

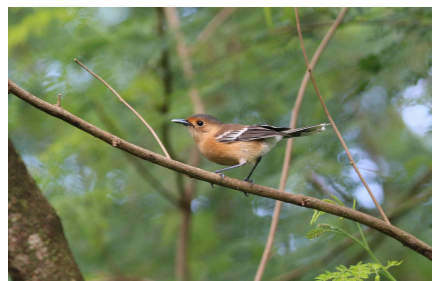
# Mission-Sensitive Species (Hawaii and Pacific Islands)

Those species with the highest potential to impact DoD missions if federally listed under ESA

Content Author: Frans Juola Ph.D., NAVFAC Pacific

## Background

Department of Defense (DoD) Partners in Flight (PIF) has identified, through a detailed technical analysis, eight avian species in the Pacific Islands (including Hawai'i, Guam, Wake Island, and the Mariana Islands) occurring on DoD lands that may be at risk of becoming listed under the federal Endangered Species Act (ESA) (Table 1). DoD PIF designated these as "Mission-sensitive Species" (MSS) due to their high potential to impact the military mission should ESA listing be warranted. The purpose of the MSS lists for the Continental United States (CONUS) and Outside Continental United States (OCONUS) Pacific Islands, is to help DoD natural resources managers prioritize monitoring and management efforts of those species and their habitats to help reverse trends and/or prepare installations for potential listings. The DoD PIF MSS lists provide recommendations based on the best available science and are not intended to supersede Military Service-specific monitoring, management, or funding priorities.



*The Tinian Monarch (Monarcha takatsukasae), a small flycatcher on the Island of Tinian, CNMI, is a DoD Mission-sensitive Species under threat by the potential introduction of the Brown Tree Snake (Credit: Tamara Conkle)*

## Review Criteria

Location and conservation status were the main factors in determining the species list for Hawaii and the Pacific. Specifically, species were considered only

if they were present on DoD installations (or important training areas) in Hawaii or the Pacific and hold a current conservation status that warrants concern. This included Federal status as ESA-candidate, species of Conservation Concern, or Vulnerable, State (Hawaii) status as Threatened or Endangered, or local government status (Commonwealth of the Northern Mariana Islands; CNMI) as a Species of Greatest Conservation Need.

Species that occurred on at least one DoD installation or training area and held at least one of these conservation status categories were included in the final list.

## Assessment Results

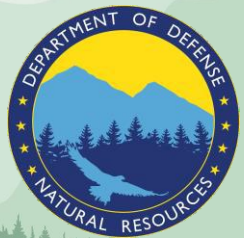
Based on these criteria, 17 species were included, split between Tier 1 and Tier 2 species. Tier 1 (Table 1) includes seven Mission-sensitive Species. These are considered the most potentially impactful species to the DoD mission based on location and current conservation status. Tier 2 (Table 2), which are those experiencing long-term declines and have some potential relevance to future mission impacts if federally listed, includes an additional 10 species worthy of inclusion but whose potential impacts to future DoD missions is less certain. Seven CNMI species were included whose populations are currently stable but are under threat by the potential introduction of the Brown Tree Snake. The remaining three species from Hawaii have populations more stable than other Hawaii species, are found at lower elevations, and in some cases, have shown resistance to avian malaria. However, inclusion was still warranted based on a suite of threats and stressors that all these birds face in the Pacific, mainly loss of habitat and predation by non-native predators.



Department of Defense  
Partners in Flight

## Our Mission

*Providing expertise on the management and conservation of birds and their habitats to sustain and enhance the military mission*



## Contact

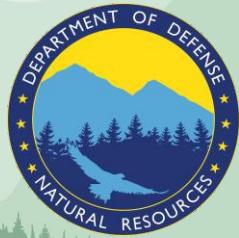
Richard Fischer, Ph.D.  
DoD PIF National Coordinator  
Richard.A.Fischer@erdc.dren.mil



Department of Defense  
Partners in Flight

### Our Mission

*Providing expertise on the management and conservation of birds and their habitats to sustain and enhance the military mission*



# Mission-Sensitive Species (Hawaii and Pacific Islands)

Those species with highest potential to impact DoD missions if federally listed under ESA

## Reviewing and Updating the MSS Lists

DoD PIF encourages and accepts input from the Military Services, including military natural resources managers, on additions and deletions to the MSS lists based on best available scientific information. We will identify any emerging needs annually and complete a thorough review of both MSS and Tier 2 species every 5 years.



*Three species of 'Amakihi occur in Hawaii. Two (Oahu and Kaua'i) species are MSS, and this species from the island of Hawaii is designated as Tier 2 (Credit: Tim Burr)*



*The Hawaiian Short-eared Owl (*Asio flammeus sandwichensis*), also known as Pueo, is a DoD Mission-sensitive Species that occurs on at least eight military installations (Credit: Tim Burr)*

**Table 1. DoD PIF Pacific Islands Mission-Sensitive Species**

Tinian Monarch	Black-footed Albatross
Christmas Shearwater	White Tern
Hawaiian Short-eared Owl	Oahu 'Amakihi
Kauai 'Amakihi	

**Table 2. DoD PIF Pacific Islands Tier 2 Species**

Micronesian Honeyeater	Rufous Fantail
Micronesian Starling	White-throated Ground Dove
Mariana Fruit-Dove	Golden White-eye
Mariana Kingfisher	Hawaii 'Elepaio
Hawaii Thrush	Hawaii 'Amakihi

### Contact

Richard Fischer, Ph.D.  
DoD PIF National Coordinator  
Richard.A.Fischer@erdc.dren.mil

# Occurrences of Tier 1 and Tier 2 Species on Pacific Islands Installations

Common Name	Hawaiian Name	Army Bases	MCB Hawaii	Joint Base Pearl Harbor-Hickam	Regional Trng. Instit. (ARNG)	Pacific Missile Range Facility	Kekaha Firing Range (ARNG)	Kaula Island		Hawai'i		Guam		Mariana Islands		Wake Island
								Kaula Rock		Pohakuloa Training Area	Keaukaha Mil. Res. (ARNG)	Andersen AFB	Naval Base Guam	Tinian / Saipan	Farallon de Medinilla	
<b>Tier 1 Mission-sensitive Species</b>																
Tinian Monarch														X*		
*Black-footed Albatross	Ka'upu					X		X*								
Christmas Shearwater			X					X*								X*
White Tern	Manu-o-ku		X	X				X*						X*		X*
Hawaiian Short-eared Owl	Pueo	X	X*	X*	X	X	X		X	X						
Oahu 'Amakihi		X		X												
Kauai 'Amakihi						X										
<b>Tier 2</b>																
Micronesian Honeyeater														X*		
Rufous Fantail														X*		
Micronesian Starling											X*	X*		X*		
White-throated Ground Dove														X*	X*	
Mariana Fruit-Dove														X*	X*	
Golden White-eye														X*		
Mariana Kingfisher														X*		
Hawaii 'Elepaio									X							
Hawaii Thrush	'Oma'o								X							
Hawaii 'Amakihi									X							

- X Regularly found on property
- X\* Confirmed nesting
- X Species observed along facility boundary and believed to utilize facility
- X Nest on adjacent islet and found within airspace