Happy New Year! As we start the 2020s, it’s a time to set goals for the future. We have seen a huge increase in attendance at our Annual Meetings. As an Association, we want to continue to offer relevant training, interesting technical sessions, productive working groups and active participation throughout the year. We have the opportunity to meet in person as a community once a year and build networks that can be beneficial throughout a career. We have a job posting page, announcement board, and working group blogs on our website to share information throughout the year. Make it a new resolution to check out our website- www.nmfwa.org!

Registration is live for our 2020 Annual Meeting and Training Workshop in Omaha, Nebraska. Pre-registration is required to attend the training sessions on either Monday or Friday. Please plan travel accordingly since space is limited. Our program for Tuesday through Thursday is open to our membership. Please note that on Thursday we have a brand new conservation game. If you are interested in playing, plan to bring a lunch. If you have any questions about registration or the program, feel free to contact me nicole.nmfwa@gmail.com.

We still have spaces available for posters at our Show and Tell event on Thursday March 12, 2020. The deadline to submit a poster will be 17 February 2020. Please consider making a contribution for the silent auction; all the proceeds go to the Scholarship Committee to support future leaders in natural resources. We are also looking for volunteers to help us at the meeting so if you want to become more involved with the Association, please let me know.

Voting for the 2020 Board of Directors will commence soon. It will be done via the website this year and we will provide more information when the nominations are announced.

Wishing everyone the best in 2020, and we are looking forward to seeing you in Omaha!
MARCH 9-13
Omaha, Nebraska

REGISTRATION IS NOW OPEN

IMPORTANT: New protocol for training courses
See pages 4-6 for information on courses available
and registration guidelines

Hotels are filling up quickly so make your
reservations soon; see website below for info


Sandhill Cranes. Photo: Richard Derevan
2020 NMFWA Annual Meeting and Training Workshop

There will be 11 Technical Sessions, 10 Working Group Meetings, 6 Training Course Topics, 2 DOD Conservation Group Meetings and 1 Field Trip.

We also have great networking opportunities:
✓ Meet and Greet for New Members
✓ Social Mixer at The Old Mattress Factory
✓ Annual Awards Banquet at Bella Terre Winery
✓ Show and Tell with a Silent Auction, Photography Contest, and Poster Session

See pages 13 and 14 for more info on the Show and Tell


Sorichill Cranes, Photo: Melissa Gröö
NMFWA 2020 Workshop Training Courses & Field Trip
Monday-March 9th and Friday-March 13th, 2020

IMPORTANT CHANGES FOR REGISTRATION PLEASE READ!

Due to the growing number of Workshop attendees and the high demand for training, there are additional restrictions for registering for courses. These are in place so that all attendees have an opportunity to attend one of the training courses.

So please be considerate to others; pick a day for training (Monday or Friday) and commit.

SPACE IS LIMITED for several courses in order to provide quality training. All training courses require pre-registration when registering for the Workshop.

What courses can I register for?
- Each registrant may select ONLY ONE training day to attend (Monday or Friday).
- This does NOT apply to the Field Trips - ONLY Training Courses.
- The Climate Change Adaptations course is the same one offered in previous years and has limited capacity. Please do not sign up if you have already taken this course in the past.
- Wait lists will not be open until all courses are filled for that day. Wait list capacity will be capped at 20 people per course. If you are on a wait list and a seat becomes available, you will be contacted directly by NMFWA via the email address you provided at the time of registration.

TRAINING COURSE DESCRIPTIONS
Monday, March 9, 2020

**Full-Day Courses - 0800-1700**

   - **PRE-WORK and a LAPTOP REQUIRED** – (Course Capacity - 25)
   The Department of Defense (DoD), through the Legacy Program, funded participation in the Avian Knowledge Network (AKN) along with other federal partners to create the Federal Avian Data Center (FADC). This data center integrates 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/international 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 capability of pooling Service-specific data, regional data, and habitat-specific data including data from our federal partners. 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 ERDC-EL.

