A forest made up of the world’s tallest trees can invite a lot of questions. Why do coast redwood trees, *Sequoia sempervirens*, grow only in northern California? Why do they grow so tall? Is there something more significant about this forest than the size of the trees?

The redwood forest attracts visitors from around the world for many reasons; one is its age. Indeed this forest contains descendants of some of the oldest plants on Earth. You can almost imagine a dinosaur crashing through the understory and thundering down the trail. Ferns and horsetails have evolved over 300 million years and once formed forests 50 feet tall.

More than 100 million years ago, ancestors of modern coast redwood trees extended across the northern hemisphere. By the time dinosaurs became extinct 65 million years ago, these redwoods grew as part of a complex forest that included ancestors of modern-day Sequoias, dawn redwood, cedar, fir, hemlock, and a variety of broad-leaved deciduous trees.

Gradually climates changed from warm and humid to cooler and drier around the globe. By three million years ago, coast redwood trees had disappeared from Europe, Asia, Greenland, and Japan. Today the redwood forest only exists on this narrow strip of California coastline, which extends 450 miles from the California/Oregon border south to Monterey Bay.

Walking in the ancient redwood forest, amongst the world’s tallest trees, you can almost imagine a dinosaur crashing through the understory and thundering down the trail.

Gradually climates changed from warm and humid to cooler and drier around the globe. By three million years ago, coast redwood trees had disappeared from Europe, Asia, Greenland, and Japan. Today the redwood forest only exists on this narrow strip of California coastline, which extends 450 miles from the California/Oregon border south to Monterey Bay.

Coast redwood trees can soar to more than 370 feet tall, but they are not the only tree that grows tall in a redwood forest. Douglas-fir trees have grown even taller; one record-breaker in British Columbia measured 400 feet. Western hemlock trees can reach 250 feet tall. Sitka spruce height rivals the hemlock and its bulk can match a medium-sized redwood.

If size is measured in years, then perhaps it does matter. Resistance to fire, insects, disease, and fungi allow the coast redwood to live more than 20 human lifetimes. Redwood trees seldom fall over. Their shallow roots form an extensive system of intertwining threads that connect with the roots of neighboring trees, providing reinforcement against the powerful winds of winter storms.

Just as impressive as the trees is the multi-layered understory that grows beneath. Ten-foot high rhododendron, azalea, huckleberry, and salmonberry bushes flourish, sword ferns grow as tall as a person, skunk cabbage leaves extend as long as your arm, fungus bigger than dinner plates emerge with the first winter rains, and 80-foot big-leaf maples turn streambanks into a burst of fall colors.

No wonder the smaller things are easily overlooked. Look below your knees along any forest trail and you will find a carpet of redwood sorrel, plants that resemble three-leaved clover, covering the forest floor. Mixed among them you might find wild ginger, Pacific starflower, or yellow redwood violets. Any time of year you can find something blooming.

Then consider what might be living in the trees themselves. Suspended 300 feet above, soil mats trapped in elbows of limbs form a miniature forest floor that provides habitat for a world of plants and animals, some that never touch the ground. This complex biomass rivals the tropical rainforests and qualifies Redwood National and State Parks as a World Biosphere Reserve.

Does size matter? It depends upon how you measure it. Redwood National and State Parks may be home to the world’s tallest trees, but the challenge is to see the forest, despite the trees.
Visitor Activities

Come join Redwood National and State Parks staff in activities that are both fun and educational for the whole family. For schedules, times, topics, and locations of all programs listed below, check at the visitor centers or on campground bulletin boards. The campfire circles at Jedediah Smith, Mill Creek, and Elk Prairie campgrounds are wheelchair accessible.

ACTIVITIES: MAY 25 – SEPTEMBER 7

Campfire Programs – Here’s your chance! Learn more about a redwood-related topic. Varied activities may include narrated slides, music, games, or storytelling. People of all ages can enjoy these programs given at:

- Jedediah Smith Redwoods State Park campfire
- Mill Creek campground in Del Norte Coast Redwoods State Park
- Elk Prairie campground in Prairie Creek Redwoods State Park

Nature Walks and Talks – Be a part of the forest, sea, or prairie lands. Join a ranger to learn more about the natural communities in one of the most diverse areas of the world. Offered at various locations and times throughout the parks.

California State Park Junior Ranger Programs – Children ages 7 to 12 are encouraged to participate in a fun and educational activity. Topics focus on the people, plants, animals, and life systems of the redwood region. Offered at Jedediah Smith, Prairie Creek, and Del Norte Coast Redwoods State Parks.

Redwood National and State Parks Junior Ranger Program – Come to one of the five visitor centers to pick up a Redwood Junior Ranger activity newspaper. If you have a few days to spend in the parks, children ages 7 to 9 can complete four activities and children ages 10 to 12 can complete six activities to earn a patch. If you have one day or less, children ages 7 to 12 can complete three activities to earn a sticker. All ages are welcome to complete a junior ranger activity newspaper!

Tidepool Walk – Discover the wonders of the sea! All tidepool walks meet at the Enderts Beach parking area near Crescent Beach Overlook south of Crescent City. The walk takes about 2-1/2 hours, tides permitting. For your safety, please wear shoes that have nonslip soles and can get wet.

Come prepared to ranger-led walks — Carry water and snacks. Wear shoes that can grip the slippery rain forest floor. Lock all valuables in the trunk of your vehicle. Keep your wallet with you.

SPECIAL EVENTS

SUMMER – Tolowa Dunes Seminars. Join subject matter specialists covering a variety of topics, from plants to birds to dunes; every Sunday from Memorial Day to Labor Day at various times. For more information, contact North Coast Redwood Interpretive Association at (707) 488-2169 or (707) 465-6191.

