthew_patterson@fws.gov">matthew_patterson@fws.gov</a>
Curriculum Category	<b>Aquatic Species Biology and Conservation</b>
Registration Link	Register in DOI Talent
DOI Talent Course Type	ILT

## Schedule: CSP1140 - Freshwater Fish Culture

Start	End	Session Information	Location	Session Contact
6/24/2019	6/28/2019	For registration questions: <a href="mailto:sharon_howard@fws.gov">sharon_howard@fws.gov</a>	Coleharbor, ND	<a href="mailto:sharon_howard@fws.gov">sharon_howard@fws.gov</a>