NR-2 Natural Resources Threatened, Endangered, and Special Status Species/Communities

APPENDIX NR-2 THREATENED, ENDANGERED, AND SPECIAL-STATUS SPECIES/COMMUNITIES

Appendix NR-2 includes the following tables:

- Table NR-2-1. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur on Langley AFB.
- Table NR-2-2. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur under Langley AFB affected airspace.
- Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur on Eglin AFB including Cape San Blas.
- Table NR-2-4. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur under Eglin AFB affected airspace.
- Table NR-2-5. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur on Elmendorf AFB.
- Table NR-2-6. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur under Elmendorf AFB affected airspace.
- Table NR-2-7. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur on Mountain Home AFB.
- Table NR-2-8. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur under Mountain Home AFB affected airspace.
- Table NR-2-9. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur on Tyndall AFB.
- Table NR-2-10. Threatened, Endangered, and Special-Status Species/Communities that occur or potentially occur under Tyndall AFB affected airspace.

Protected species status definitions include the following:

Dep = Depleted

EA = ecological association.

FC = Federal Candidate

FE = Federal Endangered

FT = Federal Threatened

FPT = Federal Proposed for Listing as Threatened

FSC = Federal Species of Concern

FT (SA) = Federally Threatened by similarity of appearance to the American Crocodile

MMPA = Protected by Marine Mammal Protection Act

SC = State Candidate

ST = State Threatened

SE = State Endangered

SGSC = State games species of concern

SS = State Sensitive

SSC = State Species of Concern or State Species of Special Concern

XN = Experimental non-essential

Species	Status	Areas of Occurence
PLANTS		
Harper's fimbristylis Fimbristylis perpusilla	SE	Coastal seasonal ponds.
INVERTEBRATES		
Northeastern beach tiger beetle	FT	Broad beaches with well-developed sand dunes.
Cicindela dorsalis dorsalis		
Tidewater interstitial amphipod Stygobromus araeus	SC	Hydric.
AMPHIBIANS		
Barking treefrog Hyla gratiosa	ST	Breeds in coastal seasonal freshwater ponds. Needs fish-free breeding habitat. Base at northern edge of range. Spends warm months in tree tops, seeks moisture during dry periods by burrowing among tree roots and clumps of vegetation.
Mabee's salamander Ambystoma mabeei	ST	Breeds in coastal seasonal freshwater ponds. Needs fish- free breeding habitat. Tupelo and cypress bottoms in pine woods, open fields, and lowland deciduous forest.
Tiger salamander Ambystoma tigrinum	SE	Breeds in coastal seasonal freshwater ponds. Needs fish- free breeding habitat. Varied, from arid pine barrens and mountain forests to damp meadows.
REPTILES	<u> </u>	
Canebreak rattlesnake Crotalus horridus atricaudatus	SE	Meadows, canebreak or "green sea" wetlands. At risk because of wetland loss. Swampy areas, canebrake thickets, and floodplains.
BIRDS		
Bald eagle <i>Haliaeetus leucocephalus</i>	FT/SE	Often nests in loblolly pines close to a food and water source. Inland waterways and estuarine areas.
Great egret Asmerodius albus	SC	Palustrine and estuarine wetlands; marshes.
Peregrine falcon Falco peregrinus	SE	Observed foraging over salt marshes on base. Open wetlands near cliffs.

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Species	Status	Areas of Occurrence
FISH	'	•
Atlantic sturgeon Acipenser oxyrhynchus	SS	Bays - Known to occur in Chesapeake Bay and once plentiful, there but now seriously declining in numbers all along the Atlantic coast.
Shortnose sturgeon Acipenser brevirostrum	FE/SE	Bays - Rare visitor in Chesapeake Bay.
AMPHIBIANS		•
Barking treefrog <i>Hyla gratiosa</i>	ST	Breeds in coastal seasonal freshwater ponds. Needs fish- free breeding habitat. Spends warm months in tree tops, seeks moisture during dry periods by burrowing among tree roots and clumps of vegetation.
Mabee's salamander Ambystoma mabeei	ST	Breeds in coastal seasonal freshwater ponds. Needs fish- free breeding habitat. Tupelo and cypress bottoms in pine woods, open fields, and lowland deciduous forest.
Cheat Mountain salamander <i>Plethodon nettingi</i>	FT	Woodland salamander originally restricted to red spruce forests of West Virginia's higher mountains. Often occurs today in successional stands of mixed deciduous species. Found in cool moist forest floor litter. Breeds on land.
Tiger salamander Ambystoma tigrinum	SE	Breeds in coastal seasonal freshwater ponds. Needs fish- free breeding habitat. Varied, from arid pine barrens and mountain forests to damp meadows.
REPTILES	<u> </u>	
American Alligator Alligator mississippiensis	FT (SA)	Found in freshwater swamps and marshes, and also in rivers, lakes and smaller bodies of water along North and South Carolina and the Florida coast.
Atlantic green sea turtle Chelonia mydas	FE	Known to occur along the Atlantic coast. Not known to nest under airspace.
Atlantic hawksbill sea turtle Eretmochelys imbricata	FE	Known to occur along the Atlantic coast. Not known to nest under airspace.
Atlantic leatherback sea turtle Dermochelys coriacea	FE	Known to occur along the Atlantic coast. Populations along the Atlantic coast are increasing in number. Do not nest this far north.
Atlantic loggerhead sea turtle Caretta caretta	FT/ST	Bays - Found in the Chesapeake Bay where they feed during the summer. Known to nest along the Atlantic coast from Florida to Virginia.
Canebreak rattlesnake Crotalus horridus atricaudatus	SE	Meadows, canebreak or "green sea" wetlands. At risk because of wetland loss. Swampy areas, canebrake thickets, and floodplains.
Kemp's Ridley sea turtle Lepidochelys kempii	FE/SE	Known to occur along the Atlantic coast but more infrequently than the loggerhead turtle. Not known to nest under airspace.

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Species	Status	Areas of Occurrence
Birds	'	
Appalachian Bewick's wren Thryomanes bewickii altus	SE	Found in wooded areas in the Appalachian states during the breeding season and in the southeastern states for the winter.
Bachman's sparrow Aimophila aestivalis	ST	Inhabits open evergreen or deciduous forest, palmetto scrub, and bushy pastures from the Gulf states north to southern Ohio and Illinois.
Bachman's warbler Vermivora bachmanii	FE	Low, wet forested areas containing variable amounts of water in the l'On Swamp area in Charleston and Berkeley Counties, South Carolina.
Bald eagle Haliaeetus leucocephalus	FT/SE	Often nests in loblolly pines close to a food and water source. Inland waterways and estuarine areas.
Brown pelican Pelicanus occiedentalis	SS	Found regularly in the bay and known to nest along the Delaware and Maryland coasts (Lippson and Lippson 1997).
Caspian tern Sterna caspia	SS	Coastal and marshland bird known to nest along the coastline parallel to the airspace.
Forster's tern Sterna forsteri	SS	Coastal and marshland bird that fishes the waters of the region.
Glossy ibis Plegadis falcinellus	SS	Wades in marshes and fishes the waters of the region.
Gull-billed tern Sterna nilotica aranea	ST	Shorelines from Long Island, New York to the Gulf of Mexico and south Florida.
Henslow's sparrow Ammodramus henslowii susurrans	ST	Grasslands under the Buckeye and Hatteras MOAs.
Kirtland's warbler <i>Dendroica kirtlandii</i>	FE	Transient on coast during migration. Nests only in young jackpine stands in Michigan.
Least tern Sterna antillarum	SS	Found feeding or nesting on the sandy beaches in the area.
Little blue heron <i>Egretta caerulea</i>	SS	Wades in marshes and fishes the waters of the region.
Migrant loggerhead shrike Lanius ludovicianus migrans	ST	Short grasses, interspersed with spiny shrubs and low trees.
Northern harrier Circus cyaneus	SS	Hunts over marshes and fields and is known to nest in the area.
Peregrine falcon Falco peregrinus	SE	Observed foraging over salt marshes on base. Non-forested wetlands with nearby cliffs.
Piping plover Charadrius melodus	FT/ST	Prefers areas with expansive sand or mudflats (for foraging) in close proximity to a sand beach (for roosting).
Red-cockaded woodpecker Picoides borealis	FE/SE	Pine forests with open understories.