JULY – Eco Fun Fest: a family event! This day-long festival includes arts, crafts, information booths, and live music at Prairie Creek Redwoods State Park. Call (707) 465-7345 or 465-7354 for more details.

JULY – Redwood Field Seminars offers star gazing. Contact Redwood Park Association at (707) 465-7125.

OCTOBER – Discovery Ride through the Ancient Forest. Enjoy the parks on bicycle for easy 10-mile and challenging 28-mile rides in Prairie Creek Redwoods State Park. Contact North Coast Redwood Interpretive Association at (707) 488-2169.

OCTOBER – Bat Walk. Join us for a walk at night in Jedediah Smith Redwoods State Park. Contact North Coast Redwood Interpretive Association (707) 458-3496.

DECEMBER – Candlelight Walk through the Ancient Forest. Experience the redwoods by candlelight in Prairie Creek Redwoods State Park. Short walk and program are free to the public. Contact North Coast Redwood Interpretive Association (707) 488-2169.

DID YOU KNOW?
The Pacific giant salamander (Dicamptodon tenebrosus) is the only salamander with a voice and will actually bark when agitated. Pacific giant salamanders provide an important link in the food chain between aquatic and terrestrial animals. Look for the definition of an indicator species on page 5.
On the Edge of Extinction
by Jeff Denny

Sheltered in a soft nest of moss and ferns, a marbled murrelet chick waits silently atop a massive redwood branch high above the forest floor. Its parents spend their day at sea, diving for small fish, returning at dusk to feed their solitary offspring. Like the fog that shrouds the forest, a murrelet’s life is connected to both forest and sea.

Nearby, a Steller’s jay hops along the forest floor scavenging for any morsel of food. Aggressive and incredibly intelligent — they can remember hundreds of different food locations — jays and their fellow corvids (ravens and crows) flourish at the ecologically-rich edges of the redwood forest.

The edges of this once unbroken forest have increased a hundred-fold in a hundred years. Highways, logging, cities, campgrounds, and picnic areas open broad boulevards into the heart of the redwood forest. Thus exposed, murrelet chicks and eggs make easy meals for crafty corvids. As the forest edge expands, the marbled murrelet lives today on the edge of extinction.

You can help! Please keep campsites, picnic areas, and trails free of food. Leave no crumb behind! Together, we can ensure a place in the wild for a rare bird.

The New Tall Tree

Area loggers’ talk of “great timber” first led National Geographic Society naturalist Paul Zahl to Redwood Creek in 1963. On one particular trip, Zahl stopped on the cut-over ridge across from what would become known as the Tall Trees Grove to take some pictures. “While catching my breath, I scanned the treetops before me — then suddenly started. One particular redwood rose above the others like a giant candle. I had already measured its companions — all of them about 320 feet tall . . .”

The Tall Tree of Redwood Creek was measured at 367.8 feet and proclaimed the world’s tallest tree in July 1964. As the torch of the environmental movement in the 1960s, it helped establish Redwood National Park in 1968.

In 1989, the top broke off of the Tall Tree during a winter storm, making it just another tree in the ancient forest. Since then, the title of the world’s tallest tree has changed often, moving from Montgomery Woods State Reserve to Humboldt Redwoods State Park. Many questioned where and when the next tallest tree would emerge.

In the summer of 2006, another tallest tree materialized in Redwood National and State Parks. It towers above all other trees at 379 feet. Many previous contenders grew along nutrient-rich alluvial flats (river bars and flood plains). Not this candidate. It grows on a steep mountainside deep in the backcountry of the parks.

The forest is dynamic, so the world’s tallest tree designation will continue to change. The immense coast redwood forest absorbs individual trees. For all we know, yet another tree stands out there rising above the others like a giant candle waiting to be seen.

SAVE-THE-REDWOODS LEAGUE

The road was dusty and the trip was long back in 1915 when three men traveled from San Francisco to see for themselves the towering trees and the impending effect of the ax. So impressed were Dr. John C. Merriam, Professor Henry F. Osborn, and Dr. Madison Grant that they immediately sought means to preserve redwood groves for future generations.

In 1918 they established the Save-the-Redwoods League and since then the non-profit organization has set aside more than 170,000 acres of redwoods.

Through public donations and matching funds from the State of California, the League purchases stands of redwoods and helps to raise worldwide awareness of redwoods.

Portions of Redwood National and State Parks comprise land donated by the League. The brown and gold signs seen along trails and roadways represent the Memorial Grove Program, started in 1921. More than 950 groves, named for individuals and organizations, have been set up, with more being added each year. They are instrumental in saving redwoods.

The Save-the-Redwoods League has more than 20,000 members from all over the world. If you would like more information about the League, you can contact them at 114 Sansome Street, Room 605, San Francisco, California, 94104, (415) 362-2352. The website address is www.savetheredwoods.org.
Life Among the Limbs

By Laura M. Sturtz

Visitors walking through the redwood forest often feel like children in a room full of adults: all we can see are legs. Lift your gaze from the base of the trees and crane your head back. Observe the massive, high branches of the tallest living things on the planet. There, catch a glimpse of an unseen world flourishing over 300 feet above the forest floor.

Until recently, the secrets of the redwood forest canopy could only be viewed from below. We could look at fallen giants — their mighty limbs shattered — and see evidence of life in the treetops. Acting like archeologists, we tried to piece together an ancient civilization from the ruins. Yet, no one really knew what occurred high in those mighty boughs.

