

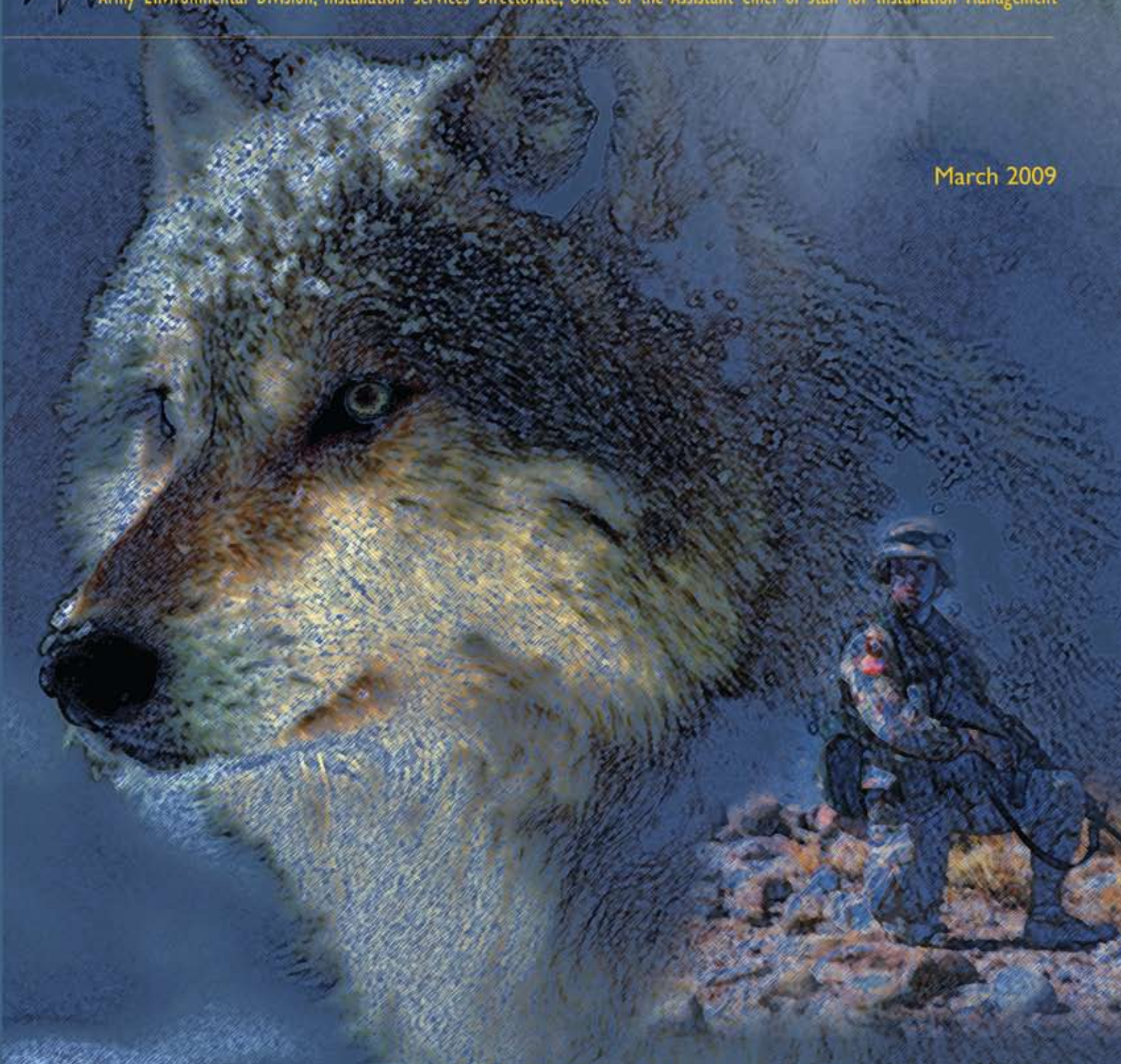


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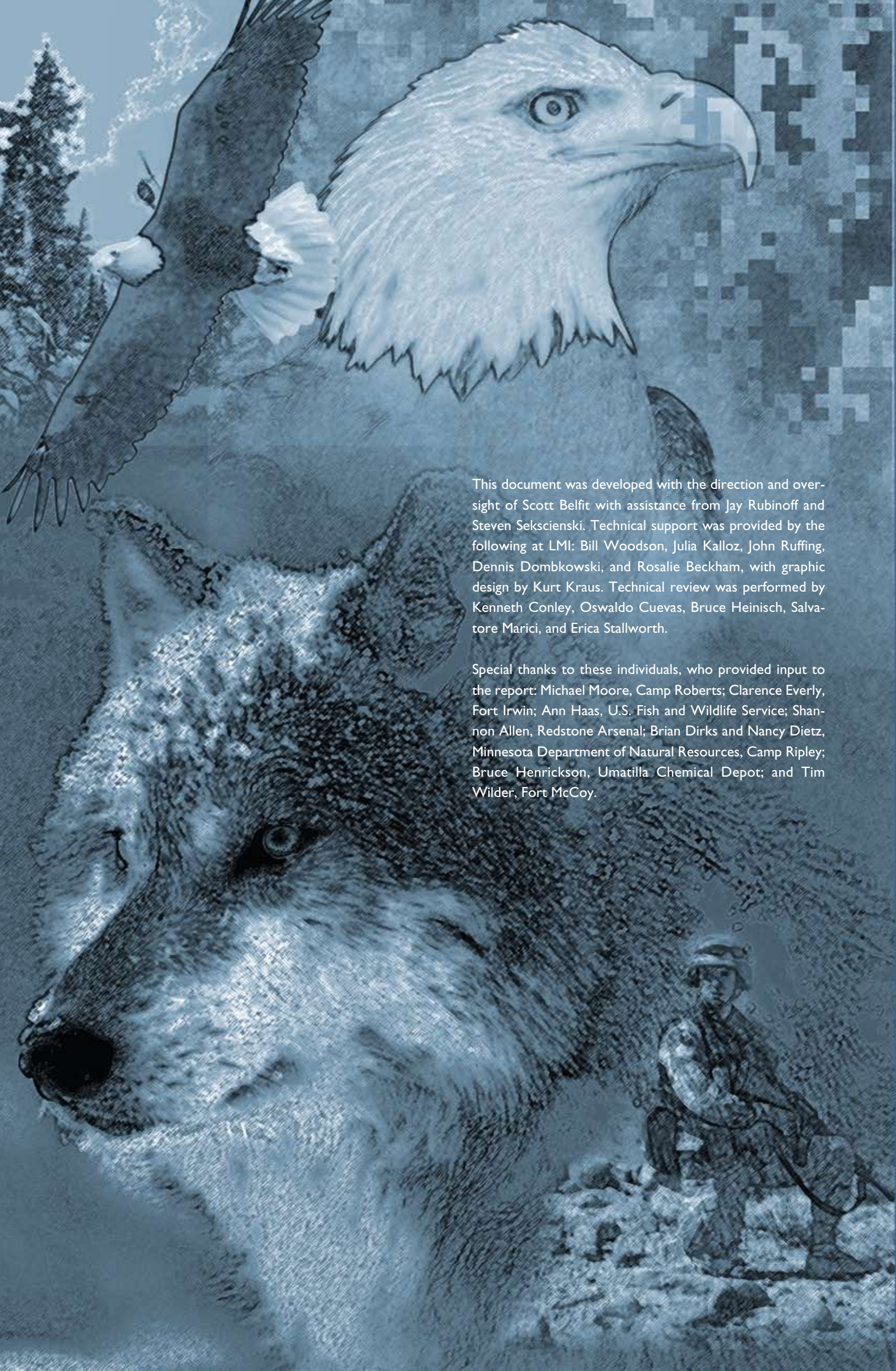
**INSTALLATION SUMMARIES
FROM THE FY 2007 SURVEY OF THREATENED
AND ENDANGERED SPECIES ON ARMY LANDS**



Army Environmental Division, Installation Services Directorate, Office of the Assistant Chief of Staff for Installation Management



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EXECUTIVE SUMMARY

The Army has identified 188 threatened and endangered (T&E) species on 99 installations for fiscal year (FY) 2007. By far the most common category is plants, which account for 62 percent of the T&E species (Figure 1), followed by birds (14 percent). The other categories of T&E species are amphibians, crustaceans, fish, insects, mammals, other invertebrates, reptiles, and snails.

The following are highlights of critical habitat in FY 2007:

- Fourteen species with critical habitat designations are reported on 15 Army installations.
- Two installations reported new critical habitat designations: Local Training Area–Aviation (Weyerhaeuser), WA; and Presidio of Monterey, CA.
- Makua Military Reservation, HI, reported critical habitat contiguous¹ to the installation for 31 species.
- Critical habitat for the northern spotted owl is no longer designated at Fort Lewis, WA.

- Three installations avoided new critical habitat designations; those instances involved Kincaid's lupine at Corvallis/Camp Adair, OR; and the southern resident killer whale at Fort Lewis and Pier 23, WA.

During FY 2007, the Army spent \$45.09 million on T&E species management. This sum included Endangered Species Act (ESA) reportable expenditures of \$35.83 million and non-reportable expenditures of \$9.26 million² (see Figure 2). These amounts do not include expenditures by military operations or military construction for work-arounds and avoidance.

The 10 installations with the highest reportable expenses accounted for 68 percent of the Army's total reportable expenses (Table 1). The red-cockaded woodpecker and desert tortoise required the most expenditure of all species—not just in FY 2007, but also cumulatively for the past 5 years (Tables 2 and 3). Table 2 shows the top 10 species, in terms of expenditures, for FY 2007 and FY 2006.

Appendixes A, B, and C provide data on all the installations and federally designated threatened, endangered, proposed, and candidate (TEPC) species reported in FY 2007. The data have been sorted by installation, scientific name, and common name to allow for quick and easy reference.

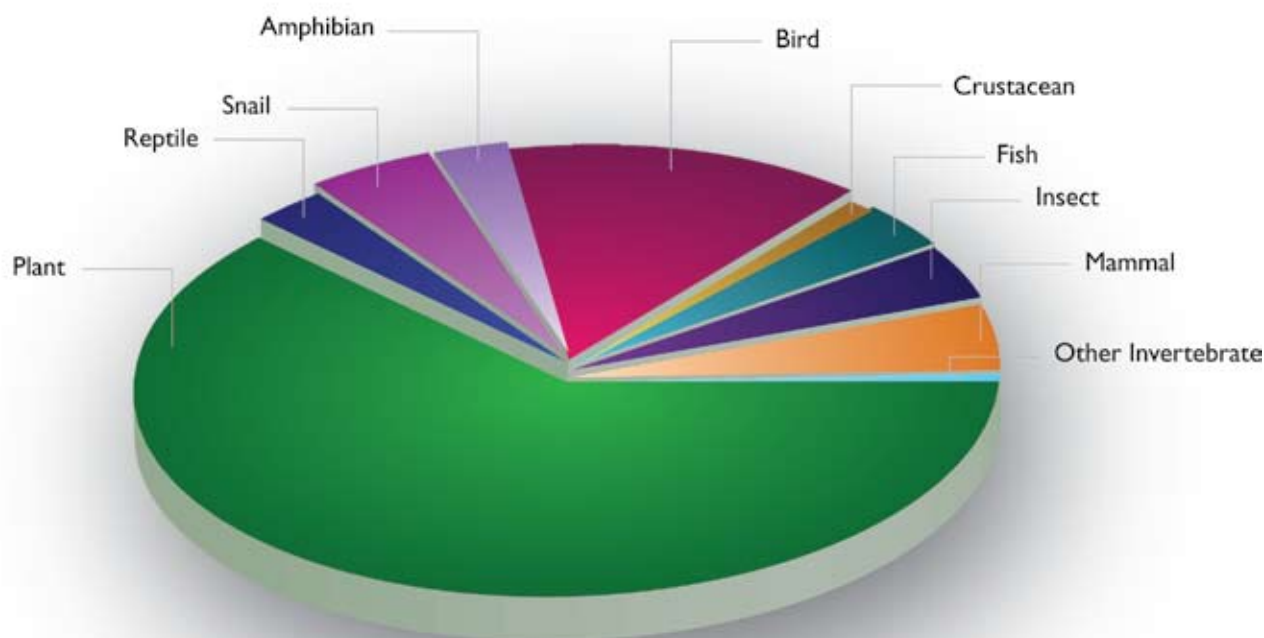


Figure 1
Onsite T&E Species by Category for FY 2007

¹ Critical habitat adjacent to an installation that could be affected by installation actions.

² The Endangered Species Act requires federal agencies to report expenses. Reportable expenses are those associated directly with a specific, individual species; non-reportable expenses are those spent on multi-species projects where no specific amount is attributable to individual listed species.

Figure 2
Reportable and Non-Reportable T&E Expenses

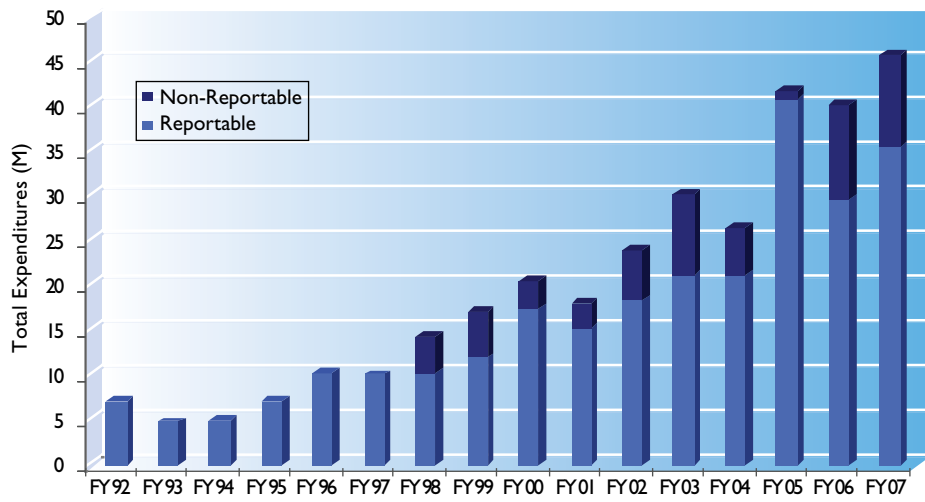


Table 1
Top 10 T&E
Expenditures by
Installation for
FY 2007

INSTALLATION	REPORTABLE EXPENDITURES (\$K)
National Training Center and Fort Irwin	\$4,707.2
Makua Military Reservation	\$4,442.2
Pohakuloa Training Area	\$3,907.8
Fort Benning	\$2,348.0
Aberdeen Proving Ground	\$2,050.0
Fort Bragg	\$1,919.4
Schofield Barracks	\$1,782.4
Kawailoa Training Area	\$1,188.3
Fort Huachuca	\$1,138.5
Fort Hood	\$1,100.0

FY 2007

FY 2006

COMMON NAME	SCIENTIFIC NAME	EXPENDITURE (\$K)	COMMON NAME	SCIENTIFIC NAME	EXPENDITURE (\$K)
Woodpecker, red-cockaded	Picoides borealis	\$6,908.8	Woodpecker, red-cockaded	Picoides borealis	\$5,654.4
Tortoise, desert (U.S.A., except in Sonoran Desert)	Gopherus agassizii	\$4,814.3	Eagle, bald	Haliaeetus leucocephalus	\$2,576.7
Eagle, bald	Haliaeetus leucocephalus	\$2,368.6	Tortoise, desert (U.S.A., except in Sonoran Desert)	Gopherus agassizii	\$2,461.9
Bat, Indiana	Myotis sodalis	\$1,706.2	Bat, Indiana	Myotis sodalis	\$1,594.2
Tortoise, gopher	Gopherus polyphemus	\$1,288.3	Tortoise, gopher	Gopherus polyphemus	\$1,144.0
Vireo, black-capped	Vireo atricapilla	\$863.7	Vireo, black-capped	Vireo atricapilla	\$1,032.9
Warbler (=wood), golden-cheeked	Dendroica chrysoparia	\$833.0	Warbler (=wood), golden-cheeked	Dendroica chrysoparia	\$625.0
Owl, Mexican spotted	Strix occidentalis lucida	\$452.5	Bat, gray	Myotis grisescens	\$587.7
Bat, gray	Myotis grisescens	\$451.3	Owl, Mexican spotted	Strix occidentalis lucida	\$382.9
Water-umbel, Huachuca	Lilaeopsis schaffneriana var. recurva	\$330.0	None	Spermolepis hawaiiensis	\$339.4
Total		\$20,015.7	Total		\$16,399.1

Table 2
Top T&E Expenditures by Species for FY 2007 and FY 2006

Table 3
Top T&E
Expenditures by
Species FY 2003 —
FY 2007

COMMON NAME	SCIENTIFIC NAME	EXPENDITURE (\$K)
Tortoise, desert	Gopherus agassizii	\$33,410.7
Woodpecker, red-cockaded	Picoides borealis	\$25,646.2
Eagle, bald	Haliaeetus leucocephalus	\$9,139.7
Vireo, black-capped	Vireo atricapilla	\$6,225.6
Bat, indiana	Myotis sodalis	\$6,122.3
Warbler, golden-cheeked	Dendroica chrysoparia	\$5,561.0
Tortoise, gopher	Gopherus polyphemus	\$5,312.3
Bat, gray	Myotis grisescens	\$3,247.2
Owl, Mexican spotted	Strix occidentalis lucida	\$1,575.3
Flycatcher, Southwestern willow	Empidonax traillii extimus	\$1,454.9
Total		\$97,695.2



I NTRODUCTION

Background

The Army's mission is to provide national defense. However, as a federal agency, the Army is also required by the ESA to conserve the federally listed T&E species that occur on the lands where it conducts the training of soldiers, testing of weapons, and all other functions essential for national defense. Data collection efforts provide the Army with information to monitor and manage TEPC species, at risk (SAR), and their habitats (refer to pages 28-31 for definitions of acronyms). Each year, installations enter data on TEPC species into the Army Environmental Database – Environmental Quality (AEDB-EQ) to provide Headquarters, Department of the Army (HQDA) with a list of TEPC species occurring within their boundaries and on land contiguous to them. This information enables the Army to assess the status of its TEPC species nationwide, to plan for expenditures related to TEPC species, to deal proactively with any potential conflicts between TEPC species and the military mission and management efforts, and to implement proactive conservation measures that benefit candidate species and SAR to help prevent the need to list them as threatened or endangered. The information provided in this report only reflects those TEPC species that are found on or adjacent to property owned or leased by the Army. The Army also trains on land owned by other military services. Such lands may have restrictions due to listed or proposed species that affect timing, duration, and intensity of training, such as Army National Guard (ARNG) training on Camp Pendleton or Eglin Air Force Base. The respective service landowner reports these species, so they are not captured in this report. However, the Army is still required to comply with ESA for actions on these sites; therefore, the Army's financial responsibility for ESA compliance extends beyond Army owned or leased properties. This report does not address TEPC species found on installations that are closed or being closed under Base Realignment and Closure (BRAC) law. The Army does not require these installations to submit data into the AEDB-EQ, nor are they required to prepare Integrated Natural Resources Management Plans (INRMPs) under the Sikes Act (Public Law 86-797, as amended; 16 United States Code (U.S.C.) §§ 670-670f). These installations may not have an impact on military training or testing, but the presence of listed species could provide tremendous challenges in the effort to close or dispose of BRAC property.

Objective

The objective of this report is to analyze and communicate the most current TEPC species information from the FY 2007 AEDB-EQ and other available data sources. These data will help the Army comply with its obligations under the ESA and perform its role as an active and effective steward of public land while carrying out its military mission.

Approach

Information summarized by this report is collected from the AEDB-EQ and other sources. The U.S. Army Environmental Command (USAEC) provided the AEDB-EQ data and other information obtained from the U.S. Fish and Wildlife Service (FWS), National Oceanic and Atmospheric Administration - National Marine Fisheries Service (NOAA-Fisheries), Commands, and installations. Installation management stories and photographs were collected directly from installations through the chain of command.

Scope

This report encompasses Army installations with federally listed species onsite or on contiguous land as of the end of FY 2007 (30 September 2007). The bald eagle is reported here as threatened; however, it was delisted late in the FY (8 August 2007). Federally listed species designations include: threatened, endangered, proposed threatened, proposed endangered, or candidate. For practical purposes, the survey represents a complete census of Army installations with TEPC species. The USAEC tracks the interim status of all information, including new federal listings, species status, and critical habitat designations on Army lands. The USAEC provides electronic mail distribution of information from the Federal Register and other sources.

Organization of This Report

This report features changes from the FY 2006 report, a summary of significant information and data for FY 2007, highlighted subjects of conservation and Army management, and a section on migratory birds. Definitions, acronyms, and references are included in the final three sections of the report. The five appendixes are included for convenient, quick reference for specific species and installation data.



CHANGES FROM FY 2006 THREATENED, ENDANGERED, PROPOSED AND CANDIDATE SPECIES SURVEY

Table 4 shows 44 species reported on or contiguous to installations in FY 2007 that were not reported in FY 2006. The newly reported species include 33 plants, 5 mammals, 2 insects, 2 snails, 1 bird, and 1 reptile. Thirty-one of the species are reported from installations in Hawaii. See Appendixes A, B, or C for information about whether these species are reported as occurring onsite or on lands contiguous to the installations.

Table 4
Species Reported in FY 2007 that were not Reported in FY 2006

CATEGORY	COMMON NAME	SCIENTIFIC NAME	STATUS	INSTALLATION
Bird	Tern, California Least	<i>Sterna antillarum browni</i>	E	PFC L.T. Baccigleiri Hall AFRC and AMSA 13 (M), Mare CA Isle
Insect	Damselfly, blackline Hawaiian	<i>Megalagrion nigrohamatum nigrolineatum</i>	C	Kawailoa TA
Insect	Damselfly, crimson Hawaiian	<i>Megalagrion leptodermis</i>	T	Schofield Barracks
Mammal	Kangaroo rat, giant	<i>Dipodomys ingens</i>	E	Leymel Hall USARC
Mammal	Kangaroo rat, San Bernardino Merriam's	<i>Dipodomys merriami parvus</i>	E	March USARC/AMSA 19 (G)
Mammal	Mouse, Pacific pocket	<i>Perognathus longimembris pacificus</i>	E	March USARC/AMSA 19 (G)
Mammal	Rabbit, New England cottontail	<i>Sylvilagus transitionalis</i>	C	Hollis Plains TS
Mammal	Whale, beluga	<i>Delphinapterus leucas</i>	PE	Fort Richardson
Plant	Aiakeakua, popolo	<i>Solanum sandwicense</i>	E	Makua Military Reservation
Plant	Aiea	<i>Nothoecstrum latifolium</i>	C	Makua Military Reservation
Plant	Akoko	<i>Euphorbia haeleleana</i>	E	Makua Military Reservation
Plant	Alani	<i>Melicope hiakae</i>	C	Kawailoa TA
Plant	Alani	<i>Melicope pallida</i>	E	Makua Military Reservation
Plant	Aupaka	<i>Isodendron hosakae</i>	E	Pohakuloa TA
Plant	Boyd's maiden fern	<i>Christella boydiae</i>	C	Kawailoa TA
Plant	Brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T	Tustin USARC
Plant	Daisy, Parish's	<i>Erigeron parishii</i>	T	March USARC/AMSA 19 (G)
Plant	Fiddleneck, large-flowered	<i>Amsinckia grandiflora</i>	E	PFC L.T. Baccigleiri Hall AFRC
Plant	Haha	<i>Cyanea calycina</i>	C	Kawailoa TA and Schofield Barracks
Plant	Haha	<i>Lobelia niuhauensis</i>	E	Makua Military Reservation and Schofield Barracks
Plant	Hulumoa	<i>Korthalsella degeneri</i>	C	Makua Military Reservation
Plant	Kampua'a	<i>Hedyotis fluviatilis</i>	C	Kawailoa TA
Plant	Kauila	<i>Colubrina oppositifolia</i>	E	Makua Military Reservation
Plant	Kaulu	<i>Pteralyxia macrocarpa</i>	C	Kahuku TA, Kawailoa TA, Makua Military Reservation and Schofield Barracks
Plant	Ma'oli'oli	<i>Schiedea kealiae</i>	E	Dillingham Military Reservation
Plant	Makou	<i>Peucedanum sandwicense</i>	E	Makua Military Reservation
Plant	Noho, Kula wahine	<i>Isodendron pyrrolifolium</i>	T	Makua Military Reservation
Plant	No Common Name	<i>Bonamia menziesii</i>	E	Makua Military Reservation
Plant	No Common Name	<i>Gouania vitifolia</i>	E	Makua Military Reservation
Plant	No Common Name	<i>Lipochaeta venosa</i>	E	Pohakuloa TA
Plant	No Common Name	<i>Lobelia oahuensis</i>	E	Kawailoa TA, Makua Military Reservation and Schofield Barracks
Plant	No Common Name	<i>Mariscus pennatiflorus</i>	E	Makua Military Reservation
Plant	No Common Name	<i>Phlegmarius nutans</i>	E	Kawailoa TA and Schofield Barracks
Plant	No Common Name	<i>Phyllostegia parviflora</i>	E	Kawailoa TA
Plant	No Common Name	<i>Platydesma cornuta cornuta</i>	C	Kawailoa TA and Makua Military Reservation
Plant	No Common Name	<i>Platydesma cornuta descurrens</i>	C	Schofield Barracks
Plant	No Common Name	<i>Vigna o-wahuensis</i>	E	Pohakuloa TA
Plant	Pauoa	<i>Ctenitis squamigera</i>	E	Makua Military Reservation and Schofield Barracks
Plant	Slickspot Peppergrass	<i>Lepidium Papilliferum</i>	PE	Orchard Range TS Boise
Plant	Sunburst, Hartweg's golden	<i>Pseudobahia bahiifolia</i>	E	63rd RRC
Plant	Woolly-threads, San Joaquin	<i>Monolopia congdonii</i>	E	Leymel Hall USARC
Reptile	Lizard, Coachella Valley fringe-toed	<i>Uma inornata</i>	T	March USARC/AMSA 19 (G)
Snail	Pupu kuahiwi	<i>Achatinella curta</i>	E	Kahuku TA and Kawailoa TA
Snail	Pupu kuahiwi	<i>Achatinella pulcherrima</i>	E	Kawailoa TA

Note: E = endangered; C = candidate; T = threatened; and PE = proposed as endangered

Table 5 shows eight species that were no longer reported on or contiguous to any Army installation in FY 2007 due to new distribution information, installation closures (and thus the installations are not reporting data), or the fact that the species is no longer recorded by an installation. The species in Table 5 represent a total of nine installations.

CATEGORY	COMMON NAME	SCIENTIFIC NAME	STATUS	INSTALLATION
Bird	Shrike, San Clemente loggerhead	<i>Lanius ludovicianus mearnsi</i>	E	63rd RRC - March USARC
Clam	Pearlymussel, Higgins' eye	<i>Lampsilis higginsii</i>	E	Savanna Depot Activity
Fish	Darter, Maryland	<i>Etheostoma sellare</i>	E	Aberdeen Proving Ground
Mammal	Prairie dog, Utah	<i>Cynomys parvidens</i>	T	Cedar City
Plant	No common name	<i>Lycopodium nutans</i>	E	Kawailoa TA and Schofield Barracks
Plant	No common name	<i>Phyllostegia mollis</i>	E	Schofield Barracks
Plant	Spineflower, robust	<i>Chorizanthe robusta</i> (incl. vars. <i>robusta</i> & <i>hartwegii</i>)	E	LTA - Moss Landing & Marina USARC/OMS/AMSA 12 S-S
Plant	Thornmint, San Mateo	<i>Acanthomintha obovata</i> ssp. <i>Duttonii</i>	E	Fort Hunter Liggett

Table 5
Species No Longer Reported by Installations in FY 2007

SUMMARY INFORMATION

Installation and Species Information

For the FY 2007 reporting period, information was collected from a total of 133 installations that have TEPC species either onsite or on contiguous lands. Of those responding, 105 installations (78.9 percent) reported TEPC species onsite and 28 installations (21.1 percent) reported only having TEPC species on contiguous lands. White Sands Missile Range reported the Northern Aplomado falcon as proposed threatened. Two installations reported proposed endangered species: slickspot peppergrass at Orchard Range and the beluga whale at Fort Richardson. Table 6 shows that 259 TEPC species³ were recorded onsite or contiguous to Army installations in FY 2007, 178 (69 percent) are endangered, 57 (22 percent) are threatened. By category, 56 percent of the TEPC species are plants, 13 percent are birds, 8 percent are mammals, 6 percent are insects, 5 percent are fish, 5 percent are reptiles, 4 percent are snails, 2 percent are amphibians, and the remaining 1 percent are crustaceans and other invertebrates. The 133 installations with onsite or contiguous TEPC species include 11 Army Materiel Command (AMC), 57 Army National Guard (ARNG), 10 Installation Management Command (IMCOM) Northeast Region (NERO), 8 IMCOM Pacific Region (PARO), 12 IMCOM Southeast Region (SERO), 20 IMCOM West Region (WEST), 11 U.S. Army Reserve – 63rd Regional Readiness Command (RRC), 3 U.S. Army Reserve – 70th RRC, and 1 U.S. Army Reserve - 88th RRC. Table 7 summarizes the numbers of TEPC species that occur within the Commands.

Table 6
Federal Status of Onsite or Contiguous TEPC Species by Category for FY 2007

CATEGORY	THREATENED**	ENDANGERED	CANDIDATE	PROPOSED THREATENED	PROPOSED ENDANGERED	TOTAL
Amphibians	3	3	0	0	0	5*
Birds	9	21	3	1	0	33*
Crustaceans	1	1	0	0	0	2
Fish	8	6	1	0	0	14*
Insects	4	7	4	0	0	15
Other Invertebrate	0	1	0	0	0	1
Mammals	4	15	2	0	1	20*
Plants	19	111	13	0	1	144
Reptiles	9	3	3	0	0	14*
Snails	0	10	1	0	0	11
Total	57	178	27	1	2	

*Steelhead (T/E), Northern Aplomado Falcon proposed as threatened (PT/E), Gray Wolf, California Tiger Salamander (T/E), Desert Tortoise (T/Threatened (similarity of appearance), and Preble's Meadow Jumping Mouse (T/E) treated as one species in total though included in the other column listings.

