

# Appendix J

## Threatened, Endangered, or Sensitive Predators and Their Vertebrate Prey

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The species lists in Appendices F through I include a number of threatened, endangered, or sensitive (TES) animals. Some of the TES animals are predators. The availability of prey animals is important to the survival of predators. This appendix lists the TES predators, and their vertebrate prey species. This information was compiled by the Oregon Natural Heritage Program, for the Oregon Department of Forestry.

For each listing, the predator's name is in boldface. The main categories of its prey are listed below. For example, under the listing for bald eagle on the next page, the main categories of "fish", "birds", and "mammals" are listed. If the predator has specific preferences within these general categories, these are also listed, indented underneath each main category. Comments are given last. Key terms for this appendix are on the next page.

## Key Terms

**Gallinaceous species** — A bird species belonging to *Galliformes*, an order of birds that includes pheasants, turkeys, quail, and partridges, as well as common domestic fowl such as chickens. They are mostly ground birds, with heavy bodies, short wings, and legs adapted to running and scratching for food; they nest on the ground and produce large broods.

**Lagomorph** — An animal species belonging to *Lagomorpha*, an order of rodent mammals that is characterized by two pairs of upper incisors, one behind the other. Examples are hares, rabbits, pikas, etc.

**Passerine** — A bird species belonging to a group of small or medium-sized, perching songbirds that have grasping feet with the first toe directed backward. More than half of all bird species belong to this group.

**Ungulate** — Hoofed mammals, such as deer and elk.

## Bald Eagle

Fishes

Birds

Waterfowl — wood duck, mallard

Mammals

Small mammals

Lagomorphs — Nuttall's cottontail, snowshoe hare, white-tailed jackrabbit

**Comments:** Feeds opportunistically on fishes, injured waterfowl and seabirds, various mammals, and carrion. Hunts live prey, scavenges, and pirates food from other birds (e.g., osprey). In the Columbia River estuary, tidal flats and water less than 4 meters deep were important foraging habitats.

## Northern Goshawk

Birds

Waterfowl — wood duck, mallard

Gallinaceous birds — blue grouse, ruffed grouse, mountain quail, California quail

Mammals

Small mammals

Lagomorphs — Nuttall's cottontail, snowshoe hare, white-tailed jackrabbit

Squirrels

**Comments:** Eats mainly lagomorphs, squirrels, ducks, gallinaceous and other birds; local diet partly depends on availability. Tends to hunt low in forest canopy; most hunting from a perch. Favors grouse and pheasant as prey.

## **Peregrine Falcon**

Fishes

Reptiles

    Lizards

Birds

    Medium-sized passerines

    Small waterfowl — wood duck

    Mourning dove

Mammals

    Small mammals

    Bats

**Comments:** Feeds primarily on birds (medium-size passerines up to small waterfowl); rarely or locally, small mammals (e.g., bats, lemmings), lizards, fishes, and insects (by young birds) may be taken. Prey pursuit initiated from perch or while soaring. May hunt up to several kilometers from nest site.

## **Greater Sandhill Crane**

Fishes

Reptiles

    Snakes

    Lizards

Birds

Mammals

    Small mammals — western harvest mice, deer mice

**Comments:** Feeds on roots, tubers, seeds, grain, berries, and small vertebrates (mice, lemmings, birds, snakes, lizards, etc.), earthworms and insects. Forages in marshes, meadows, pastures, and fields. Young birds forage for invertebrates during first few weeks of life. Grainfields used extensively during at fall staging areas; flooded ricefields important food source on wintering grounds.

## **Flammulated Owl**

Birds

Mammals

    Small mammals

**Comments:** Feeds on various insects (e.g. moths, beetles, grasshoppers, crickets, caterpillars); rarely eats small mammals or birds. Foraging tactics include hawk-gleaning, hawking, hover-gleaning, and drop-pouncing.

## Northern Pygmy-Owl

Reptiles

Birds

Passerines

Mammals

Small mammals — western harvest mice, deer mice

Rodents

**Comments:** Feeds mainly on mice and large insects; also eats other small mammals, birds, and reptiles. Glides/dives down from elevated perch to capture prey. Caches food.

## Northern Spotted Owl

Reptiles

Birds

Mammals

Northern flying squirrels

Bushy-tailed woodrat

Snowshoe hare

Pocket gophers — Botta's pocket gopher, northern pocket gopher, western pocket gopher

Small mammals — voles, deer mice

**Comments:** Small mammals, particularly nocturnal arboreal or semi-arboreal species, predominate in diet; flying squirrels, woodrats, and lagomorphs are common prey items, with pocket gophers, red tree voles, and deer mice regionally important; flying squirrels are consumed more often at higher latitudes and higher elevations, woodrats more often at lower latitudes and lower elevations. On the Olympic Peninsula, Washington, primary prey included *Glaucomys sabrinus*, *Neotoma*, and *Lepus americanus*. In Oregon, diet was dominated by *Glaucomys* and *Phenacomys (Arborimus) longicaudus* in Douglas-fir and western hemlock forest; *Neotoma* in mixed coniferous forest; *Thomomys* and *Clethrionomys* at higher elevations. In California, prey was mostly *Glaucomys*, *Neotoma*, and *Sciurus*.

