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Plan Your Visit

QUEST on KQED Public Media. You may not think of salmon when visiting the redwoods in Muir Woods, but itâ€[™]s home to a population of Coho Salmon. Redwood forests provide ideal salmon habitat, providing woody debris to protect young salmon in the creeks and keeping them shaded and cool. But the Coho in Muir Woodâ€[™]s Redwood Creek are endangered, and local biologists and volunteers are working to protect the salmon and restore their habitat.

For a map, driving directions and satellite views of this park from Googleâ,,¢ Maps, click here.

Address: Muir Woods Road, Building MW-020, Mill Valley, CA 94941

Phone: (415) 388-2595



1. Salmon latitude 37.8911847 longitude -122.5694179



Female Coho look for areas like these in Redwood Creek to lay their eggs. The loose gravel and steady water flow protect the eggs and ensure a supply of oxygen.



After spawning, female coho use A female can lay hundreds of their bodies to dig a nest, or redd, eggs in her nest. Credit: Richard in gravel at the bottom of Redwood Creek. The eggs will remain buried in the creek bottom until they hatch.



James.





Fish Biologist Michael Reichmuth explains the life cycle of Redwood Creek's Coho. The number of returning salmon have been dropping in recent years, causing concern about the health of the population.



2. Manroot latitude 37.8916693 longitude -122.5706714



Wild Cucumber (Marah fabaceus) You can recognize Wild

is also known as Man Root, due to the large tuberous root underground. The root is toxic and seed pods in the summer. was reportedly used by Native American groups to stun fish, making them much easier to catch.

Cucumber (Marah fabaceus) by its curly vines or spiky green



Milk Maids (Cardamine californica) are common wildlfowers across California, typically blooming from January through May. Other fun colloquial names include California Toothwort and Bitter cress.



3. Native Snail latitude 37.8922115 longitude -122.5719549



Saw this lovely mollusk climbing a mossy trunk , shell alomst 2" in diameter. Best guess is the Oregon Forestsnail (Allogona townsendiana). Any other ideas?

9

4. Tree Fall and Rewdoods latitude 37.89371 longitude -122.574481







When a redwood topples, it often takes down a number of other trees, thanks to its massive height and weight. If it falls into the creek, it's good news for salmon, since it creates new habitat. The Muir Woods redwoods are old-growth trees. They escaped much of the logging common to the California coast thanks to the steep terrain surrounding the valley. You'll see both Tanoaks (Lithocarpus densiflorus) and Coast Live Oaks (Quercus agrifolia) in Muir Woods, but many will look like this. Sudo Oak Death is wide-spread in

You'll see both Tanoaks (Lithocarpus densiflorus) and Coast Live Oaks (Quercus many will look like this. Sudden Oak Death is wide-spread in Marin County and is caused by the pathogen Phytophthora ramorum. Infected trees often develop cankers that ooze dark liquid. The pathogen prevents the tree from sending nutrients and energy between the leaves and roots, eventually killing the tree. The pathogen spores are spread by other trees, water and even humana



5. Understory Flowers latitude 37.89428 longitude -122.5751



This may look like clover, but
Redwood Sorrel (Oxalis oregano)The Big Leaf Rhododendron
(Rhododendron macrophyllu
can be found in local nurser)thrives in the low light of the
redwood understory.but in Muir Woods, they're raise



The Big Leaf Rhododendron (Rhododendron macrophyllum) can be found in local nurseries, but in Muir Woods, they're rare. There are only three populations left in Marin County. This plant was sprouted from seeds collected by the Golden Gate National Parks Conservancy, who are working to preserve the genetic variation of this local population. These rhododendrons benefit from fire cycles and are among the first plants to reappear after a fire. While it's thought that fires historically came through



A Trillium flower (Trillium ovatum).



A Trillium flower (Trillium ovatum) a little closer up.



6. Redwood Burl latitude 37.89563 longitude -122.57476



Lumpy burls are usually found at the base of redwood trees, but this tree's burl is high overhead. Redwoods use burls as one method of reproduction. They can simply sprout new growth from the burl if the main tree is stressed or damaged.



7. Fun with Fungus latitude 37.9002929 longitude -122.5772412



Witch's Butter (Tremella mesenterica) is a jelly fungus that are lovely, but too tough to be is actually a parasite. It feeds on another type of fungus that lives on dead wood.