**Includes T(SA).

Table 7
Federal Status of Onsite or Contiguous TEPC Species Reported by Command

COMMAND	THREATENED	ENDANGERED	CANDIDATE	PROPOSED THREATENED	PROPOSED ENDANGERED	TOTAL	# OF RECORDS REPORTED	# OF INSTALLATIONS W/ ONSITE T&Es
AMC	3	7	0	0	0	10	15	8
ARNG*	28	45	3	0	1	76	119	41
NERO	4	2	0	0	0	6	16	9
PARO	4	97	12	0	1	114	166	5
SERO	7	17	1	0	0	25	47	11
USAR-63rd RRC	14	12	1	0	0	27	32	4
USAR-70th RRC	5	1	0	0	0	6	7	2
USAR-88th RRC	0	1	0	0	0	1	1	1
WEST*	20	32	10	1	0	60	88	18

*California Tiger Salamander (T/E), Northern Aplomado Falcon (PT/E), Desert Tortoise T/T(SA), and Steelhead (T/E) treated as one species in total though under two categories.

³Species that have more than one federal designation are counted as only one species for this statistic.

Threatened and Endangered Species

The Army has 188 distinct T&E species on 99 installations. A total of 230 different T&E species (453 occurrences) were identified by 129 installations that reported having onsite or contiguous TEPC species. Of the 129 installations, 99 reported having onsite and contiguous or just onsite T&E species. The remaining 30 installations reported having only contiguous T&E species. Of the 230 T&E species, 188 species occurred onsite and the remaining 42 species were reported as being contiguous to at least one installation and not onsite at any installation (Table 8). See Appendixes D and E, respectively, for a list of installations with T&E species onsite and of all the T&E species found onsite at Army installations.

Table 8
Installations Reporting T&E Species for FY 2007

CATEGORY	ONSITE	CONTIGUOUS ONLY	TOTAL
Number of Installations	99	30	129
Number of Distinct Species	188	42	230
Number of Species Occurrences	359	94	453

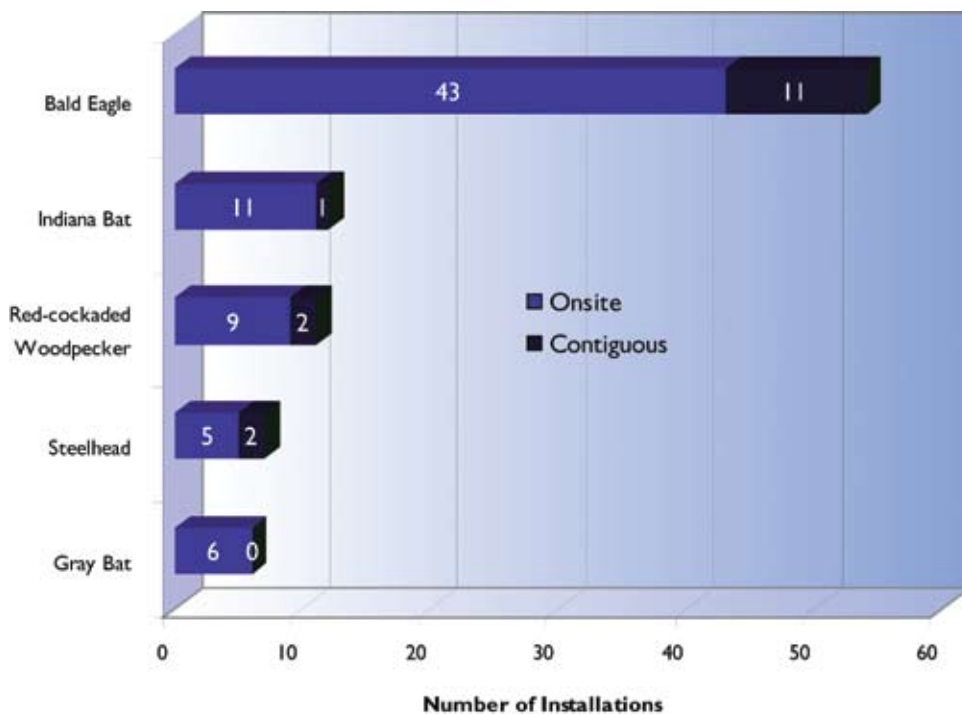


Figure 4
Most Commonly Reported T&E Species on Army Installations in FY 2007

Figure 4 shows that the bald eagle was the most commonly reported T&E species on Army installations. Fifty-four installations reported the bald eagle, of which 43 of them identified the eagle as onsite. The Indiana bat is second to the eagle with 12 installations reporting the bat as onsite or contiguous; the red-cockaded woodpecker is third with 11 installations recording them.

IMCOM Pacific Region Hawaii installations have the most T&E species occurrences (138): Makua Military Reservation with 48 onsite or contiguous, Schofield Barracks with 43, Kawaiiloa Training Area with 28, and Pohakuloa Training Area with 19. Fort Hunter Liggett, Fort Lewis, Military Ocean Terminal Sunny Point, and Maneuver Training Center (MTC) Camp Blanding each have eight or nine onsite or contiguous T&E species. Figure 4 identifies the installations with the most recorded T&E species.

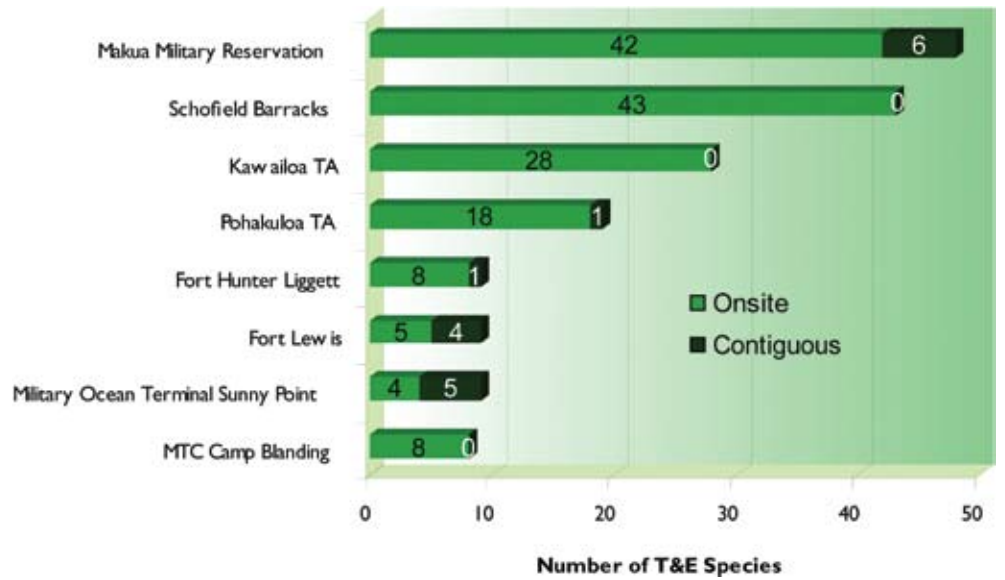


Figure 4
Installations with the most T&E Species in FY 2007

Proposed and Candidate Species

A total of 27 distinct candidate species and 3 proposed (threatened or endangered) species were identified as onsite at 17 installations (Table 9).

Table 9
Installations Reporting Proposed and Candidate Species for FY 2007

	CANDIDATE		PROPOSED THREATENED		PROPOSED ENDANGERED		TOTAL
	ONSITE	CONTIGUOUS	ONSITE	CONTIGUOUS	ONSITE	CONTIGUOUS	
Number of Installations*	15	0	1	0	2	0	17
Number of Distinct Species	27	0	1	0	2	0	30

*WSMR is counted as one installation in total, though it reports one candidate and one proposed threatened species.

What is a Candidate Species?



New England cottontail rabbit

U.S. FISH AND WILDLIFE SERVICE CANDIDATE SPECIES

Candidate species are not afforded protection under the ESA. However, they are eligible for listing and could be proposed for listing or be emergency listed at any time. A species becomes a candidate in one of two ways: via petition or an FWS internal process.

- **Petition**—A person and/or group submits a petition to the FWS to list a species under the ESA. Petitions are a factual argument justifying why a species should be listed in accordance with any of the five listing factors identified in ESA Section 4(a)(1) (see Definitions). When the FWS receives such a petition, it has 90 days to determine and then publish in the Federal Register, whether the information in the petition and within its files presents substantial scientific or commercial information indicating that listing the species may be warranted. There are two possible outcomes of a 90-day finding:
 - If the FWS determines that the information available does not warrant listing the species, then it takes no further action on the petition, and the species is no longer considered for listing, at least at that time.
 - If the FWS determines that listing may be warranted, then it will initiate a 12-month status review of the species to determine if proposing a rule to list the species is warranted. The FWS reviews all the available scientific and commercial information on the species; then, after the 12-month period, it publishes its findings in the Federal Register. A 12-month review can result in three potential findings:
 - Listing is not warranted.
 - Listing is warranted, but is precluded by listing actions with higher priority; the species becomes a candidate.
 - Listing is warranted, and a rule to list the species is proposed.
- **FWS internal process**—On 5 December 1996 (61 FR 64481), the FWS made a final decision to include as candidate species those species for which it had sufficient information on file on biological vulnerability and threats to support issuing a proposed rule to list the species, but for which a proposed rule was precluded. This standard for making a species a candidate is identical to the standard for making a “warranted-but-precluded” 12-month finding on a petition to list.

Therefore, all candidate species are species for which the FWS has sufficient information on file to support a proposal to list as endangered or threatened, but for which issuing a proposed rule is currently precluded by listing actions with higher priority.

NATIONAL MARINE FISHERIES SERVICE CANDIDATE SPECIES

The process NOAA-Fisheries uses to classify a species as a candidate is virtually the same as that used by FWS, but with one difference. If, on a 90-day finding, NOAA-Fisheries determines that a petition to list a species presents substantial scientific information indicating the petitioned action may be warranted, then they will classify the species as a candidate. Therefore, a positive 90-day finding, and not the 12-month finding, as with FWS, is the criterion for assigning candidate status to a species.

DURATION OF CANDIDATE STATUS

Candidate species will remain as such until the FWS or NOAA-Fisheries, depending on who has jurisdiction over the species, determines that listing is not warranted, proposes the species for listing, or emergency lists the species within its authority under Section 4(b)(7) of the ESA. Once a species is proposed for listing, it is afforded some protection under the ESA.

Experimental Populations Under the ESA

The FWS and NOAA-Fisheries have the authority to reintroduce populations of a listed species into unoccupied portions of the species' historical range when doing so would foster the conservation and recovery of the species. Under Section 10(j) of the ESA, FWS or NOAA-Fisheries can designate reintroduced populations established outside the species' current range, but within its historical range, as "experimental."

The FWS or NOAA-Fisheries determine whether an experimental population is "essential" or "non-essential" to the continued existence of the species. Regulatory restrictions are considerably different between the two designations. Species designated as "essential experimental populations" are afforded the full protection of the ESA. However, according to the FWS' Threatened and Endangered Species System queried in November 2008, no reintroduced listed species have been given this designation. All experimental population designations to date are "non-essential."

Under ESA Section 9, a reintroduced species designated as a "non-essential experimental population" (NEP) is treated as threatened or proposed threatened, depending on where it is located.

Within a National Wildlife Refuge or unit of the National Park System, a NEP is treated as a threatened species in which all the provisions of the ESA apply. When an NEP is located on other federal property, the population is treated as a proposed species and Section 7(a)(1) and Section 7(a)(4) apply. ESA Section 7(a)(4) requires federal agencies to confer (not consult) with the FWS or NOAA-Fisheries on actions that are likely to jeopardize the continued existence of a proposed species. The results of a conference are advisory in nature and do not restrict agencies from carrying out, funding, or authorizing activities.

5-Year Status Review

Section 4(c)(2)(A) of the ESA requires the FWS and NOAA-Fisheries to conduct a review of all listed species at least once every 5 years. This 5-year review is to assist the agencies in determining whether the listed species should be removed from the ESA list, be uplisted from threatened to endangered, be downlisted from endangered to threatened, or retain their status quo. The 5-year review considers all new information available at the time of the review. In conducting these reviews, the FWS and NOAA-Fisheries consider the best scientific and commercial data that have become available since the current listing determination or most recent status review, such as

- species biology, including, but not limited to, population trends, distribution, abundance, demographics, and genetics;
- habitat conditions, including, but not limited to, amount, distribution, and suitability;
- conservation measures that have been implemented that benefit the species;



Honohono in bloom.

US Army Garrison, HI

- threat status and trends (see the five factors in Definitions, Listing Factors); and
- other new information, data, or corrections, including, but not limited to, taxonomic or nomenclatural changes, identification of erroneous information contained in the list, and improved analytical methods.

Information submitted by an installation could provide the agencies with a better understanding of a species to support its potential downlisting or delisting. A 5-year review also gives an installation the opportunity to furnish the FWS or NOAA-Fisheries with information on how its INRMP benefits a species.

Petition Action - Delisting

Petitions are not only submitted to the FWS or NOAA-Fisheries for the listing of species, but they are also submitted for the delisting of species, as well as uplisting species, designating critical habitat, and removing critical habitat. As with a petition to list, a delisting petition must address the factors that lead to the listing of the species in the first place. The FWS or NOAA-Fisheries then have 90 days to review the petition and available information and publish their findings in the Federal Register. This 90-day standard is not always met. Due to other priorities and staffing issues, 90-day findings are sometimes rendered beyond the 90 day period. An intent to sue or court orders are sometimes the impetus to complete 90-day findings, 12-month reviews, or 5-year status reviews.



Bald eagle at Rock Island Arsenal, IL

Gloria Keeslar

The process continues along the same lines as the listing petition, with either a determination that the petition action may be warranted or is not warranted. If warranted, a 12-month review is conducted, and the outcome can either be a proposed rule to delist or downlist, or a not-warranted finding. Section 4(g)(1) of the ESA requires that a recovered species must be monitored for at least 5 years after delisting. If signs appear that the delisted/recovered population is experiencing population declines or threats, then the FWS or NOAA-Fisheries could propose to list that species again, or a third party could submit a petition to list it.

Species at Risk

The Department of Defense (DoD) Legacy Program funded a cooperative FWS and DoD project to identify SAR on military installations.⁴ NatureServe prepared the report and delivered it to DoD in 2002 (DoD 2002). In 2004, NatureServe submitted a revised report to DoD that provided more in-depth analyses of SAR within installations and in buffer areas surrounding installations (DoD 2004). Species identified in the report occur on or within a 2-kilometer buffer of a military site. The report is not inclusive of all Army installations. It does not capture Army Reserve properties other than the Army Reserve installations that are a part of IMCOM or many of the Army National Guard sites. The report also does not, nor was it intended to, specifically address migratory birds of concern as referenced in Executive Order 13186 – Responsibilities of Federal Agencies To Protect Migratory Birds, but some of these bird species are also identified as SAR. The 2004 report is a useful resource for identifying SAR that may be on or near DoD property. The 2004 report can be accessed at the following web address: https://www.denix.osd.mil/portal/page/portal/content/environment/NR/conservation/EndangeredSpecies/DOD_SAR_REPORT_FINAL.PDF.

On 29 July 2005, HQDA established policy to manage SAR and their habitats in order to preclude the need for federal listing or prepare installations for imminent listings. The policy specifically focuses on Tier I installations. The Army issued SAR policy and implementing guidance on 15 September 2006. This policy focuses on the proactive conservation of SAR. The goal of the program is to support military readiness and sustainability while furthering conservation of declining species. The top four priority SAR are described below.



Adult gopher tortoise.

Dave Delaney (Delaney, et al)

GOPHER TORTOISE

The gopher tortoise is not listed in South Carolina, Georgia, Florida, and eastern Alabama, but it has been petitioned for listing. It is recorded as an Army SAR on five Army installations: Fort Stewart, GA; Fort Benning, GA; Fort Gordon, GA; Fort Rucker, AL; and Camp Blanding, FL. Significant conservation efforts are underway for the gopher tortoise including enhancing their habitat and protecting from threats. The effort aims to help prevent the need for listing the eastern gopher tortoise population. The Army is a participant with several other partners in a memorandum of understanding and candidate conservation agreement for gopher tortoise management in its non-listed range. Army installations are participating in conservation actions as impacts to training would be significant if this species is listed.

MOJAVE GROUND SQUIRREL

The Mojave ground squirrel is an imperiled species (G2). It was unsuccessfully petitioned for listing in 1995 and is currently petitioned again. The species is listed as threatened by the State of California. It is found within the recently annexed Western Expansion Area of the National Training Center (NTC) and Fort Irwin, CA. The NTC and Fort Irwin voluntarily provides the same level of protection to the Mojave ground squirrel as that given to a fully protected, federally listed species. Accordingly, the NTC and Fort Irwin surveys new locations for the presence of the species annually, and monitors known populations every 3 years. Listing of the species would impact training at NTC and Fort Irwin.



Mojave ground squirrel.

Becky Jones, California Department of Fish and Game



Greater sage grouse - strutting.

Bureau of Land Management

GREATER SAGE GROUSE

The FWS began a range-wide status review of the greater sage grouse in February 2008. The Columbian Basin population of sage grouse is a distinct population segment of the greater sage grouse. Yakima Training Center, WA, records the grouse as onsite. It has developed and implemented a sage grouse management plan and actively participates in regional sage grouse initiatives and working groups. Part of its conservation effort is augmenting the population by releasing birds captured from offsite locations. Based on these efforts, the FWS concluded in 2002 that threats related to military training were not imminent, and designated the greater sage grouse as a Category 6 candidate species, but this designation may change when the status review is complete.

DESERT CYMPTERUS

The desert cymopterus was petitioned for listing in 2003, but after a 12-month review, FWS determined that a proposed listing rule was not warranted. This perennial herb grows in an area that was recently annexed by the NTC and Fort Irwin to expand their training range. It grows, blooms, and senesces within a 2-month period in late winter and early spring. The inflorescence resembles a purple golf ball, and the diminutive flowers are pollinated by flies attracted to the floral scent of rotten meat. The plant was first observed on Army lands in 2001, triggering a series of surveys and the creation of a protected conservation area. As a result, Army and FWS surveys have discovered additional populations in the region, both on the base and off. If listed, this species would impact training on NTC and Fort Irwin.

Desert cymopterus.

Liana Aker, ITS - supporting NTC and Fort Irwin



Critical Habitat

The FWS and NOAA-Fisheries have designated critical habitat for 52 species since the FY 2006 Army report (Rubinoff), bringing the total to 526 species. There are 14 species with critical habitat designations on 15 Army installations (Table 10). Two installations reported new critical habitat designations for 2007, Local Training Area - Aviation (Weyerhaeuser) and Presidio of Monterey. Two critical habitat designations were reported as unoccupied critical habitat, that is, critical habitat is designated on the installations, but the species does not occur there.⁵ Makua Military Reservation reports critical habitat for 31 species contiguous to the installation (Table 11).

WHAT IS CRITICAL HABITAT AND ADVERSE MODIFICATION?

Section 3 of the ESA defines critical habitat as “(i) the specific areas within the geographic area occupied by the species ... on which are found those physical or biological features (I) **essential to the conservation of the species** and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by the species at the time it is listed ... upon a determination ... that such areas are essential for the conservation of the species” (emphasis added). “Conservation” means the use of all methods and procedures that are necessary to bring a listed species to the point at which listing under ESA is no longer necessary—in other words “recovery.”

Federal agencies are to ensure that their actions do not result in the destruction or adverse modification of critical habitat, which would be an action that has “a direct or indirect alteration that appreciably diminishes the value of critical habitat for **both the survival AND recovery** of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical” (emphasis added) (50 Code of Federal Regulation Part 402.02). The FWS application of “destruction or adverse modification” has been identical to a jeopardy determination. With each classification having similar thresholds, the FWS and other federal agencies regarded the designation of statutory critical habitat as providing little additional protection other than for unoccupied areas. However, for unoccupied critical habitat, survival is not a factor; so, by regulatory definition, it would appear impossible to reach the “survival and recovery” threshold. Therefore, there is no value of critical habitat on such lands other than the regulatory burden it places upon the federal agency.

Recently, however, federal court rulings have basically redefined “destruction or adverse modification” to mean impacts on either survival OR recovery. The courts believe this is more in line with the statutory definition of critical habitat, which ties critical habitat to conservation (recovery) and not just survival. This new application of the ESA would clearly separate “jeopardy” and “destruction or adverse modification,” with the latter now having a lower threshold. Applying this new definition would mean an action could result in the “destruction or adverse modification” of critical habitat without reaching the “jeopardy” threshold. An action proposed on unoccupied critical habitat could now be subject to the “destruction or adverse modification” threshold.

On 9 December 2004, FWS issued a director’s memorandum stating that FWS should no longer rely on the regulatory definition of “destruction or adverse modification” in its evaluation of federal actions. Instead, FWS Regions are to use conservation of the species as their threshold. On 4 January 2006, the Army issued critical habitat guidance that addresses the changes in the process for designating critical habitat and the adverse modification threshold.

Table 10
Critical Habitat Designated on Army Installations as of End of FY 2007

COMMAND	INSTALLATION	STATUS	CATEGORY	SCIENTIFIC NAME	COMMON NAME	SPECIES ONSITE OR CONTIGUOUS
ARNG	Camp Navajo	T	Bird	<i>Strix occidentalis lucida</i>	Owl, Mexican spotted	Onsite
ARNG	Fort Ruger	E	Plant	<i>Spermolepis hawaiiensis</i>	No Common Name	Onsite
ARNG	Fort Ruger	E	Plant	<i>Cyperus trachysanthos</i>	Pu`uka`a	Onsite
ARNG	Kanaio Wets	E	Insect	<i>Manduca blackburni</i>	Moth, Blackburn's sphinx	Onsite
ARNG	Kekaha Wets	E	Plant	<i>Panicum niihauense</i>	Lau`ehu	Onsite
ARNG	MTA Camp Rilea	T	Insect	<i>Speyeria zerene hippolyta</i>	Butterfly, Oregon silverspot	Onsite
ARNG	Santa Cruz Armory	T	Plant	<i>Holocarpha macradenia</i>	Tarplant, Santa Cruz	Onsite
PARO	Makua Military Reservation	E	Bird	<i>Chasiempis sandwichensis ibidis</i>	Elepaio, Oahu	Onsite
PARO	Schofield Barracks	E	Bird	<i>Chasiempis sandwichensis ibidis</i>	Elepaio, Oahu	Onsite
PARO	Pohakuloa TA	E	Bird	<i>Loxioides bailleui</i>	Palila (honeycreeper)	Contiguous
USAR-70th RRC	LTA-AVN TNG Area (Weyerhaeuser)	T	Bird	<i>Strix occidentalis caurina</i>	Owl, Northern spotted	Onsite
WEST	Fort Huachuca	E	Plant	<i>Lilaeopsis schaffneriana ssp.recurva</i>	Water-umbel, Huachuca	Onsite
WEST	National Training Center and Fort Irwin	T	Reptile	<i>Gopherus agassizii</i>	Tortoise, desert	Onsite
WEST	Presidio of Monterey	T	Plant	<i>Chorizanthe pungens var. pungens</i>	Spineflower, Monterey	Onsite
WEST	White Sands Missile Range	E	Plant	<i>Hedeoma todsenii</i>	Pennyroyal, Todsen's	Onsite
WEST	Fort Lewis	T	Bird	<i>Strix occidentalis caurina</i>	Owl, Northern spotted*	Contiguous

* Critical habitat redesignated (13 August 2008); critical habitat no longer designated on Fort Lewis.

⁵ Note that critical habitat redesignation for the northern spotted owl resulted in no designation at Fort Lewis now.

Table 11

Critical Habitat in Lands Contiguous to Army Installations, End of FY 2007

COMMAND	INSTALLATION	STATUS	CATEGORY	SCIENTIFIC NAME	COMMON NAME	SPECIES ONSITE/CONTIGUOUS
PARO	Makua Military Reservation	E	Plant	<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	Akoko	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Chamaesyce herbstii</i>	Akoko	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Euphorbia haeleleana</i>	Akoko	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Cyrtandra dentata</i>	Ha'iwale	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	Haha	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Cyanea longiflora</i>	Haha	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Nototrichium humile</i>	Kulu'i	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Neraudia angulata</i>	Ma'aloa	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Flueggea neowawraea</i>	Mehamehame	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Dubautia herbstobatae</i>	Na'ena'e	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Lipochaeta tenuifolia</i>	Nehe	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Alsinidendron obovatum</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Bonania menziesii</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Diellia falcata</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Gouania vitifolia</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Hedyotis degeneri</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Hedyotis parvula</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Hesperomannia arbuscula</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Phyllostegia kaalaensis</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Sanicula mariversa</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Schiedea hookeri</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Schiedea kaalae</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Schiedea nuttallii</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Spermolepis hawaiiensis</i>	No Common Name	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Delissea subcordata</i>	Oha	Onsite
PARO	Makua Military Reservation	E	Plant	<i>Solanum sandwicense</i>	Aiakeakua, popolo	Contiguous
PARO	Makua Military Reservation	E	Plant	<i>Melicope pallida</i>	Alani	Contiguous
PARO	Makua Military Reservation	T	Plant	<i>Isodendron longifolium</i>	Aupaka	Contiguous
PARO	Makua Military Reservation	E	Plant	<i>Colubrina oppositifolia</i>	Kauiia	Contiguous
PARO	Makua Military Reservation	E	Plant	<i>Mariscus pennatiformis</i>	No Common Name	Contiguous
PARO	Makua Military Reservation	E	Plant	<i>Isodendron pyrifolium</i>	Noho, Kula wahine	Contiguous
USAR-70th RRC	LTA-AVN TNG Area (Weyerhaeuser)	T	Bird	<i>Brachyramphus marmoratus marmoratus</i>	Murrelet, Marbled	Onsite

INSTALLATIONS EXCLUDED FROM CRITICAL HABITAT DESIGNATION BASED ON ESA 4(A)(3)(B) AND/OR 4(B)(2)

In 2003, the National Defense Authorization Act (NDAA) for FY 2004 (Public Law 108-136) enacted a number of environmental provisions that impact the military. Specifically, Section 318 precludes the FWS and NOAA-Fisheries from designating critical habitat on any areas owned, controlled, or designated for use by DoD, if such areas are subject to an INRMP that provides a benefit to the species subject to critical habitat designation [ESA Section 4(a)(3)(B)]. The FWS has produced a policy that establishes criteria for determining whether an INRMP provides benefits to the species. If the FWS/NOAA-Fisheries do not determine that an INRMP provides a benefit to the species, then the applicable regulatory agency may designate critical habitat on the respective installation.

The act also amends the ESA by requiring the FWS or NOAA-Fisheries to consider the impacts of critical habitat designation on national security. Therefore, the FWS or NOAA-Fisheries may preclude designation of critical habitat on a military installation if they conclude, regardless of the status of an INRMP, that such a designation would have a significant impact on national security [ESA 4(b)(2)]. However, neither the FWS nor NOAA-Fisheries may exclude an area as critical habitat solely based on Section 4(b)(2), if doing so would result in the extinction of the species concerned. However, the ESA does not prevent the FWS from excluding lands as critical habitat, even if doing so would prevent the conservation of the species. Lastly, NDAA Section 318 does not affect the prohibition on the taking of listed species, the requirements to consult, and the requirement not to jeopardize the species.

To make the "benefit" determination of an INRMP, the FWS uses the following criteria: A current INRMP must be complete and provide a conservation benefit to the species; the plan must provide assurances that the conservation management strategies will be implemented; and the plan must provide assurances that the conservation management strategies will be effective, by providing for periodic monitoring and revisions as necessary.

Critical habitat for the northern spotted owl was revised, and now Fort Lewis, WA, is excluded. The FWS excluded Fort Lewis because the 2007 Draft Recovery Plan for the northern spotted owl no longer considers managing forest habitat on Fort Lewis as a necessary component of recovery for the northern spotted owl, since none are known to occur on the installation. The FWS/NOAA-Fisheries chose not to designate critical habitat at Corvallis/Camp Adair, OR, for Kincaid’s lupine and at Fort Lewis and Pier 23, WA, for the southern resident killer whale. The exclusion for Kincaid’s lupine was based on ESA Section 4(a)(3)(B) (INRMP) and for the killer whale, ESA Section 4(b)(2) (national security).

Installations that provide essential information to the FWS/NOAA-Fisheries that aids in making critical habitat decisions are more likely to achieve results favorable to the military mission—i.e., avoiding the need to designate critical habitat on the installations. Such proactive measures have consistently proven to be beneficial to Army missions.

Expenditures

T&E expenditures are broken down into reportable and non-reportable expenditures. Reportable expenditures include money spent primarily for the conservation of T&E species pursuant to the ESA, in which the expenditures can be attributed to a specific species. Non-reportable expenditures are money spent on multi-species projects where no specific amount of money is attributable to individual listed species. Table 12 provides a summary of Army reportable expenses for 5 years (FY 2003 – FY 2007).

In reportable expenditures, a total of \$35.83 million was spent for T&E species in FY 2007, which includes funds spent on T&E research and development projects. The total expenditures for FY 2007 were \$45.09 million which represents \$9.264 million in non-reportable expenses. Forty-five million dollars is the most the Army has ever spent on T&E species in an FY. Expenditures by species categories are provided in Table 13.

A total of approximately \$8.12 million was spent on species proposed for federal listing, candidate species, and other species at risk in FY 2007. Implementing proactive conservation measures for these species and their habitats can help preclude the need for federal listing, which would enable installations to continue their military mission without ESA compliance requirements. For those species whose listing may be imminent, these proactive efforts can assist in preparing an installation so mission impacts are minimal and/or manageable.

