



©Jeff Bates

North Cascades *Challenger*

WELCOME Experience the natural features and cultural heritage of the North Cascades. Over one million acres of pristine mountain terrain await you in this system of protected Forest, Park and Wilderness lands.

Located east of the I-5 corridor, your public lands are easily accessed by several major state highways. Starting up north you can take a drive on the Mt. Baker Scenic Byway (State Route 542). This route starts at the town of Glacier, winds along the North Fork Nooksack River, and climbs to an elevation of 5,040 feet at Artist Point above Heather Meadows. This destination is legendary for spectacular views of Mt. Baker and Mt. Shuksan as well as a colorful array of sub-alpine plants.

North Cascades National
Park Service Complex
www.nps.gov/noca

Mt. Baker Ranger District
Mt. Baker – Snoqualmie
National Forest
www.fs.fed.us/r6/mbs

For other spectacular views, follow the northern part of the Cascade Loop along the North Cascades Scenic Highway (State Route 20). A side trip up Baker Lake Road, 16 miles east of Sedro-Woolley, leads into the Baker Lake Basin, which hosts campgrounds, water recreation and a bountiful trail system. Access to climbing routes on Mt. Baker and Mt. Shuksan can be reached via the Mt. Baker National Recreation Area and remote forest roads at the north end of the lake.

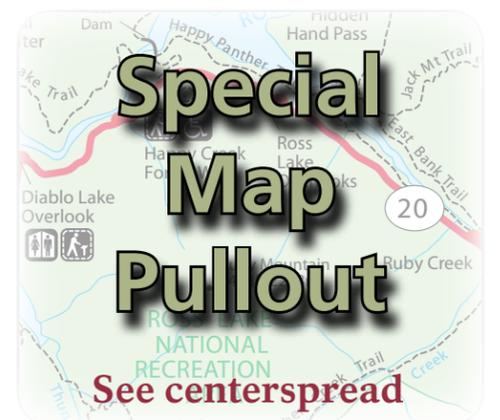
The 125-mile Skagit Wild and Scenic River system – made up of segments of the Skagit, Cascade, Sauk, and Suiattle Rivers – provides important wildlife habitat and recreation. The Skagit is home to one of

the largest winter populations of bald eagles in the United States and nearly one-third of all salmon in Puget Sound.

State Route 20 travels through the gateway communities of Concrete, Rockport, and Marblemount before reaching the North Cascades National Park. As you continue, you will pass through Ross Lake National Recreation Area where you can see Gorge, Diablo and Ross Lakes and majestic peaks that soar up to 9,000 feet in elevation. These mountains are home to 312 glaciers, more than any other park in the lower 48 states.

In 1984, more than 121,000 acres of forest were added to the National Wilderness System as the Mt. Baker and Noisy-Diobsud Wilderness Areas. In 1988, ninety-three percent of the park complex became Stephen Mather Wilderness. These wild places have few manmade developments and are established for your enjoyment and preservation of the landscape for future generations.

For more information, visit any ranger station or the National Park and Forest Service headquarters in Sedro-Woolley. Learn more about volunteer programs, the Artist-in-Residence program, and guided naturalist tours from rangers or online.



Sunset from Mt. Baker.



Kevin Hammonds



Wade B. Clark Jr.

Hundreds of bald eagles flock to the Skagit River during the winter to feast on salmon.

North Cascades National Park
Mount Baker Ranger District
810 State Route 20
Sedro-Woolley, WA 98284

Inside this guide

| | |
|--------------------------|-----|
| Park and Forest News | 2 |
| Visit and Volunteer | 3 |
| Plan and Prepare | 4 |
| Travel Safety | 5 |
| Mt. Baker Scenic Byway | 6 |
| Mt. Baker NRA | 7 |
| State Route 20 Map | 8-9 |
| Ross Lake NRA | 10 |
| Lake Chelan NRA | 11 |
| Wilderness and Climbing | 12 |
| North Cascades Glaciers | 13 |
| Research and Wildlife | 14 |
| Skagit River Stewardship | 15 |
| Area Map and Information | 16 |

Park and Forest Service receive new leadership

"My 'trifecta' of goals: re-engage Americans with the parks, increase the capacity of the National Park system and prepare the next generation of leaders for our Service."

-Mary Bomar

Mary A. Bomar was sworn in as the 17th director of the National Park Service on Oct. 17, 2006.



NPS Director Mary Bomar

Born in England, Bomar came to America in movie-like fashion: a child on a boat pulling into New York harbor, past the Statue of Liberty. Her family moved to Chicago and from there they traveled around the country to many of our national parks, such as the Grand Canyon and Mount Rushmore.

Bomar sees this time as a renaissance for Leadership, Interpretation and Education in the National Park Service. Park Service employees around the country are excited that one of their own rank and file members is now leading the organization. Bomar recognizes the needs of those who care for the nation's special places. "While we often talk about our natural and cultural resources, we often fail to talk about the needs of the 20,000 men and women who help care for them. That will change."

President Bush has proposed that the NPS receive a significant increase in its budget allocation in 2008, with much of the funding going toward the upcoming Park Centennial in 2016. To prepare for this event, Bomar has pushed to have "listening sessions" across the country to hear how the Park Service should focus its efforts.

"We aren't interested in keeping this an insider's game," she said. "We're doing the public's business. We want to hear what the public's priorities for their parks might be."

ON JAN. 12, 2007 the U.S. Department of Agriculture announced the selection of Abigail Kimbell as the 16th chief of the Forest Service. Kimbell succeeds Chief Dale Bosworth, who retired Feb. 2 after 41 years with the Forest Service.

"Abigail Kimbell is a veteran of the Forest Service who began as a seasonal worker and has since filled an impressive series of field assignments," said Department of Agriculture Secretary Mike Johanns. "Gail brings a wealth of knowledge to her new position. She is well respected both within the agency and by our stakeholders. I'm confident she will do a terrific job as chief."

Kimbell inherits a legacy of an outstanding conservation movement started by visionaries like the agency's first chief, Gifford Pinchot, politicians like Theodore Roosevelt and conservationists such as Aldo Leopold and Rachel Carson. She faces the challenge of maintaining this movement, building coalitions and partnerships and cooperative conservation efforts.



USFS Chief Abigail Kimbell

In her own words: "The future of public land management depends on greater collaboration, and as we begin to share decision-making processes we find solutions to vexing problems beginning to emerge... As the Forest Service continues to forge ahead, I have reason for optimism for our agency, the resources we manage, and the services we provide".

Local managers are encouraged by Kimbell's positive attitude and hope nearby communities and visitors will join this

collective spirit devoted to preservation of natural resources on our public lands, for the use and enjoyment of generations to come.

FLOOD RECOVERY

Visitors can expect damaged roads and trails

Severe flooding in early November 2006 caused more than \$3 million in damages to local National Park facilities and National Forest roads and trails. Aerial surveys indicate all major backcountry bridges in the National Park survived the flood. However, the full extent of the damage to the Park Complex's nearly 400 miles of backcountry trails and the 260 miles of National Forest trails will not be known until after the spring snowmelt. Until repairs are made, hikers should expect fallen trees, damaged boardwalks, scoured trail surfaces, washouts, missing footbridges, and damage to backcountry campsites.

The North Fork of the Cascade River in the National Park caused extensive damage to the Cascade River Road. High water carved out a new stream channel along 300 feet of the roadbed; most of the river is now flowing down this new channel and no longer flowing under the bridge at milepost 20.6. Further up the road, Boston Creek overwhelmed its culvert and washed away approximately 100 feet of road. The NPS intends to repair the road as quickly as possible, but due to the extensive damage the road will likely remain closed



Winter flooding damaged roughly 200 feet of the Stehekin Valley Road at milepost 8.

into August 2007. For current conditions, please visit www.nps.gov/noca/planyourvisit.

A debris flow at the Colonial Creek campground in the Ross Lake National Recreation Area dumped several hundred cubic yards of rock on the south entrance road. Rhode Creek frequently floods this campground. Repairs should be completed this spring and the south loops of the campground should be open by mid-May.

In the Baker Lake area, the popular Baker Lake Trail suffered damage to a bridge crossing at Blum Creek and a foot-log crossing at Anderson Creek. Road damages in the Baker Lake basin include a major washout at milepost 23, which agency officials

hope to have repaired by summer. Other roads affected in the Baker Lake basin are FS Roads 1130, 1144 and 1160.

Along the Mt. Baker Scenic Byway (State Route 542), the Canyon Creek, Whistler Creek, Deadhorse, Hannegan and Church Mountain roads all received damage. Visitors will need to check current condition reports for updates about repairs. Inquiries can be made at ranger stations or online at www.fs.fed.us/r6/mbs/conditions.

Over in the Lake Chelan National Recreation Area, this was the third largest flood on record for the Stehekin River. The worst damage occurred on the Stehekin Valley Road at milepost 8, washing away approximately 200 feet of road alongside the river. The NPS temporarily repaired this damage with 150 cubic yards of rock.

Flood damage along Company Creek Road completely submerged Harlequin campground. Campsites were buried under one foot of sediment and vault toilets were flooded. Every effort is being made to open the campground by Memorial Day weekend.

Experience the North Cascades Environmental Learning Center

NORTH CASCADES INSTITUTE OPERATES a new field campus at the Environmental Learning Center in the Ross Lake National Recreation Area. Nestled on Diablo Lake, this facility offers retreats, workshops, exploration and teaching opportunities focused on the region's natural and cultural history. It is a hub of discovery for all ages. Visitors can hike in this dramatic landscape, learn with scientists studying salmon or paint Pyramid Peak in the evening light.



photo courtesy of NCI
Butterfly naturalist and author Robert Michael Pyle examines his catch.

- Modeling earth-friendly design and operations, the facilities include:
- » Classrooms and library with Internet access
 - » Overnight lodging for 69 participants, graduate students, and staff
 - » Lakeside dining hall with recycling/composting center
 - » An amphitheater, outdoor learning shelters and trails
 - » ADA-accessible facilities and paths

The Learning Center is a partnership with North Cascades Institute, the National Park Service and the City of Seattle. The new facility is key to allowing families, children and all ages to connect to nature in the North Cascades. North Cascades Institute is an educational non-profit organization whose mission is to conserve and restore Northwest ecosystems through education.

Program reservations may be made by calling (360) 856-5700 ext 209 or at www.ncascades.org.

Make it happen: Volunteer!

VOLUNTEERING IS A WAY OF GIVING something back to the land that has nurtured and inspired you. It is also a way to gain a deeper understanding of the many issues related to management of our public lands. Increasing visitation, maintenance and staffing needs at visitor centers, recreation sites and trails often exceed agencies' resources. Combined efforts from people with all levels of skill and talent can help make a difference.

North Cascades National Park has a strong Volunteers-in-Park (VIP) program. With more than 500 volunteers, the park annually has more than 30,000 hours donated to assist in its mission to preserve our natural heritage. Volunteers help in many different aspects of park operations including working with rangers at the visitor center, as campground hosts and doing trail maintenance. North Cascades also welcomes as many as 30 Student Conservation Association (SCA) interns each summer. This program provides students a chance to experience careers in conservation, but anyone may apply. www.thesca.org



©David Snyder

Forest Recreation and Trails

The Mt. Baker-Snoqualmie National Forest partners with groups such as the Washington Trails Association (WTA), Volunteers for Outdoor Washington (VOW) and Backcountry Horsemen (BCH), all of which help organize volunteer work parties on trails and other sites on the forest. Volunteer hours may be good toward a NW Forest Pass.