Today researchers have gained access to the heights by shooting rubber-tipped arrows, dragging ropes into the crown, and anchoring the ropes over strong limbs. Climbing up the trees, they observe the creatures that dwell in the canopy. In fact, researchers have discovered an entire forest ecosystem growing in the sky. At 200 to 350 feet up, soil forms on limbs as big as six-feet in diameter. In the crooks of massive trees, leather fern grows in thick mats that can weigh up to a thousand pounds. Huckleberry bushes, Sitka spruce, even other redwoods take advantage and thrive in the moist treetops.

Many birds, mammals, and amphibians flourish in the treetop vegetation. Wandering salamanders, rarely found on the ground, occur by the thousands high above. Other canopy residents like red squirrels and Townsend's chipmunks can be found on the ground but find everything they need in the redwood high-rises.

While we cannot hike through the giant limbs of the tallest trees on Earth, we can imagine this hidden world that scrapes the sky. During your visit to Redwood National and State Parks, pull out along the Howland Hill Road or Newton B. Drury Scenic Parkway, or hike through Stout Grove or Lady Bird Johnson Grove. Lift your eyes from the towering trunks, look up into the loftiest limbs, and wonder what treetop creatures might be gazing down from their world.

The Ties That Binds

By Debbie Savage

The first thing I noticed when I moved to coastal California is the rain — up to 100 inches a year. I soon learned that the rain transforms every level of the forest into a colorful array of fungi in all sizes, shapes, and textures, revealing a hidden world with names like fly agaric, witch's butter, and turkey tail. Intrigued, I observed a trail of fungus from the forest floor to the canopy, searching for a connection.

By maintaining a cool, moist environment, the canopy provides ideal habitat for over 300 species of fungus. Fungus is a collection of filaments or threads that may extend for several miles beneath the surface. These threads (hyphae) produce two types of fruiting bodies, mushrooms and truffles underground. Most fungi obtain nutrients by breaking down leaves, cones, and other forest litter constantly shed from the canopy.

Some fungi infect young tree roots to form a beneficial structure called mycorrhizae (from the Latin mycor for fungus, rhiza for root). By growing into the roots and extending out into the soil, mycorrhizae increase the tree's ability to absorb water and elements such as phosphorus, zinc, manganese, and copper. These filaments also produce antibiotics to protect the roots from disease. In exchange, the fungus receive sugars from the tree’s root system.

Many forest animals rely on fungi in their diet. Chipmunks on the ground and flying squirrels in the canopy dig for truffles. Roosevelt elk, black bears, banana slugs, and millipedes graze on mushrooms. In turn, these animals disperse fungus spores in their fecal pellets, and new fungi grow from the spores. The more I learned, the more I realized that fungi threads bind the old-growth forest community together. It is the thread that connects the canopy to the soil and forms a vast underground transportation system for water and nutrients. Follow that thread the next time you visit and see where it takes you.
states that the Earth turns around the Sun in 1512, and Neil Armstrong walks on the moon in 1969. In human terms, redwoods are timeless.

Within a quilt of habitats, these redwood parks house several animals known as indicator species. As critters found in specific living spaces, they indicate a healthy environment. When they disappear, there’s trouble in paradise. Read about them throughout the guide.

**CHINOOK SALMON**

(Onchorhynchus tsawytscha)

“Spawn ‘til you die” means just once for the fish more commonly known as king, largest of the Pacific salmon. “Hatch, grow, and go” dictates its first six months in freshwater, then it’s off to sea for up to five years, returning with one single-minded purpose: to mate and produce offspring. It’s good to be the king.

Looking Forward to the Past

by Jim Wheeler

Walk into an ancient redwood forest and the variety of plant life you encounter at many different levels may look like the “chaos of nature.” This visual chaos belies an underlying order and stability that is hard for us to perceive in our short lifetimes.

The advent of logging in the 1850s and the suppression of fire after 1900 devastated the redwood forest. Today, with only four percent of the ancient forest remaining, these parks contain close to one-half of all protected primeval redwood forest. Yet more than half of the park acres — over 75,000 — are comprised of logged or second-growth forest. Now, where a naturally chaotic stability once reigned, young, even-aged trees compete for a piece of the sky in conditions so crowded that they choke out nearly all other plants below their canopy. Can we restore the natural chaos?

Visitors who venture into the second-growth forest along Redwood Creek or Mill Creek will discover stands that have more than a thousand small, unhealthy conifer trees per acre. The forest floor is barren, shaded by the dark, closed canopy.

Like a gardener, park managers must consider thinning the forest to encourage forest health and biodiversity.

Thinning second-growth stands will take many decades off the centuries needed to redevelop ancient forest qualities. In order to grow big trees, many young firs (planted for timber production prior to park establishment) will be cut, and a natural mix of redwood, Douglas-fir, Sitka spruce, grand fir, and western hemlock trees will return. By reducing tree density, the remaining trees grow vigorously. With more space and sunlight reaching the forest floor, essential understory plants and trees will grow and animals can return. With different sizes and ages of trees, we can look forward to the park forests supporting diverse wildlife species, as they did in the recent past.

Humans created unnatural order in the forest. Now we must manage the forest to restore the chaos, to restore stability, to restore the ancient redwood forest.

In the process of carving the “Indian Canoe” (Yurok, ohl’ we yoch), native people infuse the craft with spirit and purpose. They choose a large fallen redwood log from the beach or at the edge of the forest — rarely were standing trees felled in the past. The log is split down the middle to produce canoes. The log’s center becomes the bottom of both, providing for stronger hulls and enabling to remove inferior sapwood each canoe. Today, as chainsaws and antler, bone, and two canoes, the carver as he carves out modern tools such steel adzes have replaced and stone tools.