Table 12
Reportable Expenditures FY 2003 – FY 2007

YEAR (FY)	2007	2006	2005	2004	2003
Reportable Expenditures (\$K)	\$35,829.1	\$29,917.2	\$40,997.6	\$21,271.4	\$21,274.8

Consistent Reporting

The Army is frequently asked for information on T&E species. However, the intricacy of the data can result in multiple possible answers to the question, “How many T&E species are on Army lands?” For consistency, unless other data are specifically requested, the number provided will be the number of different T&E species, recorded onsite, not contiguous to Army installations. A T&E species may be recorded on more than one installation, but it is counted only once. Species that have more than one status (for example, threatened in one part of its range and endangered in another) are recorded as one species. Table 14 shows these numbers for FY 2000 through FY 2007. In the table, the number of installations reflects the number of distinct installations that have recorded one or more T&E species onsite. The 2007 data treat subspecies as individual species.

FY 2007 EXPENDITURES (\$K)		FY 2006 EXPENDITURES (\$K)	
Birds	\$12,804.8	Birds	\$11,322.5
Plants	\$11,700.4	Plants	\$9,691.2
Reptiles	\$6,135.0	Reptiles	\$3,655.7
Mammals	\$2,805.2	Mammals	\$2,951.0
Snails	\$698.1	Insects	\$665.0
Insects	\$582.4	Amphibians	\$409.1
Fish	\$485.3	Fish	\$398.0
Amphibians	\$302.7	Snails	\$383.0
Crustaceans	\$165.2	Crustaceans	\$291.1
Arachnids	\$150.0	Arachnids	\$215.0

Table 13
FY 2007 and FY 2006 Comparison of Reportable Expenditures by Category

FISCAL YEAR	NUMBER OF SPECIES	NUMBER OF INSTALLATIONS
2000	170	94
2001	172	99
2002	170	92
2003	175	95
2004	177	100
2005	188	102
2006	174	99
2007	188	99

Table 14
Number of T&E Species Onsite by FY



Installing an artificial cavity within red-cockaded woodpecker cluster sites.
Army Environmental Command

CONSERVATION AND MANAGEMENT ON ARMY INSTALLATIONS

In FY 2007 and FY 2006, the Army spent an average of \$42.8 million annually on T&E related management and conservation projects. Since the Army's SAR policy and guidance was issued, the emphasis on Army SAR has increased. In addition, Army management of species that are not listed or categorized as SAR demonstrates its commitment to conserving resources held in public trust. Below are some examples of the numerous projects being implemented by the Army. Many of these efforts also benefit the numerous plant and animal species that share habitat with TEPC species and SAR.

Listed Species

RED-COCKADED WOODPECKER

Red-cockaded woodpeckers are recorded onsite at nine Army installations in the United States. Through the dedication of Army wildlife biologists, the over-

all population growth of red-cockaded woodpeckers on Army lands increased to an average of 5 to 10 percent per year. One of the most notable success stories is the Fort Bragg, NC, red-cockaded woodpecker population, which has exceeded the FWS recovery plan population goal for the area 5 years ahead of schedule. This was achieved, in part, by imposing training and construction restrictions on the woodpeckers' habitat and introducing new breeding groups.

Natural resources conservation efforts at multiple Army installations have been successful at conserving the natural longleaf forest habitats of red-cockaded woodpeckers, which have declined from a historical high of 60–90 million acres to only 3 million. Through the use of compatible use buffers, Army installations have ensured that the red-cockaded woodpecker has protected, natural habitat away from military training operations and susceptible public lands. The Army hopes that its efforts to repopulate and protect this endangered bird will result in delisting it by 2075.



Figure 5. Dughi Spring before renovation.

Michael Moore, Camp Roberts



Figure 6. Dughi Spring after renovation.

Michael Moore, Camp Roberts

CALIFORNIA RED-LEGGED FROG

In fall 2007 the California Army National Guard (CANG) improved habitat for the California red-legged frog in an area of Camp San Luis Obispo known as Dughi Spring. This location was a former breeding site for California red-legged frogs, but no longer provided breeding habitat because sediment and vegetation had filled in the pool, effectively eliminating the open water needed by the frog.

Approximately 3 cubic yards of sediment were removed (using shovels and wheelbarrows) and moved to an appropriate upland site. Heavy equipment was not used, as it would have degraded the site, which is also a cultural resources site eligible for listing in the National Register of Historic Places.

As illustrated in Figures 5 and 6, the project created more open water and increased the water depth, thereby providing improved year-round habitat for California red-legged frogs.

All work was performed under a biological opinion issued by the FWS and with the concurrence of the State Historic Preservation Officer. No California red-legged frogs were observed during pre-construction surveys or construction itself.

On 13 August 2008, staff from Camp San Luis Obispo met with representatives from the FWS and provided them with a tour of the unique natural resources within the installation. One of the locations visited was Dughi Spring.

During the discussion of the project and its expected benefits to the California red-legged frog, a representative from the FWS observed several California red-legged frog tadpoles and one adult California red-legged frog in the water's edge of Dughi Spring.



California red-legged frog.

Army Environmental Command

CALIFORNIA CONDOR

Since 2007, the CANG has participated in multi-agency meetings regarding condor recovery, and especially the problem of lead poisoning. Studies provide overwhelming evidence that lead poisoning of condors comes from ammunition fragments in carcasses left behind in the condor range by hunters. Lead poisoning from ingesting lead fragments in carcasses is the leading cause of death for reintroduced condors in California and Arizona.

The CANG coordinates with several partners, including Fort Hunter Liggett, to strategize on lead awareness outreach. The CANG took a leadership role in banning lead use in its hunting program at Camp Roberts on 1 July 2007. CANG has now banned the use of lead ammunition in all its hunting programs in 2008.

Recently the CANG invited the public to a free “Non-Lead Ammunition Shooting Event” (Figure 7). This event provided hunters and shooting enthusiasts with an opportunity to evaluate the performance of non-lead ammunition using their own rifles. A side-by-side comparison of the performance and accuracy of traditional lead bullets with non-lead bullets made from copper and other materials was demonstrated.



California condor.

Scott Frier, FWS

Figure 7. Non-lead ammunition shooting event.

Chris Diel, FWS



Figure 8. Comparison of copper and lead bullet fragments.

Chris Diel, FWS

In comparison with lead and copper-jacketed bullets, all-copper bullets do not fragment and are far less toxic when ingested. Scavengers like the condor are less likely to ingest one large mushroomed bullet than many small bullet fragments. Hunters have a long tradition of wildlife conservation, and the best way to help conserve the condor is to hunt with non-lead ammunition.

Figure 8 shows the results of firing both lead and copper bullets into a 55 gallon drum of water and straining the water through a coffee filter to collect the bullet fragments. The copper bullet merely mushroomed, while the lead bullet fragmented into many small pieces

The CANG has also funded a project to attach four Global Positioning System transceivers to condors. This project is being conducted by the Ventana Wildlife Society.

Delisted Species

BALD EAGLE

The FWS announced the recovery of the bald eagle in 2007. Bald eagles outside the Sonoran Desert of Arizona are now protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The Army issued policy guidance for eagles in a memorandum dated 19 August 2008 (Memorandum 2008). In FY 2007, 43 Army installations reported bald eagles onsite. The Army was an active partner in achieving recovery of the bald eagle. Spending more than \$7 million from 2002 to 2006, the Army has funded multiple bald eagle conservation initiatives, such as satellite tagging at Aberdeen Proving Ground, MD, and creation of a range safety zone to keep training away from eagle nesting areas at Fort Hunter Liggett, CA.

Whether conducting surveys of bald eagle populations, maintaining habitat, or enhancing food sources within habitats, Army installations have played a major role in the population boom of this magnificent American icon.



Bald eagles at Fort McCoy, WS.

Fort McCoy

GRAY WOLF⁶

The gray wolf has called Camp Ripley, MN, home for more than 15 years. It has been protected by the ESA since the 1970s.

In the past, human-caused mortality resulted in the near extinction of gray wolves in the lower 48 states. During the mid to late 1970s, Minnesota estimated the wolf population at about 1,000 to 1,200. A 2003–2004 survey showed that the population has grown to approximately 3,000.

In 2007, the FWS removed ESA protection for the gray wolf in the states of Minnesota, Wisconsin, and Michigan; however, the ESA listing was reinstated by court order in 2008.

Besides serving as a National Guard training facility, Camp Ripley is also a Minnesota Statutory Game Refuge. Camp Ripley serves as a key National Guard training facility, and it provides good quality habitat for wolves on the southern edge of the Minnesota gray wolf range. Research has demonstrated that training activities on the camp do not negatively affect wolves, and the presence of wolves on Camp Ripley has not resulted in any loss of training capabilities.

Camp Ripley participates with the Minnesota Department of Natural Resources to monitor wolf populations on the camp as recommended in the Minnesota Wolf Management Plan.



Wolf No. 23 at Camp Ripley.

Brian Dirks and Nancy Dietz, MN Department of Natural Resources, Camp Ripley

⁶ The gray wolf was delisted in three states in 2007, but the listing was reinstated by court order in 2008.

Army Species at Risk

REGAL FRITILLARY BUTTERFLY

At Fort Indiantown Gap, PA, the regal fritillary butterfly has been kept off the list of federal endangered species because of the hard work of the installation's natural resources staff. By relocating mechanized training areas around this sensitive butterfly's habitat, Fort Indiantown Gap increased the population of the butterfly to roughly 1,000. The Army also supported creation of satellite populations at Gettysburg National Military Park to expand the population of the species. Fort Indiantown Gap is now home to the largest documented population of regal fritillary butterflies in the region.



Regal fritillary butterfly.

Army Environmental Command

RED-TAILED PRAIRIE LEAFHOPPER

The red-tailed prairie leafhopper (*Aflexia rubranura*) is a small and inconspicuous insect. It is noteworthy in that it is classified as a federal species of concern, a Wisconsin endangered species, and an Army SAR. This leafhopper was first documented on Fort McCoy, WS, in the mid-1990s.

The host plant for this insect is a grass called prairie dropseed (*Sporobolus heterolepis*). Dropseed is found in scattered patches within oak savannas, which occur on level to gently rolling terrain, and on remnant prairies found along the top of south or southwest facing slopes. Due to the location of these remnant prairies on steep slopes, they are often referred to as goat prairies. Unlike on areas of level terrain, few military training exercises occur on these goat prairies, making them ideal locations to improve habitat for a rare species. A long-term goal for managing the red-tailed prairie leafhopper is to increase its distribution on the landscape, thus reducing the need for ESA listing.

The absence of prescribed burns, wildfires, or direct management allowed woody vegetation to encroach on many of these goat prairies, reducing them to a few square meters by the late 1990s. Managing these remnant prairies involves removing selected trees, shrubs, and briars from within and around their perimeter to allow increased sunlight to reach ground level. Removing trees and shrubs improves the habitat for sun-loving prairie plants, including prairie dropseed. To date, management activities have occurred on 21 goat prairies, with work completed on 9 in 2007 and 2008.



Assessing goat prairie habitat.

Tim Wilder, Fort McCoy



Removing small oaks from goat prairie.

Tim Wilder, Fort McCoy



Two red-tailed prairie leafhoppers.

Tim Wilder, Fort McCoy

A 2008 survey documented red-tailed prairie leafhoppers at 21 locations on the installation. Seven of these sites are goat prairies. This leafhopper is a relatively immobile insect that does not readily colonize new habitats unless they are close to other occupied sites. Since many goat prairies are isolated habitats, several questions are yet unanswered, such as whether the leafhoppers will disperse to these sites and, if so, whether their numbers will be sufficient to colonize. One approach may be to collect specimens from sites with high populations and introduce them to these isolated goat prairies that now have suitable habitat.

Ultimately, with continued management, the red-tailed prairie leafhopper will co-exist with soldiers and their myriad advanced weapons systems far into the future.



Sweep net survey for red-tailed prairie leafhoppers.

Tim Wilder, Fort McCoy



Goat prairie after management; prairie dropseed in foreground.

Tim Wilder, Fort McCoy



Isolated nature of many goat prairies.

James Kerkman, Fort McCoy

Other Species

The green salamander (*Aneides aneides*) is found in small, isolated populations throughout the Appalachian Mountains region, including portions of Alabama. Throughout their range, green salamanders are threatened by development and timber harvest, resulting in habitat loss that is especially detrimental to populations isolated from one another by roads, development, or man-made lakes. Over-collecting, acid rain, climate change, and unknown pathogens also are thought to play a role in their distribution-wide decline.

Green salamanders inhabit rocky outcrops, cliffs, and caves with deep crevices that remain moist, but not permanently wet. Also, they utilize the forest canopy for foraging and cover. The protection of the surrounding forest is important to ensure the quality of environmental factors such as temperature and humidity that are important to the green salamander life history.

In cooperation with the Alabama Department of Conservation and Natural Resources, Redstone Arsenal is committed to protecting plant and animal species considered important or at risk within the state, as well as their associated habitats. Green salamander specimens were located on the installation in a 1995 survey by the Alabama Natural Heritage Program of The Nature Conservancy. However, after years of having little or no idea of the population extent and with BRAC-related development occurring on or near suspected green salamander habitat, the installation's cultural and natural resources staff chose to survey all potential habitats for green salamander populations. Geographic information system technology showing geology and soil layers, and infrared imaging of the installation, helped to locate limestone and sandstone rock outcrops, caves, and other rocky features indicating possible habitat. These locations are being systematically surveyed, especially on rainy days near dawn and dusk, for green salamanders. In addition, because green salamanders are known to utilize and migrate in the forest canopy, night visits to those selected locations are expected to yield sightings. To date, six green salamanders have been located and identified (three juveniles and three adults) in a cave and a rocky outcrop. One of those salamanders, an adult female, was captured, processed, and released.

Redstone Arsenal is dedicated to protecting natural resources, and data from this survey will enable the installation to continue a record of environmental consideration and protection. Development planning can include avoidance of known green salamander habitat or the inclusion of buffers around rock outcrops. Timber harvest can be avoided, or planned to allow the minimum of a 100-foot buffer around the salamander locations. Hopefully these protection efforts will prevent future decline of the species in this region.



Survey for green salamander.

Ben Hoksbergen, Redstone Arsenal



Green salamander.

Clayton Vaughan, Redstone Arsenal



MIGRATORY BIRDS

On 28 February 2007, the FWS published the final rule (72 Federal Register 8931) on the take of migratory birds by the armed forces. This rule is a requirement of Section 318 of the NDAA of 2003, which exempted DoD from the provisions governing the incidental take of migratory birds during military readiness activities. In short, the rule requires DoD to confer and cooperate with the FWS to develop appropriate conservation measures to minimize or mitigate actions that have or may have a significant adverse effect on a population of migratory bird species. DoD is developing policy for the military services based on the final rule. This policy is expected to be complete in FY 2009. Army policy is currently provided in Army Regulation 200-1 and two memoranda (Memoranda 2001 and 2002).

Though it is not expected that any Army action will reach the level of having a significant adverse effect on a population, the species most likely to experience negative impacts at a population level would be those identified as species of concern. Even so, Army installations implement programs for the management and conservation of birds that minimize and/or mitigate impacts associated with military readiness activities.

Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds," requires each federal agency to develop and implement a memorandum of understanding (MOU) with the FWS to promote the conservation of migratory bird populations. DoD signed the MOU on 31 July 2006. The MOU requires federal agencies to minimize the unintentional take of migratory birds, with emphasis on species of concern. The DoD MOU focus is on actions that are not classified as military readiness activities. It is available on the Defense Environmental Network and Information eXchange (DENIX, <https://www.denix.osd.mil>).

Although the focus of the executive order is on migratory bird species of concern, no single source specifically identifies all the different species of concern. There are currently seven different sources, listed below, that identify these species. The most basic geographical unit for designating migratory birds as species of concern is the Bird Conservation Region (BCR). The species of concern identified within these BCRs are the ones that DoD should be most concerned about. The resources listed in the right column specifically identify which species are considered migratory bird species of concern on a BCR or national level.

- Birds of Conservation Concern (BCC) published by the FWS:

<http://www.fws.gov/migratorybirds/reports/BCC02/BCC2002.pdf>

- North American Waterbird Conservation Plan (NAWCP):

<http://www.pwrc.usgs.gov/nacwcp/nawcp.html>

- United States Shorebird Conservation Plan (USSCP):

<http://www.fws.gov/shorebirdplan/>

- Partners in Flight Bird Conservation Plans (PIFBCP):

<http://www.partnersinflight.org/>

- North American Waterfowl Management Plan (NAWMP):

<http://www.fws.gov/birdhabitat/NAWMP/Planstrategy.shtm>

- Listed threatened and endangered bird species:

http://ecos.fws.gov/tess_public/SpeciesReport.do?groups=B&listingType=L

- Game birds below desired population sizes (GBBDPS):

<http://www.fws.gov/migratorybirds/reports/status04/GBBDC%20LIST.pdf>

USAEC helped DoD Partners in Flight develop a database that identifies the bird species of concern identified in these resources, as well as the DoD installations found within each BCR. The data and associated website enable identification of the BCR by installation and enable listing all the migratory bird species of concern within that BCR. The site's address is: http://dodpif.org/downloads/DOD_Map_2006.pdf.

BURROWING OWL⁷

In partnership with the FWS and with full support from the commander of Umatilla Chemical Depot (UMCD), LTC Bob Stein, a new burrowing owl habitat development project was begun at UMCD when planning for migratory bird protection started in 2007.

“Today’s Army mission includes environmental protection in many forms,” said Stein. “We protect the depot environment by not only keeping chemical agents safely contained, but by working with federal and state agencies to protect wildlife.”

FWS biologists, UMCD environmental staff, and volunteers partnered to construct new owl burrows from modern materials that mimic features that the owls desire, including the prerequisite darkness and dirt floors. The artificial burrows have several advantages, including easy access points for banding or counting owls, plus predator-proof construction. Future plans include addition of a low-light video camera.

“We approached the FWS with the idea of assembling a team to build artificial burrows—we call them owl condos,” said Don Gillis, UMCD natural resources manager. “We were partly inspired by a similar project nearby at the U.S. Department of Energy’s Hanford site.”

“The owls seemed to like it right away,” said Gillis. “Within 24 hours one owl moved in—we nicknamed her Buffy—and within a few weeks we saw activity in 14 of the 18 condos.”

The Sikes Act requires creation and implementation of a depot INRMP. It also requires conforming to the Migratory Bird Treaty Act. UMCD’s INRMP covers protection of various species, including burrowing owls.

“We appreciate all the hard work by these dedicated team members,” Stein said. “This is a tremendous partnership between the Army and our neighbors. We’re proud to be a part of this environmental protection effort.” And there is one payoff for the team members for their hard work: each owl condo will be named after a volunteer.



The first burrowing owl, nicknamed Buffy by depot environmental staff, moved into an artificial burrow within a day. Buffy stands next to a flexpipe entrance to an artificial burrow or “owl condo” at the Umatilla Chemical Depot.

Umatilla Chemical Depot

⁷ Adapted from press release by Bruce Henrickson, U.S. Army Umatilla Chemical Depot Public Affairs.

DEFINITIONS

Biological Opinion—The document that states the opinion of the FWS/NOAA-Fisheries as to whether a federal agency’s proposed action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.

Category (of Species)—Species are divided into the following categories in this report:

AMPHIBIANS	MAMMALS
BIRDS	OTHER INVERTEBRATES
CRUSTACEANS	PLANTS
FISH	REPTILES
INSECTS	SNAILS

Constituent Elements—Physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historical geographic and ecological distributions of a species.

Consultation—The process in which each federal agency consults with FWS/NOAA-Fisheries to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling these requirements, each agency is to use the best scientific and commercial data available. Consultations can be conducted as follows:

Formal Consultation—The process between FWS/NOAA-Fisheries and a federal agency that commences when the federal agency determines that its action may adversely affect a listed species or critical habitat. The agency then submits a written request for consultation with FWS/NOAA-Fisheries. The process concludes with the issuance of a biological opinion by the FWS/NOAA-Fisheries, stating whether the action is likely to jeopardize the species or adversely modify critical habitat.

Informal Consultation—The informal consultation process that may be requested by a federal agency, a designated non-federal representative, or other applicant. Informal consultation may include such topics as which species occur in the proposed action area, and what effect the action may have on listed species or critical habitats. Informal consultation often concludes with FWS/NOAA-Fisheries providing written concurrence with the federal agency’s determination that its action is not likely to adversely affect listed species or critical habitat.

Critical Habitat—ESA Section 3(5)(A) defines critical habitat as “(i) the specific areas within the geographical area occupied by the [listed] species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.”

Distinct Species—A species may occur on several installations, but it is counted only once for purposes of assessing the number of distinct species found Army-wide. For example, species X may occur on five installations, but when the total number of species is presented, species X is counted only once.

Expenditures—The total cost for managing each federally listed T&E species for which funds were expended during the reporting fiscal year. Guidelines for reporting T&E species expenditures are provided by the FWS. Guidance is based on the notion of “reasonably identifiable federal expenditures made primarily for the conservation of endangered or threatened species pursuant to this [Endangered Species Act]” (16 U.S.C. 1544).

Federal Status—The following designations identify the federal protection status of species:

E—Federally endangered

T—Federally threatened

T(SA)—Threatened due to similarity of appearance

PE—Federally proposed as endangered

PT—Federally proposed as threatened

C—Candidate for federal listing.

Federal Action [Proposed Action]—Any activity permitted, funded, or conducted by a federal agency.

G#—An alphanumeric designation representing the global conservation status rank of a species, assigned by NatureServe scientists:

G1—Critically imperiled globally because of extreme rarity or because of one or more factors making it especially vulnerable to extinction. Typically five or fewer occurrences or very few remaining individuals(<1,000).

G2—Imperiled globally because of rarity or because of one or more factors making it very vulnerable to extinction or elimination. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000).

Installation—The term installation includes active military installations, state ARNG offices, ARNG training sites, Army ammunition

plants and depots, and regional support centers for the Army Reserve. Analyses in this report do not make a distinction between the various types. In some cases it was difficult to define “installation” data because some ARNG state offices, for example, reported on an individual basis, while others reported at the state level.

Installation Management Command—IMCOM installations in the United States are divided into four regions: Northeast, Southeast, West, and Pacific. IMCOM regions are responsible for supporting installation base operations.

Jeopardy Biological Opinion—A biological opinion issued by the FWS or NOAA-Fisheries stating that a proposed action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Listing Factors (ESA 4(a)(1))—The factors used to determine if any species is an endangered or threatened species are:

- the present or threatened destruction, modification, or curtailment of its habitat or range;
- overutilization for commercial, recreational, scientific, or educational purposes;
- disease or predation;
- the inadequacy of existing regulatory mechanisms or;
- other natural or manmade factors affecting its continued existence.

Non-jeopardy Biological Opinion—A biological opinion issued by the FWS or NOAA-Fisheries stating that a proposed action may affect, but is not likely to jeopardize, the continued existence of listed species or result in adverse modification of critical habitat.

Species Occurrence—An occurrence is equivalent to an individual record. For example, a species that occurs on three installations is recorded as having three occurrences.

Similarity of Appearance—A species that closely resembles a threatened or endangered species may be given the federal status of the species it resembles. Similarity of appearance species are denoted by T(SA) or E(SA). However, no distinction is made between SA and T&E for reporting purposes.

Species at Risk—Species that are candidates under the ESA and/or are considered to be critically imperiled (status of G1 or T1) or imperiled (status of G2 or T2) and have not been federally listed (DoD 2004).

Army Species at Risk—Species that would have a significant impact on military missions if federally listed as T or E. Army SAR are identified in the Army’s policy guidance on SAR (Memorandum 2006).

Species Location—The location of a recorded species may be one of two possibilities:

Contiguous—Species known to occupy or otherwise use habitat adjacent to an installation, which may be affected by installation military activities and land management practices. Contiguous species are of concern to installations because of the possibility that they may at some future time be found on the installation or because the installation activities may affect the species, so the contiguous lands would be included in the action area for assessing potential effects.

Onsite—Species that have been documented on the installation.

T#—An alphanumeric designation for the status of infraspecific taxa (subspecies or varieties) following a species’ global rank:

T1—Subspecies or variety critically imperiled globally because of extreme rarity or because of one or more factors making it especially vulnerable to extinction.

T2—Subspecies or variety imperiled globally because of rarity or because of one or more factors making it very vulnerable to extinction or elimination.

T&E Species—Species that have been federally designated as threatened or endangered. These two statuses include similarity of appearance species.

TEPC Species—Species on Army lands that have been federally designated as threatened, endangered, proposed, or candidate.

Tier 1 Installations—Major training installations with strategic training value to the Army, and forward deployed locations (as directed) (DA 2004).

A CRONYMS

AAP	Army Ammunition Plant
AASF	Army Aviation Support Facility
AD	Army Depot
AEDB-EQ	Army Environmental Database—Environmental Quality
AFRC	Armed Forces Reserve Center
AMC	U.S. Army Materiel Command
AMSA	Army Medical Surveillance Activity
ARNG	Army National Guard
ASF	Aviation Support Facility
AVN	aviation
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
BRAC	Base Realignment and Closure
CANG	California Army National Guard
CFR	Code of Federal Regulations
CSTC	Combat Support Training Center
CTC	Combat Training Center
DoD	Department of Defense
ESA	Endangered Species Act
FR	Federal Register
FWS	U.S. Fish and Wildlife Service
FY	fiscal year
G1	Global rank of critically imperiled
G2	Global rank of imperiled
GBBDPS	game birds below desired population sizes
HQ	headquarters
HQDA	Headquarters, Department of Army
IMCOM	Installation Management Command
INRMP	integrated natural resources management plan
LTA	Local Training Area
MOU	memorandum of understanding
MTA	Maneuver Training Area
MTC	Maneuver Training Center

MTC-H	Maneuver Training Center—Heavy
NAWMP	North American Waterfowl Management Plan
NAWCP	North American Waterbird Conservation Plan
NDAA	National Defense Authorization Act
NEP	non-essential experimental population
NERO	Installation Management Command, Northeast Region
NTC	National Training Center
NOAA-FISHERIES	National Oceanic and Atmospheric Administration - National Marine Fisheries Service
OMS	Organizational Maintenance Shop
PARO	Installation Management Command, Pacific Region
PIFBCP	Partners in Flight Bird Conservation Plans
RRC	Regional Readiness Command
SAR	species at risk
SERO	Installation Management Command, Southeast Region
SMR	State Military Reserve
STARC	State Area Command
TI	Subspecies or varieties with global rank of critically imperiled
T2	Subspecies or varieties with global rank of imperiled
T&E	threatened and endangered
T(SA)	threatened due to similarity of appearance
TA	Training Area
TEPC	threatened, endangered, proposed, and candidate
TS	Training Site
UMCD	Umatilla Chemical Depot
USAEC	U.S. Army Environmental Command
USARC	US Army Reserve
USARC	U.S. Army Reserve Command
U.S.C.	United States Code
USSCP	United States Shorebird Conservation Plan
UTES	Unit Training Equipment Site
WEST	Installation Management Command, West Region
WETS	Weekend Training Site

REFERENCES

- Delaney, David, Tom Radzio, Joseph Hackler, Andrew Walde, and Matt Hinderliter. 30 November 2007. Response of Gopher Tortoises to Military Training Operations: Preliminary Data. Paper presented at 154th Meeting of the Acoustical Society of America.
- Department of Defense and U.S. Fish and Wildlife Service. August 2006. Fact Sheet, Greater Sage-Grouse (*Centrocercus urophasianus*).
- Department of Defense. January 2004. Species at Risk on Department of Defense Installations. Prepared and submitted by NatureServe, under contract with DoD.
- Department of Defense. July 2002. Species of Concern (SOC) on Department of Defense Installations. Prepared and submitted by NatureServe, under contract with DoD.
- Department of the Army, DAIM-ED. 15 September 2006. Memorandum, Army Species at Risk Policy and Implementing Guidance.
- Department of the Army, DAIM-ED-N. 11 October 2002. Memorandum, Supplemental Army Policy Guidance on Migratory Bird Treaty Act.
- Department of the Army, DAIM-ED-N. 17 August 2001. Memorandum, Army Policy Guidance on Migratory Bird Treaty Act.
- Department of the Army, DAIM-ISE. 19 August 2008. Memorandum, Eagle Policy Guidance.
- Department of the Army. 11 February 2004. Memorandum, Army Range and Training Land Strategy.
- Endangered Species Act of 1973. Public Law 93-205, as amended (16 U.S.C. 1531 et seq.).
- National Defense Authorization Act 2004. Public Law 108-136 (16 U.S.C. 1531-1544, as amended).
- Rubinoff, J, Todd Wills, Steve Sekscienski, and Scott Belfit. June 2007. Installation Summaries from the FY 2006 Survey of Threatened and Endangered Species on Army Lands. Report Number IMAE-AEC-TS-TR-2007017.
- U.S. Army. 13 December 2007. Army Regulation (AR) 200-1, Environmental Protection and Enhancement.
- U.S. Army. Undated. Army Environmental Database—Environmental Quality.
- U.S. Code of Federal Regulations, Title 50—Wildlife and Fisheries, Part 402.02.



