

50^{YEARS} OF THE SIKES ACT



Cover photo courtesy of George Djordje Zoric.

Bald Eagle populations in the United States were once so low that the U.S. Fish and Wildlife Service listed the species as endangered. DoD helped restore and create habitat for bald eagles across dozens of military installations. Thanks in part to DoD stewardship efforts, the bald eagle was removed from the federal threatened and endangered species list in August 2007.

ACKNOWLEDGEMENTS

The authors would like to thank everyone who reviewed this brochure, especially Derrick Golla, Booz Allen Hamilton, for his valuable input and edits.

CONTRIBUTING AUTHORS

MR. L. PETER BOICE

*DoD Natural Resources Conservation
Compliance Program*

MS. ALISON A. DALSIMER

Booz Allen Hamilton

MS. KRISTIN ALTIERI

Booz Allen Hamilton



Booz Allen Hamilton, March 2012. Booz Allen wrote and produced this *50 Years of the Sikes Act* brochure with funding awarded by the DoD Legacy Resource Management Program, under project #10-467 (AFCEE/ACX contract FA8903-05-D-8729, TO 0843) and project #11-470 (Indian Head contract #29750-0214/0290).

WHAT IS THE SIKES ACT?

INTRODUCTION

President Eisenhower signed the Sikes Act into law on September 15, 1960. At its core, the Sikes Act (16 USC 670), as amended, requires and allows the Secretary of Defense to plan, develop, and maintain natural resources on U.S. military reservations.



FACTOID: DOD CURRENTLY OWNS OR MANAGES APPROXIMATELY 30 MILLION ACRES OF LAND

Over the last 50 years, the Sikes Act has helped military installations protect and enhance nearly 30 million acres of land, air, and water resources while enabling troops to train in a wide array of the most realistic environmental conditions possible. These landscapes help troops prepare for combat throughout the world.

HISTORY

Congress originally passed the Sikes Act to ensure that the military conserved and maintained its fish and wildlife resources. Human access and development are limited on many military installations because of safety and security concerns. As a result of these restrictions, Department of Defense (DoD) installations contain some of the most significant remaining large tracts of often unique habitats in the U.S. In 1997, Congress amended the Sikes Act to require that DoD installations with significant natural resources develop and implement Integrated Natural Resources Management Plans (INRMPs) in cooperation with the U.S. Fish and Wildlife Service (USFWS), and the appropriate state fish and wildlife agency.



FACTOID: MILITARY LANDS ARE HOME TO OVER 70 SPECIES THAT ARE FOUND NOWHERE ELSE IN THE WORLD

Photo courtesy of Katrina Leigh.

The Mojave Desert is an important landscape for military training. It also provides essential habitat for many sensitive, threatened, and endangered species, including the desert tortoise and the flat-tailed horned lizard.

THE SIKES ACT ENSURES THAT MILITARY BASES MAINTAIN HABITAT FOR REALISTIC TRAINING EXERCISES.

DOD IS RESPONSIBLE FOR MANAGING AND PROTECTING OVER 420 FEDERALLY-LISTED SPECIES AND OVER 500 SPECIES AT-RISK.



Photo courtesy of Major William M. Rowley, U.S. Marine Corps. The 3rd Light Armored Reconnaissance Battalion found these two great horned owls after they fell out of their nest during a severe wind storm. Staff found the two juvenile owls sitting on the tires of the LAV sheltering from the day's high winds. The owls were taken to the Coachella Valley Wild Bird Center for Rehabilitation and, after a few weeks, were returned to the Marine Air Ground Task Force Training Command and released where they were found.

SECRETARY OF DEFENSE AWARDS

Since 1962, the Secretary of Defense has annually honored both personnel and installations for their outstanding efforts to conserve and sustain DoD's natural resources. These awards highlight strong partnerships with neighboring communities, and promote environmental practices that support DoD's environmental and operational strength.