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Species	Status	Areas of Occurence
Roseate tern Sterna dougallii	FE/SE	Open beaches or sandflats, usually near the end of barrier islands or barrier beaches.
Tricolored heron Egretta tricolor	SS	Wades in marshes and fishes the waters of the region.
Upland sandpiper <i>Bartramia longicauda</i>	FT/ST	Grasslands under the Evers and Buckeye MOAs.
Wilson's plover Charadrius wilsonia wilsonia	SE	Common summer and rare winter resident along the coast. Breeds along the barrier islands.
MAMMALS		
Atlantic bottle-nosed dolphin Tursiops tuncatus	MMPA	Found in coastal waters including estuaries. They also congregate along the continental shelf.
Blainville's beaked whale Mesophodon densirostris	MMPA	Oceanic and rarely observed, although known to occur in the area beyond the continental shelf, mostly from the Chesapeake Bay area and north.
Carolina northern flying squirrel Glaucomys sabrinus coloratus	FE	Found in conifer forests or in deciduous and mixed conferous/deciduous forests from Canada southward to northern North Carolina.
Common dolphin Delphinus delphis	MMPA	In the airspace areas, they largely occur beyond the continental shelf from Delaware north, with the exception of a few sightings near North Carolina.
Common/harbor porpoise Phocoena phocoena	MMPA	Mostly occur north of the airspace area but could venture into the northern areas.
Delmarva peninsula fox squirrel Sciurus niger cinereus	FE	Inhabit riparian forests along streams and bays and small woodlots near agricultural fields along the coastal states.
Dwarf and pygmy sperm whales <i>Kogia</i> sp.	MMPA	Several have been observed 100 miles off the Virginia and North Carolina coastlines underneath the airspace.
Eastern big-eared bat Corynorhinuss rafinesquii macrotis	SE	Found in caves in western North Carolina, West Virginia, Virginia, and Kentucky.
Fin whale Balaenoptera physalus	FE/MMPA	Frequent the continental shelf area from New Jersey north. A couple of sightings were as close as 30 miles off Delaware Bay and North Carolina.
Gray bat Myotis grisescens	FE	Found in Hellhole Cave in Pendleton County, West Virginia.
Humpback whale <i>Megaptera movaeangliae</i>	FE/MMPA	Known to migrate along the coast.
Indiana bat <i>Myotis sodalis</i>	FE	Cave habitat under Buckeye, Evers, and Farmville MOAs. Critical habitat in Hellhole Cave in Pendleton County, West Virginia.

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Species	Status	Areas of Occurence
Long-finned pilot whale Globicephala melas	MMPA	Found along the Atlantic coast and known to occur in the area.
Minke whale Balaenoptera acutorostrata	MMPA	Migrates along the continental shelf. Several have been sighted about 90 miles off Delaware Bay and over 200 miles off the Chesapeake Bay.
Northern right whale Eubalaea glacialis	MMPA/FE	Sightings near New Jersey coast. Critical habitat designated for calving area located off coast of Georgia and northern Florida. Sighting adjacent to, but not beneath, airspace.
Risso's dolphin Grampus griseus	MMPA	Found along the continental shelf and beyond all along the airspace but mostly north of North Carolina.
Sei whale <i>Balaenoptera borealis</i>	FE/MMPA	Known to migrate along the coast.
Short-finned pilot whale Globicephala macrorhynchus	MMPA	Known to occur in the area along the continental shelf.
Sperm whale Physeter catadon	FE/MMPA	Found along the continental shelf edge from Florida to New Jersey with large concentrations from North Carolina and north.
Spotted dolphin Stenella coeruleoalba	MMPA	Mostly occur beyond the continental shelf north of North Carolina and get closer to the coast south of Virginia.
Striped dolphin Stenella coeruleoalba	MMPA	Oceanic, live in large schools beyond the continental shelf. They are known to occur in the area,
Virginia big-eared bat Corynorhinus townsendii virginianus	FE	Summers and winters in two counties in West Virginia, Pendleton County has 4 critical habitat caves.
Virginia northern flying squirrel Glaucomys sabrinus fuscus	FE	Inhabits moist mixed northern deciduous/evergreen forests under the Evers MOA.
White-sided dolphin (Atlantic) Lagenorhynchus acutus	MMPA	Known to occur along the continental shelf by New Jersey and north.
West indian manatee Trichechus manatus	FE	The West Indian manatee has been reported in the Chesapeake Bay estuaries and coastal waters.

Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Eglin AFB Including Cape San Blas (Page 1 of 5)

Species	Status	Areas of occurrence
PLANTS	1	
Alabama spiny-pod <i>Matelea alabamensis</i>	SE, FSC	Found in gaps in hardwood forests. Largest population on Eglin is in upland hardwood forest in Piney Creek area.
Ashe's magnolia <i>Magnolia ashe</i> i	SE, FSC	This tree is found in steephead ravines along four creeks in the Sandhills Ecological Association (EA).
Baltzell's sedge Carex baltzellii	ST, FSC	Found in slope forests and upland hardwood forests on moist shaded locations throughout Eglin AFB.
Bog buttons <i>Lachnocaulon digynum</i>	FSC	Found on seepage slopes as well as in bogs, baygalls, and wet flatwoods. Known from near Test Areas B-70 and B-76 and likely in other areas.
Bog spicebush <i>Lindera subcoriacea</i>	SE, FSC	Only known from Mett's Creek seepage stream by the Army Ranger Camp.
Chapman's aster Aster chapmanii	FSC	Found on seepage slopes and in wet prairies and margins of dome swamps. Found in wet flatwoods and around dome swamps at various locations on Eglin.
Chapman's butterwort Pinguicula planifolia	ST, FSC	Found in wet sparsely vegetated slopes and cypress domes in Brier Creek and Yellow River area. Also near Test Areas B-76 and A-78 and Hurlburt Field.
Curtiss' sandgrass Calamovilfa curtissii	ST, FSC	Found in wet prairie, wet flatwoods, and dome swamps. Found near three Test Areas, Hurlburt Field, and Holly and Green ponds.
Drummond's yellow-eyed grass Xyris drummondii	FSC	Found in bogs, seepage slopes, and wet flatwoods in the Wetland and Riparian and Flatwoods EAs. Occurs in several locations on Eglin AFB.
Florida anise <i>Illicium floridanum</i>	ST	Found in steephead ravines in the Sandhill EA. Found at numerous locations on Eglin AFB.
Florida perforated cladonia Cladonia perforata	FE, SE	Small ground lichen known from five areas in the beach dune scrub ecotone in the barrier Island EA. Species was severely impacted by Hurricane Opal in 1995.
Godfrey's golden aster Chrysopsis godfreyi	FSC	Grows in the windy foredunes along the gulf in the Barrier Island EA.
Greens adder's mouth Malaxis unifolia	SE	Found in upland and floodplain forests. On Eglin, it is found in upland mixed forets along Buck Branch and from near Oatie Creek.
Gulf coast lupine <i>Lupinus westianus</i>	ST, FSC	Occurs on disturbed dunes on Santa Rosa Island and undisturbed and disturbed locations on Cape San Blas.
Hairy-peduncled beak-rush Rhynchospora crinipes	FSC	Only known location along Metts Creek seepage stream near the Army Ranger Camp.
Harper's yellow-eyed grass <i>Xyris scabrifolia</i>	ST, FSC	Found on fire maintained seepage slopes in Brier Creek/Underbrush area.
Heartleaf <i>Hexastylis arifolia</i>	ST	Known from slope forests and upland and mixed forests. Several occurrences in forests on Eglin.

Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Eglin AFB Including Cape San Blas

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Species	Status	Areas of occurrence
Hummingbird flower <i>Macranthera flammea</i>	SE	Occurs in a variety of wetlands and on Eglin, this includes freshwater tidal swamps, a seepage slope, and a wet roadside ditch.
Indian cucumber root <i>Medeola virginina</i>	SE	Grows in moist, cool baygalls along streams. A few plants seen in a baygall along a tributary to Alaqua Creek on Eglin.
Karst pond yellow-eyed grass <i>Xyris longisepala</i>	SE, FSC	Found in depression marshes and Sandhill upland lakes. Occurs at several locations on Eglin AFB.
Large-leaved joint weed Polygonella macrophylla	ST, FSC	Found in coastal scrub habitat on stabilized dunes in the Barrier Island EA. Observed at three locations.
Mountain laurel <i>Kalmia latifolia</i>	ST	Occurs among the underbrush in the slope forest in the Sandhills EA in the underbrush area.
Naked-stemmed panicgrass Panicum nudicaule	FSC	Seepage slopes and bogs in the Brier Creek/underbrush area.
Orange azalea Rhododendron austrinum	SE	This small shrub is found in the slope forests in the Sandhill EA in the underbrush area.
Panhandle lily <i>Lilum iridollae</i>	SE, FSC	Streamside baygalls throughout base including the underbrush area.
Panhandle meadowbeauty Rhexia salicifolia	FSC	Found in depression marshes and Sandhill upland lakes scattered over Eglin AFB.
Piedmont jointgrass Coelorachis tuberculosa	FSC	Occurs in depression marshes and sandhill lakes and on Eglin it is found in these habitats in the Titi Creek Wilderness Area and near Kemmons Pond.
Piedmont water-milfoil <i>Myriophyllum laxum</i>	FSC	Aquatic perennial from a variety of wetlands. One population on Eglin in a blackwater stream.
Pineland hoary-pea Tephrosia mohri	FSC	Open canopy Sandhills and upland pine forest. Found near Test Areas A-77 and A-78 and could occur near others.
Pineland wild indigo Baptisa calycosa var, villosa	FSC	Found in open Sandhills and upland pine forests with sandy soil, and often along roadsides.
Pinesap <i>Monotropa hyopithys</i>	SE	Found in sand pine scrub and other forest types. Found in upland hardwood and mixed forest on Eglin.
Pyramid magnolia <i>Magnolia pyramidata</i>	SE	Found in the underbrush of slope forests in the Sandhills EA.
Silky camellia Stewartia malacodendron	SE	Found in slope forests and steephead ravines in the Sandhills EA. Occurs in underbrush area and in Indigo and Little Boiling creeks.
Small-flowered meadowbeauty Rehexia parviflora	SE	Colonial species found on seepage slope, wet flawoods, and other wetlands. On Eglin, it is found around ephemeral ponds and depression wetlands.
Southern milkweed Asclepias viridula	ST, FSC	Endemic to wet flatwoods and prairies. Occurs in wet flatwoods on Alaqua Point on Eglin.

Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Eglin AFB Including Cape San Blas

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Species	Status	Areas of occurrence
Southern red lily Lilium catesbaei	ST	Occurs in variety of wetlands and on Eglin is found in seepage slopes and dome swamps, wet flatwoods, and wet prairies.
Spoon-leaved sundew Drosera intermedia	ST	Found in wet prairies, wet flatwoods, and baygalls in the Flatwoods EA. Found near Test Sites A 20/21 and Test Areas A-73 and C-2.
Sweet pitcher plant Sarracenia rubra	SE	Found in wet flatwoods and baygalls over much of Eglin AFB.
Sweet shrub Calycanthus floridus	SE	Common forest species in southeastern United States. Occurs in upland forests along creeks on Eglin.
Three-awn grass Aristida simpliciflora	FSC	In the Sandhills EA with sparse grass or shrub cover. Two populations on base near Test Area A-77.
Trailing arbutus Epigaea repens	ST	Found in slope forests and upland mixed and hardwood forests. Six occurrences on Eglin with largest population along a tributary of Ninemile Creek.
West's flax Linum westii	SE, FSC	Found in wet flatwoods, dome swamps, wiregrass dominated flats south of Test Area A-78 and near Test Sites A-20/21.
West Florida cowlily Nuphar lutea ssp. ulvaœa	FSC	Is an aquatic plant found in floodplain swamps. Known from two locations both south of Test Area A-78.
White-topped pitcher plant Sarracenia leucophylla	SE, FSC	Common in wet flatwoods in the Brier Creek area and in near several Test Areas.
Yellow fringless orchid <i>Platanthera integra</i>	SE	Found on recently burned seepage slopes in the Flatwoods EA. Only found twice on Elgin AFB.
Yellow-root Xanthorhiza simplicissima	SE	Occurs along shaded ravines and streambanks. Occurs in one location on Eglin boarding a small tributary of Blount Creek.
FISH		
Gulf sturgeon Acipenser oyrinchus desotoi	FT, SSC	Lives predominately in the northeastern Gulf of Mexico; may venture out to 20 miles. Moves inland to spawn. Within the ROI, spawning takes place in the Choctawhatchee River to the east of Eglin AFB and the Apalachicola River to the east of Tyndall AFB, during April through June.
Okaloosa darter Etheostoma okaloosae	FE, SE	Found only on Eglin AFB in six small tributaries of Choctawhatchee Bay in the Sandhills EA. Found near nine Test Areas.
Amphibians		
Dusky gopher frog Rana capito sevosa	SSC	Found in Sandhills and Sand Pine EAs and near seasonally flooded ponds lacking large predatory fish. Uses gopher tortoise burrows for cover. Eglin supports the largest known concentration of reproductive sites within range.

Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Eglin AFB Including Cape San Blas (Page 4 of 5)

Species	Status	Areas of occurrence
Flatwoods salamander Ambystoma cingulatum	FT	Found in pine flatwoods wiregrass communities with adjoining dome swamps in the Flatwood EA. Eglin supports the largest known concentration of breeding sites west of the Apalachicola River.
Florida bog frog <i>Rana okaloosae</i>	SC, SSC	Found in seeps and seepage streams in the Flatwoods and Wetland and Riparian EAs. Has been sighted near Test Areas B-12, B-70, and A-7.
REPTILES		
Alligator snapping turtle Macroclemys temmincki	SC, SSC	Deep rivers, canals, lakes, and swamps in the Flatwoods and Wetland and Riparian EAs.
American alligator <i>Alligator mississippiensis</i>	FT (SA), SSC	Common in fresh to brackish water aquatic and wetland habitats throughout Eglin AFB.
Atlantic green sea turtle Chelonia mydas	FE, SE	Nests on Santa Rosa Island beaches.
Atlantic leatherback sea turtle Dermochelys coriacea	FE, SE	May occur on area beaches and may nest at Cape San Blas.
Atlantic loggerhead sea turtle Caretta caretta	FT, ST	Nests on Santa Rosa and Cape San Blas beaches.
Eastern indigo snake Drymarchon corais couperi	FT, ST	Occurs in upland and wetlands in Sandhills and Flatwoods EAs. Observed less then two dozen times in last 20 years. Winters in gopher tortoise burrows.
Florida pine snake Pituophis melanoleucus	FSC, SSC	Found in dry Sandhills and Sand Pine EAs. Retreats to loosely packed sand, rodent burrows, and gopher tortoise burrows.
Gopher tortoise Gopherus polyphemus	FSC, SSC	Found in the Sandhills, Sand Pine, and Barrier Islands EAs over most if Eglin AFB. Many inactive and few active burrows exist.
Birds	•	
Artic peregrine falcon Falco peregrinus tundrius	SE	A rare fall and winter visitor in forested areas along the coast.
Bachman's sparrow Aimphila aestivalis	FSC	An uncommon resident species in high quality Sandhills EA habitat. May be found within or adjacent to any of the tests sites.
Bachman's warbler <i>Vermivora bachmanii</i>	FE, SE	Historic records from Eglin AFB but species now assumed to be extinct.
Bald eagle <i>Haliaeetus leucocephalus</i>	FT, ST	Nests at one location in the southern part of Eglin AFB and in recant years has successfully nested on Cape San Blas.
Brown pelican Pelecanus occidentalis	SSC	Common along the coastline of Santa Rosa Island and Cape San Blas as well as in Choctawhatchee Bay.
Florida burrowing owl Speotyto cunicularia	SSC	Nests in open grasslands near test sites.

Table NR-2-3. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Eglin AFB Including Cape San Blas

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Species	Status	Areas of occurrence
Least tern <i>Sterna antillarum</i>	ST	Nest along on the beaches in the Barrier Island EA as well as on top of buildings in built-up areas.
Little blue heron <i>Eg</i> retta caerulea	SSC	Occasional in wetlands, along rivers and streams, and Santa Rosa Island and Cape San Blas.
Piping plover <i>Charadrius melodus</i>	FT, ST	Winters on gulf beaches of Santa Rosa Island and Cape San Blas. Proposed critical habitat on barrier islands.
Red cockaded woodpecker Picoides borealis	FE, ST	Occurs in many areas in the longleaf pine forests in the Sandhills EA. Five Management Emphasis Areas totaling 260,000 acres are located on Eglin AFB.
Reddish egret <i>Egretta rufescens</i>	SSC	Occasional in wetlands, in coastal areas of Santa Rosa Island and Cape San Blas.
Snowy egret <i>Egretta thula</i>	SSC	Occasional in wetlands, along rivers and streams and Santa Rosa Island and Cape San Blas. Nests in one rookery on the base.
Southeastern American kestrel Falco sparverius paulus	ST, FSC	Is a common permanent resident in the in Sandhills and Sand Pine EAs as well as open grasslands around test areas.
Southeastern snowy plover Charadrius alexandrinus tenuirostris	ST, FSC	Nests along the eastern shore of Eglin AFB on Santa Rosa Island and at Cape San Blas.
Tricolor heron <i>Egretta tricolo</i> r	SSC	Occasional in wetlands, along rivers and streams and Santa Rosa Island and Cape San Blas.
MAMMALS		
Florida black bear Ursus americanus floridanus	ST, FSC	Found in the Sandhills, Flatwoods, and Wetland and Riparian EA's. Has been sighted within Test Areas C-3, B-71, Hurlburt Field and the Turtle Creek area.
Saint Andrew's beach mouse Peromyscus polionotus peninsulari	FE, SE	Historically found on Cape San Blas dunes but not recorded recently.
Santa Rosa beach mouse Peromyscus polionotus leucocephalus	FSC	Found in the interior portions of Santa Rosa Island. In 1995, Hurricane Opal destroyed over half of this species' habitat. Based on track counts, its numbers were much reduced but it recovered within two years.