A

APPENDIX A: INSTALLATIONS WITH T&E SPECIES RECORDED AS ONSITE OR CONTIGUOUS

COMMAND	INSTALLATION	STATE	FWS REGION	CATEGORY	COMMON NAME	SCIENTIFIC NAME	ONSITE/ CONTIGUOUS	STATUS	CRITICAL HABITAT
AMC	Anniston AD	AL	4	Plant	Grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	Onsite	E	N
	Blue Grass AD	KY	4	Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
				Plant	Clover, running buffalo	<i>Trifolium stoloniferum</i>	Onsite	E	N
	Deseret Chemical Depot	UT	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
	Hawthorne AD	NV	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Fish	Trout, Lahontan cutthroat	<i>Oncorhynchus clarki henshawi</i>	Contiguous	E	N
	Holston AAP	TN	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N
	Iowa AAP	IA	3	Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Lone Star AAP	TX	2	Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N
	McAlester AAP	OK	2	Insect	Beetle, American burying	<i>Nicrophorus americanus</i>	Onsite	E	N
	Newport Chemical Depot	IN	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Riverbank AAP	CA	1	Insect	Beetle, valley elderberry longhorn	<i>Desmocerus californicus dimorphus</i>	Contiguous	T	N
Sierra AD	CA	1	Insect	Skipper, Carson wandering	<i>Pseudocopaedeos eunus obscurus</i>	Contiguous	E	N	
ARNG	(Clinton) Truman Reservoir T.S.	MO	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Auburn TS/OMS 2	ME	5	Plant	Pogonia, small whorled	<i>Isotria medeoloides</i>	Onsite	T	N
	Camp Ashland	NE	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Camp Atterbury	IN	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Camp Bowie (State)	TX	2	Bird	Vireo, black-capped	<i>Vireo atricapilla</i>	Onsite	E	N
	Camp Crowder	MO	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
				Fish	Cavefish, Ozark	<i>Amblyopsis rosae</i>	Contiguous	T	N
	Camp Grafton	ND	6	Bird	Plover, piping	<i>Charadrius melodus</i>	Contiguous	T	N
	Camp Gruber	OK	2	Insect	Beetle, American burying (=giant carrion)	<i>Nicrophorus americanus</i>	Onsite	E	N
	Camp Joseph T. Robinson	AR	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
	Camp Mabry	TX	2	Bird	Warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	Onsite	E	N
	Camp Maxey	TX	2	Insect	Beetle, American burying (=giant carrion)	<i>Nicrophorus americanus</i>	Onsite	E	N
	Camp Murray	WA	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Camp Navajo	AZ	2	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Owl, Mexican spotted	<i>Strix occidentalis lucida</i>	Onsite	T	Y—O
	Camp Perry	OH	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Camp Ripley	MN	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Wolf, gray (MN only)***	<i>Canis lupus</i>	Onsite	T	N
	Camp Smith CSMS A	NY	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
				Fish	Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Contiguous	E	N
	Catoosa Range/TS	TN	4	Plant	Skullcap, large-flowered	<i>Scutellaria montana</i>	Onsite	T	N
	Clark County Complex	NV	1	Reptile	Tortoise, desert	<i>Gopherus agassizii</i>	Onsite	T	N
	Corvallis/Camp Adair	OR	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
				Bird	Owl, northern spotted	<i>Strix occidentalis caurina</i>	Contiguous	T	N
				Insect	Butterfly, Fender's blue	<i>Icaricia icarioides fenderi</i>	Contiguous	T	N
				Plant	Checker-mallow, Nelson's	<i>Sidalcea nelsoniana</i>	Onsite	T	N
				Plant	Lupine, Kincaid's	<i>Lupinus sulphureus kincaidii</i>	Onsite	E	N
	CTC Camp San Luis Obispo	CA	1	Amphibian	Frog, California red-legged	<i>Rana aurora draytonii</i>	Onsite	T	N
				Bird	Condor, California	<i>Gymnogyps californianus</i>	Onsite	E	N
				Bird	Vireo, least Bell's	<i>Vireo bellii pusillus</i>	Onsite	E	N
				Fish	Steelhead (Southern California)	<i>Oncorhynchus mykiss</i>	Onsite	E	N
				Plant	Thistle, Chorro Creek bog	<i>Cirsium fontinale var. obispoense</i>	Onsite	E	N
Snail				Snail, Morro shoulderband	<i>Helminthoglypta walkeriana</i>	Contiguous	E	N	
Douglas Armory	WY	6	Mammal	Mouse, Preble's meadow jumping	<i>Zapus hudsonius preblei</i>	Contiguous	E	N	

COMMAND	INSTALLATION	STATE	FWS REGION	CATEGORY	COMMON NAME	SCIENTIFIC NAME	ONSITE/ CONTIGUOUS	STATUS	CRITICAL HABITAT
ARNG	Florence Military Reservation	AZ	2	Reptile	Tortoise, desert	<i>Gopherus agassizii</i>	Onsite	T(SA)	N
	Ft Chaffee Maneuver Trng Ctr	AR	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Insect	Beetle, American burying	<i>Nicrophorus americanus</i>	Onsite	E	N
	Fort McClellan ARNG	AL	4	Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N
				Plant	Button, Mohr's Barbara	<i>Marshallia mohrii</i>	Onsite	E	N
				Plant	Grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	Onsite	E	N
	Fort Pickett ARNG MTC	VA	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Fish	Logperch, Roanoke	<i>Percina rex</i>	Onsite	E	N
				Plant	Sumac, Michaux's	<i>Rhus michauxii</i>	Onsite	E	N
	Fort Ruger	HI	1	Bird	Coot, Hawaiian (= 'alae-ke'oke'o)	<i>Fulica americana alai</i>	Onsite	E	N
				Bird	Duck, Hawaiian (=koloa)	<i>Anas wyvilliana</i>	Onsite	E	N
				Bird	Moorhen, Hawaiian Common	<i>Gallinula chloropus sandvicensis</i>	Onsite	E	N
				Plant	No common name	<i>Spermolepis hawaiiensis</i>	Onsite	E	Y—O
				Plant	Pu'uka'a	<i>Cyperus trachysanthos</i>	Onsite	E	Y—O
	Hilo (Keaukaha Military Reserv)	HI	1	Bird	Hawk, Hawaiian (= 'lo)	<i>Buteo solitarius</i>	Onsite	E	N
				Mammal	Bat, Hawaiian hoary	<i>Lasiurus cinereus semotus</i>	Onsite	E	N
	Hollis Plains TS	ME	5	Mammal	Rabbit, New England cottontail	<i>Sylvilagus transitionalis</i>	Onsite	C	N
	HQ STARC—MO	MO	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Tern, least	<i>Sterna antillarum</i>	Contiguous	E	N
	Kanaio Wets	HI	1	Insect	Moth, Blackburn's sphinx	<i>Manduca blackburni</i>	Onsite	E	Y—O
				Plant	Ohai	<i>Sesbania tomentosa</i>	Onsite	E	N
				Bird	Stilt, Hawaiian (=ae'o)	<i>Himantopus mexicanus knudseni</i>	Onsite	E	N
				Plant	Lau 'ehu	<i>Panicum niuhauense</i>	Onsite	E	Y—O
	Kingwood	WV	5	Plant	Clover, running buffalo	<i>Trifolium stoloniferum</i>	Onsite	E	N
	Kwigillingok Scout Armory	AK	7	Bird	Eider, Stellar's	<i>Polysticta stellari</i>	Contiguous	T	N
	Leesburg TS	SC	4	Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Plant	Coneflower, smooth	<i>Echinacea laevigata</i>	Onsite	E	N
				Plant	Loosestrife, rough-leaved	<i>Lysimachia asperulaefolia</i>	Onsite	E	N
	LIL Aaron Strauss	MD	5	Plant	Harperella	<i>Ptilimnium nodosum</i>	Onsite	E	N
	Macon TS	MO	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	MTA Camp Rilea	OR	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Murrelet, marbled	<i>Brachyramphus marmoratus marmoratus</i>	Contiguous	T	N
Bird				Owl, northern spotted	<i>Strix occidentalis caurina</i>	Contiguous	T	N	
Bird				Pelican, brn (Entire pop, except U.S. Atl Cst, FL, AL)	<i>Pelecanus occidentalis</i>	Contiguous	E	N	
Bird				Plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	Contiguous	T	N	
Insect				Butterfly, Oregon silverspot	<i>Speyeria zerene hippolyta</i>	Onsite	T	Y—O	
Mammal				Sea-lion, Steller (=northern)	<i>Eumetopias jubatus</i>	Contiguous	T	N	
MTA Camp Shelby	MS	4	Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Contiguous	E	N	
			Plant	Quillwort, Louisiana	<i>Isoetes louisianensis</i>	Onsite	E	N	
			Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N	
			Reptile	Snake, black pine	<i>Pituophis melanoleucus lodingi</i>	Onsite	C	N	
			Reptile	Tortoise, gopher	<i>Gopherus polyphemus</i>	Onsite	T	N	
MTC Camp Blanding	FL	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N	
			Bird	Jay, Florida scrub	<i>Aphelocoma coerulescens</i>	Onsite	T	N	
			Bird	Stork, wood	<i>Mycteria americana</i>	Onsite	E	N	
			Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N	
			Mammal	Panther, Florida	<i>Puma concolor coryi</i>	Onsite	E	N	
			Plant	Rhododendron, Chapman	<i>Rhododendron chapmanii</i>	Onsite	E	N	

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ARNG	MTC Camp Blanding	FL	4	Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N
				Reptile	Snake, eastern indigo	<i>Drymarchon corais couperi</i>	Onsite	T	N
	MTC-H Camp Grayling	MI	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Warbler, Kirtland's	<i>Dendroica kirtlandii</i>	Onsite	E	N
				Plant	Goldenrod, Houghton's	<i>Solidago houghtonii</i>	Onsite	T	N
	MTC-H Camp Guernsey	WY	6	Reptile	Massasauga, eastern	<i>Sistrurus catenatus catenatus</i>	Onsite	C	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	MTC-H Camp Roberts	CA	1	Bird	Condor, California	<i>Gymnogyps californianus</i>	Contiguous	E	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Vireo, least Bell's	<i>Vireo bellii pusillus</i>	Contiguous	E	N
				Crustacean	Fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	Onsite	T	N
				Fish	Steelhead (Southern California)	<i>Oncorhynchus mykiss</i>	Onsite	E	N
	NG Chevak Armory	AK	7	Mammal	Fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	Onsite	E	N
				Plant	Amole, purple	<i>Chlorogalum purpureum</i>	Onsite	T	N
				Bird	Eider, Stellar's	<i>Polysticta stelleri</i>	Contiguous	T	N
				Bird	Eider, spectacled	<i>Somateria fischeri</i>	Contiguous	T	N
				Bird	Eider, spectacled	<i>Somateria fischeri</i>	Contiguous	T	N
				Plant	Pogonia, small whorled	<i>Isotria medeoloides</i>	Onsite	T	N
				Plant	Bear-poppy, Dwarf	<i>Arctomecon humilis</i>	Onsite	E	N
				Plant	Slickspot peppergrass****	<i>Lepidium Papilliferum</i>	Onsite	PE	N
				Plant	Tarplant, Santa Cruz	<i>Holocarpha macradenia</i>	Onsite	T	Y—O
				Bird	Plover, piping	<i>Charadrius melodus</i>	Onsite	T	N
				Plant	Amaranth, seabeach	<i>Amaranthus pumilus</i>	Onsite	T	N
				Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Contiguous	E	N
				Fish	Cavefish, Ozark	<i>Amblyopsis rosae</i>	Contiguous	T	N
				Insect	Butterfly, Karner blue	<i>Lycæides melissa samuelis</i>	Onsite	E	N
				Bird	Eider, spectacled	<i>Somateria fischeri</i>	Contiguous	T	N
	Bird	Plover, piping	<i>Charadrius melodus</i>	Contiguous	T	N			
	Bird	Plover, piping	<i>Charadrius melodus</i>	Contiguous	T	N			
	UKUMEHAME WETS	HI	1	Bird	Coot, Hawaiian (= 'alae-ke'oke'o)	<i>Fulica americana alai</i>	Onsite	E	N
				Bird	Duck, Hawaiian (=koloa)	<i>Anas wyvilliana</i>	Onsite	E	N
				Bird	Goose, Hawaiian (=nene)	<i>Branta sandvicensis</i>	Onsite	E	N
Bird				Moorhen, Hawaiian Common	<i>Gallinula chloropus sandvicensis</i>	Onsite	E	N	
Bird				Stilt, Hawaiian (=ae'o)	<i>Himantopus mexicanus knudseni</i>	Onsite	E	N	
NERO	Aberdeen Proving Ground	MD	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Fish	Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Onsite	E	N
	Fort AP Hill	VA	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Plant	Pink, swamp	<i>Helonias bullata</i>	Onsite	T	N
				Plant	Pogonia, small whorled	<i>Isotria medeoloides</i>	Onsite	T	N
	Fort Belvoir	VA	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Plant	Pogonia, small whorled	<i>Isotria medeoloides</i>	Onsite	T	N
	Fort Dix	NJ	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Fort Drum	NY	5	Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Fort Eustis	VA	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Fort Lee	VA	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
	Picatinny Arsenal	NJ	5	Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
				Reptile	Turtle, bog (Entire U.S. except, GA, NC, SC, TN, VA)	<i>Clemmys muhlenbergii</i>	Contiguous	T	N
U.S. Army Research Lab Adelphi	MD	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N	
West Point Military Reservation	NY	5	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N	
			Fish	Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Contiguous	E	N	
PARO	Dillingham Military Reservation	HI	1	Plant	Ma'o hau hele	<i>Hibiscus brackenridgei</i>	Contiguous	E	N

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PARO	Dillingham Military Reservation	HI	I	Plant	Ma`oli`oli	Schiedea kealiae	Contiguous	E	N
				Plant	Pu`uka`a	Cyperus trachysanthos	Contiguous	E	N
	Fort Richardson	AK	7	Mammal	Whale, beluga	Delphinapterus leucas	Onsite	PE	N
	Kahuku TA	HI	II	Plant	Haha	Cyanea koolauensis	Onsite	E	N
				Plant	Kaulu	Pteralyxia macrocarpa	Onsite	C	N
				Plant	Nanu	Gardenia mannii	Onsite	E	N
				Plant	Nioi	Eugenia koolauensis	Onsite	E	N
				Plant	Ohe`ohe	Tetraplasandra gymnocarpa	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella curta	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella sowerbyana	Onsite	E	N
	Kawailoa TA	HI	I	Insect	Damselfly, blackline Hawaiian	Megalagrion nigrohamatum nigrolineatum	Onsite	C	N
				Plant	Akoko	Chamaesyce rockii	Onsite	E	N
				Plant	Alani	Melicope hiiakae	Onsite	C	N
				Plant	Alani	Melicope lydgatei	Onsite	E	N
				Plant	Boyd's maiden fern	Christella boydiae	Onsite	C	N
				Plant	Ha`iwale	Cyrtandra dentata	Onsite	E	N
				Plant	Ha`iwale	Cyrtandra viridiflora	Onsite	E	N
				Plant	Haha	Cyanea acuminata	Onsite	E	N
				Plant	Haha	Cyanea calycina	Onsite	C	N
				Plant	Haha	Cyanea crispa	Onsite	E	N
				Plant	Haha	Cyanea humboldtiana	Onsite	E	N
				Plant	Haha	Cyanea koolauensis	Onsite	E	N
				Plant	Haha	Cyanea st-johnii	Onsite	E	N
				Plant	Kampua`a	Hedyotis fluviatilis	Onsite	C	N
				Plant	Kaulu	Pteralyxia macrocarpa	Onsite	C	N
				Plant	Kolea	Myrsine juddii	Onsite	E	N
				Plant	Nanu	Gardenia mannii	Onsite	E	N
				Plant	No common name	Hesperomannia arborescens	Onsite	E	N
				Plant	No common name	Lobelia oahuensis	Onsite	E	N
				Plant	No common name	Phlegmariurus nutans	Onsite	E	N
				Plant	No common name	Phyllostegia hirsuta	Onsite	E	N
				Plant	No common name	Phyllostegia parviflora	Onsite	E	N
				Plant	No common name	Platydesma cornuta cornuta	Onsite	C	N
				Plant	No common name	Pteris lidgatei	Onsite	E	N
				Plant	No common name	Sanicula purpurea	Onsite	E	N
				Plant	No common name	Viola oahuensis	Onsite	E	N
				Plant	Ohe	Joinvillea ascendens ascendens	Onsite	C	N
				Plant	Ohe`ohe	Tetraplasandra gymnocarpa	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella apexfulva	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella bulimoides	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella byronii	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella curta	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella lila	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella livida	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella pulcherrima	Onsite	E	N
				Snail	Pupu kuahiwi	Achatinella sowerbyana	Onsite	E	N
	Makua Military Reservation	HI	I	Bird	Elepaio, Oahu	Chasiempis sandwichensis ibidis	Onsite	E	Y—O
			Plant	Aiakeakua, popolo	Solanum sandwicense	Contiguous	E	Y—C	
			Plant	Aiea	Nothocestrum latifolium	Onsite	C	N	
			Plant	Akoko	Chamaesyce celastroides var. kaenana	Onsite	E	Y—C	

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PARO	Makua Military Reservation	HI	I	Plant	Akoko	<i>Chamaesyce herbstii</i>	Onsite	E	Y—C
				Plant	Akoko	<i>Euphorbia haeleleana</i>	Onsite	E	Y—C
				Plant	Alani	<i>Melicope pallida</i>	Contiguous	E	Y—C
				Plant	Anaunau	<i>Lepidium arbuscula</i>	Onsite	E	N
				Plant	Aupaka	<i>Isodendron longifolium</i>	Contiguous	T	Y—C
				Plant	Ha`iwale	<i>Cyrtandra dentata</i>	Onsite	E	Y—C
				Plant	Haha	<i>Cyanea grimesiana ssp. obatae</i>	Onsite	E	Y—C
				Plant	Haha	<i>Cyanea longiflora</i>	Onsite	E	Y—C
				Plant	Haha	<i>Cyanea superba</i>	Onsite	E	N
				Plant	Haha	<i>Lobelia niihauensis</i>	Onsite	E	N
				Plant	Hulumoa	<i>Korthalsella degeneri</i>	Onsite	C	N
				Plant	Kamanomano	<i>Cenchrus agrimonioides</i>	Onsite	E	N
				Plant	Kauila	<i>Colubrina oppositifolia</i>	Contiguous	E	Y—C
				Plant	Kaulu	<i>Pteralyxia macrocarpa</i>	Onsite	C	N
				Plant	Kuahiwi laukahi	<i>Plantago princeps</i>	Onsite	E	N
				Plant	Kulu`i	<i>Nototrichium humile</i>	Onsite	E	Y—C
				Plant	Lo`ulu	<i>Pritchardia kaalae</i>	Onsite	E	N
				Plant	Ma`o hau hele	<i>Hibiscus brackenridgei</i>	Onsite	E	N
				Plant	Ma`aloa	<i>Neraudia angulata</i>	Onsite	E	Y—C
				Plant	Mahoe	<i>Alectryon macrococcus</i>	Onsite	E	N
				Plant	Makou	<i>Peucedanum sandwicense</i>	Onsite	T	N
				Plant	Mehamehame	<i>Flueggea neowawraea</i>	Onsite	E	Y—C
				Plant	Na`ena`e	<i>Dubautia herbstobatae</i>	Onsite	E	Y—C
				Plant	Nehe	<i>Lipochaeta tenuifolia</i>	Onsite	E	Y—C
				Plant	Noho, Kula wahine	<i>Isodendron pyriformium</i>	Contiguous	E	Y—C
				Plant	No common name	<i>Abutilon sandwicense</i>	Onsite	E	N
				Plant	No common name	<i>Alsinidendron obovatum</i>	Onsite	E	Y—C
				Plant	No common name	<i>Bonamia menziesii</i>	Onsite	E	Y—C
				Plant	No common name	<i>Diellia falcata</i>	Onsite	E	Y—C
				Plant	No common name	<i>Gouania vitifolia</i>	Onsite	E	Y—C
				Plant	No common name	<i>Hedyotis degeneri</i>	Onsite	E	Y—C
				Plant	No common name	<i>Hedyotis parvula</i>	Onsite	E	Y—C
				Plant	No common name	<i>Hesperomannia arbuscula</i>	Onsite	E	Y—C
				Plant	No common name	<i>Lobelia oahuensis</i>	Onsite	E	N
				Plant	No common name	<i>Mariscus pennatiformis</i>	Contiguous	E	Y—C
				Plant	No common name	<i>Phyllostegia kaalaensis</i>	Onsite	E	Y—C
				Plant	No common name	<i>Platydesma cornuta cornuta</i>	Onsite	C	N
				Plant	No common name	<i>Sanicula mariversa</i>	Onsite	E	Y—C
				Plant	No common name	<i>Schiedea hookeri</i>	Onsite	E	Y—C
				Plant	No common name	<i>Schiedea kaalae</i>	Onsite	E	Y—C
				Plant	No common name	<i>Schiedea nuttallii</i>	Onsite	E	Y—C
				Plant	No common name	<i>Silene lanceolata</i>	Onsite	E	N
				Plant	No common name	<i>Spermelepis hawaiiensis</i>	Onsite	E	Y—C
Plant	No common name	<i>Tetramolopium filiforme</i>	Onsite	E	N				
Plant	Oha	<i>Delissea subcordata</i>	Onsite	E	Y—C				
Plant	Pamakani	<i>Viola comissioniana ssp. chamissoniana</i>	Onsite	E	N				
Plant	Pauoa	<i>Ctenitis squamigera</i>	Onsite	E	N				
Snail	Pupu kuahiwi	<i>Achatinella mustelina</i>	Onsite	E	N				
Pohakuloa TA	HI	I	Bird	Hawk, Hawaiian (=‘Io)	<i>Buteo solitarius</i>	Onsite	E	N	
			Bird	Goose, Hawaiian (=nene)	<i>Branta sandvicensis</i>	Onsite	E	N	
			Bird	Palila (honeycreeper)	<i>Loxioides bailleui</i>	Contiguous	E	Y—O	

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PARO	Pohakuloa TA	HI	I	Mammal	Bat, Hawaiian hoary	<i>Lasiurus cinereus semotus</i>	Onsite	E	N
				Plant	A`e	<i>Zanthoxylum hawaiiense</i>	Onsite	E	N
				Plant	Aupaka	<i>Isodendron hosakae</i>	Onsite	E	N
				Plant	Honohono	<i>Haplostachys haplostachya</i>	Onsite	E	N
				Plant	Kio`ele	<i>Hedyotis coriacea</i>	Onsite	E	N
				Plant	Maaloa	<i>Neraudia Ovata</i>	Onsite	E	N
				Plant	No common name	<i>Asplenium fragile var.insulare</i>	Onsite	E	N
				Plant	No common name	<i>Lipochaeta venosa</i>	Onsite	E	N
				Plant	No common name	<i>Silene hawaiiensis</i>	Onsite	T	N
				Plant	No common name	<i>Silene lanceolata</i>	Onsite	E	N
				Plant	No common name	<i>Spermolepis hawaiiensis</i>	Onsite	E	N
				Plant	No common name	<i>Stenogyne angustifolia</i>	Onsite	E	N
				Plant	No common name	<i>Vigna o-wahuensis</i>	Onsite	E	N
				Plant	Pamakani, Mauna Kea	<i>Tetramolopium arenarium var. arenarium</i>	Onsite	E	N
				Plant	Po`e	<i>Portulaca sclerocarpa</i>	Onsite	E	N
	Plant	Popolo ku mai	<i>Solanum incompletum</i>	Onsite	E	N			
	Schofield Barracks	HI	I	Bird	Elepaio, Oahu	<i>Chasiempis sandwichensis ibidis</i>	Onsite	E	Y—O
				Insect	Damselfly, crimson Hawaiian	<i>Megalagrion leptodemus</i>	Onsite	T	N
				Plant	Akoko	<i>Chamaesyce rockii</i>	Onsite	E	N
				Plant	Anaunau	<i>Lepidium arbuscula</i>	Onsite	E	N
				Plant	Aupaka	<i>Isodendron longifolium</i>	Onsite	T	N
				Plant	Ha`iwale	<i>Cyrtandra subumbellata</i>	Onsite	E	N
				Plant	Ha`iwale	<i>Cyrtandra viridiflora</i>	Onsite	E	N
				Plant	Haha	<i>Cyanea acuminata</i>	Onsite	E	N
				Plant	Haha	<i>Cyanea calycina</i>	Onsite	C	N
Plant				Haha	<i>Cyanea grimesiana ssp. obatae</i>	Onsite	E	N	
Plant				Haha	<i>Cyanea koolauensis</i>	Onsite	E	N	
Plant				Haha	<i>Cyanea st-johnii</i>	Onsite	E	N	
Plant				Kamakahala	<i>Labordia cyrtandrae</i>	Onsite	E	N	
Plant				Kamanomano	<i>Cenchrus agrimonoides</i>	Onsite	E	N	
Plant				Kaulu	<i>Pteralyxia macrocarpa</i>	Onsite	C	N	
Plant				Kuahiwi laukahi	<i>Plantago princeps</i>	Onsite	E	N	
Plant				Ma`aloa	<i>Neraudia angulata</i>	Onsite	E	N	
Plant				Mahoe	<i>Alectryon macrococcus</i>	Onsite	E	N	
Plant				Mehamehame	<i>Flueggea neowawraea</i>	Onsite	E	N	
Plant				Nanu	<i>Gardenia mannii</i>	Onsite	E	N	
Plant				No common name	<i>Abutilon sandwicense</i>	Onsite	E	N	
Plant				No common name	<i>Alsinidendron trinerve</i>	Onsite	E	N	
Plant				No common name	<i>Diellia falcata</i>	Onsite	E	N	
Plant				No common name	<i>Hesperomannia arborescens</i>	Onsite	E	N	
Plant				No common name	<i>Lobelia gaudichaudii ssp. koolauensis</i>	Onsite	E	N	
Plant	No common name	<i>Lobelia niihauensis</i>	Onsite	E	N				
Plant	No common name	<i>Lobelia oahuensis</i>	Onsite	E	N				
Plant	No common name	<i>Phlegmariurus nutans</i>	Onsite	E	N				
Plant	No common name	<i>Phyllostegia hirsuta</i>	Onsite	E	N				
Plant	No common name	<i>Phyllostegia kaalaensis</i>	Onsite	E	N				
Plant	No common name	<i>Platydesma cornuta descurrens</i>	Onsite	C	N				
Plant	No common name	<i>Pteris lidgatei</i>	Onsite	E	N				
Plant	No common name	<i>Sanicula purpurea</i>	Onsite	E	N				
Plant	No common name	<i>Schiedea hookeri</i>	Onsite	E	N				
Plant	No common name	<i>Schiedea kaalae</i>	Onsite	E	N				

COMMAND	INSTALLATION	STATE	FWS REGION	CATEGORY	COMMON NAME	SCIENTIFIC NAME	ONSITE/ CONTIGUOUS	STATUS	CRITICAL HABITAT
PARO	Schofield Barracks	HI	I	Plant	No common name	<i>Schiedea nuttallii</i>	Onsite	E	N
				Plant	No common name	<i>Stenogyne kanehoana</i>	Onsite	E	N
				Plant	No common name	<i>Viola oahuensis</i>	Onsite	E	N
				Plant	Oha	<i>Delissea subcordata</i>	Onsite	E	N
				Plant	Ohe	<i>Joinvillea ascendens ascendens</i>	Onsite	C	N
				Plant	Ohe' ohe	<i>Tetraplasandra gymnocarpa</i>	Onsite	E	N
				Plant	Opuhe	<i>Urera kaalae</i>	Onsite	E	N
				Plant	Pamakani	<i>Viola chamissoniana ssp. chamissoniana</i>	Onsite	E	N
				Plant	Pauoa	<i>Ctenitis squamigera</i>	Onsite	E	N
				Snail	Pupu kuahiwi	<i>Achatinella byronii</i>	Onsite	E	N
Snail	Pupu kuahiwi	<i>Achatinella mustelina</i>	Onsite	E	N				
Snail	Pupu kuahiwi	<i>Achatinella sowerbyana</i>	Onsite	E	N				
	Tripler Army Medical Center	HI	I	Insect	Damselfly, orangeblack Hawaiian	<i>Megalagrion xanthomelas</i>	Onsite	C	N
SERO	Fort Benning	GA	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Stork, wood	<i>Mycteria americana</i>	Onsite	E	N
				Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Plant	Trillium, relict	<i>Trillium reliquum</i>	Onsite	E	N
				Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N
	Fort Bragg	NC	4	Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Insect	Butterfly, Saint Francis' satyr	<i>Neonympha mitchellii francisci</i>	Onsite	E	N
				Plant	Chaffseed, American	<i>Schwalbea americana</i>	Onsite	E	N
				Plant	Loosestrife, rough-leaved	<i>Lysimachia asperulaefolia</i>	Onsite	E	N
				Plant	Sumac, Michaux's	<i>Rhus michauxii</i>	Onsite	E	N
	Fort Buchanan	PR	4	Plant	Palo de rosa	<i>Ottoschulzia rhodoxylon</i>	Onsite	E	N
				Reptile	Boa, Puerto Rican	<i>Epicrates inornatus</i>	Onsite	E	N
	Fort Campbell	KY	4	Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Fort Gordon	GA	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
				Bird	Stork, wood	<i>Mycteria americana</i>	Contiguous	E	N
				Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N
	Fort Jackson	SC	4	Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Plant	Coneflower, smooth	<i>Echinacea laevigata</i>	Onsite	E	N
				Plant	Loosestrife, rough-leaved	<i>Lysimachia asperulaefolia</i>	Onsite	E	N
	Fort Knox	KY	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Fort Polk	LA	4	Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N
				Reptile	Pine snake, Louisiana	<i>Pituophis ruthveni</i>	Onsite	C	N
	Fort Rucker	AL	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
	Fort Stewart	GA	4	Amphibian	Salamander, flatwoods	<i>Ambystoma cingulatum</i>	Onsite	T	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Stork, wood	<i>Mycteria americana</i>	Onsite	E	N
Bird				Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N	
Fish				Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	Onsite	E	N	
Reptile				Snake, eastern indigo	<i>Drymarchon corais couperi</i>	Onsite	T	N	
Plant				Loosestrife, roughleaved	<i>Lysimachia asperulaefolia</i>	Onsite	E	N	
Military Ocean Terminal Sunny Point	NC	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N	
			Bird	Woodpecker, red-cockaded	<i>Picoides borealis</i>	Onsite	E	N	
			Mammal	Manatee, West Indian (=Florida)	<i>Trichechus manatus</i>	Contiguous	E	N	
			Plant	Loosestrife, roughleaved	<i>Lysimachia asperulaefolia</i>	Onsite	E	N	

