

Volcanic Vistas

Discover National Forests in Central Oregon

Summer 2009

Celebrating the re-opening of Lava Lands Visitor Center

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What's Your Interest?

The Deschutes and Ochoco National Forests are a recreation haven. There are 2.5 million acres of forest including seven wilderness areas comprising 200,000 acres, six rivers, 157 lakes and reservoirs, approximately 1,600 miles of trails, Lava Lands Visitor Center and the unique landscape of Newberry National Volcanic Monument. Explore snow-capped mountains or splash through whitewater rapids; there is something for everyone. It's easy to see that Mother Nature worked overtime here.



LAWRENCE A. CHITWOOD EXHIBIT HALL

DEDICATED MAY 30, 2009

The Exhibit Hall at Lava Lands Visitor Center is dedicated in memory of Larry Chitwood with deep gratitude for his significant contributions enlightening many students of the landscape now and in the future.



Lawrence A. Chitwood (August 4, 1942 - January 4, 2008)

Larry was a geologist for the Deschutes National Forest from 1972 until his retirement in June 2007. Larry was deeply involved in the creation of Newberry National Volcanic Monument and with the exhibits dedicated in 2009 at Lava Lands Visitor Center.

He was well known throughout the geologic and scientific communities for his enthusiastic support for those wishing to learn more about Central Oregon. Larry was a gifted storyteller and an ever-flowing source of knowledge.

Welcome to Central Oregon!

The Deschutes and Ochoco National Forests along with the Crooked River National Grassland encompass just over 2.5 million acres of Central Oregon.

These public lands extend about 100 miles along the east side of the Cascade Mountains crest and eastward into the Ochoco Mountains. They are rich in human and natural history and radiate variety offering a multitude of diverse scenic and recreation opportunities. Alpine forests and lush meadows, sparkling lakes and scenic rivers, dense evergreen forests, and lava caves are contained within the spectacular snowcapped volcanic peaks of the Cascade Mountain Range to the west and high desert to the east. Newberry National Volcanic Monument offers an up close and personal look at volcanoes and is home to the endangered pumice grape fern.

This year, we're very proud to reopen the Lava Lands Visitor Center with its recent remodel and new exhibits after two year's construction at the site. It was many years' in planning and design, so to see it come to life is thrilling! We hope that you enjoy the new exhibits at Lava Lands and your time on your public lands here in central Oregon.

John Allen
Forest Supervisor
Deschutes National Forest

Jeff Walter
Forest Supervisor
Ochoco National Forest & Crooked River National Grassland



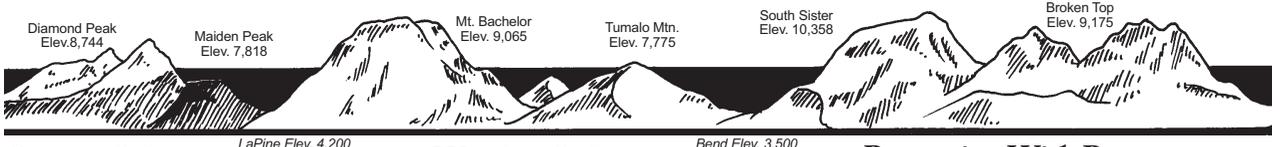
left to right: Jeff Walter & John Allen



The interpretive themes of the new exhibit hall showcases how Central Oregon geology, ecology, climate and culture are interwoven. With the assistance of various partnerships, the Forest Service is able to showcase the latest information on topics ranging from volcanic activity in the Cascade Mountains to Paleo-Indian technology. New activity exhibits will allow visitors to explore the bottom of Paulina Lake, test the weight and buoyancy of local rocks, examine the molar of a Columbian mammoth, and experience the sights and sounds of an active volcano.

Be Safe!

In an emergency dial 911



Outdoor Safety

When venturing out for the day, know your limitations. Always carry food and plenty of water... and drink it! Wear sturdy footwear, the terrain here can be rugged and unforgiving. A hat and sunscreen are advisable to protect against heat and sunburn. Do not hike alone. Tell someone your trip plans (destination and estimated return). Use maps. If your vehicle breaks down, stay with it. It is much easier to find a vehicle than a wandering person. Should you find yourself in trouble, don't panic. If you have your ten essentials and have followed basic precautions, help will be on the way.

Cell phones should not be relied upon as a top priority safety item. Many areas within and adjacent to the Wilderness areas do not have full coverage so service is not always available and batteries wear out without warning.

Ticks and Mosquitoes - Ticks can be found wherever there is vegetation and mosquitoes wherever there is moisture. Prevention is best. Wear light colored clothing, a long-sleeved shirt and pants (tucked into your socks in tick country). Insect repellent containing DEET can be sprayed on your clothing to help repel the little critters. Should you find a tick, remove it immediately. Place tweezers as close to the tick's head as possible. GENTLY pull the tick off.

Do you have the "10 Essentials" with you?

- Compass
- Extra clothing
- Extra food/water
- First aid
- Headlamp/flashlight
- Knife
- Map
- Sunglasses
- Waterproof matches and/or lighter
- Fire starter

Weather Safety

Central Oregon's weather can change drastically in a short period of time. Be aware whether you're hiking, boating, backpacking or just sightseeing. The summer temperatures can reach 100 in the daytime and may dip into the 30s at night. It can snow in July! Be prepared!

Carrying plenty of water is a must on any outing. Mountain streams look refreshing but could contain the parasite giardia. Before drinking water from these sources, boil it 3 to 5 minutes, or use a 1-micron portable water filter. A hat and sunscreen are advisable to protect against heat and sunburn. Carry a little food, a windbreaker and have a safe visit.

Weather Averages

Warmest Month	Mid-June, July and August
Warmest Day	August 1990, 103° F (39.4° C)
Coollest Months	December, January and February
Coldest Day	January 1980 -23° F (-30.6° C)
Average Yearly Rainfall	11-19 inches
Average Yearly Snowfall	15-77 inches
Average Days with Sunshine	271 days

Lightning, One Strike, You're Out

Thunder and lightning storms occur frequently. If you are caught in a storm, follow basic safety procedures. Start counting when you see the lightning and stop when you hear the thunder. A ten second count means that lightning is two miles away (4-5 seconds per mile).

Be safe:

- ★ Take cover indoors.
- ★ Swimming, boating, fishing, **get out** of the water. If your hair stands on end, take immediate action.
- ★ Stay out of windows and doors.
- ★ **Avoid trees.** Go to a low area.
- ★ A car provides the best cover - roll up all windows, do not touch any metal parts.
- ★ While hiking, carry a 4 foot square piece of polyethylene as an insulator, crouch down on it, **knees and feet together.** Crouching lessens your chances of becoming a lightning rod.
- ★ Groups attract lightning - separate.
- ★ Get away from rocks. Rocks don't hold much water and your body does.
- ★ Get off your horse. It may have metal shoes, bit and rigging in the saddle. If time, unsaddle your animal and put it in the brush.
- ★ Turn off and move away from electronic devices.

Recreating With Pets

Many people recreate with their pets both summer and winter on National Forest lands and trails. You are responsible for the safety of your pet as well as for the safety of others.

- ★ Dogs are required to be on leash in developed recreation sites on Forest Service lands which includes campgrounds, day-use areas, and trailheads. Leashes are also required on all day-use areas along the Deschutes River corridor between Benham East and Meadow Camp from May 15 thru September 15.
- ★ Only a portion of the Three Sisters Wilderness requires dogs to be leashed and under physically restrictive control from May 15 thru September 15. Dogs are required to be on leash at Moraine Lake, Green Lakes, Todd Lake, Broken Top and associated trails.

★ On most trails, dogs are not required to be on leash but must be within 15 feet and under reliable physical or voice control at all times.

★ Keep pets under control to prevent fights with other dogs, harassment to wildlife, or injury of other people.

★ Provide your pet with water at these higher altitudes.

★ Avoid taking your pet on jagged rocks and sharp surfaces found on the volcanic terrain.

★ If you lose your pet, call the Humane Society of Central Oregon at 382-3537.

★ If you find a pet, call the Bend Bulletin at 385-5809 to run a "Found Pet" ad for free.

Car Clouting-15 Seconds or Less

Trailheads, parks and monuments have become increasingly popular sites for car clouting, vandalism and thefts from vehicles. Car clouters prefer to prowl parking lots and campgrounds. If you are hiking or tent camping, take all of your valuables with you or keep them hidden in your trunk. Notify authorities immediately if you see suspicious characters or if you are a victim of car clouting or any other crime.

Volcanic Vistas

Editor Les Moscoso
Graphic Design Margot Bucholtz
Larry Berrin

A Special Thank You to all the contributing writers, artists and photographers.



Production of this publication is through a partnership between the Discover Your Northwest (DYNW) and the Deschutes National Forest.

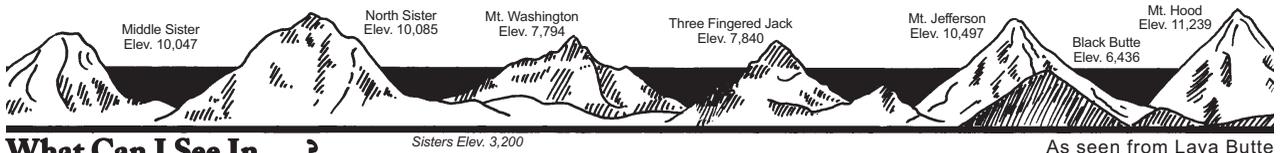
Helpful Web Sites

Deschutes & Ochoco National Forests	www.fs.fed.us/r6/centraloregon
Northwest Forest Pass (to purchase)	www.naturenw.org
U.S. Forest Service	www.fs.fed.us
Bureau of Land Management	www.blm.gov
National Park Service	www.nps.gov
Oregon State Parks	www.prd.state.or.us
Central Oregon Visitors Association	www.covisitors.com
High Desert Museum	www.highdesert.org
Wildlife Viewing Site	www.fs.fed.us/r6/centraloregon/wildlife
The Museum at Warm Springs	www.warmsprings.biz/museum
Sunriver Nature Center & Observatory	www.sunrivenaturecenter.org

Need More Information?

Deschutes National Forest	383-5300
Bend/Fort Rock Ranger District	383-4000
Sisters Ranger District	549-7700
Crescent Ranger District	433-3200
Bend Seed Extractory-tours by appt.	383-5481
Redmond Air Center- tours by appt.	504-7200
Ochoco National Forest	416-6500
Crooked River National Grassland	475-9272
Paulina Ranger District	477-6900
Lookout Mountain Ranger District	416-6500
Lava Lands Visitor Center	593-2421
Historic Paulina Lake Guard Station	536-8802

Go To Special Places



What Can I See In?

If you are new to Central Oregon, or just looking for something new to do, here are a few suggestions tailored to fit just about any schedule. Find the location where you want to start and you're on your way to new discoveries.

Lava Lands Visitor Center

One Hour – See Visitor Center, hike Trail of Molten Land or drive Lava Butte.

Two Hours – Explore Lava River Cave or drive to Benham Falls Day Use Area to hike the falls trail.

Half Day – Add a visit to Lava Cast Forest.

All Day – Add a trip to Newberry Caldera or a visit to the High Desert Museum or visit the Sunriver Nature Center and Observatory.

Newberry Volcano

One Hour – Stop at the Paulina Creek Day Use Site or see the Big Obsidian Flow.

Two Hours – Hike the Big Obsidian Flow Trail or drive to the top of Paulina Peak.

Half Day – Hike Paulina Lake Trail or Paulina Peak Trail.

All Day – Hike a one-mile nature trail at East Butte Lookout.

Cascade Lakes Area

One Hour – Visit Historic Elk Lake Guard Station on Cascade Lakes Scenic Byway.

Two Hours – Hike the Ray Atkeson Trail at Sparks Lake or ride Mt. Bachelor's Sunrise Chair to the Summit for a spectacular panoramic view.

Half Day – Float on Hosmer Lake, fish any of the Cascade Lakes, or hike Todd Lake for wildflowers in July & August.

All Day – Hike 10-miles round trip to Green Lakes.

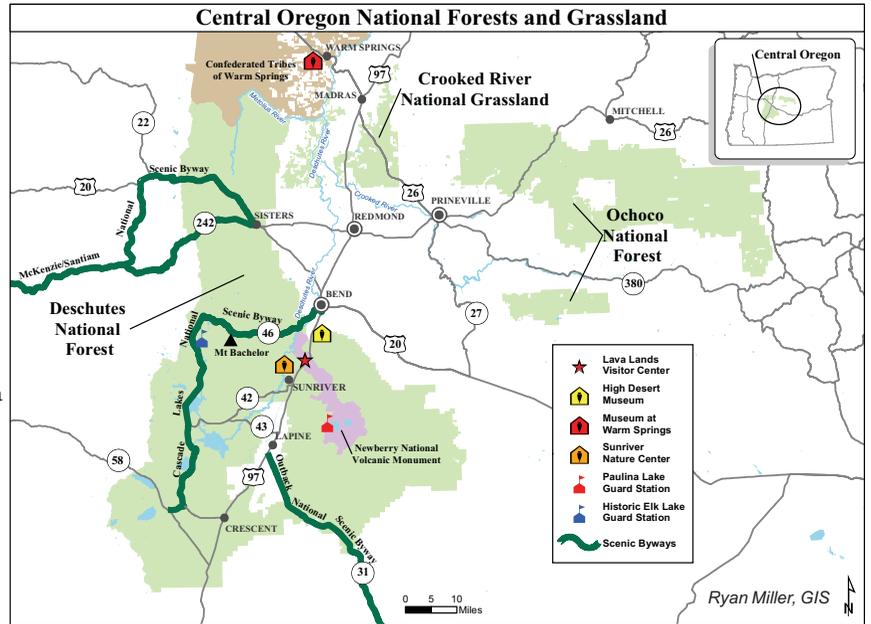
Crescent Area

One Hour – Visit Crescent Lake or Odell Lake.

