



The Tahoma News

May - June 2011



Researching Mount Rainier's Human History



Archaeologists screening a test unit for artifacts.

to the historic period when lands were ceded to the rapidly expanding United States. Ongoing analysis of chipped stone tool, botanical, and animal remains preserved in Buck Lake archaeological deposits promise to clarify our views of the manner in which human beings interacted with Mount Rainier's environments during the prehistoric past, and how mountain land-use functioned within larger, year-round subsistence and

settlement systems centered in the lowlands.

By Greg Burtchard, Park Archaeologist

For some time, Mount Rainier National Park has promoted archaeological efforts to understand the time period and ways that Native American people used the mountain during the prehistoric past. Last summer, results at two sites on opposite sides of Mount Rainier – Buck Lake at 5,400 feet on the mountain's northeast slope; and Forgotten Creek at 4,200 feet on the southwestern side – suggest repeated use of mid to upper elevation habitats. Archaeological evidence from Buck Lake suggests that people have used Mount Rainier for seasonal hunting and gathering purposes for over 9,000 years.

At Buck Lake, over 20,000 stone tools and other chipped stone artifacts were collected from cultural and natural stratigraphic layers (volcanic sediment layers of rock, ash, and mudflow deposits) spanning much of the 11,000 to 12,000 years that Mount Rainier has been free of Pleistocene (Great Ice Age) glacial ice. Artifact density was particularly high in the vicinity of a suite of pit and heath features directly atop volcanic ash from an eruption at Mount Saint Helens dating to about 4,000 years ago. Newest radiocarbon results from Buck Lake suggest that human use of the mountain may have begun as early as 9,700 years ago and continued

Last season's results from Forgotten Creek suggest that very early use of the mountain was not limited to the northeastern corner of Mount Rainier. Located on the southeastern flank of the mountain, Forgotten Creek contains a pattern of deeply stratified cultural and natural deposits similar to those at Buck Lake. Initial archaeological tests completed in 2010 suggest presence of subsurface chipped stone tool remains clustered in two places –one with a dense distribution of artifacts dating from about 4,000 years ago to the historic present; and the second, about 40 meters away, with more deeply buried artifacts in sediments that predate the eruption of Mount Mazama (Crater Lake National Park) about 7,500 years ago. This result is particularly meaningful in that presence of very old cultural deposits in opposite sides of the mountain implies wide-spread use of upper elevation landscapes at a very early age; and, in concert with results emerging from other archaeological locations at North Cascades National Park Complex, and Olympic National Park, suggest early, widespread, and continuing use of Pacific Northwest montane landscapes by Indian people throughout the prehistoric past.

Roadwork Ahead: Stevens Canyon Road

Due to extensive roadway embankment stabilization and subsurface compaction grouting efforts, Stevens Canyon Road will be closed between the gate located just west of the Grove of the Patriarchs to just east of the popular Backbone Ridge viewpoint from September 6, 2011, through the winter road closure. Visitors will be able to access the Reflection Lakes, Box Canyon and Backbone Ridge areas and adjacent trailheads from the west during the 2011 closure.

During the closure, visitors are encouraged to access the Paradise area from the southwest via the Nisqually Entrance at the east end of SR 706. Visitors traveling from the east via SR 410, SR 123, and/or US 12 who wish to visit the Paradise area have two detour options: Via Gifford Pinchot

National Forest Service Road 52 (Skate Creek Road) beginning on US 12 in Packwood and ending on SR 706 east of Ashford; or the longer route via SR 7 beginning in Morton on US 12 and ending on SR 706 at Elbe.

While the construction and associated closures and traffic delays present an inconvenience, the rehabilitation work will not only improve the driving surface of the roadway, but ensure its longevity.

Stevens Canyon roadwork is also scheduled for periods during the 2012 & 2013 seasons. Information on this project, as well as general park information, is available on the park's website at www.nps.gov/mora/parknews/newsreleases.htm.

Welcome...



Superintendent
Dave Uberuaga

...to spring at Mount Rainier National Park! As you travel through the park you will see that spring comes late and slow at 5,000 feet in elevation on the mountain. The 2010-2011 winter has brought 120% of normal snowpack to the park. As of April 10, 783 inches of snow has fallen at Paradise.