VOW: (206) 517-3019
www.trailvolunteers.org
WTA: (206) 625-1367 www.wta.org
BCH: www.bchw.org

Pacific Northwest Trail

The Pacific Northwest Trail weaves its way from the Olympic Peninsula to the Rocky Mountains in Montana, connecting three National Parks and seven National Forests. Sections of the 1200-mile trail go through the North Cascades National Park and the Mt. Baker Wilderness.

Volunteers are essential to keeping this trail system maintained. For 2007, Skagit Trail work parties are scheduled for the first and third Saturday of each month from April to October. Contact the PNTA main office in Sedro-Woolley for more information.
(360) 854-9415
pnt@pnt.org
www.pnt.org

Become a Mountain Steward or Eagle Watcher

If you enjoy being out of doors on the trails around Mt. Baker or at sites along the Skagit River watching eagles, this may be the volunteer opportunity for you. Mt. Baker Ranger District and North Cascades Institute coordinate the Mountain Steward and Eagle Watcher programs. Both programs provide training and resource materials to volunteers who help educate visitors about natural resource management issues, low impact recreation skills and natural history of mountain watersheds.

During the summer hiking season Mountain Stewards attend training sessions and sign up to contact visitors along some of the busy trail systems surrounding Mt. Baker. Winter months, the Eagle Watchers receive training and then schedule time to meet the public on weekends at various eagle watching locations along the Skagit River.

Applications for the 2007-2008 programs are available through North Cascades Institute or the Mt. Baker Ranger District. Call (360) 856-5700 ext. 209 or 515



Mountain Stewards take a break on the Heliotrope Ridge Trail.

Do I need a pass?

North Cascades National Park does not require an entrance fee or parking pass at trailheads. However, parking at certain trailheads, picnic areas and recreation sites in the National Forest does require a pass.

The Northwest Forest Pass is valid throughout all National Forests in Oregon and Washington State. The new Federal Recreational Lands Pass, Senior and Access Pass (formerly known as the Golden Passports) are also honored at NW Forest Pass sites. When in the area, passes can be obtained at ranger stations and some local vendors. You may also purchase the passes in advance by calling (800) 270-7504 or online at www.naturenw.org.

Passes should be displayed from the rearview mirror or on the dashboard of your vehicle when parked at a NW Forest Pass site.

| | |
|-------------------------|--------|
| Day Pass | \$5 |
| Annual Pass | \$30 |
| Interagency Pass | \$80* |
| Interagency Senior Pass | \$10** |

The Interagency Access Pass is free for U.S. citizens with medically determined permanent disability.

* Valid at U.S. Federal Recreation areas. ** Lifetime pass for U.S. citizens 62 and over.

Artist In Residence

The Artist-in-Residence program offers a unique opportunity to live and work in the North Cascades. Artists aid the park's mission through creative work and educational programs.

Each artist presents workshops, programs or exhibits during a month long residency. The challenge to the artist is to see the park with fresh eyes and to convey this vision to the public.

Recent artists include photographer David Snyder, painter Alice Dubiel, musician Laura Perkins, sculptor Greg Pierce and writer Lynn Heinisch.

Applications are available by contacting Charles Beall at: Charles_Beall@nps.gov or by calling (360) 854-7200



Plan & Prepare

©David Snyder

GETTING HERE

State Route 20 runs east from Burlington, accessing Baker Lake Road, and continues into the heart of North Cascades National Park and Ross Lake National Recreation Area. While a portion of the road is closed during winter, by May you can drive the entire Cascade Loop to State Route 2 as shown on the back page. Lake Chelan National Recreation Area can be accessed via Chelan off State Route 2. The Mount Baker Scenic Byway (State Route 542) leads to Heather Meadows in the Mount Baker Ranger District.

FISHING

Fishing in Washington, including in National Parks and Forests, requires a valid Washington state fishing license. The Skagit River, one of Washington's major watersheds, is home to seven species of anadromous fish (five types of salmon and two types of trout) and freshwater trout and char.

Diablo and Gorge Lakes have been stocked with rainbow and cutthroat trout. Ross Lake offers quality sport fishing opening annually on July 1. Lake Chelan has fresh water cod, trout and kokanee, a land-locked species of salmon. The Stehekin River offers rainbow and cutthroat trout. Comply with special regulations listed in the Washington Department of Fish and Wildlife Sport Fishing Regulations, available wherever licenses are sold, and online at: www.wdfw.wa.gov.

STOCK

Stock animals are welcome on trails maintained to stock standards. Trail rules and seasons of use vary and special rules apply in wilderness areas.

- » Stock parties are limited to 12 (people + animals) on trails.
- » Grazing is permitted in the national forest without a permit. But all stock must use weed-free or processed feed while on National Forest lands in Wilderness Areas and at Wilderness trailheads.
- » Grazing with a permit is allowed in the Ross Lake and Lake Chelan National Recreation Areas. This can be obtained with your backcountry permit.
- » Grazing is prohibited in the national park; pack in processed food pellets.

HIKING & CLIMBING

Hundreds of miles of trails lead into the North Cascades. Storm damage may affect your trip, so check trail conditions before you leave. Most long hikes and climbs enter designated wilderness areas where special restrictions may apply. Climbers should choose experienced partners or licensed guides and fill out Voluntary Climbing Registers at the station nearest your climb. Ask for a *Wilderness Trip Planner* and *Climbing Notes* or a list of outfitter guides. Visit the Park and Forest websites for current recreation reports and climbing information.

DOGS

Dogs are not permitted on trails or in cross-country areas within the national park. Leashed dogs are allowed in Ross Lake and Lake Chelan National Recreation Areas, along the Pacific Crest Trail and along roads in the national park.

Dogs are allowed in the National Forest but must be leashed in developed recreation areas. For safety reasons, dogs are not allowed on Table Mountain Trail 681 in the Heather Meadows Area.

WATER SPORTS

River floating is an excellent adventure worth planning. Experienced boaters run the Skagit, Nooksack and Stehekin Rivers. Ask for a list of local outfitters at any ranger station. Kayaking, canoeing and motor boating are other options. No personal watercraft (jet skis, etc.) are allowed in the North Cascades National Park Service Complex. Boat and paddling rentals are available at Baker Lake, Ross Lake and Lake Chelan. Ramps are located at Baker Lake, Gorge Lake, Diablo Lake, Lake Chelan and the north end of Ross Lake at Hozomeen.

BIKE

Many people tour the North Cascades by bicycle. Always travel single file on the right side of the road, use reflectors and wear bright clothing. Ask for the bulletin *Cycling the North Cascades Highway* at any ranger station. Mountain biking is not permitted on national park trails or on most west-side forest trails. However, riding is allowed on roads and on designated trails. Canyon Ridge Trail (off Canyon Creek Road, FS Road 31) and forest roads offer challenging mountain biking.

CAMPING

Many public campgrounds in the North Cascades are accessible by car. Most sites are available on a first-come, first-served basis. Group reservations can be made a year in advance and family sites may be reserved six months in advance by calling (877) 444-6777, or online: www.recreation.gov

National Forest: Camping in the National Forest does not require a permit, but a Northwest Forest Pass may be required to camp at certain trailheads. Campers in the Mt. Baker National Recreation Area and some areas of the wilderness must camp at designated spots. Campfires are not allowed in many backcountry areas in sub-alpine settings and seasonal fire restrictions apply.

National Park Backcountry: There are more than 200 backcountry camping sites, from boat-in sites to high alpine backpacking sites. Camping is allowed only at established sites. Camps include pit toilets, tent pads and in some cases, tables and fire pits. Backcountry permits are free but are required for all overnight stays. Permits are issued in person only on a first-come, first-served basis. For permit information, contact:
Wilderness Information Center
7280 Ranger Station Road
Marblemount, WA 98267
Phone: (360) 873-4500

North Cascades National Park offers group and some individual camping reservations. Group camps in the park are located at Goodell Creek and Newhalem Creek campgrounds. Washington State Parks reserves some sites by calling (888) 226-7688, or online at: www.parks.wa.gov

| CAMPING AREAS | | Managed by | Accessible facilities | Drinking water | Flush toilets | Garbage facilities | Vault toilets | Boat ramp | Hiking trail | Dump stations | NUMBER OF CAMPSITES |
|--------------------|--|------------|-----------------------|----------------|---------------|--------------------|---------------|-----------|--------------|---------------|----------------------|
| Location | Campground + Reservation available ++ Reservation required | | | | | | | | | | * hook-ups available |
| SR 542 | Douglas Fir + | FS | ● | ● | ● | ● | ● | ● | ● | ● | 30 |
| | Excelsior Group++ | FS | ● | | | | | | | | 2 |
| | Silver Fir + | FS | ● | ● | ● | ● | ● | ● | ● | ● | 21 |
| Baker Lake Road | Kulshan | P | ● | ● | ● | ● | ● | ● | ● | ● | 108* |
| | Horseshoe Cove + | FS | ● | ● | ● | ● | ● | ● | ● | ● | 34 |
| | Bayview Group++ | FS | ● | | | | | | | | 2 |
| | Panorama Point+ | FS | ● | ● | ● | ● | ● | ● | ● | ● | 16 |
| | Boulder Creek + | FS | ● | | | | | | | | 10 |
| | Park Creek+ | FS | ● | | | | | | | | 12 |
| SR 20 | Baker Lake Resort + | P | ● | ● | ● | ● | ● | ● | ● | ● | 90* |
| | Shannon Creek + | FS | ● | ● | ● | ● | ● | ● | ● | ● | 20 |
| | Rasar State Park + | SP | ● | ● | ● | ● | ● | ● | ● | ● | 38* |
| | Rockport State Park | SP | ● | ● | ● | ● | ● | ● | ● | ● | 62* |
| | Steelhead Park + | CP | ● | ● | ● | ● | ● | ● | ● | ● | 59* |
| | Goodell Creek | NP | ● | ● | ● | ● | ● | ● | ● | ● | 21 |
| | Newhalem Creek + | NP | ● | ● | ● | ● | ● | ● | ● | ● | 110 |
| | Colonial Creek | NP | ● | ● | ● | ● | ● | ● | ● | ● | 107 |
| | Lone Fir | FS | ● | ● | ● | ● | ● | ● | ● | ● | 27 |
| | Klipchuck | FS | ● | ● | ● | ● | ● | ● | ● | ● | 46 |
| Cascade River Road | Marble Creek + | FS | ● | ● | | | | | | | 22 |
| | Mineral Park + | FS | ● | | | | | | | | 22 |
| | Via B.C. | NP | ● | ● | ● | ● | ● | ● | ● | ● | 122 |

FS = Forest Service SP = Washington State Park P = Puget Sound Energy NP = National Park Service CP = County Park

Travel Safely, Step Lightly



©Kurt Parker

Lupine blooms along the Ptarmigan Ridge Trail.

Many come to the North Cascades to enjoy its rugged beauty and remote wildness. Recreating in natural areas, however, has inherent dangers and responsibilities. Conditions in mountainous areas can change quickly, even during a day trip. These travel tips can help you have a safe and responsible journey so that you, and future travelers, can enjoy the landscape to its fullest.



©Alex Brun

Mt. Challenger

SAFETY TIPS

- » Use caution on access roads. Watch for obstructions such as rocks, sharp turns, and parked vehicles and pedestrians.
- » Safeguard your possessions by keeping them out of sight. Lock your vehicle.
- » Carry the ten essentials listed on this page.
- » Stay on trails. Wear adequate footwear and use a topographic map and compass.
- » After hiking, check yourself for ticks, which may carry lyme disease.
- » Horses can startle easily. When stock approach, make your presence known and stand on the lower side of the trail.
- » Report trail damage to the nearest ranger station.
- » Do not depend on cell phones as there are many 'dead spots.'
- » Always tell a friend your travel plans, including destination and expected return time.