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SERO	Military Ocean Terminal Sunny Point	NC	4	Reptile	Alligator, American	<i>Alligator mississippiensis</i>	Onsite	T(SA)	N			
				Reptile	Sea turtle, green	<i>Chelonia mydas</i>	Contiguous	T	N			
				Reptile	Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Contiguous	E	N			
				Reptile	Sea turtle, leatherback	<i>Dermochelys coriacea</i>	Contiguous	E	N			
				Reptile	Sea turtle, loggerhead	<i>Caretta caretta</i>	Contiguous	T	N			
	Redstone Arsenal	AL	4	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N			
				Crustacean	Shrimp, Alabama cave	<i>Palaemonias alabamae</i>	Onsite	E	N			
				Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N			
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Contiguous	E	N			
				Plant	Potato-bean, Price's	<i>Apios priceana</i>	Onsite	T	N			
USAR-63rd RRC	63rd RRC	CA	I	Plant	Sunburst, Hartweg's golden	<i>Pseudobahia bahiifolia</i>	Contiguous	E	N			
	AMSA 13 (M), Mare Isle	CA	I	Bird	Pelican, brown (Entire pop, except U.S. Atl Cst, FL, AL)	<i>Pelecanus occidentalis</i>	Onsite	E	N			
				Bird	Tern, California least	<i>Sterna antillarum browni</i>	Onsite	E	N			
				Fish	Salmon, chinook (CA, Sacramento River-winter run)	<i>Oncorhynchus tshawytscha</i>	Onsite	T	N			
				Fish	Smelt, delta	<i>Hypomesus transpacificus</i>	Contiguous	T	N			
				Fish	Steelhead (Central California Coastal)	<i>Oncorhynchus mykiss</i>	Contiguous	T	N			
				Fish	Steelhead (Central Valley California)	<i>Oncorhynchus mykiss</i>	Contiguous	T	N			
				Fish	Sturgeon, green	<i>Acipenser medirostris</i>	Contiguous	T	N			
	BT Collins Enclave	CA	I	Crustacean	Fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	Onsite	T	N			
	Leymel Hall USARC	CA	I	Mammal	Kangaroo rat, giant	<i>Dipodomys ingens</i>	Contiguous	E	N			
				Plant	Sunburst, San Joaquin adobe	<i>Pseudobahia peirsonii</i>	Contiguous	T	N			
				Plant	Woolly-threads, San Joaquin	<i>Monolopia congdonii</i>	Contiguous	E	N			
	LTA—Moss Landing	CA	I	Bird	Pelican, Brown (Entire pop, expt U.S. Atl Cst, FL, AL)	<i>Pelecanus occidentalis</i>	Onsite	E	N			
				Bird	Plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	Onsite	T	N			
				Mammal	Otter, southern sea	<i>Enhydra lutris nereis</i>	Onsite	T	N			
				Plant	Gilia, Monterey	<i>Gilia tenuiflora ssp.arenaria</i>	Onsite	E	N			
				Plant	Spineflower, Monterey	<i>Chorizanthe pungens var. pungens</i>	Onsite	T	N			
	March USARC/AMSA 19(G)	CA	I	Mammal	Kangaroo rat, San Bernardino Merriam's	<i>Dipodomys merriami parvus</i>	Contiguous	E	N			
				Mammal	Kangaroo rat, Stephens'	<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)	Contiguous	E	N			
				Mammal	Mouse, Pacific pocket	<i>Perognathus longimembris pacificus</i>	Contiguous	E	N			
				Plant	Daisy, Parish's	<i>Erigeron parishii</i>	Contiguous	T	N			
				Reptile	Lizard, Coachella Valley fringe-toed	<i>Uma inornata</i>	Contiguous	T	N			
	Marina USARC/OMS/AMSA 12 S-S	CA	I	Plant	Gilia, Monterey	<i>Gilia tenuiflora ssp.arenaria</i>	Onsite	E	N			
				Plant	Spineflower, Monterey	<i>Chorizanthe pungens var. pungens</i>	Onsite	T	N			
	PFC L.T. Baccigleiri Hall AFRC	CA	I	Amphibian	Frog, California red-legged	<i>Rana aurora draytonii</i>	Contiguous	T	N			
				Bird	Tern, California least	<i>Sterna antillarum browni</i>	Contiguous	E	N			
				Plant	Fiddleneck, large-flowered	<i>Amsinckia grandiflora</i>	Contiguous	E	N			
	Quinones AFRC	CA	I	Mammal	Fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	Contiguous	E	N			
	Tustin USARC	CA	I	Bird	Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	Contiguous	E	N			
				Plant	Brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	Contiguous	T	N			
Plant				Spineflower, San Fernando Valley	<i>Chorizanthe parryi fernandina</i>	Onsite	C	N				
Victorville USARC/ASF	CA	I	Reptile	Tortoise, desert	<i>Gopherus agassizii</i>	Contiguous	T	N				
USAR-70th RRC	Fort Lawton USAR Complex	WA	I	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N			
				LTA-AVN TNG Area (Weyerhaeuser)	WA	I	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
							Bird	Murrelet, marbled	<i>Brachyramphus marmoratus marmoratus</i>	Onsite	T	Y—C
	Pier 23 USARC	WA	I	Bird	Owl, northern spotted	<i>Strix occidentalis caurina</i>	Onsite	T	Y—O			
				Fish	Salmon, chinook	<i>Oncorhynchus tshawytscha</i>	Onsite	T	N			
				Fish	Trout, bull	<i>Salvelinus confluentus</i>	Onsite	T	N			
USAR-88th RRC	Twinsburg USARC/AMSA #123	OH	3	Mammal	Whale, southern resident killer	<i>Orcinus orca</i>	Contiguous	E	N			
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N			

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WEST	Dugway Proving Ground	UT	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Contiguous	T	N
	Fort Bliss	TX	2	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Falcon, northern Aplomado	<i>Falco femoralis septentrionalis</i>	Onsite	E	N
				Plant	Cactus, Kuenzler hedgehog	<i>Echinocereus fendleri</i>	Onsite	E	N
				Plant	Cactus, Sneed pincushion	<i>Coryphantha sneedii</i>	Onsite	E	N
	Fort Carson	CO	6	Bird	Owl, Mexican spotted	<i>Strix occidentalis lucida</i>	Contiguous	T	N
				Fish	Darter, Arkansas	<i>Etheostoma cragini</i>	Onsite	C	N
				Mammal	Mouse, Preble's meadow jumping	<i>Zapus hudsonius preblei</i>	Contiguous	T	N
				Plant	Ladies'-tresses, Ute	<i>Spiranthes diluvialis</i>	Contiguous	T	N
	Fort Hood	TX	2	Bird	Crane, whooping	<i>Grus americana</i>	Onsite	E	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Vireo, black-capped	<i>Vireo atricapilla</i>	Onsite	E	N
				Bird	Warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	Onsite	E	N
	Fort Huachuca	AZ	2	Amphibian	Salamander, Sonoran tiger	<i>Ambystoma tigrinum stebbinsi</i>	Onsite	E	N
				Bird	Cuckoo, yellow-billed (Western U.S.)	<i>Coccyzus americanus</i>	Onsite	C	N
				Bird	Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	Contiguous	E	N
				Bird	Owl, Mexican spotted	<i>Strix occidentalis lucida</i>	Onsite	T	N
				Fish	Minnow, loach	<i>Tiaroga cobitis</i>	Contiguous	T	N
				Fish	Spikedace	<i>Meda fulgida</i>	Contiguous	T	N
				Mammal	Bat, lesser long-nosed	<i>Leptonycteris curasoae yerbabuena</i>	Onsite	E	N
				Plant	Fleabane, Lemmon	<i>Erigeron lemmonii</i>	Onsite	C	N
				Plant	Water-umbel, Huachuca	<i>Lilaeopsis schaffneriana ssp.recurva</i>	Onsite	E	Y—O
				Snail	Springsnail, Huachuca	<i>Pyrgulopsis thompsoni</i>	Onsite	C	N
	Fort Hunter Liggett	CA	1	Amphibian	Frog, California red-legged	<i>Rana aurora draytonii</i>	Onsite	T	N
				Amphibian	Salamander, California tiger	<i>Ambystoma californiense</i>	Onsite	T	N
				Amphibian	Toad, arroyo	<i>Bufo californicus</i>	Onsite	E	N
				Bird	Condor, California	<i>Gymnogyps californianus</i>	Onsite	E	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Vireo, least Bell's	<i>Vireo bellii pusillus</i>	Contiguous	E	N
				Crustacean	Fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	Onsite	T	N
				Mammal	Fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	Onsite	E	N
				Plant	Amole, purple	<i>Chlorogalum purpureum</i>	Onsite	T	N
	Fort Leavenworth	KS	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Fish	Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Onsite	E	N
	Fort Leonard Wood	MO	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Mammal	Bat, gray	<i>Myotis grisescens</i>	Onsite	E	N
				Mammal	Bat, Indiana	<i>Myotis sodalis</i>	Onsite	E	N
	Fort Lewis	WA	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Lark, streaked horned	<i>Eremophila alpestris strigata</i>	Onsite	C	N
				Bird	Murrelet, marbled	<i>Brachyramphus marmoratus marmoratus</i>	Contiguous	T	N
				Bird	Owl, northern spotted**	<i>Strix occidentalis caurina</i>	Contiguous	T	Y—O
				Fish	Salmon, chinook	<i>Oncorhynchus tshawytscha</i>	Onsite	T	N
				Fish	Steelhead (Lower Columbia River)	<i>Oncorhynchus mykiss</i>	Onsite	T	N
				Fish	Trout, bull	<i>Salvelinus confluentus</i>	Onsite	T	N
				Insect	Butterfly, Whulge checkerspot	<i>Euphydryas editha taylori</i>	Onsite	C	N
				Insect	Skipper, Mardon	<i>Polites mardon</i>	Onsite	C	N
				Mammal	Pocket gopher, Mazama	<i>Thomomys mazama</i>	Onsite	C	N
Mammal				Whale, southern resident killer	<i>Orcinus orca</i>	Contiguous	E	N	
Plant				Howellia, water	<i>Howellia aquatilis</i>	Onsite	T	N	
Plant				Paintbrush, golden	<i>Castilleja levisecta</i>	Contiguous	T	N	

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WEST	Fort McCoy	WI	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Insect	Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	Onsite	E	N
				Mammal	Wolf, gray***	<i>Canis lupus</i>	Onsite	E	N
	Fort Riley	KS	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Plover, piping	<i>Charadrius melodus</i>	Onsite	T	N
				Bird	Tern, least	<i>Sterna antillarum</i>	Onsite	E	N
				Fish	Shiner, Topeka	<i>Notropis topeka</i>	Onsite	E	N
	Fort Sam Houston	TX	2	Bird	Vireo, black-capped	<i>Vireo atricapilla</i>	Onsite	E	N
				Bird	Warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	Onsite	E	N
				Insect	Ground beetle	<i>Rhadine exilis</i>	Onsite	E	N
				Insect	Ground beetle	<i>Rhadine infernalis</i>	Onsite	E	N
				Other Invertebrate	Madla's cave meshweaver	<i>Cicurina madla</i>	Onsite	E	N
	Fort Sill	OK	2	Bird	Vireo, black-capped	<i>Vireo atricapilla</i>	Onsite	E	N
	National Training Ctr & Ft Irwin	CA	1	Plant	Milk-vetch, Lane Mountain	<i>Astragalus jaegeerianus</i>	Onsite	E	N
				Reptile	Tortoise, desert	<i>Gopherus agassizii</i>	Onsite	T	Y—O
	Pinon Canyon	CO	6	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	Presidio of Monterey	CA	1	Plant	Spineflower, Monterey	<i>Chorizanthe pungens</i> var. <i>pungens</i>	Onsite	T	Y—O
				Plant	Yadon's piperia	<i>Piperia Yadonii</i>	Onsite	E	N
	Rock Island Arsenal	IL	3	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
	U.S. Army CSTC And Camp Parks	CA	1	Amphibian	Frog, California red-legged	<i>Rana aurora draytonii</i>	Onsite	T	N
				Amphibian	Salamander, California tiger	<i>Ambystoma californiense</i>	Onsite	E	N
				Mammal	Fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	Contiguous	E	N
	White Sands Missile Range	NM	2	Bird	Cuckoo, yellow-billed (Western U.S.)	<i>Coccyzus americanus</i>	Onsite	C	N
				Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
				Bird	Falcon, northern Aplomado#	<i>Falco femoralis septentrionalis</i>	Onsite	PT	N
				Bird	Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	Contiguous	E	N
				Bird	Owl, Mexican spotted	<i>Strix occidentalis lucida</i>	Contiguous	T	N
				Bird	Pelican, brown (Entire pop, expt U.S. Atl Cst, FL, AL)	<i>Pelecanus occidentalis</i>	Onsite	E	N
				Bird	Tern, least	<i>Sterna antillarum</i>	Onsite	E	N
				Mammal	Jaguar	<i>Panthera onca</i>	Onsite	E	N
				Plant	Pennyroyal, Todsens's	<i>Hedeoma todsenii</i>	Onsite	E	Y—O
	Yakima Training Center	WA	1	Bird	Eagle, bald*	<i>Haliaeetus leucocephalus</i>	Onsite	T	N
Bird				Grouse, greater sage (Columbia Basin DPS, WA)	<i>Centrocercus urophasianus phaios</i>	Onsite	C	N	
Fish				Salmon, chinook (T=WA) naturally spawned populations in the Columbia R. tributaries upstream of Rock Island Dam and downstream of Chief Joseph Dam)	<i>Oncorhynchus tshawytscha</i>	Onsite	T	N	
Fish				Steelhead (Middle Columbia River)	<i>Oncorhynchus mykiss</i>	Onsite	T	N	
Fish				Steelhead (Upper Columbia River)	<i>Oncorhynchus mykiss</i>	Onsite	E	N	
Fish				Trout, bull	<i>Salvelinus confluentus</i>	Contiguous	T	N	
Plant				Daisy, basalt	<i>Erigeron basalticus</i>	Onsite	C	N	

“Y-O”—critical habitat on installation

“Y-C”—critical habitat contiguous to installation, but within action area

* Delisted 8 August 2007

** Critical habitat redesignated (13 August 2008). Critical habitat no longer designated on installation.

*** Delisted 12 March 2007; listing reinstated by court order

**** Proposed rule withdrawn 12 January 2007

Non-essential experimental population

B

APPENDIX B: T&E SPECIES AND INSTALLATIONS WHERE RECORDED— SORTED BY SCIENTIFIC NAME

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Abutilon sandwicense	No common name	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Achatinella apexfulva	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella bulimoides	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella byronii	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Snail	PARO	I	Schofield Barracks	HI	Onsite	N
Achatinella curta	Pupu kuahiwi	E	Snail	PARO	I	Kahuku TA	HI	Onsite	N
		E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella lila	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella livida	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella mustelina	Pupu kuahiwi	E	Snail	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Snail	PARO	I	Schofield Barracks	HI	Onsite	N
Achatinella pulcherrima	Pupu kuahiwi	E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
Achatinella sowerbyana	Pupu kuahiwi	E	Snail	PARO	I	Kahuku TA	HI	Onsite	N
		E	Snail	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Snail	PARO	I	Schofield Barracks	HI	Onsite	N
Acipenser brevirostrum	Sturgeon, shortnose	E	Fish	ARNG	5	Camp Smith CSMS A	NY	Contiguous	N
		E	Fish	NERO	5	Aberdeen Proving Ground	MD	Onsite	N
		E	Fish	NERO	5	West Point Military Reservation	NY	Contiguous	N
		E	Fish	SERO	4	Fort Stewart	GA	Onsite	N
Acipenser medirostris	Sturgeon, green	T	Fish	USAR- 63rd RRC	I	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Alectryon macrococcus	Mahoe	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Alligator mississippiensis	Alligator, American	T(SA)	Reptile	AMC	2	Lone Star AAP	TX	Onsite	N
		T(SA)	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
		T(SA)	Reptile	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T(SA)	Reptile	SERO	4	Fort Benning	GA	Onsite	N
		T(SA)	Reptile	SERO	4	Fort Gordon	GA	Onsite	N
		T(SA)	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
Alsindendron obovatum	No common name	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
Alsindendron trinerve	No common name	E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Amaranthus pumilus	Amaranth, seabeach	T	Plant	ARNG	5	Sea Girt	NJ	Onsite	N
Amblyopsis rosae	Cavefish, Ozark	T	Fish	ARNG	3	Camp Crowder	MO	Contiguous	N
		T	Fish	ARNG	3	Springfield AVCRAD/AASF	MO	Contiguous	N
Ambystoma californiense	Salamander, California tiger	T	Amphibian	WEST	I	Fort Hunter Liggett	CA	Onsite	N
		E	Amphibian	WEST	I	U.S. Army CSTC And Camp Parks	CA	Onsite	N
Ambystoma cingulatum	Salamander, flatwoods	T	Amphibian	SERO	4	Fort Stewart	GA	Onsite	N
Ambystoma tigrinum stebbinsi	Salamander, Sonoran tiger	E	Amphibian	WEST	2	Fort Huachuca	AZ	Onsite	N
Amsinckia grandiflora	Fiddleneck, large-flowered	E	Plant	USAR-63rd RRC	I	PFC LT. Baccigleiri Hall AFRC	CA	Contiguous	N
Anas wyvilliana	Duck, Hawaiian (=koloa)	E	Bird	ARNG	I	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	I	Ukumehame Wets	HI	Onsite	N
Aphelocoma coerulescens	Jay, Florida scrub	T	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
Apios priceana	Potato-bean, Price's	T	Plant	SERO	4	Redstone Arsenal	AL	Onsite	N
Arctomecon humilis	Bear-poppy, dwarf	E	Plant	ARNG	6	OMS 10B/St. George	UT	Onsite	N
Asplenium fragile var.insulare	No common name	E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
Astragalus jaegerianus	Milk-vetch, Lane Mountain	E	Plant	WEST	I	National Training Center and Fort Irwin	CA	Onsite	N
Bonamia menziesii	No common name	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
Brachyramphus marmoratus marmoratus	Murrelet, marbled	T	Bird	ARNG	I	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR-70th RRC	I	LTA-AVN TNG Area (Weyerhaeuser)	WA	Onsite	Y—C
		T	Bird	WEST	I	Fort Lewis	WA	Contiguous	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Branchinecta lynchi	Fairy shrimp, vernal pool	T	Crustacean	ARNG	I	MTC-H Camp Roberts	CA	Onsite	N
		T	Crustacean	USAR-63rd RRC	I	BT Collins Enclave	CA	Onsite	N
		T	Crustacean	WEST	I	Fort Hunter Liggett	CA	Onsite	N
Branta sandvicensis	Goose, Hawaiian (=nene)	E	Bird	ARNG	I	Ukumehame Wets	HI	Onsite	N
		E	Bird	PARO	I	Pohakuloa TA	HI	Onsite	N
Brodiaea filifolia	Brodiaea, thread-leaved	T	Plant	USAR-63rd RRC	I	Tustin USARC	CA	Contiguous	N
Bufo californicus	Toad, arroyo	E	Amphibian	WEST	I	Fort Hunter Liggett	CA	Onsite	N
Buteo solitarius	Hawk, Hawaiian (=ʻIo)	E	Bird	ARNG	I	Hilo (Keaukaha Military Reservation)	HI	Onsite	N
		E	Bird	PARO	I	Pohakuloa TA	HI	Onsite	N
Canis lupus	Wolf, gray (MN only)***	T	Mammal	ARNG	3	Camp Ripley	MN	Onsite	N
Canis lupus	Wolf, gray***	E	Mammal	WEST	3	Fort McCoy	WI	Onsite	N
Caretta caretta	Sea turtle, loggerhead	T	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Castilleja levisecta	Paintbrush, golden	T	Plant	WEST	I	Fort Lewis	WA	Contiguous	N
Cenchrus agrimonoides	Kamanomano	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Centrocercus urophasianus phaios	Grouse, grt sage (Colum Basin DPS, WA)	C	Bird	WEST	I	Yakima Training Center	WA	Onsite	N
Chamaesyce celastroides var. kaenana	Akoko	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
Chamaesyce herbstii	Akoko	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
Chamaesyce rockii	Akoko	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Charadrius alexandrinus nivosus	Plover, western snowy	T	Bird	ARNG	I	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR-63rd RRC	I	LTA—Moss Landing	CA	Onsite	N
Charadrius melodus	Plover, piping	T	Bird	ARNG	6	Camp Grafton	ND	Contiguous	N
		T	Bird	ARNG	5	Sea Girt	NJ	Onsite	N
		T	Bird	ARNG	6	TS Garrison	ND	Contiguous	N
		T	Bird	ARNG	6	TS Williston	ND	Contiguous	N
		T	Bird	WEST	6	Fort Riley	KS	Onsite	N
Chasiempis sandwichensis ibidis	Elepaio, Oahu	E	Bird	PARO	I	Makua Military Reservation	HI	Onsite	Y—O
		E	Bird	PARO	I	Schofield Barracks	HI	Onsite	Y—O
Chelonia mydas	Sea turtle, green	T	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Chlorogalum purpureum	Amole, purple	T	Plant	ARNG	I	MTC-H Camp Roberts	CA	Onsite	N
		T	Plant	WEST	I	Fort Hunter Liggett	CA	Onsite	N
Chorizanthe parryi fernandina	Spineflower, San Fernando Valley	C	Plant	USAR-63rd RRC	I	Tustin USARC	CA	Onsite	N
Chorizanthe pungens var. pungens	Spineflower, Monterey	T	Plant	USAR-63rd RRC	I	LTA - Moss Landing	CA	Onsite	N
		T	Plant	USAR-63rd RRC	I	Marina USARC/OMS/AMSA 12 S-5	CA	Onsite	N
		T	Plant	WEST	I	Presidio of Monterey	CA	Onsite	Y—O
Christella boydiae	Boyd's maiden fern	C	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
Cicurina madla	Madla's cave meshweaver	E	Other Invertebrate	WEST	2	Fort Sam Houston	TX	Onsite	N
Cirsium fontinale var. obispoense	Thistle, Chorro Creek bog	E	Plant	ARNG	I	CTC Camp San Luis Obispo	CA	Onsite	N
Clemmys mhlenbergii	Turtle, bog (Ent. U.S. expt. GA, NC, SC, TN, VA)	T	Reptile	NERO	5	Picatinny Arsenal	NJ	Contiguous	N
Coccyzus americanus	Cuckoo, yellow-billed (Western U.S.)	C	Bird	WEST	2	Fort Huachuca	AZ	Onsite	N
		C	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Colubrina oppositifolia	Kauiha	E	Plant	PARO	I	Makua Military Reservation	HI	Contiguous	Y—C
Coryphantha sneedii	Cactus, Sneed pincushion	E	Plant	WEST	2	Fort Bliss	TX	Onsite	N
Ctenitis squamigera	Pauoa	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Cyanea acuminata	Haha	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Cyanea calycina	Haha	C	Plant	PARO	I	Kawailoa TA	HI	Onsite	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
<i>Cyanea calycina</i>	Haha	C	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Cyanea crispa</i>	Haha	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	Haha	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Cyanea humboldtiana</i>	Haha	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
<i>Cyanea koolauensis</i>	Haha	E	Plant	PARO	II	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Cyanea longiflora</i>	Haha	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
<i>Cyanea st-johnii</i>	Haha	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Cyanea superba</i>	Haha	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
<i>Cyperus trachysanthos</i>	Pu'uka'a	E	Plant	ARNG	I	Fort Ruger	HI	Onsite	Y—O
		E	Plant	PARO	I	Dillingham Military Reservation	HI	Contiguous	N
<i>Cyrtandra dentata</i>	Ha'iwale	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
<i>Cyrtandra subumbellata</i>	Ha'iwale	E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Cyrtandra viridiflora</i>	Ha'iwale	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Delissea subcordata</i>	Oha	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Delphinapterus leucas</i>	Whale, beluga	PE	Mammal	PARO	7	Fort Richardson	AK	Onsite	N
<i>Dendroica chrysoparia</i>	Warbler, golden-cheeked	E	Bird	ARNG	2	Camp Mabry	TX	Onsite	N
		E	Bird	WEST	2	Fort Hood	TX	Onsite	N
		E	Bird	WEST	2	Fort Sam Houston	TX	Onsite	N
<i>Dendroica kirtlandii</i>	Warbler, Kirtland's	E	Bird	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
<i>Dermodochelys coriacea</i>	Sea turtle, leatherback	E	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
<i>Desmocerus californicus dimorphus</i>	Beetle, valley elderberry longhorn	T	Insect	AMC	I	Riverbank AAP	CA	Contiguous	N
<i>Diellia falcata</i>	No common name	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
<i>Dipodomys ingens</i>	Kangaroo rat, giant	E	Mammal	USAR-63rd RRC	I	Leymel Hall USARC	CA	Contiguous	N
<i>Dipodomys merriami parvus</i>	Kangaroo rat, San Bernardino Merriam's	E	Mammal	USAR-63rd RRC	I	March USARC/AMSA 19(G)	CA	Contiguous	N
<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)	Kangaroo rat, Stephens'	E	Mammal	USAR-63rd RRC	I	March USARC/AMSA 19(G)	CA	Contiguous	N
<i>Drymarchon corais couperi</i>	Snake, eastern indigo	T	Reptile	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T	Reptile	SERO	4	Fort Stewart	GA	Onsite	N
<i>Dubautia herbstobatae</i>	Na'ena'e	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
<i>Echinacea laevigata</i>	Coneflower, smooth	E	Plant	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Plant	SERO	4	Fort Jackson	SC	Onsite	N
<i>Echinocereus fendleri</i>	Cactus, Kuenzler hedgehog	E	Plant	WEST	2	Fort Bliss	TX	Onsite	N
<i>Empidonax traillii extimus</i>	Flycatcher, southwestern willow	E	Bird	USAR-63rd RRC	I	Tustin USARC	CA	Contiguous	N
		E	Bird	WEST	2	Fort Huachuca	AZ	Contiguous	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Contiguous	N
<i>Enhydra lutris nereis</i>	Otter, southern sea	T	Mammal	USAR-63rd RRC	I	LTA—Moss Landing	CA	Onsite	N
<i>Epicrates inornatus</i>	Boa, Puerto Rican	E	Reptile	SERO	4	Fort Buchanan	PR	Onsite	N
<i>Eremophila alpestris strigata</i>	Lark, streaked horned	C	Bird	WEST	I	Fort Lewis	WA	Onsite	N
<i>Erigeron basalticus</i>	Daisy, basalt	C	Plant	WEST	I	Yakima Training Center	WA	Onsite	N
<i>Erigeron lemmonii</i>	Fleabane, Lemmon	C	Plant	WEST	2	Fort Huachuca	AZ	Onsite	N
<i>Erigeron parishii</i>	Daisy, Parish's	T	Plant	USAR-63rd RRC	I	March USARC/AMSA 19(G)	CA	Contiguous	N
<i>Etheostoma cragini</i>	Darter, Arkansas	C	Fish	WEST	6	Fort Carson	CO	Onsite	N
<i>Eugenia koolauensis</i>	Nioi	E	Plant	PARO	I	Kahuku TA	HI	Onsite	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
<i>Eumetopias jubatus</i>	Sea-lion, Steller (=northern)	T	Mammal	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
<i>Euphorbia haeleleana</i>	Akoko	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
<i>Euphydryas editha taylori</i>	Butterfly, Whulge checkerspot	C	Insect	WEST	1	Fort Lewis	WA	Onsite	N
<i>Falco femoralis septentrionalis</i>	Falcon, northern Aplomado	E	Bird	WEST	2	Fort Bliss	TX	Onsite	N
		PT	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
<i>Flueggea neowawraea</i>	Mehamehame	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Fulica americana alai</i>	Coot, Hawaiian (= 'alae-ke'oke'o)	E	Bird	ARNG	1	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
<i>Gallinula chloropus sandvicensis</i>	Moorhen, Hawaiian Common	E	Bird	ARNG	1	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
<i>Gardenia mannii</i>	Nanu	E	Plant	PARO	1	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Gilia tenuiflora ssp.arenaria</i>	Gilia, Monterey	E	Plant	USAR-63rd RRC	1	LTA—Moss Landing	CA	Onsite	N
		E	Plant	USAR-63rd RRC	1	Marina USARC/OMS/AMSA 12 S-5	CA	Onsite	N
<i>Gopherus agassizii</i>	Tortoise, desert	T	Reptile	ARNG	1	Clark County Complex	NV	Onsite	N
		T(SA)	Reptile	ARNG	2	Florence Military Reservation	AZ	Onsite	N
		T	Reptile	USAR-63rd RRC	1	Victorville USARC/ASF	CA	Contiguous	N
		T	Reptile	WEST	1	National Training Center and Fort Irwin	CA	Onsite	Y—O
<i>Gopherus polyphemus</i>	Tortoise, gopher	T	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
<i>Gouania vitifolia</i>	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
<i>Grus americana</i>	Crane, whooping	E	Bird	WEST	2	Fort Hood	TX	Onsite	N
<i>Gymnogyps californianus</i>	Condor, California	E	Bird	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		E	Bird	ARNG	1	MTC-H Camp Roberts	CA	Contiguous	N
		E	Bird	WEST	1	Fort Hunter Liggett	CA	Onsite	N
<i>Haliaeetus leucocephalus</i>	Eagle, bald*	T	Bird	AMC	6	Deseret Chemical Depot	UT	Contiguous	N
		T	Bird	AMC	1	Hawthorne AD	NV	Onsite	N
		T	Bird	AMC	4	Holston AAP	TN	Onsite	N
		T	Bird	AMC	3	Newport Chemical Depot	IN	Onsite	N
		T	Bird	ARNG	3	(Clinton) Truman Reservoir T.S.	MO	Onsite	N
		T	Bird	ARNG	6	Camp Ashland	NE	Onsite	N
		T	Bird	ARNG	3	Camp Atterbury	IN	Onsite	N
		T	Bird	ARNG	3	Camp Crowder	MO	Contiguous	N
		T	Bird	ARNG	4	Camp Joseph T. Robinson	AR	Contiguous	N
		T	Bird	ARNG	1	Camp Murray	WA	Onsite	N
		T	Bird	ARNG	2	Camp Navajo	AZ	Onsite	N
		T	Bird	ARNG	3	Camp Perry	OH	Onsite	N
		T	Bird	ARNG	3	Camp Ripley	MN	Onsite	N
		T	Bird	ARNG	5	Camp Smith CSMS A	NY	Contiguous	N
		T	Bird	ARNG	1	Corvallis/Camp Adair	OR	Contiguous	N
		T	Bird	ARNG	4	Fort Chaffee Maneuver Training Center	AR	Onsite	N
		T	Bird	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
		T	Bird	ARNG	3	HQ STARC—MO	MO	Onsite	N
		T	Bird	ARNG	3	Macon TS	MO	Onsite	N
		T	Bird	ARNG	1	MTA Camp Rilea	OR	Onsite	N
		T	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T	Bird	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
		T	Bird	ARNG	6	MTC-H Camp Guernsey	WY	Onsite	N
		T	Bird	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Haliaeetus leucocephalus	Eagle, bald*	T	Bird	NERO	5	Aberdeen Proving Ground	MD	Onsite	N
		T	Bird	NERO	5	Fort AP Hill	VA	Onsite	N
		T	Bird	NERO	5	Fort Belvoir	VA	Onsite	N
		T	Bird	NERO	5	Fort Dix	NJ	Onsite	N
		T	Bird	NERO	5	Fort Eustis	VA	Onsite	N
		T	Bird	NERO	5	Fort Lee	VA	Contiguous	N
		T	Bird	NERO	5	U.S. Army Research Laboratory Adelphi	MD	Onsite	N
		T	Bird	NERO	5	West Point Military Reservation	NY	Onsite	N
		T	Bird	SERO	4	Fort Benning	GA	Onsite	N
		T	Bird	SERO	4	Fort Gordon	GA	Contiguous	N
		T	Bird	SERO	4	Fort Knox	KY	Onsite	N
		T	Bird	SERO	4	Fort Rucker	AL	Contiguous	N
		T	Bird	SERO	4	Fort Stewart	GA	Onsite	N
		T	Bird	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
		T	Bird	SERO	4	Redstone Arsenal	AL	Onsite	N
		T	Bird	USAR-70th RRC	1	Fort Lawton USAR Complex	WA	Contiguous	N
		T	Bird	USAR-70th RRC	1	LTA-AVN TNG Area (Weyerhaeuser)	WA	Contiguous	N
		T	Bird	WEST	6	Dugway Proving Ground	UT	Contiguous	N
		T	Bird	WEST	2	Fort Bliss	TX	Onsite	N
		T	Bird	WEST	2	Fort Hood	TX	Onsite	N
		T	Bird	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		T	Bird	WEST	6	Fort Leavenworth	KS	Onsite	N
		T	Bird	WEST	3	Fort Leonard Wood	MO	Onsite	N
		T	Bird	WEST	1	Fort Lewis	WA	Onsite	N
		T	Bird	WEST	3	Fort McCoy	WI	Onsite	N
		T	Bird	WEST	6	Fort Riley	KS	Onsite	N
		T	Bird	WEST	6	Pinon Canyon	CO	Onsite	N
		T	Bird	WEST	3	Rock Island Arsenal	IL	Onsite	N
		T	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
		T	Bird	WEST	1	Yakima Training Center	WA	Onsite	N
Haplostachys haplostachya	Honohono	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Hedeoma todsenii	Pennyroyal, Todsens's	E	Plant	WEST	2	White Sands Missile Range	NM	Onsite	Y—O
Hedyotis coriacea	Kio'ele	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Hedyotis degeneri	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Hedyotis fluviatilis	Kampua'a	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Hedyotis parvula	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Helminthoglypta walkeriana	Snail, Morro shoulderband	E	Snail	ARNG	1	CTC Camp San Luis Obispo	CA	Contiguous	N
Helonias bullata	Pink, swamp	T	Plant	NERO	5	Fort AP Hill	VA	Onsite	N
Hesperomannia arborescens	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Hesperomannia arbuscula	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Hibiscus brackenridgei	Ma'o hau hele	E	Plant	PARO	1	Dillingham Military Reservation	HI	Contiguous	N
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Himantopus mexicanus knudseni	Stilt, Hawaiian (=ae'o)	E	Bird	ARNG	1	Kekaha Wets	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
Holocarpa macradenia	Tarplant, Santa Cruz	T	Plant	ARNG	1	Santa Cruz Armory	CA	Onsite	Y—O
Howellia aquatilis	Howellia, water	T	Plant	WEST	1	Fort Lewis	WA	Onsite	N
Hypomesus transpacificus	Smelt, delta	T	Fish	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Icaricia icarioides fenderi	Butterfly, Fender's blue	T	Insect	ARNG	1	Corvallis/Camp Adair	OR	Contiguous	N
Isodendron hosakae	Aupaka	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N

