Visitor Information Guide
2002-2003

Mt. Baker-Snoqualmie National Forest -- North Cascades National Park Complex

North Cascades Challenger



Welcome to the North Cascades!

Experience this unique region of natural features and cultural histories in a safe and enjoyable manner. Look beyond the scenery and discover a complex web of life in the landscape.

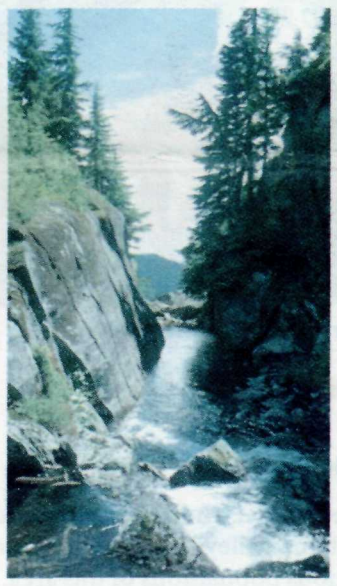
We hope you will enjoy your visit. The 21st Century presents new challenges to National Forest and Park stewards as we blend the human dimension into care of the natural environment. The North Cascades is primarily wilderness and watersheds whose health is crucial to the entire Pacific Northwest. By promoting sustainability of resources, clean watersheds, partnerships, education, and personal responsibility, we hope to preserve a high quality of life for future generations.

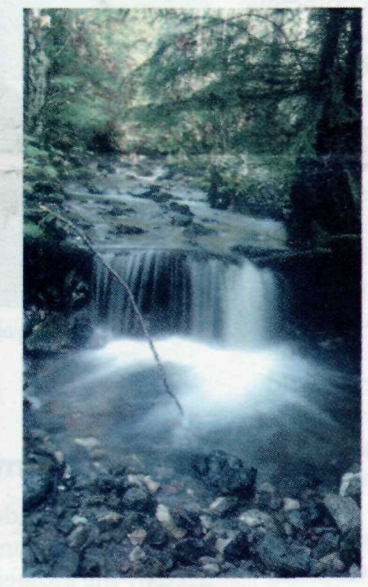
You are invited to explore interrelationships of humans, plants and animals in this spectacular setting. Please share your perspective on the management of these public lands. Contact us at our web sites or by writing to us at the address below. Have a safe and rewarding visit!

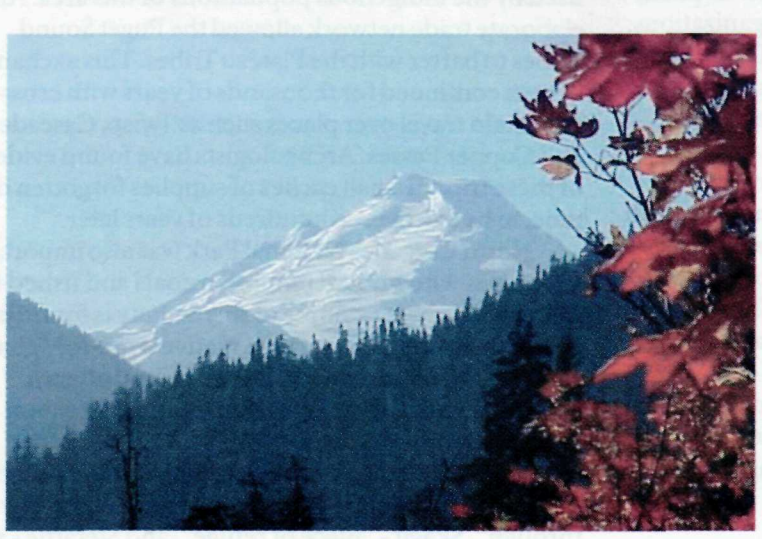
Jon Vanderheyden
Mount Baker District Ranger
Mount Baker-Snoqualmie National Forest

William F. Paleck
Superintendent
North Cascades National Park









North Cascades National Park Service Complex - North Cascades National Park, Lake Chelan & Ross Lake National Recreation Areas - totals 684,000 acres.

In 1988 Congress designated 93 percent of the complex as the **Stephen Mather Wilderness.**

These areas embrace the crest of the North Cascades Mountains and are bounded on the west by the Mt. Baker-Snoqualmie National Forest.

Mt. Baker Ranger District of the **Mt. Baker-Snoqualmie National Forest** includes more than 530,000 acres in northwestern Washington.

The District encompasses:

- Mt. Baker Wilderness
- Noisy-Diobsud Wilderness
- Sections of Glacier Peak Wilderness
- Skagit Wild & Scenic River System
- Mt. Baker National Recreation Area and Baker Lake
- Mt. Baker Scenic Byway and Heather Meadows

2 Caring for the Land

Blending the human dimension with the natural landscape, the North Cascades is home to people and values that reach back in time and forward into our explorations today.

5 Water as the Essence

The lifeforce of the Cascades, water plays a crucial role in this unique ecosytem. The National Park Service and Forest Service are teaming up to ensure the protection of these fragile lands.

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

Caring For The Land

"It has always been part of the human experience to live in a culture of wilderness. There has been no wilderness without some kind of human presence for several hundred thousand years. Nature is not a place to visit, it is home - and within that home territory there are more familiar and less familiar places. Often these are areas that are difficult and remote, but all are known and even named."

Gary Snyder

From rivers to glaciers, valleys to summits, the North Cascades is one of the most extraordinary ecosystems in the world. Jagged peaks of ice-sculpted mountains rise above deep, forested valleys. Blanketing these mountains are forests yielding astonishing quantities of vegetation that provide habitat for millions of living organisms and diverse life forms. Rivers of cold glacial runoff cascade down the valleys replenishing lakes, allowing for recreational opportunities and providing for an expanding nearby population. This ecosystem that is home to seven Native American tribes, is the core to one of the largest protected wild areas in the United States.