Roads completely snowed in since last fall are cleared by park crews and state road crews with heavy equipment and rotary snow blowers; boulders, rocks and fallen trees are cleared from roads, and repairs made; snow is shoveled from park buildings; water and utility systems shut down since fall are reactivated; damage from winter's harsh conditions is repaired; and many other maintenance activities associated with getting the park's public facilities ready for another season of visitation are accomplished in spring. Concurrently, NPS and concession employees are hired, trained and prepared to operate the park and serve visitors. By July, almost 500, mostly temporary, employees are on board. Many people, working together, including volunteers, are needed to "start up" Mount Rainier National Park each spring!

May and June are great times to visit to experience the rebirth of the park from a long winter nap. Be sure to be prepared for possible inclement weather as spring storms can be very unpredictable.

Enjoy your visit!

Dave Uberuaga,
Superintendent

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Naturalist Programs

Join a park ranger or volunteer for a talk, guided walk, or evening program. These free programs explore the park's natural and cultural history. Find out who else has come to Mount Rainier and why. Discover what this mountain really is and what it may become. Meet some other users of the park's resources - from owls to elk - and find out why they are here. Check at a visitor center for program times and locations.

HEY KIDS!

Ask for a Junior Ranger Activity Book. It's FREE at all park visitor centers. Complete it to learn lots of cool stuff about your park and earn a badge and certificate.



Protect Your Park

Mount Rainier National Park was established in 1899 to preserve the natural and cultural resources in this area and to provide for public benefit and enjoyment. To protect yourself and your park, during your visit please follow these rules:

- Pets must be on leashes no longer than six feet and are not allowed in buildings, on trails, or on snow.
- Do not feed or disturb the wildlife.
- Hunting is prohibited.
- Stay on designated trails.
- Make fires only in a fire grill. Collecting firewood is prohibited.
- Bicycle only on roads, not on trails.
- Camp in designated campsites only. Sleeping in vehicles outside of campgrounds is not permitted.
- The use of firearms is prohibited within Mount Rainier National Park. Also, federal law prohibits firearms in certain facilities in this park; those places are posted with signs at public entrances. People who can legally possess firearms under federal, Washington State, and local laws may possess them in the park.

Do Your Part for Climate Friendly Parks!



Mount Rainier National Park is a climate friendly park with a goal of becoming carbon neutral by 2016 - the centennial of the National Park Service. You can be part of the effort by logging on to the Do Your Part website

to calculate your carbon footprint and set your personal goals. Don't forget to select Mount Rainier as your favorite park! To log on to Do Your Part, go to <http://doyourpartparks.org/index.php>. Visit the Climate Friendly Parks website for more information on Climate Friendly Parks: <http://www.nps.gov/climatefriendlyparks/index.html>.

Ride the Free Weekend Shuttle to Paradise



Starting June 24, free shuttle service is available from Longmire to Paradise on Fridays, Saturdays and Sundays. Additional free shuttle service between downtown Ashford and Longmire is available Saturdays and Sundays.

Shuttle schedules are posted at all shuttle stops, and on the park's website www.nps.gov/mora. Leave your car behind, save money on gas, and enjoy a safe, stress-free ride to Paradise. Choose not to be part of the congestion!

The Longmire-to-Paradise shuttle runs every 45 minutes on Fridays, and every 20 - 30 minutes on Saturdays and Sundays. The shuttle stops at Cougar Rock Campground in both directions. Shuttles also stop at Narada Falls on the way to Paradise, and at the Comet Falls Trailhead on the return to Longmire. Service begins at Longmire at 10:00 a.m., with the last bus returning around 7:30 p.m.

The Ashford-to-Longmire shuttle begins service at 9:15 a.m., with buses leaving every 20 minutes until 10:45 a.m., then every 75 minutes thereafter. The last shuttle leaves Ashford at 5:00 p.m., with the final bus returning from Longmire by 8:15 p.m. Shuttle service is free, but park entrance fees apply.

Road Opening Schedule Estimated Dates (subject to change)	
Nisqually to Paradise	Open
Westside Road to Dry Creek	April 2
Paradise Valley Road	May 27
Stevens Canyon Road	May 27
State Route 410/Chinook Pass	May 21
State Route 123/Cayuse Pass	April 24
White River Road to White River Campground Parking Lot	May 20
Sunrise Road	June 25
Mowich Lake Road	July 1

Use caution while driving this spring.