   **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 Omaha. Participants must bring an appropriate and ready avian dataset and participate in a pre-course webinar to confirm ready datasets and gain access to the FADC. Participants must bring a laptop that can access the Internet to the training in Omaha. Course instructors will contacted registrants via email with more information closer to the Workshop.

2. **Climate Adaptation for DoD Natural Resource Managers.** (Course Capacity - 36). This course was provided in 2019. Please do not sign up if you have already taken this course.

   This workshop will introduce participants to climate adaptation planning in the context of installation natural resource management and INRMPs. The course is based on the new DoD guide, “Climate Adaptation for DoD Natural Resource Managers,” which was released in June 2019. The guide offers a six-step INRMP adaptation planning process that allows managers to understand climate-related vulnerabilities and risks to their installation’s natural resources, and to identify adaptation strategies capable of reducing those risks and sustain installation mission and military readiness. This training will introduce participants to the principles of effective adaptation and offer a summary of how climatic shifts may affect the various INRMP program elements. Through hands-on team exercises and worksheets, the training will provide step-by-step instructions to the INRMP adaptation planning process. The guide and course were funded by DoD Legacy Resource Management Program and developed by National Wildlife Federation and Naval Information Warfare Center in collaboration with OSD and the Military Services.

Continued on next page
Half-Day Courses – Morning Session 0800-1200

3. Unmanned Aerial Vehicles (UAVs) Utilization in Conservation Resource Management. (Course Capacity – 40)
   This training session provides insight into the use of UAVs for natural resource management on DoD lands. Topics include a review of current DoD use policies, approval processes, training requirements, and example resource management applications. The course will provide participants with an understanding of both the challenges and potential benefits of unmanned aerial vehicles for natural resource management on DoD lands and is offered by instructors from the U.S. Army Dugway Proving Ground, Select Engineering Services, and Man Tech International Corporation.

4. Advanced Endangered Species Act (ESA) Topics. (Course Capacity-40)
   This conservation strategies workshop, including conservation banking, is ideal for those who have been introduced to off-site mitigation and are interested in learning more about how specific off site conservation areas are established and operated. Instructors will focus on how to create regulatory efficiencies by integrating conservation strategies into the section 7 consultation process, highlight the roles and responsibilities of the various parties involved with developing and managing off site conservation areas, and provide some examples of where these strategies have been used by the military. This course is offered by the US Fish and Wildlife Service instructors in cooperation with the NMFWA Training Committee.

Half-Day Courses – Afternoon Session 1300-1700

5. Unmanned Aerial Vehicles (UAVs) Utilization in Conservation Resource Management. (Course Capacity – 40)
   See description above.

6. Advanced Endangered Species Act (ESA) Topics. (Course Capacity-40)
   See description above.

7. Innovations in Invasive Species Management. (Course Capacity – 100)
   The field of invasive species management is rapidly evolving with constant influx of new tools, challenges, early detection and rapid response (EDRR) efforts and management approaches. This half-day interactive course will focus on invasive species, presenting new technologies and innovations being utilized in the invasive species management arena and discuss installation specific examples. Utilizing a presentation format this session will include interactive talks about invasive species mapping and tracking tools, invasive species control methods and examples of reestablishment of native species. Invasive species can and do impact military operations (e.g. wildfire frequency/intensity, cargo inspections, etc..) and are commonly key factors influencing endangered species listing and recovery programs. If your installation or organization is currently working on, or have plans to work on invasive species management projects in the future that you think would be of interest to course attendees and invasive species working group members, please email the instructor, Steven Manning at steve@ipc.us.com to discuss your ideas.

8. The Migratory Bird Treaty Act: Recent changes and interpretation. (Course Capacity – 100)
   This half-day interactive workshop will use a scenario-based format to provide an overview of migratory bird related requirements, including the Migratory Bird Treaty Act, Migratory Bird “Readiness” Rule, and Executive Order 13186 and the associated Memorandum of Understanding. It will cover recent changes in interpretation of the MBTA; explain how, when, and where regulations apply; implications for enabling mission; and the importance of communication and collaboration across pillars at the installation level. This course will present and discuss a wide variety of real and simulated migratory bird scenarios on DoD lands, and describe differences in regulations and guidance between USFWS and DoD. Attendees are encouraged to bring their own migratory bird scenarios from installations such that we can discuss and provide insight on how to address in a mission support framework. This course will be offered by instructors from DoD Partners in Flight and U.S. Fish and Wildlife Service.

