

# Meet the Military Personnel Who Support and Defend Endangered Animals

There are more endangered species living on acres managed by the U.S. Department of Defense than there are in the nation's national parks.



BY ASHLEY STIMPSON PUBLISHED: AUG 31, 2022



(U.S. Marine Corps photo by Sgt. Jesus Sepulveda Torres)

- More than 500 threatened and endangered species make their home on the nation's military installations; 60 of them live only on land managed by the Department of Defense.
- Protected from public access and private development, military installations harbor some of the largest and most pristine tracts of native habitat left in the U.S.

- The 1960 Sikes Act requires the military to preserve and enhance the natural resources it manages, while maintaining the conditions needed to train soldiers for combat.
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Every February on Marine Base Hawaii, the 3rd Marines Combat Assault Company embarks on a training exercise known as Mud Ops, maneuvering a fleet of amphibious assault vehicles (AAVs) around a 482-acre wetland on the southeastern edge of the base. For three days, AAVs careen through the soggy landscape, their tire tracks leaving behind a mosaic of mud and flattened foliage.

But the enemy during this combat exercise isn't a foreign military—it's an invasive species called pickleweed. If left unmanaged, pickleweed would quickly dominate these wetlands, which happen to be an important breeding ground for Hawaiian stilts, a leggy shorebird and one of the 11 endangered species that calls this base home. During Mud Ops, new marines receive essential training operating AAVs in a realistic environment; the stilts get the wide-open mudflats they need to nest.



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This exercise may sound unconventional, but efforts like this take place on virtually every military installation across the country. Because public access and private development are prohibited on military bases, today there are more endangered species living on acres managed by the U.S. Department of Defense (DOD) than there are in the nation's national parks. More than 500 threatened and endangered species live on military installations, and a staggering 60 of those species—such as Saint Francis' satyr, a tiny butterfly and resident of North Carolina's Fort Bragg—are *only* found on military lands.

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In 1960, Congress passed the Sikes Act, which requires the DOD to protect or enhance the nearly 30 million acres of natural resources it manages, while enabling troops to train in a wide array of the most realistic conditions possible. At first blush, these two goals may seem at odds; after all, heavy artillery and fragile ecosystems don't seem like an ideal mix. But around the country, military personnel are demonstrating that warfare and wildlife can coexist in surprising ways.

## **Bats on an Air Force Bombing Range**





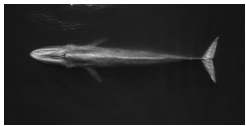
*A Florida bonneted bat.*

Enwebb/Creative Commons

“Even though I work on a bombing range, it is arguably some of the most pristine habitat you’ll find anywhere,” explains Charles “Buck” MacLaughlin, a former Air Force fighter pilot who is now director of operations at Avon Park Air Force Range, a 107,000-acre installation two hours south of Orlando, Florida.

With no unit of its own, MacLaughlin tells *Popular Mechanics* that the base hosts members of all branches of the military, who come to drop Hellfire missiles, fire Howitzers, and perform explosives training. The base also hosts 12 endangered species, including the grasshopper sparrow, the most endangered bird in North America, and the Florida Bonneted bat, the most-endangered bat in North America.

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This is possible because only about 20,000 acres of the range are “impact areas,” MacLaughlin says; the rest are set aside as a safety buffer, unspoiled scrub and prairie habitat that are increasingly hard to find in Florida. Additionally, the range partners with conservation agencies on projects to protect the endangered species in their midst. Avon Park is now one of the release sites of a grasshopper sparrow captive breeding program and partners with the U.S. Fish and Wildlife Service (USFWS) to monitor the bats and their roosts, so that training exercises can be planned around them.

“If we do not take care of the land we’ve been entrusted with, we’ll lose the ability to use that land,” MacLaughlin says, referring to the Sikes Act.

