“Highly-trained employees are more motivated, efficient, and adaptive, and better able to accomplish the Service’s mission.”
Jay Slack, Former Director, NCTC

The U.S. Fish and Wildlife Service’s Leadership Competency Model has been developed to assist with the continuous learning efforts of our employees, and to guide employees at all levels and in all functions toward excellence in addressing the Service’s mission.

The Model identifies attributes that an employee should obtain, at whatever his or her level or job in the Service, to enhance readiness for positions of greater responsibility. This Model also enhances and complements the scientific and natural resources management knowledge and skills that remain critical to employee performance and success in conservation leadership.
How to use this Guide

Choose the subject area you are interested in on the wheel and go to the corresponding page.

- Select the class that best fits your need — introductory, intermediate, or advanced.
- Develop a short- or long-term plan to acquire the skills needed to advance your career.
- Map a pathway to achieve proficiency and expertise in a particular subject area.
- Create your Individual Development Plan (IDP).

Ways you can take courses

- NCTC CLASSROOM
- FIELD LOCATION
- LIVE AND ONLINE
- ANYTIME ONLINE
- BLENDED

About this Guide

This Guide gives you a comprehensive view of the courses the National Conservation Training Center (NCTC) offers to U.S. Fish and Wildlife Service (FWS) employees and the broader conservation community. The Guide contains a description and list of courses by subject area. Where applicable, some subject areas include specialized skill development pathways. These pathways suggest a progression of courses to help you gain proficiency in a subject area.

For more information or to register for a class, go to http://nctc.fws.gov or call 304-870-7101.

Additional NCTC resources:

- Video Galleries https://nctc.fws.gov/resources/knowledge-resources/video-gallery/
- Webinar Galleries https://nctc.fws.gov/topic/online-training/webinars/
- USFWS Conservation Library https://library.fws.gov

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Academies are focused on developing the skills and knowledge needed to address the mission of the programs and the Service. They are single and multi-week courses designed for targeted groups of FWS employees. Academies are by nomination only. Recruitment announcements are released throughout the year. If you are interested in attending an Academy, talk to your supervisor for details.

Courses-at-a-Glance

Academies

- Fisheries Academy CSP0100
- Project Leader Academy LED0381
- Realty Academy CLM7178
- Refuge Management Academy CLM3287
- Advanced Refuge Management Academy CLM3288
- Wage Grade Academy CLM5100
Leadership

These courses and programs prepare leaders and supervisors to accomplish the Service’s mission. Skills are developed for emerging, mid-level, and advanced levels of leadership and supervision. Courses are based on the FWS Leadership Competency Development Model and the U.S. Office of Personnel Management and Department of the Interior mandatory supervisory training requirements.

### Introductory Courses
- Inspiring Leadership Through Emotional Intelligence
- Level 1: Leadership Intermine: Designing Your Leadership Journey
- The Leadership Connection Program

### Intermediate Courses
- Emerging Dynamics in Leadership
- Introduction to Team Leadership
- Leading at the Speed of Trust
- Advanced Leadership Development Program
- Advanced Supervision: Building on Experience
- Shopping Up to Leadership

### Advanced Courses
- Advanced Leadership Development Program
- Leadership Connection - Program and/or Individual Courses, utilized by FWS employees only.

Supervision & Employee Development

These courses and programs prepare leaders and supervisors to accomplish the Service’s mission. Skills are developed for emerging, mid-level, and advanced levels of leadership and supervision. Courses are based on the FWS Leadership Competency Development Model and the U.S. Office of Personnel Management and Department of the Interior mandatory supervisory training requirements.

### Introductory Courses
- Discover Your Service: USFWS Foundations
- OLT-101
- Merit Systems Principles, OLT-102
- Conduct and Performance-Based Actions, OLT-103
- Pay and Leave for Supervisors, OLT-104

### Intermediate Courses
- Crucial Conversations Workshop
- LED5153
- Currently: Getting Started with Your Mentor
- LED5285
- Supervisory Skills Workshop
- SUPSKILLS

### Advanced Courses
- Advanced Supervision: Building on Experience
- LED6166
Communications

These courses build the skills needed to effectively serve as the face and voice of the Service. Emphasis is placed on written, oral, and digital communication skills and tools.