TRAVELING WITH CHILDREN

Make the most out of your adventure by taking special safety precautions. Children should remain with adults. Establish rules for keeping together.

If separated, the child should hug a tree near an open area and stay put. Pick trails and adjust goals to children's ages and abilities.

Bring along the ten essentials. Have children help develop an emergency kit and make sure they are familiar with how to use each item. Help children develop responsible outdoor practices.

ACTIVITY IDEAS FOR CHILDREN

Have children bring along a friend. Explore with ears and eyes. Play observation games—watch for birds and identify plants, bugs or animal tracks. Listen for sounds of wildlife. Draw a picture or write a poem to remember the trip.

Spend time with a ranger or volunteer naturalist. Ask them about the Junior Ranger Program and Family Fun Packs. These publications and others are available in English and Spanish at Visitor Centers and Ranger Stations.

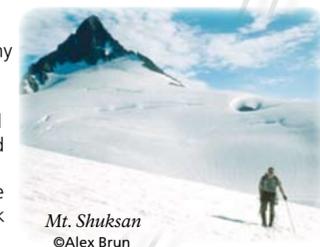
LEAVE NO TRACE

- » **Plan Ahead and Prepare** - Know the regulations and special concerns for the area you will visit. Be prepared for harsh weather or emergencies.
- » **Travel and Camp on Durable Surfaces** - Stay on trails and camp in designated spots. Avoid fragile areas along waterways or in alpine meadows.
- » **Dispose of Waste Properly** - Pack out all garbage and food leftovers. Use toilets where available. Otherwise, bury human waste in a small hole 6 to 8 inches deep and away from trails and water.
- » **Leave What you Find** - Observe, but do not take. Leave all natural and cultural objects where you find them so others may enjoy.
- » **Minimize Campfire Impacts** - Use a backpacking stove for cooking. Where fires are allowed, use established fire rings and keep fires small. Put out fires completely.
- » **Respect Wildlife** - Observe wildlife from a distance. Never feed animals. Proper food storage is essential to protecting wildlife.
- » **Be Considerate of Other Visitors** - Be courteous and respect the experience of other visitors. Let natural sounds prevail.



THE 10 ESSENTIALS

- 1) **Food and Water:** Carry high-energy snacks and plenty of water. Water treatment pills can be used, but only boiling kills giardia.
- 2) **Clothing:** Weather can change dramatically in the mountains. Carry rain gear and warm clothing including wool socks, gloves and a hat.
- 3) **Navigation:** Carry and know how to use a topographic map and compass.
- 4) **Light:** Flashlight with spare batteries and bulb.
- 5) **Fire:** Waterproof matches and fire starter such as a candle.
- 6) **Sun Protection:** Sunglasses and sunscreen.
- 7) **First Aid:** Make sure to include any special medications.
- 8) **Knife:** Folding pocket knife.
- 9) **Signal:** Carry both an audible and visual signal, such as a whistle and a metal mirror.
- 10) **Emergency Shelter:** Plastic tube shelter or waterproof bivouac sack or emergency blanket.



Mt. Shuksan ©Alex Brun

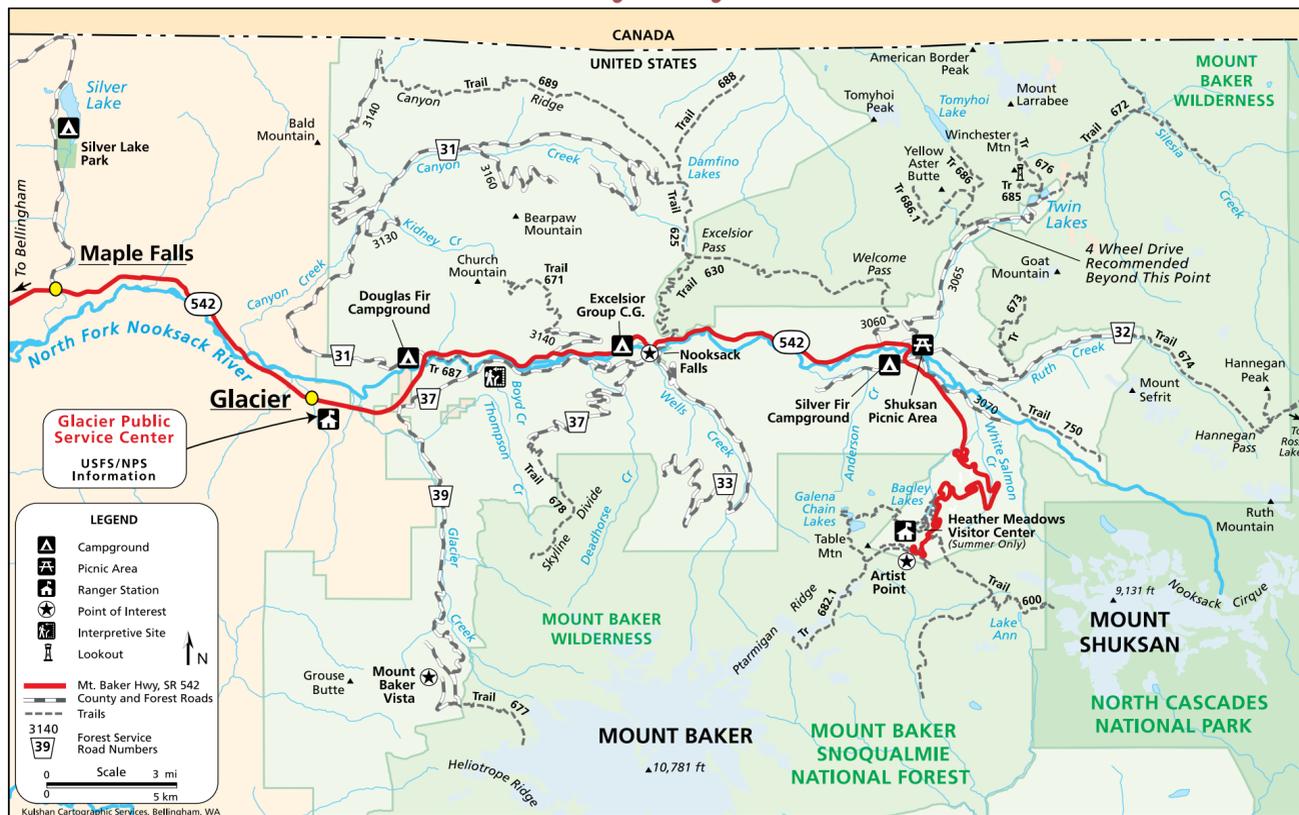
LODGING

There are a variety of lodging options in and near the National Park and Forest. Local Chamber of Commerce offices are happy to assist you. Remote accommodations in the North Cascades include: Ross Lake Resort (206) 386-4437 www.rosslakeresort.com and Baker Lake Resort (888) 711-3033. Stehekin Landing Resort www.stehekinlanding.com and other lodging is available in Stehekin. Pick up the *Focus on Stehekin* at any ranger station. Learn about other tourism opportunities around the state at www.experiencewashington.com

WEST SIDE:
Bellingham/Whatcom County (360) 671-3990 www.bellingham.org
Burlington (360) 757-0994 www.burlington-chamber.com
Concrete (360) 853-7042 www.concrete-wa.com
Mt. Vernon (360) 428-8547 www.mountvernonchamber.com
Sedro-Woolley (360) 855-1841 www.sedro-woolley.com
Mt. Baker Foothills (360) 599-1518 www.mtbakerchamber.org

EAST SIDE:
Chelan (800) 4CHELAN www.lakechelan.com
Leavenworth (509) 548-5807 www.leavenworth.org
Twisp (509) 997-2926 www.twispinfo.com
Wenatchee Valley (800) 572-7753 www.wenatcheevalley.org
Winthrop (888) 463-8469 www.winthropwashington.com

Mt. Baker Scenic Byway (State Route 542)



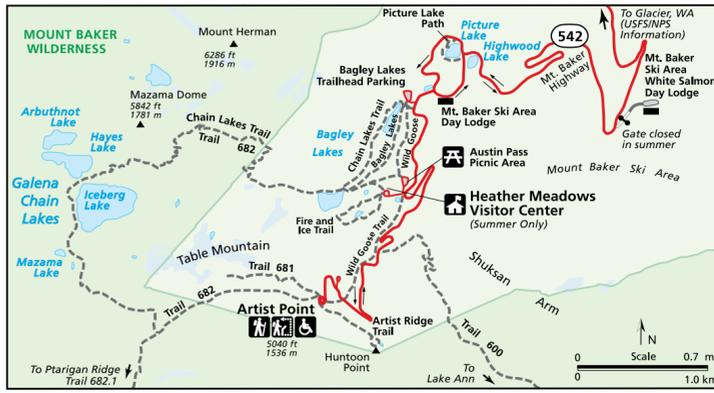
Popular Trails along the Mt. Baker Scenic Byway

| Glacier Area Trails | | | | |
|-----------------------------|--------------------|-----------|------------------------|---|
| Trail # | Name | Access | Distance one-way miles | Remarks |
| 625 | Damfino Lakes | Road 31 | 3.0 (4.8 km) | No fires, connects with High Divide |
| 630 | High Divide | Hwy 542 | 13.0 (20.9 km) | Wilderness, no fires, stock 8/1 to 11/1 |
| 671 | Church Mountain | Road 3040 | 4.2 (6.8 km) | Steep hike up forested slopes |
| 677 | Heliotrope Ridge | Road 39 | 3.7 (6.0 km) | Wilderness, no fires |
| 678 | Skyline Divide | Road 37 | 5.5 (8.9 km) | Wilderness, no fires, stock 8/1 to 11/1 |
| 687 | Horseshoe Bend | Hwy 542 | 1.5 (2.4 km) | Follows Nooksack River |
| 673 | Goat Mountain | Road 32 | 4.0 (6.4 km) | Wilderness, stock allowed 8/1 to 11/1 |
| 674 | Hannegan Pass | Road 32 | 5.0 (8.0 km) | Wilderness, no fires, enters National Park, stock allowed 7/1 to 11/1 |
| 685 | Winchester Mtn. | Road 3065 | 2.0 (3.2 km) | High clearance vehicle needed on road, Wilderness, no fires |
| 686 | Tomyhoi Lake | Road 3065 | 4.0 (6.4 km) | Wilderness |
| 686.1 | Yellow Aster Butte | Road 3065 | 2.0 (3.2 km) | Wilderness, no fires |
| 626 | Boyd Creek | Road 37 | 0.25 (0.4 km) | Accessible, Interpretive |
| Heather Meadows Area Trails | | | | |
| 600 | Lake Ann | Hwy 542 | 4.8 (7.7 km) | Wilderness, no fires |
| 682.1 | Ptarmigan Ridge | Trail 682 | 5.0 (8.0 km) | Wilderness, no fires |
| 681 | Table Mountain | Hwy 542 | 0.7 (1.1 km) | Wilderness, no fires, no dogs |
| 682 | Chain Lakes | Hwy 542 | 6.5 loop | Wilderness, no fires, camp at designated sites only |
| 735 | Picture Lake | Hwy 542 | 0.5 loop | Accessible, Interpretive |
| 684.2 | Fire and Ice | Hwy 542 | 0.5 loop | Accessible, Interpretive |
| 684.3 | Wild Goose | Hwy 542 | 2.5 (4.0 km) | No camping one mile from trail |
| 669 | Artist Ridge | Hwy 542 | 1.0 loop | Accessible viewpoint |

A Northwest Forest Pass is required at posted recreation sites and trailheads. Always check trail and road conditions at the Forest Service website or by calling a ranger station.

