



Stewardship news

YOUR Thoughts

Volume 7, Issue 3: September 2024

We are looking for contributors and ideas. ✖ If you have a topic, success story, lesson learned, or helpful suggestion, let us know.

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Stewardship News is an unofficial publication of the U.S. Army Corps of Engineers (USACE). This online publication is produced quarterly with the purpose of providing its readers information about the USACE Stewardship Program. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof.

Your Stewardship HQ Update: Migratory Bird Treaty Act BMPs

The USACE Migratory Bird Treaty Act (MBTA) Policy was signed by Mr. Edward E. Belk, Director of Civil Works, and is intended to educate and inform staff as well as to provide best management practices (BMPs) on commonly performed activities to help achieve compliance with MBTA.



This compliance will allow USACE to meet its responsibility to avoid or minimize negative impacts to migratory birds and their habitat while adhering to USACE policies, practices, and guidelines.

The USACE vision is to ensure that MBTA compliance is met at all Civil Works projects, programs, and activities on USACE lands and waters. The policy memorandum is applicable to all USACE missions and projects and will be applied to migratory bird issues in the execution of all Civil Works programs.


The policy memorandum can be found at <https://corpslakes.ercd.dren.mil/employees/cecwon/pdfs/24Aug7-MigratoryBirdBMPImplementation.pdf>

The BMPs can be found at <https://corpslakes.ercd.dren.mil/employees/cecwon/pdfs/Migratory%20Bird%20Treaty%20Act%20BMP%202024.pdf>




 **Click here for policy!**
 **Click here for BMPs!**

Mark Your Calendar: Training Opportunities

 **ENS 101 (November 2024 & August 2025).** In FY25, ENS 101 will be offered through the USACE Learning Center as a PROSPECT course. The first session will be held Nov. 4—7, 2024 at Lake Sonoma, CA. The second session will be held Aug. 18—21, 2025 at Kanopolis Lake, KS. Registration for this course is through your training coordinator. Please visit <https://ulc.usace.army.mil/> for more information.

 **Aquatic Invasive Management Workshop (February 2025).** An additional workshop is being planned for Feb. 10—14, 2025 located in Kissimmee, FL. For additional details or to register, please email Tara.J.Whitsel@usace.army.mil.

 **ENS 102 (February 2025).** In FY25, the 4th pilot course of ENS 102 will be offered. The class will be held Feb 24—27, 2025 at Arkabutla Lake, MS. There is no cost. For additional details or to register, please email Tara.J.Whitsel@usace.army.mil. This course is scheduled to be available through PROSPECT in FY26.



Left: Aquatic Invasive Management Workshop held at Raystown Lake.

Stewardship Around USACE



1 Mill Creek Project (NWW) - Lead Ranger Ben Morris, Project Manager Austin Kuhlman, and Park Ranger Katryana Keely met with 10 students of the Confederated Tribes of the Umatilla Indian Reservation along with Tribal educational personnel to talk about USACE-Tribal partnerships. Together, they toured the Mill Creek Project to learn how it operates, observed demonstrations of fish passage monitoring equipment, and noted culturally important plants and features that are present on the project.



Below left: Ben Morris and Katryana Keely show students how fish counting equipment works at the Mill Creek Project. Below middle and right: Students also learned about the flooding history of the area and about the stream model in the Visitor Center.



In Case You Missed It...

Below are a few recent ESA listing determinations from the USFWS on herp species (Federal Register Jul. 12, 2024).

- Arizona Toad (*Anaxyrus microscaphus*); Petitioned Species and Under Review.
- Pearl River Map Turtle (*Graptemys pearlensis*); Threatened.

Due to similarity in appearance to the Pearl River Map Turtle, the following species are also listed as Threatened species:

- Alabama Map Turtle (*Graptemys pulchra*)
- Barbour's Map Turtle (*Graptemys barbouri*)
- Escambia Map Turtle (*Graptemys ernsti*)
- Pascagoula Map Turtle (*Graptemys gibbonsi*)



2 Tulsa District (SWT) - Tulsa District Office maintains a repository under the Native American Graves Protection and Repatriation Act (NAGPRA) for ancestral and cultural items removed from federal lands after Nov. 16, 1990. An update to NAGPRA, published Jan. 12, 2024, requires federal agencies to notify affiliated Tribes within six months about individual remains not yet repatriated to Tribes. NAGPRA Specialist Jackie Rodgers worked extensively to identify the sites, tribal affiliation for those sites, and the number of individuals removed.