Two Hours – Drive to Walker Mountain Lookout.

Half Day – Drive to Big Marsh near Davis Lake and hike two-mile Nature Trail.

All Day – Drive Cascade Lakes Scenic Byway to see eagles, osprey and other wildlife at Davis Lake, Wickiup Reservoir and Crane Prairie Reservoir.



Sisters Area

One Hour – Drive to head of the Metolius River, see Mt. Jefferson and hike the river trail.

Two Hours – Visit Wizard Falls Fish Hatchery on Metolius River.

Half Day – Hike Metolius River Trail or to top of Black Butte.

All Day – Drive McKenzie Pass to Dee Wright Observatory then to Proxy Falls, return via Santiam Pass.

Prineville Area

One Hour – Crooked River National Grassland - hike the paved Rimrock Springs trail for some great spots to view birds.

Two Hours – Drive to Big Summit Prairie in summer for the wildflowers or up Crooked River to hike Chimney Rock Trail or tour Rimrock Springs for birds and wildlife.

Half Day – Drive to Mill Creek Rd to see Stein's Pillar and Brennan Palisades, return to Prineville via Harvey Gap or visit The Museum at Warm Springs.

All Day – Visit Prineville Reservoir State Park for boating, fish Crooked River and hike Chimney Rock Trail.

Looking for a Hike on the Deschutes National Forest?

See page 13

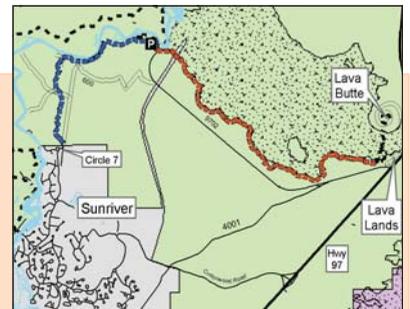
Discovering the Deschutes River and Black Rock Trail

The fresh smell of ponderosa pine and the soothing sounds of the nearby Deschutes River will greet you as you begin to explore the Deschutes River Trail starting just outside of Circle Seven in Sunriver and intersecting with the Black Rock Trail at the Benham Falls East parking lot while ending at Lava Lands Visitor Center. During the fall of 2003 a seven and a half mile trail was completed by the U.S. Forest Service giving bikers, hikers, and sightseers recreational opportunities to experience and see a part of Central Oregon's unique landscape. When exploring the first three miles of the trail you will wind through a gentle sloping forest overlooking the Deschutes River. You may be fortunate to see different types of wildlife associated with the forest and riparian areas along the river. Animals that inhabit the area include deer, elk, coyote, raccoon, and a variety of birds including eagles and osprey.

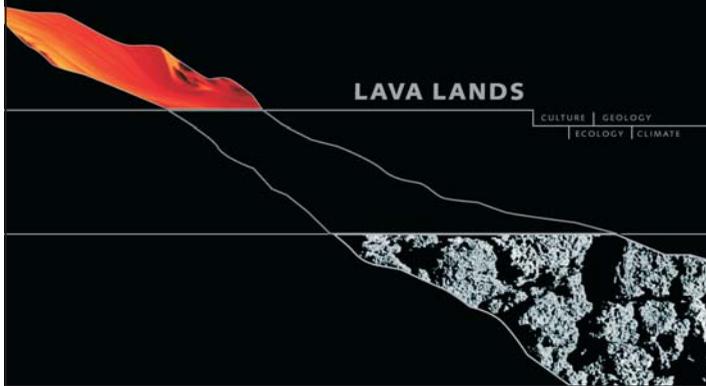
The Benham Falls East parking area located at mile marker three provides an excellent setting for taking a break and learning about the history of the area through several interpretive signs. There are restrooms and picnic tables scattered throughout a giant stand of ponderosa pine hundreds of years old. These magnificent orange and yellow trees were left by the Shelvin-Hixon Timber Company so their families could enjoy picnic outings near the river in a park-like setting. The ponderosa pines tell a story of the historical significance of the area associated with the Deschutes River. This is explained at the half mile interpretive trail to Benham Falls and the quarter mile interpretive loop to the old mill site. Forest Service Road 9702 at Lava Butte will take you to the Benham Falls parking area.

The last section of trail to Lava Lands Visitor Center skirts the flanks of a seven thousand year old lava flow from Lava Butte. Lava from this flow backed up the Deschutes River creating many of the cascading waterfalls on the river as you head towards Bend. Lava Lands offers an excellent place to fill your drinking water, take a break, and enjoy displays and exhibits that speak to the past and present features that continue to shape Central Oregon. The best times to use the Deschutes River and Black Rock Trail are May through September. You can start on either end of the trail and parking is available at a pullout northeast of Circle Seven off Forest Road 600 in Sunriver and at the south parking lot at Lava Lands.

– Jason Merwin, Interpretive Specialist



Welcome to Lava Lands Visitor Center



Big Changes Are Here!

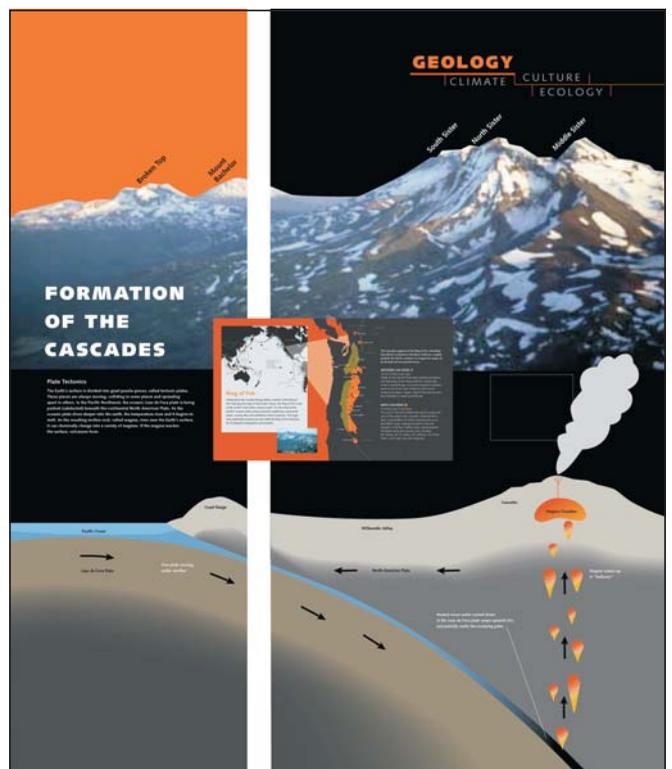
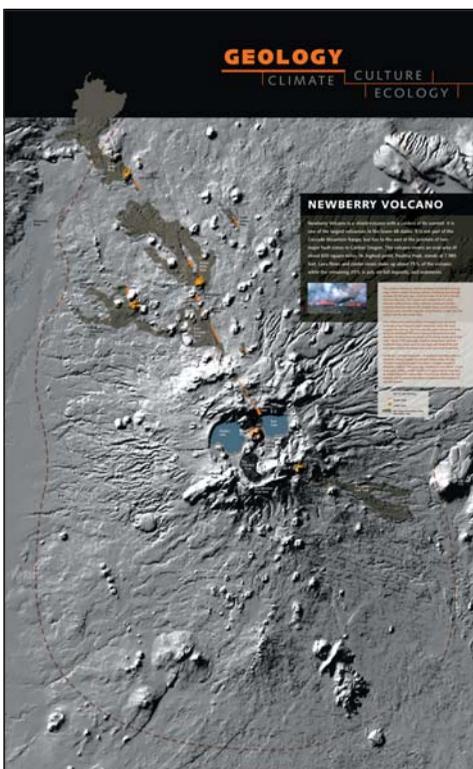
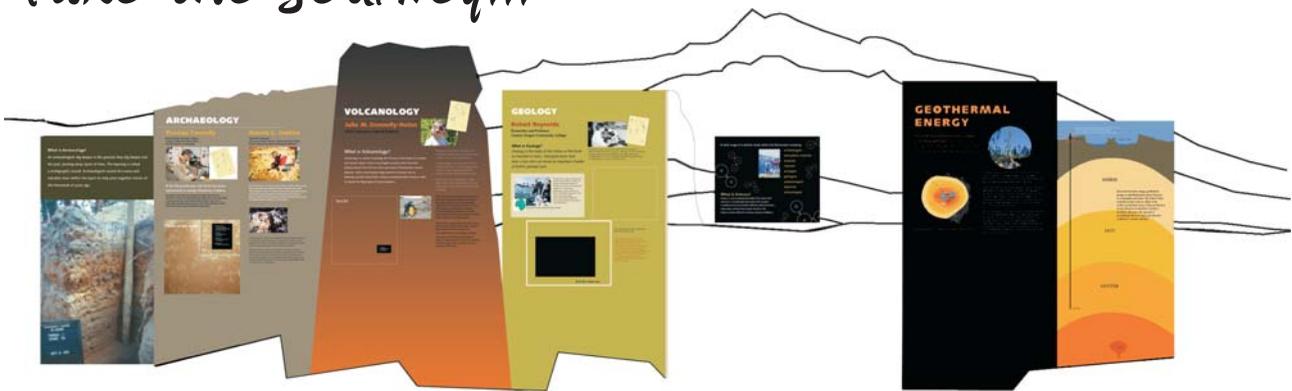
Visitors to Lava Lands Visitor Center this year will notice some big changes to their experience. The new Lawrence A. Chitwood Exhibit Hall is now open to the public after years of dedicated work on the project. This new exhibit marks the final piece to our grand re-opening of the Lava Lands Visitors Center that has been over two years in the making. Last year, a new 1,500 square foot addition was added to the center in order to house the lobby, reception area, and bookstore. These makeovers to the center are the first of their kind in over 30 years.

The interpretive themes of the new exhibit hall will showcase how our local geology, ecology, climate, and culture are all interwoven. Through various partnerships and assistance, we are able to showcase the latest information on topics ranging from volcanic activity in the Cascade Mountains to Paleo-Indian technology. In

addition, new hands-on activities will allow younger visitors to explore the bottom of Paulina Lake, test out the weight and buoyancy of our local rocks, examine a molar of a Columbian Mammoth, and experience the sights and sounds of an active volcano!

The exhibit hall is dedicated in memory of Larry Chitwood (August 4, 1942 - January 4, 2008), former geologist with Deschutes National Forest, with deep gratitude for his significant contributions throughout the development of this exciting new visitor experience. We hope that you enjoy the new exhibits and your total experience at Lava Lands Visitor's Center.

Take the Journey...



Lava Lands Visitor Center

A Big Thank You to Lava Lands Supporters

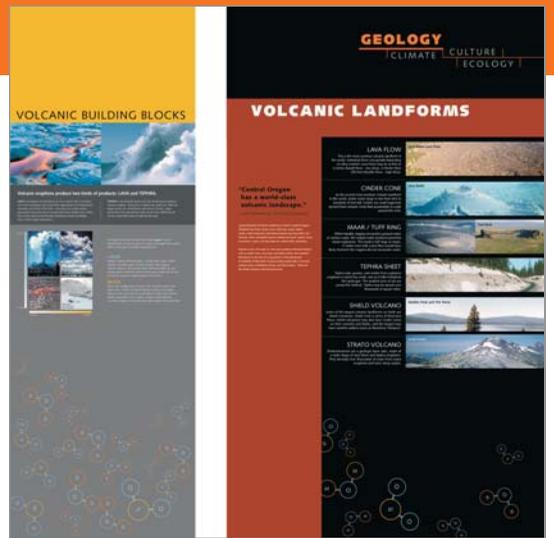
The enhancements and upgrades made to Lava Lands was a process that took over 5 years to envision, plan, coordinate and finally implement over the last two years. These partners and organizations contributed significantly to the project, some receiving compensation, while others with little or none at all. All were active participants, spending much time and effort to produce the quality exhibits that we have for you to enjoy. Also, there were many people that are not listed behind the scenes at the organizations shown below. Without everyone's support and dedication from these individuals and organizations from near and far, this endeavor would have been much harder to accomplish. The Deschutes National Forest thanks them all for the assistance and material they provided to help us make the new Lava Lands an exciting and engaging center for us all to learn and enjoy for years to come.