Heather Meadows Area »
 Located along the upper reaches of the byway, this spectacular sub-alpine setting offers summer day-use recreation along a network of scenic trails. Visitors can spread out a picnic lunch at Austin Pass Picnic Area and enjoy several self-guided interpretive trails. Several longer hikes lead into the surrounding Mt. Baker Wilderness, where Wilderness regulations apply. When entering such areas, be prepared for risk and challenge. The terrain can be rugged and the weather unpredictable.

Check in with staff at the Heather Meadows Visitor Center for current conditions and area histories. Open daily in the summer from 10 a.m. to 4 p.m. A Northwest Forest Pass is required for visiting this area. During winter months, check avalanche forecasts at www.nwac.noaa.gov or call (206) 526-6677.

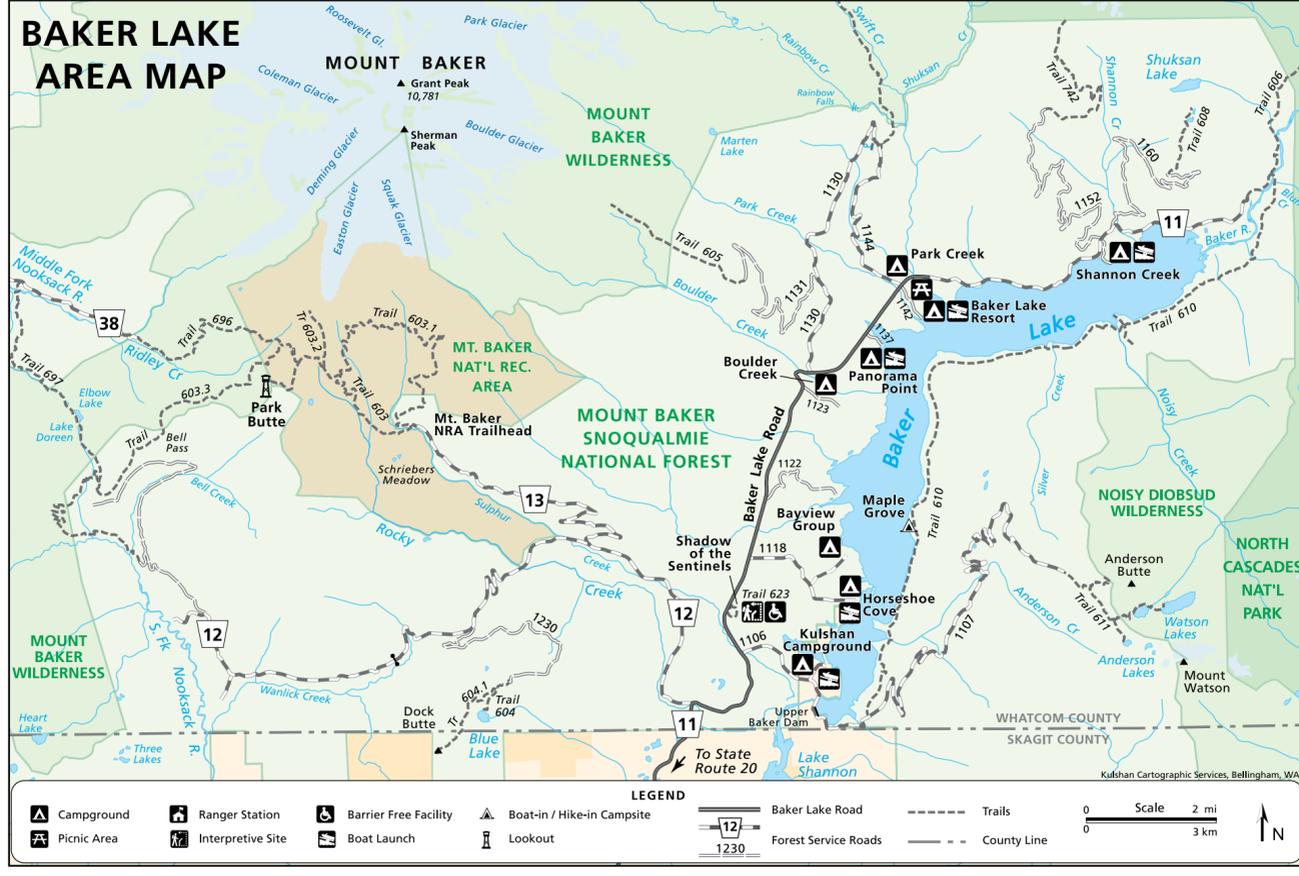


THE SCENIC MT. BAKER HIGHWAY winds along the North Fork of the Nooksack River, ending at Artist Point at 5,040 feet (1536m), above Heather Meadows. The last 24 miles (39 km) is designated as a National Forest Scenic Byway. At the road's end, trail systems lead into the Mt. Baker Wilderness. During winter months motor traffic ends at the Mt. Baker Ski Area 2.5 miles (4 km) below Artist Point.

Points of Interest
 » Glacier Public Service Center, located at milepost 34, is listed on the National Register of Historic Places. The service center is jointly operated by the Forest Service and National Park Service during the summer season.
 » Forest Service Campgrounds: Douglas Fir, Silver Fir and Excelsior Group Camp offer rustic camps in forested settings.

» Boyd Creek Interpretive Trail, Forest Road 37: This short, self-guided nature trail focuses on components of a healthy fish habitat.
 » Nooksack Falls, milepost 40: A dramatic waterfall plummets more than 100 feet over rocky outcrops. A fence-lined pathway leads to a viewpoint.

» Shuksan Picnic Area: Day use area along the North Fork Nooksack River at the base of Forest Road 32 (Hannegan Road).



Aerial photo of the north side of Mt. Baker ©John Scurlock

Baker Lake

Nine-mile (14 km) long Baker Lake is located on the Baker River about 8 miles north of the North Cascades Highway (State Route 20). The lake basin offers opportunities for camping, boating, fishing, picnicking, hiking and pack & saddle trips. Washington State regulations govern boating and fishing activities on the lake.

National Forest developed campgrounds and a privately operated summer resort are located along the western side of the lake. The Baker Lake Trail extends along the eastern shoreline, crossing the Baker River at the north end. The Upper Baker Dam operated by Puget Sound Energy is located at the south end of the lake along with the Kulshan Campground and Baker Lake Lodge.

For camping information see the chart on page 4; for Baker Lake Lodge & Resort information call (888) 711-3033 or visit www.bakerlakelodge.com

Mt. Baker National Recreation Area

The Mt. Baker National Recreation Area was established in 1984 to allow for snowmobile use when snow levels are sufficient. This impressive landscape is accessible by trails leading from the end of Forest Road 13 or through the wilderness from the South Fork Nooksack river drainage.

To help prevent resource damage and protect sub-alpine vegetation, campers in the NRA must stay at designated sites and no campfires are allowed. One-night-only campsites are established for hikers and stock parties at the trailhead at the end of Forest Road 13.

Winter recreation includes skiing, snowmobiling and snowshoeing when snow levels are sufficient.

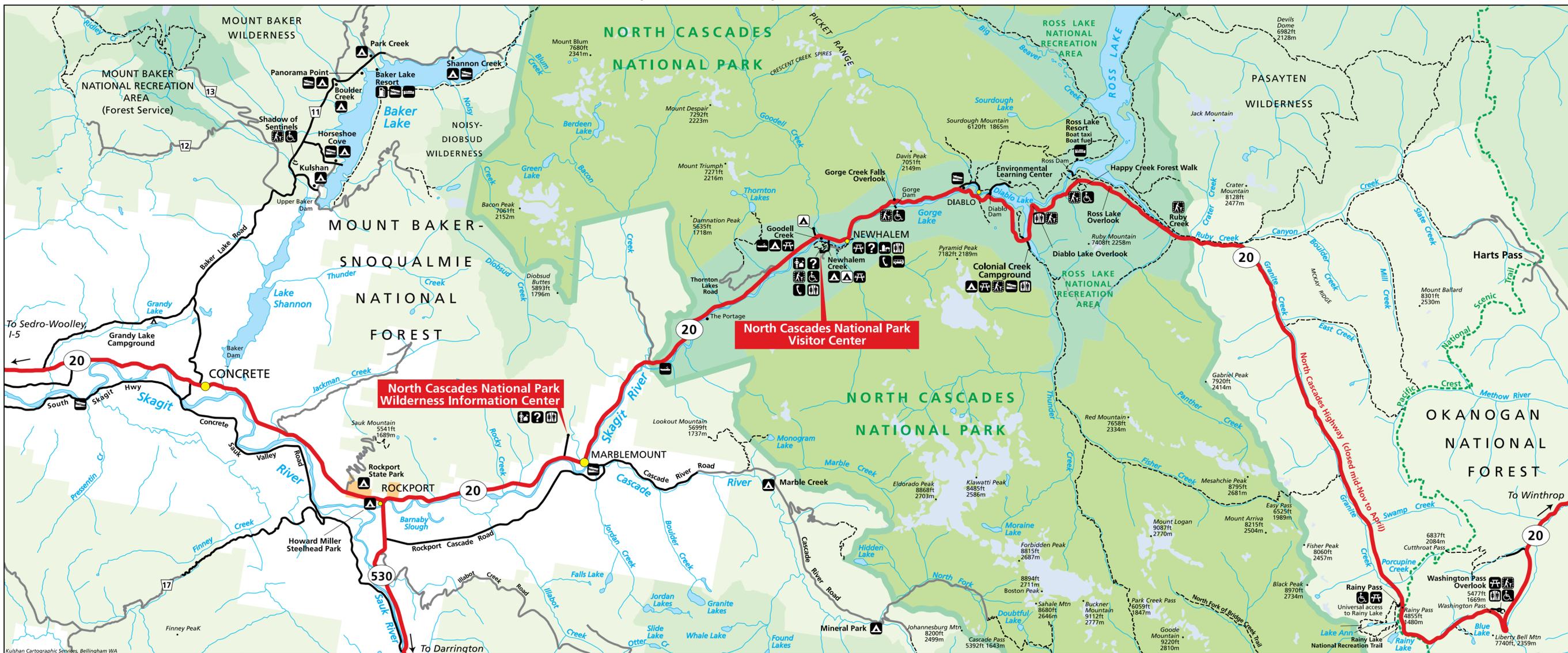
Hikers can explore the trails and stock animals are welcome Aug. 1 to Nov. 1. Visitors should prepare for challenging creek crossings in this area due to swift water flow.

Please ask for a detailed handout on campsites and area regulations at a ranger station.

Popular Trails in Baker Lake Area

| Mt. Baker National Recreation Area Trails | | | | |
|---|-------------------------|----------------|------------------------|--|
| Trail # | Name | Access | Distance one-way miles | Remarks |
| 603 | Park Butte | Road 13 | 3.5 (5.6 km) | Enters wilderness, no fires, camp at designated sites, stock 8/1 to 11/1 |
| 603.1 | Scott Paul | Road 13 | 6.5 (10.5 km) | No camping, hikers only |
| 603.2 | Railroad Grade | Trail 603 | 1.0 (1.6 km) | Camp at designated sites, no fires, hikers only |
| 603.3 | Bell Pass | Road 12 | 5.0 (8.0 km) | Wilderness, stock allowed 8/1 to 11/1 |
| 696 | Ridley Creek | Road 38 | 5.5 (8.9 km) | Not maintained, connects to trail 603.3 |
| 697 | Elbow Lake | Road 12 | 3.0 (4.8 km) | Wilderness, stock allowed 8/1 to 11/1 |
| | | Road 38 | 3.5 (5.6 km) | |
| Baker Lake Area Trails | | | | |
| 604.1 | Dock Butte | Road 1230 | 1.5 (2.4 km) | Leads to a scenic vista |
| 604 | Blue Lake | Road 1230 | 0.7 (1.1 km) | Short forest hike to lake |
| 606 | Baker River | Road 11 | 2.6 (4.2 km) | Enters National Park |
| 610 | Baker Lake | Road 1107 | 14.0 (22.5 km) | Stock allowed year-round |
| 611 | Watson Lakes | Rd. 1107-022 | 2.3 (3.7 km) | Wilderness, no fires, camp at designated sites |
| 611.2 | Anderson Lakes | Rd. 1107-022 | 2.4 (3.8 km) | Non-wilderness |
| 623 | Shadow of the Sentinels | Baker Lk. Road | 0.5 (0.8 km) | Accessible, Interpretive |

A Northwest Forest Pass is required at posted recreation sites and trailheads. Always check trail and road conditions at the Forest Service website or by calling a ranger station.