**Introductory Courses**

- Business Communications CLM8134
- Communications Science–Distilling Your Message CLM2014
- Facebook for FWS Employees CLM725b (Currently Not Available)
- Social Media Overview for FWS Employees CLM725a (Currently Not Available)
- Strategic Communication for Outreach: Overview and Planning CLM8111

**Intermediate Courses**

- Crucial Conversations Workshop LED5153
- Digital Communications in Conservation Training Workshop CLM7158
- Negotiation Skills for Conservation Professionals: Building a Foundation CLM8155
- Writing with Clarity CLM8201

**Advanced Courses**

- Congressional Operations Seminar CLM4196
- Critical Writing/Critical Thinking CLM2167
- Scientific Writing for Publication: Course and Clinic CSP2182
- Strategies and Tactics for the Experienced Conservation Practitioner CLM8116

Visitor Services

These courses build the skills needed to develop, provide, and manage priority public uses and other recreation at FWS field stations. The training focuses on the Big Six priority public uses (hunting, fishing, wildlife observation, photography, environmental education, and interpretation).

**Introductory Courses**

- Connecting People with Nature Through Birds OUT1963
- Education Programs for Youth: School’s Out OUT1962
- Intergibrary Foundations CLM2402
- Introduction to Visitor Services CLM8140
- Teaching Youth Outdoor Skills OUT8862
- Volunteer Recruitment and Management CLM8114
- Youth Mentored Hunting and Fishing Programs OUT8865

**Intermediate Courses**

- Archery as an Outreach Tool OUT8061
- Building Urban Wildlife Habitats OUT8060
- Integrating Education Standards in Your Education and Outreach Programs OUT8102
- National FWS Communications, Outreach, and Visitor Services Training Workshop OUT8152
- Recruit, Retain, Reactivate (R3) Training OUT8072

**Advanced Courses**

- Advanced Volunteer Management CLM4193
- Designing a Long-Term Phenology Monitoring Program OUT8063
- Planning and Evaluating Education and Outreach Programs OUT8064
- Process of Interpretive Planning CLM8244
- Visitor Services Planning CLM8251

Webinars and other resources:

- Visitor Services Webinar Series
- Friends Webinar Series
- Pollinator Curriculum Webinar Series
Human Dimensions

These courses focus on using social science knowledge and tools to effectively incorporate societal values into conservation planning and decision-making, and to build stronger and more diverse partnerships.

Introductory Courses
- Foundations in Public Participation: CLM8227
- Human Dimensions Foundations of Natural Resource Conservation: CLM8228
- Partnership and Community Collaboration: Managing by Network: CLM8123

Intermediate Courses
- Collaborative Conservation: Partnerships in Practice: CLM8124
- Community Connections Academy: CLM8152
- Negotiation Skills for Conservation Professionals: Building a Foundation: CLM8155

Advanced Courses
- Improving Conservation Outcomes Through Social Science Integration: CLM8228
- Strategies and Tactics for the Experienced Conservation Negotiator: CLM8116

Conservation Policy

These courses explore mission relevant policies and planning topics. Participants learn how to locate, interpret, and apply regulations resulting from policy and law.

Introductory Courses
- Developing a Conservation Agreement: CSP3105
- Developing Effective Tribal Relations: CSP3184
- Endangered Species Act (ESA) of 1973 Overview: CSP3114
- Federal Activities and the Fish and Wildlife Coordination Act (FWCA): CSP3122
- Integrating NEPA into FWS Activities: CSP3121
- Management of Oil and Gas Activities on National Wildlife Refuge System Lands: CLM8116
- Migratory Bird Conservation - A Trust Responsibility: CSP3102
- Natural Resources Damage Assessment and Restoration (NRDAR): CSP3111

Intermediate Courses
- Endangered Species Recovery Planning and Implementation: CSP3137
- Habitat Conservation Planning for Endangered Species: CSP3117
- Interagency Consultation for Endangered Species: CSP3138
- Introduction to Species Status Assessment: CSP3110

Advanced Courses
- Improving Conservation Outcomes Through Social Science Integration: CLM8228
- Strategies and Tactics for the Experienced Conservation Negotiator: CLM8116

Webinars and other resources:
- Human Dimensions Foundations of Natural Resource Conservation Broadcast: CLM8225
- Humen Dimensions of Conservation: Podcasts (Digital Library)
These courses focus on in-depth exploration of law, policy, and planning topics relevant to National Wildlife Refuge System (NWRS) land acquisition, protection, and management. Participants learn about managing oil and gas activities, assessment and acquisition of land, biological program planning, cultural resource protection, and other related topics.
### Decision Analysis

These courses build the knowledge and skills needed to make better decisions. Most courses are based on the Problem, Objectives, Alternatives, Consequences & Tradeoffs (PrOACT) model and the Structured Decision Making (SDM) process.