Organizations

- University of Oregon; Museum of Natural and Cultural History & State Museum of Anthropology. Pam Endzweig, Director of Collections and Senior Research Associate
- Central Oregon Community College, Bob Reynolds, Associate Professor of Geology
- The Museum at Warm Springs, Carol Leone, Executive Director, Natalie Moody, Curator/Exhibits Coordinator
- Portland State University, Portland State Tree Ring Research, Keith S. Hadley, Department of Geology
- Willamette University, Karen Arabas, Professor, Department of Environmental and Earth Sciences
- University of Hawaii, College of Engineering, Peter J. Mouginiis-Mark, Director, Hawaii Institute of Geophysics and Planetology
- University of Nevada, Reno Library, Kathryn Totton, Photograph Curator,
- David A. Johnston Cascades Volcano Observatory, USGS, William E. Scott, Geologist, Dave Ramsey, Geologist
- Volcano Hazards Team, USGS, Julie Donnelly-Nolan
- Hawaiian Volcano Observatory, USGS, Takeo J. Takahashi,
- Grand Valley State University, Steve R. Mattox, Associate Professor of Geology
- Oregon Historical Society, Lucy Berkley, Photographic Services Coordinator

Volunteer Photographers

- Bob Jensen, Retired Geologist, Deschutes National Forest, numerous images
- Jim Fenton, Blue Heron image
- Glen Carter, Lava Flows images
- Charlie and Jo Larson, Lava River Cave images
- Roger Riolo, Ponderosa pine; bitterbrush images
- Lew Scharpf, Cottontail rabbit image
- Steve Thuman, Western fence lizard image
- Stephen Shamoff, Lichen image
- Karen Wattenmaker, Fire ecology image
- Ruth Mano, Douglas squirrel image
- Timothy Ives, Cal Academy/CalFlora, White fir image



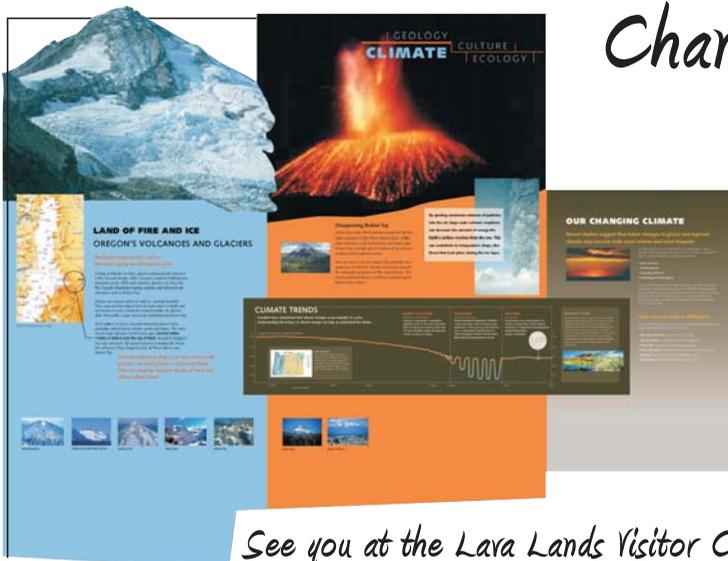
Design Team

- Larry Chitwood, Bob Jensen, Katie Grenier, Gregg Riegel, Paul Claeysens, Dough Seamen, Robin Gyorgyfalvy (Team Leader); Deschutes National Forest

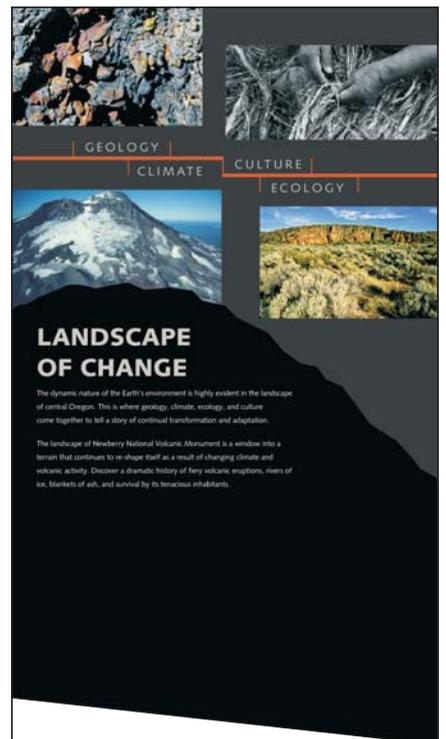
Other Contributors

- Ellen Morris-Bishop, Numerous Central Oregon images
- Mark B. Bartosik, Osprey in flight image
- Color-Ad, Inc., Robert Velke & Donald Grogan, Exhibit Fabricators
- John Hutmacher, various images, Deschutes National Forest
- Tom Iraci, Pacific Northwest Region, Regional Photographer
- Lehrman Cameron Studio, Maxwell Cameron, Exhibit Designer
- Randolph Construction Services, Scott Suemori, Projects Manager
- Jakob Dulisse, Species at Risk, Blue-tailed skink
- Dorothy S. Norton, Harlan's sloth and Columbian mammoth images
- Gary Monroe, Cal Academy/CalFlora, photographer, Twinflower image
- Christopher Christie, Cal Academy/CalFlora, photographer, Desert lupine image
- William R. Hewlett, Cal Academy/CalFlora, photographer, Mountain hemlock image
- Gladys Lucille Smith, Cal Academy/CalFlora, photographer, Pink mountain heather image

...Discover a Landscape of Change



See you at the Lava Lands Visitor Center!



Experience Today

Unleash the Power of National Public Lands Day Saturday, September 26,

National Public Lands Day keeps the promise of the Civilian Conservation Corps, the "tree army" that worked from 1933-42 to preserve and protect America's natural heritage.

National Public Lands Day is an important way to get work done through partnerships. Every year on the last Saturday in September volunteers, partners, local businesses, and agencies of all kinds work together to accomplish essential work at participating National Public Lands Day (NPLD) sites.

Since 1996, national forests have participated in this fun, educational, and productive event. In 2008, 120,000 volunteers built trails and bridges, removed trash and invasive plants and planted over 1.6 million trees. Join us for the 16th annual National Public Lands Day. Every federal land management agency participates and many events are sponsored by more than one agency.

National Public Lands Day is the nation's largest hands-on volunteer effort to improve and enhance the public lands Americans enjoy. For more information about events in your area and how to get involved visit www.publiclandsday.org

Looking for Bald Eagles in Central Oregon?

Nine pairs live year round at Wickiup Reservoir. In response to an abundant supply of catfish from spring through fall, another 30 to 40 adults and immature eagles gather here. Eagle wing tags at indicate birds have come from as far as California and Arizona.

Wickiup's shallow basin provides warm water habitat for catfish. As reservoir waters recede in response to irrigation draw downs, fish concentrate in remaining pools and become easy prey for hungry eagles. Reservoir catfish and brown and rainbow trout from the Deschutes River make up a large part of their diet.

Want to see An Eagle from home?

Go Online! - The Deschutes has launched a webcam of a Bald eagle nest. Catch a glimpse of eagle life by logging onto the link below.
www.fs.fed.us/outdoors/naturewatch/vidcam.htm



Meet our Partner Interpretive Association: Discover Your Northwest

Discover Your Northwest (DYNW) is a nonprofit organization dedicated to promoting the discovery of northwest public lands, enriching the experience of visitors, and building community stewardship of these special places today and for generations to come.

As you explore the area, please support our work by visiting our bookstores throughout the Deschutes and Ochoco National Forests including Lava Lands Visitor Center, Paulina Visitor Center, Lava River Cave, Bend/Fort Rock Ranger District, Crescent Ranger District, Sisters Ranger District, Ochoco National Forest Supervisor's Office and Deschutes National Forest Supervisor's Office.

Proceeds from our retail operations are used to fund conservation education programs, publications, exhibits, guest speakers, and other services designed to enhance your appreciation of the area.

Become a member of DYNW and receive a 15% discount at DYNW sales outlets at public lands throughout the Northwest (excludes passes, native crafts, and buying for resale purposes).

For more information, please visit our website at www.discovernw.org or contact us at Discover Your Northwest, 164 Jackson Street, Seattle, WA 98104



Would you like a summer job working for the Central Oregon Youth Conservation Corps?

If you are...

- ▲ 16 to 18 years old
- ▲ Interested in working outdoors
- ▲ Willing to get dirty, work hard and be part of a team

Then consider applying in 2009 for a position on the Central Oregon Youth Conservation Corps. Work starts end of June through mid August.

- ▲ Pay: \$7.95 per hour
- ▲ 36 hours per week
- ▲ 4 day work week/3 day weekends

For an application or more information, see your School to Work counselor or call Lynn Roby on the Ochoco National Forest at 416-6542 or on the Deschutes National Forest call Les Moscoso, Bend, 383-4712 Kevin Foss in Sisters, 549-7710 or David Lee in Crescent, 433-3253.

Additional Resources:

Deschutes & Ochoco National Forests Conservation Education: www.fs.fed.us/r6/centraloregon/education/
Naturewatch: www.fs.fed.us/outdoors/naturewatch/
US Forest Service Kids Page: www.fs.fed.us/kids/
US Forest Service Animal Inn: www.fs.fed.us/r6/nr/wildlife/animalinn/

Kids Explore the Wonders of central Oregon



Newberry National Volcanic Monument and other areas of the Deschutes & Ochoco National Forests offer many ways for children to be involved with the natural environment of central Oregon. As a family or school group thousands of acres await for youth to explore and learn more about the geology, climatology, ecology, and cultural heritage of the amazing variety that central Oregon has to offer.

During the summer "ranger talks" are presented to school groups that visit Lava Lands Visitor Center. The 20-30 minute talk introduces the students, which vary from 1st grade to high school and even college level, to the basic concepts of geology within Newberry National Volcanic Monument while incorporating flora, fauna, weather, and cultural aspects of the area. Groups may also visit and explore the features of Lava River Cave and Newberry Caldera.

The winter months bring an abundance of snow to the mountains in central Oregon and offer a great environment to participate in a winter snowshoe program that occurs on Mount Bachelor. From January through March, Junior Snow Ranger snowshoe experiences are offered to local schools every Tuesday, Wednesday, and Thursday. Many of the children are experiencing snowshoeing for the first time and possibly even seeing Mount Bachelor as a first. Snow "rangers" lead the kids on a snowshoe journey into the Mountain Hemlock forest to discover and learn about wildlife adaptations, winter safety, winter recreation, and the importance of snow pack to central Oregon.

In a combined effort to further experiential learning opportunities for kids in the outdoors, the Forest Service, the High Desert Museum and the Northwest Interpretive Association recently submitted two grant proposals to the Forest Service sponsored More Kids in the Woods Program. The goal and desire of which is to reintroduce past environmental education programs including Project Snow (winter), Newberry Junior Ranger Program (summer), and Time Tracks and Trails (fall). These programs were once a staple on the Deschutes National Forest and we hope to bring them back to life bigger and better than what was previously offered.

So no matter what time of the year it is, Newberry National Volcanic Monument, the Deschutes & Ochoco National Forests and central Oregon offer great environmental education opportunities for the youth of Oregon to learn and explore the wonders of this unique place. -Jennifer Winston, Interpretive Services



For a Better Tomorrow

Tomorrows' Conservation Leaders ... Contributing Today

Connecting people to the land has always been an important part of the Forest Service. Conservation education helps people to learn about natural and cultural resources and the connections of these resources to their lives. The summer youth program on the Ochoco and Deschutes National Forests provides opportunities for today's youth while caring for the land. Last year 16 crews (96 youth) accomplished much needed natural resources work across the two forests. As an added educational benefit - all youth crews participate in three full days of hands on science activities, provided by Wolfree, an award winning science education organization.

The Central Oregon Conservation Youth Corps is made possible through a partnership between Heart of Oregon Corps (HOC), Central Oregon Intergovernmental Council (COIC), Oregon Youth Conservation Corps (OYCC) and the Deschutes and Ochoco National Forests.

Spend the night in a historic Forest Service cabin or fire lookout....

Whether it is winter, spring, summer, or fall, you can experience all of the seasons in a historic Forest Service cabin or fire lookout. Once operated as fully staffed lookouts or remote ranger stations, many of these rentals provide an opportunity to live the life of a ranger or fire lookout. For more information, call your local ranger station or visit: Recreation Lodging <http://www.fs.fed.us/r6/recreation/rentals/>

High Cascade Forest Volunteers

If you've ever thought you'd like to help maintain the trails and lakes we enjoy in Central Oregon, there are two free trainings each spring at which you can learn the needed skills. Details can be found at www.fs.fed.us/r6/willamette/admin/volunteer/training/index.html

Volunteers from local trail clubs are working with the Forest Service and High Cascade Forest Volunteers to put on these trainings free of charge.

Forest Service trail maintenance budgets have been cut dramatically over the past two decades, thus making trail volunteers essential to keep trails open and in good shape. Without more trail volunteers we are in danger of losing some trails.

Please share this opportunity with friends you think might be interested. For more information, contact Jean Nelson-Dean at 541-383-5300.

Everyone Pays for Vandalism

Each year thousands and thousands of your tax dollars, that could be spent on improving your recreational opportunities, are instead spent repairing damage caused by vandalism.

Last year, employees of the Deschutes National Forest spent time and money removing graffiti from cave walls; removing illegally dumped garbage, abandoned vehicles and appliances; and repairing damage to cultural resources. If you see vandalism occurring - please report it!