Intricate and indicate the connecting humans, knot carved in the bottom nose, lungs, lifeline, kidneys, and a seat at the stern. Other commonly carved features include eyes, spirit are embodied in the hearth of home and sweathouse, and the heart of the canoe.

These sturdy, beautiful boats provided the main means of travel up and down the Klamath and Smith Rivers, and the ability to haul freight on both the rivers and the coast. The art of carving redwood canoes is still taught. You can see canoes used annually during the Boat Dances on the Klamath and Trinity Rivers. For both Yurok and Tolowa, redwood is a living entity whose life and spirit are imbued in the hearth of home and sweathouse, and the heart of the canoe.

In 2016, we will commemorate the 100th anniversary of the National Park Service. Between today and then, our national parks (and our state parks) face many challenges: increasing budget pressures; human development around park sites; a rapidly growing and mobile population; and a high-speed electronic culture with less time to experience the glory of America’s landscape.

What places will stand as icons for the next generation of Americans? What stories will speak to the common American experience of our children and grandchildren? What will we be able to say about the value of parks to those who will protect them into the future? Our national parks can retain that communal vision of America, in its landscapes and in its stories, if we continue to remember that collectively, “This land was made for you and me.”

(Song lyrics by Woody Guthrie. Used with permission by publisher: Ludlow Music, Inc. NY, NY)
For 2,000 years, the Tolowa people lived in villages amongst the dunes surrounding Lake Earl and relied on the abundant fish, waterfowl, and wildlife supported by the various habitats. The diverse natural resources attracted fur traders, miners, and eventually settlers to the area.

Dense, old-growth stands of spruce, redwood, and Douglas-fir that once blanketed this area fell with the advance of settlers, loggers, and miners. Lake Earl was used to transport redwood logs to the mill that existed on its shores. Misnamed as a lake, it is actually a coastal lagoon with a mix of fresh and salt water. A naturally fluctuating lagoon periodically opens to the sea before being closed off again by a sandbar. Developers dreamed of its potential as a freshwater port and experimented with mechanical devices to control the level of water. During the first half of the 20th century, ranchers and farmers routinely drained the lagoon to create rich pastureland around its perimeter.

In 1977 the California Department of Parks and Recreation and the Department of Fish and Game began a series of acquisitions to protect this unique wetland and delicate area. Today 10,000 acres are administered jointly by the two agencies. In October of 2001, Tolowa Dunes State Park received full status and is one of California’s newest state parks. It was renamed to honor contemporary Tolowa members of the region who have ancestral ties to the area. Together, Lake Earl Wildlife Area and Tolowa Dunes State Park encompass the West Coast’s largest coastal lagoon, numerous ponds, abundant wetlands, long beaches, sand dunes, coastal pine forests, and a wide variety of ecological communities supporting a diversity of plants, animals, and birds.

Lying within the Pacific flyway, Lake Earl and its wetlands serve as an important stopover for thousands of birds. The once endangered Aleutian cackling goose can be observed staging here every spring. Nearly extinct in the early 1970s, the population has recovered to more than 90,000 birds. Other notable species include bald eagles, osprey, and peregrine falcon. More than 300 bird species migrate to the Lake Earl wetlands, but a few species, such as mallards and wood ducks, winter-over and nest locally. A 25-mile network of trails offers access to hikers, bicyclists, and horses. Bring your binoculars to enjoy the wildlife and scenery!

For more information contact:
Tolowa Dunes State Park
1111 Second Street
Crescent City, CA 95531
(707) 465-2145
http://www.parks.ca.gov/
Lake Earl Wildlife Area
www.dfg.ca.gov
Lake Earl Wildlife Information Center
Tolowa Dunes Nature Store
2591 Old Mill Road
Crescent City, CA 95531
(707) 488-2169

Area Information

LOCAL CHAMBERS OF COMMERCE

ARCATA
1635 Heindon Road
Arcata, CA 95521
(707) 822-3619
www.arcatabusiness.com/

BROOKINGS
16330 Lower Harbor Road
Brookings, OR 97415
(541) 469-3181  (800) 535-9469
www.brookingsor.com

CRESCEINT CITY/ DEL NORTE COUNTY
1001 Front Street
Crescent City, CA 95551
(707) 464-3174  (800) 343-8300
www.northernca.com

EUREKA
2112 Broadway
Eureka, CA 95501
(707) 442-3738  (800) 356-6381
www.eurekachamber.com/home.cfm

Humboldt County Convention & Visitors Bureau
1034 2nd Street
Eureka, CA 95501
(800) 346-3482
http://redwoods.info/

KLAMATH
Box 476
Klamath, CA 95548
(707) 482-7165  (800) 202-2335
www.klamathcc.org/

MCKINLEYVILLE
PO. Box 2144
McKinleyville, CA 95519
(707) 839-2449
www.mckinleyvillechamber.com

ORICK
PO Box 234
Orick, CA 95555
(707) 488-2885
www.orick.net

TRINIDAD
PO Box 356
Trinidad, CA 95570
(707) 441-9827
http://discovertrinidadca.com/

AREA ATTRACTIONS

Battery Point Lighthouse Museum
PO Box 535
Crescent City, CA 95531
(707) 464-3089
living history tours — summer only

Del Norte County Historical Society
577 H Street
Crescent City, CA 95551
(707) 464-3922
Northcoast Marine Mammal Center
424 Howe Drive
Crescent City, CA 95531
(707) 465-6265

For fishing, horseback riding, kayaking, and other recreation, contact the local Chamber of Commerce.

Smith River National Recreation Area (SRNRA) invites you to a scenic playground encompassing more than 450 square miles of densely forested mountains, pristine botanical areas, remote wilderness landscapes, high-mountain lakes, and rocky canyons. The Smith River’s watershed contains more than 300 miles of forks and streams. Enjoy 75 miles of hiking trails and several hundred miles of roads, including the Smith River Scenic Byway.