Species	Status	Areas of occurrence
FISH		
Alabama shad Alosa alabamae	FC	Occurrence is unknown east of Choctawhatchee Bay in the Florida panhandle.
Dusky shark Carcharinus obscurus	FC	One of the larger shark species of continental shelf waters; occurs in Atlantic and Pacific. Feeds on fish including other sharks, rays, squid, octopus and starfish.
Gulf sturgeon Acipenser oyrinchus desotoi	FT, SSC	Lives predominately in the northeastern Gulf of Mexico; may venture out to 20 miles. Moves inland to spawn. Within the ROI, spawning takes place in the Choctawhatchee River to the east of Eglin AFB and the Apalachicola River to the east of Tyndall AFB, during April through June.
Jewfish <i>Epinephelus itajara</i>	FC	Occurs from Florida and northern Gulf through Caribbean to southeastern Brazil, west Africa, and parts of eastern Pacific. May grow to 700 lbs. Possession by anglers is illegal.
Nassau grouper Epinephelus striatus	FC	Occurs from Bermuda to North Carolina, rare and uncertain occurrence in Gulf.
Night shark Carcharinus signatus	FC	Occurs in deep waters from Delaware to Brazil including the Gulf of Mexico. It feeds on fishes and shrimp and has no economic significance.
Sand tiger shark Odontaspis taurus	FC	In North America, the sand tiger ranges from the Gulf of Maine to Florida and the Gulf of Mexico. It is a popular aquarium shark, surviving up to 10 years in captivity.
Speckled hind <i>Epinephelus drummondhayi</i>	FC	Occurs from North Carolina and Bermuda to Florida. Reddish brown in coloration with light speckles.
Warsaw grouper Epinephelus nigritus	FC	Common from Massachusetts to Texas, with smaller individuals occurring around jetties and offshore platforms and adults preferring deeper, cooler waters.
Amphibians	·	
Flatwoods salamander Ambystoma cingulatum	FT, ST	Found in pine flatwoods wiregrass communities with adjoining dome swamps in the Flatwood EA. Eglin supports the largest known concentration of breeding sites west of the Apalachicola River. Occurs in 1 county under the Rose Hill MOA in Alabama, 3 counties under the Moody 3 MOA in Georgia, and all counties under the Tyndall MOAs in Florida
Red Hills salamander <i>Phaeognathus hubrichti</i>	FT	Occurs in 3 counties under the Rose Hill and Camden Ridge MOAs in Alabama.
REPTILES		
American alligator <i>Alligator mississippiensis</i>	FT, SSC	Common in fresh to brackish water aquatic and wetland habitats throughout Eglin AFB.
Atlantic green sea turtle Chelonia mydas	FE, SE	Inhabits open water and hard bottoms of marine environment. Nests within the affected area from May to August.

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Species	Status	Areas of occurrence
Atlantic hawksbill sea turtle Eretmochelys imbricata	FE, SE	Open water. Does not nest within affected area.
Atlantic leatherback sea turtle Dermochelys coriacea	FE, SE	Inhabits open water and hard bottoms of marine environment. May occur on area beaches and may nest at Cape San Blas.
Atlantic loggerhead sea turtle Dermochelys coriacea	FT, ST	Inhabits open water and hard bottoms of marine environment. Hatchlings often associated with <i>Sargassum</i> rafts. Nests within the affected area from April to October.
Eastern indigo snake <i>Drymarchon corais couperi</i>	FT, ST	Occurs in 8 counties under the Rose Hill and Camden Ridge MOAs in Alabama and all counties under the Tyndall MOAs in Florida and the Moody 3 MOA in Georgia.
Gopher tortoise Gopherus polyphemus	FT, SSC	Occurs in two counties under the Camden Ridge MOA in Alabama. Is not federally listed in other counties under MOAs in Alabama or Florida and Georgia.
Kemp's Ridley sea turtle <i>Lepidochelys kempi</i>	FE, SE	Smallest and most endangered of the sea turtles. Open water. Does not nest within affected area, but does occur in affected area waters.
Birds	•	
Bachman's warbler <i>Vermivora bachmanii</i>	FE, SE	Historic records from Eglin AFB but species now assumed to be extinct.
Bald eagle <i>Haliaeetus leucocephalus</i>	FT, SE, ST	Occurs in two counties under the Camden Ridge MOA and one county under the Moody 3 MOA in Alabama, five counties under the Tyndall MOAs in Florida, and all counties under the Moody 3 MOA in Georgia. Nests at one location in the southern part of Eglin AFB and in recant years has successfully nested on Cape San Blas.
Brown pelican Pelecanus occidentalis carolinensis	SSC	Occurs within the coastal regions of the Gulf of Mexico and is listed as a species of special concern by the State of Florida. Will sometimes travel 20 miles offshore to feed.
Piping plover Charadrius melodus	FT, ST	Occurs in four counties under the Tyndall MOAs in Florida. Winters on gulf beaches of Santa Rosa Island and Cape San Blas. Proposed critical habitat on barrier islands.
Red cockaded woodpecker Picoides borealis	FE, SE	Occurs in three counties under the Rose Hill and Camden Ridge MOAs in Alabama, five counties under the Tyndall MOAs in Florida and all counties under the Moody 3 MOA in Georgia. Occurs in many areas in the longleaf pine forests in the Sandhills EA. Five Management Emphasis Areas totaling 260,000 acres are located on Eglin AFB.
Wood stork <i>Mycteria americana</i>	FE, SE	Occurs in six counties under the Rose Hill and Camden Ridge MOAs in Alabama and all counties under the Tyndall MOAs in Florida and Moody 3 MOA in Georgia.

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Species	Status	Areas of occurrence
MAMMALS		
Atlantic bottlenose dolphin Tursiops truncatus	MMPA	Bottlenose dolphins are commonly sighted in groups throughout the coastal, shelf, and slope waters of the affected area.
Atlantic spotted dolphin Stenella frontalis	MMPA	The diet of the Atlantic spotted dolphin consists of squid and fish from the surface and epipelagic zones of the Gulf.
Blainville's beaked whale Mesoplodon densirostris	MMPA	Blainville's beaked whales are difficult to distinguish from other beaked whales during surveys, but beaked whales in general were sighted in all seasons within the eastern Gulf.
Blue whale Balaenoptera musculus	FE, MMPA	Largest animal on earth. Rare visitor in United States Atlantic. Not expected to occur within affected area.
Bryde's whale Baleanoptera edeni	MMPA	The most common baleen whale in the Gulf. Most Gulf of Mexico sightings of the Brydes' whale have occurred during the spring and summer months along the edge of DeSoto Canyon.
Choctawhatchee beach mouse Peromyscus polionotus allophrys	FE, SE	Occurs in one county under the Tyndall MOAs in Florida.
Clymene dolphin Stenella dymene	MMPA	Distribution in the Atlantic ranges from New Jersey to the Lesser Antilles, including the Gulf of Mexico. Clymene dolphins are primarily sighted outside the ROI.
Cuvier's beaked whale Ziphius cavirostris	MMPA	Perhaps the most common beaked whale in the Gulf, these animals have been sighted during all seasons within the eastern Gulf.
Dwarf sperm whale Kogia simus	MMPA	Dwarf sperm whales generally inhabit the deeper offshore water feeding on squids, crustaceans, and fish.
False killer whale Pseudorca crassidens	MMPA	False killer whales have been sighted in the northern Gulf in the spring and summer during aerial and ship surveys.
Fin whale Balaenoptera physalus	FE, SE, MMPA	Common in North Atlantic, but not expected to occur within affected area.
Florida black bear Ursus americanus floridanus	ST, SC	Found in the Sandhills, Flatwoods, and Wetland and Riparian EAs.
Florida manatee Trichechus manatus	FE, SE	Herbivorous aquatic mammals. Diet consists mainly of water hyacinth, hydrilla, turtle grass, manatee grass, and shoal grass. Usually occur south of Suwannee River but have been sighted in northwest Florida.
Fraser's dolphin <i>Lagenodelphis hosei</i>	MMPA	This species is tropical in distribution and should be expected in pelagic waters of all oceans. This species has been sighted in the northern Gulf but not within the affected area.
Gervais' beaked whale <i>Mesoplodon europaeus</i>	MMPA	Information on Gulf of Mexico beaked whales in general indicates that they are deep-diving animals, with a diet consisting of fish, squid, and deep-water benthic invertebrates. This species has been sighted within the eastern Gulf.