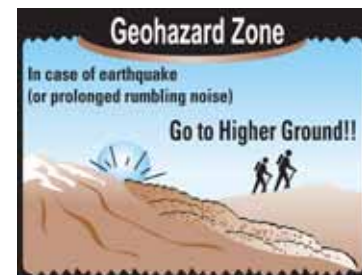
Parking in Paradise

Due to the popularity of the Paradise area, parking in the upper Paradise lot (adjacent to the visitor center) is limited to two hours and is generally full by 11:00 a.m. Parking for longer than two hours is permitted in the lower Paradise lot and along the Paradise Valley Road.

Mount Rainier: An Active Volcano

Active steam vents, periodic earth tremors, and historic eruptions provide evidence that Mount Rainier is sleeping, not dead. Seismic monitoring stations around the mountain should provide days or weeks of advance warning of impending eruptions. Other geologic hazards, however, can occur with little warning. These include debris flows and rockfalls.

The more time you spend in an area with geologic hazards, the greater the chance that you could be involved in an emergency event. While most people consider the danger to be relatively low, you must decide if you will assume the risk of visiting these potentially dangerous locations.



If you are near a river and notice a rapid rise in water level, feel a prolonged shaking of the ground, and/or hear a roaring sound coming

from up valley - often described as the sound made by a fast-moving freight train - move quickly to higher ground! A location 160 feet or more above river level should be safe.

Detailed information is available at park visitor centers or from scientists at the U.S.G.S. Cascades Volcano Observatory, 1300 SE Cardinal Court, Building 10, Suite 100, Vancouver, WA 98661, or visit the U.S.G.S. Cascade Volcanoes website: vulcan.wr.usgs.gov.

Park Partners

Who's responsible for protecting Mount Rainier National Park? Everyone! Here are some people who deserve special thanks:



Discover Your Northwest (formerly Northwest Interpretive Association) provides resources like travel guides, maps, educational books, DVDs, and other materials for visitors to public lands. Each year, they support projects and programs that enhance visitor experiences by generating funding through retail sales in bookstores located in visitor and information centers across the Northwest. To find out more, visit one of their locations in the park, call the Mount Rainier location at (360) 569-2211, ext. 3320, or visit them online at www.discovernw.org.



Volunteers Each year more than 137,000 volunteers donate over 5,200,000 hours of service in the national parks. They come from every state and nearly every country in the world to help preserve and protect America's natural and cultural heritage for the enjoyment of this and future generations. At Mount Rainier National Park, 2,016 volunteers contributed a total of 73,990 hours in 2010. We express our deep appreciation to them and to all who are volunteering in 2011! Both short and long-term opportunities are available. For a schedule of activities and information on how to join our team, contact the Volunteer Coordinator at (360) 569-2211 ext. 3385, or visit our website at www.nps.gov/mora/supportyourpark/volunteer.htm.



Washington's National Park Fund Every year millions of people visit Washington state's spectacular national parks: Mount Rainier, North Cascades, and Olympic. Since 1993, Washington's National Park Fund has connected people to parks and inspired contributions of time, talent and money. The Fund helps ensure that visitors have high quality, memorable experiences by sponsoring educational, trail and wildlife projects. By securing funding from individuals, corporations, foundations and businesses, the Fund supports park restoration, enhancement and preservation. For information about how you can help Washington's national parks, call 253-566-4644 or visit www.wnfp.org.



Student Conservation Association SCA is a nationwide force of high school and college-age volunteers who are committed to protecting and preserving the environment. Through internships, conservation jobs and crew experiences, SCA members are rising to meet environmental challenges while gaining real, hands-on field experience. They complete projects in every conservation discipline from archaeology to zoology. SCA directed volunteer efforts at Mount Rainier National Park in response to the floods of 2006, for which it received the Department of the Interior's Cooperative Conservation Award. For more information about SCA or to get involved, visit www.thesca.org.

