One of my favorite questions I get asked when I tell people that I’m a terrestrial biologist for the Navy is “why does the Navy have biologists?” I love telling them that across DoD there are dedicated natural resources professionals who manage military lands/submerged lands, conduct flora and fauna surveys, promote public outreach, ensure compliance with federal laws and regulations, and implement strategies to conserve and protect biological resources. We do this AND enable the military to meet training requirements. It is a huge responsibility to manage the highest density of threatened or endangered species of any federal agency AND ensure no net loss in the capability to support the military mission. We have a unique opportunity to support ecosystems AND soldiers, sailors, airmen, and Marines. I take pride in the sense of purpose my job provides. We are sometimes caught in a balancing act and face challenging situations so it’s encouraging to know there is a network of like-minded people. One focus of NMFWA is to connect our membership through our working groups and annual meeting so we can share lessons learned, hear about new technologies, attend trainings, and exchange ideas/experiences with one another.

Our next annual meeting will be in Omaha, Nebraska from 8-13 March 2020 and it’s a great way to interact in person with other members. We also have Working Groups that provide outreach throughout the year on specific subjects. We received a plethora of topics for our annual meeting and want to thank everyone who submitted an idea during the call for proposals. We will be finalizing our program in October and look forward to offering a diverse range of technical sessions. We will follow the same format as last year—technical sessions will vary in length but all Working Groups will have 30 minutes to conduct business and anyone is welcome to attend. We will have pre-registration for trainings and class sizes may be limited so the instructors can have active participation. We will provide more details regarding the schedule and registration so please visit our website, www.nmfwa.org, for updates.

The Awards Committee is accepting nominations for next year to be presented during the banquet so please submit an application to recognize all the hard work we are doing across DoD lands.

We have a new page on our website for job postings so if you want to advertise a job or apply for a new one, please check out our website https://www.nmfwa.org/jobs-listings.html. And if you get a new job, please let us know so we can update our membership list, there’s a link on our website to update contact information. Encourage co-workers to join. Membership is free and open to anyone dedicated to natural resource management on Department of Defense Lands. Let’s continue to build the community. If you would like to volunteer to serve on a committee, run for an office, help at the annual meeting, or learn more about NMFWA, please contact me, nicole.nmfwa@gmail.com.
Natural Resource Conservation Model Program Award

Your Team/Program/Biologist Wanted Here!

Do you know a rockstar Biologist? Have an outstanding Model Program? Is the best team ever working on your installation?

Then nominate them for a NMFWA Award and get them their own poster!

It’s really easy too—there is even a form! It is all on the website: https://www.nmfwa.org/awards1.html

Send your nominations and any questions to Awards Committee Chair, Robby Smith at robby.smith@navy.mil.

Recognition is awarded for the following categories:

Military Natural Resource Conservation Research
Natural Resource Conservation Management, Model Programs / Projects
Natural Resource Conservation Management, Policy
Natural Resource Conservation Management, Enforcement
Natural Resources Conservation Communication, Military Involvement
Natural Resources Conservation Communication, Conservation Partnerships
Natural Resources Conservation Communication, Promoting Public Awareness
NMFWA Lifetime Achievement Award

All nominations will be reviewed and awardees will be announced at the 2020 NMFWA Annual Meeting and Training Workshop in Omaha, Nebraska.
Last year, the United States Fish and Wildlife Service removed the black-capped vireo from the endangered species list due in part to a 40-fold increase in the number estimated to nest at Fort Hood, Texas. Recent surveys revealed over 8,000 territorial singing males on the installation which is over half the number currently known to exist across the entire range of the species.

“I’m proud of our Natural Resources team for their application of sound science to demonstrate military training is compatible with the black-capped vireo recovery. I also appreciate the efforts of the U.S. Fish and Wildlife Service to fully understand our training and readiness requirements, striking a balance between Fort Hood’s mission and endangered species management,” said Col. Henry Perry, Fort Hood’s garrison commander in a 2018 news release.

“This delisting results from decades of collaboration between the U.S. Fish and Wildlife Service and stakeholders like Fort Hood.” Once again, Fort Hood and the USFWS are collaborating to implement a post-delisting monitoring plan to ensure the species remains recovered.

“The Army has been one of our most important partners in endangered species conservation. The team at Fort Hood was invaluable to the recovery of the black-capped vireo and we look forward to continuing to work on our shared conservation efforts,” said Omar Bocanegra, USFWS supervisory fish and wildlife biologist.
There is a long history of archaeological investigations at Fort McCoy, dating back to the early 1960s. In fact, six of the first seven archaeological sites recorded in Monroe County lie within the installation boundary.