So what is it that brought you to the North Cascades? People have very personal reasons for visiting the peaceful waters and humbling peaks of this region. Some come for a physical and mental challenge, while others prefer a quiet moment just watching the clouds in solitude. Regardless, each of our journeys is unique as we uncover our connection to the world around us.



The Forest Service and the National Park Service face the challenge of providing for human values and benefits while preserving the wilderness character of the land. These lands represent opportunities for recreational use, scientific study, and education. Natural processes are allowed to operate freely within wilderness in order to ensure their continued integrity. Visitors can help preserve these national treasures by following rules and regulations established for protection of the wilderness resource.

We hope that human care and interaction with the wild lands of the North Cascades will inspire for a global perspective. Henry David Thoreau wrote, "In wildness is the preservation of the world." Native Americans have known they are physically and spiritually connected to all things. Perhaps here, in the North Cascades you will discover your personal connection that will contribute to the quality of life on earth.

Beyond Boundaries

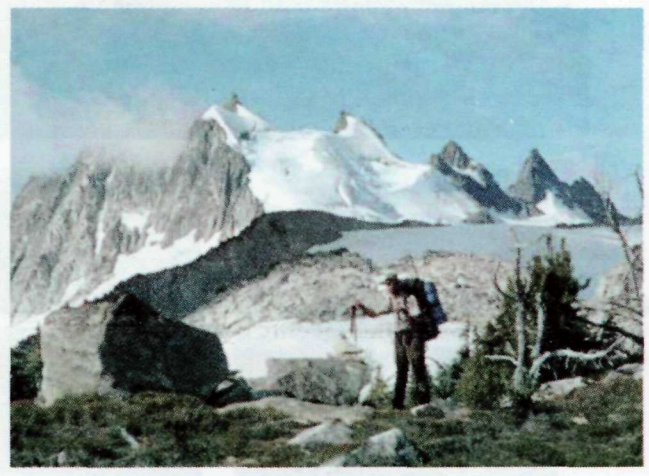
The Mt. Baker-Snoqualmie National Forest is located in a unique and inspiring place, largely wild, yet within a stone's throw of major metropolitan areas. The convergence of abundant natural resources and 5.5 million people creates an environment that is both prized and abused. Increasing pressures and conflicting demands threaten these natural resources daily. The Forest Service goal is to provide long lasting benefits for all by caring for the land and serving people's needs.

This combination of place and time fosters abundant opportunities for developing partnerships that push beyond geographical, legal, administrative, political and personal boundaries to find effective solutions. Here the partnership story plays out in the Skagit River Watershed involving many people, resources and issues. For all a common thread is the Pacific Northwest salmon. The Skagit Wild and Scenic River is widely recognized as a critical source for wild salmon in Puget Sound and a key to salmon recovery efforts. The push to protect and restore salmon affects every aspect of life here, galvanizing local conservation efforts and fostering strong controversy.

Forest Service partnerships continue to be forged through cooperation. The Skagit Watershed Council, comprised of thirty different concerned organizations, brings cohesion to regional efforts to care for this land and its many species. From North Cascades Institute's *Skagit Watershed Education Program* to the Skagit Conservation District's *Soil and Water Stewardship Week,* partners offer all ages a way to get involved.

Volunteers spend hundreds of hours helping with conservation resource education efforts, trail work, wildlife and fisheries habitat protection projects, visitor services and recreation site maintenance. The value of these efforts is priceless as they blend the past with future visions.

To learn about the many other opportunities pick up the *Saving Skagit Salmon brochure* at the visitor centers or see the *volunteering article* on page 14.



Park Ranger on Mt. Challenger

Native Home

North Cascades has been home for thousands of years. These mountains, valleys and rivers were widely used by the indigenous populations of this area. An elaborate trade network allowed the Puget Sound Tribes to barter with the Plateau Tribes. This exchange system continued for thousands of years with cross-mountain travel over places such as Twisp, Cascade and Copper Passes. Archeologists have found evidence of these trips in small caches of supplies forgotten over time, to be discovered hundreds of years later.

North Cascades National Park was also important to Natives who hunted mountain goats and fished for salmon. The best example of this activity is found in Newhalem - derived from the Native word for "goat snare." The Newhalem Rock Shelter Trail offers a glimpse into a world of hunting mountain goats at least 1,350 years ago.

This is the home of a People who left their mark on the land in place names such as Stehekin - "the way through", Skagit - "place of refuge", and Stetattle - a corrupted word for "grizzly bear." These were not temporary visitors or people seeking to subdue the earth. They called this place home.

However, this story does not end in the past. Native Peoples in the present and for future generations will continue their long tradition of mountain use. The National Park Service manages an environment that has been only lightly touched since the Native ancestor's walked on this ground. North Cascades National Park is currently working with tribal communities to foster better relations and promote mutual honor and respect. We seek diverse voices to better understand the world around us. National parks are meant to reflect American culture. North Cascades National Park endeavors to interpret the proud history of Native Peoples who have used and continue to use their ancestral home.