If You See a Black Bear or a Mountain Lion

Mount Rainier National Park contains a wide variety of wildlife species. Among the largest and most feared are the black bear and the mountain lion. Though you are not likely to see them, they are powerful animals, and your safety depends on how you act around them. Be aware of your surroundings, and follow these guidelines while in the park.

Close Encounters With Black Bears

Black bear attacks are extremely rare in the United States and we have no records of any occurring in Mount Rainier National Park. A bear's response to your presence depends heavily on how you respond to the bear's.



- Never feed a black bear, either intentionally or by leaving food unsecured.
- Do not approach bear cubs. An adult may be nearby to protect and defend the cubs.
- Back away from a nearby bear, even if it appears unconcerned with your presence.
- Do not run. Back away slowly. Talk loudly.
- A defensive bear will appear agitated and will often give visual and vocal warnings like swatting or stomping the ground, exhaling loudly, huffing, snapping teeth, or lowering the head with ears drawn back while facing you. This response may escalate to a charge.

If Charged by a Black Bear

- If the bear stops, slowly back away while talking, keeping the bear in view while leaving the area.
- If it continues, act aggressively, shouting and throwing rocks or sticks.
- If the bear attacks and you have food, distance yourself from the food.
- If the bear attacks and you do not have food, fight back aggressively. This is likely a predatory attack, and the bear is treating you as prey.

Close Encounters With Mountain Lions

Mountain lions (also known as cougars) usually do not like confrontation. If you see one, give it plenty of space so it can get away. Never approach cougar kittens. Leave the area immediately.

- Do not run or turn your back on a lion.
- Gather children with adults. Quickly pick up and hold small children.
- Stand in a group with your companions.
- If the lion moves toward you, wave your arms and make noise. Make yourself look large, intimidating and in control: stand up tall, open your jacket, yell, throw things.
- Back away slowly while facing the animal.
- If attacked, fight back aggressively. Stay

standing. Hit as hard as possible especially to the head. Use a stick or rock as a weapon. Throw dirt in the eyes. Protect your head and neck.



Report all bear and mountain lion sightings to a ranger or call park dispatch at (360) 569-2211 extension 2334.

Secrets to a Safe and Enjoyable Hike

Hiking at Mount Rainier National Park can mean adventure, exploration, learning, or just plain having fun! The secret to a great hike? Staying safe!

Hikers need to emphasize personal safety as they journey by foot through the backcountry and along many of the popular trails. For trail information, talk with a ranger at any visitor center or wilderness information center. Use the following tips to keep your journey safe.

Use Common Sense

- Protect yourself by wearing appropriate outdoor clothing including footwear.
- Be prepared. Carry the ten essentials even on a short sightseeing hike.
- Always tell someone of your travel plans so they can notify the park if you fail to return.
- Do not travel alone. If visibility is poor, do not travel at all.

Pay Attention To The Weather

At Mount Rainier, the weather can change rapidly. Hikers who aren't prepared for weather conditions increase their risk of becoming lost or injured. Avoid problems: plan and prepare for Mount Rainier's changeable weather.

Crossing Streams Safely

Many hikers underestimate the power of moving water and some consider their former successful stream crossings as a ticket to the other side. This may not be true. Regardless of your knowledge, skills, and experience use these pointers in making wise decisions when crossing a stream.

- Early morning when river levels are generally at their lowest is the best time to cross.
- Look for an area with a smooth bottom and slow moving water below knee height.
- Before crossing, scout downstream for log jams, waterfalls and other hazards that could trap you. Locate a point where you can exit if you fall in.
- Use a sturdy stick to maintain two points of contact with the ground at all times.
- Unfasten the belt of your pack so you can easily discard it if necessary.
- Staring down at moving water can make you dizzy. Look forward as much as possible.

Taking these few precautions could save your day... and your life!

Climbing

Each year, approximately 10,000 people attempt to climb Mount Rainier. Nearly half reach the 14,410 foot summit. Climbing permits are required for travel above 10,000' and/or on glaciers. Climbing information – including fees, routes, and conditions – is available at ranger stations and climbing information centers. Guided climbs and climbing seminars are available through:

Alpine Ascents International (206) 378-1927
International Mountain Guides (360) 569-2609
Rainier Mountaineering, Inc. (888) 892-5462

Wilderness Camping

Wilderness camping permits are required for all overnight stays in the park's backcountry. Permits and backcountry information are available at all wilderness information centers and most visitor centers (see page 4 for locations and hours).