3 Little Rock District (SWL) - In June, Little Rock District Commander, COL Knarr, accompanied by Deputy Chief of Operations, Greg Mattson, and District Archaeologist, Allen Wilson, hosted a meeting with the U.S. Fish and Wildlife Service's Division of Refuge Law Enforcement to discuss resource protection within the district. The meeting was prompted by planned drawdowns for USACE projects. Drawdowns expose archaeological sites that were previously protected. In many cases, this attracts individuals whose intent is to unlawfully remove resources that have been newly exposed in violation of the Archaeological Resources Protection Act (ARPA). The meeting explored opportunities to support additional patrols by uniformed USFWS personnel on USACE lands—specifically for resources-related crimes (hunting, fishing, timber theft, archaeological theft, etc.) including the capability to handle any necessary law enforcement. Previously, USFWS officers located individuals removing artifacts during a drawdown at Millwood Lake last year. While the removal did not elevate the crime to a felony, the resources were saved and citations were issued.



USACE resource protection meeting with USFWS officers.

Top left circle: Tulsa District NAGPRA Specialist Jackie Rodgers as she works to identify sites and tribal affiliation.

Stewardship Around USACE

4 Libby Dam (NWS) - Libby Dam NRM staff along with Kootenai National Forest personnel participated in a training by the Xerces Society to learn to identify and monitor native bumblebee populations. Libby Dam staff often partners with the Forest Service for various efforts. This training will enable both Libby Dam and Forest Service staff to complete population surveys on federal lands within the area.



Libby Dam and US Forest Service staff participate in a training with the Xerces Society to learn how to identify native bumblebee populations.



5 Table Rock Lake (SWL) - In June, Table Rock Lake held its third annual "Partners of Pollinators" event to celebrate pollinators, educate the public on their importance, and showcase efforts accomplished by USACE partners. A total of 557 visitors attended the event. Partners included the Master Gardeners of the Ozarks, Table Rock State Park, and Shepherd of the Hills Fish Hatchery. Activities included hands-on demonstrations, games, crafts, flower garden tours, and information on how to help pollinators. Bobber the Water Safety Dog, adorned with butterfly wings, joined the event for fun photo opportunities. The Table Rock Lake Project has over 12 flower garden beds, maintained by partners, which creates pollinator habitat to help fulfill the USACE environmental stewardship mission.

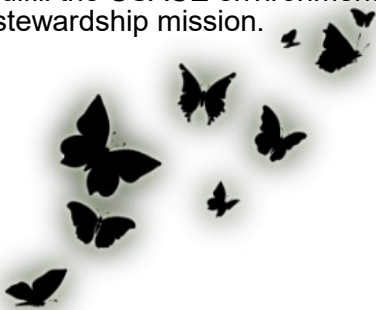


Above: Table Rock's Partners of Pollinators event. Right: Libby Dam bee identification.

Interesting Reading

A few recent ERDC publications that may interest you!

- 1 ERDC/EL SR-24-4**—*The Use of Rhodamine Water Tracer (RWT) Dye to Improve Submersed Herbicide Applications*
 - Authors: Kurt D. Getsinger, Christopher R. Mudge, Bradley T. Sartain, Benjamin P. Sperry, Damian J. Walter, and Michael W. Durham
 - Link: <http://dx.doi.org/10.21079/11681/48412>
- 2 ERDC/EL TR-24-9**—*Impacts of Invasive Species on Populations of Federally Listed Species on US Army Corps of Engineers Project Lands*
 - Authors: Jacob F. Jung, Michael P. Guilfoyle, Richard A. Fischer, and Andrew Sharp
 - Link: <http://dx.doi.org/10.21079/11681/48594>
- 3 ERDC/EL TR-24-11**—*Flowering Rush Control in Hydrodynamic Systems: Part 2: Field Demonstrations for Chemical Control of Flowering Rush*
 - Authors: Bradley T. Sartain, Damian J. Walter, and Kurt D. Getsinger
 - Link: <http://dx.doi.org/10.21079/11681/48732>