## **A Raft of Wildlife on a Naval Island**







*An island night lizard.*

Don Bartletti // Getty Images

Managed by Naval Base Coronado, San Clemente Island lies in the Pacific Ocean, about 70 miles west of San Diego, making it the perfect spot for the Navy's only ship-to-shore bombardment training range—as well as 300 unique species of plants and animals. Before the Navy acquired the 57-square-mile spit of land in 1932, San Clemente was home to ranchers who introduced a host of invasive and destructive species into the island's ecosystem. Goats, pigs, and rabbits spent decades dining on native plants and ruining the topsoil.

Beginning in the mid-1990s, the Navy partnered with the National Park Service to remove invasive species from the island. Since then, the 20 state and federally endangered species endemic to the island have been on the rebound, including the island night lizard, which was delisted in 2014 after a population count found more than 21 million of them crawling around the base, the highest density of the lizard anywhere on Earth.

Further efforts to remove invasive plants and restore native flora resulted in the 2021 delisting of four previously endangered plant species—the San Clemente Island paintbrush, lotus, larkspur, and bush mallow—as well as the San Clemente Island Bell's sparrow, a bird that thrives in these native grasses and whose population once numbered in the mere dozens.

## **Tiny Songbirds at a Massive Army Installation**





***Brown-headed cowbirds.***

VW Pics // Getty Images

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At Fort Hood in central Texas, where the Army trains not one, but two armored divisions, an epic battle had been playing out for decades between two birds on the installation's 215,000 acres before biologists noticed. Brown-headed cowbirds had been laying their eggs in the nests of black-capped vireos, saddling the much smaller songbird with parenting duties. Typically, the cowbird egg would hatch first, and the larger chick would outcompete the smaller vireo chicks for food—or simply push them out of the nest. By the late 80s, there were fewer than 350 of the vireo left, with 200 of them on the base. In 1987, the bird was added to the endangered species list.

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“It became clear we needed to reduce cowbird parasitism,” David Cimprich, a conservation biologist who works at Fort Hood, tells *Popular Mechanics*. Over the next two decades, Army personnel partnered with the USFWS to trap and exterminate cowbirds, while the mortality of vireo chicks dropped from 90 percent to 10 percent. By 2019, there were 8,000 male black-capped vireos on Fort Hood alone, and the bird was delisted.

With the cowbirds managed, the vireos have thrived because the habitat they prefer—the edges of forests and open grassland—are two ecosystems that the installation's soldiers need for realistic training scenarios like combat drills and armored vehicle exercises. Periodically, Fort Hood's land managers use controlled burns to rejuvenate

the landscape. This, according to Cimprich, “is exactly what we would do if we were managing the habitat for vireos.”

## Monk Seals on a Marine Base

Back on Marine Base Hawaii, home of Mud Ops, the installation’s environmental division celebrated another conservation milestone last year. In June of 2021, celebrity Hawaiian monk seal pup Lōli‘i was transferred to the installation to protect her from the well-meaning but dangerous crowds on Waikiki Beach, where she was born. There are just over 1,500 monk seals left in the wild, and Lōli‘i now enjoys her own private beach—and a security detail no one’s going to mess with.

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### The U.S. Coast Guard, Stewards of the Sea Creatures



*Cmdr. Jeffrey Jager, operations officer for Coast Guard Air Station Barbers Point, and David Schofield, National Oceanic and Atmospheric Administration Marine Mammal Health and Response Program Manager, pre-position seven Hawaiian monk seal decals on an HC-130 Hercules airplane at Air Station Barbers Point, Oahu, May 16, 2016.*

Though it is not a DOD agency, and therefore not bound by the Sikes Act, the U.S. Coast Guard has its own Environmental Protection Program through which it responds to oil spills, rescues trapped or impaired animals, and inspects maritime vessels for invasive species.

The Coast Guard also plays a role in monk seal conservation, often transporting sick seals for treatment or rehabilitated seals for release.

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*Correction, September 14, 2022: An earlier version of this story incorrectly identified the number of monk seals left in the wild. We regret the error.*

ASHLEY STIMPSON

Ashley Stimpson is a freelance journalist who writes most often about science, conservation, and the outdoors. Her work has appeared in the Guardian, WIRED, Nat Geo, Atlas Obscura, and elsewhere. She lives in Columbia, Maryland, with her partner, their greyhound, and a very bad cat.

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