Forest Service River Rangers

Northwest Monument

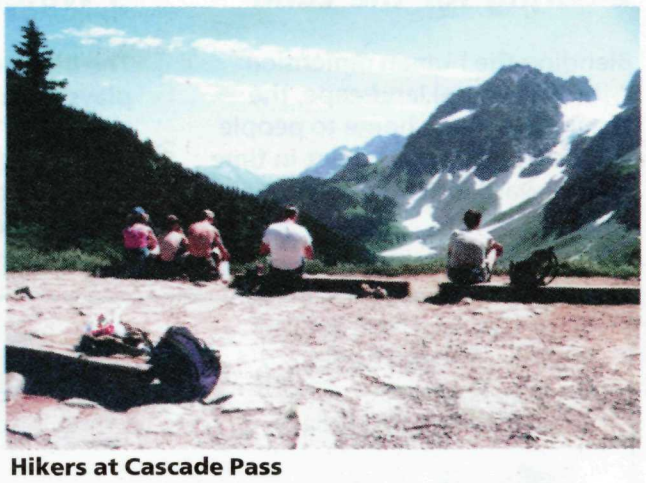
From Ancient Rome to the temples of the Mayans, many lands display monumental human accomplishments. Yet the United States displays treasures more magnificent and pure than any feat of human endeavor. Countries in Europe built cathedrals of stone. The United States established national parks to preserve the natural marvels that define the American experience. Here in the Northwest, the connection between the natural world and cultural history is intensely felt. Our national parks preserve the essence and history of this place, our home.

Forming the backbone of this diverse region, North Cascades National Park anchors our explorations into cultural and natural history, our present place in this changing world, and our dreams for future generations. The past is like the roots of our cultural tree, supporting our growth into the future. Following receding glaciers after the Little Ice Age, the Skagit People inhabited these lands with the salmon and cedar. They found refuge in these mountains from aggressive coastal peoples and lived off the abundance of forest and river. Soon, rugged pioneers blazed their way up the Skagit on the Goat Trail searching for gold, pelts, adventure and the freedom that the wild land offered.

Their freedom disappeared soon, however, as the modern age pushed its way upstream along the powerful Skagit River. With a dream and persistence, J.D. Ross started a movement that altered the wild Skagit to its present harnessed form. Gorge, Diablo, and Ross Dams still the mighty Skagit above Newhalem now, but the mountains remain wild due to the diligence of many conservationists and Senator Henry M. "Scoop" Jackson. After repeated attempts to preserve the North Cascades, Congress established a National Park here in 1968.

North Cascades National Park Service Complex preserves for future generations the majesty that the Upper Skagit People, pioneers and recreationists have long appreciated - over 684,000 acres of mountains, forest and streams. More than half of the glaciers in the lower 48 states continue to sculpt these mountains. Due to the steep terrain and proximity to the Pacific Ocean, these mountains are one of the most biodiverse areas on the planet. North Cascades National Park is a bounty of ecological information and personal inspiration.

North Cascades National Park is a testament to our diverse nation. Its outstanding features attract people from around the world as they seek to find what they have lost in their own homelands. This is our national legacy. This is our northwest monument.



Hikers at Cascade Pass

Questions? Please stop by or call one of the Park & Forest Information Stations listed on the back page. Websites are listed on page 15.

- The **Forest/Park Service Information Office, along the North Cascades Highway** (SR 20) in Sedro-Woolley, is where you can find year-round visitor services.
- At the **North Cascades Visitor Center**, located near Newhalem off SR 20, find information, naturalist programs, exhibits and multi-media presentations.
- **Glacier Public Service Center,** located at milepost 34 off Mt. Baker Hwy SR 542 east of Bellingham, is jointly operated by the Forest Service and Park Service from mid-May to mid-October.
- **Heather Meadows Visitor Center,** off SR 542 at milepost 56, showcases the natural and cultural heritage of the Mt. Baker area and is usually open from July to October.
- **Chelan Ranger Station,** operated by the U.S. Forest Service and National Park Service, provides information about Lake Chelan NRA and Wenatchee NF. From Chelan or Field's Point Landing, take a ferry to remote Stehekin.

NORTHWEST FOREST PASS

PASS ON YOUR NATURAL LEGACY

Passes & Special Use Permits

If you are planning a trip to any of the Washington or Oregon National Forests or North Cascades National Park Service Complex, you may need a **Northwest Forest Pass** where there are facilities, trail, or services. Separate fees are charged at developed campgrounds and private resorts within the National Forest and Park.

These passes can be obtained:
In person - ranger stations
By calling - 1-800-270-7504
Online - http://www.fs.fed.us/r6/mbs

- **Northwest Forest Pass:**

Daily	$5
Annual	$30

(w/ Golden Age *or* Golden Access Passports *1/2 price)*

- **Federal Recreation Pass Programs:**

The following Federal Recreation Passes are not valid for trailhead parking, only entrance fees. North Cascades National Park does not charge for entrance.

National Parks Pass *(upgrade to Golden Eagle add $15)*	$50
Golden Eagle Passport	$65

~ Golden Age & Golden Access Passports allow 1/2 price on campsites and NW Forest Pass

Golden Age *(US citizen 62 or older)*	$10
Golden Access *(Qualified disabled)*	Free

- **National Forest permits for firewood** and other forest products are available on a **very limited** basis. Permits are issued first-come, first-served and must be prepared in advance.

- **Forest Service Christmas tree permits** are available during the latter part of November into December. Call, check the Forest website, or stop by the district office for further details.

- **Mushroom Collecting** is prohibited in the North Cascades National Park Service Complex but is allowed on some state and national forests. Check with a local ranger station for rules.

NOTE: Where collecting is permitted, collection of any item in quantities more than adequate for personal use is strictly prohibited.

Accessible Opportunities for All

Barrier-free trails, campsites, viewpoints, restrooms, and visitor information centers are being added and upgraded for accessibility throughout the North Cascades.

Accessible restrooms are available at all visitor information stations and most campgrounds. Several trails adjacent to each highway route are either boardwalk or surfaced for wheelchairs and strollers, as well as for individuals who have difficulty walking.

Accessible trails are indicated on trail lists on pages 6-10 with a symbol.

Where to Stay

Campground options and reservation information are listed on pages 8-9, along with the North Cascades Highway Map.