Managed by the USDA Forest Service as part of the Six Rivers National Forest, the SRNRA was created by Congress in 1990 to protect the area’s special scenic value, natural diversity, cultural and historical attributes, wilderness, wildlife, fisheries, and the Smith River’s clean waters.

Dedicated and protected as part of the National Wild and Scenic River System, this crown jewel begins high in the Siskiyou Mountains and flows freely, without a dam, for its entire length, the only major river system in California to do so. The SRNRA offers a year-round menu of recreational opportunities:

Winter Whitewater Challenges.
Smith River tenders surprises for even
Patrick’s Point State Park

In the past, the Yurok people had permanent village sites north and south of Patrick’s Point and used the current park area as a seasonal encampment. Established in 1929, Patrick’s Point State Park includes this seasonal encampment among its 640-acres of spruce forest, rocky overlooks, and quiet beaches.

In the fall of 1990, the newly constructed Yurok Village of Sumeg (a place name for the Patrick’s Point area) opened to the public. The village was built to preserve and carry on the traditions of the Yurok lifestyle. The Sumeg village consists of three family houses, a sweathouse, dance pit, three changing houses, and a redwood canoe. A native plant garden, full of plants used by the Yurok people, grows next to Sumeg Village. Today, the Yuroks and neighboring tribes use this village to instruct their youth and share their traditions with the public.

The park is open year round, with day use areas open sunrise to sunset. Park activities include 10 miles of hiking trails, beachcombing, Sumeg Village, whale watching, and visitor center. The campground is open year round with car, group, and hike/bike campsites available. Reservations are recommended in the summer months.

Location: 25 miles north of Eureka and 56 miles south of Crescent City, take the Patrick’s Point Drive exit off Highway 101.

For more information contact:
Patrick’s Point State Park, 4150 Patrick’s Point Drive, Trinidad, CA 95570, (707) 677-3570 or 677-1945, http://www.parks.ca.gov/
Backcountry Basics

REGULATIONS

✔ Pets, firearms, motorized vehicles, and hunting are prohibited on park trails.
✔ Feeding or intentionally disturbing wildlife is illegal and carries a fine.
✔ Store food, garbage, cooking gear, and all other items in food storage lockers provided in campgrounds;
food storage lockers are available at Kuchel Visitor Center; or suspended in a tree, at least 10 feet above ground and 4 feet out from the trunk.
✔ Mushroom gathering or possession is illegal.

HORSES

Horses are welcome on the following trails. Walk your mount when approaching hikers or riders.

- Little Bald Hills Trail - access from Howland Hill Road
- Mill Creek Horse Trails - access from Bertsch Avenue off Howland Hill Road - day use only
- Orick Horse Trail - Check at a visitor center

Backcountry Horse Regulations:

✔ Permits are required for overnight use on Orick Horse Trail.
✔ Camp only in designated sites.
✔ Carry only pellets or weed-free feed.
✔ Animals may not graze park vegetation.
✔ Animals must be hobbled or tied to a hitching post when unattended.

HIKING SAFETY

✔ Filter water or bring it to a boil to be safe from Giardiasis, an intestinal disorder caused by a microscopic protozoan.
✔ River conditions in Redwood Creek can change at any time. When fording water that’s above your knees, un-buckle water and chest straps on your backpack. Brace yourself with a sturdy stick for solo crossings or interlock arms with fellow hikers. Seal important items in plastic bags.

To avoid hypothermia, stay dry (bring lots of good raingear); stay out of the wind; do not wear cotton, the new synthetics are better; use a hat and gloves to preserve body heat. If you experience uncontrollable shivers, slurred speech, and fumbling hands, hypothermia is setting in. Remove all wet clothing, get into dry clothing and a sleeping bag, and drink warm fluids.

Leave No Trace

Plan ahead and prepare: Inquire about the area you plan to visit; bring proper equipment; repack food into reusable containers to reduce trash; select terrain and mileage compatible with your entire group; know the regulations.

Camp and travel on durable surfaces:
Stay on established trails; do not short-cut switchbacks (it is destructive and illegal); don’t clear new ground for camping; camp in designated campsites to limit impacts to the resource.

Pack it in, pack it out:
Pack out all unburnable trash; carry plastic bags for garbage; do not throw garbage into pit toilets; leave your site in better condition than you found it.

Properly dispose of what you can’t pack out:
Use pit toilets when available or bury human waste in a 6- to 8-inch-deep cat hole 100 feet away from any water; wash yourself and dishes 100 feet away from streams/ocean; strain food particles from waste water and scatter it well away from campsite and 100 feet away from waterways.

Minimize use and impact of fires:
Strive to use portable stoves only; fires are restricted to designated fire pits (except on Redwood Creek gravel bars); collect dead and down wood only; keep fires small and contained; check fire danger level at a visitor center before you go.

Leave what you find:
Collecting or disturbing natural features, plants, rocks, antlers, and cultural or archeological resources is forbidden.

Backcountry Campsites

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** 44 Camp is closed to horses, open to backpackers.
Check Redwood Creek height during winter when seasonal bridges are out.
Dispersed camping is allowed only at Redwood Creek, which contains no amenities.

$ Miners Ridge and Ossagon Creek are fee sites; Obtain permit and pay fee at Prairie Creek entrance station.
ELK WATCHING

The northern redwood region's most often seen land mammal is the Roosevelt elk. One of the most popular elk-watching spots is along the Newton B. Drury Scenic Parkway in Prairie Creek Redwoods State Park. Elk Prairie is 35 miles south of Crescent City and six miles north of Orick. The open area on both sides of the parkway allows good year-round viewing of the herd, mostly females and calves. Large bull elk with magnificent antlers are commonly seen at Elk Prairie during the fall mating season. Calves are born in May and June.