Continued on next page
The FAWN

TRAINING COURSE and FIELD TRIP DESCRIPTIONS

Friday, March 13, 2020

Full-Day Course - 0800-1700

9. Project-level Climate Change Adaptation Planning for Natural Resource Managers. (Course Capacity- 30 registrants). This course was provided in 2018 & 2019. Please do not sign up if you have already taken this course in the past. This full-day workshop will focus on incorporating climate change considerations into common natural resources projects such as wildlife habitat improvement, vegetation restoration, stream management, and erosion control. This project-level planning identifies practical, on-the-ground management actions that can help natural systems and infrastructure cope with change, tiering to overarching goals at the installation-level. This process follows an abbreviated format of the Adaptation Workbook used by the Northern Institute of Applied Climate Science (NIACS) on hundreds of natural resources projects. Participants will work in groups to identify climate adaptation actions for real-world management projects. At the end of the course participants will be able to: 1) identify climate change-related challenges and opportunities for their sample resource management project and in their own management, 2) develop actionable steps to adapt ecosystems to changing conditions and 3) communicate how their actions address climate risks and help to meet management goals and support the military mission. This workshop is offered by Chris Stone, Kristen Schmitt, and Todd Ontl of NIACS.

Note: Pre-workshop reading is required! Registrants will be contacted by course instructors via email with more information closer to the Workshop.

Field Trip – 0800-1400

Camp Ashland Training Site, Nebraska Army National Guard. (Field Trip Capacity – 45 registrants). Buses load 0800 outside the Host Hotel and will return by 1400. Please bring a lunch and dress appropriately for walking around outside.

This field trip will tour areas at the Nebraska Army National Guard's Camp Ashland Training Site that were affected by catastrophic flooding in March 2019. This field trip will look at impacts to Section 7 conservation measure projects, training land lost/damaged, levee breaches, damage to historical buildings, land scouring, repair and monitoring efforts that have occurred or ongoing. There will also be an open discussion on how the Nebraska Army National Guard has dealt with regulators and public concerns with the reoccupation and cleanup effort due to this flood event.
The Pentagon says Wildfires, Driven by Climate Change, are a Growing National Security Threat

Jacob Margolis

A 2019 Department of Defense report concluded that the effects of a changing climate, including wildfires, threaten dozens of military bases. Any kind of wildfire is terrifying. But add military weapons, ammunition and chemical storage, and an apocalyptic blaze becomes a possibility. Wildfires, exacerbated by climate change, are a growing concern for the Department of Defense as a threat to military installations around the world.

Fires like the one in September 2016 that ignited the dense, dry chaparral covering some of the 100,000 acres of Vandenberg Air Force Base in Santa Barbara County, Calif. Video taken at the time shows a firefighter screaming "Let's go! Go!," as waves of embers blast his truck. Day turned to night as black smoke covered the sun, engulfing him and his colleagues as they hurried back to their safe zone roughly 600 yards away.

Worryingly near were military ordnance, chemical storage, and buildings crucial to national security. A little over a mile away, a Delta II rocket was ready to launch. "Having a rocket fully loaded on a pad, fully fueled, that's a pucker factor," said Chief Mark Farias, a 20 year veteran of the Vandenberg Fire Department who helped fight the fire.

Ultimately, crews were able to contain the fire, though Farias said the Vandenberg Fire Department needed substantial additional resources from other local, state and national fire agencies. The fire burned about 12,500 acres, relatively reasonable for a California wildfire.