#### Introductory Courses
- An Overview of Structured Decision Making, ALC3183
- Collaboration and Conflict Transformation in Multi-Party Processes, ALC3195
- Decision Analysis for Climate Change, ALC3196
- Introduction to Structured Decision Making, ALC3171
- Open Standards for the Practice of Conservation, ALC3128

#### Intermediate Courses
- Adaptive Management: Structured Decision Making for Recurrent Decisions, ALC3176
- Decision Analysis: Elicitation and Facilitation, ALC3180
- Decision Analysis: Tools, ALC3191
- Structured Decision Making Workshop: Observers and Mentees, ALC3180
- Structured Decision Making Practicum, ALC3108
- Conservation Coaches Network, ALC3198
- USFWS/USGS Structured Decision Making Workshop, ALC3199

#### Advanced Courses
- Decision Analysis: Expert Elicitation and Facilitation, ALC3190
- Collaboration and Conflict Transformation in Multiparty Process, ALC3198

### Decision Analysis Pathways

**Quantitative Decision Analysis**
- Build basic skills in decision theory and the use of analytical tools to support the decision analysis process.

**Facilitative Decision Analysis**
- Build basic skills in decision theory with a focus on facilitating decision analysis.

#### Level 1
- Introduction to Structured Decision Making, ALC3171
- Adaptive Management: Structured Decision Making for Recurrent Decisions, ALC3176
- Decision Analysis: Tools, ALC3191

#### Level 2
- Decision Analysis Pathways Choose from a series of electives

#### Level 3
- Decision Analysis Pathways Choose from a series of electives

[https://nctc.fws.gov](https://nctc.fws.gov)
Statistics and Modeling

These courses build skills in population modeling, biological monitoring, and quantitative assessments needed to support conservation decisions. Participants learn about the modeling process including how to think like a modeler, run popular modeling software, and interpret results from models.

### Introductory Courses
- Conservation Biology and Modeling, CSP1304
- Data Wrangling with R, CSP1400
- Field Data Management using MS Access, CSP1003
- Introduction to R, CSP2401
- Making Sense of Biological Data with R, CSP4200
- Modeling Principles for Natural Resources Management, Beginner, CSP3156a

### Intermediate Courses
- Fish Population Dynamics and Assessment, CSP2300
- Modeling for Endangered Species Management, CSP2304
- Modeling Principles for Natural Resources Management, Intermediate, CSP4201
- Statistical Modeling for Conservation, CSP4210

### Advanced Courses
- Design and Analysis of Biological Monitoring, CSP4230
- Occupancy Modeling, CSP4241
- Species Distribution Modeling, CSP4220

### Statistics and Modeling Pathways

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Level 1</th>
<th>Level 2</th>
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<tbody>
<tr>
<td>Status and Trend Assessment Pathway</td>
<td>Making Sense of Biological Data with R, CSP4200</td>
<td>Data Wrangling, CSP4200</td>
<td>Statistical Modeling for Conservation, CSP4210</td>
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<tr>
<td></td>
<td>or Introduction to R, CSP4201</td>
<td></td>
<td>Design and Analysis of Biological Monitoring, CSP4230</td>
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<tr>
<td>Species Distribution Modeling and Conservation Design Pathway</td>
<td>Data Wrangling, CSP4200</td>
<td>Statistical Modeling for Conservation, CSP4210</td>
<td>Species Distribution Modeling, CSP4220</td>
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<tr>
<td></td>
<td>or Introduction to R, CSP4201</td>
<td></td>
<td>or Occupancy Modeling, CSP441</td>
</tr>
<tr>
<td>Population Modeling Pathway</td>
<td>Introduction to Structured Decision Making, ALC3171</td>
<td>Fish Population Dynamics &amp; Assessment, CSP2300</td>
<td>Modeling Principles for Natural Resources Management, Intermediate, CSP3156b</td>
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<td>or Modeling for Endangered Species Management, CSP2304</td>
</tr>
<tr>
<td>Data Manipulation Analysis</td>
<td>Introduction to R, CSP4201</td>
<td>Making Sense of Biological Data with R, CSP4200</td>
<td>Statistical Modeling for Conservation, CSP4210</td>
</tr>
<tr>
<td></td>
<td>or Data Wrangling, CSP4200</td>
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</tbody>
</table>
Geospatial Technologies
These courses build skill proficiency in using GIS and GIS applications for mapping and map communication, analysis, modeling, data creation and data management to support planning and decision making. Training in mobile GPS and remote sensing are also offered.