These investigations span the efforts of hundreds of individuals who very carefully dug thousands of holes by hand across tens of thousands of acres.

Of the hundreds of thousands of artifacts recovered from these investigations, some of the rarest finds were prehistoric tools made out of raw copper; 11 prehistoric copper artifacts have been recovered from nine separate sites separated by more than 12 miles across the installation.

Native Americans had mastered the technology of hammering, rolling, cutting, drilling, joining, and decorating copper long ago. They began making tools such as fish hooks, knives, and projectile points out of native copper more than 6,000 years ago using a process often referred to as cold hammering.

Copper is a malleable (easily bent) material which can be shaped with a stone used as a hammer and then strengthened by heating and rapid cooling or “quenching,” which is simply dunking the heated material into cold water.

Continued on next page
Pre-historic Copper artifacts discovered at FORT MCCOY, WI, cont’d

The first copper artifact recovered at Fort McCoy was the most complete tool when compared to subsequent finds. This tool was identified as a tanged knife (#1) and was likely hafted to a handle or hilt made of bone or wood. Another of these copper artifacts (#2) was likely affixed to the end of a spear to serve as a projectile weapon.

Other copper artifact discoveries included tool fragments and items (#3 and 4) which could have been used in the later stages of stone tool manufacture, and two were described by researchers as folded copper. Other copper items (#5 and 6) may represent decorative items.

The use of copper by Native Americans changed in focus over time, with more recent copper artifacts which would have dated from 1,500-1,000 years ago to more recent times.

Copper beads or tinkling cones (#5) area unique copper artifact, frequently recognized as ornamental items. They were nicknamed “tinklers” because of the jingling sound they made when they hit against each other and adorned clothing or special costumes in large numbers to make this sound.

They were made from sheet copper that was rolled into a cone and were also attached to pouches, knife sheaths, moccasins and clothing.

All archaeological work conducted at Fort McCoy was sponsored by the Directorate of Public Works, Environmental Division, Natural Resources Branch.

Visitors and employees are reminded they should not collect artifacts on Fort McCoy or other government lands and leave the digging to the professionals.

Any individual who excavates, removes, damages, or otherwise alters or defaces any historic or prehistoric site, artifact, or object of antiquity on Fort McCoy is in violation of federal law.

The discovery of any archaeological artifact should be reported to the Directorate of Public Works Environmental Division Natural Resources Branch.

(Article prepared by Colorado State University’s Center for the Environmental Management of Military Lands and the Directorate of Public Works Environmental Division Natural Resources Branch, Fort McCoy, Wisconsin.)

Do you have a new coworker? Do they know about NMFWA?
Have you recently changed jobs yourself?

Please help the organization by telling your new coworkers about NMFWA and have them to sign-up on our website or update your own status.

www.NMFWA.org

The FAWN
The iconic monarch butterfly (*Danaus plexippus*) and its spectacular migration are in jeopardy. Their North American numbers have suffered a steep decline of approximately 90% over the past two decades, and in 2014 the U.S. Fish and Wildlife Service was petitioned to protect the monarch butterfly under the Endangered Species Act (with a listing decision expected for summer 2019). Like the monarch, the rusty patched bumble bee (RPBB) was a common species 20 years ago, with a range across 28 states and two Canadian provinces. RPBB (*Bombus affinis*) populations have also seen a swift decline since the 1990s, which earned it placement on the endangered species list in 2017 – with a distinction of becoming the first bee in the contiguous 48 states to be declared endangered. The species has now only been observed as a few small patches of populations across what is estimated to be only 0.1% of its historical range.

**Project Wingspan (PW)** is a two-year project sponsored by a grant from the National Fish and Wildlife Foundation to the non-profit Pollinator Partnership (P2), which is leading a coalition of partners in an effort to enhance land across the Midwest to support our imperiled pollinators. The grant provides $149,000 to be matched by $385,500 of matching and in-kind contributions from the partners.

PW will increase monarch and RPBB habitat by building off the success of P2’s, 2017-2019 Monarch Wings Across the Eastern Broadleaf Forest Program, (MWAEBF), and by engaging public land managers and private land stewards throughout the 8-state target region of Arkansas, Illinois, Indiana, Michigan, Missouri, Ohio, Pennsylvania, and Wisconsin through a series of monarch habitat enhancement activities, with the goal of establishing 10,000 acres of monarch and RPBB habitat.