Stewardship Around USACE



6 Fort Worth District (SWF) - NRM Specialists Tyler Slovacek, Emily Laperriere, and Gina Jaworski attended the 25th East Texas Interagency Wildfire & Incident Management Academy hosted by the Texas A&M Forest Service and USDA Forest Service as part of the National Wildfire Coordinating Group. USACE participants successfully completed Wildland Fire Training/Fire Behavior classes to safely participate in future prescribed burns conducted on the Sam Rayburn and Town Bluff Project.



USACE staff participate in Wildland Fire Training/Fire Behavior classes in order to safely participate in future prescribed burns.

NRM
to the future . .

On the homepage of the NRM Gateway (<https://corpslakes.erdc.dren.mil/nrm.cfm>), there is a revolving headline located under "Natural Resources Management Notes."

 **Click here!**

The NRM Notes section is updated as new items become available. Older stories are relocated to <https://corpslakes.erdc.dren.mil/headlines.cfm?List=0>.

The headlines are relevant to opportunities that are available, current news, and so forth. If you have a story of national importance, this is a great location to spotlight it for the NRM Community! Please submit articles to amanda.palmer@usace.army.mil

Interesting Reading

[US Army Invests Billions to Battle Highly Invasive Species](#)

Top left circle: Hydrilla in the Connecticut River, CT

7 Tulsa District Surveys and Work (SWT) - District staff have worked to conduct and complete:

- Least Tern surveys: District biologists completed population surveys on the Arkansas River for the recently delisted Interior Least Tern (ILT). The surveys are required by the USFWS for a period of 5—10 years following the ILT delisting in February 2021 from the federal endangered species list. Surveys conducted prior to 2021 by district biologists indicated recovering ILT populations that supported the delisting.
- USACE staff, in coordination with the Oklahoma Department of Wildlife Conservation (ODWC), are working with anglers to catch and report trout that have been tagged in the Lower Mountain Fork river below Broken Bow Dam. ODWC will utilize this information to determine how fish are moving, which will allow them to make better informed decisions on stocking rates and locations. This data will be added to a larger study on cost-reducing methods of growing trout in Oklahoma, allowing a grow and remove model as opposed to a stock and remove model. The goal is to continue to allow anglers quality fishing experiences on the Lower Mountain Fork River using the most cost-effective measure.



Biologist Stacy Dunkin looks for Interior Least Tern adults, nests, chicks, and fledglings.



Trout (left photo) and milkweed (right photo) work conducted in Tulsa District.

- USACE staff, in coordination with Oklahoma City Zoo post-doc Emily Geest, worked to collect seeds from native milkweed species around Broken Bow Lake. This research project was focused on the survivability and potential establishment of native milkweed in Southeast Oklahoma.

St. Louis District hosts Environmental Stewardship Meeting

St. Louis District held its 3rd annual environmental stewardship meeting at the Shelbyville Lake Project. The purpose of this meeting was to gather the environmental stewardship district team to build relationships across the district. Relevant information on current issues as requested by team members were discussed and presented. The collaboration included “Good Enough to Share” topics from each project and a tour of managed areas at Lake Shelbyville. The group had guest speakers from the University of Illinois Springfield, Natural Resources Conservation Service, and the USACE environmental compliance branch, strengthening knowledge of several relevant management topics. Conducting this meeting annually enables the sharing of ideas and solutions to common issues, resulting in better execution of the mission across the district.



Top: The environmental stewardship team works together to better execute the mission in MVS. Bottom: The Environmental stewardship team members from across the St. Louis district.