The following Secretary of Defense Environmental Awards illustrate the powerful impact that military installations have on natural resources conservation (NRC) efforts across the U.S.:

Army National Guard's (ARNG) Fort Custer Training Center (FCTC), Michigan. 2010 SecDef NRC, Small Installation Award.¹ FCTC personnel:

- * Completed surveys revealing that 80% of Michigan's flora and fauna species are present at FCTC, including 14 newly discovered species on the installation.
- * Supported integrated pest management by using biological insect control instead of traditional chemical pesticides. FCTC currently uses leaf-feeding beetles raised by local high school students to control the invasive purple loosestrife plant, significantly reducing FCTC's annual herbicide use.
- * Restored and enhanced Prairie Fen communities with prescribed burns, which enhanced soldier training by increasing visibility and maneuverability in exercise areas.
- * Maintained landscapes to allow FCTC to function as one of three critical stopover and nesting sites for migratory birds in the Mississippi regional migration flyway.

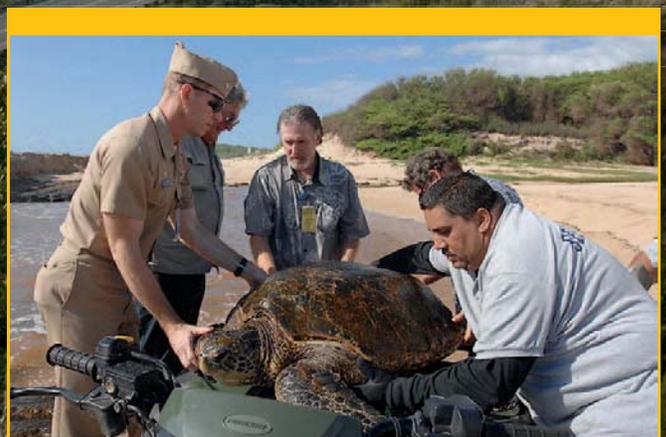
¹ www.denix.osd.mil/awards/upload/1-Fort-Custer-Training-Center-Michigan-Army-National-Guard.pdf.

Hickam Air Force Base, Hawaii. 2010 SecDef NRC, Small Installation Award.² Hickam personnel:

- * Surveyed installation shorebirds including the ruddy turnstone, sanderling, Pacific golden plover, and endangered Hawaiian stilt to help monitor State-wide sites and regions for endangered species population fluctuations.
- * Removed invasive red mangroves and pickleweed from Hickam's Ahua Reef property shoreline, improving potential bird habitats away from aircraft flight lines and reducing the risk of bird strike hazards, thereby increasing pilot safety.

² www.denix.osd.mil/awards/upload/NRC-Narrative-Hickam-AFB.PDF.

Photo courtesy of MC2 Jay C. Pugh.
Capt. Aaron Cudnohufsky, Commanding Officer, Pacific Missile Range Facility (PMRF), with Dennis Rowley, Tom Clements, Don Heacock, and Bobby Ragassa, carry an injured green sea turtle to an all-terrain vehicle at Nohili Ditch on PMRF. The turtle was later transported to Oahu for medical treatment and released back into the wild.





Naval Base Coronado (NBC), California. 2009 SecDef NRC, Large Installation Award.³ NBC personnel:

- * Increased species' population numbers on the installation including the federally endangered San Clemente loggerhead shrike, the federally endangered California least tern, and the federally threatened Western snowy plover. This prevented additional critical habitat designation while only minimally impacting training requirements.
- * Increased San Clemente Island (SCI) fox populations using threat reduction, roadside vegetation management, and pathology and veterinary services. This prevented listing the SCI fox on the island, and minimized the impact to essential SCI military operations.