But the concern that climate change will lead to more severe, more frequent fires is being taken seriously by military leaders. A 2019 document titled, "Report on Effects of a Changing Climate to the Department of Defense," doesn't mince words. "The effects of a changing climate are a national security issue," it begins. "DoD must be able to adapt current and future operations to address the impacts of a variety of threats and conditions, including those from weather and natural events," the report said. "To that end, DoD factors in the effects of the environment into its mission planning and execution to build resilience."
The Pentagon says Wildfires, Driven by Climate Change, are a Growing National Security Threat, con’d

The Pentagon report examined climate change-related threats at 72 U.S. bases around the world, examining such things as wildfires, droughts, flooding, and desertification, in which a formerly fertile soil becomes dryland. "They have to take into consideration a changing climate," said Maureen Sullivan, Deputy Assistant Secretary of Defense for Environment.

The report said about half of the bases should consider wildfires an issue. Over the next 20 years, the Pentagon expects to add an additional seven bases to the list as the climate continues to change. "You know we just had a huge fire this summer in Alaska … which was really problematic," Sullivan said. "You wouldn't think of Alaska as a wildfire risk, but that tells you how the wildfire situation is changing."

Bases need to determine their degree of exposure to changing climate conditions and their adaptive capacity, as well as write up integrated natural resources management plans. Those can help determine how the installation manages the land across the facility. The Defense Department has provided them with tools to do so, said Sullivan.

For instance, it has developed a series of guidelines that can help bases figure out proper wildfire monitoring, how to address fuel management, and how to determine if certain parts of the base might be vulnerable to smoke or fire. Bases already are clearing vegetation, especially with controlled burns, though some bases are limited by local laws. They're also partnering with local, state and national fire agencies.

Chief Farias at Vandenberg said the 2016 fire showed why his base needs better brush management, more people and more money. "We haven't gained resources," he said. "Even though things have gotten worse, we're actually less people, less resourced."

This story was produced by the American Homefront Project, a public media collaboration that reports on American military life and veterans. Funding comes from the Corporation for Public Broadcasting.
Fort Hood conducts spot-fire training for Soldiers

By Scott Summers-Fort Hood Natural Resources

Training exercises incorporate various ammunition with tracers and pyrotechnics in live fire, and occasionally ignite undesirable range spot-fires, i.e. those fires that are in initial stages, small and easily extinguished. These spot fires can slow training progress and if not checked, can grow into difficult-to-manage wildfires.

Recently, wildland firefighters from the United States Fish and Wildlife Service (USFWS) in conjunction with the Fort Hood Fire Department (FHFID) and Department of Public Works Natural and Cultural Resources Management Branch (NCRMB) conducted spot-fire suppression training for the 1st Armored Brigade Combat Team (ABCT), 1st Cavalry Division (CD). The exercises were hosted at Fort Hood.

The Directorate of Plans, Training, Mobilization and Security’s Visual Information Branch staff captured still-frame and video of the operation that will be used to update the training video that Range Operations gives to the 10 Soldier firefighting detail. This short 15-minute video is important because it is the only formal training Soldiers receive prior to fighting incidental fires occurring on ranges due to live fire exercises.

The training focused on how to properly and effectively suppress small spot-fires with hand tools and water, before they grow too large without extra resources. Larger wildfires can threaten to consume expensive range targets and other installation infrastructure. SFC Cedric Gustave, Jr. with the 1ABCT, 1CD described the problems fires can pose during training missions.

“Fires significantly affect training hours…more significantly on our multi-use ranges. Fires on the range jeopardize target lifters and movers that are expensive and time consuming to repair,” said Gustave. “As a result, fires must be extinguished in a timely manner. In doing so, we are obligated to shut down not only our range, but any adjacent range that has surface danger zones that cross into the area we send our firefighting details,” Gustave added.

Wildfires are a natural part of the Fort Hood landscape and can be beneficial to plants and animals by maintaining vegetation in various successional growth stages. In addition to training delays, there can be another downside to wildfire. That is, potential loss of habitat of the federally endangered golden-cheeked warbler, a small songbird that thrives here due to Army land ownership and management. This species’ habitat does not need fire at all because it takes several decades, if not longer, to grow and mature into the dense woodlands the birds need to survive.