Ranger Cross Training: West Hill Dam Hosts Hessel Hairstreak Butterfly and Atlantic White Cedar Swamp Survey

Article provided by Viola Bramel, West Hill Dam

Staff at West Hill Dam began hosting a cross training opportunity for USACE NRM Specialists by assisting in surveys of Atlantic White Cedar Swamps and the Hessel Hairstreak Butterfly. These surveys began in 2020 in coordination with Mass-Wildlife and the New England Butterfly Society after a contracted surveyor observed an adult Hessel Hairstreak butterfly. Atlantic White Cedar Swamps are forested wetland communities with a dense, primarily evergreen canopy, a deciduous shrub layer, and a sparse herb layer dominated by mosses. There are four community types in Massachusetts, all of which are considered imperiled in the state and are a priority natural community for protection due to their unique vegetation and limited distribution. The larvae of Hessel’s Hairstreak butterflies feed exclusively on Atlantic White Cedar. Providing cross training for USACE staff while conducting these surveys expands stewardship opportunities, fosters knowledge sharing, and increases both cooperation and coordination of efforts.



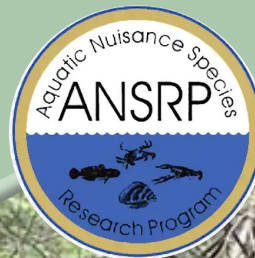
In Case You Missed It...

HAB Explorer is public!

Please update your bookmarks to:
<https://jecop-public.usace.army.mil/hab/>

 **Click here for link!**

This application is meant to assist viewers with monitoring HABs in freshwater systems using readily available Sentinel-2 satellite imagery. It was developed with support from USACE’s Aquatic Nuisance Species Research Program. The map products generated within the application show relative estimations of HAB water quality indicators and are intended as a cursory screening tool to quickly identify potential areas of concern that may require additional monitoring. The analytical methods used to generate the map products are based on current techniques available in the scientific literature and are subject to change as part of on-going research and development.



Below: Surveying for the Hessel Hairstreak butterfly.

Aquatic Species Establishment at Beaver Lake

USACE's ERDC has partnered with Arkansas Game and Fish Commission (AGFC) to place approximately 24 enclosures on Beaver Lake that contain native aquatic vegetation. The goal of this project is to successfully establish these species in areas where the enclosures are placed. If established, this would result in nursery habitat for fish and cover for baitfish and young game fish. AGFC recently published an article on this effort, which is provided below.

<https://www.agfc.com/news/arkansas-aquatic-habitat-effort-finds-new-gear/>

Article—Arkansas Aquatic Habitat Effort Finds New Gear. (AGFC) Mar. 1, 2023.

Thanks to a partnership between the Arkansas Game and Fish Commission and the U.S. Army Corps of Engineers Engineering, Research and Development Center's laboratory in Texas, an innovative project to establish native aquatic vegetation in Corps reservoirs is planting roots throughout The Natural State.

As part of the new agreement, the AGFC will contract with the laboratory over the next four years to provide continued maintenance and monitoring of aquatic vegetation cages in Corps reservoirs. The project has shown initial success in bringing back native aquatic vegetation, a vital component of fish habitat, in Lake Ouachita and DeGray Lake.

According to Sean Lusk, AGFC staff biologist, the agreement will dedicate even more man hours to the establishment of aquatic vegetation and improvement of fish habitat in some Corps reservoirs. It will also enable researchers to fine tune the program by experimenting with various native plants and modifications to enclosure designs.

"Previously, the aquatic vegetation project was added on top of the duties of the fisheries biologists in Hot Springs," Lusk said. "This will help free up more time for them to work on other habitat projects and needed work on these lakes and other lakes in their district. It also will ensure that this work remains a priority in the Hot Springs area instead of getting attention sporadically when other duties consume the limited amount of staff time available."