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Species	Status	Areas of occurrence
Humpback whale <i>Megaptera novangliae</i>	FE, SE, MMPA	Common in North Atlantic, but not expected to occur within ROI.
Gray bat Myotis grisescens	FE, SE	Occurs in one county under the Camden Ridge MOA in Georgia, two counties under the Tyndall MOAs in Florida and seven counties under the Moody 3 MOA in Georgia.
Killer whale <i>Orcinus orca</i>	MMPA	Killer whales are found in all oceans of the world with local distribution ranging from the Atlantic pack ice to the Lesser Antilles, including the north, east, and western Gulf.
Melon-headed whale <i>Peponocephala sp.</i>	MMPA	Distribution is worldwide tropical to warm-temperate waters including the Atlantic ocean and Gulf of Mexico.
Minke whale <i>Balaenoptera acutorostrata</i>	MMPA	Occurs in Atlantic but not expected to occur within affected area.
Northern right whale <i>Eubalaena glacialis</i>	FE, SE, MMPA	Occurs off Atlantic coast but not expected to occur within affected area.
Pantropical spotted dolphin Stenella attenuata	MMPA	Year-round inhabitants of the Gulf having been sighted during all seasons, primarily in waters greater than 200 meters.
Pygmy killer whale Feresa sp.	MMPA	Distribution in the Atlantic ranges from North Carolina to the Lesser Antilles, including the Gulf of Mexico. Sighted primarily outside the region of influence.
Pygmy sperm whale Kogja breviceps	MMPA	Distribution in the Atlantic ranges from Nova Scotia to the Greater Antilles, including the northeastern and western Gulf of Mexico. Sightings have occurred in the northern Gulf primarily along the continental shelf edge and in deeper shelf waters during all seasons except winter.
Risso's dolphin Grampus griseus	MMPA	Sightings in the Gulf occur along continental shelf and slope; this species is abundant within the eastern Gulf.
Rough-toothed dolphin Steno bredanensis	MMPA	Rough-toothed dolphins are expected to occur throughout the year in the Gulf. In 1998, 60+ rough-toothed dolphins stranded on Cape San Blas.
St Andrew beach mouse Peromyscus polionotus peninsularis	FE, SE	Occurs in one county under the Tyndall MOAs in Florida.
Sei whale <i>Balaenoptera borealis</i>	FE, SE, MMPA	Occurs off Atlantic coast but not expected to occur within affected area.
Short-finned pilot whale Globicephala sp.	MMPA	Distribution in the Atlantic ranges from New Jersey to Venezuela, including Gulf of Mexico. Short-finned pilot whales are more commonly observed in other parts of the Gulf.
Sperm whale Physeter catadon	FE, SE, MMPA	The most abundant of the federally listed endangered whales in the Gulf of Mexico. Areas of relatively high abundance west of W-155B and W-151.

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Species	Status	Areas of occurrence
Spinner dolphin Stenella longirostris	MMPA	Distribution in the Atlantic ranges from eastern Newfoundland to the Lesser Antilles, including northern and eastern Gulf of Mexico waters. Sightings in the Gulf occur along continental shelf and slope.
Striped dolphin Stenella coeruleoalba	MMPA	Striped dolphins are primarily found off deeper waters of the continental shelf and have been sighted in the northern Gulf during fall, winter, and spring.

Table NR-2-5. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Elmendorf AFB*

Species	Status	Areas of Occurrence	
Birds	1	•	
American peregrine falcon Falco peregrinus	SSC	Open wetlands near cliffs. Non-forested wetlands near cliffs.	
Blackpoll warbler <i>Dendroica striata</i>	SSC	Suspected to nest on base. Evergreen forest.	
Gray-cheeked thrush Catharus minimus	SSC	Considered migratory on base. Evergreen forest, mixed forest.	
Northern goshawk <i>Accipiter gentilis</i>	SSC	Not documented on base. Mixed forest, evergreen forest.	
Olive-sided flycatcher Contopus borealis	SSC	Suspected to nest on base. Open coniferous forests, forested wetlands.	
Townsend's warbler Dendroica townsendi	SSC	Base record based on uncertain identification. Evergreen forest.	
MAMMALS			
Cook Inlet subpopulation beluga whale Delphinapterus leucas	MMPA (Dep.)	Cook inlet, including Knik Arm. Often congregate at stream outlets for foraging. May occur in areas of Knik Arm adjacent to base.	

Note: Beluga whales do not occur on base, but may occur in waters beneath base-associated noise contours.

Species	Status	Areas of Occurrence
Birds	•	
American peregrine falcon Falco peregrinus	SSC	Open wetlands near cliffs, thought to migrate through base.
Arctic peregrine falcon Falco peregrinus tundris	SSC	Open wetlands near cliffs.
Blackpoll warbler <i>Dendroica striata</i>	SSC	Suspected to nest on base. Evergreen forest, possible breeder under airspace.
Eskimo curlew Numenius borealis	SSC	Nests on arctic tundra, potential migrant.
Gray-cheeked thrush <i>Catharus minimus</i>	SSC	Considered migratory on base. Evergreen, mixed forest.
Northern goshawk <i>Aαipiter gentilis</i>	SSC	Mixed and evergreen forest.
Olive-sided flycatcher <i>Contopus borealis</i>	SSC	Suspected to nest on base, open coniferous forest, forested wetlands.
Townsend's warbler Dendroica townsendi	SSC	Base record based on uncertain identification, evergreen forest.

Table NR-2-7. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Mountain Home AFB

(Page 1 of 3)

Species	Status	Areas of Occurrence
LICHENS	I	1
Wovenspore lichen Texosporium sancti-jacobi	FSC	Sagebrush steppe with native bunch grass component. No records from base.
PLANTS	•	
Bugleg goldenweed Haplopappus insecticruris	FSC	Disturbed sagebrush communities with grass component. No records from base.
Davis' Peppergrass Lepidium davisii	FSC	Davis' Peppergrass typically occurs in association with Wyoming Big Sagebrush. Habitat near construction has been removed by recent construction.
Idaho douglasia <i>Douglasia idahoensis</i>	FSC	Found in mountains of central Idaho above 7,200 feet. Does not occur on base.
Mourning milkvetch Astragalus atratus var. inseptus	FSC	Late seral sagebrush dominated communities. No records from base. No habitat on base.
Slickspot peppergrass <i>Lepidium papilliferum</i>	С	Small sodic playas in shrubsteppe habitat. Endemic to western Idaho. No records from base.
Ute ladies'-tresses Spiranthes diluvialis	LT	Sandy gravel bars in a riverine situation. No records from western Idaho. No habitat on base.
INVERTEBRATES		
Bliss Rapids snail Taylorconcha serpenticola	FT	Aquatic habitats. Does not occur on base.
Idaho springsnail <i>Fontelicella idahoensis</i>	FE	Aquatic habitats. Does not occur on base.
Snake River physa snail Physa natricina	FE	Aquatic habitats. Does not occur on base.
FISH		
Bull Trout Salvelinus confluentus	FT	Rivers and streams within Columbia River Basin. Requires high water quality and tree cover.
AMPHIBIANS		
Columbia spotted frog Rana luteiventris	SSC	High elevation riparian areas with appropriate escape cover. Does not occur on base. Subpopulation north of Snake River does not have candidate status.
Northern leopard frog Rana pipiens	FSC/SSC	Riparian areas with high vegetation. No records from base.
Western toad <i>Bufo boreas</i>	FSC/SSC	Variety of forested, meadow, and desert habitats in proximity to appropriate aquatic breeding habitat. Not well known from southwestern Idaho. No records from base.
REPTILES		
Ground snake Sonora Semiannulata	SSC	Sagebrush, grasslands, and salt desert scrub with loose or sandy soil. Does not occur on base.
Longnose snake <i>Rhinocheilus lecontei</i>	SSC	Shrub habitats and grasslands with rocky component. Does not occur on base.

Table NR-2-7. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Mountain Home AFB

(Page 2 of 3)

Species	Status	Areas of Occurrence
BIRDS	•	
Bald eagle Haliaeetus leucocephalus	FT/SE	Near rivers and lakes with tall trees or cliffs. Winters along Bruneau, Owyhee, and Snake rivers. No habitat on base. Has potential to range onto base from Snake River habitats.
Black tern Chlidonias niger	SSC	Lakeshores and wetlands. Potential habitat exists, but no confirmed occurrences on the base or in the airspace.
Columbian sharp-tailed grouse Tympanuchus phasianellus	FSC/SSC	Open grassland and shrub habitats in proximity to stands of low growing trees. Extirpated from most of its former range. No records from base.
Flammulated owl Otus flammeolus	SSC	Deciduous and evergreen forests, especially ponderosa; nests and roosts in tree cavities. Does not occur on base.
Long-billed curlew Numenius americanus	FSC	Open grasslands in landscapes with good visibility. May occur in non-native seedings and near agricultural fields. No records from base.
Mountain quail <i>Oreortyx pictus</i>	FSC/SSC	Chapparal, brushy ravines, mountain slopes generally at higher elevations. Does not occur on base.
Western burrowing owl Athene cunicularia hypugaea	SSC	Grasslands and shrublands. Frequents disturbed habitats. Associated with Townsend's ground squirrel and badger burrows. Four use areas identified on base.
White-headed woodpecker Picoides albolarvatus	SSC	Nests in open coniferous mountain forests, especially ponderosa and sugar pine. Moves to lower elevations in winter.
Yellow-billed cuckoo Coccyzus americanus	SSC	Higher elevation open woodlands and riparian areas.
MAMMALS		
Canada lynx <i>Lynx Canadensis</i>	FT	Remote upper montane and subalpine coniferous forest. No habitat on base. Does not occur on base.
Fisher <i>Martes pennanti</i>	SSC	Arboreal species occupying forest habitats. Does not occur on base.
Gray wolf Canis lupus	XN	Historically extirpated from Idaho. An experimental population reintroduced to montane habitats of central Idaho is expanding. Does not occur on base.
Kit fox Vulpes macrotis	SSC	Steppe and desert habitats. Little known for Idaho; occurrence based on very limited data.
Pygmy rabbit <i>Brachylagus idahoensis</i>	SSC/SGSC	Occurs in dense stands of tall sagebrush (big sagebrush). Distribution not well described. No habitat on base. No records on base.