Marine Corps Base Camp Lejeune, North Carolina. 2009 SecDef NRC, Large Installation Award.⁴ Camp Lejeune personnel:

- * Restored longleaf pine habitat on 521 acres, and enhanced endangered red-cockaded woodpecker (RCW) habitat on 2,170 acres of upland pine by removing understory hardwoods and other vegetation. This decreased military training restrictions and simultaneously restored the dwindling RCW population.
- * Minimized human impacts to endangered sea turtles by reducing artificial lighting on sea turtle nesting beaches with low-pressure sodium roadway and parking light fixtures, canister lights, timers, and amber shields. This helped sea turtles breed and restore their population level.

ARNG Camp Edwards, Massachusetts. 2007 SecDef NRC, Large Installation Award.⁵ Camp Edwards personnel:

- * Reduced soil erosion to improve species' habitats and protect wetland ecosystems designated as critical habitat. This helped conserve rare, State-listed species such as the spotted salamander and the chain-dotted geometer, which avoided further critical habitat designations.
- * Developed an Integrated Wildfire Management Plan and Wildfire Response Plan, which enabled natural resources managers to recover and restore 175 acres of training area and biologically diverse habitat.
- * Completed an Eastern box turtle study and a floral survey to demonstrate that training disturbance and prescribed burns benefit species by providing improved nesting and foraging areas.
- * Performed prescribed burns on approximately 375 acres to improve pine and scrub oak ecosystem habitat by allowing new growth and removing excessive cover that would otherwise have impeded training area available to soldiers.

³ www.denix.osd.mil/awards/FY08SECDEF.cfm.

⁴ www.denix.osd.mil/awards/upload/1-Marine-Corps-Base-Camp-Lejeune.pdf.

⁵ www.denix.osd.mil/awards/upload/NRC_Inst_Camp-Edwards.pdf.

PARTNER RECOGNITION

IN 2004, THE USFWS CREATED THE MILITARY CONSERVATION PARTNER AWARD TO RECOGNIZE MILITARY CONTRIBUTIONS THAT LED TO SIGNIFICANT ACCOMPLISHMENTS THROUGH A DOD-USFWS PARTNERSHIP. SINCE THAT TIME, SEVEN INSTALLATIONS (FORT CARSON,⁶ FORT RILEY,⁷ U.S. ARMY GARRISON-POHAKULOA,⁸ WHITE SANDS MISSILE RANGE,⁹ U.S. ARMY GARRISON-HAWAII, SCHOFIELD BARRACKS,¹⁰ FORT STEWART,¹¹ AND UMATILLA CHEMICAL DEPOT¹²) HAVE WON THIS PRESTIGIOUS AWARD, WHICH THE DIRECTOR OF THE USFWS PRESENTS ANNUALLY AT THE NORTH AMERICAN WILDLIFE AND NATURAL RESOURCES CONFERENCE.

⁶ www.fws.gov/pdfs/awardwinners.pdf.

⁷ www.fws.gov/news/newsreleases/showNews.cfm?newsId=A9930A9F-0FCA-8C41-0C63D9D00D5AF965.

⁸ www.fws.gov/news/newsreleases/showNews.cfm?newsId=9013CC69-AC51-92DC-7455AAC0221F93F3.

⁹ www.fws.gov/news/NewsReleases/showNews.cfm?newsId=052A27AD-9995-C92D-7E93664033DD29EF.

¹⁰ www.fws.gov/news/NewsReleases/showNews.cfm?newsId=24A94A45-92D8-DED1-ED2EB4340D9DFE5C.

¹¹ www.fws.gov/news/NewsReleases/showNews.cfm?newsId=9ACE4CB6-081D-A73F-4466CAE656E9C46E.

¹² www.fws.gov/pacific/highlights_archive/Feature.cfm?id=13793.

Photo courtesy of Brett Hillyard. Camp Pendleton serves as the Marine Corps' prime amphibious training base. It also contains the longest stretch of undeveloped coastline between Los Angeles and San Diego--an area that provides pristine habitat for 16 threatened and endangered species.

