

# Species At-Risk on DoD Lands

## What Species At-Risk Are

Species at-risk (SAR) are native plants or animals that are not yet listed as threatened or endangered under the federal Endangered Species Act (ESA). As a result, the ESA does not protect these species. So they have some protections, the U.S. Fish and Wildlife Service (USFWS) may designate SAR as candidates for listing. Risk to a species also can be determined by its global rank, as defined by NatureServe.



*Common Terns have declined significantly in the Great Lakes region.  
Photo: USFWS*

## Threats to Species At-Risk

There are many threats to listed and at-risk species:

- development eliminates or fragments important habitats;
- invasive species, pollution, and other factors degrade habitats to the point where they can no longer provide essential food and shelter;
- climate change alters species' ranges and destroys sensitive habitats;
- diseases that can decimate populations are on the rise due to climate change; and
- poaching and over-hunting can deplete populations.

Loss of habitat is the number one cause for species endangerment and the increase of SAR in the lower 48 states; invasive species are the number one cause in Hawaii.

## Importance to DoD

DoD manages its lands and waters to support both the military mission and a healthy environment. This dual management strategy is important because DoD lands harbor more federally listed species per acre than any other major federal land management agency. DoD lands also protect more imperiled species than lands managed by the National Park Service or the USFWS.

Species experiencing significant population declines are at risk of the USFWS listing them as threatened or endangered under the ESA. Once the USFWS lists a species, it becomes more difficult and more expensive to manage. Therefore, keeping species from becoming listed is a top DoD priority. Conserving SAR protects biodiversity and allows DoD to continue its high quality training activities in realistic environments. For these reasons, protecting SAR is a win-win scenario for DoD.

## Number of Species At-Risk on DoD Lands

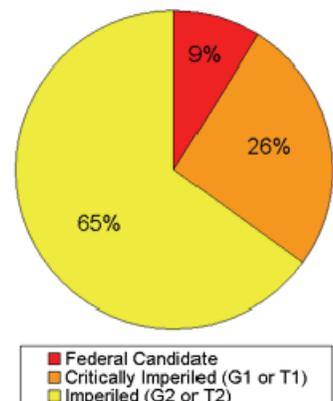
According to a study prepared by NatureServe, there are 523 SAR on DoD installations and civil works properties in the U.S. Total SAR are listed below. Some SAR exist on lands operated by more than one Military Service.

- Army: 240
- Navy: 154
- Air Force: 146
- Marine Corps: 21
- Army Corps of Engineers: 86

In terms of density, the number of SAR per 100 square miles on DoD installations and civil works properties in the U.S. varies significantly.

- Army: 3.0
- Navy: 3.6
- Air Force: 1.2
- Marine Corps: 1.4
- Army Corps of Engineers: 0.5

*SAR by Status  
Source: NatureServe*



## Types of Species At-Risk on DoD Lands

DoD manages nearly 30 million acres of land. Of the 523 SAR on those lands:

- 47 are federal candidates;
- 136 are critically imperiled;
- 340 are imperiled;
- 352 are vascular plants;
- 107 are invertebrates;
- 64 are vertebrates;
- 24 exist only on military installations; and
- 82 have half of their entire population on DoD lands.

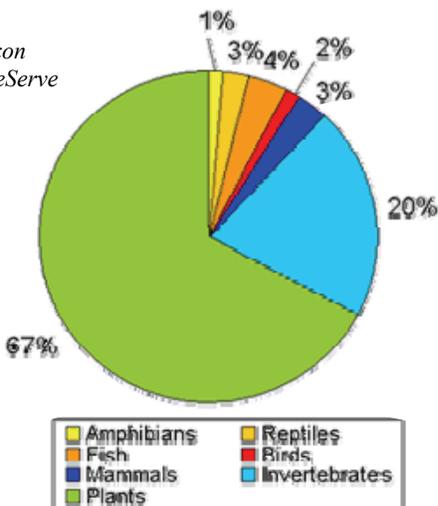
Installations in Hawaii, California, Florida, and New Mexico have the most SAR.

## Managing Species At-Risk on DoD Lands

It is a DoD priority to prevent further SAR declines. To help DoD managers to this, the DoD Legacy Program funded the development of *Management Guidelines for Species at Risk on Department of Defense Installations* (03-154). Following these guidelines could help prevent the USFWS from listing additional species under the ESA. This, in turn, would help the Military Services meet their training requirements. Factors to consider when developing SAR guidelines include:

- range, status, and life history;
- habitat requirements;
- existing and potential threats;
- existing and potential partnerships;
- adaptive management and monitoring techniques;
- research needs;
- information management techniques;

SAR by Taxon  
Source: NatureServe



- measuring plan effectiveness techniques;
- timeline for plan implementation; and
- feasibility.

But, to implement this priority, DoD needs to allocate more resources to protect SAR and their habitats. This is especially true in biologically rich areas, such as those in Hawaii, California, Florida, and New Mexico.



The USFWS may soon list the Pacific walrus under the ESA.  
Photo: USFWS

## DoD's Work to Protect Species At-Risk

The DoD Natural Resources Conservation Program provides policy, guidance, and oversight for managing DoD natural resources. Through the Conservation Program, DoD works to protect all species on its lands and in its waters, including SAR. Examples of DoD's work to protect SAR include:

- establishing SAR as a "must fund" priority in the DoD Instruction, which defines DoD policy and assigns responsibilities for the DoD Natural Resources Conservation Program;
- coordinating with the USFWS and states;
- implementing SAR management guidelines; and
- forming partnerships to implement high priority SAR projects.

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