Project Wingspan is a 2-year project designed to address the habitat needs of monarchs, RPBBs, and other rare pollinators by increasing quality habitat that will provide resources for imperiled pollinators while increasing citizen scientist’s interest, skills in, and knowledge of appropriate native seed collection protocols and provide resources for in-state seed services. To successfully achieve the 10,000 habitat acre goal the following tasks will be performed:

**Facilitate a regional seed collecting program for IL, IN, MI, OH, PA, and WI to help meet the increased and immediate needs for regionally adapted monarch and RPBB resources.**

Regionally-appropriate milkweed and forage plant seed is generally commercially unavailable in large quantities within the areas Project Wingspan is targeting for plant materials development. In order to successfully enhance monarch and RPBB habitat across the targeted 10,000 acres, a coordinated regional milkweed and forage plant seed collection and distribution network will be established.

**Establish and enhance long-term monarch and RPBB habitat.**

Habitat acres, which include existing habitat areas along with areas that are seeking further enhancement and those with near future planned establishment will be identified through a preliminary online habitat survey. The acres included and reported in the program will be secured through a letter of long-term commitment, (minimum of 5-years) signed by the land manager or landowner. The letter will include enhancement and/or management actions that qualify habitat areas for inclusion in the program. The agreements will be made through Pollinator Partnership as well as the U.S. Fish and Wildlife Service - Partners for Fish and Wildlife Program.

For further information or to join the partnership creating Project Wingspan, please contact Amber Barnes and Elizabeth Kaufman with Pollinator Partnership at ab@pollinator.org and ek@pollinator.org.

See the Project Wingspan flyer on the next page.
Seed Collecting for Monarchs and the Endangered Rusty Patched Bumble Bee!

The Pollinator Partnership has joined forces with several organizations and agencies to launch our new initiative, Project Wingspan, and we need your help! The project will be collecting seed throughout the states of Ohio, Indiana, Illinois, Pennsylvania, Wisconsin, and Michigan.

We are looking for enthusiastic seed collecting volunteers in all 6 states to help identify and collect milkweed and other valuable native forage plants. As a seed collecting volunteer you will be provided with training and be making valuable contributions to supporting migrating monarchs and the imperiled rusty patched bumble bee.

No seed collecting experience is required, but basic plant knowledge is preferred.

Project Wingspan is also looking for landowners and public land managers with robust native plant populations, who are interested in supporting local habitat restoration efforts by serving as native seed collection sites.

To sign-up as a volunteer seed collector please fill out the online form here: https://tinyurl.com/Wingspan-volunteer.

To see our list of target plants and sign-up as a seed collection location please fill out the online form here: https://tinyurl.com/PWseedsite.
The Navy’s Ex Ex and a Legacy of Military Naturalists

At the height of the Battle of Alcañiz, Spain, on May 23, 1809, as he was about to order a desperate charge by French troops into the center of the Spanish line, Col. Pierre François Marie Auguste Dejean happened to glance down. The air around him was thick with gunpowder and blood, but on a flower beside a stream he saw a beetle, species unknown. He immediately dismounted, collected it and pinned the specimen to a piece of cork affixed to the inside of his helmet.

Dejean was a count and a battle-tested leader in the Napoleonic Wars who would later serve as Napoléon Bonaparte’s aide-de-camp. But he was also a coleopterist—a specialist in beetles. Dejean’s men knew of his obsession. Many carried glass vials for him and had orders to collect anything on six legs that crawled or flew. His enemies knew it, too, and, out of respect for the cause of scientific discovery, returned to him vials taken from the dead on the field of battle.

Having pinned this latest prize, Dejean swung back up into the saddle and ordered the attack. With bayonets fixed, the massed French forces advanced upslope toward the Spanish artillery. The gap between them closed. The scene grew tense and quiet. Then, at the last moment, the cannon loosed a storm of grapeshot into the attackers’ faces, killing hundreds of French soldiers.

Shot shattered Dejean’s helmet, but he and his specimen survived intact. Years later he would name his specimen from Alcañiz, by genus and species, Cebrio ustulatus — only to find that someone else had already entered the species in the annals of science under a different name.

To modern readers Dejean’s reckless passion for beetles in the face of enemy fire may sound insane. But in the 18th and 19th centuries — when European nations launched the great age of biological discovery — soldiers and sailors often led the quest for new species.