NCRMB supervisory wildlife biologist Virginia Sanders manages both endangered species and the wildland prescribed fire operations conducted on Fort Hood. Sanders explains the benefits this training will have on the Installation.
The Soldier spot-fire training is one tool to help us prevent future catastrophic fires, especially when conditions are particularly dry, which we call Range Condition Red,” said Sanders. “The Units training on Fort Hood respond to an incredible number of fires on the ranges. So our intent is to improve the quality of training the Soldiers receive so they can become more effective in suppressing those fires.”

This past July, Soldier firefighting details successfully managed 185 fires started during live fire exercises, 6 of which became intense enough to require assistance from the Fort Hood Fire department.

“We strike a balance of enhancing wildlife habitat with fire and ensuring it happens in a way to support our Integrated Natural Resources Management Plan (INRMP),” Sanders added.

The INRMP ultimately benefits Army training because Fort Hood’s ecosystem function and training areas are enhanced by natural habitat that sustain a landscape required for long-term military training. Natural habitat is created and managed with the help of periodic fire, because central Texas has many plants that require fire to germinate seeds to continue their life cycles.

Fort Hood has a long history of prescribed fire and wildfire suppression. Indeed, the NCRMB has been conducting prescribed fire since the 1990s. Today, NCRMB works with the USFWS from Balcones Canyonlands National Wildlife Refuge through a Cooperative Agreement, and additional fire support from FHFD. Carl Schwope is a USFWS fire management officer and has been a professional prescribed fire Burn Boss (RXB2) at the refuge since 1999. Schwope explained how the spot-fire training benefits Army training.
Fort Hood conducts spot-fire training for Soldiers, *cont’d*

“Managing fire at Fort Hood is a multi-tiered approach. Suppressing unwanted fires and igniting beneficial prescribed fires begins with the Army. Having well-trained Soldiers efficient in firefighting is key to suppressing unwanted fires before the fires can get large and potentially destructive,” said Schwope. “This allows for prescribed fires used for beneficial purposes such as resource protection and natural resource management to be ignited. Being part of this collaboration and working with the Army has been exciting and rewarding,” Schwope added.

The Fort Hood fire department has worked with NCRMB staff for many years and plans are underway to have more department firefighters become professionally certified to manage wildland fire. FHFD firefighter Joey Dominguez is taking the lead to help his staff and the Soldiers get more educated with wildland fire. Though his department has helped with wildland fires annually, he is assisting with changes his department is pushing to benefit them and the 10 Soldier firefighting detail.

“We have a lot of structural fire experience, but not as much wildland. Like structural, wildland is something the Installation faces every year because we have live fire military training exercises year-round. More training, and the updated training video the DPTMS is developing will help our Department achieve Installation work objectives in that area of responsibility,” said Dominguez. “It is a great collaboration, and we are very happy that all the subject matter experts came together to help us put forward best management practices,” Dominguez added.

Wildland fire is different than structure fires. Federal professional wildland firefighter training is sanctioned and administered by the National Wildfire Coordinating Group (NWCG). The NWCG sets fitness and fire line qualification standards for wildland fire operations. This allows interoperability for wildland fire operations among federal, state, local, tribal, and territorial partners.

The NWCG is comprised of large federal partners starting with the U.S. Forest Service, USFWS, U.S. Park Service, Bureau of Land Management, and state foresters. Recently, the U.S. Army and Air Force have taken steps toward becoming integrated members of NWCG.
BARKING SANDS — The U.S. Navy Pacific Missile Range Facility (PMRF) at Barking Sands has been named the winner of the 2019 Navy Community Service Environmental Stewardship Award, acknowledging excellence in conservation and species preservation at the base.

It’s one of several awards handed out annually by the Navy.

For PMRF, the award means a pat on the back from the Navy for programs like relocating albatross away from the runway, and the base’s “Dark Skies” initiative to turn off all non-essential exterior lighting during the Newell shearwater, Hawaiian and band-rumped storm petrel migration seasons.

Capt. Timothy Young, commanding officer of PMRF, said the award is a recognition of great partnerships between PMRF and other organizations and government entities on the island, and of the hard work and selfless dedication of PMRF’s entire team.

“The professionals in our Public Works Department and our talented environmental team set the standard for protecting and restoring our natural environment,” Young said.