You may see elk a few miles south of Elk Prairie off Highway 101 along Davison Road. If you follow the unpaved Davison Road (motorhomes and vehicles with a combined length of more than 24 feet are prohibited) eight miles to Gold Bluffs Beach (day-use fee area) you may take advantage of the only opportunity to see and photograph these majestic animals on the beach.

Travel eight miles along Bald Hills Road (½ mile north of Orick off Highway 101; motorhomes and trailers not advised) to reach one of the most picturesque areas for elk watching. Oak woodlands and grasslands with Redwood Creek far below provide a grand backdrop for grazing elk surrounded by ancient redwoods.

South of Orick on the oceanside of Highway 101, lone bulls and herds of as many as 30 cow elk may be seen grazing at Stone and Big Lagoons.

Bulls of this largest subspecies of North American elk can weigh as much as 1,200 pounds and are aggressive in guarding their cow elk harems.

REMEMBER that Roosevelt elk are wild animals. NEVER APPROACH THEM.

About Cougars

Cougars, or mountain lions, are large, seldom-seen inhabitants of Redwood National and State Parks. Like any wild animal, they can be dangerous. Mountain lion sightings have increased over recent years. If you should be among the few people to see a cougar, the following suggestions can help ensure a safe experience:

Prevent an encounter
• Do not hike alone.
• Keep children in sight; do not let them run ahead of you on the trail.
• Keep a clean camp.
• Be alert to your surroundings.

If you meet a mountain lion
• Do NOT run!
• Do NOT crouch or bend over.
• Stand up and face it.
• Pick up young children.
• Appear large; wave your arms or jacket.
• Do not approach the lion; slowly back away.

If a mountain lion attacks
• Do NOT turn your back or take your eyes off it.
• Shout loudly.
• Fight back aggressively.

Report all mountain lion sightings to a ranger immediately. Call (707) 464-6101 or stop by any park visitor center. A description of the animal, the location, date, time of day, the cat’s behavior, and duration of the sighting can help park managers protect visitors and lions.

About Bears

Like all animals in our parks, bears are wild. Inviting them into your picnic or camp — on purpose or accidentally — can result in damage to your equipment, you, or the bear. Bears are memory retentive and quickly grow accustomed to human foods. Wildlife managers may have to destroy bears that repeatedly visit areas where they encounter people. So that visitors continue to enjoy seeing free-roaming bears, and to avoid personal injury, please follow these precautions:

• Keep a clean camp. A bear uses its nose to read your menu. Food odors will invite a bear to pay you a surprise visit — not a good thing.
• Store food in airtight containers or wrap it carefully. Use bear-proof lockers; when they are not available, lock food in the trunk of your vehicle and/or out of sight.
• Dispose of all garbage in bear-proof trash cans or dumpsters.

Animals will often beg for food. Do NOT feed them. Once fed, animals often become increasingly aggressive in their demands for more.

A Fed Bear Is A Dead Bear.
Old-growth forest ecosystems of the Pacific Northwest are dominated by large conifers which range in age from 250 to beyond a thousand years. Twenty-five conifer species are in these forests. In southeast Alaska and coastal British Columbia, Sitka spruce tends to be dominant; Douglas-fir in Oregon, Washington State, and inland B.C.; and the stately coast redwood, largest of all, in northern California.

Younger forests share some characteristics with old-growth woodlands; however, only in old-growth forests are all of the following features present at the same time.

- **Large living trees and a multi-layered canopy.** Old and younger trees grow together in a mixture of species. The larger trees, 200 feet tall or more, have wind-damaged tops and relatively few large branches and thick growth of mosses and lichen harboring many insects, birds, and small mammals. The huge trunks often survive fires, for they are reservoirs, which hold thousands of gallons of water protected by thick bark. The uneven canopy is efficient at trapping moisture, even from thin fog during drier seasons. Bacteria living on the leaves of certain lichen capture nitrogen, essential for plant growth, from the atmosphere.

- **Large standing snags.** Dead snags may remain standing for more than 200 years. As their branches slough off, sunlight can reach the forest floor and allow species that require light, such as Douglas-fir, to germinate. Insects and woodpeckers open up the dead wood, providing habitat for many other species. In turn, these creatures become food for the northern spotted owl, marten, black bear, and other larger predators.

- **Large down trees.** Logs, 50 tons per acre or more in stands of Douglas-fir, crisscross the forest floor, helping to hold steep soils in place. Over a period of 200 to 500 years, as the logs decay, dozens of species of insects, birds, and mammals use them for shelter or food. All this activity helps raise concentrations of nutrients such as phosphorous and nitrogen in the rotting wood, and the rootlets of nearby live trees tap them for food. Like live trees, down logs can hold extraordinary amounts of water. Often rotten sapwood from such logs can be wrung out like a sponge.

- **Large fallen trees in streams.** Old-growth forests shape their streams in complex ways. Fallen trees lie in random patterns in small headwater streams. Since run-off is not powerful enough to dislodge them, such logs form semi-permanent "staircases" that hold woody debris long enough for 70 percent of it to be processed as food and shelter by insects and bacteria. Fish benefit from the pool-forming ability of the forest floor by not only having the insects available for food, but also having shelter from storm run-off and temperature-controlled waters. Studies show that populations of large salmonoids, such as coho salmon and cutthroat trout, are directly related to pool volume on a stream. Given a choice between pools, large fish always congregate in the one with the most large woody debris. Fish are an end product of the old-growth forest. When northwestern fisheries declined disastrously after World War I, overfishing was blamed. Recent research suggests that this was instead the consequence of the destruction of old growth in the coast ranges, a distress signal that no one understood.