They were typically the first outsiders to visit remote regions, and their need to reconnoiter the terrain meant, among other things, getting to know the flora and fauna.

Were jaguars or venomous snakes a threat? Were elk or bison abundant enough to supply food? Were plant or animal products suitable for commercial development?

Military men also shared in that era’s genuine excitement about natural history. Even the busiest and most powerful statesmen and soldiers commonly made time to collect a new species or to reach out to an enemy in joint pursuit of some precious fossil.

The American Revolution was already underway in 1775, for instance, when Benjamin Franklin instructed American ships not to interfere with Capt. James Cook as he returned on Royal Navy’s sloop Resolution from his second voyage of discovery. And the war had not quite ended when, in 1782, George Washington lent an enemy officer a dozen men with wagons and tools to help excavate a mastodon skeleton in New York’s Hudson Valley.

Discoveries about the natural world were regarded almost universally as “useful knowledge,” a phrase Benjamin Franklin helped turn into a watchword of the day. Decades earlier Franklin had helped found the American Philosophical Society, the nation’s leading scientific organization. Its purpose was to encourage all studies “that let Light into the Nature of Things, tend to increase the Power of Man over Matter and multiply the Conveniencies [sic] or Pleasures of Life.”
But it was, of course, much more than a matter of convenience. Deciphering the natural world mattered urgently at a time when mysterious epidemics still swept away whole armies almost overnight.

In the United States, Thomas Jefferson helped establish the role of the military in natural science in 1803, when he commissioned two soldiers, Capt. Meriwether Lewis and 2nd Lt. William Clark, to explore the American West. Jefferson, who served simultaneously as president of the nation and of the American Philosophical Society, arranged for Lewis to receive special training in scientific collection methods, and issued particular instructions to notice “the animals of the country generally.”

The expedition went on to record the scientific discovery of the elk, the grizzly bear, the western rattlesnake, the cutthroat trout, the trumpeter swan and several hundred other animal and plant species.

Secretary of War John C. Calhoun also committed the military to “scientifick [sic] purposes” when he sent an expedition to explore the Great Plains up to the Rocky Mountains in 1819–20. Calhoun equipped Maj. Stephen Harriman Long with a corps of civilian scientists and ordered him to record “everything interesting in relation to soil, face of the country, watercourses and productions whether animal, vegetable or mineral.”

Among its many discoveries were the first scientific descriptions of such iconic American species as the coyote, swift fox and Great Plains wolf.

Given our experience of modern bureaucrats and military brass, it’s startling to read that even as late as 1838 U.S. Secretary of the Navy Mahlon Dickerson was a botanist and member of the American Philosophical Society. Secretary of War Joel Poinsett was a plant collector who introduced his namesake, the poinsettia, from Mexico to the United States.

In Britain, likewise, the military and scientific establishments often overlapped. “Scientific gentlemen” typically hitchhiked on naval expeditions of discovery and conquest (like Charles Darwin on board the Royal Navy’s brig-sloop Beagle) or served in the military themselves (like Royal Navy Capt. Constantine Phipps, who on an arctic voyage in 1773 secured the first scientific description of the polar bear).

An interest in natural history also provided the perfect training in careful observation—and plausible cover—for work as a spy. Stephen Maturin, the surgeon/naturalist/spy in Patrick O’Brian’s novels about the 19th century Royal Navy, wasn’t entirely a fiction.

If these naturalists managed to return alive and with good results, they often advanced into the corridors of power. Botanist Joseph Banks, for example, made his name (and helped discover “the kanguru”) with Cook aboard the Royal Navy’s bark Endeavour.

Back home Banks went on to orchestrate scientific expeditions in his capacity as president of the Royal Society, Britain’s national academy of sciences. He supervised Capt. William Bligh’s ill-fated voyage on the Royal Navy’s armed vessel Bounty to transport breadfruit trees from the Pacific to the Caribbean as a potential food source for slaves and was an early advocate of developing tea plantations in India to compete with China.

He also made himself a driving force for the British colonization of Australia. In 1800, when Banks got wind of a French scientific expedition to Australia, he lobbied hard to launch a competing British effort. England was at war with France and needed all its resources. But the admiralty quickly assigned a ship, for fear the French might be secretly planning an Australian colony, and they allowed Banks to pick the captain.
He settled on 26-year-old Lt. Matthew Flinders, who had served under Bligh and who applied for the job by shrewdly emphasizing “the interests of geography and natural history in general.” Flinders set sail in July 1801 on board a refitted collier of dubious repair named Investigator.