Travel the North Cascades Scenic Highway (SR 20) along the Skagit Wild and Scenic River Corridor, into the heart of the Cascade Mountains.

Baker Lake and Mt. Baker National Recreation Area

Follow Baker Lake Road #11 for access to water sports, hiking and campgrounds. After entering the National Forest, Roads 12 and 13 lead to the Mt. Baker National Recreation Area for winter sports and hiking on the south side of Mt. Baker.



Mt. Baker towers above Baker Lake

Rockport

Two parks, Rockport State Park and Howard Miller Steelhead Park, offer camping. State Route 530 goes south along the Sauk River, a part of the Skagit Wild and Scenic River System, and accesses roads to the Glacier Peak Wilderness. Forest Roads 1030 and 1036 provide access to the Sauk Mt. Trail.



Picnicking on the dock at Colonial Creek

Marblemount

This is the last stop for full services and gas before Winthrop. National Park backcountry permits are issued at the Wilderness Information Center one mile (1.6 km) north of State Route 20 on Ranger Station Road.

» THE CASCADE RIVER ROAD at the east end of town leads through the National Forest to the Cascade Pass Trailhead.



View from the Diablo Lake Overlook

Newhalem

Across the Skagit River is the North Cascades National Park Visitor Center with several short trails including To Know a Tree, Rock Shelter and River Loop. Newhalem Creek and Goodell Creek Campgrounds offer tent, RV and group campsites. In town, Seattle City Light runs an Information and Tour Center with facilities, walking tours, and trails including Trail of the Cedars and Ladder Creek Falls.



Rock Shelter trail near Newhalem

Gorge Creek Falls and Gorge Overlook

Rest stop and accessible loop trail offering views of the gorge and dam.

Colonial Creek Campground

Located on Diablo Lake, the campground has camp hosts and offers naturalist programs in the summer, an accessible picnic area and fishing platform. Thunder Creek, Thunder Woods and Thunder Knob Trails leave from the campground and go through diverse forests to scenic views.



Blue Lake near Washington Pass

Diablo Lake Overlook

Viewpoint has a variety of vistas, restrooms, a map and detailed geology exhibits.



Liberty Bell as seen from State Route 20

Ross Dam Trailhead

The Ross Dam Trailhead and Happy-Panther Trail are accessed from this area, as well as the Ross Lake Resort.

Ross Lake Overlook

View Ross Lake and mountains and walk the Happy Creek accessible trail.

East Bank Trailhead

Panther Creek, East Bank and Ruby Creek converge near here. A new option is to follow the Happy-Panther Trail west from here.

Rainy Pass Picnic Area

One-mile (1.6 km) accessible trail leads to Rainy Lake and glacier views. Longer hikes go to Lake Ann (2 mi, 3.2 km) or around Maple Pass Loop (7.5 mi, 12 km.) Typically not snow-free until late July.

Washington Pass

Highest point along the highway, enjoy views of Liberty Bell and Early Winters Spires.

Upper Methow Valley

Mazama turnoff to Hart's Pass (22 mi, 35.4 km) unpaved; Early Winters Visitor Center just west of Mazama.

Accessible Interpretive Trails

Shadow of the Sentinels See Baker Lake Area popular trails chart, pg 7

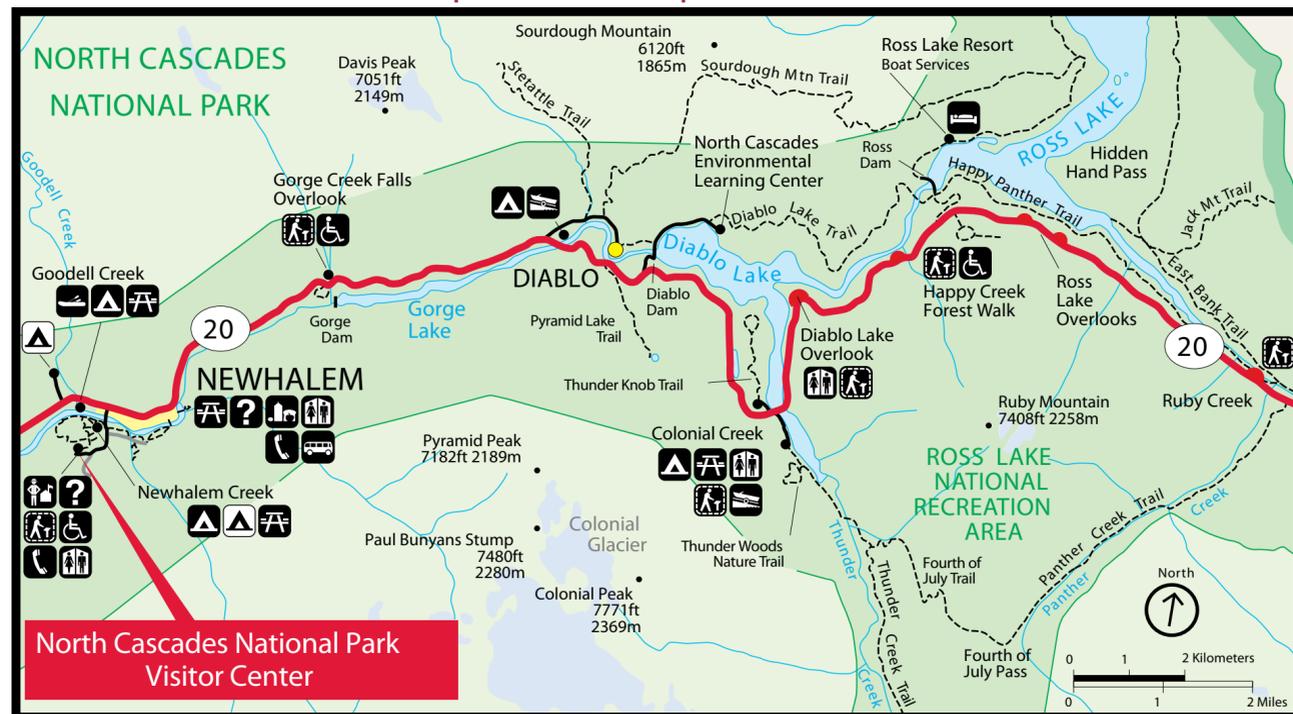
Sterling Munro River Loop
Rock Shelter
Gorge Overlook
Happy Creek See North Cascades popular trails chart, pg 10

Rainy Lake
Washington Pass Overlook

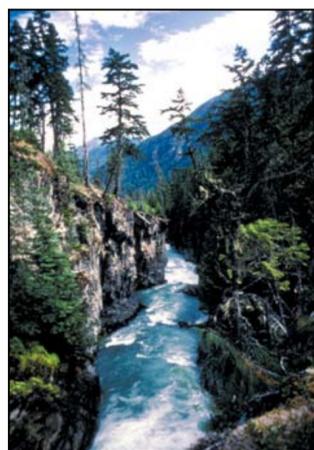


How far is it? How long will it take?

| Location | Distance in miles | Time in minutes |
|------------------------------|-------------------|-----------------|
| Sedro-Woolley ⇌ Concrete | 24 | 25 |
| Concrete ⇌ Rockport | 8 | 10 |
| Rockport ⇌ Marblemount | 8 | 15 |
| Marblemount ⇌ Newhalem | 15 | 25 |
| Sedro-Woolley ⇌ Newhalem | 55 | 75 |
| Newhalem ⇌ Diablo Overlook | 14 | 25 |
| Diablo Overlook ⇌ Rainy Pass | 26 | 35 |
| Rainy Pass ⇌ Washington Pass | 4 | 5 |
| Newhalem to Washington Pass | 44 | 65 |
| Washington Pass ⇌ Mazama | 17 | 25 |
| Mazama ⇌ Winthrop | 13 | 20 |
| Washington Pass to Winthrop | 30 | 45 |
| TOTAL TRIP: | 129 miles | 3 hours |



Ross Lake National Recreation Area



Above: Thunder Creek

Right: Kayakers on Ross Lake



THIRTY MILES OF the North Cascades Highway meanders through the upper Skagit watershed among forests and soaring peaks. A variety of activities can be accessed from the corridor including challenging hikes and paddling. A number of scenic vistas, picnic areas, campgrounds and short trails are available for those seeking a more relaxing trip.

See page 12 for Ranger Programs and Newhalem information

Below Newhalem, the free-flowing portion of the Skagit River offers excellent wildlife viewing and rafting opportunities. A launch is located next to Goodell Creek Campground, but careful planning is required to float the swift Skagit as there can be seasonal hazards and closures.

Diablo Lake offers the only easy access for launching watercraft off of State Route 20. The lake, surrounded by glaciated peaks, is a brilliant turquoise blue in summer. This unique color is caused by fine rock sediment called glacial flour, carried into the lake by glacier-fed streams. There are three boat-in campsites where a backcountry permit is required.

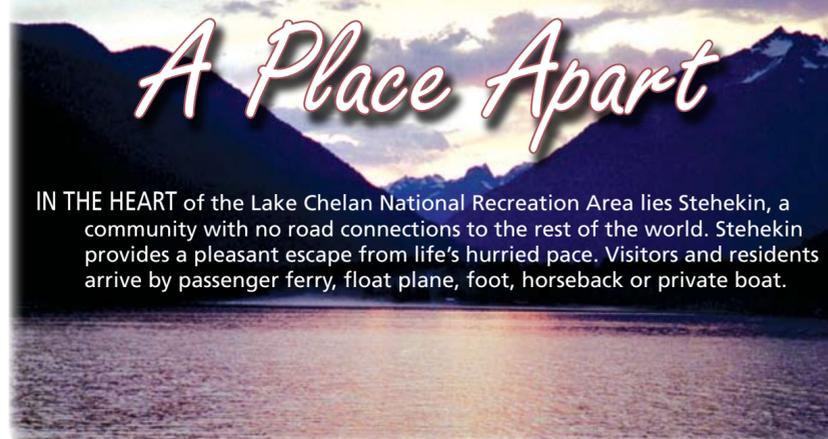
Ross Lake, the largest of the three reservoirs, winds nearly 25 miles from Ross Dam to Hozomeen on the Canadian border. The only vehicle access is via Hope, British Columbia but small motor boats (14' and under) and canoes/kayaks can be portaged around Ross Dam from Diablo Lake. Nineteen boat-in camps (backcountry permit required) and the Ross Lake Resort are available for those looking to spend multiple days in this remote landscape.