Naturescaping

Collecting wild plants is allowed on some public lands, with a permit. Call your local Forest Service office to find out which plants can be collected and where.

Looking to the Future:

Lead Partner Deschutes National Forest supports Vision Element SC 8.1, Forest Stewardship through Conservation Education and the National Forest Foundation. For more information visit www.bend2030.org



Volunteer Opportunities - Interpret the Great Outdoors

Share your knowledge of the area and unique expertise with visitors to Newberry National Volcanic Monument and the High Lakes area. We are seeking enthusiastic volunteers of all ages to donate a minimum of 4 hours, one day per week to assist the thousands of people who visit Deschutes National Forest throughout the year. The types of volunteer positions available are described below. Uniforms and introductory training are provided.

Volunteer Naturalist: Assist with interpretive programs at Lava Lands Visitor Center, Lava River Cave, Lava Butte, Newberry Caldera, and Mt. Bachelor. Program topics include geology, bird watching, native plants, and cultural history. These are delivered as nature walks, patio talks, informal roving interpretation, and evening programs. Our winter program incorporates volunteer naturalists into an alpine interpretative program provided at Mt. Bachelor ski resort. Cross-country, downhill or snowshoe skill required.

Volunteer Information Specialist: Staff the information desk and assist with book sales, entrance station information, office work, or minor general maintenance at various visitor sites. Volunteers answer visitor questions about the Newberry National Volcanic Monument, local campgrounds and trails, and recreational opportunities in Central Oregon.

We offer the potential for new **friends**, frequent **potlucks**, continuing **education**, and interesting folks from all around the country, **fun**, our unending **gratitude** and a **recognition** event at the end of the season. **If you have the time, we've got the place.**

For these or other volunteer opportunities, please contact: - Pete Hatman, Bend/Ft. Rock Ranger District, 383-4771, phatman@fs.fed.us

Visiting Caves

Caves can be explored and protected on the Deschutes by observing proper caving etiquette and any cave restriction signs or gates you encounter. A good lava tube to visit is Lava River Cave. At one mile in length, it is the longest uncollapsed lava tube in Oregon. It is one mile south of Lava Lands Visitor Center on Highway 97 and open May 2-October 14. Boyd Cave, near China Hat Road/Road 18, southeast of Bend is open year-round. Both of these are good caves to take kids in as the walking is relatively easy.

Cave access restrictions

Most caves in the vicinity of China Hat Road/Road 18 are closed from October 15-May 1 to protect hibernating bats. Some are closed during the summer to protect bat maternity colonies. Several cave entrances are also gated to reduce vandalism and protect bats. Skeleton, Wind, and Bat Caves in this area are closed year-round and gated. For private tours in Boyd Cave and Skeleton Cave, contact Wanderlust Tours in Bend.

Cave Conservation Starts With You

Each year, thousand of your tax dollars are spent removing garbage, investigating vandalism, and repairing gated caves as a result of a few thoughtless individuals. Here's how you can protect caves:

DO NOT! The following are illegal in caves and outside cave entrances.

- * Smoking or lighting a camp fire or stove fire
- * Camping
- * Pets of any kind including dogs
- * Alcoholic beverages
- * Glass containers
- * Littering
- * Bikes, horses, or motorized vehicles
- * Removing or defacing any part of a cave including digging at the entrance
- * Using the cave as a toilet
- * Using hand-drying agents including chalk or anchors (temporary or permanent)

DO!

- * Wear sturdy shoes, take food, water, and two sources of light
- * Leave only footprints—pack out everything you bring in
- * Protect bats you see by minimizing time and flashlight use near them
- * Respect cave closure signs you encounter on public lands
- * Contact your local caving grotto for more information on caving and cave conservation
- * Enjoy your public lands respectfully!
- * Report any damage or illegal activity you see to 541-383-4000.



Youth crews participated in many natural resource projects such as building and maintaining fences and trails, eradicating noxious weeds, reducing hazard fuel in high risk

Explore Newberry Volcano



Paulina Lake from Paulina Peak, photo courtesy of Sherri Lee

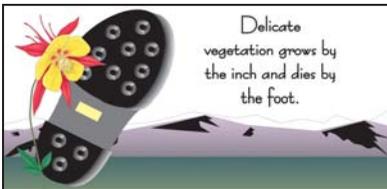
History

Newberry National Volcanic Monument is just south of Bend, Oregon, off Hwy 97. Community concern for the preservation of the area led to the establishment of the Monument in 1990. The Deschutes National Forest currently manages the Monument to preserve and protect the area's unique geologic and ecological resources. The exceptional scenic and recreational opportunities cover 50,000 acres.

Geology

Newberry Volcano is one of the largest shield-shaped volcanoes in the lower 48 states, covering over 600 square miles. The Monument is located along a group of faults known as the Northwest Rift zone. A complex geological history indicates that the volcano has erupted hundreds of times during the last half-million years. The most recent eruption was 1,300 years ago suggesting that the volcano is still active.

The caldera of Newberry is commonly referred to as **Newberry Crater** but it is truly a caldera like Crater Lake. This feature formed after a series of collapses following big eruptive episodes and now contains two crystal clear lakes. The Monument also has many other fine examples of common volcanic features such as cinder cones, ash flows, lava tubes and flows, pumice and obsidian deposits.



Recreation Pass Program on the Deschutes National Forest

Recreation Passes are required on Newberry National Volcanic Monument as well as designated day use sites on the Deschutes National Forest.

Passes accepted are:

- ◆ 3-day Monument Pass
- ◆ National Forest Recreation Day Pass
- ◆ Annual Northwest Forest Pass
- ◆ Interagency Annual Pass
- ◆ Interagency Senior Pass
- ◆ Interagency Access Pass
- ◆ Golden Age Passport
- ◆ Golden Access Passport
- ◆ WA & OR Recreation Pass with the Interagency Annual

All passes are available at Forest Service offices throughout Washington and Oregon. The 3-day Monument Pass is only sold at Lava Lands Visitor Center, Lava River Cave, and Newberry Entrance Station.

Archaeology

The Newberry area has been inhabited by Native Americans intermittently for the last 10,000 years. Archaeologists hypothesize that early inhabitants used this area in much the same way we do – for fishing, hunting and recreation. Obsidian from Newberry was traded up and down the Pacific Northwest and has been found as far away as British Columbia in Canada. It is unlawful to remove or damage any rock, plant or artifact found within the Monument.

Recreation

Boating: Frequent steady winds make the lakes ideal spots for sailing and windsurfing. Motor boats are permitted on both lakes throughout the summer. There is a 10 mph speed limit in force, and Oregon fishing licenses are required.

Trails: Miles of hiking trails explore the Monument; most are open late spring through fall for hiking, horseback riding and mountain biking. The trails are also popular in winter with cross-country skiers and snowmobilers.

- Crater Rim Trail (21 miles)
- Paulina Lake Trail (7 miles)
- Peter Skene Ogden Trail, (8.6 miles) – mountain bikes in uphill direction only
- Paulina Peak (4 miles)

Wildlife

Wildlife Observation: The caldera is a designated wildlife refuge. Mammals include deer, elk, badger, pine marten, and black bear. The lakes are home to osprey, ducks, geese, and tundra swans. A pair of bald eagles nest along the shore of East Lake. The 4,000 foot elevation change within the Monument spans several vegetation zones, including ponderosa pine, lodgepole pine, mixed conifer, mountain hemlock and white pine. All old growth stands are protected.

Did you Know....

- ◆ The flanks of Newberry are dotted with over 400 cinder or “parasite” cones? Many such cones are found along the Northwest Rift Zone, a line of fissures running from Newberry Caldera to Lava Butte.
- ◆ Based on geophysical and geologic evidence, a magma chamber (molten rock) probably lies 2 to 3 miles below the caldera floor.
- ◆ The Big Obsidian flow, found within the Caldera, formed 1,300 years ago. It is the youngest lava flow in Oregon.
- ◆ The last major caldera forming eruption probably occurred about 200,000 years ago. Since then, the caldera floor has gradually been filled in with ash, pumice and lava.
- ◆ Newberry is not part of the Cascades Mountain Range. It lies at the juncture of three major fault zones in Central Oregon.

A Fed Bear Could Be A Dead Bear!

If Newberry Caldera is also a wildlife refuge, why would black bears and other animals ever face destruction from animal control officers? The answer is that visitors, thinking they are being kind to the wildlife, feed animals or carelessly leave food where animals can raid it.



Newberry Caldera, the area within the rim of Newberry Volcano, has been a wildlife refuge for nearly half a century. All wildlife there enjoys protection from hunting or harassment by human visitors. The Caldera is also a highly popular recreation area containing 400+ campsites, two lakes, and spectacular volcanic scenery. Sometimes human and animal needs conflict and that most often revolves around food.

American black bears are occasional foragers at Newberry's campgrounds and day use sites. Bears can be very creative at food pilfering and can do extensive property damage trying to find your food. This can range from cooler clouting to breaking vehicle windows or destroying a tent.

Black bears are very dangerous and overcome their fear of people easily. **Keep your pets and children away from bears.** Bears that lose their fear of humans are often destroyed because of the risk they pose for injury to people. It is your responsibility to **store your food, leftovers and garbage out of bear's and other wildlife's sight and smell.**

Chipmunks, ground squirrels and birds may seem harmless, but these animals can be aggressive towards humans, too, biting or scratching to get food. Some may have diseases that humans can catch. Feeding these animals our food encourages them to stop foraging on their own, which can lead to starvation and death during winter.

Help keep wildlife in the Newberry Refuge wild. Do not contribute to the destruction of a bear or other animal by feeding it or improperly storing human and pet food. *–Larry Pratt, Deschutes National Forest*

What To Do

One Hour:
Lava Lands Visitor Center
Lava Butte
Paulina Falls
Big Obsidian Flow

Half Day:
Benham Falls Trail
Lava River Cave
Lava Cast Forest

Full Day:
Newberry Caldera
Paulina Peak
Paulina Lake Trail
East Lake Trail

Schedules

See page 16 for Visitor Center, Lava Butte and Lava River Cave schedules. Interpretive program schedules will be posted at entrance stations, information desks, and campground bulletin boards. Please check the weekly schedule for times and locations.

Check for Road Conditions

Explore Newberry Volcano



Paulina Peak from Paulina Lake, photo courtesy of Kathy Pratt

Points of Interest

1 Paulina Peak, located four miles by road or trail from Historic Paulina Lake Guard Station, is the highest point within the Monument, 7,985 feet. The 360 degree view includes the Cascade Range from California to Washington; the Basin and Range region of eastern Oregon; and a clear view of the caldera lakes and surrounding landscape. **This road is not suited to trailers or motor homes.**

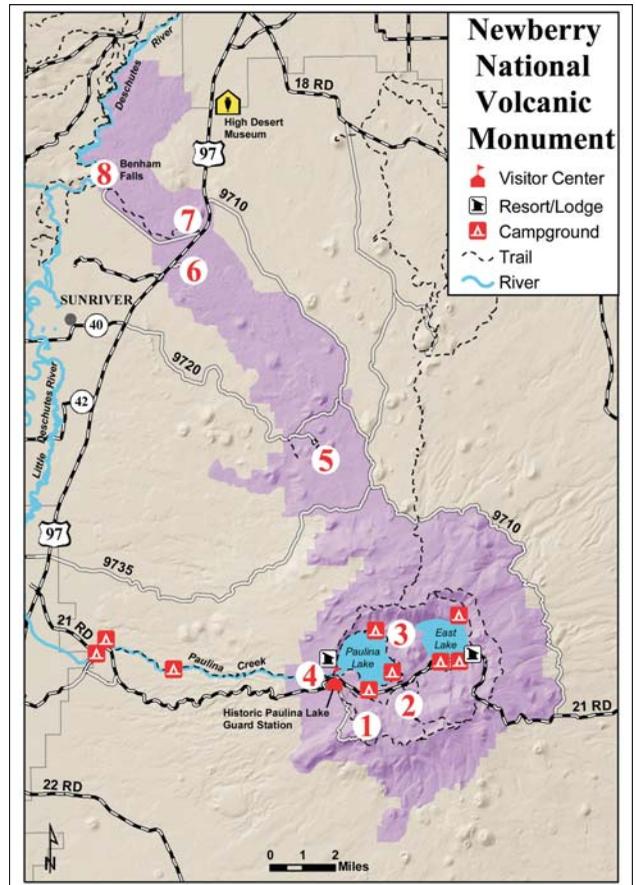
2 Big Obsidian Flow is the result of the most recent lava flow of Newberry Volcano, 1,300 years and is the youngest lava flow in Oregon. Over 170 million cubic yards of obsidian and pumice erupted from a vent about a mile south of the trailhead. Native Americans used the glass for trade and tools. A one-mile loop trail and seven interpretive guide visitors across a corner of the flow.

3 Paulina and East Lakes - The caldera may originally have held one large lake, much like Crater Lake, but deposits of pumice and lava divided the crater into two separate bodies of water. Paulina Lake is one of the deepest lakes in Oregon, 250 feet; East Lake is somewhat shallower, 180 feet. Clear and nutrient rich, both lakes support a large population of trout and salmon, stocked by the Oregon Department of Fish and Wildlife. The lakes offer excellent fishing from late spring through fall.