By then the French, under Capt. Nicolas Baudin, had gotten a nine-month head start. The hunt for species ultimately shaped not just the rivalry between these two expeditions, but also the fate of a continent.

Flinders made up for lost time and accomplished the first circumnavigation of Australia, a name he helped popularize (in place of New Holland). His expedition also brought back 150 genera and 1,500 species of new plants. The botanical focus served to identify favorable circumstances for agriculture, thus enabling new colonies to be self-sustaining.

Blending scientific and colonial priorities proved less successful for the French. Baudin sent home a spectacular assortment of new species, including 144 new birds. He also surveyed coastal Australia and eventually made peaceful contact with Flinders in what is now Encounter Bay. But his party of 23 scientists bickered childishly, according to Encountering Terra Australis, a recent history of the rival voyages.

At one point, zoologist François Péron presented himself to Baudin dripping with blood from a fight with the ship’s surgeon over which of them would keep the heart of a shark they were dissecting. Baudin was himself a naturalist. So he didn’t suffer from the tendency of naval officers to regard scientists as a nuisance. Indeed, as one naturalist noted, Baudin “would prefer to discover a new mollusk than a new landmass.”

And at Encounter Bay, a disgruntled French officer told the British, “If we had not been kept so long picking up shells and catching butterflies at Van Diemen’s Land [present-day Tasmania], you would not have discovered the south coast before us.”

It was almost proverbial: For want of a shell, the kingdom was lost, and thus the less fractious and more carefully focused British achieved lasting influence over Australia.

The combination of science, adventure and nationalistic ambition made naturalists the heroic figures of the day, like knights-errant in the Middle Ages. But the reality was inevitably far less heroic, and the contrast between the bloody work of combat and the delight of discovery could be jarring.

Even so, the heroic image of naturalists was powerful enough that nations commissioned their navies and armies to conduct great biological collecting expeditions to every corner of the planet.

The U.S. Exploring Expedition, under the command of Navy Lt. Charles Wilkes, was the first great American effort to strut its scientific prowess on the world stage. The Ex Ex, as it became known, explored the southern Pacific in 1838–42. Early on, one young naval officer expressed his admiration for the expedition’s naturalists, who had left the comforts of home “to garner up strange things of strange lands.”

Specimens from the Ex Ex soon became the basis for the natural history collection of the newly founded Smithsonian Institution in Washington, D.C.

The military continued to play a key role in making the Smithsonian a great national museum, particularly after Spencer Fullerton Baird went to work there in 1850. Baird was adept at recruiting amateur collectors to ship him plant and animal specimens from the field, and he sent out an astonishing average of more than 3,500 letters a year to maintain this network. It helped that his father-in-law, Brig. Gen. Sylvester Churchill, was inspector general for the U.S. Army. Thus Baird was able to make natural history collectors out of such unlikely characters as Maj. Gen. George B. McClellan, Capt. David Farragut and Commodore Matthew C. Perry.

He persuaded the Army to include naturalists on major survey expeditions, equipping them with the means to collect and preserve specimens.

Thanks in part to their efforts, Baird was able to build the Smithsonian’s natural history collection from a mere 6,000 specimens in 1850 to 2.5 million when he retired in 1887.

The military naturalists’ greatest achievement came at the end of the 19th century. Yellow fever, now largely forgotten in the developed world, was then a menace as far north as Boston, striking in violent summertime epidemics.

The dead accumulated faster than the living could bury them. A single 1853 epidemic killed more than 12,000 New Orleanians, the corpses at one cemetery “piled on the ground, swollen and bursting their coffins.” All of that changed after members of the U.S. Army Yellow Fever Commission, commanded by Army Maj. (and doctor) Walter Reed, visited physician and scientist Carlos Finlay at his home in Havana, Cuba, on Aug. 1, 1900, and listened to his ideas about mosquito-borne transmission of the disease.

Army researchers hatched mosquitoes from those eggs, infected them with yellow fever, allowed it to incubate and then used the mosquitoes to transmit the disease to human volunteers, soldiers and medical staff. (Jesse W. Lazear, a physician on temporary assignment to the Army Medical Corps, died after being bitten by an infected mosquito.)


Walter Reed had died a few years earlier, of a ruptured appendix. But he had boldly focused the reputation and might of the U.S. Army on an obscure mosquito species, at a time when skeptics still considered it an absurdly trivial adversary.

