# Wildlife Checklist

National Park Service U. S. Department of Interior Muir Woods National Monument



# A Forest of Life



When walking through Muir Woods National Monument visitors often wonder: Where is the wildlife? At first glance the stillness of the forest may lead one to think it is devoid of life, yet upon closer inspection you will find that the redwoods are home to a diverse mix of specialized residents, seasonal visitors, and occasional opportunists.

Life in a redwood forest is determined by the low light conditions that restrict growth of plant species producing flowers, nuts, or berries. In addition, coast redwood trees contain an abundance of tannin (or tannic acid), a chemical compound that deters the presence of insects. Taken together, these conditions create an environment that is relatively low in the resources that typically form the base of a food web. Below, you will find information on the animal species that are most often seen in the woods, depending on the time of day or season.

Keep Wildlife Wild	Feeding or approaching wildlife can cause problems for both humans and wildlife. Wild animals that learn to asso- ciate humans with food often become dependent on human-related food and garbage.	They lose their wildness and may become pests or aggressive. This can be potentially harmful to people, property and the animals as well. They may be cute, but feeding them is unhealthy and dangerous for them.
Help Prevent Problems	• Don't give your food to wildlife.	
	<ul> <li>Never leave food unattended, even for a short while.</li> </ul>	TING STORES
	<ul> <li>Properly store food in a food locker or vehicle.</li> </ul>	NTO E
	<ul> <li>Properly dispose of trash in a trash can or recycling container.</li> </ul>	
	<ul> <li>Never overfill garbage cans. Take your trash to a can that is less full.</li> </ul>	Kappens
	<ul> <li>Leave the area cleaner than you found it.</li> </ul>	- M
	<ul> <li>Pick up all food scraps, crumbs and wrappers.</li> </ul>	
	<ul> <li>Wipe down tabletops after eating.</li> </ul>	
	<ul> <li>Report wildlife problems to a Ranger.</li> </ul>	www.wikimedia.org
	<ul> <li>Apply what you have learned here to every place you visit where wild animals exist.</li> </ul>	Trash cans are tempting for many types of wild animals. Latching trash cans have been installed in the park
	<ul> <li>Encourage others to do the same.</li> </ul>	to keep out animal invaders.

#### Mammals



#### Black-Tailed deer Odocoileus hemionus columbianus

Black-tailed deer are a western subspecies of the mule deer, characterized by large ears and their black tails. A conspicuous component of the biological community here at Muir Woods, deer are herbivores and forage on a wide variety of plants that grow in the understory of the forest. Deer help maintain diversity by selectively grazing on particular plants which ensures that no particular species will dominate, thus keeping a balance in the understory. Over the last several decades black-tailed deer have become more abundant due to a decrease in the population of large predators, such as the mountain lion.

Viewing Tips: Deer are frequently seen in the woods throughout most of the year but are relatively uncommon during the winter months. On particularly warm days the deer are more likely to seek refuge under the cool canopy of the redwoods. Look for fawns (baby deer) from April through August.



# Sonoma Chipmunk Eutamis sonoma

Chipmunks are small squirrel-like rodents with well-defined stripes down their backs. They inhabit the understory of many forests in North America. Chipmunks are opportunistic omnivores with a varied diet of nuts, insects and mushrooms as well as birds' eggs and young. During the fall, they gather and store large amounts of nuts and seeds in their burrows to eat during the winter months. This behavior is important to a forest because many of the stored seeds go uneaten and will eventually sprout to grow new plants and trees. Chipmunks also help to disperse the spores of fungi, which form underground networks with trees that aide in the uptake of water and nutrients, called mychorrhizal associations.

Viewing Tips: Chipmunks are most active during spring and summer. They are commonly seen throughout the forest and near the sunny forest edge.

#### Fish



### Coho Salmon Oncorhynchus kisutch

Coho salmon (also known as silver salmon) are an anadromous species of fish, which spend their life in both fresh and salt water environments. Baby fish, or fry, spend one year of their life here in Redwood Creek where they feed on aquatic invertebrates. In the winter of their first year, the juveniles undergo a transformation, called smoltification, which allows them

to survive in the ocean where they will feed for the next two years. As fully mature adults, at three years of age, coho make a several hundred mile journey back to their home creek where they spawn and die. The influx of nutrients brought annually by the dead and dying salmon is crucial for the health of other plants and animals. Coho salmon are endangered and federally protected by the Endangered Species Act.