Introductory Courses
- GIS Introduction (ArcGIS Pro) CSP7102
- Transitioning to ArcGIS Pro CSP7103

Intermediate Courses
- Creating Maps that Work CSP7203
- Field Data Collection Using ArcGIS CSP7302
- GIS Intermediate CSP7204

Advanced Courses
- Advanced Geospatial Topics (topics vary) CSP7305
- FWES Geospatial Training Workshop CSP7304
- Watershed Analysis and Hydrologic Modeling CSP7306

Geospatial Technologies Webinars and other resources:

Webinars and other resources:
- Restoration Webinar Series CSP3904
- Field Techniques for Invasive Plant Management CLM2139
- Rotenone and Antimycin Use in Fisheries Management CSP2132
- Wetland Assessment, Restoration and Management CSP3106

Introductory Courses
- Applied Fluvial Geomorphology CSP3210
- Field Techniques for Invasive Plant Management CLM2139
- Forest Ecology and Management CSP2110

Intermediate Courses
- Functional Framework for Stream Assessment and Monitoring CSP3275
- Natural Channel Design Review CSP3174
- Pesticides and Fish and Wildlife Resources CSP3119
- River Morphology and Applications CSP3138

Advanced Courses
- Advanced Plant Identification: Grasses, Sedges, Rushes and Composites CSP3130
- Hazard Analysis and Critical Control Point Planning for Invasive Species (HACCP). Train-the-Trainer CSP2133
- Wetland Assessment, Restoration, and Management CSP3106

Habitat Assessment, Restoration, and Management
These courses build the knowledge and skills to effectively assess, restore, and manage streams, wetlands, and upland habitats. A highly developed series of courses in stream measurement and fluvial geomorphology build advanced skills for the most challenging restoration problems.

Introductory Courses
- Applied Fluvial Geomorphology CSP3210
- Field Techniques for Invasive Plant Management CLM2139
- Forest Ecology and Management CSP2110

Intermediate Courses
- Functional Framework for Stream Assessment and Monitoring CSP3275
- Natural Channel Design Review CSP3174
- Pesticides and Fish and Wildlife Resources CSP3119
- River Morphology and Applications CSP3138

Advanced Courses
- Advanced Plant Identification: Grasses, Sedges, Rushes and Composites CSP3130
- Hazard Analysis and Critical Control Point Planning for Invasive Species (HACCP). Train-the-Trainer CSP2133

Webinars and other resources:
- Restoration Webinar Series CSP3904
- Hydrology and Aquatic Resources Conservation Webinar Series
- Forest Ecology and Management Webinar Series
Habitat Restoration and Management Pathways

Level 1
- Wetland Plant Identification, CSP101
- Faunal Techniques for Innovative Plant Management, CLMI320
- Stream Habitat Measurement Techniques, CSP200
- Applied Fluvial Geomorphology, CSP218
- Forest Ecology and Management, CSP210

Level 2
- River Morphology and Applications, CSP218
- Wetland Assessment, Restoration and Management, CSP306
- Advanced Plant Identification - Grasses, Sedges, Rushes and Composites, CSP310

Level 3
- Advanced Plant Identification - Grasses, Sedges, Rushes and Composites, CSP310

Introductory Courses
- Conservation Biology of Freshwater Mussels CSP1101
- Macroinvertebrate Ecology and Identification CSP2221
- Coldwater Fish Culture CSP1100
- Freshwater Fish Culture CSP1140
- Introduction to Fish Health CSP1150
- Fish Identification CSP2220
- Ecology and Conservation of North American Crayfishes CSP1195

Intermediate Courses
- Freshwater Mussel Identification CSP1102
- Macroinvertebrate Ecological Monitoring Using Benthic Macroinvertebrates CSP3300
- Principles and Techniques of Electrofishing CSP2201
- Principles and Techniques of Electrofishing CSP2201
- Fish Sampling Techniques CSP2204
- Histology and Histopathology of Aquatic Species CSP1195

Advanced Courses
- Freshwater Mussel Propagation for Restoration CSP1102
- Electrofishing Sampling Advanced Practicum CSP2203
- Scientific River Diving Safety SAF4300

Aquatic Species Biology and Conservation

These courses focus on the successful restoration of threatened and endangered aquatic species. Participants learn about the biology, identification, propagation, and conservation of aquatic species, including freshwater fishes, mussels, crayfish, and other macroinvertebrates.