Today there are three coast redwood drive-through trees along the Highway 101 corridor in northern California. All are on private lands, all charge admission. From north to south, they are:

- Klamath Tour-Thru Tree in Klamath. Take the Terwer Valley exit.
- Shrine Drive-Thru Tree in Myers Flat. 
- Chandelier Tree in Drive-Thru Tree Park in Leggett. Follow signs off Highway 101.

Whether we drive through, walk beside, or peer skyward more than 300 feet to the tops of these towering ancient giants, their scale and timelessness capture our imagination and inspire our care.

A flock of brown pelicans flies by. One breaks formation and — like a lightning bolt — dives for fish from 50 to 60 feet up in the air!

**DID YOU KNOW?**
The endangered brown pelican’s bill can hold more than its belly!
Ranger Specials: Short Order Trails and Tent Camping

Tired of bologna on white bread or fighting the crowds for fast food? No time or money for fillet mignon? May we suggest a few of these special short order trails and tent camping recommendations? They are all located off the beaten path, served up daily, and at price that’s tough to beat—FREE!

Short Order Trails

Trillium Falls Trail – 2 1/2 mile loop
For starters: an Elk Meadow with a side of wetlands; followed by a healthy serving of old-growth redwoods topped with a waterfall. Are you hungry for a hike yet? Take Davidson Road to the Elk Meadow Day Use Area. RVs welcome.

Ah Pah Interpretive Trail - .8 mile roundtrip
Want a sweet taste of the park’s efforts in watershed restoration? Mmmm… does that sound appetizing? Take a self-guided walk on a path that used to be an old logging road. Get a taste for the how and why watershed restoration is helping the redwood forest. Your efforts won’t go unrewarded. Located on the north end of Newton B. Drury Parkway at milepost 133.50; watch for signs.

Nickerson Ranch and Mill Creek Trail - 3 mile loop
Only three delicious miles, Nickerson Ranch Trail serves up hearty dose of old-growth redwoods stacked higher than slapsjacks. You can only dream of pure maple syrup flowing in unrestricted Mill Creek. Relish the day as you meander from creek to forest and forest to creek. Take Howland Hill Road and park at Boy Scout Tree Trail. Enjoy.

Short Order Tent Camping

Got a tent? Do you want a campsite for up to five days with no fees, no permits, and first-come first-serve? Sound mouth-watering? check out this plateful of primitive camps:

Flint Ridge Primitive Camp - .25 mile hike (one way)
A scrumptious little spot near the mouth of the Klamath River with all the fixings: 11 campsites, picnic tables, fire pits, toilets, old-growth redwoods within walking distance, and bear proof lockers. Set your sights to the north end of the Coastal Drive, just south of the Klamath River.

Nickel Creek Primitive Camp - .5 mile hike (one way)
Want one of the best little near-shore marine campsites around, with beach access that serves up, twice daily, some of the best tidepooling around? This little spot comes with all the condiments: 5 campsites, picnic tables, fire pits, toilets, and bear proof lockers. Head to the south end of Enderts Beach Road, off the Coastal Trail, located just three miles south of Crescent City.

Quick Serve Beaches

Picnicking at the beach has never been better than at Crescent Beach, Wilson Creek, Gold Bluffs Beach, and Freshwater Lagoon Spit. You can fill your palate with beachcombing, fishing, and relaxation. Check out the Official Map and Guide to find these locations north to south.

DID YOU KNOW?
Freshwater mussels live up to 140 years old! They are one of the most endangered group of animals on the planet due to over harvesting for buttons and water quality conditions, such as pollution and sedimentation. Please leave them where you find them. Right: western pearlshell (Margaritifera falcata) photo by William Leonard.

Four Short Walks

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<tr>
<th>WALK</th>
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<tbody>
<tr>
<td>Stout Grove</td>
<td>Travel on Hwy 101 south in Crescent City. Turn onto Elk Valley Road, drive 1 mile to Howland Hill Road. Can also be accessed 2 miles east of Hiouchi off Hwy 199.</td>
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<tr>
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<tr>
<td>Simpson–Reed Nature Trail “Barrier-free”</td>
<td>Park on shoulder of Hwy 199, 2 miles west of Hiouchi Information Center (6 miles east of Crescent City).</td>
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<tr>
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<tr>
<td>Lady Bird Johnson Grove and Nature Trail</td>
<td>Travel on Hwy 101 to Bald Hills Road (1/2 mile north of Orick). Turn right and travel 2 1/2 miles on Bald Hills Road.</td>
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<tr>
<th>WALK</th>
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<tr>
<td>Cathedral Trees Trail/Foothill Trail</td>
<td>Big Tree Wayside</td>
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Four Scenic Drives