Although permits are free, there is an optional, fee-based reservation system for campers and climbers in effect May through September. Backcountry reservations are \$20 per party (1-12 people) for 1 to 14 consecutive nights. Seventy percent of all backcountry sites and zones are available for reservation. The remaining 30% are issued on a first-come, first-served basis the day of, or one day before the trip begins.

Before you step off the trail...

... consider this: each step into a meadow crushes an average of 20 plants!



When exploring Mount Rainier's fragile meadows...

Please hike only on maintained trails or thick patches of snow.

Leave No Trace

Plan ahead & prepare
Travel & camp on durable surfaces
Dispose of waste properly
Leave what you find
Minimize campfire impacts*
Respect wildlife
Be considerate of others

*Fires are for emergency use only; they are not allowed in Mount Rainier's Wilderness

Keep Wildlife Wild

- Please don't feed the wildlife.
- Store your food in an animal-proof container, or inside your car.
- Don't leave food, beverages, pet food, or toiletries unattended for any length of time.
- Clean up picnic areas after you eat.



Human food puts animals at risk and some die as a result. Birds like jays or ravens are effective nest predators – eating the eggs or young of other birds. By feeding birds, visitors concentrate

these nest predators near roads and trails and inadvertently contribute to the death of songbirds in the same area.

Still, one of the most common mistakes people make at Mount Rainier National Park is to feed the wildlife. Visitors seeking a personal connection with animals think they are "helping" them. In fact it harms them in many ways.

Beggar squirrels, foxes, deer, and jays learn to approach people and busy areas and often get hit and killed by cars. Animals that become accustomed to humans and human food may pursue and injure visitors. Biologists and rangers must intervene – with killing the animal as the last resort.

Carry the "10 Essentials" and know how to use them!

1. map of the area
2. compass
3. extra food & water
4. extra clothing (warm!) & rain gear
5. emergency shelter
6. first aid kit
7. flashlight or headlamp
8. sun glasses & sun screen
9. pocket knife
10. matches (waterproof!)

Visitor Facility Hours

Visitor Centers

Longmire Museum (360) 569-2211 x3314	May 1 - June 30 9:00 a.m. - 4:30 p.m. daily July 1 - September 5 9:00 a.m. - 5:00 p.m. daily	Ranger programs, exhibits, information, books
Paradise Henry M. Jackson Visitor Center (360) 569-2211 x6036	May 1 - May 19 10:00 a.m. - 5:00 p.m. weekends only through May 6, then daily May 20 - June 17 10:00 a.m. - 6:00 p.m. daily June 18 - September 5 10:00 a.m. - 7:00 p.m. daily	Ranger programs, exhibits, information, theater, books, food, gifts
Ohanapecosh Visitor Center (360) 569-2211 x6046	Scheduled to open May 27 May 27 - May 30 10:00 a.m. - 5:00 p.m. Fri. - Mon. June 4 - June 5 10:00 a.m. - 5:00 p.m. Sat. - Sun. June 11 - September 4 9:00 a.m. - 6:00 p.m. daily	Ranger programs, exhibits, information, books
Sunrise Visitor Center (360) 663-2425	Scheduled to open July 1	Exhibits, information, books

Wilderness & Climbing Information Centers

Longmire WIC (360) 569-4453	Scheduled to open May 27 7:30 a.m. - 5:00 p.m. daily	Wilderness camping & climbing permits
Paradise Climbing information Center (Guide House) (360) 569-2211 x6009	May 1 - May 26 7:00 a.m. - 3:00 p.m. weekends only May 27 - September 5 6:00 a.m. - 6:00 p.m. daily	Climbing & wilderness permits, exhibits, information
White River WIC (360) 569-2211 x6030	Scheduled to open May 27 7:30 a.m. - 4:30 p.m. Sun. - Thurs. 7:00 a.m. - 7:00 p.m. Fri. 7:00 a.m. - 5:00 p.m. Sat.	Wilderness camping & eastside climbing permits
Carbon River Ranger Station (360) 829-9639	Call for hours.	Wilderness camping & northside climbing permits (including Ipsut Creek campground)