Popular Trails along the North Cascades Highway

| Trail Name | Milepost | Round-Trip Distance in miles | Difficulty | Remarks |
|----------------|----------|------------------------------|----------------|--|
| Sterling Munro | 120 | 0.1 (0.2 km) | very easy | Accessible boardwalk with view of the Picket Range |
| River Loop | 120 | 1.8 (2.9 km) | easy | Accessible, forested path to the Skagit River |
| Rock Shelter | 120 | 0.3 (0.5 km) | easy | Accessible trail to historic site used by Native People 1,400 years ago |
| Gorge Overlook | 123 | 0.5 (0.8 km) | easy | Accessible trail with views of a deep gorge and waterfall |
| Pyramid Lake | 127 | 4.2 (6.8 km) | moderate | Moderately steep hike through diverse habitat leading to a lake, no camping |
| Diablo Lake | 128 | 7.6 (12.2 km) | moderate | Offers views of glaciers and peaks, located on north side of Diablo Lake |
| Thunder Knob | 130 | 3.6 (5.8 km) | easy | Hike through dry forest terrain, views of Diablo Lake and surrounding peaks |
| Thunder Creek* | 130 | 1.6-46 (2.8-74 km) | easy-difficult | Excellent day hikes, extended trips to Stehekin Valley via Park Creek Pass |
| Thunder Woods | 130 | 0.9 (1.5 km) | moderate | Nature trail that highlights the unique habitat near Thunder creek |
| Ross Dam | 134 | 1.5 (2.4 km) | moderate | Short, steep trail down to Ross Dam |
| Happy-Panther | 134 | 10.5 (16.9 km) | easy | Follows south shore of Ross Lake, connects Ross Dam Trail to East Bank Trail |
| Happy Creek | 134 | 0.3 (0.5 km) | very easy | Accessible boardwalk interpretive trail through ancient forest |
| East Bank* | 138 | 0.5-62 (0.8-99.8 km) | easy-moderate | Winds along forested path, loops around Desolation Peak to Hozomeen |

*Obtain a permit at the Wilderness Information Center in Marblemount for all backcountry camping.

Lake Chelan National Recreation Area



©Kerry Olson

IN THE HEART of the Lake Chelan National Recreation Area lies Stehekin, a community with no road connections to the rest of the world. Stehekin provides a pleasant escape from life's hurried pace. Visitors and residents arrive by passenger ferry, float plane, foot, horseback or private boat.

Many activities await visitors who journey to Stehekin. Stehekin Landing Resort offers overnight accommodations, a restaurant, small convenience store, boat gas, marina, and tours to Rainbow Falls. Private businesses throughout the valley provide a range of lodging, horseback trips, bicycle rentals, guided raft and kayaking adventures, and a pastry company.

A bus takes visitors up the drivable portion of the road to access trailheads and camps. Hiking trails, campsites and special vistas waiting to be discovered are plentiful throughout the valley.

For a complete list of lodgings, services and schedules, pick up the *Focus on Stehekin*, visit the National Park website (www.nps.gov/noca) or call the Golden West Visitor Center at (360) 854-7365 ext. 14.

There are over 16 public docks along Lake Chelan including four in the National Recreation Area. Boaters using any of these federal docks need a dock site pass from May 1 to October 31 (\$5 daily or \$40 for the season). This fee helps pay for maintenance costs. Passes can be obtained at the Chelan Ranger Station or from local vendors.

A Taste of History

People have been coming to the valley long before it was a destination for those seeking its isolated beauty and adventure. The word "Stehekin" stems from a Native American term meaning "the way through," and for centuries people used the river and lake as a passage through the mountains. Later, U.S. Army surveyors charted routes over Cascade Pass, and prospectors staked claims on Bridge Creek and in Horseshoe Basin. For most of these people, Stehekin was simply "the way through" to somewhere else. Only a few, tantalizing glimpses of their presence remain.

Then the homesteaders came. Names such as Buzzard, Buckner, Purple and Imus have historical significance that can still be felt. One of the landmarks left by these homesteaders is the Buckner Orchard. In 1910, the Buckners purchased Bill Buzzard's 149-acre property and began creating an orchard and adding over a dozen buildings. By 1925 the orchard expanded to almost 50 acres of apple trees. Sold to the National Park Service in the 1970s,

the ranch, orchard and 90 acres of surrounding land now comprise the Buckner Homestead National Historic District. Most of the trees left today are common delicious, a predecessor to the red delicious apple. While the common delicious is no longer being commercially propagated and sold, the Park Service and the community are stewards of the orchard and the apple trees are thriving. Visitors can experience this living history by touring the orchard, adopting a tree or even sampling apples in the fall. For more information or to learn about how to adopt a tree, contact:

Buckner Homestead Heritage Foundation
PO Box 174
Manson, WA 98831

Or contact Washington's National Park Fund by calling (206) 770-0627 or visiting www.wnfp.org.



The Stehekin River winds down through the valley to Lake Chelan.

©Kerry Olson

Inspirational Images

The North Cascades area has inspired people for thousands of years. The Golden West Gallery offers visitors a chance to view work created by local artists and crafts people.

The Golden West Gallery is dedicated to the understanding and appreciation of the natural, historic, cultural and artistic landscapes of the North Cascades through the arts. The gallery is a cooperative venture of the resident artists of Stehekin and North Cascades National Park.

Artist receptions, presentations, readings, and hands on workshops for children and adults are offered throughout the season. Announcements for events and gallery openings are posted at the Golden West Visitor Center. The Arts and Humanities of Stehekin (AHS), a nonprofit organization operated by volunteers, manages the gallery. If you would like more information, please write to:

Arts and Humanities of Stehekin
PO Box 83
Stehekin, WA 98852
e-mail: stehekinarts@starband.net



©Mark Scherer

Golden West Visitor Center

The Golden West's long history began in the late 1920s when materials were salvaged from the Field Hotel at the head of Lake Chelan to use in building the Golden West Lodge. It accommodated Stehekin visitors until the National Park Service acquired the structure in the 1970s for use as a national park visitor center.

In 2003, the Service completed badly needed renovations, while preserving as much of the original structure as possible. Listed on the National Register of Historic Places, the Golden West Visitor Center offers exhibits, information and seasonal ranger programs while also serving as a community center and ranger station for Lake Chelan National Recreation Area.

What to do

Hour Stay

- » Visit the Golden West Visitor Center for books, exhibits and art gallery.
- » Learn about homesteading along the 15-minute McKellar Cabin Trail.

Three-Hour Stay

- » Attend a ranger talk at the Golden West Visitor Center.
- » Walk the Imus Creek Nature Trail, a 3/4 mile self-guided loop with views.
- » Bike 3.5 miles one-way to Rainbow Falls and the historic Buckner Orchard.

Whole Day

- » Explore the area by bus, bicycle, kayak, horseback or trail.
- » Take a hike.
- » Enjoy a picnic lunch at the Jackson Memorial Park.

Overnight

- » Travel the area trails by foot or horseback, stay at a scenic backcountry camp.
- » Attend ranger-led activities or evening programs.

Wandering in the Wilderness

THE WILDERNESS ACT of 1964 set forth an ideal that would come to define much of the National Wilderness Preservation System that you can visit today. Wilderness is a place for personal challenge or relaxation, through primitive and unconfined recreation such as hiking, climbing, horseback riding, hunting, fishing, or just being in nature. Wilderness areas also serve as vast storehouses of ecological, geological, and historical resources, allowing us to learn about the world as it was and how it is changing today. Howard Zahniser, author of the Wilderness Act, perhaps captured it best when he wrote: "For the wilderness is essential to us, as human beings, for a true understanding of ourselves, our culture, our own natures, our place in nature."



Climbers on Eldorado Peak.

©Erin McKay

Climbing in the North Cascades

Here in the North Cascades, large tracts of Wilderness are managed by the Park and Forest Service. The Stephen Mather Wilderness comprises 93 percent of North Cascades National Park Service Complex. Forest Service lands to the west include the Mt. Baker and Noisy-Diobsud Wilderness areas; to the east the Pasayten Wilderness; and to the south and east the Lake Chelan-Sawtooth and Glacier Peak Wilderness areas.

THE PROMINENT VOLCANIC cone of Mt. Baker, northernmost of the Cascade volcanoes, attracts thousands of climbers who each year attempt the 10,781-foot summit. The peak offers a variety of approaches and varying degrees of technical difficulty. All routes enter the Mt. Baker Wilderness where National Forest Wilderness regulations apply. The two most popular routes are via the Coleman or the Easton Glaciers. The climb is physically challenging and the routes require technical skills and good fitness.

Mt. Baker is just one of a multitude of rewarding climbs located throughout both the National Park and National Forest. Climbers should be experienced in glacier travel and proficient at route finding and crevasse rescue before attempting a summit in the North Cascades. As the season progresses, routes become more difficult because open crevasses make route finding more challenging. Generally, the best climbing conditions are from May to July.

It is important to make a plan and stick to it when venturing into the mountains. Let others know your plan and fill out a Voluntary Climbing Register at the closest ranger station.

Human waste is one of the most significant concerns while climbing because there is no soil in which to bury it and it can contaminate drinking sources. Some climbing areas have toilets, but in many areas climbers must pack out waste. Never bury waste in snow or toss in a crevasse—it melts out quickly, contaminates drinking water and is a serious eyesore for all climbers on the route.

Climbers should also be careful when traversing sub-alpine areas. Vegetation at this elevation is particularly fragile and susceptible to human disturbance. These plants have short, often harsh growing seasons. Walking, sitting, or camping on the vegetation can easily cause significant damage. Please travel, rest, and camp on trails or in designated sites or on durable surfaces such as snow, rock, or bare ground.

Consult one of the many climbing guide books for detailed route information. A list of licensed climbing guides and outfitters can be obtained from any ranger station or the National Park or Forest Service websites. Pick up a copy of the National Park Service *Climbing Notes* newsletter to learn more about issues relevant to the climbing community. Check weather conditions beforehand at a ranger station or online.

National Park Service www.nps.gov/noca U.S. Forest Service www.fs.fed.us/r6/mbs

Newhalem

The Edge of Wilderness

THE NORTH CASCADES were still remote and wild in the 1910s, when the power of the Skagit River was first being harnessed. Newhalem was built as a company town for the men who worked at the dams and their families.

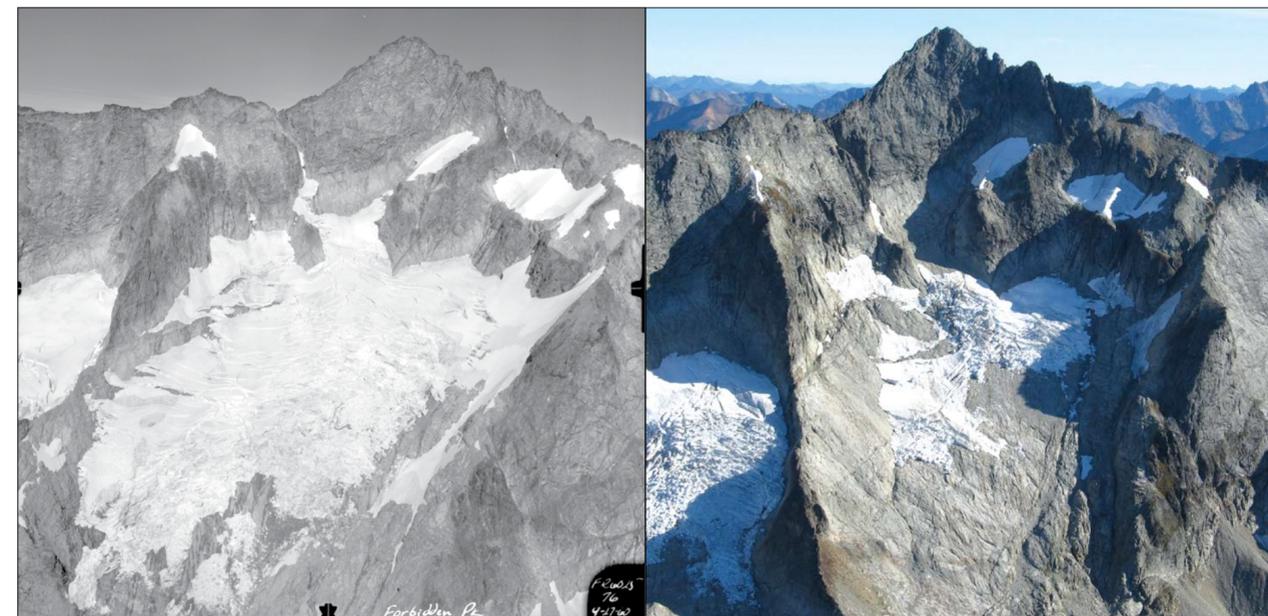
Learn about the area's natural and cultural history by exploring interactive exhibits, watching theater presentations or talking with rangers at the North Cascades National Park Visitor Center. The interpretive staff at the Center present a wide variety of programs including evening programs at both the Colonial Creek and Newhalem Creek campgrounds.