“We are very proud of this recognition. It is just another validation that PMRF sailors and civilians continue to make this one of the finest installations in the Navy.”

PMRF works closely with federal and state agencies, schools, conservation organizations and the public to implement various groundbreaking initiatives toward conservation, environmental protection and protection of endangered species, said Young.

In the past year, personnel from PMRF collaborated with more than 25 schools and organizations, integrating the U.S. Navy’s core values of honor, and courage to promote appreciation of natural and cultural resources.

The value of PMRF is not only measured in its contributions to the combat readiness of U.S. Navy and allied forces, but also as a steward of the natural environment found on Kauai’s western shores, said Sara Trujillo, PMRF public affairs office, in a release.

“The purpose of the Environmental and Cultural Community Outreach Program is to achieve a long-lasting, proactive educational environment that promotes stewardship of both the land and the Native Hawaiian culture,” she said.
CALLING ALL PHOTOGRAPHERS!!!

Got a great photo? Enter it in the Photography Contest at the Show and Tell. Or the next time you are in the field, out on the water, or even in your own backyard, take a photo!

Categories include the following:

⇒ Wildlife
⇒ Landscape/Scenic
⇒ Installation/Field Activities
⇒ Botany
⇒ Humor

Photos must be at least 5x7 inches, but no larger than 11x14 inches

DON’T FORGET YOUR CAMERA!!!

The Silent Auction is a success due to your generous donations. Thank You!

Food or beverages local to your area, rare field books, art, outdoor gear—all have been great hits! So keep ‘em coming.

The Silent Auction benefits the NMFWA Scholarship Fund.
CALL FOR POSTERS!!!

It’s that time again, and we are looking for YOU to present at the NMFWA Annual Meeting and Training Workshop’s Show and Tell poster session.

Poster submission deadline is **Monday, 17 February 2020**.

We know that you all do great work out there, so why not show everyone and present a poster!

Poster sizes should be roughly 48 in. x 60 in, though we can accommodate other poster sizes, too.

Our goal is to provide easels for your posters, but if this were to change, we will let you know.

If you have specific questions regarding the poster session, please contact Roland Sosa at roland.sosa@navy.mil.

We look forward to seeing your posters at the Workshop!
Webinar Series to Share Information on Research Related to Renewable Energy off the U.S. West Coast

The Bureau of Ocean Energy Management (BOEM) invites you to attend the next webinar in the West Coast Renewable Energy Science Exchange, a series of webinars about scientific research offshore California, Oregon, and Washington that will inform decisions about the planning, leasing, and development of ocean renewable energy. Additional information, including webinar access, can be found at: www.boem.gov/west-coast-renewable-energy-science-exchange

January 8, 2020
Overview of BOEM-funded Research about Birds and Bats on the West Coast
Presenter: David Pereksta, Avian Biologist, BOEM

March 11, 2020
Overview of BOEM-funded Research about Fish and Fisheries on the West Coast
Presenter: Donna Schroeder, Marine Ecologist, BOEM

May 13, 2020
Overview of BOEM-funded Research about Marine Mammals on the West Coast
Presenter: Desray Reeb, Marine Biologist, BOEM

July 8, 2020
Overview of BOEM-funded Research about Benthic Habitats on the West Coast
Presenter: Lisa Gilbane, Biologist, BOEM

September 9, 2020
Overview of BOEM-funded Research about Cultural Resources on the West Coast
Presenter: David Ball, Marine Archaeologist, BOEM

Webinars are led by subject matter experts based in the BOEM Pacific office in Camarillo, California, and will be held at 10:00 a.m. Pacific Time on the second Wednesday of every other month. Slides of the presentation will be available after the webinar on the website.

The BOEM Environmental Studies Program (ESP) in the Pacific has funded a diverse array of applied and basic research about the marine, coastal, and human environments offshore California, Oregon, Washington, and Hawaii. The environmental, social, and economic information garnered from ESP studies informs decisions about energy programs on the Pacific Outer Continental Shelf (OCS), which extends from the U.S.-Mexico border to the U.S.-Canada border and includes the OCS of Hawaii.