Remote accommodations in the North Cascades include: **Ross Lake Resort**, Rockport, WA 98283, (206) 386-4437; **North Cascades Stehekin Lodge**, Box 457, Chelan, WA 98816, (509) 682-4494; and **Baker Lake Resort** 1-888-711-3033.

Many private accommodations are available in local communities. Listings are available from Chamber of Commerce offices listed on page 9.

Drive

Highway drives access the scenic routes of the North Cascades. Gravel access roads may not be safe for travel by all vehicles. **State Route 20** runs east/west across the mountains and closes during the winter from milepost 134 to 171. By April it is usually possible to travel the entire **Cascade Loop** outlined on the back page.

The **Mt. Baker Scenic Byway**, State Route 542, leads visitors to Heather Meadows on the divide between Mt. Baker and Mt. Shuksan. The Mt. Baker Ski Area operates here during the winter months.

Bike

Many people tour the **North Cascades Highway** and **Mt. Baker Scenic Byway** by bicycle. These remote routes offers a unique and challenging experience. Travel single file on the right edge of the road and use reflectors and bright clothing. Bike use is not permitted on westside forest or any national park trails. Side roads are rugged enough for avid mountain bikers. The **Okanogan National Forest** east of Washington Pass allows trail riding on designated trails. Be well supplied with water, food, and warm, waterproof clothing. *Ask for the site bulletin: Cycling the North Cascades Highway.*

Pets

Dogs are **not permitted** on the trails or in cross-country areas within the national park. Leashed dogs are allowed in Ross Lake & Lake Chelan National Recreation Areas, along the Pacific Crest Trail and along roads in the national park. Dogs must be leashed in developed recreation areas within the national forest, as well as on trails in Heather Meadows in the Mt. Baker Ranger District.

Ride

Stock (horses, mules, donkeys, and llamas) are welcome on trails maintained to stock standards. Trails in the national park and national forests have different rules and seasons of use. Please check with the ranger station for detailed information and a listing of stock trails and their current conditions.

Stock in Wilderness:

- Stock parties on trails are limited to a total of 12 people and stock combined; for example, five people and seven horses. In national park areas where stock are allowed off-trail, the limit is six.
- Grazing is permitted in Ross Lake and Lake Chelan National Recreation Areas. Grazing permits are required and can be obtained with your backcountry permit.
- Grazing is prohibited in North Cascades National Park.
- Grazing is permitted, without a permit, in national forests but must be at least 200 feet from the shoreline of any lake.
- In wilderness, pack in sufficient processed feed pellets for your trip. Possessing or transporting any unprocessed livestock feed is prohibited.

Hike & Climb

Hundreds of miles of trails lead into the North Cascades mountains. Most long hikes and climbs enter designated wilderness.

Overnight stays in North Cascades National Park Service Complex's backcountry require free permits. In Washington and Oregon, the **NW Forest Pass** is required for parking in many places.

Staff at the Wilderness Information Center in Marblemount can help you plan your trip and will issue backcountry permits for the North Cascades National Park Service Complex.

Climbers should choose experienced partners or licensed guides and fill out Voluntary Climbing Registers at Sedro-Woolley, Marblemount, Glacier or Stehekin. Ask for a *Wilderness Trip Planner* and *Climbing Notes* or a list of *Outfitter Guides.*

Backcountry Camping

- **National Park Service: Permits (no charge) are required for all overnight stays in the Park Complex's backcountry**, which includes the National Park and Ross Lake and Lake Chelan National Recreation Areas. More than 200 backcountry campsites are available. Most camps have toilets; signs along trails indicate location. **Permits are issued in person only on a first-come, first-served basis.** For areas not accessed through Marblemount, permits may be obtained at the ranger station nearest your point of entry. Ranger stations on the west side are located in Marblemount, Sedro-Woolley, Hozomeen, and Glacier; and on the east side in Chelan, Stehekin and Winthrop. For permit information, contact:

Wilderness Information Center
North Cascades National Park
7280 Ranger Station Road
Marblemount, WA 98267
Phone: (360) 873-4500, ext. 39

- **Forest Service: Camping in the national forest does not require a permit; however, parking at trailheads requires a Northwest Forest Pass.** Overnight visitors to the Mt Baker NRA, Chain Lakes, Lake Ann, and Watson Lakes must camp at designated sites.

Campfires are not allowed in many backcountry areas located in subalpine settings.

Boat

Lots of water-oriented activities are available. Use of approved life jackets is required. Use of personal watercraft (such as jet skis) is prohibited in the North Cascades National Park Service Complex. River floating is an adventure worth planning. Experienced boaters run the Skagit, Nooksack, and Stehekin Rivers. For boating trips, plan in advance by asking for a list of *Outfitter Guides* or *Accommodations and Services.*

Lake recreation: Boat rentals are offered at Baker Lake, Lake Chelan, and Ross Lake. Boat ramps are at Baker Lake, Gorge Lake, Diablo Lake, the north end of Ross Lake at Hozomeen and Lake Chelan.

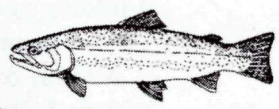
Passengers travel to Stehekin by cruising up 50-mile long Lake Chelan. The Lake Chelan Boat Company operates year-round, daily spring to fall. Schedules are available from the company (1-509-682-2224) or from any ranger station.

Fish

Fishing in Washington, including in national parks and forests, requires a valid Washington State fishing license.

The Skagit River, Washington's second largest after the Columbia, and its impounded lakes are home to nine species of anadromous fish (five salmon, steelhead, cutthroat trout, and Dolly Varden, bull trout), as well as several fresh water species.

In order to protect spawning fish populations, it is necessary to comply with special regulations including closures, seasons, catch limits and gear restrictions. These are listed in the Washington State Department of Fish & Wildlife game fish regulations.



