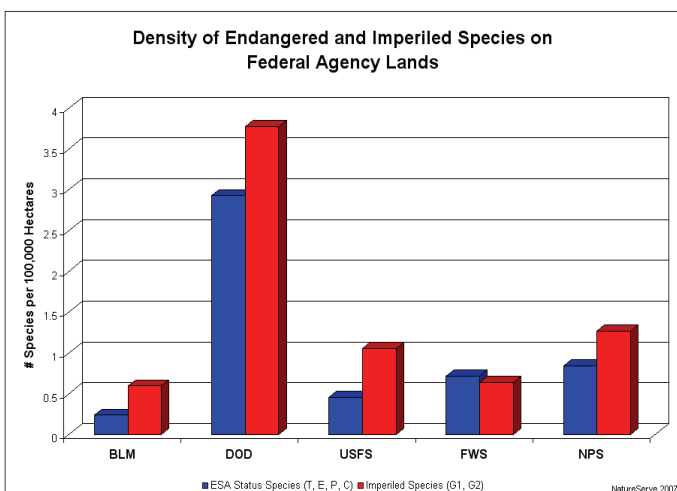


Threatened and Endangered Species on DoD Lands

Background

The U.S. Department of Defense (DoD) plays a vital role in the conservation of many rare plant and animal species. In the U.S., DoD manages approximately 30 million acres of land across approximately 420 large military installations (greater than 500 acres); 355 of those installations have natural resources significant enough to require active management plans. Access limitations due to security and safety concerns shelter many military lands from development pressures and large-scale habitat loss. As a result, some of the finest remaining examples of rare wildlife habitats are found on military installations. In fact, DoD has the highest density of species listed as threatened or endangered (T&E) under the Endangered Species Act (ESA) of any other federal land management agency, as shown in the following figure.



DoD is responsible for the management and protection of all 420 T&E species found on its installations. Each installation has different requirements for both species protection and military training. To best manage for its diverse training requirements and for T&E species, DoD communicates and collaborates with the U.S. Fish and Wildlife Service (USFWS). This partnership enables DoD to carry out its mission requirements, while ensuring the continued use of sound science in the conservation and protection of T&E species on DoD lands.

DoD T&E Expenditures

Each fiscal year (FY), the Military Services are required to file a report with the USFWS outlining their T&E species expenditures. These data summarize the costs of T&E species management on DoD lands, and include actions such as species surveys, monitoring, research, and management efforts. The USFWS then reports these

expenditures in its report of all federal agencies to Congress.

This fact sheet provides a summary of DoD reported T&E species expenditures from FY1993-FY2008. The number of T&E species and expenditures for each of the Military Services during this period are listed below:

Service	Species ¹	Expenditures FY93-FY08
Air Force	90	\$152,172,060
Army	174	\$335,881,930
Marine Corps	58	\$45,786,790 ²
Navy	120	\$80,094,315
Total	420	\$613,935,090

1. Many species are managed by more than one Service.
2. FY93 and FY99 totals reported with the Navy.

From FY93 to FY08, DoD invested most heavily in the following ten species:

1. Red-cockaded Woodpecker \$99.6 million
2. Desert Tortoise \$71.3 million
3. San Clemente Loggerhead Shrike \$24.7 million
4. Mexican Spotted Owl \$20.8 million
5. Bald Eagle \$18.2 million
6. Black-Capped Vireo \$16.4 million
7. Golden-Cheeked Warbler \$14.4 million
8. California Least Tern \$11.5 million
9. Western Snowy Plover \$11.2 million
10. Southwestern Willow Flycatcher \$10.4 million



The Desert tortoise (*Gopherus agassizii*) is listed as threatened under the ESA and is found on 11 DoD installations.



Greatest expenditures per species by each Military Service between FY93 to FY08:

- Army:** Red-cockaded Woodpecker - \$71.4 million
- Air Force:** Red-cockaded Woodpecker - \$22.8 million
- Navy:** San Clemente Loggerhead Shrike - \$24.7 million
- Marine Corps:** Least Bell's Vireo - \$5.1 million

The endangered Indiana Bat (*Myotis sodalis*), found on 10 Army installations and one Air Force base, received more funding than any other mammal on DoD lands: \$10.4 million over the last 15 years.



Photo: USFWS

DoD's top ten species by expenditure in FY08 were:

- | | |
|-----------------------------------|--------------|
| 1. Red Cockaded Woodpecker | \$13,300,000 |
| 2. Desert Tortoise | \$5,882,408 |
| 3. San Clemente Loggerhead Shrike | \$1,984,151 |
| 4. Indiana Bat | \$1,372,996 |
| 5. Western Snowy Plover | \$1,279,156 |
| 6. Oregon Silverspot Butterfly | \$1,125,000 |
| 7. Kuenzler Hedgehog Cactus | \$1,042,000 |
| 8. Bald Eagle | \$986,386 |
| 9. California Least Tern | \$984,883 |
| 10. Florida Scrub Jay | \$861,020 |

Taxonomic Group	No. of Species	Expenditures FY93 – FY08
Amphibians	8	\$6,801,810
Arachnids	4	\$1,308,000
Birds	65	\$300,737,500
Clams	12	\$128,700
Crustaceans	8	\$10,188,140
Ferns and allies	4	\$1,797,000
Fishes	23	\$20,868,630
Insects	17	\$9,729,990
Lichens	1	\$163,800
Mammals	65	\$54,780,260
Mollusks	0	\$0
Plants	208	\$71,272,220
Reptiles	26	\$94,589,750
Snails	15	\$3,605,370
Other [#]	x	\$56,005,954
Total	456*	\$631,977,110

[#]Includes expenditures not attributable to a single species.

*Includes candidate species and species no longer listed under the ESA as of FY08.

DoD T&E Management Efforts

Installation efforts to manage T&E species primarily focus on the implementation of Integrated Natural Resource Management Plans (INRMPs). INRMPs are planning documents that allow DoD installations to implement landscape-level management of their natural resources, including T&E species. INRMPs identify specific actions required to attain natural resource management goals and associated budget requirements.

Specific management actions identified in installation INRMPs vary by species and landscape, but can include captive breeding programs, habitat enhancement, prescribed burning, invasive species management, noise effect studies, monitoring, and inventory.

Top 10 installations: greatest number of T&E species

Rank	Service	Installation	State	No. of species
1	Army	Schofield Barracks Military Reservation	HI	47
2	Army	Makua Military Reservation	HI	39
3	Navy	Lualualei Naval Reservation	HI	38
4	Army	Pohakuloa Training Area	HI	17
5	Marine Corps	Marine Corps Base Camp Pendleton	CA	17
6	Navy	San Clemente Island Range Complex	CA	10
7	Air Force	Eglin Air Force Base	FL	10
8	Air Force	Vandenberg Air Force Base	CA	10
9	Army	Fort Lewis Military Reservation	WA	10
10	Air Force	Avon Park Air Force Range	FL	10

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