As a result, 1905 was the last time the United States suffered the terror of a yellow fever epidemic. The military naturalists had given the world very useful knowledge indeed.
# 2019 Readiness and Environmental Protection Integration Program (REPI) Webinar Series

The REPI Webinar Series is brought to you by the DoD, and showcases best practices, tutorials, and knowledge sharing on REPI partnerships that support military missions and accelerate the pace and rate of conservation.

Unless otherwise noted, all webinars begin at 1:00 p.m. eastern. To download the detailed webinar descriptions and connection instructions, please visit [http://www.repi.mil/Resources/Webinars.aspx](http://www.repi.mil/Resources/Webinars.aspx).

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<td>Measuring Impacts: Developing Mission Benefit Metrics</td>
<td>October 9, 2019</td>
<td>Learn about ongoing efforts to quantify the benefit of REPI partnerships to the military's testing, training, and operational mission. This webinar will feature efforts to capture REPI's military value and provide an opportunity for you to explore new ways to measure your REPI partnership's accomplishments.</td>
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<td>REPI and the Farm Bill</td>
<td>November 20, 2019</td>
<td>The 2018 Farm Bill provides funding to numerous technical and financial assistance programs that can benefit working lands in your REPI agreement area. Hear from Farm Bill experts about opportunities to leverage USDA resources and programs to further the goals of your REPI partnership.</td>
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<td>How to Introduce Local Businesses into your REPI Partnership</td>
<td>January 8, 2020</td>
<td>The core mission of the REPI Program is to advance military readiness objectives in a manner that is beneficial to the surrounding community. During this webinar, presenters will outline how unconventional partners, specifically local businesses, can layer additional benefits on to your REPI project by bolstering local economic productivity.</td>
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![Save the Date](https://via.placeholder.com/150)

**Sustaining Military Readiness Conference**

**AUGUST 10-13 | 2020**

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Join your colleagues to share lessons learned and best practices to support and enhance military readiness.
Conservation Law Enforcement Patrols, Protects Joint Base Langley-Eustis (JBLE)

Story by Senior Airman Delaney Gonzales, Joint Base Langley-Eustis

Rivers, creeks and estuaries trace the landscape of Fort Eustis and it’s up to a select few to patrol the 27 miles worth of shoreline in order to protect the installation.

“Fort Eustis is over 7,900 acres,” said Police Officer Sgt. Christopher Griffin, 733rd Security Forces Squadron Game Warden Section conservation law enforcement officer. “The post is surrounded by water--we are actually a peninsula.”

Due to the dense forested areas and the expansive waterways, some parts of the installation are difficult to access.

“We patrol through the post’s training areas to ensure no one is there without authorized access to that site and along the parameters [of the installation] where regular patrols have a hard time reaching,” said Police Officer Sgt. Bryan Sheehan, 733rd SFS Game Warden Section conservation law enforcement officer.

Unlike other career fields, conservation law enforcement officer’s duties are partially contingent upon the time of year.

“Depending on the season our routines vary, right now it’s mainly fishing--so my weekly operations would be checking the authorized and unauthorized fishing locations,” Sheehan explained.

With certain military activities posing a threat to those who trespass into unauthorized locations, the public’s safety becomes a top priority for the post’s conservation law enforcement officers.

“A lot of people don’t understand that with being an active military installation that certain military operations occur,” Griffin stated. “Not only on the water, but also on the land. Just because you do not hear rifle fire, does not mean those ranges aren’t in use. If you have boats entering into the creeks and the streams [near Fort Eustis], they could easily be struck by an errant round.”

U.S. Army Police Officer Sgt. Christopher Griffin, 733rd Security Forces Squadron Game Warden Section conservation law enforcement officer, patrols the waterways along the coast of Joint Base Langley-Eustis, Virginia, Sept. 16, 2019. The post has 27 miles worth of shoreline that requires patrolling for the protection of the installation. (U.S. Air Force photo by Senior Airman Delaney Gonzales)
Conservation law enforcement patrols, protects JBLE, cont’d

Considering the post’s long military history, other hazards present themselves in the form of military artifacts.

“This post was established in 1918,” Griffin remarked. “Originally the installation was a bombing range--unexploded ordnances can be found in certain areas on the post from World War I, World War II, the Korean War and the Vietnam War.