4 Paulina Falls is located just a quarter of a mile west of Paulina Lake Lodge. This dramatic 80 foot waterfall spills over volcanic cliffs into a canyon and is a short walk from the parking lot. Paulina Creek is the only surface outlet for Paulina Lake and has qualified for federal designation as a Wild and Scenic River.

5 Lava Cast Forest is approximately 7,000 years old. Lava from vents on Newberry Volcano flowed through a mature ponderosa pine forest. The molten lava enveloped the trees and quickly cooled around them forming a mold. The pines eventually burned to charcoal or ash. A one-mile self-guided interpretive trail winds across the lava flow, which is slowly being claimed again by young ponderosa pines.

6 Lava River Cave is located one mile south of Lava Lands Visitor Center on Hwy. 97. The one-mile cave is the longest lava tube in Oregon. Lava tubes form when a river of molten lava creates a channel and the sides eventually crust over to create the roof. The tube kept the flowing lava hot enough to drain out of the channel. The cave temperature is a constant 42½ degrees Fahrenheit (5 degrees Centigrade), so wear warm clothing and carry at least two light sources (only propane lanterns or flashlights please). There is an entrance fee from early May to mid-October and lanterns are available to rent.



Ryan Miller, GIS

7 Lava Lands Visitor Center and Lava Butte is 12 miles south of Bend on Hwy. 97. A key hub for travelers and Monument visitors, there are exhibits, a bookstore, water, trails, and picnic tables; a wide array of information services, and an energetic staff of interpreters.

8 The Deschutes River and Benham Falls are located on the northwest border of the Monument. The Deschutes offers some of the best flyfishing, whitewater rafting and kayaking in Oregon. A river trail from Sunriver to Bend has beautiful views for the hiker, biker or equestrian. Wildlife watching opportunities include beaver, otter, deer, elk, mink, martins, eagles, osprey and other birds.

Newberry Caldera: One Lake Or Two?

A question commonly asked about Newberry Caldera's Paulina and East Lake is "Were they ever a single lake like Crater Lake?"

Core samples collected by the United States Geological Survey from a geothermal test well drilled northeast of the Big Obsidian Flow in 1981 do indicate that a large lake existed here in the past. By about 12,000 years ago the separation of the two lakes was essentially accomplished. A small stream may have continued to connect the lakes for a few thousand years after the original lake was divided. This channel would now be buried under younger lava flows south of Little Crater.

Numerous volcanic features now occupy the area separating Paulina Lake and East Lake. The Interlake Obsidian Flows, which are accessible from the Paulina Lake Trail at the north end of Little Crater Campground, formed about 7,300 years ago. The Central Pumice Cone, which is visible on the west shore of East Lake, formed about the same time. - *Larry Chitwood*

Forest Restoration—Whychus Creek



Both the Metolius (pictured here) and Whychus were protected by Congress as Wild and Scenic Rivers meaning they are recognized as unique rivers and national treasures.

and even some of its floodplains are being restored in different rivers in our Cascade backyard.

Riding this wave of momentum, this year both Whychus and the Metolius River have been chosen as one of five landscapes in the country for the National Forest Foundation's *Treasured Landscapes, Unforgettable Experiences* National Conservation Campaign. The objective of this Conservation Campaign is to revitalize and restore our National Forests and strengthen community connections to public lands through stewardship. With the help of the National Forest Foundation and our partners we will be working to restore natural resources, wildlife habitat, watersheds and recreation opportunities. The other selected project areas are in Wyoming, Colorado, Alaska and the Grasslands near Chicago.

The National Forest Foundation's mission is to engage citizens in the stewardship and enjoyment of our National Forests. Chartered by Congress in 1991, it is the only nonprofit specifically dedicated to support of our National Forests. They implement their mission by raising funds for restoration and enhancement of National Forest lands. With this commitment to support the Whychus & Metolius conservation campaign the National Forest Foundation will proactively seek funds that can leverage Forest Service grants to complete restoration projects. Stay tuned for how you can get involved. Two rivers are depending on you. - *Maret Pajutee, District Ecologist, Sisters Ranger District, Deschutes National Forest*

Metolius Love Affair

We all just love the Metolius River and we're not the first to be enchanted. Tucked in a forested valley east of the Cascade Mountains, the Metolius Basin has been treasured by generations of people. It is a landscape of spring fed waters, mountain vistas, and clean air. Guarded by the ancient volcano Black Butte, old growth pine forests and the world famous river create a peaceful setting that has been enjoyed for thousands of years.

Salmon were once a part of this landscape. Native Americans fished the headwaters for "Metolla", a fish they also called dog salmon. Spawning spring chinook were plentiful and sockeye salmon traveled up the Metolius to Suttle Lake, one of two lake systems in Oregon that supported historic runs of these ocean going fish. Early European explorers such as Fremont in 1843 were told by their Indian guides this was a "salmon river" and shown huge fish traps nestled in downed pine trees on the river bottom. In 1855 Lt. Henry Abbott bought a 25-pound salmon from a group of Indian families that was caught with an iron pointed fish spear. Trails along the Metolius River led to huckleberry grounds in the mountains and hunting grounds for deer. The Metolius Basin is still highly valued today by the Confederated Tribes of Warm Springs as part of its cultural landscape protected by treaty rights.

European settlers began to homestead the Metolius Basin in the 1880's. As settlers arrived, the forest began to change with the suppression of wildfires and logging of large pine to supply lumber to growing communities. Around 1910 it became a favorite camping retreat for residents of Sherman County. By 1917 they had established a seasonal community known as Camp Sherman. Later Civilian Conservation Corp campground projects and private resort developments provided shelters, lodging and amenities. Generations of Oregonians came to the Metolius to camp, fish, and enjoy the natural beauty.

Although the expansive ponderosa pine forests of the Basin were recognized early on as a timber resource, conservation has been a long-term theme of the area as well. In the 1890's the establishment of the Cascade Forest Reserve withdrew the area from settlement claims and preserved recreational opportunities on what later became public lands of the Deschutes National Forest. The Headwaters of the Metolius was acquired in 1924 as a site for a mill pond and lumber mill, but by 1927, the Governor of Oregon was trying to secure the site as a state

The Tale of Two Rivers

Two rivers travel through the forested landscape of the Central Oregon Cascade Mountains. One is an icon, known throughout the country for its ice cold serenity, old growth pine, and fly fishing. The other is a secret, lost for almost a hundred years, tempestuous and flashy, its floods once tamed only by bulldozers. What could these two rivers have in common?

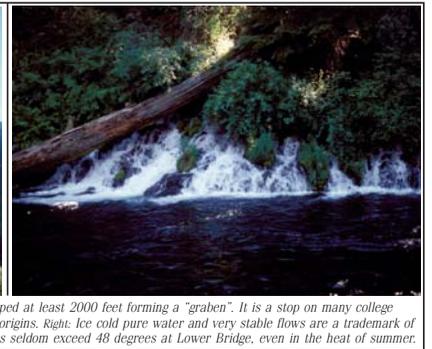
Both the Metolius River and Whychus Creek were recognized by Congress as having outstanding natural values such as scenery, geology, fish, and hydrology and their upper stretches gained protection as Wild and Scenic Rivers in 1988. They also share the story of a great loss and rebirth.

Salmon and steelhead once lived in these mountain rivers, then traveled hundreds of miles to the sea through the Deschutes River and Columbia, returning years later to spawn. Dams broke the connection and anadromous fish runs were eliminated as a result. But with the restoration of fish passage at Pelton-Round Butte Dam both rivers are coming alive again with sea-going fish.

The Metolius needs continuing care and attention because it has been found by generations of people and is in danger of being loved to death. Whychus has gotten its name back, more water, in complicated restoration projects. People are excited and want to help take care of these very



Left: The Metolius Basin was formed when land west of Green Ridge dropped at least 2000 feet forming a "graben". It is a stop on many college geology tours because of the unique interplay of it's volcanic and glacial origins. Right: Ice cold pure water and very stable flows are a trademark of the Metolius River which is fed by numerous springs. Water temperatures seldom exceed 48 degrees at Lower Bridge, even in the heat of summer.



park. In 1928 the Deschutes National Forest recommended to the Regional Office that more than 640 acres of old growth pine near the river be excluded from all future sales and managed as a "yellow pine museum". Three years later in 1931, the Metolius Research Natural Area was established and protected 1300 acres of old growth pine forest for scientific study. In the 1970's the Johnson family worked with the Forest Service to negotiate a scenic easement to protect the classic view of the headwaters and Mt Jefferson forever. The Metolius River was protected by Congress as a Wild and Scenic River in 1988.

Today people who love the river are excited by the return of sockeye and spring Chinook salmon as fish passage is restored at Pelton Round Butte Dam. But the river still faces challenges from the growing numbers of visitors. Although most people show a great respect for the Metolius, we each have impacts and they can be cumulative. One fisherman, then twenty, stepping into riverside shrubs can slowly break down protection for streambanks. Bikes and cars can spread invasive plant seeds. Many

footsteps can compact and kill vegetation and add to silty runoff that can smother fish eggs.

The "Tale of Two Rivers" project will repair eroding trails, harden fisherman access points, remove invasive plants, increase educational efforts and work to develop a workforce of volunteer river stewards to watch over this special place.

Will the Metolius of your childhood look the same to your grandchildren? Our vision for the future is a peaceful river of timeless beauty. River waters would stay crystal-clear and very cold. Blue pools would hide large trout and other mysteries. Salmon would once again run the Metolius, bringing people to the river banks to watch the end of their long journey. Kokanee, chinook, and sockeye would travel the waters to find their homes, spawn, die, and be reborn. Excellent water quality and habitat would combine to create a river where huge bull trout hunt and fishermen dream to practice the graceful art of fly-casting.

The river will still be full of wildflower islands in the summer, formed of large stream wood covered with yellow monkey flowers, blue lupine, and white spires of hellebore. Meadows would be open and full of native grasses and plants. Herds of grazing deer and elk, white headed woodpeckers, goshawks, and eagles would live in open fire maintained forests. Forest and river habitats would support populations of butterflies, forest and stream insects, lizards, and frogs. Mushrooms, mosses, and bright forest lichens would often be seen.

The Metolius of the future would remain a place for families as it has been for generations. People would come to find rest, recreation or solitude for the afternoon, a week, or a lifetime. With your help our love affair with the Metolius will be long. - *Maret Pajutee, District Ecologist, Sisters Ranger District, Deschutes National Forest*



Tree Hug- Large old growth ponderosa pine trees are a special attraction along the Metolius and Whychus and much loved by many people. The orange play bark can smell like vanilla or pineapple when warmed by the sun.

Forest Restoration-Whychus Creek

Finding The Lost River Whychus



With the re-creation of fish passage at Pelton-Round Butte Dam there has been a concerted effort to restore stream flows dried by irrigation withdrawals. Steelhead will find their way to Sisters again within 3 years and people who love the amazing wild steelhead can't wait.

The town of Sisters had a river once. For thousands of years Native Americans followed its course to the high country in the Cascade Mountains of Central Oregon. The river was full of waterfalls and wild steelhead, providing more than half of the spawning habitat in the Upper Deschutes Basin. It had several names, but some called the river "Whychus". As homesteaders came and built a scenic mountain town, the river first lost its name, then its water to irrigation withdrawals, and finally its fish, blocked from returning to spawn by hydroelectric dams. The river became a trickle of a creek, dry in the summer, its wild upper reaches forgotten.

Today the Whychus watershed is coming back to life and the community is rediscovering a river they had lost for almost a hundred years. With the re-creation of fish passage at Pelton-Round Butte Dam there has been a concerted effort to restore stream flows dried by irrigation withdrawals. Steelhead will find their way to Sisters again within 3 years.

Ambitious restoration projects are rebuilding the meandering channels that once absorbed the flashy flows of this stream which is prone to winter floods. Bull dozers will be removing and smoothing large berms that other bull dozers created in the 1960's as the creek was confined in a deep ditch. The stream will be set free in some places to reconnect to its historic floodplain. Thousands of willows, wild roses, and sedges are growing in nurseries waiting to be planted into streamside habitats. There is a surge of excitement in the rapidly growing community where old stories tell of people watching steelhead spawn from the stream banks in the City Park. The river will reclaim its role in the ancient story of mountains, oceans, and the incredible journey of sea - going fish.

The stream is a still a local's secret in a popular tourist area. It's hard to find and accessible only by winding dirt roads. It is both scenic and remote, however some users are destructive, vandalizing natural and cultural resources and building new roads, trails, and stream crossings. Attitudes are changing, as more and more people want to learn about this elusive stream in their backyard and help to protect it.

Upcoming restoration will work to create more stable and resilient stream corridors from the stream's glacial headwaters to the City of Sisters. This will be accomplished by actions such as: closing user created roads and trails, defining dispersed campsites, revegetation, invasive plant control, cleanup and protection of streamside cultural sites important to the Confederated Tribes of Warm Springs, and thinning streamside forests to reduce wildfire risk. Biomass produced can support the developing local biomass industry. Concurrently, interpretive and educational outreach will be increased to develop a volunteer river stewards workforce and continue work with youth groups to grow the next generation of stewards.