North Cascades National Park Visitor Center
Open daily mid-April through October
Open Saturday & Sunday, November to April
Daily Ranger Programs: June 26 to September 3

| Skagit Ranger Program Schedule | | | | | | | | | |
|--------------------------------|--|---------|-----|-----|-----|-----|-----|-----|-----|
| PROGRAM | LOCATION | TIME | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| Evening Program | Colonial Creek Campground | 9:00pm* | • | • | • | • | • | • | • |
| Evening Program | Newhalem Creek Campground | 9:00pm* | | | | | | • | • |
| Trail of the Cedars Walk | Skagit Tours Information Center | 3:15pm | • | | | | | • | • |
| Junior Ranger Program | Colonial Creek Campground Amphitheater | 10:00am | | | | | | | • |
| Thunder Knob Hike | Colonial Creek Campground Kiosk | 2:00pm | | | | | | | • |
| River Loop Hike | National Park Visitor Center | 10:00am | • | | | | | | |
| Exploration Tables | National Park Visitor Center | 10:00am | • | • | • | • | • | • | • |
| Ranger at the Lake | Diablo Lake Overlook | 2:00pm | • | • | • | • | • | • | • |

*Check bulletin boards or at the National Park Visitor Center as times may change

Here today, Gone tomorrow?



The photo of the south side of Forbidden Peak on the left was taken Sept. 27, 1960. The photo on the right was shot on Sept. 21 2005.

courtesy of Jon Riedel

North Cascades National Park is home to 312 glaciers, more than any other park in the lower 48 states. These monsters of ice slowly carve out the intricate system of valleys in the park and fill the surrounding streams and lakes with chilled blue water.

However, these reminders of an icy past may not have a long future in the North Cascades.

"They're retreating pretty fast and it's because the summers and winters are warmer," NPS geologist Jon Riedel said. "A lot of times we're getting rain on these glaciers in the late fall or even winter when they would normally be accumulating snow."

In order to determine how much the park's glaciers are retreating, Riedel began monitoring four glaciers in 1993, each in a different watershed. The northernmost is Silver Glacier up along the U.S.-Canada border, followed by Noisy Creek Glacier, North Klawatti Glacier, and Sandalee Glacier near Stehekin.

Each glacier has its own unique relationship to climate, Riedel said, based on its surrounding topography and elevation. The type of rock underneath the glacier and the slope of the mountain are especially important. Shade is also a key factor, which is why most of the remaining glaciers in the park are hiding on the north side of many peaks.

Measuring all the variables involved in the survival of a glacier would be time consuming and nearly impossible. So Riedel focuses on the most important factor: snow accumulation.

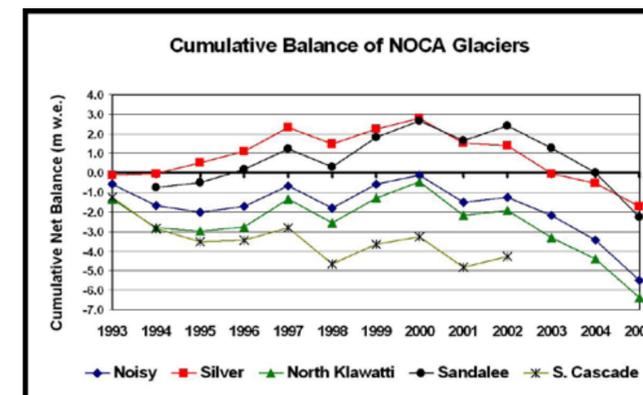
"To get at that direct signal between climate and glacier behavior, we focus on what happens on the surface," he said. "It's like your checkbook budget: if we account for how much water [snow] the glacier accumulates in the winter and how much it loses in the summer, we come up with a balance. If it's positive, then more snow was gained in the winter than was lost in the following summer."

To get these measurements, Riedel and his team journey to each of the four glaciers three times per year: first in late April (the end of the accumulation season), then in June and again in September (the end of the melt season). Roads and trails to these remote areas are impassable most of the year, requiring the team to helicopter in for April and September measurements.

In April, the team measures the thickness of the winter snow accumulation with an old metal tank antenna. Measuring stakes are then drilled into the glacier with a backpack-mounted steam drill. These stakes are used to determine how much snow and ice melted over the course of the summer.

"In any long-term monitoring, you have to have methods that are fairly easy to follow and straight forward," Riedel said, "so that they can be repeated and you can compare measurements from 1993 to 2007."

Geologist Jon Riedel monitors four glaciers in the North Cascades National Park and found that 13 percent of the park's glacier area has melted since 1993.



All four glaciers in the study have carried a negative balance since 2002. If these glaciers are losing snow, that means nearby streams and lakes are losing a major source of cool water in the summertime. For example, in Thunder Creek, glaciers produce as much as 45 percent of summer runoff, Riedel said.

"We call it the buffering capacity," he said. "It protects our lakes and streams from low flow."

With summer temperatures a degree warmer compared to 100 years ago, Riedel estimates that glaciers will need roughly 125 percent of normal snow pack in order to break even each year. The snowstorms in January 2007 put the glaciers at 150 percent of normal snow pack, but the dry, sunny weather in February lowered that down to 120 percent.

Riedel said he was not originally optimistic about this year's snowfall, but a flurry of late-February storms have changed his opinion.

ABOVE: All of the glaciers being monitored have been losing mass since 2002. The South Cascade Glacier is monitored by the USGS.

BELOW: Monitoring on the Silver Glacier.



courtesy of Jon Riedel

"As I watch the snow accumulate outside my window," he said in an e-mail on the last day of February, "I am now quite sure that we will be near normal snowpack when we visit the glaciers in April."

Coexisting with Wildlife

NATURE PROVIDES A VARIETY of food sources for all creatures, from mice to ravens to bears. But if people make human foods easy to get, wildlife may try to “steal” them. This can be dangerous for both animals and humans. For the well-being and safety of all, here are some tips on how to keep wildlife wild:

- » Some campsites have separate cooking and sleeping areas; use these as designated. Otherwise, sleep 100 – 300 feet (30 – 90 m) from where you cook and store your food.
- » Keep tents and sleeping gear free of food and cosmetic scents.
- » Store your food, garbage and all scented items in either bear-resistant canisters (available on loan from the National Park Service) or strung up 15 feet (5 m) off the ground and at least 5 feet (1.5 m) from tree trunks.
- » Pack out all garbage, including food waste.
- » Never feed wildlife.



Wildlife Encounters

Appreciate wildlife from a distance — most are wary or afraid of people. Do not approach any animal. Dangerous wildlife encounters are rare, but it is important to know how to respond in any interaction with wild animals. Different species behave differently. A correct behavior with one species may be inadvisable for another. Ask for cougar and bear site bulletins at any ranger station and educate yourself. Some general guidelines:

- » Travel in small groups.
- » Give wildlife plenty of space.
- » If you see a cougar or bear, DO NOT RUN. Group together and slowly back away.

Help Protect Spawning Salmon

- » Know the fishing rules printed in *Fishing in Washington* available wherever licenses are sold.
- » Be an observant river visitor and do not disturb salmon swimming up river. They use their last strength to spawn. Do not disturb gravel beds where eggs could be incubating.
- » Report illegal fishing to the Enforcement Hotline at: (800) 477-6224 (Monday to Friday, 8 a.m. to 5 p.m.)

North Cascades Research

The greater North Cascades ecosystem has a local relief of more than 8,000 feet, roughly 700 glaciers, major watersheds, old growth forests, pristine alpine meadows and an intriguing geologic history. Over 1,500 vascular plants and 300 vertebrate species have been identified in the area.

It has a history as both home and travel-way for indigenous peoples for more than 8,000 years. The great jumble of peaks that compose the North Cascades provide a formidable challenge to those that venture deep into their interior. As a result, large portions remain roadless wilderness. With such a varied and protected landscape, there is an abundance of study and research opportunities.

A major program in the National Park Service is the Natural Resource Challenge and its Inventory and Monitoring Program. This ambitious program seeks to acquire information

about the presence and distribution of species in the park, as well as global influences.

The Park Service, Forest Service, Washington Department of Fish and Wildlife, private organizations and universities all perform research in the North Cascades.

Current projects document vertebrates (such as mammals, birds, amphibians, fishes and reptiles), invertebrates and plants, air and water quality as well as geology and soil information. This data can be used to generate maps, plan future monitoring and restoration work, and better manage and preserve the park.

Forest Service researchers are studying the effects of climate change on various forest types and the dynamics of fire in forests. They are also working on surveying mountain goat populations and monitoring stream health.

University researchers are studying many aspects of the North Cascades. Western Washington University researchers are studying the effects of recreational use on subalpine sites such as Trapper Lake and the history of regional volcanism at Hannegan Caldera.

This is just a sampling of the scientific work occurring here. Together, we are gaining an understanding of the puzzle that comprises the North Cascades. For more information, pick up *Natural Notes* or visit: www.fs.fed.us/pnw www.nps.gov/nwresearch

Mountain Goats

Surveys of the Mount Baker area mountain goat population continued in 2006. In July, 324 goats were spotted, which is comparable to the 331 seen in 2005. Fewer than 300 animals were spotted in 2004. This year, researchers hope to partner with the University of Idaho to study the type of habitat preferred by mountain goats.

Mountain goats are considered an indicator species of the health of the North Cascades ecosystem. If you happen upon one — or rather, if it happens upon you — please keep your distance. Goats need to be left alone so that they will have a chance to thrive during the vital months of the year when they are feeding and gaining energy to survive the harsh Pacific Northwest winters.



Mountain goats are considered an indicator species for the health of the North Cascades ecosystem.

Wolverines

In the winter of 2005/2006, the USFS joined with the Washington Department of Fish and Wildlife to begin monitoring wolverine populations in the North Cascades. This is the first project in Washington to study the distribution and ecology of this rare and elusive forest carnivore.

During the first winter, one male and one female were captured near Hart's Pass and fitted with a satellite transmitter collar. Both of their collars fell off early, leading researchers to modify the collar design. The new collars are preprogrammed to fall off after 115 days.

This year, one male and one female were captured in the upper Twisp River drainage. The male, nicknamed Chewie because he nearly chewed his way out of the log cabin-style trap, has since traveled many miles throughout the Cascades. The female has also spent much of her time within park boundaries.

Also, the female captured last year was recaptured and collared at the Hart's Pass site. Researchers believe she mated this year and are hoping she will provide some clues about den site selection and habitat preference.



courtesy of Roger Christophersen

Washington State wildlife biologist Scott Fitkin (below) holds a wolverine nicknamed Chewie because it nearly chewed its way out of the log cabin-style trap, seen above. Chewie was captured in the upper Twisp River drainage in late January and fitted with a tracking collar.



courtesy of WDFW

Skagit River stewardship

People working together in the Skagit and Nooksack River Systems have helped create a powerful network of stewardship over the past few years. Along the Skagit River the Forest Service has chosen to work in partnership with the multitude of agencies and organizations concerned with issues that affect the river. In this way stewardship of the river system is a shared responsibility. Education and outreach programs, conducted with a network of partners, are a cornerstone of Skagit Wild and Scenic River management.