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Isodendron longifolium	Aupaka	T	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
		T	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Isodendron pyriformis	Noho, Kula wahine	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Isoetes louisianensis	Quillwort, Louisiana	E	Plant	ARNG	4	MTA Camp Shelby	MS	Onsite	N
Isotria medeoloides	Pogonia, small whorled	T	Plant	ARNG	5	Auburn TS/OMS 2	ME	Onsite	N
		T	Plant	ARNG	5	NHNG Training Center	NH	Onsite	N
		T	Plant	NERO	5	Fort AP Hill	VA	Onsite	N
		T	Plant	NERO	5	Fort Belvoir	VA	Onsite	N
Joinvillea ascendens ascendens	Ohe	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Korthalsella degeneri	Hulumoa	C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Labordia cyrtandrae	Kamakahala	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Lasiurus cinereus semotus	Bat, Hawaiian hoary	E	Mammal	ARNG	1	Hilo (Keaukaha Military Reservation)	HI	Onsite	N
		E	Mammal	PARO	1	Pohakuloa TA	HI	Onsite	N
Lepidium arbuscula	Anaunau	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Lepidium Papilliferum	Slickspot peppergrass****	PE	Plant	ARNG	1	Orchard Range TS Boise	ID	Onsite	N
Lepidocheilus kempii	Sea turtle, Kemp's ridley	E	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Leptonycteris curasoae yerbabuena	Bat, lesser long-nosed	E	Mammal	WEST	2	Fort Huachuca	AZ	Onsite	N
Lilaeopsis schaffneriana ssp.recurva	Water-umbel, Huachuca	E	Plant	WEST	2	Fort Huachuca	AZ	Onsite	Y—O
Lipochaeta tenuifolia	Nehe	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Lipochaeta venosa	No common name	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Lobelia gaudichaudii ssp. koolauensis	No common name	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Lobelia nihauensis	Haha	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Lobelia oahuensis	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Loxioides bailleui	Palila (honeycreeper)	E	Bird	PARO	1	Pohakuloa TA	HI	Contiguous	Y—O
Lupinus sulphureus kincaidii	Lupine, Kincaid's	E	Plant	ARNG	1	Corvallis/Camp Adair	OR	Onsite	N
Lycaeides melissa samuelis	Butterfly, Karner blue	E	Insect	ARNG	5	State Military Reservation	NH	Onsite	N
		E	Insect	WEST	3	Fort McCoy	WI	Onsite	N
Lysimachia asperulaefolia	Loosestrife, rough-leaved	E	Plant	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
		E	Plant	SERO	4	Fort Jackson	SC	Onsite	N
		E	Plant	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
Manduca blackburni	Moth, Blackburn's sphinx	E	Insect	ARNG	1	Kanaio Wets	HI	Onsite	Y—O
Mariscus pennatifolius	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Marshallia mohrii	Button, Mohr's Barbara	E	Plant	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
Meda fulgida	Spikedace	T	Fish	WEST	2	Fort Huachuca	AZ	Contiguous	N
Megalagrion leptodermis	Damselfly, crimson Hawaiian	T	Insect	PARO	1	Schofield Barracks	HI	Onsite	N
Megalagrion nigrohamatum nigrolineatum	Damselfly, blackline Hawaiian	C	Insect	PARO	1	Kawailoa TA	HI	Onsite	N
Megalagrion xanthomelas	Damselfly, orangeblack Hawaiian	C	Insect	PARO	1	Tripler Army Medical Center	HI	Onsite	N
Melicope hiakae	Alani	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Melicope lydgatei	Alani	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Melicope pallida	Alani	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Monolopia congdonii	Wooly-threads, San Joaquin	E	Plant	USAR-63rd RRC	1	Leymel Hall USARC	CA	Contiguous	N
Mycteria americana	Stork, wood	E	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		E	Bird	SERO	4	Fort Benning	GA	Onsite	N
		E	Bird	SERO	4	Fort Gordon	GA	Contiguous	N

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<i>Mycteria americana</i>	Stork, wood	E	Bird	SERO	4	Fort Stewart	GA	Onsite	N
<i>Myotis grisescens</i>	Bat, gray	E	Mammal	AMC	4	Holston AAP	TN	Onsite	N
		E	Mammal	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
		E	Mammal	SERO	4	Fort Campbell	KY	Onsite	N
		E	Mammal	SERO	4	Fort Knox	KY	Onsite	N
		E	Mammal	SERO	4	Redstone Arsenal	AL	Onsite	N
		E	Mammal	WEST	3	Fort Leonard Wood	MO	Onsite	N
<i>Myotis sodalis</i>	Bat, Indiana	E	Mammal	AMC	4	Blue Grass AD	KY	Onsite	N
		E	Mammal	AMC	3	Iowa AAP	IA	Onsite	N
		E	Mammal	AMC	3	Newport Chemical Depot	IN	Onsite	N
		E	Mammal	ARNG	3	Camp Atterbury	IN	Onsite	N
		E	Mammal	ARNG	3	Macon TS	MO	Onsite	N
		E	Mammal	NERO	5	Fort Drum	NY	Onsite	N
		E	Mammal	NERO	5	Picatiny Arsenal	NJ	Onsite	N
		E	Mammal	SERO	4	Fort Campbell	KY	Onsite	N
		E	Mammal	SERO	4	Fort Knox	KY	Onsite	N
		E	Mammal	SERO	4	Redstone Arsenal	AL	Contiguous	N
		E	Mammal	USAR-88th RRC	3	Twinsburg USARC/AMSA #123	OH	Onsite	N
		E	Mammal	WEST	3	Fort Leonard Wood	MO	Onsite	N
<i>Myrsine juddii</i>	Kolea	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
<i>Neonympha mitchellii francisci</i>	Butterfly, Saint Francis' satyr	E	Insect	SERO	4	Fort Bragg	NC	Onsite	N
<i>Neraudia angulata</i>	Ma'aloa	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Neraudia ovata</i>	Maaloa	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
<i>Nicrophorus americanus</i>	Beetle, American burying	E	Insect	AMC	2	McAlester AAP	OK	Onsite	N
		E	Insect	ARNG	2	Camp Gruber	OK	Onsite	N
		E	Insect	ARNG	2	Camp Maxey	TX	Onsite	N
		E	Insect	ARNG	4	Fort Chaffee Maneuver Training Center	AR	Onsite	N
<i>Nothoecstrum latifolium</i>	Aiea	C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
<i>Nototrichium humile</i>	Kulu'i	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
<i>Notropis topeka</i>	Shiner, Topeka	E	Fish	WEST	6	Fort Riley	KS	Onsite	N
<i>Oncorhynchus clarki henshawi</i>	Trout, Lahontan cutthroat	E	Fish	AMC	1	Hawthorne AD	NV	Contiguous	N
<i>Oncorhynchus mykiss</i>	Steelhead (Southern California)	E	Fish	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
	Steelhead (Southern California)	E	Fish	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
	Steelhead (Central California Coastal)	T	Fish	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
	Steelhead (Central Valley California)	T	Fish	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
	Steelhead (Lower Columbia River)	T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
	Steelhead (Middle Columbia River)	T	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
	Steelhead (Upper Columbia River)	E	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
<i>Oncorhynchus tshawytscha</i>	Salmon, chinook (CA, Sac. River-winter run)	T	Fish	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Onsite	N
	Salmon, chinook (T=WA) ntrl pop. from rivers & streams flowing into Puget Sound)	T	Fish	USAR-70th RRC	1	Pier 23 USARC	WA	Onsite	N
		T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
	Salmon, chinook (T=WA) naturally spawned populations in the Columbia R. tributaries upstream of Rock Island Dam & downstream of Chief Joseph Dam)	T	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
<i>Orcinus orca</i>	Whale, southern resident killer	E	Mammal	USAR-70th RRC	1	Pier 23 USARC	WA	Contiguous	N
		E	Mammal	WEST	1	Fort Lewis	WA	Contiguous	N
<i>Ottoschulzia rhodoxylon</i>	Palo de rosa	E	Plant	SERO	4	Fort Buchanan	PR	Onsite	N
<i>Palaemonias alabamae</i>	Shrimp, Alabama cave	E	Crustacean	SERO	4	Redstone Arsenal	AL	Onsite	N
<i>Panicum niihauense</i>	Lau `ehu	E	Plant	ARNG	1	Kekaha Wets	HI	Onsite	Y—O
<i>Panthera onca</i>	Jaguar	E	Mammal	WEST	2	White Sands Missile Range	NM	Onsite	N

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Pelecanus occidentalis	Pelican, brown (Entire pop, except U.S. Atl Cst, FL, AL)	E	Bird	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
		E	Bird	USAR-63rd RRC	1	LTA-Moss Landing	CA	Onsite	N
		E	Bird	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Onsite	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Percina rex	Logperch, Roanoke	E	Fish	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
Perognathus longimembris pacificus	Mouse, Pacific pocket	E	Mammal	USAR-63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
Peucedanum sandwicense	Makou	T	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Phlegmariurus nutans	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Phyllostegia hirsuta	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Phyllostegia kaalaensis	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Phyllostegia parviflora	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Picoides borealis	Woodpecker, red-cockaded	E	Bird	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Bird	ARNG	4	MTA Camp Shelby	MS	Contiguous	N
		E	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		E	Bird	ARNG	4	SMR Camp Beauregard	LA	Contiguous	N
		E	Bird	SERO	4	Fort Benning	GA	Onsite	N
		E	Bird	SERO	4	Fort Bragg	NC	Onsite	N
		E	Bird	SERO	4	Fort Gordon	GA	Onsite	N
		E	Bird	SERO	4	Fort Jackson	SC	Onsite	N
		E	Bird	SERO	4	Fort Polk	LA	Onsite	N
		E	Bird	SERO	4	Fort Stewart	GA	Onsite	N
Piperia Yadonii	Yadon's piperia	E	Plant	WEST	1	Presidio of Monterey	CA	Onsite	N
Pituophis melanoleucus lodingi	Snake, black pine	C	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
Pituophis ruthveni	Pine snake, Louisiana	C	Reptile	SERO	4	Fort Polk	LA	Onsite	N
Plantago princeps	Kuahiwi laukahi	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Platydesma cornuta cornuta	No common name	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Platydesma cornuta descurrens	No common name	C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Polites mardon	Skipper, Mardon	C	Insect	WEST	1	Fort Lewis	WA	Onsite	N
Polysticta stellari	Eider, Stellar's	T	Bird	ARNG	7	Kwigillingok Scout Armory	AK	Contiguous	N
		T	Bird	ARNG	7	NG Chevak Armory	AK	Contiguous	N
Portulaca sclerocarpa	Po'e	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Pritchardia kaalae	Lo'ulu	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Pseudobahia bahiifolia	Sunburst, Hartweg's golden	E	Plant	USAR-63rd RRC	1	63rd RRC	CA	Contiguous	N
Pseudobahia peirsonii	Sunburst, San Joaquin adobe	T	Plant	USAR-63rd RRC	1	Leymel Hall USARC	CA	Contiguous	N
Pseudocopaedes eunus obscurus	Skipper, Carson wandering	E	Insect	AMC	1	Sierra AD	CA	Contiguous	N
Pteralyxia macrocarpa	Kaulu	C	Plant	PARO	1	Kahuku TA	HI	Onsite	N
		C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Pteris lidgatei	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Ptilimnium nodosum	Harperella	E	Plant	ARNG	5	LIL Aaron Strauss	MD	Onsite	N
Puma concolor coryi	Panther, Florida	E	Mammal	ARNG	4	MTC Camp Blanding	FL	Onsite	N
Pyrgulopsis thompsoni	Springsnail, Huachuca	C	Snail	WEST	2	Fort Huachuca	AZ	Onsite	N
Rana aurora draytonii	Frog, California red-legged	T	Amphibian	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		T	Amphibian	USAR-63rd RRC	1	PFC L.T. Baccigleiri Hall AFRC	CA	Contiguous	N
		T	Amphibian	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		T	Amphibian	WEST	1	U.S. Army CSTC And Camp Parks	CA	Onsite	N
Rhadine exilis	Ground beetle	E	Insect	WEST	2	Fort Sam Houston	TX	Onsite	N
Rhadine infernalis	Ground beetle	E	Insect	WEST	2	Fort Sam Houston	TX	Onsite	N
Rhododendron chapmanii	Rhododendron, Chapman	E	Plant	ARNG	4	MTC Camp Blanding	FL	Onsite	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Rhus michauxii	Sumac, Michaux's	E	Plant	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
		E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
Salvelinus confluentus	Trout, bull	T	Fish	USAR-70th RRC	1	Pier 23 USARC	WA	Onsite	N
		T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
		T	Fish	WEST	1	Yakima Training Center	WA	Contiguous	N
Sanicula mariversa	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Sanicula purpurea	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Scaphirhynchus albus	Sturgeon, pallid	E	Fish	WEST	6	Fort Leavenworth	KS	Onsite	N
Schiedea adamantis	Schiedea, diamond head	E	Plant	ARNG	1	Fort Ruger	HI	Onsite	N
Schiedea hookeri	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Schiedea kaalae	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Schiedea kealiae	Ma'oli'oli	E	Plant	PARO	1	Dillingham Military Reservation	HI	Contiguous	N
Schiedea nuttallii	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Schwalbea americana	Chaffseed, American	E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
Scutellaria montana	Skullcap, large-flowered	T	Plant	ARNG	4	Catoosa Range/TS	TN	Onsite	N
Sesbania tomentosa	Ohai	E	Plant	ARNG	1	Kanaio Wets	HI	Onsite	N
Sidalcea nelsoniana	Checker-mallow, Nelson's	T	Plant	ARNG	1	Corvallis/Camp Adair	OR	Onsite	N
Silene hawaiiensis	No common name	T	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Silene lanceolata	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Sistrurus catenatus catenatus	Massasauga, eastern	C	Reptile	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
Solanum incompletum	Popolo ku mai	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Solanum sandwicense	Aiakeakua, popolo	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Solidago houghtonii	Goldenrod, Houghton's	T	Plant	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
Somateria fischeri	Eider, spectacled	T	Bird	ARNG	7	NG Elim Armory	AK	Contiguous	N
		T	Bird	ARNG	7	NG St. Michael Armory	AK	Contiguous	N
		T	Bird	ARNG	7	Stewart River TS	AK	Contiguous	N
Spermolepis hawaiiensis	No common name	E	Plant	ARNG	1	Fort Ruger	HI	Onsite	Y—O
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Speyeria zerene hippolyta	Butterfly, Oregon silverspot	T	Insect	ARNG	1	MTA Camp Rilea	OR	Onsite	Y—O
Spiranthes diluvialis	Ladies'-tresses, Ute	T	Plant	WEST	6	Fort Carson	CO	Contiguous	N
Stenogyne angustifolia	No common name	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Stenogyne kanehoana	No common name	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Sterna antillarum	Tern, least	E	Bird	ARNG	3	HQ STARC—MO	MO	Contiguous	N
		E	Bird	WEST	6	Fort Riley	KS	Onsite	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Sterna antillarum browni	Tern, California least	E	Bird	USAR-63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Onsite	N
		E	Bird	USAR-63rd RRC	1	PFC L.T. Baccigleiri Hall AFRC	CA	Contiguous	N

SCIENTIFIC NAME	COMMON NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
<i>Strix occidentalis caurina</i>	Owl, northern spotted	T	Bird	ARNG	1	Corvallis/Camp Adair	OR	Contiguous	N
		T	Bird	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR-70th RRC	1	LTA-AVN TNG Area (Weyerhaeuser)	WA	Onsite	Y—O
		T	Bird	WEST	1	Fort Lewis	WA	Contiguous	Y—O**
<i>Strix occidentalis lucida</i>	Owl, Mexican spotted	T	Bird	ARNG	2	Camp Navajo	AZ	Onsite	Y—O
		T	Bird	WEST	6	Fort Carson	CO	Contiguous	N
		T	Bird	WEST	2	Fort Huachuca	AZ	Onsite	N
		T	Bird	WEST	2	White Sands Missile Range	NM	Contiguous	N
<i>Sylvilagus transitionalis</i>	Rabbit, New England cottontail	C	Mammal	ARNG	5	Hollis Plains TS	ME	Onsite	N
<i>Tetramolopium arenarium</i> var. <i>arenarium</i>	Pamakani, Mauna Kea	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
<i>Tetramolopium filiforme</i>	No common name	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
<i>Tetraplasandra gymnocarpa</i>	Ohe`ohe	E	Plant	PARO	1	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Thomomys mazama</i>	Pocket gopher, Mazama	C	Mammal	WEST	1	Fort Lewis	WA	Onsite	N
<i>Tiaroga cobitis</i>	Minnow, loach	T	Fish	WEST	2	Fort Huachuca	AZ	Contiguous	N
<i>Trichechus manatus</i>	Manatee, West Indian (=Florida)	E	Mammal	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
<i>Trifolium stoloniferum</i>	Clover, running buffalo	E	Plant	AMC	4	Blue Grass AD	KY	Onsite	N
		E	Plant	ARNG	5	Kingwood	WV	Onsite	N
<i>Trillium reliquum</i>	Trillium, relict	E	Plant	SERO	4	Fort Benning	GA	Onsite	N
<i>Uma inornata</i>	Lizard, Coachella Valley fringe-toed	T	Reptile	USAR-63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
<i>Urera kaalae</i>	Opuhe	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Vigna o-wahuensis</i>	No common name	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>	Pamakani	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Viola oahuensis</i>	No common name	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Vireo atricapilla</i>	Vireo, black-capped	E	Bird	ARNG	2	Camp Bowie (State)	TX	Onsite	N
		E	Bird	WEST	2	Fort Hood	TX	Onsite	N
		E	Bird	WEST	2	Fort Sam Houston	TX	Onsite	N
		E	Bird	WEST	2	Fort Sill	OK	Onsite	N
<i>Vireo bellii pusillus</i>	Vireo, least Bell's	E	Bird	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		E	Bird	ARNG	1	MTC-H Camp Roberts	CA	Contiguous	N
		E	Bird	WEST	1	Fort Hunter Liggett	CA	Contiguous	N
<i>Vulpes macrotis mutica</i>	Fox, San Joaquin kit	E	Mammal	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
		E	Mammal	USAR-63rd RRC	1	Quinones AFRC	CA	Contiguous	N
		E	Mammal	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		E	Mammal	WEST	1	U.S. Army CSTC And Camp Parks	CA	Contiguous	N
<i>Xyris tennesseensis</i>	Grass, Tennessee yellow-eyed	E	Plant	AMC	4	Anniston AD	AL	Onsite	N
		E	Plant	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
<i>Zanthoxylum hawaiiense</i>	A`e	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
<i>Zapus hudsonius preblei</i>	Mouse, Preble's meadow jumping	E	Mammal	ARNG	6	Douglas Armory, WY	WY	Contiguous	N
		T	Mammal	WEST	6	Fort Carson	CO	Contiguous	N