Viewing Tips: Fry and smolt (recently hatched and year olds) can be seen in Redwood Creek year round. Best viewing is from one of the bridges. Adult salmon return to Muir Woods with the winter rains and spawn from late November through January. Call the park information hotline at (415) 388-2595 to find out if they have arrived.

#### **Birds**



Northern Spotted Owl Strix occidentalis

The northern spotted owl is a medium sized brown bird of prey that ranges from extreme southern British Columbia to Marin County. Spotted owls prefer old growth forests where they nest in large cavities or the abandoned nests of other birds. Here they prey primarily upon a large rodent known as the dusky footed wood rat. In recent years, spotted owls have been restricted to increasingly smaller areas due to intensive deforestation and competition from a more aggressive eastern species called the barred owl. The spotted owl is listed as endangered and is federally protected under the Endangered Species Act. Ongoing efforts are being made to ensure the continued presence of this animal in Muir Woods.

Viewing Tips: Spotted owls are rare and well-camouflaged. They are most audible during the breeding season from March through August. However, being nocturnal they sleep during the day and are unlikely to be seen. Keeping an ear out is the best way to encounter one of these elusive birds.

*Troglodytes troglodytes* The winter wren is a small brown song bird, about the size of a golf-ball, that is easily identified by its erect tail feathers. Winter wrens are one of only a few species of animal that spend their entire lives in Muir Woods. They are specialized ground feeders, eating a variety of insects from the surface of plants and fallen trees. During the winter they may supplement their diet with pupae and seeds.

Winter Wren

Viewing Tips: Winter wrens are common throughout the year in Muir Woods. They are most often seen on the forest floor where they forage for food. During spring their loud and distinct song can be heard across the canyon. During the summer, look for nests near the roots of trees, among ferns or weaved into the bark of a coast redwood.

### Invertebrates



#### Banana Slug Ariolimax columbianus

The banana slug, so named because of its long slender shape and sometimes bright yellow color, is the largest land mollusk in North America, reaching lengths of 11 inches! This strange and slow-moving creature is an important member of the forest community, using its 27,000 teeth to consume dead plant material. As a decomposer, the banana slug is a crucial link in the nutrient cycle between the living and non-living components of the redwood ecosystem. The nutrients made available by the slug, following digestion, are taken up by plants that then provide food for herbivores, which are in turn eaten by carnivores. If you see one on the trail move it off to the side and give it a kiss for good luck.

Viewing Tips: Banana slugs prefer moist, cool habitats. During rainy weather they are a common sight on or near the trail. In the dry summer months they are restricted to microclimates underneath leaf litter, fallen trees or near the creek. Keep your eyes open for their slimy footprint.



# Convergent Lady Bug Hippodamia convergens

Convergent lady bugs spend their larval stage eating aphids in the agricultural fields of the Central and Santa Clara valleys. The voracious appetite of the larvae is responsible for the health of millions of dollars worth of produce that is consumed annually throughout the US. With the onset of the summer heat, the metamorphosed adults migrate over 100 miles to the safety of the Sierra Nevada and coastal mountain ranges. While overwintering in Muir Woods, the lady bugs cluster in large groups to conserve energy, repel predators, and find a mate. Following the winter rains the lady bugs emerge from the safety of the understory and fly back to their natal valleys where they will lay eggs and die.

Viewing Tips: Adult lady bugs typically arrive in swarms during May and are visible until November. Clustering swarms can be seen at various sites in Muir Woods and Mt. Tam State Park. They are commonly seen along the Bootjack Trail as well as on the Fern Creek Trail about 20 feet from the Main trail.

