

2026 NMFWA Workshop

Training Course Offerings and Descriptions

1. **Title:** Department of War Participation in the Avian Knowledge Network: The Who, What, Where, When, Why, and How

Length: Full-day Course

Course Capacity: 35

Date/Time: Monday, March 30, 2026; 0800-1700

Instructors: Elizabeth Neipert, Director, DoW Avian Knowledge Network Program, U.S. Army Corps of Engineers, Engineer Research and Development Center, Environmental Laboratory; Sam Veloz, Director Ecoinformatics and Climate Solutions, Point Blue Conservation Science; John Alexander, Executive Director, Klamath Bird Observatory; Caitlyn Gillespie, Research Biologist/Informatics and Data Science Program, Klamath Bird Observatory; Dianne Miller, Technical Product Manager, Ecoinformatics Team, Point Blue Conservation Science; Zoe Duran, Research Biologist/Data Support Analyst, U.S. Army Corps of Engineers, Engineer Research and Development Center, Environmental Laboratory

Course Description: Department of War (DoW), through the Legacy Program, funds participation in the Avian Knowledge Network (AKN) along with other federal partners. On 24 June 2022, the Office of the Secretary of War (OSW) issued a memo that endorses and requires the use of AKN by the DoW Components. AKN integrates avian monitoring data from similar standardized protocols and data structures for use in analysis, summarization, and visualization. Users have access to sharing roles that include data entry, data management, and data analysis, providing the only national enterprise system of its type for scientific observation protocols, analyzable results, long-term storage, and widespread input. Attendees will learn about how the system is organized, how to create project metadata and input data, how data sharing levels work, and how to visualize, analyze, and aggregate data for conservation purposes. They will also learn about the capabilities of pooling Military Service-specific data, regional data, and habitat-specific data including data from our federal partners. Participants will learn the who, what, where, when, why, and how of the AKN and DoW's commitment to the use of the AKN. They will leave with the capability to upload, archive, access, and use extensive avian data tools to assist in NEPA analysis and assessing impacts of readiness and non-readiness activities. Instructors include engineers and biologists from Point Blue Conservation Science, Klamath Bird Observatory, and U.S. Army Engineer Research and Development Center – Environmental Laboratory.

NOTE: Pre-work is required to participate in this course. Any interested participants need to commit to completing the pre-work prior to the in-person training in Louisville, KY. Participants must participate in a pre-course webinar to confirm ready datasets and gain access to AKN. All participants will need to bring laptops that can access the internet to the training. It is encouraged for participants to bring an appropriate and ready avian dataset. Registrants will be contacted by course instructors via email with more information closer to the Workshop.

2. **Title:** Introduction to Manual Bat Acoustic Identification

Length: Full-day Course

Course Capacity: 50

Date/Time: Monday, March 30, 2026; 0800-1700

Instructors: Donald Solick, Owner, Vesper Bat Echolocation Specialists; Nick Solick, Assistant, Vesper Bat Echolocation Specialists. Moderators: Jillian Josimovich, Biologist, U.S. Fish and Wildlife Service; Rada Petric, Director for the institute for the Environment at Highlands Field Site and Research Assistant Professor, University of North Carolina - Chapel Hill

Course Description: The initiation and continued monitoring of bat populations across military installations is growing in importance as more bat species become federally listed. Acoustic monitoring is a tool for inventorying and monitoring bat species at military installations to support INRMP goals, complete required USFWS presence/absence surveys for projects, and assist larger efforts to assess bat species population statuses and trends, such as the North American Bat Monitoring Program (NABat). Acoustic experts from Vesper Bat Echolocation Specialists (Vesper) will provide course participants with the opportunity to learn about the basics of bat acoustic identification and how bat calls can be manually vetted for some common, at-risk, and federally listed species (e.g., Indiana bat, Northern long-eared bat, gray bat, tricolored bat, little brown bat). This training is equivalent to the Echolocation 101/Best Practices, Acoustic ID of Common and Endangered High-frequency Bats, and SonoBat Data Processing for NABat courses offered by Vesper. The training will include an overview of how to deploy detectors, how to choose which calls to identify, the basics of SonoBat (a popular bat acoustic software program), the basics of AnalookW (another program useful for identifying endangered Indiana bats), and manual vetting for high-frequency bat species in SonoBat. All skill levels are welcome to this training, including wildlife professionals and students. Vesper also offers affordable online trainings that students could pursue independently after the meeting according to their skill levels and regional species needs.

