

2024 Secretary of Defense Environmental Awards Natural Resources Conservation, Small Installation Award

Each year since 1962, the Secretary of Defense has honored installations, teams, and individuals for outstanding achievements in Department of Defense (DoD) environmental programs. These accomplishments include outstanding conservation activities, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising DoD's mission success. The 2024 Secretary of Defense Environmental Awards cycle encompasses an achievement period from October 1, 2021, through September 30, 2023 (Fiscal Years [FY] 2022-2023). A diverse panel of 48 judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select 1 winner for each of the 9 categories. These nine categories cover six subject areas including natural resources management, and environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon systems acquisition.

About the Natural Resources Conservation, Small Installation Award

The Natural Resources Conservation, Small Installation award recognizes efforts to promote the conservation of natural resources, including the identification, protection, and restoration of biological resources and habitats; the sound management and use of the land and waters and their resources; support of the military readiness mission; and the promotion of innovative ecosystem management perspectives. Efforts may include engaging in proactive, collaborative conservation efforts to protect threatened, endangered, and at-risk species and their habitats; reducing bird/wildlife aircraft strike hazard incidents; managing proactively to reduce wildfire risks; reducing and eradicating invasive species; and making landscapes more resilient to ensure access to realistic combat environments while protecting ecosystems and the species that live there. Small installations have fewer than 10,000 acress and can include leased, military-owned, or administered ranges, or training practice areas. The 2024 winner of the Natural Resources Conservation, Small Installation award is *Minot Air Force Base, North Dakota*.

About Minot Air Force Base, North Dakota

Minot Air Force Base (AFB) is located in North Dakota, 15 miles north of the City of Minot and 40 miles south of the United States-Canada border, on the ancestral lands of the Anishinaabe. Assiniboine, and Oceti Sakowin tribes. Minot AFB is home to two Air Force Global Strike Command units, the 5th Bomb Wing and the 91st Missile Wing, as well as 5,707 military personnel, 1,038 civilians, contractors, private businesses, and 5,644 family members and retirees. The base has an annual economic impact of \$606 million to the area. Minot AFB carries out both missions of the 5th Bomb Wing and 91st Missile Wing while balancing natural resources conservation against the need to reduce wildlife hazards to the missions. To accomplish these goals, Minot AFB's Natural Resources Program works alongside the U.S. Fish and Wildlife Service (USFWS) and North Dakota Game and Fish department to develop and annually review the Installation Natural Resources Management Plan.



Minot AFB takes great pride in being able to accomplish its mission amidst some of the most challenging winter elements in the United States. Low temperatures reaching -40°F (-60°F with windchill) and an average of 45 inches of snow from October to April add challenges for Natural Resources Management.

Major Accomplishments in FY 2022-2023

- Minot AFB implemented a raptor translocation program to decrease the lethal take of 14 raptor species on base due to wildlife-aircraft collisions. In FY2022-2023, Minot AFB captured 55 juveniles from 6 raptor species, including the boreal owl. Minot AFB translocated the juveniles 50 miles to be released on Federal lands. The capture of the boreal owl was the first ever to be recorded for the State of North Dakota. These efforts reduced bird-aircraft strike risk, promoted natural raptor populations, and contributed to scientific knowledge on raptor ecology, including movement and longevity. Success of the translocation efforts was evident in a zero-percent return rate.
- Minot AFB partnered with the City of Minot Pollinator Project, Minot Public Schools, USFWS, and Audubon National Wildlife Refuge to secure a \$5,000 grant to restore 5 acres of schoolleased land to native pollinator habitat. Using no-till methods, Minot AFB sowed over 70 pounds of native pollinator seed mix, including 9 grass and 15 flower species, that supports the 30 North Dakota Species of Conservation Priority in Minot. This effort increased resources critical to declining grassland birds and provided habitat for Federally endangered pollinators.
 Minot AFB joined Bumble Bee Watch, a multi-organizational



Raptors, such as this Northern Sawwhet Owl, pose a bird to aircraft strike risk. Minot AFB implemented a translocation program to capture, band, and relocate raptors to reduce lethal take.

effort to track and conserve North America's bumble bees. This ^{lethal take.} effort led to the first cataloging of bumble bee species on the installation, including two Bumble Bee Watch Species of Conservation Concern.

- Minot AFB gained approval for several biocontrols, or using one organism to control another, to reduce invasive species on base. After identifying the presence of the spurge hawk-moth, which targets the invasive leafy spurge, Minot AFB stopped pesticide-spraying in areas containing hawk-moth caterpillars, allowing the insect to breed and continue reducing the invasive plants.
- In June 2023, Minot AFB committed to the North American Bat effort to monitor its bat populations. During the achievement period, Minot AFB deployed 4 bioacoustic recorders and gained 192 hours of bat sounds. These efforts confirmed the presence of eight bat species, including two endangered species, which spurred efforts to create bat houses on the installation.
- Minot AFB installed trail cameras to monitor wildlife in shelterbelts and other key habitats throughout the installation. The monitoring and follow-on trapping led to the identification of six new mammal species not previously recorded on the installation. One of these mammal species is the Arctic shrew, a North Dakota Species of Conservation Priority. Minot AFB also recorded 27 species of birds not previously recorded on the installation by using new sound recording equipment combined with bird song identification software.
- In May 2023, Minot AFB set a target to complete an installation-wide tree inventory within five years. Forming a Vegetation Management Group, Minot AFB collaborated with security forces to identify trees too close to fences and other infrastructure, as well as dead-standing trees, diseased trees, and trees at risk to high wind damage. Attaining this goal allows Minot AFB staff to plan for tree loss due to damage, climate change, or pests. In addition, tree assessments led to members of the 5th Civil Engineer Squadron removing 60 trees and 461 feet of dense shrubs that were creating security obstructions.



Airman First Class Thomas Reed, Senior Airman (SrA) Tran Phuc, and SrA Hayden Gerdes use geospatial coordinates as part of an effort to complete a 100 percent inventory of all trees at Minot AFB.