Lake Chelan has fresh water cod and salmon. The Stehekin River gives anglers a good chance at rainbow and cutthroat trout. Bait shops and local anglers are the best sources of information and advice.

Travel Safely, Tread Lightly

Opportunties to enjoy the beauty of the North Cascades are abundant, but fragile. Take time to learn how to interact as a responsible steward.

Safety Tips

- Use caution on forest and park access roads.
- At trailheads, safeguard your possessions out of sight. Lock your vehicle.
- Bring extra water on hikes. A fine filter may be necessary since even clean-looking water can carry giardia. Treat and/or boil all ground water. Water may not be near camp.
- Hiking over challenging terrain with inadequate skills or equipment is the primary cause of accidents in the North Cascades. Staying on trails, wearing adequate footwear, and using a good topographic map can minimize the hazards of this rugged land.
- Be prepared for insects. You may encounter mosquitoes, wasps, bees, biting flies, and ticks. After hiking, check yourself for ticks, which may carry Lyme Disease.
- Bear and cougar encounters may be dangerous situations. Abide by the tips in the adjacent article *Coexisting with Wildlife* and ask for the brochure *Living with Wildlife*.
- When horses are approaching, hikers should talk to make their presence known and step off the trail on the low side.
- Some stream crossings are not bridged. Cross streams in the morning (when they are lowest), scout for the safest crossings, or turn back if the rushing water is unsafe.
- Downed trees or washed out sections of trail should be reported at a ranger station.

Backcountry Safety

Don't let a pleasurable outing turn into an unexpected tragedy by not being prepared. Entering into a mountain experience — even a day hike — should not be taken lightly.

- Be well informed; contact the Park or Forest Service for current conditions.
- Research maps & trail handbooks.
- Carry the "10 Essentials."
- Let others at home know your plans.
- Make the best decision for your safety, including turning back.
- Do not depend on cell phones; there are many 'dead spots' in these mountains.

TOP 10 ESSENTIALS

Delays or changes in weather can cause emergencies. Even on short day hikes, each person should take and know how to use these items:

Navigation
Topographic map and compass.

Food
Extra food and water.
Boiling water kills giardia; treatment pills may not.

Clothing
Extra clothing, including rain gear, wool socks, sweater, gloves, and hat.

Light
Flashlight with spare bulb and batteries.

Fire
Waterproof matches and fire starter, such as a candle.

Sun Protection
Sunglasses and sunscreen.

First Aid
Aid kit including any special medications you might need.

Knife
A folding pocket knife.

Signal
Audible & Visual: whistle & metal mirror.

Emergency Shelter
Plastic tube shelter or waterproof bivouac sack.

Naturalist Programs

- **Amphitheaters at Colonial Creek:** summer nightly programs, and at **Newhalem Creek:** weekends only; see posted schedules.
- **North Cascades Visitor Center:** daily walks, talks, multi-media, and children's programs.
- **Hozomeen:** weekend programs at Ross Lake.
- **Heather Meadows:** summer programs.
- **Skagit Wild and Scenic River Programs:** Winter: weekend speakers and eagle viewing Summer weekends: river walks and talks.
- **Purple Point Information Center**: summer daily talks, evening and children's programs.

Leave No Trace

The following backcountry travel tips are based on principles developed by the national "Leave No Trace" program. For more details, contact LNT at 1-800-332-4100 or visit its website (*http://www.lnt.org*).

- **Plan Ahead and Prepare:**

Plan ahead by considering your goals and those of your group. Prepare by gathering information, communicating expectations, and aquiring the technical skill, first aid knowledge, and equipment to do the trip right.

- **Travel and Camp on Durable Surfaces:**

In high use areas, concentrate activity within established campsites and trails where additional use causes little impact. Avoid making parallel trails, cutting switchbacks, or widening trails. In remote areas, travel in groups of no more than six people. Hike and camp on surfaces such as rock, sand, gravel, and snow.

- **Pack It In, Pack It Out:**

Repackage food to save weight and space and minimize potential litter. Pack out all trash, including food waste, as animals can become accustomed to and dependent on unnatural food sources.

- **Dispose of Waste Properly:**

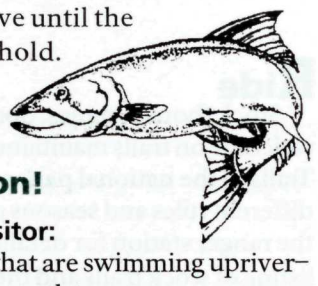
Properly dispose of human waste. Use vault and compost toilets where available. In glacial areas pack out human waste - the "blue bag" system or other commercial options are available. Check with ranger station for details. In forested areas, dig a "cathole" 6-8 inches deep in organic soil at least 200 ft. from water, trails, and camp. Urinate on rock or bare soil. Waste water from dishwashing, cooking, bathing, or laundry should be scattered at least 200 feet from camps and water sources.

- **Leave What You Find:**

Do not alter campsites by trenching around tents or building walls, tables, or lean-tos; dismantle excessive user-built facilities such as multiple fire rings. Avoid damaging live trees and plants. Leave flowers, natural objects, and cultural artifacts for others to enjoy.

- **Minimize Campfire Impacts:**

Use campstoves instead of fires. If you do build a fire: bring a fire pan or build a mound fire, collect small pieces of dead or downed wood, know current regulations and weather concerns, and do not leave until the wood is cool enough to hold.



Help protect Spawning Salmon!

Be an observant river visitor:

- Don't disturb salmon that are swimming upriver– they use the last of their strength to spawn.
- Avoid riverbed gravel where salmon eggs could be incubating.