Courses-at-a-Glance
Fisheries Pathways

Quantitative Fisheries
- **Gain tools in analysis of fish and fisheries data for population assessment and evaluation of alternate management strategies.**
  - Introduction to R, CSP4281
  - Introduction to Population Modeling CSP3158a or CSP3158b
  - Fish Population Dynamics and Assessment, CSP2300

Fish Sampling
- **Gain practical knowledge and skills in deploying gear for improved sampling data.**
  - Principles and Techniques of Electrofishing (in-person or online) CSP2201 or CSP2204
  - Fish Sampling Techniques, (Online, Field, Lab, and Classroom), CSP2204
  - Electrofishing Sampling Advanced Practicum, CSP2205

Wildlife Biology and Field Techniques

These hands-on field and laboratory courses increase skills in the sampling, measuring, and health assessment of terrestrial and aquatic wildlife to manage and sustain species. Training includes techniques for identifying and monitoring species of birds, bats, small mammals, and herptiles.

**Introductory Courses**
- Applied Landscape-Scale Conservation Biology CSP1201
- Basic Bird Biology CSP1200
- Conservation Biology and Modeling CSP104
- Forest Ecology and Management CSP2100
- Foundations of Forest Wildlife Habitat Management CSP2112
- Fundamentals of Bird Banding CSP2114
- Introduction to Conservation Genetics CSP1917
- Survey Methods for Frog Abnormalities on National Wildlife Refuges CSP3165

**Intermediate Courses**
- Applied Conservation Genetics CSP3148
- Evaluating Acoustic Bat Surveys for ESA Compliance CSP2111
- Fish Sampling Techniques CSP2201
- Principles and Techniques of Electrofishing CSP2205
- Principles and Techniques of Electrofishing CSP2206
- Designing a Long-Term Phenology Monitoring Program OUT10052
- Electrofishing Sampling Advanced Practicum CSP2203
- Implementing a Successful Citizen Science Effort OUT10067

**Advanced Courses**
- Forest Ecology and Management Webinar Series
- Conservation Science Webinar Series CSP3100
- Webinars and other resources:
  - Forest Ecology and Management Webinar Series
  - Conservation Science Webinar Series CSP3100

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Courses-at-a-Glance

**Academies**
- Ecological Adaptations
- Wilderness Training

**NCTC Course Guide**

**NCTC CLASSROOM**
- In classroom

**LIVE AND ONLINE**
- Anytime online

**BLENDED**
- Live and online

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https://nctc.fws.gov
Ecological Adaptation

These courses provide the knowledge and skills needed to address the environmental challenges posed by a changing climate. The training reflects the most current research on basic climate science, vulnerability assessment, adaptation, and scenario planning.

- **Introductory Courses**
  - An Overview of Climate-Smart Conservation
  - Climate Academy
  - Climate Fundamentals for USFWS Employees

- **Intermediate Courses**
  - Climate-Smart Conservation Assessment
  - Planning for a Changing Climate
  - Climate-Smart Conservation Workshop
  - Scenario-Planning Toward Climate Change Adaptation

- **Advanced Courses**
  - Climate Change Vulnerability Assessment
  - Climate-Smart Conservation Workshop

Safety and Emergency Response

Safety courses are mandatory for jobs that require specialized skills for using equipment or dealing with situations with inherent risk. These courses prepare employees to pass required tests to operate watercraft, conduct electrofishing, and operate other equipment.

- **Introductory Courses**
  - Airboat Operator Module (MOCC)
  - Critical Incident Stress Management (CISM) Peer Support Training
  - Airboat Operator Module Practical
  - Hazardous Waste Operations and Emergency Response (HAZWOPER) Refresher Course

- **Intermediate Courses**
  - Critical Incident Stress Management (CISM) Peer Support Refresher Training
  - Rocket Not User Refresher
  - Rocket Not User Refresher Course

- **Advanced Courses**
  - Motorboat Operator Refresher
  - Scientific River Diving Safety
  - Critical Incident Stress Management (CISM) Peer Support Training

Webinars and other resources:

- Safeguarding Wildlife from Climate Change
- Inland Oil Spill for DOI Response Webinar Series
NCTC provides exemplary training and professional development tailored to support Service employees and conservation partners in accomplishing the agency’s mission.