Since the ESP’s inception in 1973, more than 310 Pacific studies have been conducted at a cost of more than $142 million. While many of these studies have been conducted to inform decisions about oil and gas development on the California OCS, regional study priorities have expanded to address information needs regarding renewable energy development throughout the Pacific OCS.

The Bureau of Ocean Energy Management (BOEM) promotes energy independence, environmental protection and economic development through responsible, science-based management energy and marine mineral resources on the nation’s Outer Continental Shelf.
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!
Meegan Wallace retired this December from Versar, Incorporated after more than 25 years as an ecological researcher. Meegan started her career in the environmental division on Marine Corps Base Quantico before taking a position with Geo-Marine, Incorporated in 1998. Meegan is a Certified Ecologist through the Ecological Society of America and has been a NMFWA member for 25 years. During her NMFWA membership she was a co-chairman for the Invasive Species Working Group from 2013 to 2015.

While Meegan was involved in numerous projects on DoD installations from Maine to Hawaii and many parts between, she was especially involved within the mid-Atlantic and southeast, performing projects on 33 DoD installations. Meegan is an experienced natural resource planner and over the course of her career was involved in developing 17 Integrated Natural Resources Management Plans and seven associated Environmental Assessments. She managed or participated in several multi-disciplinary field studies, which included forest and vegetation inventories, small mammal and bird censuses, threatened and endangered species surveys, invasive plant surveys and management plans, and wetland delineations. She is also recognized by the US Fish and Wildlife Service as a qualified surveyor for small whorled pogonia (*Isotria medeoloides*).

Meegan has been a source of knowledge and guidance for everyone she has worked with and has provided a level of excellence that will be hard to replace.
Dr. Terry Bashore, NMFWA Past President

Dr. Terry Bashore was born August 9, 1942 in Lebanon Pennsylvania and grew up in neighboring rural Newmanstown Pennsylvania where he developed his love of the outdoors. From an early age, Terry was an avid hunter and fisherman and excelled in baseball and swimming. The summer after graduating high school he worked as a lifeguard at Ocean City, Maryland and would swim off shore to mingle with passing pods of dolphins. It was during Terry’s undergraduate years at the University of Miami where he had a chance meeting with Dr. John C Lilly, author of *Man and Dolphin* and head of the Dolphin Communication Research Laboratory. Fostering the opportunity from that chance meeting, Terry volunteered his time between classes as a member of the research team that was trying to understand the language of dolphins.

After graduating from the University of Miami with a degree in psychology and minor in biology, Terry commissioned in the U.S. Air Force as a Second Lieutenant. He attended pilot training school at Williams Air Force Base outside of Phoenix, Arizona and spent a year in Southeast Asia (Thailand/Laos) as an Air Commando/Special Operations Officer. After leaving the Air Force he went on to the Millersville State University in Pennsylvania where he earned a master’s degree in biology and later to the Pennsylvania State University where he received a PhD in ecology. Upon graduation, Terry taught a variety of natural resource course during his tenure at New England College in New Hampshire and later within the University of Maryland System where he also Directed the University’s Coastal Ecology Research Station on Assateague Island National Seashore while supervising and serving on Masters and PhD student committees.

In 1995, he became a Senior Wildlife Ecologist at Fort Bliss in El Paso, Texas. That same year he joined the National Military Fish and Wildlife Association and attended his first meeting in Minneapolis, Minnesota. It was during that first meeting where he and his wife Tessa became engaged. While at Ft. Bliss he was involved with the Ft. Bliss McGregor Military Land Withdrawal, antelope and deer check stations, co-authored the NMFWA’s slide presentation on procedures for implanting radio transmitters in venomous reptiles, and other resource management duties.