Know the fishing rules:
Fishing in Washington, available where you buy your fishing license, will tell you when and where you can fish, what kinds of fish you can catch, and what kind of tackle to use. *www.wa.gov/wdfw*

Report illegal fishing:
If you see someone fishing illegally or disturbing spawning salmon, contact the Washington State Highway Emergency Line:
- Skagit County–(360) 757-1175
- Whatcom County–(360) 676-2076
- Snohomish County–(360) 658-2588

Hiking with Children

Children should remain with adults for their safety. Teach your children that remaining quiet and blending with the surroundings will offer the best opportunities for wildlife observation.

Bring along extra items such as:
wholesome snack foods
a whistle to use if lost
insect repellent
extra water
sunscreen

Activity Ideas for Children:
Have children bring along a friend. **Play** observation games. **Watch** for birds in the forest or sky. **Identify** plants, bugs, or animal tracks. **Listen** for wildlife, like the drumming of a woodpecker or the shrill "whistle" of a hoary marmot. **Draw** a picture or **write** a poem about nature. Encourage kids to explore using eyes.

Family Fun Packs and Junior Ranger programs are available at the North Cascades Visitor Center and Purple Point Information Center



Coexisting with Wildlife

By careful planning, travel, and sanitation you can reduce your impacts on wildlife:

- **Cooking:** Try to have your sleeping area and personal gear about 100 yards (90 m) uphill or upwind from your cooking area. Do not sleep in the clothing you wore while cooking. Keep sleeping gear and personal items free of food odors.

- **Food Storage:** Keep wildlife wild by not feeding them. Store food, garbage, cooking gear and toiletries properly at all times. **Bear-resistant canisters for backcountry use are available commercially and on loan from National Park Service offices where you obtain backcountry permits.** Ross Lake campsites have bear boxes available. Otherwise, place items in a plastic-coated dry bag or backpack and hang it from a branch or rope stretched between two trees in your cooking area at least 15 feet (5 m) above the ground and at least five feet (1.5 m) out from the tree trunk. Also hang cosmetics, sunscreen, soap, toothpaste and any item with an odor.

- **Hunting and Fishing:** Where hunting is permitted, store game meat the same as food. Ask for game and fish regulations when purchasing your license. Dispose of fish entrails by puncturing air bladders and dropping them in deep water.

- **Horses:** Store horse pellets the same as human food. For information about horse and trail safety and minimum impact riding, ask for a *Stock Use* bulletin or call the Backcountry Horsemen of Washington (425) 335-3745.

- **Camping in the front country:** Lock food in your car. Use septic or vault facilities to deposit graywater from cooking or washing.

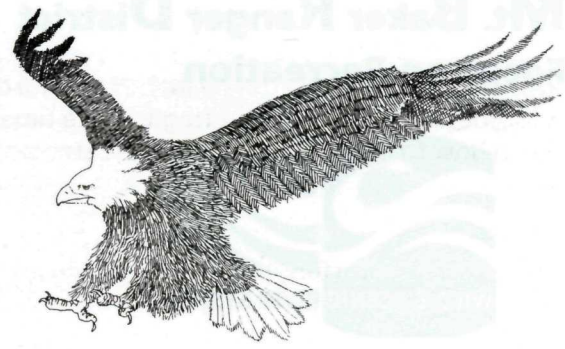
- **Bear and Cougar Sightings:** Never approach a wild animal: do not run; back away slowly; appear as large as possible. If a bear comes close to your campsite, you may be able to frighten it away by shouting or banging pots and pans. If you see a bear or cougar report it at the nearest ranger station. Information collected will be used for long term monitoring.

Water As The Essence



Copper Lake - North Cascades National Park

Water is the life force of the North Cascades. It falls from the sky, melts from glaciers, trickles off mountains, replenishes lakes and flows to the sea. Within the Puget Sound watershed, the Skagit is the largest and most bounteous river. With its 2,900 streams, the Skagit River Watershed accounts for one third of the water that empties into Puget Sound.



All five species of salmon and four species of anadromous trout begin life in the cool gravel bottoms of the Skagit River system. On average 330,000 pink and 30,000 coho salmon return yearly to spawn in the Skagit. In odd-numbered years like 2001, as many as 40,000 chum salmon may return. Proving to be a good year, 2001 brought 894,000 pink, approximately 75,000 Coho and 62,262 Chum back to the Skagit watershed.

The Skagit River and other watersheds of the North Cascades are habitats that attract one of the largest winter gatherings of bald eagles in the lower 48 states. More than 500 bald eagles spend the winter along the river. The eagles travel here to feed on spawned-out salmon carcasses that sustain them through the winter. In turn the eagles help cleanse the river and return the nutrients in the fish to the land. This completion of a key life cycle reminds us that nature's recycling and clear, clean water are critical to survival.

Cascading Waters,

Where to view Waterfalls:

Ladder Creek: Located at milepost 121 off State Route 20 behind the Gorge Powerhouse in upper Newhalem. Cross a suspension bridge to the powerhouse, then follow signs. The trail's .4 mile loop takes you to beautiful pools, falls, and flower gardens. Watch for steep steps and handrails. Flashlights are advisable at night.

Gorge Creek Falls: Located between Newhalem and Diablo on SR 20, Gorge Creek drops 242 feet in a breathtaking plunge. Near the falls is a large parking area and loop trail overlook.

Rainbow Falls (Baker Lake): Rainbow Creek cascades down a steep gorge more than 100 ft in the Baker Lake Basin. On a sunny day look for a colorful rainbow from the viewpoint on Forest Service Road #1130.

Rainbow Falls (Stehekin): Originating high above Stehekin Valley in the snowfields of Rainbow Ridge, the waters of Rainbow Creek plunge 312 feet in a misty cascade viewed just off the Stehekin Valley Road.

Nooksack Falls: Located at milepost 40 on the Mt. Baker Hwy SR 542 past the town of Glacier, the North Fork of the Nooksack River drops more than 100 feet into a roaring mass of raging water. One of the first hydroelectric power plants in Washington uses this drop to generate power.