Table NR-2-7. Threatened, Endangered, and Special-Status Species/Communities That Occur or Potentially Occur on Mountain Home AFB

(Page 3 of 3)

Species	Status	Areas of Occurrence
Wolverine <i>Gulo gulo</i>	SSC	Remote forested wilderness areas. Individuals have large home ranges. Does not occur on base.

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Species	Status	Areas of Occurrence
PLANTS	•	
Davis' peppergrass <i>Lepidium davisii</i>	FSC	Davis' peppergrass typically occurs in association with Wyoming big sagebrush.
Slick spot peppergrass <i>Lepidium papilliferum</i>	FC	Sage steppe slick spots in southwestern Idaho. Idaho endemic with limited distribution.
Ute ladies'-tresses Spiranthes diluvialis	FT	Sandy gravel bars in a riverine situation. No records from western Idaho.
INVERTEBRATES		
Bliss rapids snail Tayloconcha serpenticola	FT	Aquatic habitats.
Bruneau hot springs snail Pyrgulopsis bruneauensis	FE	Hot Creek and 120 hot springs adjacent to the Bruneau River.
Idaho dunes tiger beetle Cicindela arenicola	FSC	Sand dunes and sandy alkaline soils.
Idaho springsnail Pyrgulopsis idahoensis	FE	Aquatic habitats.
Snake River physa snail <i>Physa natricina</i>	FE	Aquatic habitats.
Utah valvata snail <i>Valvata utahensis</i>	FE	Aquatic habitats.
FISH		
Bull trout Salvelinus confluentus	FT	Rivers and streams within the Columbia River Basin. Require streams with high water quality and tree cover.
AMPHIBIANS		
Columbia spotted frog (Great Basin sub-population) <i>Rana luteiventris</i>	FC, SSC	High elevation riparian areas with appropriate escape cover. No habitat on base, but occurs in Owyhees, Jarbidge Mountains, and Jordan Valley in Oregon.
Northern leopard frog Rana pipiens	FSC/SSC	Riparian areas with high vegetation. Declining in many parts of range.
Western toad Bufo boreas	FSC/SSC	Variety of forested, meadow, and desert habitats in proximity to appropriate aquatic breeding habitat. Not well known from southwestern Idaho.
REPTILES		
Ground snake Sonora semiannulata	SSC	Sagebrush, grasslands, and salt desert scrub with loose or sandy soil. Does not occur on base.
Longnose snake Rhinocheilus lecontei	SSC	Deserts, grasslands, and rocky canyons.
Mojave black-collared lizard Crotaphytus bicinctores	SSC	Talus, cliffs, and sagebrush habitats with a rocky component.
BIRDS		
Bald eagle Haliaeetus leucocephalus	FT/SE	Near rivers and lakes with tall trees or cliffs. Winters along Bruneau, Owyhee, and Snake rivers. No known nesting within airspace.

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Species	Status	Areas of Occurrence
Black tern <i>Chlidonias nig</i> er	SSC	Lakeshores and wetlands. Potential habitat exists, but no confirmed occurrences on the base or in the airspace.
Flammulated owl Otus flammeolus	SSC	Deciduous and evergreen forest, especially ponderosa; nests and roosts in tree cavities.
Loggerhead shrike <i>Lanius ludovicianus</i>	FSC/SSC	Late seral sagebrush steppe habitats. Shrub obligate appears to be declining because of habitat loss.
Long-billed curlew Numenius americanus	FSC	Open grasslands in landscapes with good visibility. May occur in non-native seedings and near agricultural fields.
Mountain quail <i>Oreortyx pictus</i>	SSC	Chapparal, brushy ravines, mountain slopes, altitudes up to 10,000 feet.
Northern goshawk <i>Accipiter gentilis</i>	SSC	Deep, conifer-dominated mixed woodlands. ¹ Does not occur on the base.
Peregrine falcon Falco peregrinus anatum	SE	Wetlands near cliffs.
Trumpeter swan Cygnus buccinator	SSC	Marshes, also Henrys Fork of the Snake River, near Island Park, Idaho, and are likely migrants through the area.
Western burrowing owl Athene cunicularia hypugaea	SSC	Grasslands and shrublands. Frequents open disturbed habitats. Associated with Townsend's ground squirrel and badger burrows.
White-faced ibis <i>Plegadis chihi</i>	FSC	Riparian areas in shrubsteppe habitats. Frequents many small isolate stock ponds under airspace.
White-headed woodpecker <i>Picoides albolarvatus</i>	SSC	Nests in open coniferous mountain forests, especially in ponderosa and sugar pine, lower altitudes in winter.
Yellow-billed cuckoo Cocyzus americanus	SSC	Higher elevation open woods and riparian areas.
MAMMALS		
California bighorn sheep Ovis anadensis californiana	FSC/ SSC	Found in canyons including those associated with the Owyhee, Bruneau, and Jarbidge rivers.
Fringed myotis <i>Myotis thysanodes</i>	SSC	Forest and desert habitats providing caves or mines for roosting. Use abandoned buildings as roosts in some areas.
Gray wolf Canis lupus	XN	Extirpated. Experimental reintroduced population occurs in montane habitats of central Idaho.
Kit fox Vulpes macrotis	SSC	Steppe and desert habitat, with shrubs or grasses. Little known for Idaho; occurrence based on very limited data.
Little pocket mouse Perognathus longimembris	SSC	Shadescale and dwarfed sage areas on lower slopes of alluvial fans, particularly pea-sized gravel.
Pygmy rabbit <i>Brachylagus idahoensis</i>	SSC/SGSC	Occurs in dense stands of tall sagebrush. Not known to occur on the base or airspace. Occurs in Wyoming big sagebrush habitat.

Species	Status	Areas of Occurrence
Spotted bat Euderma maculatum	SSC	Arid/semi-arid regions. Occurs within airspace, primarily in or near large canyons.
Townsend's big-eared bat Corynorhinus townsendii	SSC	Caves, abandoned mine shafts, old buildings, crevices, cliffs. Found in Bruneau/Jarbidge River Canyon.

Table NR-2-9. Threatened, Endangered and Special-Status Species/Communities That Occur or Potentially Occur on Tyndall AFB (Page 1 of 3)

Species	Status	Areas of occurrence
PLANTS	П	
Carolina lilaeopis Lilaeopsis carolinensis	SC	This salt marsh and brackish water species has been recorded on the east end of Crooked Island West on Tyndall AFB.
Chapman's butterwort Pinguicula planifolia	ST, SC	Small insectivorous plant occurs in wet flatwoods, seepage slopes, bogs, and dome swamps. Found on Tyndall AFB in two populations in wet flatwoods with high water table and frequent inundation.
Chapman's crownbeard <i>Verbesina chapmanii</i>	ST, SC	Occurs in wet flatwoods, wet prairies, and seepage slopes. On Tyndall AFB, it is found in wet flatwoods dominated by longleaf pine and slash pine plantations.
Drummond's yellow-eyed grass <i>Xyris drummondii</i>	SC	A small grass-like species found in bogs, seepage slopes, wet flatwoods, and wet prairies. On Tyndall AFB, it is found in frequently burned wet prairie on the drone launch field.
Godfrey's golden aster Chrysopis godfreyi	SC	Found in coastal areas on mobile and stable dunes. Grows on dunes on Shell Island, Crooked Island West, and Crooked Island East on Tyndall AFB.
Gulf coast lupine <i>Lupinus westianus</i>	ST, SC	Found in coastal scrub and dune habitats. On Tyndall AFB, it occurs along roadsides, sand pine plantations, and sand pine scrub community.
Harper's yellow-eyed grass Xyris scabrifolia	ST, SC	Found in deep muck in depressions and streamlets on seepage slopes. On Tyndall AFB, found in frequently burned wet prairie at the drone launch field in association with Drummond's yellow-eyed grass and quillwort yellow-eyed grass.
Large-flowered jointweed Polygonella macrophylla	ST, SC	Primarily occurs in mainland coastal scrub that occurs on stabilized dunes of former shorelines. On Tyndall it is in scrub habitat with sand pine, sand live oak, and rosemary.
Quillwort yellow-eyed grass Xyris scabrifolia	SC	A small narrow-leaved perennial of the wet prairies and seepage slopes. Found at frequently burned wet prairie at drone launch field with two other species of yellow-eyed grass.
Spoon-leaved sundew Drosera intermedia	ST	Small insectivorous plant found in bogs, and along stream and pond margins. On Tyndall, one population occurs in disturbed wetlands (ditch and artificial pond) and a second in a baygall.
Southern milkweed Asclepias viridula	ST, SC	Occurs in mesic and wet flatwoods. Three plants were observed in 1988 but not during a subsequent survey.
Southern red lily <i>Lilium catesbaei</i>	ST	Found in wet flatwoods with an open canopy of slash pine on Tyndall AFB.
Violet-flowered butterwort <i>Pinguicula ionantha</i>	FT, SE	Endemic in wet flatwoods in the lower Apalachicola River drainage. One population of 12 individuals along a roadside ditch on Tyndall AFB.