The Skagit Wild and Scenic River System consists of 158.5 miles of the Skagit River and three of its tributaries, the Sauk, Suiattle and Cascade Rivers. These clean, rushing waters provide a healthy home to all five species of Pacific salmon, as well as two species of trout. Nearly 300 species of wildlife populate the area, including black-tailed deer, bald eagle, black bear and osprey.

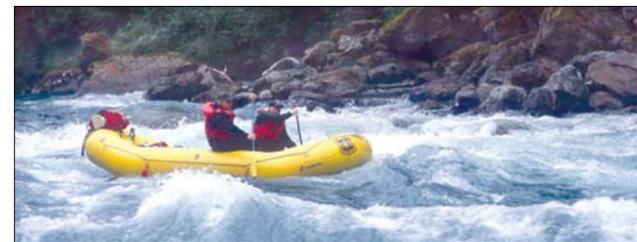
The Skagit is the largest watershed in Puget Sound. It flows south from British Columbia, originating in glaciers of high peaks in the North



Wintering populations of bald eagles attract visitors to the banks of the Skagit River.

Cascades range. Meandering on through forests and the Ross Lake National Recreation Area, it skirts the communities of Marblemount, Rockport and Concrete, and finally empties into Puget Sound beyond Mount Vernon.

During winter months, when hundreds of bald eagles migrate to the area to feed on spawning salmon, volunteers help staff Eagle Watcher sites along the Skagit River. Urban youth from Seattle's International Housing District Alliance have joined this effort the past few years by assisting with staffing and field trips. Visitors are welcome to tour facilities at the Marblemount Hatchery to learn about salmon and their life cycle.



Rafting the Skagit River.

In the Nooksack River drainage, the Forest Service works with the Nooksack Salmon Enhancement Association (NSEA) to educate the public about fish, fish habitat, and ways to minimize impacts on fish while recreating on and near the rivers. NSEA organizes a cadre of student interns and volunteers to provide environmental education for public and private groups such as area school and youth organizations and others who may have questions, concerns or interest in the fish of the Nooksack River.

Through these collective efforts, stewards are able to help protect river resources by maintaining a presence along or near the waterways and by providing informal education on site. If you are interested in attending a program or having a presentation at your facility, you may contact the Forest Service or NSEA through their website at www.n-sea.org.

New Interpretive Center planned for Skagit River

FOR OVER TWENTY YEARS, local organizers of the Upper Skagit Bald Eagle Festival have dreamed of a new center along the Skagit River that would be a place to discover the character of the watershed, its heritage and peoples, and the area's plants and animals.

Although the Skagit River Bald Eagle Awareness Team (SRBEAT) strives to make a pleasant experience for those viewing the hundreds of bald eagles that converge each winter in the Upper Skagit River watershed, they also understand the values of the river are a year-round interest.

Skagit County Parks and Recreation made the first step in this cooperative project by donating a building site in Howard Miller Steelhead Park. Additional funds are now needed for a new building design. In the meantime the former park ranger residence at the county park will serve as the interim center.

Check with the Park and Forest headquarters in Sedro-Woolley about the variety of programs highlighting the Skagit River's ecosystems, the area's intriguing history and guided nature walks that may be offered this year. More information about the new Interpretive Center and the Bald Eagle Festival is available online. www.skagiteagle.org

Thanks Partners!

The National Forest and Park Service work in a collaborative fashion with a variety of groups and private individuals devoted to the care of our natural resources. By working together and combining efforts, these networks create a community of shared concerns.

NORTH CASCADES INSTITUTE

North Cascades Institute offers a variety of hands-on programs, including Mountain School, a residential program for elementary, junior and high-school students from various school districts in western Washington. Other programs include summer youth adventures, family getaways, adult seminars and retreats, graduate studies and volunteer stewardship opportunities.

For more information about classes and programs visit www.ncascades.org
North Cascades Institute
810 State Route 20
Sedro-Woolley, WA 98284-1239
Phone: (360) 856-5700 ext. 209
E-mail: nci@ncascades.org

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 (206) 770-0627 or visit www.wnpf.org.



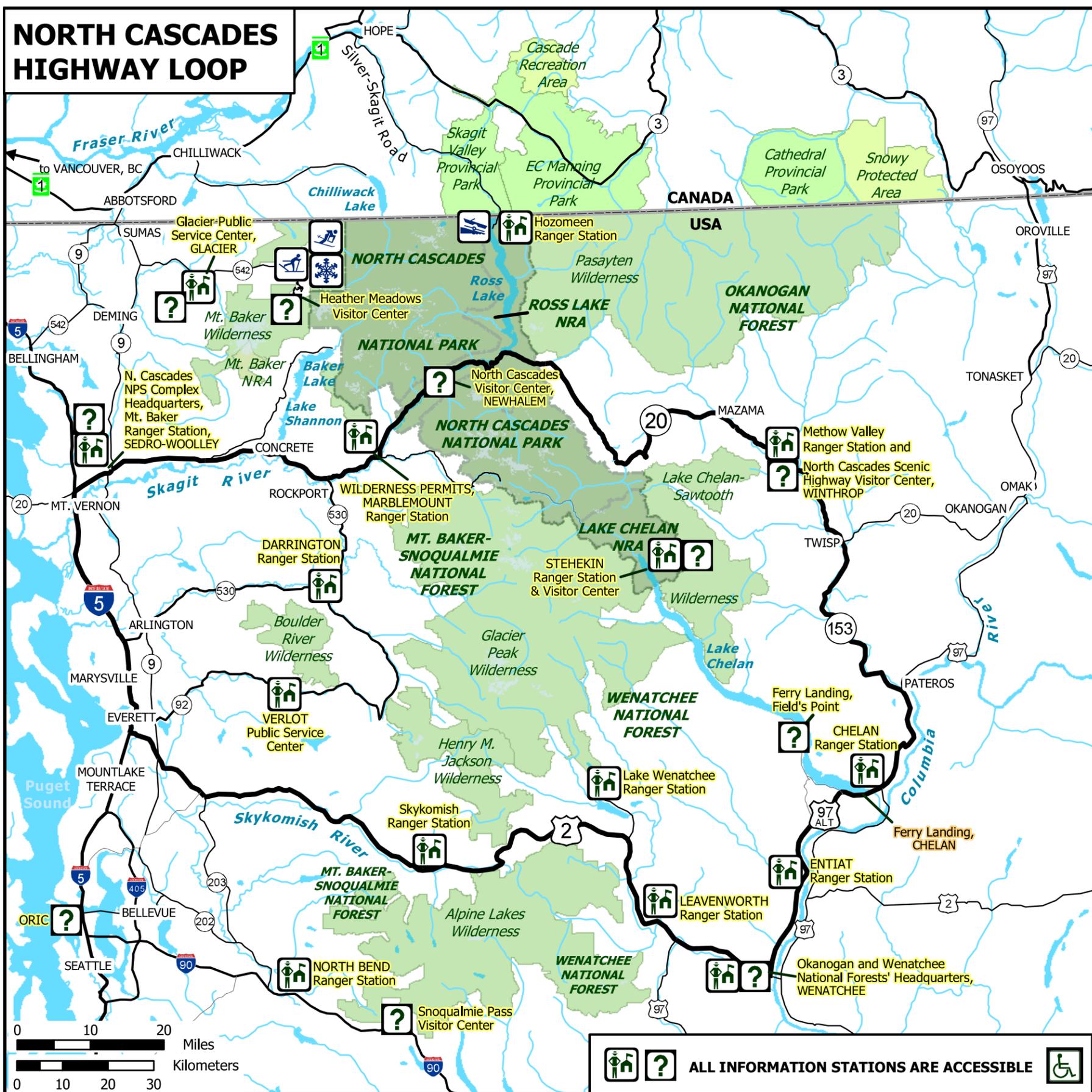
Northwest Interpretive Association



The Northwest Interpretive Association is a nonprofit organization that works cooperatively with public agencies throughout the Northwest to promote historical, scientific and educational activities. Money received through local sales, memberships and donations is used to help both North Cascades National Park and the Mt. Baker Ranger District. The association publishes this newspaper and other guides. Sales items may be purchased at various offices, online and through mail order. Visit www.nwpubliclands.org or call (360) 856-5700 ext. 291.

National Forest Foundation

Would you like to help maintain your public lands for future generations? Partners are encouraged to work with the Forest Service through the National Forest Foundation, a private, nonprofit organization dedicated to building relationships that result in improvements in our national forests and the communities and landscapes that surround them. Find out more about the foundation at www.natlfoundation.org.



Information and Visitor Centers Summer Hours

North Cascades National Park; Mt. Baker Ranger District

SEDRO-WOOLLEY

810 State Route 20, 98284
Daily 8 a.m. to 4:30 p.m.
(360) 854-7200 (NPS)
(360) 856-5700 (USFS)

MARBLEMOUNT

Wilderness Information Center
Backcountry Information/Permits
Fri. to Sat. 7 a.m. to 8 p.m.
Sun. to Thur. 7 a.m. to 6 p.m.
(360) 873-4500 ext. 39

NEWHALEM

North Cascades National Park Visitor Center
May-October: 9 a.m. to 5 p.m.
July & August: 9 a.m. to 6 p.m.
Open daily
(206) 386-4495

STEHKIN

Lake Chelan National Recreation Area
Golden West Visitor Center
Daily 8:30 a.m. to 5 p.m.
(360) 854-7365 ext. 14

Okanogan National Forest; Methow Valley Ranger District

WINTHROP

Methow Valley Ranger District
Mon. through Fri.
7:45 a.m. to 4:30 p.m.
(509) 996-4003

Early Winters Visitor Center
Daily 9 a.m. to 5 p.m.
(509) 996-4000

Wenatchee National Forest

CHELAN RANGER DISTRICT

Lake Chelan National Recreation Area
Daily 7:45 a.m. to 4:30 p.m.
(509) 682-2576 (USFS)
(509) 682-2549 (NPS)

WENATCHEE RIVER RANGER DISTRICT

LEAVENWORTH OFFICE

Mon. - Sat. 7:45 a.m. to 4:30 p.m.
(509) 548-6977

LAKE WENATCHEE RANGER STATION

Wed. through Sat.
8 a.m. to 4:30 p.m.
(509) 763-3103

Mt. Baker-Snoqualmie National Forest

MOUNTLAKE TERRACE - SUPERVISOR'S OFFICE

No visitor services
(425) 775-9702 or 1-800-627-0062

GLACIER PUBLIC SERVICE CENTER

Late-May to mid-October,
Daily 8 a.m. to 4:30 p.m.
(360) 599-2714

HEATHER MEADOWS VISITOR CENTER

Daily 10 a.m. to 4 p.m.
Mid-July to late Sept.

DARRINGTON RANGER DISTRICT

Mon. - Fri. 8 a.m. to 4:30 p.m.
(360) 436-1155

VERLOT PUBLIC SERVICE CENTER

Daily 8 a.m. to 4:30 p.m.
(360) 691-7791

SKYKOMISH RANGER DISTRICT

Mon. - Sat. 8 a.m. to 4:30 p.m.
(360) 677-2414

SNOQUALMIE RANGER DISTRICT

North Bend Office

Mon. through Sat. 8 a.m. to 4:30 p.m.
(425) 888-1421

Enumclaw Office

Mon. through Sat. 8 a.m. to 4:30 p.m.
(360) 825-6585

SNOQUALMIE PASS VISITOR CENTER

Fri. through Sun. 8:45 a.m. to 3:45 p.m.
(425) 434-6111