Integrated Natural Resources Management Plans (INRMPs)

In Fiscal Year (FY) 2011, 334 of DoD's military installations had natural resources significant enough to require an INRMP.¹³ In general, INRMPs are documents that describe how DoD will conserve and rehabilitate an installation's or group of installations' natural resources. INRMPs detail how installations will conduct natural resources activities in ways that sustain and enhance military operations, and are consistent with state and federal stewardship and legal requirements.

To help guide INRMP activities, the DoD's Natural Resources Conservation Compliance Program provides policy, guidance, and oversight to the Military Services to ensure that installation natural resources activities support the Secretary of Defense's priorities, and that soldiers have continued access to realistic training conditions. In this way, the Program helps support the military's combat readiness mission, guaranteeing no net loss to mission capability, while simultaneously working to ensure the long-term sustainability of our nation's priceless natural heritage.

INRMPs PROVIDE A COMPREHENSIVE APPROACH TO NATURAL RESOURCES MANAGEMENT ON INSTALLATIONS.

INRMPs REFLECT A MUTUAL AGREEMENT BETWEEN DOD, THE STATE, AND THE U.S. FISH AND WILDLIFE SERVICE.

¹³ Sikes Act of 1960, as amended. <http://www.fws.gov/endangered/esa-library/pdf/2004SikesAct%20NMFWA.pdf>.



Photo courtesy of the U.S. Fish and Wildlife Service. The Saint Francis' satyr butterfly is endemic to Fort Bragg, NC. The Army's longleaf pine stewardship initiatives help support this endangered butterfly, while protecting important training areas that enable the military mission.



Photo courtesy of the U.S. Fish and Wildlife Service. The red-cockaded woodpecker (RCW) requires longleaf pine habitat, and is the only woodpecker known to create cavities in live trees that are more than 80 years old. DoD has spent \$144.7 million since FY 1993 to ensure continued military access to RCW habitat, reduce training restrictions, and create and link habitat corridors to promote healthy RCW population numbers in the future.



Photo courtesy of Wikimedia Commons. The gopher tortoise is a keystone species found on military lands in the southeastern United States. They are known to produce large burrows that provide shelter and food for over 300 different species. By protecting gopher tortoise habitat, DoD keeps important training lands open and accessible for maneuvers.

CONCLUSION

Installation natural resources professionals demonstrate daily that military mission support and good stewardship are compatible and attainable. Over fifty years after President Eisenhower signed the Sikes Act, DoD, USFWS, the states, and other partners continue to find new ways that this landmark legislation can enable the military to protect both our nation and its invaluable natural resources.

For more information on INRMPs or the relationship between the Sikes Act and DoD's natural resources planning efforts, please visit www.dodnaturalresources.net or www.fws.gov/habitatconservation/sikes_act.html.

The Sikes Act states that each Military Department is responsible for:

- * Preparing an INRMP in cooperation with the Secretary of the Interior, acting through the Director of the USFWS and the head of each appropriate state fish and wildlife agency;
- * Preparing and implementing an INRMP to reflect the parties' mutual agreement concerning fish and wildlife resources conservation, protection, and management; and
- * Ensuring, to the extent feasible, that a sufficient number of professionally trained natural resources management personnel and law enforcement personnel are available and responsible for carrying out all of Title 16 (Conservation), including preparing and implementing INRMPs.

The Sikes Act states that INRMPs shall:

- * Be consistent with the use of military installations to ensure Armed Forces preparedness;
- * Provide for fish and wildlife management, land management, forest management, and fish- and wildlife-oriented recreation to the extent that the use is consistent with the fish and wildlife resource needs and subject to requirements necessary to ensure safety and military security; and
- * Ensure no net loss in the capability of installation lands to support its military mission objectives.

Photo courtesy of the U.S. Fish and Wildlife Service.
Longleaf pine once stretched across 92 million acres around the country. Today, of the 3.4 million remaining acres, over 730,000 are on military installations and ranges in the southeastern United States. Healthy longleaf pine ecosystems provide open and realistic training areas for soldiers and are home to several endangered species, including the gopher tortoise and red-cockaded woodpecker.

MARCH 2012