Conserving Habitat in the Skagit River Watershed

In the fight to protect native salmon runs, the Forest Service is acquiring land to restore and enhance habitat critical to their survival. Since 1990, Congress has appropriated nearly $5 million to buy over 3,000 acres within the Skagit River basin. Funds derived from the sale of surplus real estate and royalties that paid for coastal oil and mineral leases are reinvested in Federal land purchases through the Land and Water Conservation Fund.

The Land and Water Conservation Fund has become a major source of funds for natural resource protection. Local lands acquired under this program lie within or adjacent to the National Forest boundary or the Skagit Wild and Scenic River corridor. The Forest Service works with state and local governments, The Nature Conservancy, Skagit Land Trust and tribal resource staff of the Skagit Systems Cooperative to identify suitable habitat available for sale. The assistance of these partners is essential to providing opportunities to protect the Skagit watershed.

The Three "R's"

Restore, Revegetate, and Rehabilitate

Restoration of the Goodell Creek Gravel Pit began in October 2001 along part of the eastside of Goodell Creek. The National Park Service is implementing an ecological restoration on about 0.6 acres of the 6-acre former gravel pit near Newhalem off SR 20. The park, funded by Washington State Department of Transportation, will plant the area with a variety of native trees and seeds.

The spectacular, 2001 fall salmon run in Goodell Creek showed just how important this creek is for salmon. Restoration of this riparian zone will provide a continuous wildlife corridor along the east bank of the creek from the Skagit River to its headwaters, and will improve salmon habitat by creating a buffer zone along the creek. The 0.6 acreage is comprised of the gravel pit segment located closest to Goodell Creek - where drain rock and sand were stockpiled. Without plant cover this area could erode and be readily invaded by alien plants, such as Japanese knotweed.

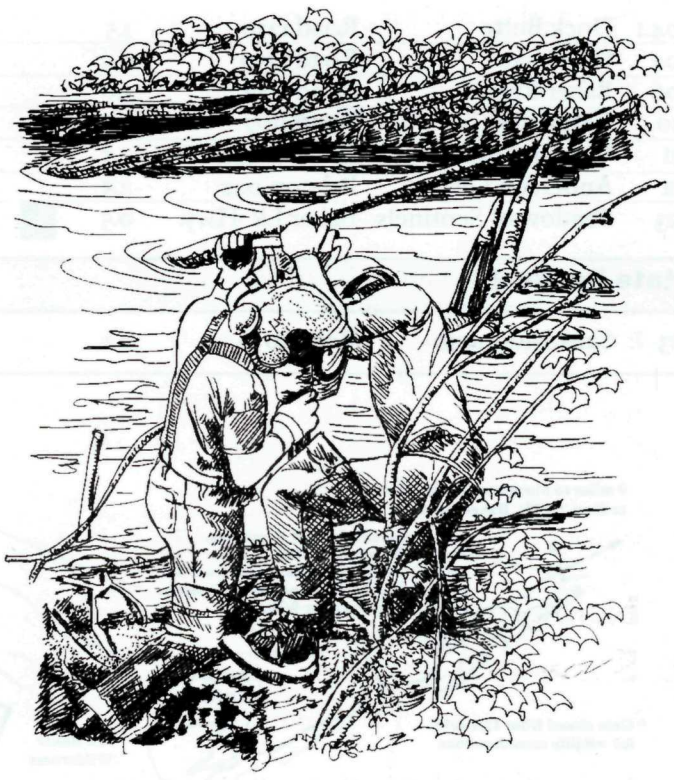
In another restoration effort the park needs visitor help. Rehabilitation efforts are taking place in spots along Ross Lake. Recently log cribbing, rock walls, and native plants have been built and planted in order to stabilize erosion. Unfortunately for the new plants the Ross Lake area is a relatively dry part of the North Cascades Park Service Complex. These new plants thrive better if watered in the first two years after planting. You can help by using the watering cans provided along the edges of revegetation sites. Whether you watch the Goodell Creek project or pitch in at Ross Lake, take time to enjoy the natural beauty and surrounding wilderness. For more information on either of these projects pick up the *Ross Lake Rehabilitation* or *North Cascades Revegetation* brochures.

Seattle City Light Funds Projects in Skagit Watershed

Seattle City Light, under a 30-year federal license for generating hydropower on the Skagit River, continues to fund projects in the Skagit Watershed to compensate for the effects of Gorge, Diablo and Ross dams. The National Park Service administers projects in wildlife, fisheries, recreation, erosion control and cultural resources. The Forest Service oversees projects related to the Skagit Wild and Scenic River System. Completed projects range from accessible trails to the North Cascades National Park Research Station at Newhalem to a raft launch and picnic shelter at Goodell Creek Campground.

Examples of other projects include:

- The 2 mile Thunder Knob Trail near Colonial Creek Campground
- Construction of an accessible fishing pier on Diablo Lake at Colonial Creek Campground and accessible improvements to the existing facilities
- Improvement of the boat ramp at Colonial Creek Campground
- Archeological research and erosion control around Ross Lake
- Conservation education and interpretation focused on the Skagit Wild and Scenic River System
- Continued research on bats and Harlequin Ducks and investigation of lake ecology and water quality
- Construction of the North Cascades Environmental Learning Center, a residential facility at Diablo Lake to open in 2003 and to be operated by the North Cascades Institute
- Scoping on potential spawning channel project at Marblemount
- Installation of woody debris in Cascade River for creation of fish habitat
- Completion of a Skagit Interpretive Center feasibility study



Baker River Hydro Projects

Tribes, government agencies and citizens are participating in committees to implement studies to determine appropriate resource protection and enhancement that will become a part of the license agreement for the two Baker River dams. The committees' topics currently being discussed are: aquatics, fish passage, recreation, terrestrial and heritage resources and economics. In April, 2004 Puget Sound Energy will submit a Settlement Agreement based on the information found to the Federal Energy Regulatory Commission. For more information visit *www.bakerriverproject.com*

Roger Nichols

- Geologist -

Mt. Baker-Snoqualmie National Forest
Mt. Baker Ranger District



His Work:
Restoration coordinator with primary focus on partnership projects involving roads and streams.