Relic hunters attempt to enter onto the installation to go to Civil War sites, colonial sites and Native American sites,” Griffin added. “They don’t understand the dangers of going into those areas. Also, the ordnances they try to collect have their own inherent dangers.”

The conservation law enforcement officers’ primary mission is to educate the base population about the rules and regulations regarding hunting, fishing and environmental laws.

“I would like the public to know the game wardens at Fort Eustis are here for you,” Griffin noted. “We are here for [your] education more than anything. We are not here to write people tickets, however that is a part of the education process if it comes to that. Although, we prefer you ask us any questions you may have before you get yourself into trouble.”

With the posts’ active hunting and fishing program, safety protocols are important to be aware of and to follow.

“On Fort Eustis we have deer, turkey, small game and water fowl hunting, which incorporates the use of various weapons such as bows and shotguns,” Sheehan said. “If someone was to access an area where active hunting is going on, especially a Soldier or Airman who is wearing camouflage, they may not be visible to the hunter, which creates a potentially dangerous situation.”

For more information about the conservation law enforcement program contact (757) 878-4557.

“Please ask to speak to one of the conservation law enforcement officers here at Fort Eustis and we would be happy to return your phone call,” Griffin concluded.

Seeking Interested Parties for Establishing New NMFWA Working Group!

Interested in innovative technologies, approaches, and methods for natural resource management and conservation on installations? NMFWA members Rick Lance and Brent Koenen have proposed a new NMFWA working group, tentatively titled The Emerging Tools Working Group, and we are seeking interested parties that might like to help in forming and joining the group.

The Emerging Tools Working Group would provide NMFWA members a forum for interacting and sharing knowledge, skills, and ideas on the use of emerging technologies, methods, applications, and approaches for DOD natural resources management and conservation. This working group would also serve as mechanism for distributing information on emerging tools to NMFWA members unable to attend Annual Training Workshop, provide a body of expertise for NMFWA to draw on with regard to emerging tools, and help identify and develop training opportunities (typically in conjunction with the NMFWA workshop) for NMFWA members interested in new approaches and technologies as part of their professional development.

If you think such a working group would benefit the military mission and be of use to you in your position, and if you’d like to be part of it, just shoot an email to Rick (richard.f.lance@usace.army.mil) or Brent (brent.koenen@us.af.mil) and let us know!
We are saddened to inform you that on July 2, 2019 Dr. Joseph Mitchell lost his life in a tragic vehicle accident. To us and many others within the DoD natural resources community, Joe was a respected colleague, dear friend, accomplished herpetologist, and a proud veteran. His legacy includes extensive research and surveys for amphibians and reptiles on military lands in Virginia, where he was a longtime resident, and throughout the country. Also, Joe worked on multiple DoD Legacy Resource Management Program and DoD PARC projects over his decades of involvement in herpetology, touching the lives of dozens of military installation natural resources managers and contractors.

Throughout his career as a professional herpetologist, Joe taught classes at Virginia Commonwealth University and the University of Richmond. He was also a longtime member of the Virginia Herpetological Society and a Research Associate both at the Smithsonian Institution and Florida Museum of Natural History. Furthermore, he was the owner of an ecological consulting business named Mitchell Ecological Research Service, LLC. Joe published more than 500 scientific articles in his career and authored or co-authored five books including Reptiles of Virginia. He was a founding member of the Partners in Amphibian and Reptile Conservation (PARC) network and made many significant contributions to the network over the last 20 years including: series editor of the Habitat Management Guidelines (HMGs) and co-author of the Southeast and Northeast HMGs; technical editor for the Timber Rattlesnake Conservation Action Plan; and contributor to the PARC Inventory and Monitoring Guide.

Joe served proudly in the U.S. Marine Corps from 1966 to 1970. Joining the Marine Corps was considered “the best decision of my life” according to his biographical sketch published in 2019. Joe went to boot camp at Marine Corps Recruit Depot Parris Island and later worked as a member an ordnance crew at Marine Corps Air Station Cherry Point. He also conducted two deployments in Yuma, Arizona. A broken foot bone prevented Joe from deploying to Vietnam and he served his last eight months of active duty at Marine Corps Base Kaneohe Bay, Hawaii.