The story of Whychus is the story of a second chance. It's a second chance to be a river that flows in the summer. To be a river with a floodplain and willow thickets and wildflowers. To be a river where steelhead jump in the waterfalls. Whychus has been found again. - *Maret Pajutee, District Ecologist, Sisters Ranger District, Deschutes National Forest*

Water Milfoil - An Unwanted Hitchhiker

East and Paulina Lakes are prized recreational sites within the crater of Newberry National Volcanic Monument. What a unique experience to fish inside the caldera of a volcano. Preserving this experience requires your assistance.

The lakes are suffering from the introduction of the invasive aquatic weed Eurasian watermilfoil (*Myriophyllum spicatum*). This invader can displace native plants, alter water quality, diminish fish habitat, and hinder boating. Eurasian watermilfoil is an extremely adaptable plant. It grows in depths up to 30 feet, thrives in Central Oregon's sunny summer's, and is not deterred by temperature extremes - even surviving Newberry Crater's cold winters under the lake ice.

Eurasian milfoil and other aquatic invasive plants and animals are often unknowingly spread from lake to lake by boaters and fishermen. So what can you do to help prevent the spread and preserve your favorite lakes?

✓ Clean your boat, motor, trailer, anchor, gear and vehicle of any plants and animals before and after launching.

✓ Drain all water from boats, trailers, tackle and gear before leaving the area.

✓ Dispose of livewell water, bait, plants, and other material away from shore or in trash cans.

Please do your part to keep Central Oregon's beautiful lakes and rivers free of Eurasian watermilfoil and other invasive species, and thanks for encouraging your friends and neighbors to do the same.

To report invasive species call (toll free) 1-866-INVADER, or the Deschutes National Forest at (541) 383-5300 or (541) 383-4787. - *Mona Derby, biological science technician*

Love Wildflowers?



For more information on celebrating wildflowers visit: www.fs.fed.us/r6/centraloregon

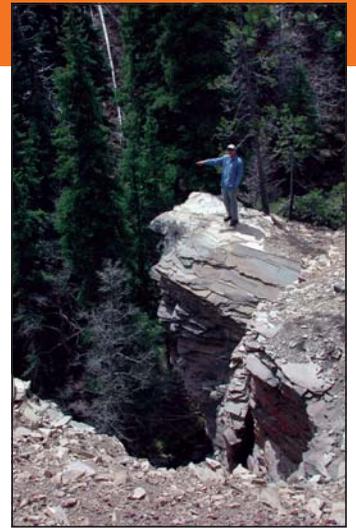
Discover the Beauty of Jack Creek

One of the most unique spots on the Sisters Ranger District is at the Head of Jack Creek. A 1/4 mile-long trail takes you through an intriguing "forest within a forest" that illustrates the importance of water to the plants that have adapted to this island of riparian ecology.

Jack Creek and the springs that feed it have created a lush forest supporting plants incapable of surviving on the surrounding, drier slopes and hillsides. Large trees shade the forest floor, making it possible for smaller shrubs to grow and water-loving species flourish along the cool spring-fed streams. Look for Pacific yew, yellow monkey flower, lady fern, twinberry, cool wart, and bead lily.

Jack Creek flows into the Metolius River, which flows into Lake Billy Chinook and the Deschutes River. It is not exactly known where the water feeding the springs originates.

Visit Jack Creek and you'll see that hasn't deterred it from creating a wonderful ecosystem.



Hard to find and accessible only by winding dirt roads, Whychus Creek is a beautiful and well kept secret. Its quiet habitats are a refuge for wildlife including goshawks, bear, deer, bats, and woodpeckers.



Ambitious restoration projects to remeander the creek and restore its connection to it's natural floodplains are bringing Whychus Creek back to life.



These arrowleaf balsamroot are just some of the many different native wildflowers that thrive along Whychus Creek.

Exploring Rivers

Deschutes River, Length: 252 miles
Activities: fishing, rafting, kayaking, camping, hiking, biking, picnicking

Little Deschutes, Length: 100 miles
Activities: fishing

Metolius River, Length: 41 miles
Activities: fishing, rafting, kayaking, camping, hiking, biking, picnicking, fish viewing

Fall River, Length: 11 miles
Activities: fishing, camping, picnicking, fish viewing

Spring River, Length: 1 1/2 miles
Activities: canoeing, fishing

Crooked River, Length: 100 miles
Activities: fishing

Paulina Creek, Length: 9 miles
Activities: viewing falls, hiking, birdwatching

Tumalo Creek, Length: 17 miles
Activities: viewing falls, wildlife, hiking

Discover the Natural World

Popular Lakes

Crane Prairie Reservoir
 Located 48 miles SW of Bend via Cascade Lakes Highway
 boating, fishing, swimming



Crescent Lake
 Located Crescent Lake Junction, 3 miles S of Hwy 58 via FS Rd 60
 boating, fishing, swimming, sailing, water skiing, windsurfing



Cultus Lake
 Located 48 miles SW of Bend via Cascade Lakes Hwy
 boating, fishing, swimming, water skiing, windsurfing



Davis Lake
 Located 60 miles SW of Bend via Cascade Lakes Hwy
 boating, fishing, canoeing



Devils Lake
 Located 30 miles SW of Bend via Cascade Lakes Hwy
 fishing, canoeing



East Lake
 Located 35 miles SE of Bend located in Newberry Caldera; S. on Hwy 97; E on FS Rd 21
 boating, fishing, swimming



Elk Lake
 Located 32 miles SW of Bend via Cascade Lakes Hwy
 boating, fishing, swimming, sailing



Hosmer Lake
 Located 35 miles SW of Bend via Cascade Lakes Hwy; turn left at Elk/Hosmer Lakes sign
 fishing, swimming, canoeing



Lake Billy Chinook
 Located West of Hwy 97 near Culver, Oregon; turn left and follow the Cove Palisades State Park/Tour Route sign
 boating, fishing, swimming



Lava Lake
 Located 38 miles SW of Bend via Cascade Lakes Hwy
 boating, fishing, swimming



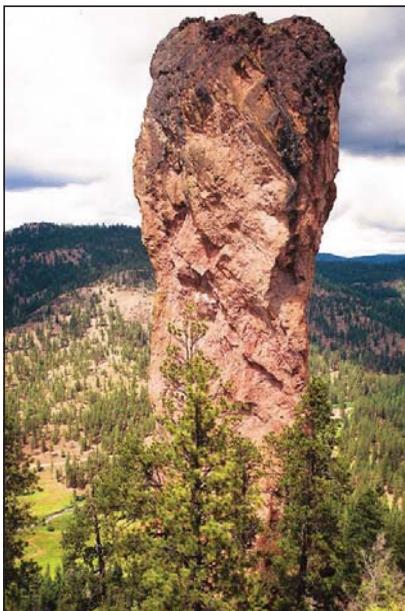
Little Lava Lake
 Located 38 miles SW of Bend via Cascade Lakes Hwy
 boating, fishing, swimming, canoeing



Little Cultus Lake
 Located 50 miles SW of Bend via Cascade Lakes Hwy; take FS Rd 4630; then FS Rd 4636
 boating, fishing, swimming, canoeing



North Twin Lake
 Located S on Hwy 97; take Fall River turn onto FS Rd 43 to Wickiup Reservoir; then FS Rd 1620
 boating, fishing, swimming, canoeing



Stein's Pillar: Clue To A Volcanic Past

Stein's Pillar, 350 feet high and 120 feet wide, is a modern day clue to Central Oregon's ancient volcanic past. Located eight miles north of US Highway 26 along Mill Creek Road (FR 33) on the Ochoco National Forest, this geologic marvel is intriguing to visitors and geologists alike.

Around forty-four million years ago, avalanches of hot ash, pumice and volcanic dust flowing from local volcanic centers covered this area that now forms Mill Creek valley. About 20 million years later, three successive flows of hot volcanic ash flowed across the area again. These flows are visible in the different layers of Stein's Pillar. More recently, rain, wind and frost have patiently sculpted the landscape, slowly chiseling and wedging along cracks in the rocks to form the valley and leave Stein's Pillar standing as a beacon today.

The name Stein's Pillar has an interesting origin. In the 1860s Major Enoch Steen, with the U.S Military Department at Fort Dalles on the Columbia River, explored this region. Though Steens Mountain in southeastern Oregon is named for the illustrious major, his name was misspelled when given to this Mill Creek monolith and an incorrect version became the official.

Mill Creek Road is nine miles east of Prineville near the eastern end of placid Ochoco Reservoir. There are numerous recreational opportunities in the area including access to the Mill Creek Wilderness. -Caroline Gordon, Sue Kocis, and Allan Redman

White-Nose Syndrome Update



Little brown bats with white-nose syndrome. New York. Photo courtesy of Nancy Heaslip New York Department of Environmental Conservation

Evidence suggests that human visitation to caves may contribute to the spread of WNS. According to the US Fish and Wildlife Service Northeast Region website "The discontinuous nature of the rapid spread of WNS, especially to the most recently discovered sites in West Virginia and Virginia suggests that something other than bat to bat transmission is contributing to the spread of WNS. The potential for human assisted spread of WNS is further supported by the fact that many of the affected sites are also popular destinations for recreational cavers, while many bat hibernacula in less popular or inaccessible caves between the newly affected caves and those affected in 2008 remain unaffected."

This evidence is strong enough that the US Fish and Wildlife Service has issued a cave advisory with recommendations specifically to recreational cave visitors, including mines used by cavers:

1. - A voluntary moratorium on caving in states with confirmed WNS (NY, VT, NH, NJ, PA, CT, MA, VA, and WV) and all adjoining states
2. - Nationally, in states not WNS-affected or adjoining states, use clothing and gear that has never been in caves in WNS-affected or adjoining states

For more information on the current recommendations and WNS visit:

♦ www.fws.gov/northeast/wnscaveadvisory.html

for more general information on cave advisory recommendations:

♦ www.fws.gov/northeast/white_nose.html

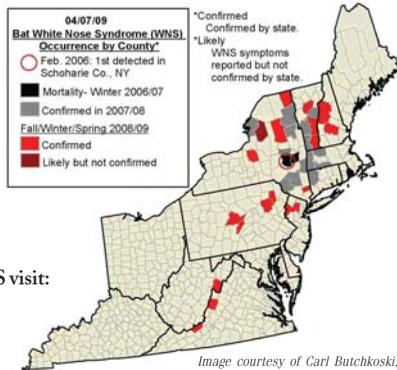


Image courtesy of Carl Butchkoski, Pennsylvania Game Commission

Did you Know?

Contrary to popular belief, bats are not blind and most have good vision. Many of the largest bats in the world known as "flying foxes" do not use sonar at all and rely on their highly acute vision to find fruit. These are found in Asia, Australia and Africa. In tropical regions, bats are critical pollinators and seed dispersers for many economically important products including bananas, mangos, figs, cashews, tequila and commercial timber!

The Real Bug Zappers - Insectivorous (insect eating) bat species consume tons of insects species nightly including mosquitoes and some agricultural and forest pests. Bats forage along streams, in forests, over water bodies, and maybe in your backyard. Many of the up to 14 bat species on the Deschutes can be seen flying at dusk to begin their nightly quest for a beetles, flies, crickets, gnats, mosquitoes, and wasps. The Townsend's big-eared bat is a Lepidopteran specialist, which means it primarily eats moths. The largest bat on the Deschutes—the hoary bat—may even eat a tiny western pipestrelle bat on occasion in addition to insects.

Please remember:



TREAD LIGHTLY!

Know before you go...