Table NR-2-9. Threatened, Endangered and Special-Status Species/Communities That Occur or Potentially Occur on Tyndall AFB (Page 2 of 3)

Species	Status	Areas of occurrence
Amphibians		
Flatwoods salamander Ambystoma cingulatum	FT	Found in mesic/wet flatwoods and other wet woods. Not recorded during surveys on Tyndall but surveys took place during a drought so still could occur in appropriate habitat on Tyndall.
REPTILES		
Alligator snapping turtle Macroclemys temmincki	SC, SSC	Occurs in lakes, rivers, and swamps. Reported from Felix Lake on Tyndall AFB.
American alligator <i>Alligator mississippiensis</i>	FT(SA), SSC	Common at Tyndall AFB in fresh, brackish, and salt water.
Atlantic loggerhead sea turtle Caretta caretta	FT, ST	Nests on Shell Island, Crooked Island west, and Crooked Island East. Nesting has increased during last decade as a result of protecting nests and monitoring hatchlings to insure they reach the water.
Gopher tortoise Gopherus polyphemus	SC, SSC	Requires upland areas of grassy open ground that historically was maintained by fire. Currently occurs in several locations and there are likely several hundred on base.
Gulf salt marsh snake <i>Nerodia darkii darkii</i>	SC	Found in grass and rush dominated salt marsh. Has been observed in black needle rush marsh on bay side of Shell Island on Tyndall.
BIRDS		
American oystercatcher <i>Haematopus palliatus</i>	SSC	Rare to locally abundant along the Gulf coast of Florida. Is casual in the Tyndall AFB area being recorded only on two occasions but may nest at Tyndall AFB.
Arctic peregrine falcon Falco peregrinus tundrius	SE	An occasional migrant and winter resident in Florida and very rare on Tyndall AFB. One observed hunting on Crooked Island East during surveys.
Bald eagle <i>Haliaeetus leucocephalus</i>	FT, ST	Rare breeder in the Florida panhandle, rare during the winter at Tyndall AFB, and even less common at other times of year. No confirmed nest sites on the base although it nests just east of the base.
Brown pelican Pelecanus occidentalis	SSC	Common in coastal areas in Florida. Up to 300 have been observed at Tyndall AFB. Roosts on sandbars and points on Tyndall AFB barrier islands.
Least tern Sterna antillarum	ST	Is a regular and fairly common breeding species in Florida. Is a fairly common summer resident in the Tyndall AFB area and has nested at the west end of Crooked Island East as well as on roof tops on the main base.
Little blue heron Egretta caerulea	SSC	Is a fairly common species on Tyndall AFB in the summer and uncommon to rare the rest of the year. Forages mainly along bay shoreline.
Osprey Pandion haliaetus	SSC	Most common in the summer in Florida panhandle decreasing in the winter reflecting it's southward migration. Up to 20 recorded from the base in the summer and two active nests are known from on base.

Table NR-2-9. Threatened, Endangered and Special-Status Species/Communities That Occur or Potentially Occur on Tyndall AFB (Page 3 of 3)

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Species	Status	Areas of occurrence
Piping plover Charadrius melodus	FT, ST	Rare to fairly common winter resident along beaches of Florida's Gulf Coast. Occur on sand bars, sand pits, and tidal pools on Crooked Island West and Crooked Island East and along sand pits in St. Andrews Sound. Barrier islands included in proposed wintering critical habitat.
Reddish egret <i>Egretta rufescens</i>	SC, SSC	Uncommon resident and local breeding species along Florida's gulf coast. Is uncommon but regularly seen during the winter on Shell Island. Two to three seen consistently during survey on Tyndall AFB.
Southeastern snowy plover Charadrius alexandrinus tenuirostris	ST, SC	Breeds on beaches along the Gulf coast. Up to 70% of Florida populations occurs in the panhandle area. The beaches on Tyndall support an estimated 12 percent of the states breeding population.
Tricolor heron <i>Egretta tricolor</i>	SSC	A common to very common resident of Florida. Fairly common on Tyndall AFB in the summer too uncommon during the rest of the year.
White ibis Eudocimus albus	SSC	Locally common in the panhandle of Florida and rare on Tyndall AFB. Only one observed on Shell Island during surveys.
MAMMALS		
Manatee <i>Trichechus manatus</i>	FE	Occasionally seen during the summer in the Tyndall AFB area swimming in the bays and waters off barrier islands.
Choctawhatchee beach mouse Peromyscus polionotus allophrys	FE, SE	Range includes 15.9 kilometers of shoreline including Shell Island on Tyndall AFB.
Florida black bear Ursus americanus floridanus	ST, SC	Observed frequently on eastern part of Tyndall AFB (8-10 bears may be resident on base).
St. Andrew beach mouse Permyscus polionotus peninsularis	FE, SE	Range extends from Tyndall AFB Crooked Island East, southeast along the coast to St. Joseph split.

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Species	Status	Areas of occurrence
FISH	-	
Alabama shad <i>Alosa alabamae</i>	FC	Occurrence is unknown east of Choctawhatchee Bay in the Florida panhandle.
Dusky shark Carcharinus obscurus	FC	One of the larger shark species of continental shelf waters; occurs in Atlantic and Pacific. Feeds on fish including other sharks, rays, squid, octopus, and starfish.
Gulf sturgeon Acipenser oyrinchus desotoi	FT, SSC	Lives predominately in the northeastern Gulf of Mexico; may venture out to 20 miles. Moves inland to spawn. Within the ROI, spawning takes place in the Choctawhatchee River to the east of Eglin AFB and the Apalachicola River to the east of Tyndall AFB, during April through June.
Jewfish <i>Epinephelus itajara</i>	FC	Occurs from Florida and northern Gulf through Caribbean to southeastern Brazil, west Africa, and parts of eastern Pacific. May grow to 700 lbs. Possession by anglers is illegal.
Nassau grouper <i>Epinephelus striatus</i>	FC	Occurs from Bermuda to North Carolina, rare and uncertain occurrence in Gulf.
Night shark Carcharinus signatus	FC	Occurs in deep waters from Delaware to Brazil including the Gulf of Mexico. It feeds on fishes and shrimp and has no economic significance.
Sand tiger shark Odontaspis taurus	FC	In North America, the sand tiger ranges from the Gulf of Maine to Florida and the Gulf of Mexico. It is a popular aquarium shark, surviving up to 10 years in captivity.
Speckled hind Epinephelus drummondhayi	FC	Occurs from North Carolina and Bermuda to Florida. Reddish brown in coloration with light speckles.
Warsaw grouper Epinephelus nigritus	FC	Common from Massachusetts to Texas, with smaller individuals occurring around jetties and offshore platforms and adults preferring deeper, cooler waters.
AMPHIBIANS		
Flatwoods salamander Ambystoma cingulatum	FT, ST	Found in pine flatwoods wiregrass communities with adjoining dome swamps in the Flatwood EA. Eglin supports the largest known concentration of breeding sites west of the Apalachicola River. Occurs in one county under the Rose Hill MOA in Alabama, three counties under the Moody 3 MOA in Georgia, and all counties under the Tyndall MOAs in Florida.
Red Hills salamander Phaeognathus hubrichti	FT	Occurs in three counties under the Rose Hill and Camden Ridge MOAs in Alabama.
REPTILES		
American alligator Alligator mississippiensis	FT, SSC	Common in fresh to brackish water aquatic and wetland habitats throughout Eglin AFB.
Atlantic green sea turtle Chelonia mydas	FE, SE	Inhabits open water and hard bottoms of marine environment. Nests within the affected area from May to August.