To grow up in Virginia and be interested in amphibians and reptiles (as Rob Lovich did), meant Joe Mitchell was a legend. He was a significant member of the Virginia Herpetological Society and regularly published in their journal titled Catesbeiana. It was truly a pleasure for Rob to get to work with Joe later in life, as they did on a variety of projects including the Department of Defense Amphibian Disease Survey (Do Frogs Get Their Kicks on Route 66? Project).
In Memoriam

Joe was most recently conducting herpetological surveys at Joint Expeditionary Base (JEB) Fort Story and Naval Submarine Base New London, working as a subcontractor to LG² Environmental Solutions. I had the pleasure of assisting Joe and LG² Senior Biologist Kristina Witter in the field several times during these surveys. The last day I spent with Joe, we sat on the tailgate of his truck at JEB Fort Story eating lunch from the Navy Exchange. Seeing Joe’s Semper Fi sticker on the back of his truck, a man walking by asked “Who’s the Marine?” Joe was quick to respond and happy to talk about his time served in the Marine Corps and the herpetofauna survey we were conducting on the installation. For me, this conversation summarized how I will always remember Joe; a proud and loyal Marine, a passionate herpetologist, and a kind-natured man. He will be greatly missed.

Article by Chris Petersen and Rob Lovich (DoD PARC)

Dr. Joe Mitchell, John “Chip” Blackburn and Chris Petersen at Fort A.P Hill. (Picture by Rob Lovich)

Dr. Joe Mitchell, Chris Petersen and Kristina Witter (JEB Fort Story, Virginia Beach)

Link to BIOGRAPHICAL SKETCH AND BIBLIOGRAPHY OF JOSEPH C. MITCHEL:
https://repository.si.edu/bitstream/handle/10088/95348/2019.SHIS155.JosephC.Mitchell.pdf?sequence=1&isAllowed=y
Send in your photo/s with a caption and tell everyone what you did the last time you got “Out of the Office.”

Joe Iafrate (Naval Undersea Warfare Center Division, Newport) and Ryan Schultz (US Fleet Forces Command) refill an automatic fish feeder and replace the battery at a pond at Naval Air Station Patuxent River. The pond is holding about 100 juvenile sturgeon that will be used for underwater acoustic studies. Shout out to Jim Swift and Kyle Rambo (NAS PAX River) for their excellent fish husbandry skills!
Send in your photo/s with a caption and tell everyone what you did the last time you got “Out of the Office.”

Coralie Cobb (NAVFAC Southwest and Past President) and Nicole Olmsted (NAVFAC Pacific and President) were caught sporting their NMFWA gear in the field.
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L-R: Russ Lawrence, Zoe Tinkle, Robby Smith, Alan Schultz, Elizabeth Neipert, Janet Johnson, Nicole Olmsted, Michele Richards, Tim Buchanan, Bill Berry, Blake Waller, Laura Busch, and Michael Wright (Not Pictured: Roland Sosa). See page 25 for positions.

Do you want to get more involved in the Association? How about running for a position on the Board of Directors? If you are interested or would like more information, please contact this year's nomination chair, Liz Neipert at (esneipert@hotmail.com).

Regional Directors serve a two year term, elected by simple majority of the membership vote. One position in each of the three membership regions (West, Central, and East) and the At-Large Directors are elected in even-numbered years and the other in odd-numbered years to maintain continuity.

All other positions—Treasurer, Secretary, and Vice-President, serve for two-terms as well.

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The FAWN
The USDA National Invasive Species Information Center has numerous conferences and training workshops: [www.invasivespeciesinfo.gov/news/calendar.php](http://www.invasivespeciesinfo.gov/news/calendar.php)

DENIX has a list of upcoming conferences and meetings: [http://www.denix.osd.mil/conferences/](http://www.denix.osd.mil/conferences/)

Ecological Society of America Annual Meeting

Louisville, Kentucky

August 2-7, 2020

[https://www.esa.org/saltlake/](https://www.esa.org/saltlake/)

Society for Range Management

Denver, CO

February 16 – 20, 2020

[http://www.rangelands.org/events-abstracts/](http://www.rangelands.org/events-abstracts/)

The Wildlife Society Annual Meeting

Joint meeting w/ American Fisheries Society

Reno, Nevada

September 29-October 3, 2019


Society of American Foresters National Convention

October 30 to November 3, 2019

Louisville, Kentucky

[https://www.eforester.org/](https://www.eforester.org/)
2020 NMFWA Annual Meeting and Training Workshop

Omaha
Nebraska

8-13 March
Hilton Omaha
Start planning now. Hotel rooms book up quickly

NOTE: Titles and affiliations are for informational purposes only and do not present the individuals as spokespersons of the Department of Defense or agency/installation listed.

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