NOTE: Course participants must bring a laptop computer and download course materials prior to attending this training. Instructors will contact registrants 1-2 weeks prior with instructions for downloading materials.

3. **Title:** Expanding Impact: Integrated Monarch Monitoring Program (IMMP) Training as a Framework for Monitoring At-Risk Species

Length: ½-Day Course

Course Capacity: 30

Date/Time: Monday, March 30, 2026; 0800-1200

Instructors: Mercy Manzanares, Program Coordinator, Monarch Joint Venture

Course Description:

The Integrated Monarch Monitoring Program (IMMP) was developed to assess monarch butterfly populations, habitat quality, and conservation outcomes across North America. However, the program's standardized methods and modular design also provide a scalable framework for broader biodiversity monitoring. This training equips participants with field-based skills in plant and pollinator identification, habitat assessment, and data collection—skills directly transferable to monitoring other at-risk and early-successional species such as bumble bees, grassland birds, and other pollinators of concern. By integrating IMMP protocols into existing monitoring efforts, participants can generate multi-species data that inform adaptive management and contribute to regional conservation priorities. The training emphasizes practical field applications, data submission workflows, and opportunities for collaboration across agencies and landscapes, including Department of Defense installations and conservation partner sites. Through this

additive approach, IMMP training strengthens capacity for unified, ecosystem-based monitoring that supports both monarch recovery and the conservation of broader pollinator and grassland communities.

4. **Title:** Expanding Impact: Integrated Monarch Monitoring Program (IMMP) Training as a Framework for Monitoring At-Risk Species (Same Course as AM Session)

Length: ½-Day Course

Course Capacity: 30

Date/Time: Monday, March 30, 2026; 1300-1700

Instructors: Mercy Manzanares, Program Coordinator, Monarch Joint Venture

Course Description:

The Integrated Monarch Monitoring Program (IMMP) was developed to assess monarch butterfly populations, habitat quality, and conservation outcomes across North America. However, the program's standardized methods and modular design also provide a scalable framework for broader biodiversity monitoring. This training equips participants with field-based skills in plant and pollinator identification, habitat assessment, and data collection—skills directly transferable to monitoring other at-risk and early-successional species such as bumble bees, grassland birds, and other pollinators of concern. By integrating IMMP protocols into existing monitoring efforts, participants can generate multi-species data that inform adaptive management and contribute to regional conservation priorities. The training emphasizes practical field applications, data submission workflows, and opportunities for collaboration across agencies and landscapes, including Department of Defense installations and conservation partner sites. Through this additive approach, IMMP training strengthens capacity for unified, ecosystem-based monitoring that supports both monarch recovery and the conservation of broader pollinator and grassland communities.

5. **Title:** A Trapping Awareness Workshop for Understanding, Communicating, and Applying Trapping in Wildlife Management

Length: Full Day Course

Course Capacity: 45

Date/Time: Monday, March 30, 2026; 0800-1700

Instructor: Bryant White, Association of Fish and Wildlife Agencies, Washington DC

Course Description:

Trapping is one of the most important yet often least understood tools in modern wildlife management. Despite its critical role in endangered species protection, species restoration, human–wildlife conflict resolution, and wildlife research, many wildlife professionals and members of the public lack familiarity with trapping practices. This workshop is designed to address that knowledge gap. This trapping awareness workshop will provide participants with a strong foundation in the science, practice, and communication of regulated trapping. By combining effective messaging strategies with hands-on demonstrations of trapping equipment and methods, this session will prepare wildlife professionals to understand, explain, and apply trapping in their work.

Participants will leave the workshop with:

- A clear understanding of the role of trapping in wildlife management, research, and conservation.

- Firsthand experience with the most common traps, equipment, and sets, including demonstrations of their selectivity, practicality, and humane use.
- Effective communication strategies and key messages for discussing trapping with diverse audiences (peers, policymakers, the media, and the public).
- Knowledge of Best Management Practices (BMPs) for regulated trapping, including research supporting humane and science-based approaches.