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<tr>
<td>Howland Hill Road</td>
<td>Travel Hwy 101 south in Crescent City. Turn onto Elk Valley Road, drive 1 mile to Howland Hill Road. Can also be accessed 2 miles east of Hiouchi off Hwy 199.</td>
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<tr>
<td>Coastal Drive</td>
<td>From the north: travel Hwy 101 to Klamath Beach Road and follow to Coastal Drive. From the south: travel Hwy 101 to Newton B. Drury Scenic Parkway, then 7 miles to Coastal Drive.</td>
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<tr>
<th>DRIVE</th>
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<tr>
<td>Gold Bluffs Beach/Fern Canyon Road</td>
<td>Travel Hwy 101 to Davison Road, 2 miles north of Orick.</td>
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<th>TIME, DISTANCE, &amp; FEATURES</th>
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<tr>
<td>1 hour, 1/2 mile, loop</td>
<td>Beautiful, easy walk in a river-bottom group of redwoods. Paved trail from parking lot to redwood flat that is fairly steep.</td>
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<tr>
<td>1 hour, 3/4 mile, loop</td>
<td>Flat stroll on self-guided nature trail with large redwoods, octopus trees (hemlock), and many redwood-associated plants.</td>
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<tr>
<td>2 hours, 2 miles, loop</td>
<td>Easy walk on self-guided trail through beautiful redwood grove. Distant views of ocean. Picnic sites available at the trailhead.</td>
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<tr>
<td>7 miles one way</td>
<td>Old-growth redwoods, ferns, numerous trailheads, Big Tree Wayside, Roosevelt elk.</td>
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<tr>
<td>8 miles one way</td>
<td>Magnificent views of ocean, mouth of Klamath River and its estuary. Whales, sea lions, and pelicans often seen from overlooks. Flint Ridge trailhead about 3 miles from Hwy 101 on Klamath Beach Road.</td>
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<tr>
<td>8 miles one way</td>
<td>State park day-use fee is charged. Four miles of spectacular beach, Roosevelt elk watching, Fern Canyon: a botanical wonder (30-foot canyon walls covered with numerous fern species).</td>
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What You Need to Know!

**PETS**—Pets are wonderful creatures that give comfort and companionship; however, a national or state park is not the best place for them. Domestic dogs or cats retain their instinct to mark territory with scent and may spread domestic diseases to wild animals. Unleashed pets may chase wildlife, causing the animals to be injured or leave their territory. Your unleashed pet may get lost and become a meal for a coyote or mountain lion.

*If you bring your pet, please remember the following:*
- Pets must remain on a leash under six feet in length while they visit Redwood National and State Parks.
- Your leashed pet is only allowed at Crescent and Gold Bluffs beaches, parking and picnic areas, state park campgrounds, and national and state park roads.
- Pets (dogs!) are not allowed on trails.
- Only guide animals are allowed in park buildings or at interpretive programs.

**PARK ANIMALS**—Let’s keep them wild! Do not approach or feed any park animals.

**PLANTS**—You are welcome to harvest berries for immediate consumption, but plants, mushrooms, cones, and flowers are protected and removal is prohibited.

**LITTER**—Place all garbage in trash cans or bear-proof receptacles. Do not stuff garbage cans to overflowing or place garbage outside of cans. Please use recyclable bins found throughout the parks. Help keep the parks clean. Save a bear.

**BEAKS**—Inspect your body thoroughly after a hike. Check your socks and your shirt into your pants. Light-colored clothing. Tuck pant legs into socks. Use light-colored clothing. Dark-colored ticks can be seen most easily on light-colored clothing. Tuck pant legs into your socks and your shirt into your pants. Light-colored clothing. Use light-colored clothing. Tuck pant legs into your socks. Light-colored clothing.

**TICKS**—Ticks that carry Lyme disease occur in this area. Stay on trails and check your clothing frequently. Dark-colored ticks can be seen most easily on light-colored clothing. Tuck pant legs into your socks and your shirt into your pants. Light-colored clothing.

**We NEED Your HELP!** Please properly dispose of trash at trailheads and campgrounds to decrease the possibility of corvid predation on marbled murrelets, an endangered species in California.

**BEACHES**—Plan ahead before exploring our diverse beaches. Check for storms or high surf advisories. Know the tides; tide charts are available at visitor centers. Expect sneaker waves—always face the water. Sneaker waves appear without warning and often surge up on the beach with deadly force. You cannot outrun a sneaker wave. If pulled into the surf, stay calm, call for help, and swim with the wave. Supervise children and have them wear a life jacket. Sneaker waves account for 63 percent of weather-caused fatalities on the North Coast.

**Tsunami PRECAUTIONS**—Earthquakes beneath the ocean floor can cause a series of large waves. If you feel a strong earthquake while on the coast, immediately move inland and to higher ground; a tsunami may be coming. Stay away from the coast. Big waves can occur for hours. Wait for an official "all clear" on the radio.

**Logging Trucks**—Logging trucks rumble down Bald Hills Road.

Maps, Field Guides, & Books

Five visitor centers operate within Redwood National and State Parks. A wide range of educational material covering the redwood forests, the seashore, other natural history topics, and regional human history is available. Information and gifts for all ages.

Redwood Park Association and the North Coast Redwood Interpretive Association are not-for-profit cooperating associations, established to aid and support the interpretive programs within Redwood National and State Parks. Proceeds from sales are returned directly to the parks for visitor programs, museum activities, research, library operations, exhibits, and publications. Park maps, information, and publications are available at the following locations:

- Hiouchi Information Center — Located on Highway 199. Open daily 9 A.M. to 6 P.M. during the summer months.
- Jedediah Smith Visitor Center — Located in Jedediah Smith campground. Open daily 9 A.M. to 5 P.M. during the summer months, also during evening campfire programs. Winter months, when staff is available.
- Crescent City Information Center — Located at 1111 Second Street, Crescent City. Summer hours 9 A.M. to 6 P.M. daily. Winter hours 9 A.M. to 4 P.M. daily.
- Prairie Creek Visitor Center — Located off Newton B. Drury Scenic Parkway. Summer hours 9 A.M. to 5 P.M. daily. Winter hours vary.
- Kuchel Visitor Center — Located one mile south of Orick on Highway 101. Summer hours 9 A.M. to 6 P.M. daily. Winter hours 9 A.M. to 4 P.M. daily.

All visitor centers are handicap accessible.