Food & Lodging

For in-park lodging reservations, call Mount Rainier Guest Services at (360) 569-2275 or go to www.mtrainierguestservices.com

National Park Inn at Longmire	Open year-round Front Desk open 24 hours daily	Lodging, dining room, post office
Longmire General Store	May 1 - June 10 10:00 a.m. - 5:00 p.m. daily June 11 - September 4 9:00 a.m. - 8:00 p.m. daily	Gifts, snacks, firewood
Paradise Inn	Open for the season May 20 Front Desk open 24 hours daily	Lodging, dining room, cafe, gift shop, post office
Paradise Jackson Visitor Center Snack Bar & Gift Shop	May 1 - May 6 11:00 a.m. - 4:45 p.m. weekends only May 7 - May 19 10:00 a.m. - 4:45 p.m. daily May 20 - June 17 10:00 a.m. - 6:00 p.m. daily June 18 - September 4 10:00 a.m. - 7:00 p.m. daily	Food, gifts, books
Sunrise Lodge Snack Bar & Gift Shop	Scheduled to open June 24 10:00 a.m. - 7:00 p.m. daily	Food and gifts. Day use only, no overnight lodging

Gasoline, lodging, dining, recreation equipment rentals, and other services are available in local communities. A list of these services is available at park visitor centers and on the park's website at www.nps.gov/mora. Religious services are available in local communities.
GAS IS NOT AVAILABLE IN THE PARK



National Park Service
U.S. Department of the Interior

Mount Rainier National Park

Superintendent
Dave Ueberuaga

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Ashford, WA 98304

E-mail
MORAInfo@nps.gov

Park Headquarters
(360) 569-2211
(360) 569-2177 TDD

Website
www.nps.gov/mora

EXPERIENCE YOUR AMERICA™

Please Recycle!

Mount Rainier National Park has been recycling since the late 1960s. We recycle aluminum cans, plastic (no. 1 and 2), glass, office paper, mixed paper, cardboard, scrap metal, used oil, batteries, and a number of other items.

We also purchase recycled plastic products such as plastic bags, picnic tables, and plastic lumber; paper products made of pre- and post-consumer recycled paper; automobile products; and other products.

Be part of the effort! Please deposit aluminum cans, plastic bottles and glass in the recycle cans provided.

Accessibility

Most comfort stations, visitor centers, picnic areas, and designated campsites are accessible or accessible with help for wheelchair users. Accessible lodging is available inside the park and in local communities. In the Jackson Visitor Center at Paradise, the audiovisual programs are captioned; assistive listening devices are available for the park film; an audio described tour of the exhibits is available; and the building and exhibits are accessible to wheelchair users. The Kautz Creek Boardwalk Nature Trail is accessible when snow-free. An accessible trail leads to the base of the Paradise meadows, and a portion of the trails at Paradise are accessible with help; inquire at the Jackson Visitor Center for more information. TDD: (360) 569-2177

Drive-in Campgrounds

Campground	Open Dates	Elev.	Sites	Fee	Group Sites	Group Fees	Toilets	Dump Station	Maximum RV/Trailer Length
Cougar Rock*	May 27 - Oct. 10	3,180'	173	\$12/15*	5	\$40-64	Flush	Yes	RV 35'/Trailer 27'
Ohanapecosh*	May 27 - Oct. 10	1,914'	188	\$12/15*	2	\$40	Flush	Yes	RV 32'/Trailer 27'
White River	June 24 - Sept. 25	4,400'	112	\$12	0	N/A	Flush	No	RV 27'/Trailer 18'
Mowich Lake	Primitive walk-in campground, tents only. 10 sites, 3 group sites (max. group size 12). No fee (must self-register at campground kiosk). Chemical toilets, <i>no potable water</i> . No fires allowed. Elevation 4,929'; generally open July through early October, depending on road and weather conditions. Call 360-829-9639 for information.								

***Advance reservations are recommended for individual sites at Cougar Rock and Ohanapecosh Campgrounds from June 24 through the night of September 5. These can be made up to 6 months in advance. Reservations for group sites are required June 23 through the night of September 4, and can be made up to one year in advance. To make a reservation online, go to www.recreation.gov or call 877-444-6777.**