## Great Gray Owl

Amphibians

Frogs

Birds

Mammals

Small mammals — voles, microtine rodents

Pocket gophers — Botta's pocket gopher, northern pocket gopher, western pocket gopher

**Comments:** Diet in North America dominated by pocket gophers and voles. Forages usually in open area where scattered trees or forest margin provides suitable sites for visual searching; also uses sound to locate prey under snow cover.

## **Loggerhead Shrike**

Amphibians

Reptiles

Lizards

Birds

Passerines

Mammals

Small mammals

**Comments:** Feeds primarily on large insects, also small birds, lizards, and rodents. Diet varies with season and location; in parts of the range, most of the food eaten in winter may be vertebrates, which comprise only a small part of the diet in California. In California, the summer diet comprises mainly insects. Captures prey via short flight from perch. Sometimes impales food items on a plant spine or on barbed wire.

## **Ringtail**

Amphibians

Reptiles

Snakes

Birds

Passerines

Mammals

Small mammals — deer mice

Bushy-tailed woodrat

Nuttall's cottontail

**Comments:** Omnivorous, but prefers animal matter. Principal foods are arthropods, small mammals, and fruits; proportions vary seasonally. Also eats various birds, reptiles, amphibians; nectar feeding from agave also reported. Diet varies seasonally: mammals, insects, and juniper berries in spring; insects and fruit in summer; birds, mammals, and fruit of hackberry and mistletoe in winter.

## **Marten**

Birds

Mammals

Small mammals — shrews, mice, voles

Bushy-tailed woodrat

Pika

Lagomorphs — Nuttall's cottontail, snowshoe hare, black-tailed jackrabbit

Mountain beaver

Chipmunks — least chipmunk, yellow-pine chipmunk, Allen's chipmunk

Squirrels — Douglas' squirrel

Bats

**Comments:** Diet mainly small mammals, birds, insects, carrion. Berries and other vegetable matter eaten in season. Forages in trees and on ground (mostly). Tracks prey, ambushes, robs nests, excavates burrows, uses hunting perches.

## **Pacific Fisher**

### Birds

Jays, nuthatches, woodpeckers, chickadees, thrushes, sparrows, quail, grouse, owls

### Mammals

Small mammals — shrews, mice, voles, moles

Squirrels — northern flying squirrel, Douglas' squirrel

Lagomorphs — Nuttall's cottontail, snowshoe hare, black-tailed jackrabbit

Muskrat

Mountain beaver

Beaver

Porcupine

Raccoon

Black-tailed deer

**Comments:** Diet consists primarily of mammals (small rodents, shrews, squirrels, hares, muskrat, beaver, porcupine, raccoon, deer, carrion); also birds and fruit. Quills from porcupines may penetrate internal organs without apparent damage. Feeding is opportunistic.

## **California Wolverine**

### Fish

### Birds

### Mammals

Marmots

Pocket gophers — Botta's pocket gopher, northern pocket gopher, western pocket gopher

Mice

Black-tailed deer

**Comments:** Opportunistic. Feeds on a wide variety of roots, berries, small mammals, birds' eggs, fledglings, and fish. May attack moose, caribou, and deer hampered by deep snow. Small and medium-size rodents and carrion (especially ungulate carcasses) often make up a large percentage of the diet. May cache prey in fork of tree branches or under snow.

## **Pacific Pallid Bat**

### Reptiles

Short-horned lizards

### Mammals

Small mammals — Great Basin pocket mice

**Comments:** Insectivorous. Primarily forages on the ground; may capture some food in flight, within a few meters of ground vegetation. Food items include: flightless arthropods, Jerusalem crickets, moths, beetles, etc. May eat small vertebrates. Most food items are from 25-35 millimeters in body length. Documented to take some vertebrate prey (horned lizards and pocket mice). Skull seems adapted to hard-bodied prey such as large beetles.

## **Bull Trout**

Fish

Amphibians

    Frogs

Reptiles

    Snakes

Birds

    Waterfowl (young)

Mammals

    Mice

**Comments:** Young bull trout feed heavily on aquatic insects. Adults feed principally on fish, but have also been known to eat other small vertebrates: frogs, snakes, mice, and ducklings, etc.

## **Northwestern Pond Turtle**

Fish

Amphibians

    Frogs and tadpoles

Birds (carrion)

**Comments:** Scavenger and opportunistic predator with preference for live prey; adults partially herbivorous; food items mostly aquatic. Diet often includes adult and larval insects, worms, crustaceans, carrion, and algae. Seen feeding on a dead mallard duck. A bullfrog was taken from the stomach of a California specimen.