In 1998, while at the NMFWA meeting, Terry was recruited by the Pentagon to take the lead for the development of the Department of Defense’s Native American Communications course at the Army Corps of Engineer’s Prospect school in Huntsville, Alabama. In addition to the communication course, Terry was involved in the development of numerous Interservice Environmental Education Review Board (ISEERB) distance-learning courses in natural resources. During his tenure with the USACE Terry was considered an Army Natural Resource Subject Matter Expert and worked closely with the Army Environmental Center at Aberdeen Maryland.
In 2000 Terry took the position of Senior Ecologist/Science Program Director at Headquarter Air Combat Commands (ACC) Directorate of Operations (A3) which served as ACC’s single focal point for all environmental issues dealing with airfield management, air traffic control, terminal instrument procedures, and the establishment, maintenance, modification, and disestablishment of airspace and ranges for air-to-air and air-to-ground operations in the continental United States. This included development of policy, planning, programming, requirements and guidance. During his time at HQ ACC, Terry delivered scientific oversight, advice, and research services for eighteen installations, thirteen primary training ranges, two major range and testing facilities bases, and 462 airspace parcels supporting the mission of ACC and Air Force Global Strike Command. Dr. Bashore is a recognized leader in the scientific community and by other federal agencies. Terry authored eleven peer-reviewed journal articles on topics ranging from species restoration to bird and aircraft strike hazard control activities, and ecology and reproductive biology of federally listed plant species. He served as guest editor for two leading conservation peer-review journals. He also served as a member of the Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP) committees promoting collaboration with academia, industry, and other federal agencies to improve the department of defense’s environmental performance. Finally, he was recognized by the Air Force for his ability to maintain the balance between mission and environmental through careful engagement with United States Fish and Wildlife Service, ensuring the protection of threatened and endangered species without sacrificing mission accomplishment.

Dr. Bashore was elected NMFWA Vice President in 2005 and President in 2007. At the 2005 NMFWA Buisness meeting Terry introduced the concept of a DOD Resources Management Certification; the program was approved in 2007 by the membership for which Terry was a major innovator of the program. In addition to the NMFWA presidential duties, he also developed and produced the NMFWA Award Coin and colorized the NMFWA logo. Terry always promoted NMFWA as the go-to organization for managing natural resources on DoD installations.
Send your photo/s with a caption and tell everyone what you did the last time you got “Out of the Office.”
Send to laura.busch.navy@gmail.com

...And Out of the Nest!

SSG Pico of the Arizona Army National Guard (AZARNG) 258th Engineer Battalion helped NMFWA Vice-President Janet Johnson rescue a Greater Roadrunner nestling in the 112 degree Arizona heat.

The nestling had fallen from a nest built on top of the engine block of a convoy vehicle of the AZARNG’s Florence Military Reservation Training Site in the Sonoran Desert.

No wily coyotes were spotted during the rescue effort.
Send in your photo/s with a caption and tell everyone what you did the last time you got “Out of the Office.”

US Navy personnel/NMFWA members (L-R) Julie Rivers (Sixth Fleet, Naples, Italy), Laura Busch (US Fleet Forces, Norfolk, VA), Tara Moll (Naval Undersea Warfare Center, Newport RI) and Amy Farak (US Fleet Forces) attended the World Marine Mammal Conference in Barcelona, Spain in December. They also helped at the Stewards of Sea outreach exhibit by speaking with conference attendees about the Navy’s environmental compliance program.
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Offices Throughout North America
National Military Fish and Wildlife Association  
2019/2020 Board of Directors

L-R: Russ Lawrence, Zoe (Tinkle) Duran, 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 24 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.

Come join us on the board!
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Alan Schultz, Fort Bragg, NC

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

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

Ecological Society of America Annual Meeting
Salt Lake City, Utah
August 2-7, 2020
https://www.esa.org/saltlake/

The Wildlife Society Annual Meeting
Louisville, KY
September 27-October 1, 2020
http://wildlife.org/network/conferences-network/

Society for Range Management
Denver, CO
February 16 – 20, 2020
http://www.rangelands.org/events-abstracts/

Society of American Foresters National Convention
October 28 to November 1, 2020
Providence, RI
https://www.eforester.org/
The FAWN

FISH AND WILDLIFE NEWS (FAWN)
OFFICIAL NEWSLETTER OF THE
NATIONAL MILITARY FISH AND WILDLIFE ASSOCIATION

2020 NMFWA Annual Meeting and Training Workshop

Omaha Nebraska

9-13 March
Hilton Omaha

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.