“Y-O”—critical habitat on installation

“Y-C”—critical habitat contiguous to installation, but within action area

* Delisted 8 August 2007

** Critical habitat redesignated (13 August 2008). Critical habitat no longer designated on installation.

*** Delisted 12 March 2007; listing reinstated by court order

**** Proposed rule withdrawn 12 January 2007

Non-essential experimental population

C

APPENDIX C: T&E SPECIES AND INSTALLATIONS WHERE RECORDED—SORTED BY COMMON NAME

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
A'e	<i>Zanthoxylum hawaiiense</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Aiakeakua, popolo	<i>Solanum sandwicense</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Aiea	<i>Nothocestrum latifolium</i>	C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Akoko	<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Chamaesyce herbstii</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Chamaesyce rockii</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Euphorbia haeleleana</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Alani	<i>Melicope hiiakae</i>	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Melicope lydgatei</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Melicope pallida</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Alligator, American	<i>Alligator mississippiensis</i>	T(SA)	Reptile	AMC	2	Lone Star AAP	TX	Onsite	N
		T(SA)	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
		T(SA)	Reptile	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T(SA)	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
		T(SA)	Reptile	SERO	4	Fort Benning	GA	Onsite	N
		T(SA)	Reptile	SERO	4	Fort Gordon	GA	Onsite	N
Amaranth, seabeach	<i>Amaranthus pumilus</i>	T	Plant	ARNG	5	Sea Girt	NJ	Onsite	N
Amole, purple	<i>Chlorogalum purpureum</i>	T	Plant	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
		T	Plant	WEST	1	Fort Hunter Liggett	CA	Onsite	N
Anaunau	<i>Lepidium arbuscula</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Aupaka	<i>Isodendron hosakae</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
		T	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Aupaka	<i>Isodendron longifolium</i>	T	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Bat, gray	<i>Myotis grisescens</i>	E	Mammal	AMC	4	Holston AAP	TN	Onsite	N
		E	Mammal	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
		E	Mammal	SERO	4	Fort Campbell	KY	Onsite	N
		E	Mammal	SERO	4	Fort Knox	KY	Onsite	N
		E	Mammal	SERO	4	Redstone Arsenal	AL	Onsite	N
		E	Mammal	WEST	3	Fort Leonard Wood	MO	Onsite	N
Bat, Hawaiian hoary	<i>Lasiurus cinereus semotus</i>	E	Mammal	ARNG	1	Hilo (Keaukaha Military Reservation)	HI	Onsite	N
		E	Mammal	PARO	1	Pohakuloa TA	HI	Onsite	N
Bat, Indiana	<i>Myotis sodalis</i>	E	Mammal	AMC	4	Blue Grass AD	KY	Onsite	N
		E	Mammal	AMC	3	Iowa AAP	IA	Onsite	N
		E	Mammal	AMC	3	Newport Chemical Depot	IN	Onsite	N
		E	Mammal	ARNG	3	Camp Atterbury	IN	Onsite	N
		E	Mammal	ARNG	3	Macon TS	MO	Onsite	N
		E	Mammal	NERO	5	Fort Drum	NY	Onsite	N
		E	Mammal	NERO	5	Picatinny Arsenal	NJ	Onsite	N
		E	Mammal	SERO	4	Fort Campbell	KY	Onsite	N
		E	Mammal	SERO	4	Fort Knox	KY	Onsite	N
		E	Mammal	SERO	4	Redstone Arsenal	AL	Contiguous	N
		E	Mammal	USAR- 88th RRC	3	Twinsburg USARC/AMSA #123	OH	Onsite	N
		E	Mammal	WEST	3	Fort Leonard Wood	MO	Onsite	N
		Bat, lesser long-nosed	<i>Leptonycteris curasoae yerbabuena</i>	E	Mammal	WEST	2	Fort Huachuca	AZ
Bear-poppy, Dwarf	<i>Arctomecon humilis</i>	E	Plant	ARNG	6	OMS 10B/St. George	UT	Onsite	N
Beetle, American burying	<i>Nicrophorus americanus</i>	E	Insect	AMC	2	McAlester AAP	OK	Onsite	N
		E	Insect	ARNG	4	Fort Chaffee Maneuver Training Center	AR	Onsite	N
		E	Insect	ARNG	2	Camp Gruber	OK	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Beetle, American burying	<i>Nicrophorus americanus</i>	E	Insect	ARNG	2	Camp Maxey	TX	Onsite	N
Beetle, valley elderberry longhorn	<i>Desmocerus californicus dimorphus</i>	T	Insect	AMC	1	Riverbank AAP	CA	Contiguous	N
Boa, Puerto Rican	<i>Epicrates inornatus</i>	E	Reptile	SERO	4	Fort Buchanan	PR	Onsite	N
Boyd's maiden fern	<i>Christella boydiae</i>	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T	Plant	USAR 63rd RRC	1	Tustin USARC	CA	Contiguous	N
Butterfly, Fender's blue	<i>Icaricia icarioides fenderi</i>	T	Insect	ARNG	1	Corvallis/Camp Adair	OR	Contiguous	N
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	E	Insect	ARNG	5	State Military Reservation	NH	Onsite	N
		E	Insect	WEST	3	Fort McCoy	WI	Onsite	N
Butterfly, Oregon silverspot	<i>Speyeria zerene hippolyta</i>	T	Insect	ARNG	1	MTA Camp Rilea	OR	Onsite	Y—O
Butterfly, Saint Francis' satyr	<i>Neonympha mitchellii francisci</i>	E	Insect	SERO	4	Fort Bragg	NC	Onsite	N
Butterfly, Whulge checkerspot	<i>Euphydryas editha taylori</i>	C	Insect	WEST	1	Fort Lewis	WA	Onsite	N
Button, Mohr's Barbara	<i>Marshallia mohrii</i>	E	Plant	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
Cactus, Kuenzler hedgehog	<i>Echinocereus fendleri</i>	E	Plant	WEST	2	Fort Bliss	TX	Onsite	N
Cactus, Sneed pincushion	<i>Coryphantha sneedii</i>	E	Plant	WEST	2	Fort Bliss	TX	Onsite	N
Cavefish, Ozark	<i>Amblyopsis rosae</i>	T	Fish	ARNG	3	Camp Crowder	MO	Contiguous	N
		T	Fish	ARNG	3	Springfield AVCRAD/AASF	MO	Contiguous	N
Chaffseed, American	<i>Schwalbea americana</i>	E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
Checker-mallow, Nelson's	<i>Sidalcea nelsoniana</i>	T	Plant	ARNG	1	Corvallis/Camp Adair	OR	Onsite	N
Clover, running buffalo	<i>Trifolium stoloniferum</i>	E	Plant	AMC	4	Blue Grass AD	KY	Onsite	N
		E	Plant	ARNG	5	Kingwood	WV	Onsite	N
Condor, California	<i>Gymnogyps californianus</i>	E	Bird	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		E	Bird	ARNG	1	MTC-H Camp Roberts	CA	Contiguous	N
		E	Bird	WEST	1	Fort Hunter Liggett	CA	Onsite	N
Coneflower, smooth	<i>Echinacea laevigata</i>	E	Plant	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Plant	SERO	4	Fort Jackson	SC	Onsite	N
Coot, Hawaiian (= 'alae-ke'oke'o)	<i>Fulica americana alai</i>	E	Bird	ARNG	1	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
Crane, whooping	<i>Grus americana</i>	E	Bird	WEST	2	Fort Hood	TX	Onsite	N
Cuckoo, yellow-billed (Western U.S.)	<i>Coccyzus americanus</i>	C	Bird	WEST	2	Fort Huachuca	AZ	Onsite	N
		C	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Daisy, basalt	<i>Erigeron basalticus</i>	C	Plant	WEST	1	Yakima Training Center	WA	Onsite	N
Daisy, Parish's	<i>Erigeron parishii</i>	T	Plant	USAR- 63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
Damselfly, blackline Hawaiian	<i>Megalagrion nigrohamatum nigrolineatum</i>	C	Insect	PARO	1	Kawailoa TA	HI	Onsite	N
Damselfly, crimson Hawaiian	<i>Megalagrion leptodemus</i>	T	Insect	PARO	1	Schofield Barracks	HI	Onsite	N
Damselfly, orangeblack Hawaiian	<i>Megalagrion xanthomelas</i>	C	Insect	PARO	1	Tripler Army Medical Center	HI	Onsite	N
Darter, Arkansas	<i>Etheostoma cragini</i>	C	Fish	WEST	6	Fort Carson	CO	Onsite	N
Duck, Hawaiian (=koloa)	<i>Anas wyvilliana</i>	E	Bird	ARNG	1	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
Eagle, bald*	<i>Haliaeetus leucocephalus</i>	T	Bird	AMC	6	Deseret Chemical Depot	UT	Contiguous	N
		T	Bird	AMC	1	Hawthorne AD	NV	Onsite	N
		T	Bird	AMC	4	Holston AAP	TN	Onsite	N
		T	Bird	AMC	3	Newport Chemical Depot	IN	Onsite	N
		T	Bird	ARNG	3	(Clinton) Truman Reservoir T.S.	MO	Onsite	N
		T	Bird	ARNG	6	Camp Ashland	NE	Onsite	N
		T	Bird	ARNG	3	Camp Atterbury	IN	Onsite	N
		T	Bird	ARNG	3	Camp Crowder	MO	Contiguous	N
		T	Bird	ARNG	4	Camp Joseph T. Robinson	AR	Contiguous	N
		T	Bird	ARNG	1	Camp Murray	WA	Onsite	N
		T	Bird	ARNG	2	Camp Navajo	AZ	Onsite	N
		T	Bird	ARNG	3	Camp Perry	OH	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Eagle, bald*	<i>Haliaeetus leucocephalus</i>	T	Bird	ARNG	3	Camp Ripley	MN	Onsite	N
		T	Bird	ARNG	5	Camp Smith CSMS A	NY	Contiguous	N
		T	Bird	ARNG	1	Corvallis/Camp Adair	OR	Contiguous	N
		T	Bird	ARNG	4	Fort Chaffee Maneuver Training Center	AR	Onsite	N
		T	Bird	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
		T	Bird	ARNG	3	HQ STARC—MO	MO	Onsite	N
		T	Bird	ARNG	3	Macon TS	MO	Onsite	N
		T	Bird	ARNG	1	MTA Camp Rilea	OR	Onsite	N
		T	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T	Bird	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
		T	Bird	ARNG	6	MTC-H Camp Guernsey	WY	Onsite	N
		T	Bird	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
		T	Bird	NERO	5	Aberdeen Proving Ground	MD	Onsite	N
		T	Bird	NERO	5	Fort AP Hill	VA	Onsite	N
		T	Bird	NERO	5	Fort Belvoir	VA	Onsite	N
		T	Bird	NERO	5	Fort Dix	NJ	Onsite	N
		T	Bird	NERO	5	Fort Eustis	VA	Onsite	N
		T	Bird	NERO	5	Fort Lee	VA	Contiguous	N
		T	Bird	NERO	5	U.S. Army Research Laboratory Adelphi	MD	Onsite	N
		T	Bird	NERO	5	West Point Military Reservation	NY	Onsite	N
		T	Bird	SERO	4	Fort Benning	GA	Onsite	N
		T	Bird	SERO	4	Fort Gordon	GA	Contiguous	N
		T	Bird	SERO	4	Fort Knox	KY	Onsite	N
		T	Bird	SERO	4	Fort Rucker	AL	Contiguous	N
		T	Bird	SERO	4	Fort Stewart	GA	Onsite	N
		T	Bird	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
		T	Bird	SERO	4	Redstone Arsenal	AL	Onsite	N
		T	Bird	USAR- 70th RRC	1	Fort Lawton USAR Complex	WA	Contiguous	N
		T	Bird	USAR- 70th RRC	1	LTA-AVN TNG Area (Weyerhaeuser)	WA	Contiguous	N
		T	Bird	WEST	6	Dugway Proving Ground	UT	Contiguous	N
		T	Bird	WEST	2	Fort Bliss	TX	Onsite	N
		T	Bird	WEST	2	Fort Hood	TX	Onsite	N
		T	Bird	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		T	Bird	WEST	6	Fort Leavenworth	KS	Onsite	N
		T	Bird	WEST	3	Fort Leonard Wood	MO	Onsite	N
		T	Bird	WEST	1	Fort Lewis	WA	Onsite	N
		T	Bird	WEST	3	Fort McCoy	WI	Onsite	N
		T	Bird	WEST	6	Fort Riley	KS	Onsite	N
		T	Bird	WEST	6	Pinon Canyon	CO	Onsite	N
		T	Bird	WEST	3	Rock Island Arsenal	IL	Onsite	N
T	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N		
T	Bird	WEST	1	Yakima Training Center	WA	Onsite	N		
Eider, spectacled	<i>Somateria fischeri</i>	T	Bird	ARNG	7	NG Elim Armory	AK	Contiguous	N
		T	Bird	ARNG	7	NG St. Michael Armory	AK	Contiguous	N
		T	Bird	ARNG	7	Stewart River TS	AK	Contiguous	N
Eider, Stellar's	<i>Polysticta stellari</i>	T	Bird	ARNG	7	Kwigillingok Scout Armory	AK	Contiguous	N
		T	Bird	ARNG	7	NG Chevak Armory	AK	Contiguous	N
Elepaio, Oahu	<i>Chasiempis sandwichensis ibidis</i>	E	Bird	PARO	1	Makua Military Reservation	HI	Onsite	Y—O
		E	Bird	PARO	1	Schofield Barracks	HI	Onsite	Y—O
Fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	T	Crustacean	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
		T	Crustacean	USAR- 63rd RRC	1	BT Collins Enclave	CA	Onsite	N
		T	Crustacean	WEST	1	Fort Hunter Liggett	CA	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Falcon, northern Aplomado	<i>Falco femoralis septentrionalis</i>	E	Bird	WEST	2	Fort Bliss	TX	Onsite	N
		PT	Bird	WEST	2	White Sands Missile Range	NM	Onsite#	N
Fiddleneck, large-flowered	<i>Amsinckia grandiflora</i>	E	Plant	USAR- 63rd RRC	1	PFC L.T. Baccigleiri Hall AFRC	CA	Contiguous	N
Fleabane, Lemmon	<i>Erigeron lemmonii</i>	C	Plant	WEST	2	Fort Huachuca	AZ	Onsite	N
Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	E	Bird	USAR- 63rd RRC	1	Tustin USARC	CA	Contiguous	N
		E	Bird	WEST	2	Fort Huachuca	AZ	Contiguous	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Contiguous	N
Fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	E	Mammal	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
		E	Mammal	USAR- 63rd RRC	1	Quinones AFRC	CA	Contiguous	N
		E	Mammal	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		E	Mammal	WEST	1	U.S. Army CSTC And Camp Parks	CA	Contiguous	N
Frog, California red-legged	<i>Rana aurora draytonii</i>	T	Amphibian	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		T	Amphibian	USAR- 63rd RRC	1	PFC L.T. Baccigleiri Hall AFRC	CA	Contiguous	N
		T	Amphibian	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		T	Amphibian	WEST	1	U.S. Army CSTC And Camp Parks	CA	Onsite	N
Gilia, Monterey	<i>Gilia tenuiflora ssp.arenaria</i>	E	Plant	USAR- 63rd RRC	1	LTA—Moss Landing	CA	Onsite	N
		E	Plant	USAR- 63rd RRC	1	Marina USARC/OMS/AMSA 12 S-S	CA	Onsite	N
Goldenrod, Houghton's	<i>Solidago houghtonii</i>	T	Plant	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
Goose, Hawaiian (=nene)	<i>Branta sandvicensis</i>	E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
				PARO	1	Pohakuloa TA	HI	Onsite	N
Grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	E	Plant	AMC	4	Anniston AD	AL	Onsite	N
		E	Plant	ARNG	4	Fort McClellan ARNG	AL	Onsite	N
Ground beetle	<i>Rhadine exilis</i>	E	Insect	WEST	2	Fort Sam Houston	TX	Onsite	N
		E	Insect	WEST	2	Fort Sam Houston	TX	Onsite	N
Grouse, greater sage (Columbia Basin DPS, WA)	<i>Centrocercus urophasianus phaios</i>	C	Bird	WEST	1	Yakima Training Center	WA	Onsite	N
Ha'iwaile	<i>Cyrtandra dentata</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Cyrtandra subumbellata</i>	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Cyrtandra viridiflora</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Haha	<i>Cyanea acuminata</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Cyanea calycina</i>	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Cyanea crispa</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Cyanea grimesiana ssp. obatae</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Cyanea humboldtiana</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Cyanea koolauensis</i>	E	Plant	PARO	11	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Cyanea longiflora</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Cyanea st-johnii</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
<i>Cyanea superba</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N	
<i>Lobelia niihauensis</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N	
Harperella	<i>Ptilimnium nodosum</i>	E	Plant	ARNG	5	LIL Aaron Strauss	MD	Onsite	N
Hawk, Hawaiian (=‘lo)	<i>Buteo solitarius</i>	E	Bird	ARNG	1	Hilo (Keaukaha Military Reservation)	HI	Onsite	N
		E	Bird	PARO	1	Pohakuloa TA	HI	Onsite	N
Honohono	<i>Haplostachys haplostachya</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Howellia, water	<i>Howellia aquatilis</i>	T	Plant	WEST	1	Fort Lewis	WA	Onsite	N
Hulumoa	<i>Korthalsella degeneri</i>	C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Jaguar	<i>Panthera onca</i>	E	Mammal	WEST	2	White Sands Missile Range	NM	Onsite	N
Jay, Florida scrub	<i>Aphelocoma coerulescens</i>	T	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
Kamakahala	<i>Labordia cyrtandrae</i>	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Kamanomano	<i>Cenchrus agrimonoides</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Kampua`a	<i>Hedyotis fluviatilis</i>	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Kangaroo rat, giant	<i>Dipodomys ingens</i>	E	Mammal	USAR- 63rd RRC	1	Leymel Hall USARC	CA	Contiguous	N
Kangaroo rat, San Bernardino Merriam's	<i>Dipodomys merriami parvus</i>	E	Mammal	USAR- 63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
Kangaroo rat, Stephens'	<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)	E	Mammal	USAR- 63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
Kauila	<i>Colubrina oppositifolia</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
Kaulu	<i>Pteralyxia macrocarpa</i>	C	Plant	PARO	1	Kahuku TA	HI	Onsite	N
		C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Kio`ele	<i>Hedyotis coriacea</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Kolea	<i>Myrsine juddii</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
Kuahiwi laukahi	<i>Plantago princeps</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Kulu`i	<i>Nototrichium humile</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Ladies'-tresses, Ute	<i>Spiranthes diluvialis</i>	T	Plant	WEST	6	Fort Carson	CO	Contiguous	N
Lark, streaked horned	<i>Eremophila alpestris strigata</i>	C	Bird	WEST	1	Fort Lewis	WA	Onsite	N
Lau `ehu	<i>Panicum niihauense</i>	E	Plant	ARNG	1	Kekaha Wets	HI	Onsite	Y—O
Lizard, Coachella Valley fringe-toed	<i>Uma inornata</i>	T	Reptile	USAR- 63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N
Lo`ulu	<i>Pritchardia kaalae</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Logperch, Roanoke	<i>Percina rex</i>	E	Fish	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
Loosestrife, roughleaved	<i>Lysimachia asperulaefolia</i>	E	Plant	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N
		E	Plant	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
		E	Plant	SERO	4	Fort Jackson	SC	Onsite	N
Lupine, Kincaid's	<i>Lupinus sulphureus kincaidii</i>	E	Plant	ARNG	1	Corvallis/Camp Adair	OR	Onsite	N
Ma`o hau hele	<i>Hibiscus brackenridgei</i>	E	Plant	PARO	1	Dillingham Military Reservation	HI	Contiguous	N
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Ma`oli`oli	<i>Schiedea kealiae</i>	E	Plant	PARO	1	Dillingham Military Reservation	HI	Contiguous	N
Maaloa	<i>Neraudia Ovata</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Ma`aloa	<i>Neraudia angulata</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Madla's cave meshweaver	<i>Cicurina madla</i>	E	Other Invertebrate	WEST	2	Fort Sam Houston	TX	Onsite	N
Mahoe	<i>Alectryon macrococcus</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Makou	<i>Peucedanum sandwicense</i>	T	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
Manatee, West Indian (=Florida)	<i>Trichechus manatus</i>	E	Mammal	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Massasauga, eastern	<i>Sistrurus catenatus catenatus</i>	C	Reptile	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
Mehamehame	<i>Flueggea neowawraea</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Milk-vetch, Lane Mountain	<i>Astragalus jaegerianus</i>	E	Plant	WEST	1	National Training Center and Fort Irwin	CA	Onsite	N
Minnow, loach	<i>Tiaroga cobitis</i>	T	Fish	WEST	2	Fort Huachuca	AZ	Contiguous	N
Moorehen, Hawaiian Common	<i>Gallinula chloropus sandwicensis</i>	E	Bird	ARNG	1	Fort Ruger	HI	Onsite	N
		E	Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
Moth, Blackburn's sphinx	<i>Manduca blackburni</i>	E	Insect	ARNG	1	Kanaio Wets	HI	Onsite	Y—O
Mouse, Pacific pocket	<i>Perognathus longimembris pacificus</i>	E	Mammal	USAR- 63rd RRC	1	March USARC/AMSA 19(G)	CA	Contiguous	N

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Mouse, Preble's meadow jumping	<i>Zapus hudsonius preblei</i>	E	Mammal	ARNG	6	Douglas Armory, WY	WY	Contiguous	N
		T	Mammal	WEST	6	Fort Carson	CO	Contiguous	N
Murrelet, marbled	<i>Brachyramphus marmoratus marmoratus</i>	T	Bird	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR- 70th RRC	1	LTA-AVN TNG Area (Weyerhaeuser)	WA	Onsite	Y—C
		T	Bird	WEST	1	Fort Lewis	WA	Contiguous	N
Na'ena'e	<i>Dubautia herbstobatae</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Nanu	<i>Gardenia mannii</i>	E	Plant	PARO	1	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
Nehe	<i>Lipochaeta tenuifolia</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
Nioi	<i>Eugenia koolauensis</i>	E	Plant	PARO	1	Kahuku TA	HI	Onsite	N
Noho, Kula wahine	<i>Isodendron pyriformium</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
No common name	<i>Abutilon sandwicense</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Alsinidendron obovatum</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Alsinidendron trinerve</i>	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Asplenium fragile var.insulare</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
	<i>Bonamia menziesii</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Diellia falcata</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Gouania vitifolia</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Hedyotis degeneri</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Hedyotis parvula</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Hesperomannia arborescens</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Hesperomannia arbuscula</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Lipochaeta venosa</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
	<i>Lobelia gaudichaudii ssp. koolauensis</i>	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Lobelia niihauensis</i>	E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Lobelia oahuensis</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Mariscus pennatiformis</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Contiguous	Y—C
	<i>Phlegmarius nutans</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Phyllostegia hirsuta</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Phyllostegia kaalaensis</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Phyllostegia parviflora</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Platydesma cornuta cornuta</i>	C	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	1	Makua Military Reservation	HI	Onsite	N
	<i>Platydesma cornuta descurrens</i>	C	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Pteris lidgatei</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Sanicula mariversa</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
	<i>Sanicula purpurea</i>	E	Plant	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Schiedea hookeri</i>	E	Plant	PARO	1	Makua Military Reservation	HI	Onsite	Y—C
E		Plant	PARO	1	Schofield Barracks	HI	Onsite	N	

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
No common name	Schiedea kaalae	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
	Schiedea nuttallii	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
	Silene hawaiiensis	T	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
	Silene lanceolata	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
	Spermolepis hawaiiensis	E	Plant	ARNG	I	Fort Ruger	HI	Onsite	Y—O
		E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
	Stenogyne angustifolia	E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
	Stenogyne kanehoana	E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
	Tetramolopium filiforme	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
	Vigna o-wahuensis	E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
	Viola oahuensis	E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
E		Plant	PARO	I	Schofield Barracks	HI	Onsite	N	
Oha	Delissea subcordata	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	Y—C
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Ohai	Sesbania tomentosa	E	Plant	ARNG	I	Kanaio Wets	HI	Onsite	N
Ohe	Joinvillea ascendens ascendens	C	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		C	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Ohe' ohe	Tetraplasandra gymnocarpa	E	Plant	PARO	I	Kahuku TA	HI	Onsite	N
		E	Plant	PARO	I	Kawailoa TA	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Opuhe	Urera kaalae	E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Otter, southern sea	Enhydra lutris nereis	T	Mammal	USAR- 63rd RRC	I	LTA—Moss Landing	CA	Onsite	N
Owl, Mexican spotted	Strix occidentalis lucida	T	Bird	ARNG	2	Camp Navajo	AZ	Onsite	Y—O
		T	Bird	WEST	6	Fort Carson	CO	Contiguous	N
		T	Bird	WEST	2	Fort Huachuca	AZ	Onsite	N
		T	Bird	WEST	2	White Sands Missile Range	NM	Contiguous	N
Owl, northern spotted	Strix occidentalis caurina	T	Bird	ARNG	I	Corvallis/Camp Adair	OR	Contiguous	N
		T	Bird	ARNG	I	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR- 70th RRC	I	LTA-AVN TNG Area (Weyerhaeuser)	WA	Onsite	Y—O
		T	Bird	WEST	I	Fort Lewis	WA	Contiguous	Y—O**
Paintbrush, golden	Castilleja levisecta	T	Plant	WEST	I	Fort Lewis	WA	Contiguous	N
Palila (honeycreeper)	Loxioides bailleui	E	Bird	PARO	I	Pohakuloa TA	HI	Contiguous	Y—O
Palo de rosa	Ottoschulzia rhodoxylon	E	Plant	SERO	4	Fort Buchanan	PR	Onsite	N
Pamakani	Viola chamissoniana ssp. chamissoniana	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Pamakani, Mauna Kea	Tetramolopium arenarium var. arenarium	E	Plant	PARO	I	Pohakuloa TA	HI	Onsite	N
Panther, Florida	Puma concolor coryi	E	Mammal	ARNG	4	MTC Camp Blanding	FL	Onsite	N
Pauoa	Ctenitis squamigera	E	Plant	PARO	I	Makua Military Reservation	HI	Onsite	N
		E	Plant	PARO	I	Schofield Barracks	HI	Onsite	N
Pelican, brown (Entire pop, except U.S. Atlantic Coast, FL, AL)	Pelecanus occidentalis	E	Bird	ARNG	I	MTA Camp Rilea	OR	Contiguous	N
		E	Bird	USAR-63rd RRC	I	LTA-Moss Landing	CA	Onsite	N
		E	Bird	USAR- 63rd RRC	I	AMSA I3 (M), Mare Isle	CA	Onsite	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Pennyroyal, Todsens's	Hedeoma todsenii	E	Plant	WEST	2	White Sands Missile Range	NM	Onsite	Y—O
Pine snake, Louisiana	Pituophis ruthveni	C	Reptile	SERO	4	Fort Polk	LA	Onsite	N
Pink, swamp	Helonias bullata	T	Plant	NERO	5	Fort AP Hill	VA	Onsite	N
Plover, piping	Charadrius melodus	T	Bird	ARNG	6	Camp Grafton	ND	Contiguous	N
		T	Bird	ARNG	5	Sea Girt	NJ	Onsite	N
		T	Bird	ARNG	6	TS Garrison	ND	Contiguous	N
		T	Bird	ARNG	6	TS Williston	ND	Contiguous	N
		T	Bird	WEST	6	Fort Riley	KS	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	T	Bird	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
		T	Bird	USAR- 63rd RRC	1	LTA—Moss Landing	CA	Onsite	N
Po'e	<i>Portulaca sclerocarpa</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Pocket gopher, Mazama	<i>Thomomys mazama</i>	C	Mammal	WEST	1	Fort Lewis	WA	Onsite	N
Pogonia, small whorled	<i>Isotria medeoloides</i>	T	Plant	ARNG	5	Auburn TS/OMS 2	ME	Onsite	N
		T	Plant	ARNG	5	NHNG Training Center	NH	Onsite	N
		T	Plant	NERO	5	Fort AP Hill	VA	Onsite	N
		T	Plant	NERO	5	Fort Belvoir	VA	Onsite	N
Popolo ku mai	<i>Solanum incompletum</i>	E	Plant	PARO	1	Pohakuloa TA	HI	Onsite	N
Potato-bean, Price's	<i>Apios priceana</i>	T	Plant	SERO	4	Redstone Arsenal	AL	Onsite	N
Pu'uka'a	<i>Cyperus trachysanthos</i>	E	Plant	ARNG	1	Fort Ruger	HI	Onsite	Y—O
		E	Plant	PARO	1	Dillingham Military Reservation	HI	Contiguous	N
Pupu kuahiwi	<i>Achatinella apexfulva</i>	E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Achatinella byronii</i>	E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Snail	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Achatinella curta</i>	E	Snail	PARO	1	Kahuku TA	HI	Onsite	N
		E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Achatinella lila</i>	E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
		E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Achatinella mustelina</i>	E	Snail	PARO	1	Makua Military Reservation	HI	Onsite	N
		E	Snail	PARO	1	Schofield Barracks	HI	Onsite	N
	<i>Achatinella pulcherrima</i>	E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
	<i>Achatinella sowerbyana</i>	E	Snail	PARO	1	Kahuku TA	HI	Onsite	N
		E	Snail	PARO	1	Kawailoa TA	HI	Onsite	N
E		Snail	PARO	1	Schofield Barracks	HI	Onsite	N	
Quillwort, Louisiana	<i>Isoetes louisianensis</i>	E	Plant	ARNG	4	MTA Camp Shelby	MS	Onsite	N
Rabbit, New England cottontail	<i>Sylvilagus transitionalis</i>	C	Mammal	ARNG	5	Hollis Plains TS	ME	Onsite	N
Rhododendron, Chapman	<i>Rhododendron chapmanii</i>	E	Plant	ARNG	4	MTC Camp Blanding	FL	Onsite	N
Salamander, California tiger	<i>Ambystoma californiense</i>	T	Amphibian	WEST	1	Fort Hunter Liggett	CA	Onsite	N
		E	Amphibian	WEST	1	U.S. Army CSTC And Camp Parks	CA	Onsite	N
Salamander, flatwoods	<i>Ambystoma cingulatum</i>	T	Amphibian	SERO	4	Fort Stewart	GA	Onsite	N
Salamander, Sonoran tiger	<i>Ambystoma tigrinum stebbinsi</i>	E	Amphibian	WEST	2	Fort Huachuca	AZ	Onsite	N
Salmon, chinook (CA, Sacramento River-winter run)	<i>Oncorhynchus tshawytscha</i>	T	Fish	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Onsite	N
Salmon, chinook (T=WA) naturally spawned populations in the Columbia R. tributaries upstream of Rock Island Dam & downstream of Chief Joseph Dam)		T	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
Salmon, chinook (T=WA) natural populations from rivers & streams flowing into Puget Sound)		T	Fish	USAR- 70th RRC	1	Pier 23 USARC	WA	Onsite	N
Salmon, chinook (T=WA) natural populations from rivers & streams flowing into Puget Sound)		T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
Schiedea, diamond head	<i>Schiedea adamantis</i>	E	Plant	ARNG	1	Fort Ruger	HI	Onsite	N
Sea turtle, green	<i>Chelonia mydas</i>	T	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	E	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Sea turtle, leatherback	<i>Dermodochelys coriacea</i>	E	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Sea turtle, loggerhead	<i>Caretta caretta</i>	T	Reptile	SERO	4	Military Ocean Terminal Sunny Point	NC	Contiguous	N
Sea-lion, Steller (=northern)	<i>Eumetopias jubatus</i>	T	Mammal	ARNG	1	MTA Camp Rilea	OR	Contiguous	N
Shiner, Topeka	<i>Notropis topeka</i>	E	Fish	WEST	6	Fort Riley	KS	Onsite	N
Shrimp, Alabama cave	<i>Palaemonias alabamae</i>	E	Crustacean	SERO	4	Redstone Arsenal	AL	Onsite	N
Skipper, Carson wandering	<i>Pseudocopaodes eunus obscurus</i>	E	Insect	AMC	1	Sierra AD	CA	Contiguous	N
Skipper, Mardon	<i>Polites mardon</i>	C	Insect	WEST	1	Fort Lewis	WA	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Skullcap, large-flowered	<i>Scutellaria montana</i>	T	Plant	ARNG	4	Catoosa Range/TS	TN	Onsite	N
Slickspot peppergrass****	<i>Lepidium Papilliferum</i>	PE	Plant	ARNG	1	Orchard Range TS Boise	ID	Onsite	N
Smelt, delta	<i>Hypomesus transpacificus</i>	T	Fish	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Snail, Morro shoulderband	<i>Helminthoglypta walkeriana</i>	E	Snail	ARNG	1	CTC Camp San Luis Obispo	CA	Contiguous	N
Snake, black pine	<i>Pituophis melanoleucus lodingi</i>	C	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
Snake, eastern indigo	<i>Drymarchon corais couperi</i>	T	Reptile	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		T	Reptile	SERO	4	Fort Stewart	GA	Onsite	N
Spikedace	<i>Meda fulgida</i>	T	Fish	WEST	2	Fort Huachuca	AZ	Contiguous	N
Spineflower, Monterey	<i>Chorizanthe pungens var. pungens</i>	T	Plant	USAR- 63rd RRC	1	Marina USARC/OMS/AMSA 12 S-S	CA	Onsite	N
		T	Plant	WEST	1	Presidio of Monterey	CA	Onsite	Y—O
Spineflower, San Fernando Valley	<i>Chorizanthe parryi fernandina</i>	C	Plant	USAR- 63rd RRC	1	Tustin USARC	CA	Onsite	N
Springsnail, Huachuca	<i>Pyrgulopsis thompsoni</i>	C	Snail	WEST	2	Fort Huachuca	AZ	Onsite	N
Steelhead (Central California Coastal)	<i>Oncorhynchus mykiss</i>	T	Fish	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Steelhead (Central Valley California)		T	Fish	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Steelhead (Lower Columbia River)		T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
Steelhead (Middle Columbia River)		T	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
Steelhead (Southern California)		E	Fish	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		E	Fish	ARNG	1	MTC-H Camp Roberts	CA	Onsite	N
Steelhead (Upper Columbia River)		E	Fish	WEST	1	Yakima Training Center	WA	Onsite	N
Stilt, Hawaiian (=ae'o)		<i>Himantopus mexicanus knudseni</i>	E	Bird	ARNG	1	Kekaha Wets	HI	Onsite
	E		Bird	ARNG	1	Ukumehame Wets	HI	Onsite	N
Stork, wood	<i>Mycteria americana</i>	E	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		E	Bird	SERO	4	Fort Benning	GA	Onsite	N
		E	Bird	SERO	4	Fort Gordon	GA	Contiguous	N
		E	Bird	SERO	4	Fort Stewart	GA	Onsite	N
Sturgeon, green	<i>Acipenser medirostris</i>	T	Fish	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Contiguous	N
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	E	Fish	WEST	6	Fort Leavenworth	KS	Onsite	N
Sturgeon, shortnose	<i>Acipenser brevirostrum</i>	E	Fish	ARNG	5	Camp Smith CSMS A	NY	Contiguous	N
		E	Fish	NERO	5	Aberdeen Proving Ground	MD	Onsite	N
		E	Fish	NERO	5	West Point Military Reservation	NY	Contiguous	N
		E	Fish	SERO	4	Fort Stewart	GA	Onsite	N
Sumac, Michaux's	<i>Rhus michauxii</i>	E	Plant	ARNG	5	Fort Pickett ARNG MTC	VA	Onsite	N
		E	Plant	SERO	4	Fort Bragg	NC	Onsite	N
Sunburst, Hartweg's golden	<i>Pseudobahia bahiifolia</i>	E	Plant	USAR- 63rd RRC	1	63rd RRC	CA	Contiguous	N
Sunburst, San Joaquin adobe	<i>Pseudobahia peirsonii</i>	T	Plant	USAR- 63rd RRC	1	Leymel Hall USARC	CA	Contiguous	N
Tarplant, Santa Cruz	<i>Holocarpha macradenia</i>	T	Plant	ARNG	1	Santa Cruz Armory	CA	Onsite	Y—O
Tern, California least	<i>Sterna antillarum browni</i>	E	Bird	USAR- 63rd RRC	1	AMSA 13 (M), Mare Isle	CA	Onsite	N
		E	Bird	USAR- 63rd RRC	1	PFC L.T. Baccigleiri Hall AFRC	CA	Contiguous	N
Tern, least	<i>Sterna antillarum</i>	E	Bird	ARNG	3	HQ STARC—MO	MO	Contiguous	N
		E	Bird	WEST	6	Fort Riley	KS	Onsite	N
		E	Bird	WEST	2	White Sands Missile Range	NM	Onsite	N
Thistle, Chorro Creek bog	<i>Cirsium fontinale var. obispoense</i>	E	Plant	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
Toad, arroyo	<i>Bufo californicus</i>	E	Amphibian	WEST	1	Fort Hunter Liggett	CA	Onsite	N
Tortoise, desert	<i>Gopherus agassizii</i>	T	Reptile	ARNG	1	Clark County Complex	NV	Onsite	N
		T(SA)	Reptile	ARNG	2	Florence Military Reservation	AZ	Onsite	N
		T	Reptile	USAR- 63rd RRC	1	Victorville USARC/ASF	CA	Contiguous	N
		T	Reptile	WEST	1	National Training Center and Fort Irwin	CA	Onsite	Y—O
Tortoise, gopher	<i>Gopherus polyphemus</i>	T	Reptile	ARNG	4	MTA Camp Shelby	MS	Onsite	N
Trillium, relict	<i>Trillium reliquum</i>	E	Plant	SERO	4	Fort Benning	GA	Onsite	N