# **Muir Woods Wildlife Checklist**

<b>Big brown bat (Eptesicus fuscus)</b> California myotis ( <i>Myotis californicus</i> ) Fringed myotis ( <i>Myotis thysanodes</i> ) Hoary bat ( <i>Lasiurus cinereus</i> ) Little brown bat ( <i>Myotis lucifugus</i> ) Mexican free-tailed bat ( <i>Tadarida brasiliensis</i> ) Silver haired bat ( <i>Lasionycteris noctivagans</i> ) Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> ) Western red bat ( <i>Lasiurus blossevillii</i> ) Yuma myotis ( <i>Myotis yumanensis</i> )
Tuma myous ( <i>Myous yumanensis</i> )

Insectivores

Broad-handed or California mole (Scapanus grieus ord) Shrew mole (Neurotrichus gibbsi)

Herbivores	Black-tailed mule deer (Odocoileus hemionus columbianus)
Terbivores	Black-tailed jackrabbit (Lepus californicus)
	Brush rabbit (Sylvilagus bachmani)
	California vole ( <i>Microtus californicus</i> )
	Deer mouse (Peromyscus maniculatos)
	Dusky-footed woodrat (Neotoma fuscipes baird)
	Pacific shrew (Sorex pacificus)
	Valley pocket gopher (Thomomys bottae)
	Western gray squirrel (Sciurus griseus ord)
Carnivores	Bobcat ( <i>Lynx rufus</i> )
	Coyote (Canis latrans)
	Long-tailed weasel ( <i>Mustela frenata</i> )
	Mountain Lion ( <i>Felis concolor</i> )
	River otter (Lutra canadensis)
Omnivores	Gray fox (Urocyon cinereoarygenteus)
	Racoon (Procyon lotor)
	Sonoma Chipmunk ( <i>Eutamis sonoma</i> )
	Spotted skunk ( <i>Spilogal gracilis</i> ) String d skunk ( <i>Manhiii</i> a man <i>hii</i> i)
	Striped skunk ( <i>Mephitis mephitis</i> )
Fish	Coho (Silver) salmon ( <i>Oncorhynchus kisutch</i> )
	Prickly sculpin (Cottus asper)
	Riffle sculpin (Co <i>ttus gulosus</i> ) Staghorn sculpin ( <i>Leptocottus armatus</i> )
	Steelhead trout (Oncorhynchus mykiss)
Reptiles	Coast garter snake (Thamnophis elegans terrestris)
Reptiles	Gopher snake ( <i>Pituophis melanoleucus</i> )
	Northern alligator lizard (Gerrhonotus coeruleus wiegmann)
	Pacific ringneck snake (Diadophis amabilis amabilis)
	Rubber boa ( <i>Charina bottae</i> )
Miscellaneous	Camel cricket
Invertebrates	Dragonflies
invertebrates	Millipede
	Snail
	Syrphid fly
	Banana slug (Ariolimax columbianus)
	Convergent ladybug (Hippodamia convergens)
Amphibians	California slender salamander (Batrachoseps attenuatus)
	Ensatina ( <i>Ensatina eschsoltzii</i> )
	Pacific giant salamander (Diacampton ensatus eschscholtz)
	Rough skinned newt (Taricha granulosa)
Dutte uflie e	Aniso sucleantail (Papilio zolisaan)
Butterflies	Anise swallowtail ( <i>Papilio zelicaon</i> ) Cabbage white ( <i>Pieris rapae</i> )
	Cabbage white (Fields rapae) California ringlet (Coenonympha tullia californica)
	California sister (Adelpha bredowii)
	California tortoise-shell (Nymphalis californica)
	Common anglewing/Satyr Comma (Polygonia satyrus)
	Common buckeye ( <i>Junonia coenia</i> )
	Echo blue ( <i>Celastrina echo</i> )
	Monarch (Danaus plexippus)
	Mourning cloak (Nymphalis antiopa)
	Pale swallow-tail (Papilio eurymedon)
	Red admiral (Vanessa atalanta)
	Veined white ( <i>Pieris napi</i> )
	Western tiger swallow-tail ( <i>Papillo rutulus</i> ) West coast lady ( <i>Vanessa annabella</i> )
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Exotics	Wild Turkey ( <i>Meleagris gallopavo intermedia</i> )
Birds	To view a complete bird checklist visit the park website at :
	http://www.nps.gov/muwo/naturescience/birds.htm
Printed on recycled paper with soybased inks.	
	EXPERIENCE YOUR AMERICA™ www.nps.gov/muw