For more OHV information in central Oregon visit:
www.fs.fed.us/r6/centraloregon

Discover the Natural World

TRAIL NAME	Trail No. (corresponds to Deschutes Nmi Forest Map)	Length Miles (*Miles one-way)	Elevation Low-High	Season	Difficulty	Horse	Mt. Biking (UP = uphill only)	Bird/Wildlife Viewing	Geological Interest	Forest	Panoramic Views
Bend/Fort Rock											
Charlton Lake	19	10	5500-7100	Jun-Nov	Diff.	X	X	X		X	X
Crater Rim	3957	21	6330-7600	Jun-Nov	Diff.	X	X	X	X	X	X
Coyote Loop	3962	6.6	4050-4350	Mar-Dec	Mod	X	X				
Hoffman Island	3959	1.0*	5500-5600	May-Nov	Easy	N	N		X	X	
Lava Butte	3918	0.3	4950-5000	May-Oct	Easy		N	X	X	X	X
Lava Cast Nature	3960	0.9	5750-5850	May-Nov	Easy		N		X		
Little Crater	3953	1.5*	6330-6850	Jun-Nov	Mod.		N		X		X
Lost Lake	3958.2	3.9*	6440-7400	Jun-Nov	Diff	X	X		X	X	X
Mt. Bachelor	30	1.6*	6200-9000	Jun-Nov	Diff				X		X
Newberry Crater	3958	8.7*	6350-7300	Jun-Nov	Mod	X	X	X	X	X	X
North Fork	24.2	3.5*	4950-6100	Jun-Nov	Mod		UP	X		X	
Obsidian Flow	3958.1	0.5	6420-6560	Jun-Nov	Easy	N	N		X		X
Osprey Point	29	0.3*	4450-4500	May-Nov	Easy	N		X			
Paulina Falls	3954	0.5*	6120-6280	Jun-Nov	Easy				X	X	
Paulina Lakeshore	3955	7	6330-6560	Jun-Nov	Mod	N	N	X	X	X	
Paulina Peak	3951	0.5*	7800-7980	Jun-Nov	Diff	N	N	X	X	X	X
Peter Skeen Ogden	3956	9.5*	4300-6329	May-Nov	Mod	X	UP	X		X	
Ray Atkeson Loop	4.3	2.5	5400-5450	Jun-Nov	Easy	N	N	X	X	X	X
Swamp Wells	3961	20.8	4000-7480	May-Dec	M-D	X	X		X	X	
Swampy Lake	23	8.5	5350-6100	Jun-Nov	Mod	X	X	X		X	
Molten Lands	3922	0.5*	4500-4550	Apr-Dec	Easy	N	N		X		
Tumalo Mountain	38	1.5*	6200-7700	Jun-Nov	Diff	N	N	X	X	X	X
Whispering Pines	3930	0.3	4500-4500	Apr-Dec	Easy	N	N	X	X	X	
SISTERS											
Black Crater	4058	7.6	4900-7251	Jun-Oct	Diff	X			X	X	X
Metolius-Windigo	99	37.6	2900-6600	Jun-Oct	Mod	X	X			X	
Metolius River Trail	4020	10	2750-3000	Mar-Oct	Easy			X		X	
Suttle Lake Shore	4030	3.2	3450-3500	Mar-Oct	Easy		X			X	
Sisters Mt Bike Trail	4090	15	3200-3800	Mar-Oct	Mod		X		X		X
Squaw Creek Falls	4080	0.9	4800-5200	Mar-Oct	Mod	X		X	X	X	
CRESCENT											
Cowhorn Mt.	2000	12.7	Smt 7664	Jun-Nov	Mod	X			X		X
Diamond Peak	2000	18.2	Smt 8744	Jun-Nov	Mod	X	N	X	X		X
Moore Creek Trail	40	7.5*	4850-5450	Jun-Nov	Easy	X	X	X		X	
Maiden Lake Trail	41	6.0*	5200-6000	Jun-Nov	Mod	X	X	X		X	
Maiden Peak Trail	41.1	2.7*	6300-7800	Jun-Nov	Diff	X	X		X	X	X
Whitefish Creek	42	14.3*	4800-6200	Jun-Nov	Easy	X		X		X	X
Snell Lake Trail	43	8.5*	5500-6200	Jun-Nov	Easy	X		X		X	
Crater Butte Trail	44	13.7*	4850-6200	Jun-Nov	Mod	X		X		X	
Fawn Lake Trail	44-A	4.7*	4900-5650	Jun-Nov	Easy	X	N			X	X
Stag Lake	44-B	0.7*	5900-6000	Jun-Nov	Easy	X				X	X
Oldenberg Lake	45	9.7*	4950-5950	Jun-Nov	Easy	X	X	X		X	
Summit Lake	46	10.9*	5500-6200	Jun-Nov	Easy	X	X			X	
Yoran Lake	49	5.3*	4800-5950	Jun-Nov	Easy	X				X	
Windy Lakes	50	5.7*	4680-6300	Jun-Nov	Mod	X	X			X	
Rosary Lakes / PCT	2000	22	4950-7100	Jun-Nov	M-D	X	N	X		X	X
Big Marsh Nature	3888	2.6*	4730	Jun-Nov	Easy	N	N	X			

Crescent Lake - Scratch More Than Just The Surface!

Crescent Lake is a popular recreation site on the Deschutes NF in a lush setting of wooded shorelines and sandy beaches. The lake is a brilliant, crystal blue-green color and features a resort and four campgrounds. Crescent Lake covers about 4500 acres and is one of the deepest Cascade lakes at a maximum depth of 265 feet.

Visitors from all over the world come to Central Oregon to take advantage of the recreational opportunities that Crescent Lake has to offer. These include swimming, boating, water and snow skiing, windsurfing, snowmobiling, hiking and fishing. Crescent Lake is also home to many populations of fish including kokanee, lake trout, rainbow trout, brown trout and whitefish.

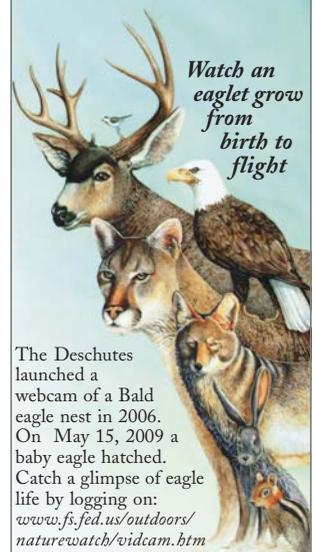
Crescent Lake is located in a naturally glaciated basin behind a terminal moraine that was created by glacial ice about 25,000 years ago? During an ice age, ice flows can carry rocks, boulders and other debris downwards from the top of a mountain where they may form moraines or mounds. Advancing ice sheets can also block drainage pathways and create glacial lakes. Some moraines can be more than 300 feet high and 3 miles wide. This is how Crescent Lake was formed.

Did You Know?

Lava Lands Visitor Center is a great place for taking a birding walk. The pine forest surrounding the center provides habitat for Clark's Nutcracker, Yellow-rumped Warbler, Mountain Chickadee, Red Crossbill, Brown Creeper, Green-tailed Towhee, Hairy Woodpecker, Chipping Sparrow, Red-tailed Hawk and Varied Thrush. The stark lava flows and cinder cone provide habitat for Rock Wren, Common Nighthawk and Common Raven.



Wildlife on the Web... Are you ready to explore the natural world around you? The Central Oregon Wildlife Viewing Website makes it easy and fun! Explore your wildlife viewing options, print a customized guide, then get outside! Visit www.fs.fed.us/r6/centraloregon/wildlife/index.shtml



Watch an eaglet grow from birth to flight

The Deschutes launched a webcam of a Bald eagle nest in 2006. On May 15, 2009 a baby eagle hatched. Catch a glimpse of eagle life by logging on: www.fs.fed.us/outdoors/naturewatch/vidcam.htm

Popular Lakes

Odell Lake

Located From Crescent, W on FS Rd 61 12 miles; N on Hwy 58 5 miles; take East Odell Lake access road boating, fishing, windsurfing



Paulina Lake

Located 35 miles SE of Bend located in Newberry Caldera; S on Hwy 97; E on FS Rd 21 boating, fishing, swimming



South Twin Lake

Located S on Hwy 97; take Fall River turn onto FS Rd 43 to Wickiup Reservoir; then FS Rd 4260 boating, fishing, swimming, canoeing



Three Creeks Lake

Located 15 miles S of Sisters; take FS Rd 1600 fishing, canoeing



Todd Lake

Located 25 miles SW of Bend via Cascade Lakes Hwy boating, fishing, canoeing



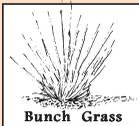
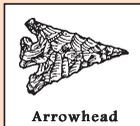
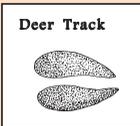
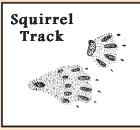
Wickiup Reservoir

Located 60 miles SW of Bend via Cascade Lakes Hwy boating, fishing, water skiing

Kids' Corner



Scout It Out At Lava Lands-Cross these off as you see them in or around the Lava Lands Visitor Center.

 Bunch Grass	 Bird Bath	Cool facts about volcanoes in central Oregon	 Arrowhead	 Deer Track	 Cottontail Rabbit	 Lava Butte	 Pine Cone
 Owl	 Deer Antler	Cottontail Rabbit Tracks	 SMOKEY	 Squirrel Track	 Bitterbrush	 Chipmunk	The new interpretive exhibits at Lava Lands Visitor Center

Have you seen any birds today?

It's hard to **avoid** bird watching on the Deschutes National Forest. The lakes are full of waterfowl and osprey. Bald eagles soar above looking for fish and raptors scan the high desert where unlucky rodents are easy to see and catch. Turkey Vultures migrate back to Central Oregon each summer with thousands of other birds.

Some birds eat seeds, many eat insects, others eat rodents and of course, the Turkey Vulture eats dead animals. To figure out what a bird eats—look at its beak. A short thick beak is for cracking seeds while small beaks and big mouths net insects.

Once you spot a bird, observe its behavior. Identifying birds takes careful observation. Behavior, beak shape, size, shape and color are a start. Then look for field marks such as lines across the wings (wing bars), patches of color, stripes across the eyes or marks on the body. After you've had a good look—grab a bird book or ask a ranger to help figure out what kind of bird you discovered today. While birdwatching, don't disturb the bird you are viewing, especially parents with young. To get a good look and avoid scaring birds away—use binoculars.



Vulture

Bird Behavior Bingo

Find birds doing the things shown in the Bird BINGO Card. Write or draw what you see in the squares. Can you get a Bird BINGO?

Flock of Birds	A Nest	Hunting	Singing
Trying to Hide	Bird of Your Choice	Feeding	Resting
Picking its Feathers	Flying	Swimming	Playing
Chasing	Hopping	Bathing	Walking

Feathered Feet...

Can you connect the right feet to the right bird?

A.  PERCHING BIRDS, like finches and warblers, have feet designed for grasping branches.

B.  MOST DUCKS AND GEESE have webbed toes for swimming and standing on soft mud.

C.  BIRDS OF PREY (hawks, owls, falcons...) have sharp, strong talons for grasping their prey.

Here on the Deschutes National Forest, abandoned campfires are the number one cause of human caused fires. Most of these abandoned campfires stay small and easy for firefighters to suppress. It only takes one escaping fire to jeopardize lives, destroy property and change a beautiful area forever. Here are some simple steps (See Renee's illustrations) to help you properly build and extinguish a Campfire. -Cathy O'Brien, Fire Prevention Officer; Illustrations - Renee Lamoreaux, Fire Prevention Officer

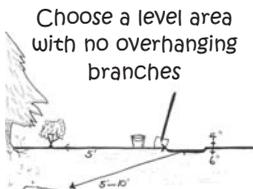
Building a Fire...



Check before you go.
For Campfire restrictions
Call: 1-800-523-4737 or
Visit: www.fs.fed.us/r6/centraloregon/fire

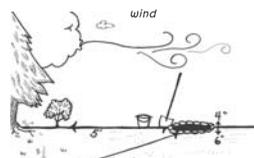


Make sure you have a shovel and water very close by



Choose a level area with no overhanging branches

Dig a 4" to 6" pit
Clear away all vegetation, including pine needles



Circle pit with rocks
Pile firewood up wind and 10 feet from pit

Keep fire small, & contained inside fire pit and NEVER leave a campfire unattended, no matter how small



Putting the Fire Out...COLD!



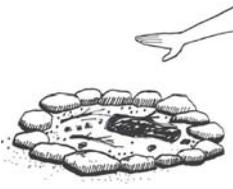
Slowly add water to put out all flames



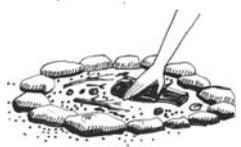
Scatter, scrape, and separate



Add more water until all the steaming stops



Feel for heat

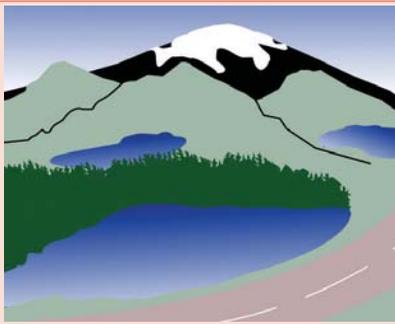


Feel to make sure fire is out COLD!

Answers to feathered feet: perching birds (B); ducks & geese (C); birds of prey (A).

Take the Road Less Traveled

Scenic Byways are a way of getting in touch with the pulse of the communities and cultures of central Oregon. Traveling the three National Scenic Byways on the Deschutes National Forest will bring you face to face with incredible scenery and fascinating stories about people of the past. Each byway offers opportunities to learn about Native American lifestyles and their history, early explorers and trappers traveling through as yet unmapped territory, homesteaders eking out a living on the high desert, and loggers, farmers, and miners changing the look of the landscape.

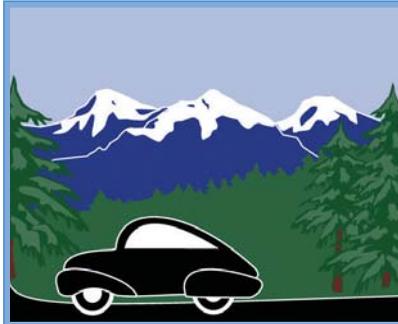


The Cascade Lakes National Scenic Byway is our “String of Pearls.” This 66 mile drive takes you closer to the sky as you drive through Cascade peaks and alpine lakes. The air has an entirely different feel up here. You follow the journey of water from its icy origins to springs, streams, rivers, and lakes that have transformed the volcanic landscape into meadows, wildflower carpets, and mixed conifer forests.

Selected by Scenic America as one of the nation’s 10 most important byways, this route offers many opportunities for experiencing the outdoors in a wilderness setting, places to watch wildlife, open spaces for hiking and biking, a variety of lakes for fishing and boating, and special interpretive sites and trails designed for learning more about this incredible environment.