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Species	Status	Areas of occurrence
Atlantic hawksbill sea turtle Eretmochelys imbricata	FE, SE	Open water. Does not nest within affected area.
Atlantic leatherback sea turtle Dermochelys coriacea	FE, SE	Inhabits open water and hard bottoms of marine environment. May occur on area beaches and may nest at Cape San Blas.
Atlantic loggerhead sea turtle Dermochelys coriacea	FT, ST	Inhabits open water and hard bottoms of marine environment. Hatchlings often associated with Sargassum rafts. Nests within the affected area from April to October.
Eastern indigo snake Drymarchon corais couperi	FT, ST	Occurs in eight counties under the Rose Hill and Camden Ridge MOAs in Alabama and all counties under the Tyndall MOAs in Florida and the Moody 3 MOA in Georgia.
Gopher tortoise Gopherus polyphemus	FT, SSC	Occurs in two counties under the Camden Ridge MOA in Alabama. Is not federally listed in other counties under MOAs in Alabama or Florida and Georgia.
Kemp's Ridley sea turtle <i>Lepidochelys kempi</i>	FE, SE	Smallest and most endangered of the sea turtles. Open water. Does not nest within affected area, but does occur in affected area waters.
BIRDS		
Bachman's warbler <i>Vermivora bachmanii</i>	FE, SE	Historic records from Eglin AFB but species now assumed to be extinct.
Bald eagle <i>Haliaeetus leucocephalus</i>	FT, SE, ST	Occurs in two counties under the Camden Ridge MOA and one county under the Moody 3 MOA in Alabama, five counties under the Tyndall MOAs in Florida, and all counties under the Moody 3 MOA in Georgia. Nests at one location in the southern part of Eglin AFB and in recent years has successfully nested on Cape San Blas.
Brown pelican Pelecanus occidentalis carolinensis	SSC	Occurs within the coastal regions of the Gulf of Mexico and is listed as a species of special concern by the State of Florida. Will sometimes travel 20 miles offshore to feed.
Piping plover Charadrius melodus	FT, ST	Occurs in four counties under the Tyndall MOAs in Florida. Winters on Gulf beaches of Santa Rosa Island and Cape San Blas. Proposed critical habitat on barrier islands.
Red cockaded woodpecker Picoides borealis	FE, SE	Occurs in three counties under the Rose Hill and Camden Ridge MOAs in Alabama, five counties under the Tyndall MOAs in Florida and all counties under the Moody 3 MOA in Georgia. Occurs in many areas in the longleaf pine forests in the Sandhills EA. Five Management Emphasis Areas totaling 260,000 acres are located on Eglin AFB.
Wood stork <i>Mycteria americana</i>	FE, SE	Occurs in six counties under the Rose Hill and Camden Ridge MOAs in Alabama and all counties under the Tyndall MOAs in Florida and Moody 3 MOA in Georgia.

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Species	Status	Areas of occurrence
MAMMALS	•	
Atlantic bottlenose dolphin Tursiops truncatus	MMPA	Bottlenose dolphins are commonly sighted in groups throughout the coastal, shelf, and slope waters of the affected area.
Atlantic spotted dolphin Stenella frontalis	MMPA	The diet of the Atlantic spotted dolphin consists of squid and fish from the surface and epipelagic zones of the Gulf.
Blainville's beaked whale Mesoplodon densirostris	MMPA	Blainville's beaked whales are difficult to distinguish from other beaked whales during surveys, but beaked whales in general were sighted in all seasons within the eastern Gulf.
Blue Whale Balaenoptera musculus	FE, MMPA	Largest animal on earth. Rare visitor in United States Atlantic. Not expected to occur within affected area.
Bryde's whale Baleanoptera edeni	MMPA	The most common baleen whale in the Gulf. Most Gulf of Mexico sightings of the Brydes' whale have occurred during the spring and summer months along the edge of DeSoto Canyon.
Choctawhatchee beach mouse Peromyscus polionotus allophrys	FE, SE	Occurs in one county under the Tyndall MOAs in Florida.
Clymene dolphin Stenella dymene	MMPA	Distribution in the Atlantic ranges from New Jersey to the Lesser Antilles, including the Gulf of Mexico. Clymene dolphins are primarily sighted outside the ROI.
Cuvier's beaked whale Ziphius cavirostris	MMPA	Perhaps the most common beaked whale in the Gulf, these animals have been sighted during all seasons within the eastern Gulf.
Dwarf sperm whale Kogia simus	MMPA	Dwarf sperm whales generally inhabit the deeper offshore water feeding on squids, crustaceans, and fish.
False killer whale Pseudorca crassidens	MMPA	False killer whales have been sighted in the northern Gulf in the spring and summer during aerial and ship surveys.
Fin whale Balaenoptera physalus	FE, SE, MMPA	Common in North Atlantic, but not expected to occur within ROI.
Florida black bear Ursus americanus floridanus	ST, SC	Found in the Sandhills, Flatwoods, and Wetland and Riparian EAs.
Florida manatee <i>Trichechus manatus</i>	FE, SE	Herbivorous aquatic mammals. Diet consists mainly of water hyacinth, hydrilla, turtle grass, manatee grass, and shoal grass. Usually occur south of Suwannee River but have been sighted in northwest Florida.
Fraser's dolphin <i>Lagenodelphis hosei</i>	MMPA	This species is tropical in distribution and should be expected in pelagic waters of all oceans. This species has been sighted in the northern Gulf but not within the affected area.
Gervais' beaked whale <i>Mesoplodon europaeus</i>	MMPA	Information on Gulf of Mexico beaked whales in general indicates that they are deep-diving animals, with a diet consisting of fish, squid, and deep-water benthic invertebrates. This species has been sighted within the eastern Gulf.

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Species	Status	Areas of occurrence
Humpback whale <i>Megaptera novangliae</i>	FE, SE, MMPA	Common in North Atlantic, but not expected to occur within affected area.
Gray bat <i>Myotis grisescens</i>	FE, SE	Occurs in one county under the Camden Ridge MOA in Georgia, two counties under the Tyndall MOAs in Florida and seven counties under the Moody 3 MOA in Georgia.
Killer whale <i>Orcinus orca</i>	MMPA	Killer whales are found in all oceans of the world with local distribution ranging from the Atlantic pack ice to the Lesser Antilles, including the northern, eastern and western Gulf.
Melon-headed whale <i>Peponocephala sp.</i>	MMPA	Distribution is worldwide tropical to warm-temperate waters including the Atlantic ocean and Gulf of Mexico.
Minke whale <i>Balaenoptera acutorostrata</i>	MMPA	Occurs in Atlantic but not expected to occur within affected area.
Northern right whale <i>Eubalaena glacialis</i>	FE, SE, MMPA	Occurs off Atlantic coast but not expected to occur within affected area.
Pantropical spotted dolphin Stenella attenuata	MMPA	Year-round inhabitants of the Gulf having been sighted during all seasons, primarily in waters greater than 200 meters.
Pygmy killer whale Feresa sp.	MMPA	Distribution in the Atlantic ranges from North Carolina to the Lesser Antilles, including the Gulf of Mexico. Sighted primarily outside the region of influence.
Pygmy sperm whale Kogia breviceps	MMPA	Distribution in the Atlantic ranges from Nova Scotia to the Greater Antilles, including the northeastern and western Gulf of Mexico. Sightings have occurred in the northern Gulf primarily along the continental shelf edge and in deeper shelf waters during all seasons except winter.
Risso's dolphin <i>Grampus griseus</i>	MMPA	Sightings in the Gulf occur along continental shelf and slope; this species is abundant within the eastern Gulf.
Rough-toothed dolphin Steno bredanensis	MMPA	Rough-toothed dolphins are expected to occur throughout the year in the Gulf. In 1998, 60+ rough-toothed dolphins stranded on Cape San Blas.
St Andrew beach mouse Peromyscus polionotus peninsularis	FE, SE	Occurs in one county under the Tyndall MOAs in Florida.
Sei whale <i>Balaenoptera borealis</i>	FE, SE, MMPA	Occurs off Atlantic coast but not expected to occur within affected area.
Short-finned pilot whale Globicephala sp.	MMPA	Distribution in the Atlantic ranges from New Jersey to Venezuela, including Gulf of Mexico. Short-finned pilot whales are more commonly observed in other parts of the Gulf.
Sperm whale Physeter catadon	FE, SE, MMPA	The most abundant of the federally listed endangered whales in the Gulf of Mexico. Areas of relatively high abundance west of W-155B and W-151.

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Species	Status	Areas of occurrence
Spinner dolphin Stenella longirostris	MMPA	Distribution in the Atlantic ranges from eastern Newfoundland to the Lesser Antilles, including northern and eastern Gulf of Mexico waters. Sightings in the Gulf occur along continental shelf and slope.
Striped dolphin Stenella coeruleoalba	MMPA	Striped dolphins are primarily found off deeper waters of the continental shelf and have been sighted in the northern Gulf during fall, winter, and spring.

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