This full-day interactive workshop combines classroom sessions with field demonstrations and discussion. Major components include:

1. Communication Skills
 - Understanding public perceptions of trapping.
 - Lessons from human dimensions research and focus groups.
 - How to craft and deliver effective messages to different audiences.
2. Traps and Trapping Techniques
 - Hands-on demonstrations of foothold traps, cable restraints, cage traps, body-grip traps, and more.
 - Examination of selectivity, practicality, efficiency, and release capabilities.
 - Small-group rotations through equipment stations.
3. Best Management Practices for Trapping
 - Research behind humane trapping standards.
 - How BMPs are developed, tested, and applied.
 - Practical application of BMPs in wildlife management programs.
4. Trapping in Policy and Practice
 - Overview of trapping demographics, motivations, and statistics.
 - Current role of trapping in wildlife policy and management at the state and national level.

This workshop is designed for:

- Wildlife biologists and managers.
- Natural resource agency staff.
- Researchers using live capture methods.
- Students and early-career professionals seeking applied experience.

NOTE: Outdoor demonstrations will be held at a nearby park that will require a 15 minute walk, therefore participants should dress appropriately.

6. **Title:** Living Shoreline & Coastal Resiliency Training
Length: ½-Day Course
Course Capacity: 35
Date/Time: Monday, March 30, 2026; 0800-1200

Instructors: C. Scott Hardaway, Jr., Senior Research Scientist, Shoreline Studies Program, Virginia Institute of Marine Science, William & Mary; Donna Milligan, Associate Research Scientist, Shoreline Studies Program, Virginia Institute of Marine Science, William & Mary.

Course Description: Introductory training for marine and natural resources professionals interested in beginning to understand the process and components of shoreline management focusing on living shoreline strategies. Topics will include, but not be limited to, an overview of shoreline management planning and methods; research on performance and resiliency; concept to construction project design for hybrid living shorelines with engineered structures; and site-specific design case studies. The training will allow resource managers to assess nature-based project designs for successful shore protection, ecosystem restoration, and long-term coastal resiliency. The course program will feature shoreline management and living shoreline resiliency projects implemented within the Chesapeake Bay watershed that would also be applicable to other microtidal (less than 2 m; 6 ft) coastal estuarine areas particularly along the Eastern and Southern Coasts of the US. The presenters have extensive experience in research-based analyses of estuarine coastal geomorphology and physical forces for shoreline management as well as living shoreline research, design, and performance monitoring. <https://www.vims.edu/research/units/programs/ssp/>

7. **Title:** Novel Approaches to Ground-based Forest Measurements—Seeing the Forest by Measuring the Trees

Length: ½-Day Course

Course Capacity: 20

Date/Time: Friday, March 30, 2025; 1300-1700

Instructors: Nathan Beane, Ph.D., Research Forester, US ARMY, Engineer Research and Development Center (ERDC)

Course Description: The course will be geared to showcase common foundational forest sampling methods and to demonstrate the use of traditional and new innovative tools used to assess forest and vegetation community structure and condition. With fast-paced advances in remote sensing technologies, opportunities to acquire high-resolution imagery and LiDAR data of forested areas abound. How does one decipher what they are seeing in the imagery without performing ground-based validation? Collecting accurate forest and vegetation community structure and condition is not only essential for mapping/modeling needs, but also critical information used to guide forest and wildlife management decision-making. This training is aimed at reviewing foundational approaches to measuring vegetation while showcasing advancements in forestry tools that can increase efficiencies and improve the quality of data collected. This learning and hands-on opportunity will discuss method selection while also demonstrating novel tools used to perform forest stand evaluations. This training is applicable to any natural resources manager in any geographic region. This training will provide 1.5 hours of lecture materials, and 2.5 hours of hands-on learning. Attendees are not required to have any prior or specific knowledge of the subject area, but if you hug trees (to measure them as part of your day job), this training will be beneficial to you.

NOTE: Course is open to DoW employed participants only. Seats still available on the day of training will be open to all on a first-come first-serve basis until filled. Hands-on learning will be conducted outdoors at a nearby park requiring a short 15 min walk, so participants should dress appropriately.