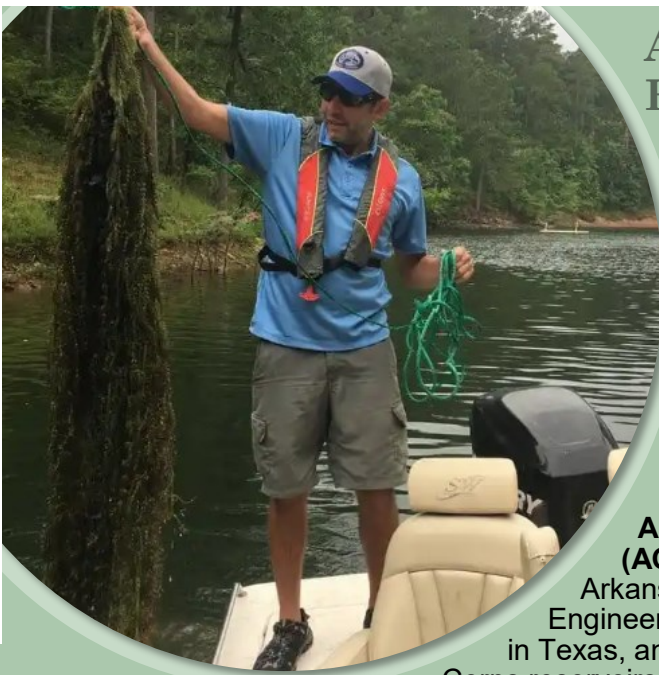


Above: AGFC biologist Brett Hobbs and Sean Lusk add coontail to floating cages in an effort to bring back the aquatic vegetation at DeGray Lake. Top left circle: AGFC Black Bass program Biologist Jeff Buckingham holds up coontail found outside the enclosures that show evidence of the plants taking root.

The AGFC also is working to expand the project from its proving grounds on DeGray Lake to include Greers Ferry Lake and Lake Greeson, two Corps reservoirs that have proven difficult to establish vegetative cover in previous attempts.

The project has been in place since 2019, when AGFC fisheries biologists worked with the ERDC's Lynde Dodd to develop floating cages of aquatic plants on DeGray with the intention that these plants would spread outside the enclosures and become established in the areas where the cages were stationed. The resulting vegetation would create dense, complex cover that baitfish and young game fish could use as nursery habitat while also providing habitat for adult sport fish. It also would provide a home for insects and aquatic invertebrates to add fuel to the food chain in these lakes.

Fluctuating water levels pose a particularly interesting obstacle in establishing native aquatic vegetation. Areas where submersed vegetation is planted can be left dry, which kills the plants before they have a chance to become established. Sean Lusk, staff biologist for the AGFC, said much of the lake bed in shallow areas of DeGray and other Arkansas Corps lakes is shale with very little soil, which compounds the problem.



Arkansas Aquatic Habitat Article (continued)

“Once any vegetation is exposed, the ground under it dries more quickly than mud or silt bottoms,” Lusk said. “We also saw a lot of aquatic herbivory in previous attempts; turtles and other plant-eating animals would just wipe out what started to grow.”

The solution was enclosures that would protect the plants from hungry animals and adjust to rising and falling water levels automatically.

“The floating cubes are a modification of a design developed by ERDC,” Lusk said. “They’re anchored in one location, but are built to rise and fall with the water. We filled them with coontail, American pondweed, Sago pondweed, and eelgrass: all grown in nurseries provided by the Corps and all preferred native aquatic species. The coontail was able to be suspended in the cage, but the others required pots of soil with the plants to provide support.”

In the project’s first three years, it’s shown some promising results. Portions of DeGray Lake are beginning to see aquatic vegetation come back and stay, and recent fishing tournaments have seen successful anglers talking about fishing “the grass” again.

“We’ve heard a lot of positive comments from anglers about grass growing near them again,” Lusk said. “Scott Jones at the University of Arkansas at Pine Bluff has been conducting an evaluation of the enclosures and in many of the areas we’ve placed the cages, there is some degree of aquatic vegetation coming back.”

The addition of Greers Ferry to ERDC’s effort actually is a continuation of work the AGFC has been doing at that lake since 2020.

Jeremy Risley, AGFC fisheries supervisor over Greers Ferry Lake, said biologists have deployed up to eight floating cubes filled with coontail during the last two years in the Higden Bay area of the lake and he welcomes the help of ERDC.

“After the initial success of the project in Hot Springs we wanted to bring it to Greers Ferry, where we’ve already been able to establish some water willow through transplanting work,” Risley said. “We are learning more each year. With help from ERDC, we hope to be efficient and effective with our efforts.”

Top small circle: AGFC and ERDC team members deploying enclosures in Beaver Lake. Bottom small circle: Plant enclosures staged along the shoreline at Rocky Branch Park, Beaver Lake for placement. Large circle: Successful deployment of aquatic species enclosures on Beaver Lake.



Above: AGFC Fisheries Supervisor Brett Hobbs with tanks full of various aquatic vegetation used in the project.