The Ray Atkeson Wayside tells you about Oregon’s photographer laureate who used photography as a way to create awareness for the preservation of Oregon’s scenic beauty. The Soda Creek Interpretive Site will teach you about how a creek was restored from a straight channel to its natural meanderings. The new Wickiup Dam Interpretive Site will describe Oregon’s last big log drive and the construction of the dam.

To access the Cascade Lakes Scenic Byway, follow signs through Bend to Mt. Bachelor and the Cascade Lakes. Return north to Bend via Highway 97 or by crossing the Deschutes and Little Deschutes rivers on Forest Road 42. The best time to take this drive is between June and October. Minimum driving time is 3 to 5 hours. This drive is closed during winter beyond Mt. Bachelor to south of Davis Lake.



The McKenzie Pass-Santiam Pass National Scenic Byway starts in Sisters and quickly climbs two passes while carving through 82 miles of jagged lava landscapes suddenly softened by lush forests and sheltering trees. This dramatic byway follows an 1860s wagon road. Brilliant views of contrasting dark and light are offered over a foreground of lava and a backdrop of the magnificent North and Middle Sisters. The hidden South Sister is visible from the Cascade Lakes National Scenic Byway to the south.

The stark contrasts between fire and ice give way to a softer textured environment as you drive through old growth forests and the gentler west side understorey of vine maple and other deciduous vegetation. A pause at Proxy Falls will take you to fern covered hillsides and a beautiful display of cascading water. A short hike to Linton Lake is worth the refreshing view. Native American stories and pioneer history await you at Dee Wright Observatory, Sahalie Falls, Koosah Falls, and the new scenic view portal at the McKenzie Ranger District.

You can catch this rush of a ride by heading west on Oregon Route 242 after slowly making your way through the town of Sisters. The loop drive will take you up to McKenzie Pass for some challenging driving, along the McKenzie River on Oregon 126, over the Santiam Pass, past Suttle Lake and Black Butte Resort, and then back to Sisters. The best time to take this drive is between July and October as McKenzie Pass is closed during winter. Minimum driving time is 3 to 5 hours.

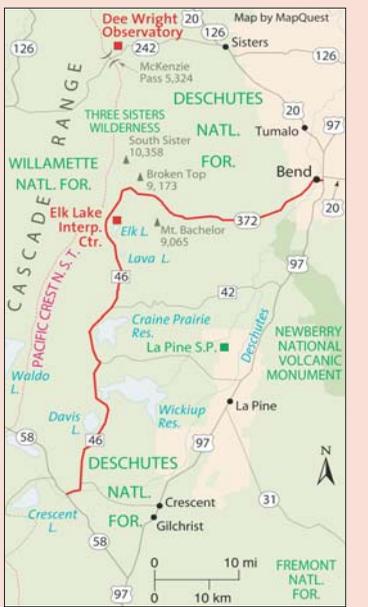


The Outback National Scenic Byway, with its “Sounds and Colors of Silence,” is a 171 mile drive that takes you through remote small towns with tall tales as reminders of the not too distant past. This is a place where silence is transformed into pearls of wisdom and living history through the stories told by volunteers at Fort Rock Homestead Village Museum. There are several homestead-era structures which were moved from their original locations to be preserved and protected at the museum site. Visiting the cabins, school house, and church will help you appreciate the lifestyle of these homesteaders who settled the area in the early 1900s.

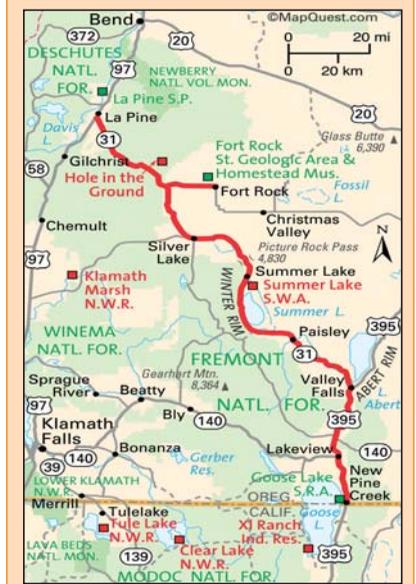
The geology and history of this remote expanse of rimrock and sage await discovery one mile away at Fort Rock State Park. The fortress-like rock formation that rises above the sagebrush plains is an unforgettable sight.

Summer Lake is a wildlife area that is part of the Pacific Flyway where waterfowl can be viewed. Silver Lake is less of a lake now than a dry basin. Scattered throughout the desert are hot springs. There is an attractive rest area at Summer Lake halfway between Highway 97 and Highway 395. Lakeview is the “tallest town” in the state at 4,800 feet with Oregon’s only geyser Old Perpetual shooting 60 feet in the air every minute or so.

To find the Outback Scenic Byway, drive 33 miles south of Bend on Highway 97 to the junction 2 miles south of LaPine and then turn southeast on Oregon 31. Fort Rock Homestead Village Museum and Fort Rock State Park are 30 miles south on Oregon 31 and 7 miles east to the town of Fort Rock. The best time to enjoy this drive is spring and fall. Minimum driving time is 3 to 4 hours.



Cascade Lakes, McKenzie Pass-Santiam Pass and Outback National Scenic Byway maps courtesy of www.byways.org. Visit their website for more information.



Discover Special Places

2009 Visitor Center Hours & Interpretive Program Schedule

Lava Lands Visitor Center, Lava Butte and Lava River Cave

Lava Land Visitor Center is open...

May 1st - June 30th, Wednesday-Sunday, 9:00 a.m.-5:00 p.m.

July 1st - September 7th, 7 days a week, 9:00 a.m.-5:00 p.m.

September 8th - October 15th, Wednesday-Sunday, 9:00 a.m.-5:00 p.m.

Lava River Cave is open ...

May 8th - June 30th, Wednesday-Sunday, 9:00 a.m.-5:00 p.m.

July 1st - September 7th, 7 days a week, 9:00 a.m.-5:00 p.m.

September 8th - October 15th, Wednesday-Sunday, 9:00 a.m.-5:00 p.m.

Lava River Cave offers self-guided exploration of a mile-long lava tube. It takes approximately 1.5 hours to tour the entire cave. Lantern rentals are available until 4:00 p.m. for \$4.00.

Paulina Visitor Center is open...

July 1st - September 14th, Thursday-Monday, 9:00 a.m.-5:00 p.m.

Interpretive programs are offered July 1st to September 7th at Lava Lands Visitor Center, Mount Bachelor-Pine Marten Lodge, Newberry Caldera, Cascades Lakes Highway and The High Desert Museum. Check at the information desk for current schedule. Schedules will also be posted at entrance stations, information desks, & campground bulletin boards. Please check the weekly schedule for times and locations. For more information call Lava Lands Visitor Center at 541-593-2421.

Passport in Time (PIT) Projects

Pack your bags and head out but don't forget your Passport in Time (PIT). As part of a PIT crew, you work alongside archaeologists and historians on all sorts of projects. Archaeology digs, restoring historic structures and recording oral histories are a few possibilities. There is no fee to become a PIT partner. Is your local National Forest sponsoring a PIT project this summer? Call the Supervisors Office of any National Forest and ask for the PIT Traveler, the Passport In Time newsletter, or write to: Passport In Time Clearinghouse, PO Box 31315, Tuscon, AZ, 85751-1315 or visit our web site at: www.passportintime.com

Historic Elk Lake Guard Station

June 13 through Sept 12, 9:30 am -4:30 pm

Visitor information and historic site interpretation. Tour the station log cabin and grounds to see how Forest Service guards lived in the 1930s and 1940s. Hiking Trail connects guard station to Elk Lake campground and resort.

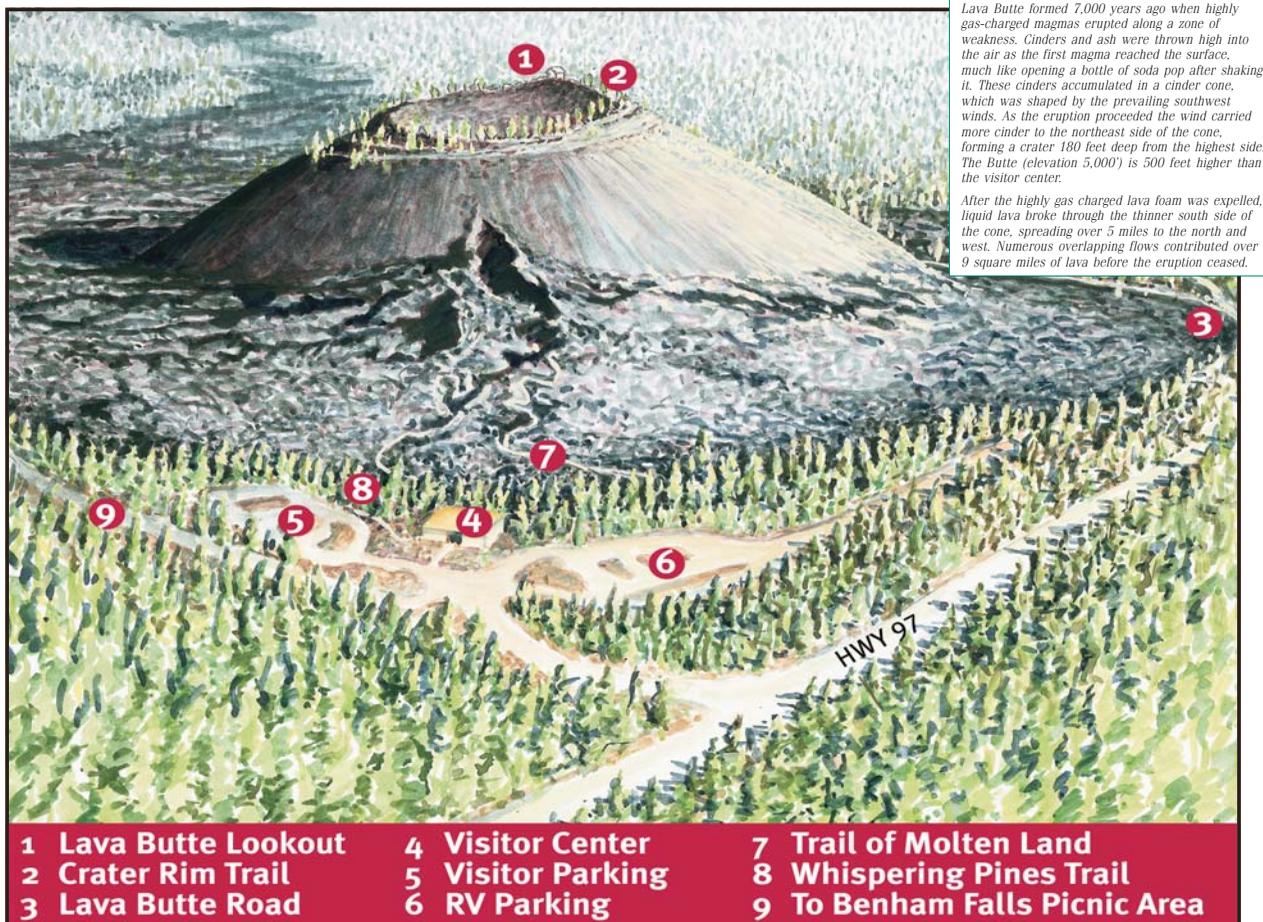
Redmond Air Center

Redmond Air Center is a hub for wildfire suppression and fire-related aviation activities for the Pacific Northwest region. Located 2 miles east of Redmond at the north end of the Redmond Airport, the facilities are open for public tours Monday thru Friday from 9:00 to 10:30 a.m. and 1:00 to 3:00 p.m. Visitors may tour the Redmond Smokejumper Base, the National Interagency Incident Support Cache, and the Redmond Air Tanker Base during the operating season. Please schedule tours in advance by calling the Center at (541) 504-7200.

High Desert Museum

Through exhibits, wildlife, and living history, the High Desert Museum creates learning experiences to help audiences discover their connection to the past, their role in the present, and their responsibility to the future. The museum is open daily from 9:00 to 5:00. For more information and rates please call 382-4754 or visit the website at highdesertmuseum.org.

Newberry National Volcanic Monument - Lava Lands Visitor Map



Lava Butte formed 7,000 years ago when highly gas-charged magmas erupted along a zone of weakness. Cinders and ash were thrown high into the air as the first magma reached the surface, much like opening a bottle of soda pop after shaking it. These cinders accumulated in a cinder cone, which was shaped by the prevailing southwest winds. As the eruption proceeded the wind carried more cinder to the northeast side of the cone, forming a crater 180 feet deep from the highest side. The Butte (elevation 5,000') is 500 feet higher than the visitor center.

After the highly gas charged lava foam was expelled, liquid lava broke through the thinner south side of the cone, spreading over 5 miles to the north and west. Numerous overlapping flows contributed over 9 square miles of lava before the eruption ceased.

- | | | |
|----------------------|-------------------|-------------------------------|
| 1 Lava Butte Lookout | 4 Visitor Center | 7 Trail of Molten Land |
| 2 Crater Rim Trail | 5 Visitor Parking | 8 Whispering Pines Trail |
| 3 Lava Butte Road | 6 RV Parking | 9 To Benham Falls Picnic Area |

Artist: Dennis McGregor



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Celebrating the grand re-opening of Lava Lands Visitor Center