COMMON NAME	SCIENTIFIC NAME	STATUS	CATEGORY	COMMAND	FWS REGION	INSTALLATION	STATE	ONSITE/ CONTIGUOUS	CRITICAL HABITAT
Trout, bull	<i>Salvelinus confluentus</i>	T	Fish	USAR- 70th RRC	1	Pier 23 USARC	WA	Onsite	N
		T	Fish	WEST	1	Fort Lewis	WA	Onsite	N
		T	Fish	WEST	1	Yakima Training Center	WA	Contiguous	N
Trout, Lahontan cutthroat	<i>Oncorhynchus clarki henshawi</i>	E	Fish	AMC	1	Hawthorne AD	NV	Contiguous	N
Turtle, bog (Entire U.S. except, GA, NC, SC, TN, VA.)	<i>Clemmys muhlenbergii</i>	T	Reptile	NERO	5	Picatiny Arsenal	NJ	Contiguous	N
Vireo, black-capped	<i>Vireo atricapilla</i>	E	Bird	ARNG	2	Camp Bowie (State)	TX	Onsite	N
		E	Bird	WEST	2	Fort Hood	TX	Onsite	N
		E	Bird	WEST	2	Fort Sam Houston	TX	Onsite	N
		E	Bird	WEST	2	Fort Sill	OK	Onsite	N
Vireo, least Bell's	<i>Vireo bellii pusillus</i>	E	Bird	ARNG	1	CTC Camp San Luis Obispo	CA	Onsite	N
		E	Bird	ARNG	1	MTC-H Camp Roberts	CA	Contiguous	N
		E	Bird	WEST	1	Fort Hunter Liggett	CA	Contiguous	N
Warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	E	Bird	ARNG	2	Camp Mabry	TX	Onsite	N
		E	Bird	WEST	2	Fort Hood	TX	Onsite	N
		E	Bird	WEST	2	Fort Sam Houston	TX	Onsite	N
Warbler, Kirtland's	<i>Dendroica kirtlandii</i>	E	Bird	ARNG	3	MTC-H Camp Grayling	MI	Onsite	N
Water-umbel, Huachuca	<i>Lilaeopsis schaffneriana ssp.recurva</i>	E	Plant	WEST	2	Fort Huachuca	AZ	Onsite	Y—O
Whale, beluga	<i>Delphinapterus leucas</i>	PE	Mammal	PARO	7	Fort Richardson	AK	Onsite	N
Whale, southern resident killer	<i>Orcinus orca</i>	E	Mammal	USAR- 70th RRC	1	Pier 23 USARC	WA	Contiguous	N
		E	Mammal	WEST	1	Fort Lewis	WA	Contiguous	N
Wolf, gray (MN only)***	<i>Canis lupus</i>	T	Mammal	ARNG	3	Camp Ripley	MN	Onsite	N
Wolf, gray***		E	Mammal	WEST	3	Fort McCoy	WI	Onsite	N
Woodpecker, red-cockaded	<i>Picoides borealis</i>	E	Bird	ARNG	4	Leesburg TS	SC	Onsite	N
		E	Bird	ARNG	4	MTA Camp Shelby	MS	Contiguous	N
		E	Bird	ARNG	4	MTC Camp Blanding	FL	Onsite	N
		E	Bird	ARNG	4	SMR Camp Beauregard	LA	Contiguous	N
		E	Bird	SERO	4	Fort Benning	GA	Onsite	N
		E	Bird	SERO	4	Fort Bragg	NC	Onsite	N
		E	Bird	SERO	4	Fort Gordon	GA	Onsite	N
		E	Bird	SERO	4	Fort Jackson	SC	Onsite	N
		E	Bird	SERO	4	Fort Polk	LA	Onsite	N
		E	Bird	SERO	4	Fort Stewart	GA	Onsite	N
E	Bird	SERO	4	Military Ocean Terminal Sunny Point	NC	Onsite	N		
Woolly-threads, San Joaquin	<i>Monolopia congdonii</i>	E	Plant	USAR- 63rd RRC	1	Leymel Hall USARC	CA	Contiguous	N
Yadon's piperia	<i>Piperia Yadonii</i>	E	Plant	WEST	1	Presidio of Monterey	CA	Onsite	N

“Y-O”—critical habitat on installation

“Y-C”—critical habitat contiguous to installation, but within action area

* Delisted 8 August 2007

** Critical habitat redesignated (13 August 2008). Critical habitat no longer designated on installation.

*** Delisted 12 March 2007; listing reinstated by court order

**** Proposed rule withdrawn 12 January 2007

Non-essential experimental population

D

APPENDIX D: INSTALLATIONS WITH T&E SPECIES ONSITE

COMMAND	INSTALLATION	STATE	COMMAND	INSTALLATION	STATE		
AMC	Anniston AD	AL	NERO	Fort A.P. Hill	VA		
	Blue Grass AD	KY		Fort Belvoir	VA		
	Hawthorne AD	NV		Fort Dix	NJ		
	Holston AAP	TN		Fort Drum	NY		
	Iowa AAP	IA		Fort Eustis	VA		
	Lone Star AAP	TX		Picatiny Arsenal	NJ		
	McAlester AAP	OK		U.S. Army Research Laboratory Adelphi	MD		
	Newport Chemical Depot	IN		West Point Military Reservation	NY		
	(Clinton) Truman Reservoir T.S.	MO		Kahuku TA	HI		
ARNG	Auburn TS/OMS 2	ME	PARO	Kawailoa TA	HI		
	Camp Ashland	NE		Makua Military Reservation	HI		
	Camp Atterbury	IN		Pohakuloa TA	HI		
	Camp Bowie (State)	TX		Schofield Barracks	HI		
	Camp Gruber	OK		SERO	Fort Benning	GA	
	Camp Mabry	TX			Fort Bragg	NC	
	Camp Maxey	TX			Fort Buchanan	PR	
	Camp Murray	WA			Fort Campbell	KY	
	Camp Navajo	AZ			Fort Gordon	GA	
	Camp Perry	OH	Fort Jackson		SC		
	Camp Ripley	MN	Fort Knox		KY		
	Catoosa Range/TS	TN	Fort Polk		LA		
	Clark County Complex	NV	Fort Stewart		GA		
	Corvallis/Camp Adair	OR	Military Ocean Terminal Sunny Point		NC		
	CTC Camp San Luis Obispo	CA	Redstone Arsenal		AL		
	Florence Military Reservation	AZ	USAR-63rd RRC		AMSA 13 (M), Mare Isle	CA	
	Fort Chaffee Maneuver Training CTR	AR			BT Collins Enclave	CA	
	Fort McClellan ARNG	AL			LTA—Moss Landing	CA	
	Fort Pickett ARNG MTC	VA			Marina USARC/OMS/AMSA 12 S-S	CA	
	Fort Ruger	HI			LTA-AVN TNG Area (Weyerhaeuser)	WA	
	Hilo (Keaukaha Military Reservation)	HI			Pier 23 USARC	WA	
	HQ STARC—MO	MO			Twinsburg USARC/AMSA #123	OH	
	Kanaio Wets	HI			WEST	Fort Bliss	TX
	Kekaha Wets	HI				Fort Hood	TX
	Kingwood	WV	Fort Huachuca			AZ	
	Leesburg TS	SC	Fort Hunter Liggett			CA	
	LIL Aaron Strauss	MD	Fort Leavenworth			KS	
	Macon TS	MO	Fort Lewis			WA	
	MTA Camp Rilea	OR	Fort Leonard Wood			MO	
	MTA Camp Shelby	MS	Fort McCoy			WI	
	MTC Camp Blanding	FL	Fort Riley	KS			
	MTC-H Camp Grayling	MI	Fort Sam Houston	TX			
	MTC-H Camp Guernsey	WY	Fort Sill	OK			
	MTC-H Camp Roberts	CA	National Training Center and Fort Irwin	CA			
	NHNG Training Center	NH	Pinon Canyon	CO			
	OMS 10B/St. George	UT	Presidio of Monterey	CA			
	Santa Cruz Armory	CA	Rock Island Arsenal	IL			
	Sea Girt	NJ	U.S. Army CSTC and Camp Parks	CA			
	State Military Reservation	NH	White Sands Missile Range	NM			
	Ukumehame Wets	HI	Yakima Training Center	WA			
	NERO	Aberdeen Proving Ground	MD				

Silene lanceolata in bloom.

U.S. Army Garrison, HI



ʻAkoko

Army Environmental Command



Pupu kuahiwi (*Achatinella livida*)
- one of the listed snails in HI.

U.S. Army Garrison, HI



Wood storks.

Army Environmental Command

E

APPENDIX E: T&E SPECIES FOUND ON ARMY INSTALLATIONS

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Abutilon sandwicense</i>	No common name	E
<i>Achatinella apexfulva</i>	Pupu kuahiwi	E
<i>Achatinella bulimoides</i>	Pupu kuahiwi	E
<i>Achatinella byronii</i>	Pupu kuahiwi	E
<i>Achatinella curta</i>	Pupu kuahiwi	E
<i>Achatinella lila</i>	Pupu kuahiwi	E
<i>Achatinella livida</i>	Pupu kuahiwi	E
<i>Achatinella mustelina</i>	Pupu kuahiwi	E
<i>Achatinella pulcherrima</i>	Pupu kuahiwi	E
<i>Achatinella sowerbyana</i>	Pupu kuahiwi	E
<i>Acipenser brevirostrum</i>	Sturgeon, shortnose	E
<i>Alectryon macrococcus</i>	Mahoe	E
<i>Alligator mississippiensis</i>	Alligator, American	T(SA)
<i>Alsinidendron obovatum</i>	No common name	E
<i>Alsinidendron trinerve</i>	No common name	E
<i>Amaranthus pumilus</i>	Amaranth, seabeach	T
<i>Ambystoma californiense</i>	Salamander, California tiger	E/T
<i>Ambystoma cingulatum</i>	Salamander, flatwoods	T
<i>Ambystoma tigrinum stebbinsi</i>	Salamander, Sonoran tiger	E
<i>Anas wyvilliana</i>	Duck, Hawaiian (=koloa)	E
<i>Aphelocoma coerulescens</i>	Jay, Florida scrub	T
<i>Apios priceana</i>	Potato-bean, Price's	T
<i>Arctomecon humilis</i>	Bear-poppy, Dwarf	E
<i>Asplenium fragile</i> var. <i>insulare</i>	No common name	E
<i>Astragalus jaegerianus</i>	Milk-vetch, Lane Mountain	E
<i>Bonamia menziesii</i>	No common name	E
<i>Brachyramphus marmoratus marmoratus</i>	Murrelet, marbled	T
<i>Branchinecta lynchi</i>	Fairy shrimp, vernal pool	T
<i>Branta sandvicensis</i>	Goose, Hawaiian (=nene)	E
<i>Bufo californicus</i>	Toad, arroyo	E
<i>Buteo solitarius</i>	Hawk, Hawaiian (=‘lo)	E
<i>Canis lupus</i>	Wolf, gray***	E/T
<i>Cenchrus agrimonoides</i>	Kamanomano	E
<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	Akoko	E
<i>Chamaesyce herbstii</i>	Akoko	E
<i>Chamaesyce rockii</i>	Akoko	E
<i>Charadrius alexandrinus nivosus</i>	Plover, western snowy	T
<i>Charadrius melodus</i>	Plover, piping	T
<i>Chasiempis sandwichensis ibidis</i>	Elepaio, Oahu	E
<i>Chlorogalum purpureum</i>	Amole, purple	T
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Spineflower, Monterey	T
<i>Cicurina madla</i>	Madla's cave meshweaver	E
<i>Cirsium fontinale</i> var. <i>obispoense</i>	Thistle, Chorro Creek bog	E
<i>Coryphantha sneedii</i>	Cactus, Sneed pincushion	E

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Ctenitis squamigera</i>	Pauoa	E
<i>Cyanea acuminata</i>	Haha	E
<i>Cyanea crispa</i>	Haha	E
<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	Haha	E
<i>Cyanea humboldtiana</i>	Haha	E
<i>Cyanea koolauensis</i>	Haha	E
<i>Cyanea longiflora</i>	Haha	E
<i>Cyanea st-johnii</i>	Haha	E
<i>Cyanea superba</i>	Haha	E
<i>Cyperus trachyanthos</i>	Pu'uka'a	E
<i>Cyrtandra dentata</i>	Ha'iwale	E
<i>Cyrtandra subumbellata</i>	Ha'iwale	E
<i>Cyrtandra viridiflora</i>	Ha'iwale	E
<i>Delissea subcordata</i>	Oha	E
<i>Dendroica chrysoparia</i>	Warbler, golden-cheeked	E
<i>Dendroica kirtlandii</i>	Warbler, Kirtland's	E
<i>Diellia falcata</i>	No common name	E
<i>Drymarchon corais couperi</i>	Snake, eastern indigo	T
<i>Dubautia herbstobatae</i>	Na'ena'e	E
<i>Echinacea laevigata</i>	Coneflower, smooth	E
<i>Echinocereus fendleri</i>	Cactus, Kuenzler hedgehog	E
<i>Enhydra lutris nereis</i>	Otter, southern sea	T
<i>Epicrates inornatus</i>	Boa, Puerto Rican	E
<i>Eugenia koolauensis</i>	Nioi	E
<i>Euphorbia haeleleana</i>	Akoko	E
<i>Falco femoralis septentrionalis</i>	Falcon, northern Aplomado	E
<i>Flueggea neowawraea</i>	Mehamehame	E
<i>Fulica americana alai</i>	Coot, Hawaiian (= 'alae-ke'oke'o)	E
<i>Gallinula chloropus sandvicensis</i>	Moorhen, Hawaiian Common	E
<i>Gardenia mannii</i>	Nanu	E
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	Gilia, Monterey	E
<i>Gopherus agassizii</i>	Tortoise, desert	T/(SA)
<i>Gopherus polyphemus</i>	Tortoise, gopher	T
<i>Gouania vitifolia</i>	No common name	E
<i>Grus americana</i>	Crane, whooping	E
<i>Gymnogyps californianus</i>	Condor, California	E
<i>Haliaeetus leucocephalus</i>	Eagle, bald*	T
<i>Haplostachys haplostachya</i>	Honohono	E
<i>Hedeoma todsenii</i>	Pennyroyal, Todsens	E
<i>Hedyotis coriacea</i>	Kio'ele	E
<i>Hedyotis degeneri</i>	No common name	E
<i>Hedyotis parvula</i>	No common name	E
<i>Helonias bullata</i>	Pink, swamp	T
<i>Hesperomannia arborescens</i>	No common name	E
<i>Hesperomannia arbuscula</i>	No common name	E

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Abutilon sandwicense</i>	No common name	E
<i>Achatinella apexfulva</i>	Pupu kuahiwi	E
<i>Achatinella bulimoides</i>	Pupu kuahiwi	E
<i>Achatinella byronii</i>	Pupu kuahiwi	E
<i>Achatinella curta</i>	Pupu kuahiwi	E
<i>Achatinella lila</i>	Pupu kuahiwi	E
<i>Achatinella livida</i>	Pupu kuahiwi	E
<i>Achatinella mustelina</i>	Pupu kuahiwi	E
<i>Achatinella pulcherrima</i>	Pupu kuahiwi	E
<i>Achatinella sowerbyana</i>	Pupu kuahiwi	E
<i>Acipenser brevirostrum</i>	Sturgeon, shortnose	E
<i>Alectryon macrococcus</i>	Mahoe	E
<i>Alligator mississippiensis</i>	Alligator, American	T(SA)
<i>Alsinidendron obovatum</i>	No common name	E
<i>Alsinidendron trinerve</i>	No common name	E
<i>Amaranthus pumilus</i>	Amaranth, seabeach	T
<i>Ambystoma californiense</i>	Salamander, California tiger	E/T
<i>Ambystoma cingulatum</i>	Salamander, flatwoods	T
<i>Ambystoma tigrinum stebbinsi</i>	Salamander, Sonoran tiger	E
<i>Anas wyvilliana</i>	Duck, Hawaiian (=koloa)	E
<i>Aphelocoma coerulescens</i>	Jay, Florida scrub	T
<i>Apios priceana</i>	Potato-bean, Price's	T
<i>Arctomecon humilis</i>	Bear-poppy, Dwarf	E
<i>Asplenium fragile</i> var. <i>insulare</i>	No common name	E
<i>Astragalus jaegerianus</i>	Milk-vetch, Lane Mountain	E
<i>Bonamia menziesii</i>	No common name	E
<i>Brachyramphus marmoratus marmoratus</i>	Murrelet, marbled	T
<i>Branchinecta lynchi</i>	Fairy shrimp, vernal pool	T
<i>Branta sandvicensis</i>	Goose, Hawaiian (=nene)	E
<i>Bufo californicus</i>	Toad, arroyo	E
<i>Buteo solitarius</i>	Hawk, Hawaiian (=‘lo)	E
<i>Canis lupus</i>	Wolf, gray***	E/T
<i>Cenchrus agrimonioides</i>	Kamanomano	E
<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	Akoko	E
<i>Chamaesyce herbstii</i>	Akoko	E
<i>Chamaesyce rockii</i>	Akoko	E
<i>Charadrius alexandrinus nivosus</i>	Plover, western snowy	T
<i>Charadrius melodus</i>	Plover, piping	T
<i>Chasiempis sandwichensis ibidis</i>	Elepaio, Oahu	E
<i>Chlorogalum purpureum</i>	Amole, purple	T
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Spineflower, Monterey	T
<i>Chorizanthe robusta</i> (incl. vars. <i>robusta</i> & <i>hartwegii</i>)	Spineflower, robust (incl. Scotts Valley)	E
<i>Cicurina madla</i>	Madla's cave meshweaver	E
<i>Cirsium fontinale</i> var. <i>bispoense</i>	Thistle, Chorro Creek bog	E
<i>Coryphantha sneedii</i>	Cactus, Sneed pincushion	E

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Ctenitis squamigera</i>	Pauoa	E
<i>Cyanea acuminata</i>	Haha	E
<i>Cyanea crista</i>	Haha	E
<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	Haha	E
<i>Cyanea humboldtiana</i>	Haha	E
<i>Cyanea koolauensis</i>	Haha	E
<i>Cyanea longiflora</i>	Haha	E
<i>Cyanea st-johnii</i>	Haha	E
<i>Cyanea superba</i>	Haha	E
<i>Cyperus trachyanthos</i>	Pu'uka'a	E
<i>Cyrtandra dentata</i>	Ha'iwale	E
<i>Cyrtandra subumbellata</i>	Ha'iwale	E
<i>Cyrtandra viridiflora</i>	Ha'iwale	E
<i>Delissea subcordata</i>	Oha	E
<i>Dendroica chrysoparia</i>	Warbler, golden-cheeked	E
<i>Dendroica kirtlandii</i>	Warbler, Kirtland's	E
<i>Diellia falcata</i>	No common name	E
<i>Drymarchon corais couperi</i>	Snake, eastern indigo	T
<i>Dubautia herbastobatae</i>	Na'ena'e	E
<i>Echinacea laevigata</i>	Coneflower, smooth	E
<i>Echinocereus fendleri</i>	Cactus, Kuenzler hedgehog	E
<i>Enhydra lutris nereis</i>	Otter, southern sea	T
<i>Epicrates inornatus</i>	Boa, Puerto Rican	E
<i>Eugenia koolauensis</i>	Nioi	E
<i>Euphorbia haeleleana</i>	Akoko	E
<i>Falco femoralis septentrionalis</i>	Falcon, northern Aplomado	E
<i>Flueggea neowawraea</i>	Mehamehame	E
<i>Fulica americana alai</i>	Coot, Hawaiian (= 'alae-ke'oke'o)	E
<i>Gallinula chloropus sandvicensis</i>	Moorhen, Hawaiian Common	E
<i>Gardenia mannii</i>	Nanu	E
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	Gilia, Monterey	E
<i>Gopherus agassizii</i>	Tortoise, desert	T/(SA)
<i>Gopherus polyphemus</i>	Tortoise, gopher	T
<i>Gouania vitifolia</i>	No common name	E
<i>Grus americana</i>	Crane, whooping	E
<i>Gymnogyps californianus</i>	Condor, California	E
<i>Haliaeetus leucocephalus</i>	Eagle, bald*	T
<i>Haplostachys haplostachya</i>	Honohono	E
<i>Hedeoma todsenii</i>	Pennyroyal, Todsen's	E
<i>Hedyotis coriacea</i>	Kio'ele	E
<i>Hedyotis degeneri</i>	No common name	E
<i>Hedyotis parvula</i>	No common name	E
<i>Helonias bullata</i>	Pink, swamp	T
<i>Hesperomannia arborescens</i>	No common name	E
<i>Hesperomannia arbuscula</i>	No common name	E

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Hibiscus brackenridgei</i>	Ma'ō hau hele	E
<i>Himantopus mexicanus knudseni</i>	Stilt, Hawaiian (=ae'ō)	E
<i>Holocarpa macradenia</i>	Tarplant, Santa Cruz	T
<i>Howellia aquatilis</i>	Howellia, water	T
<i>Isodendron hosakae</i>	Aupaka	E
<i>Isodendron longifolium</i>	Aupaka	T
<i>Isoetes louisianensis</i>	Quillwort, Louisiana	E
<i>Isotria medeoloides</i>	Pogonia, small whorled	T
<i>Labordia cyrtandrae</i>	Kamakahala	E
<i>Lasiurus cinereus semotus</i>	Bat, Hawaiian hoary	E
<i>Lepidium arbuscula</i>	Anaunau	E
<i>Leptonycteris curasoae yerbabuena</i>	Bat, lesser long-nosed	E
<i>Lilaeopsis schaffneriana ssp. recurva</i>	Water-umbel, Huachuca	E
<i>Lipochaeta tenuifolia</i>	Nehe	E
<i>Lipochaeta venosa</i>	No common name	E
<i>Lobelia gaudichaudii ssp. koolauensis</i>	No common name	E
<i>Lobelia niihauensis</i>	Haha/No common name	E
<i>Lobelia oahuensis</i>	No common name	E
<i>Lupinus sulphureus kincaidii</i>	Lupine, Kincaid's	E
<i>Lycaeides melissa samuelis</i>	Butterfly, Karner blue	E
<i>Lysimachia asperulaefolia</i>	Loosestrife, rough-leaved	E
<i>Manduca blackburni</i>	Moth, Blackburn's sphinx	E
<i>Marshallia mohrii</i>	Button, Mohr's Barbara	E
<i>Megalagrion leptodermis</i>	Damselfly, crimson Hawaiian	T
<i>Melicope lydgatei</i>	Alani	E
<i>Mycteria americana</i>	Stork, wood	E
<i>Myotis grisescens</i>	Bat, gray	E
<i>Myotis sodalis</i>	Bat, Indiana	E
<i>Myrsine juddii</i>	Kolea	E
<i>Neonympha mitchellii francisci</i>	Butterfly, Saint Francis' satyr	E
<i>Neraudia angulata</i>	Ma'aloa	E
<i>Neraudia ovata</i>	Maaloa	E
<i>Nicrophorus americanus</i>	Beetle, American burying (=giant carrion)	E
<i>Nototrichium humile</i>	Kulu'i	E
<i>Notropis topeka</i>	Shiner, Topeka	E
<i>Oncorhynchus mykiss</i>	Steelhead	E/T
<i>Oncorhynchus tshawytscha</i>	Salmon, chinook	T
<i>Ottoschulzia rhodoxylon</i>	Palo de rosa	E
<i>Palaemonias alabamae</i>	Shrimp, Alabama cave	E
<i>Panicum niihauense</i>	Lau `ehu	E
<i>Panthera onca</i>	Jaguar	E
<i>Pelecanus occidentalis</i>	Pelican, brown (Entire pop, except U.S. Atlantic Coast, FL, AL)	E
<i>Percina rex</i>	Loggerhead, Roanoke	E
<i>Peucedanum sandwicense</i>	Makou	T
<i>Phlegmarius nutans</i>	No common name	E
<i>Phyllostegia hirsuta</i>	No common name	E
<i>Phyllostegia kaalaensis</i>	No common name	E
<i>Phyllostegia parviflora</i>	No common name	E
<i>Picoides borealis</i>	Woodpecker, red-cockaded	E

SCIENTIFIC NAME	COMMON NAME	STATUS
<i>Piperia yadonii</i>	Yadon's piperia	E
<i>Plantago princeps</i>	Kuahiwi laukahi	E
<i>Portulaca sclerocarpa</i>	Po'e	E
<i>Pritchardia kaalae</i>	Lo'ulu	E
<i>Pteris lidgatei</i>	No common name	E
<i>Ptilimnium nodosum</i>	Harperella	E
<i>Puma concolor coryi</i>	Panther, Florida	E
<i>Rana aurora draytonii</i>	Frog, California red-legged	T
<i>Rhadine exilis</i>	Ground beetle	E
<i>Rhadine infernalis</i>	Ground beetle	E
<i>Rhododendron chapmanii</i>	Rhododendron, Chapman	E
<i>Rhus michauxii</i>	Sumac, Michaux's	E
<i>Salvelinus confluentus</i>	Trout, bull	T
<i>Sanicula maritima</i>	No common name	E
<i>Sanicula purpurea</i>	No common name	E
<i>Scaphirhynchus albus</i>	Sturgeon, pallid	E
<i>Schiedea adamantis</i>	Schiedea, diamond head	E
<i>Schiedea hookeri</i>	No common name	E
<i>Schiedea kaalae</i>	No common name	E
<i>Schiedea nuttallii</i>	No common name	E
<i>Schwalbea americana</i>	Chaffseed, American	E
<i>Scutellaria montana</i>	Skullcap, large-flowered	T
<i>Sesbania tomentosa</i>	Ohai	E
<i>Sidalcea nelsoniana</i>	Checker-mallow, Nelson's	T
<i>Silene hawaiiensis</i>	No common name	T
<i>Silene lanceolata</i>	No common name	E
<i>Solanum incompletum</i>	Popolo ku mai	E
<i>Solidago houghtonii</i>	Goldenrod, Houghton's	T
<i>Spermolepis hawaiiensis</i>	No common name	E
<i>Speyeria zerene hippolyta</i>	Butterfly, Oregon silverspot	T
<i>Stenogyne angustifolia</i>	No common name	E
<i>Stenogyne kanehoana</i>	No common name	E
<i>Sterna antillarum</i>	Tern, least	E
<i>Sterna antillarum brownii</i>	Tern, California least	E
<i>Strix occidentalis caurina</i>	Owl, northern spotted	T
<i>Strix occidentalis lucida</i>	Owl, Mexican spotted	T
<i>Tetramolopium arenarium</i> var. <i>arenarium</i>	Pamakani, Mauna Kea	E
<i>Tetramolopium filiforme</i>	No common name	E
<i>Tetraplasandra gymnocarpa</i>	Ohe'ohe	E
<i>Trifolium stoloniferum</i>	Clover, running buffalo	E
<i>Trillium reliquum</i>	Trillium, relict	E
<i>Urera kaalae</i>	Opuhe	E
<i>Vigna o-wahuensis</i>	No common name	E
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>	Pamakani	E
<i>Viola oahuensis</i>	No common name	E
<i>Vireo atricapilla</i>	Vireo, black-capped	E
<i>Vireo bellii pusillus</i>	Vireo, least Bell's	E
<i>Vulpes macrotis mutica</i>	Fox, San Joaquin kit	E
<i>Xyris tennesseensis</i>	Grass, Tennessee yellow-eyed	E
<i>Zanthoxylum hawaiiense</i>	A'e	E



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14. ABSTRACT This report (part of a continuing series) summarizes the Army's threatened and endangered species data for FY 2007. Data were obtained from various sources, including the Army Environmental Database - Environmental Quality, U.S. Fish and Wildlife Service, and Army commands and installations. Installation level data provide information on federally listed species occurrences onsite or contiguous to each installation. Species-level data list all installations on which species occur. Corresponding information on federal status, critical habitat, and threatened and endangered species expenditures is provided. Also included is information on species at risk and migratory birds.					
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