The flame-like ripples of the False Brown Witches Butter (Tremella Turkey-tail, or Stereum hirsutum, foliacea) like many fungi is found edible. Common in Bay Area woodlands, Stereum hirsutum is easy to mistake for Trametes versicolor, the "actual" Turkey Tail fungus.

growing on the wood of dead trees. Here it appears to be parasitizing False Turkey-tail, or Stereum hirsutum.

7c. Brown Witches Butter Fungus



8. Foetid Adders Tongue latitude 37.899078 longitude -122.57675





In order to spread its seed far and The Fetid Adder's Tongue blooms wide, the Fetid Adder's Tongue, or early - you'll see these flowers in Slinkpod (Scoliopus bigelovii) grows its seed pods on long, thin a slightly foul smell which attracts stalks. As they grow larger, the stalks bend away from the plant and touch the ground. Each has a packet of nutrients that attracts ants and other insects, which help carry the seeds even further.

December or January. They have pollinators like gnats, instead of bees.



9. Funner Fungus latitude 37.9012238 longitude -122.5794138



The Yellow Waxy Cap (Hygrocybe flavescens) is a bright yellow mushroom often found in redwood forests.



These dark mushrooms (Bulgaria Likely these are Oyster inquinans) definitely resemble gum drops and live on decomposing wood.



Mushrooms (Pleurotus ostreatus), sought after by mushroom hunters for their culinary uses. Anyone able to confirm?



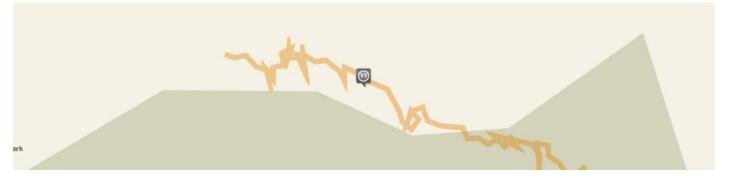
10. Albino Redwood latitude 37.9018673 longitude -122.5829904





This is a redwood tree, but its needles are white. They're lacking albino redwoods in California. chlorophyll, the green substance that helps plants do photosynthesis. Because it can't make food on its own, this tree acts like a parasite, tapping into the roots of another redwood.

There are only a handful of known They can only survive by living on other trees.



11. Log Fall latitude 37.90253 longitude -122.58414



Pools like these, created by Salmon, who like cold, clean water. Returning salmon rest in pools like these as they head up the creek to spawn. Juvenile salmon rely on creek pools to protect them. Today, the Park Service is in the process of adding wood pack to Redwood Creek, since it was once their policy to remove it.



toppled trees, are crucial for Coho These young Coho were caught in juvenile salmon in Redwood a fish survey. After hatching, they're known as "fry". They spend 16-18 months living in the creek, eating bug larvae. Image: Chris Friedel.



Native sculpin like these prey on Creek. Young salmon also have to worry about non-native crayfish. Image. Richard James.

11d. Eye on the log



Sometimes when looking around the forest floor, things look back.



12. Convergent Ladybugs latitude 37.90327 longitude -122.58608



Throughout the winter in the Bay Area, you may see large groups of ladybugs clustering together. These Convergent Lady Beetles (Hippodamia convergens) come together for their winter hibernation and huddle together to conserve warmth and energy.



13. Salmon End latitude 37.9032567 longitude -122.58828





13b. End of the Coho lifecycle

In December and January, Coho return to Redwood Creek, completing their three year life cycle. They rely on winter rains to salmon's skin, which were taken raise the level of the creek, which for a biological survey when this breeches a sandbar that often forms at the outlet to the ocean. The salmon return to the creeks they were born in to mate and lay eggs. Image. Richard James.

you look closely, you can see small circle punched out of the salmon was found. Credit. Richard James.



Each year, biologists from the Point Reyes National Seashore survey Redwood Creek for Coho Salmon and Steelhead Trout. They work to find out how many salmon are returning each year, to help estimate the health of the population. Coho are listed as an endangered species. In the 1940s, California's population was estimated at 200,000 to 500,000. In just 50 years, that population has declined about 90%. Credit. Richard James.