Approach to Solutions:
It takes tenacity, time, and long-term commitment to internal and external partnerships to solve road and stream projects. It doesn't happen overnight.

Defining Moment:
When we started to do an in-channel restoration by putting wood into a stream, it reversed damage we had done. We saw immediate results. It didn't take a research project to show we were on the right track.

Dream:
One day, talented people of the Forest Service will be able to share their expertise with the community at large.

Quote:
"Rather than copying – observe, learn, adapt, and apply."

Mt. Baker Ranger District

Focus on Recreation

SKAGIT WILD & SCENIC RIVER SYSTEM

Segments of the Sauk, Suiattle, Cascade and Skagit Rivers make up the federally designated Skagit Wild & Scenic River System.

Pacific salmon travel between ocean waters and the rivers, followed in the winter months by the return of bald eagles. Recreationists enjoy the rivers at several sites along their shorelines. Boaters move along the sometime swift moving waters in motor craft, canoes, kayaks and rafts. Ask at a Ranger Station for a listing of outfitter guides who offer raft trips.

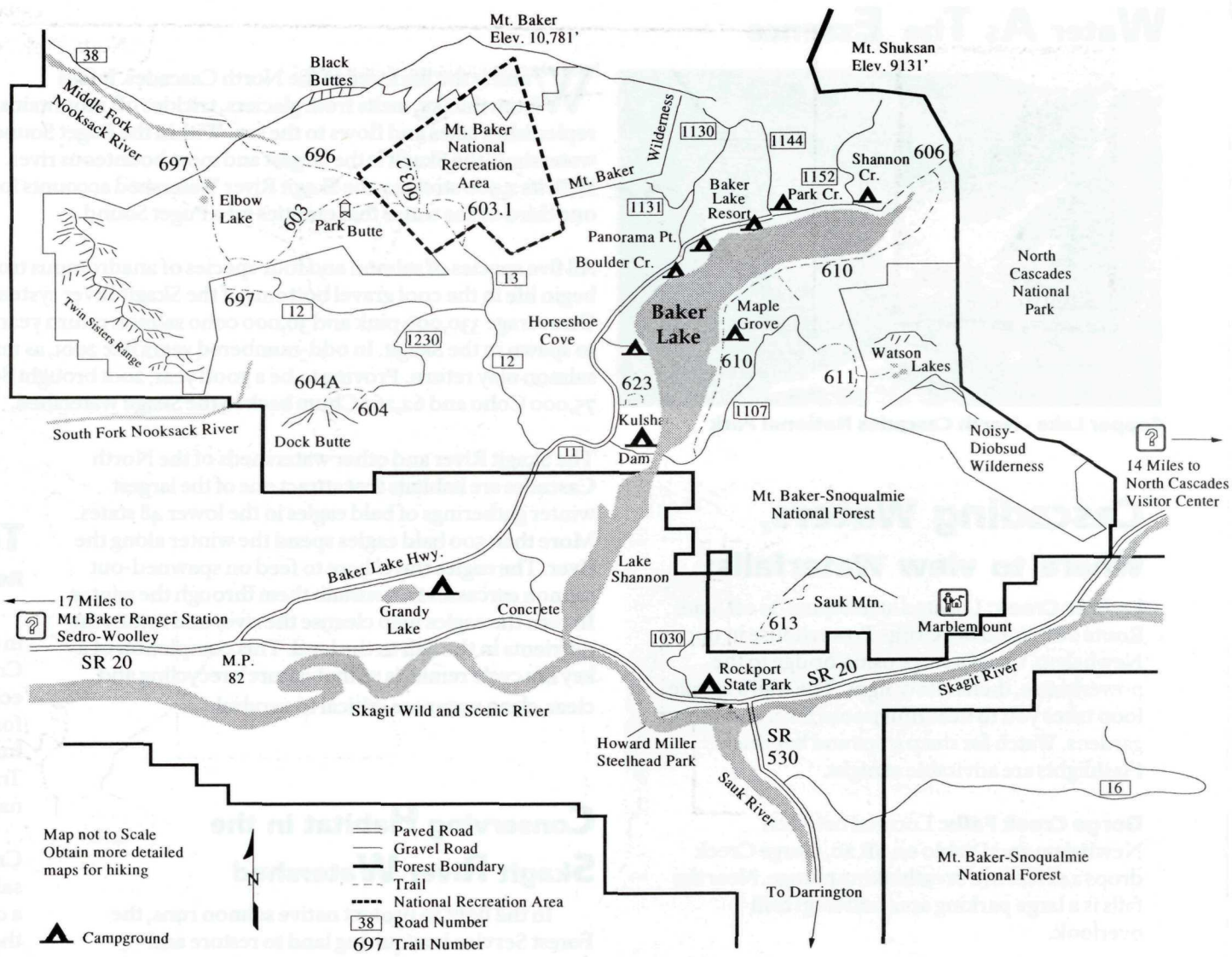
The Forest Service and North Cascades Institute coordinate educational efforts aimed at telling some of the stories behind the Skagit W&SR. One such effort is the *Eagle Watcher* Program. During winter months volunteers staff sites along the eagle feeding grounds on the Skagit River. *Eagle Watchers* offer insight about eagle watching etiquette, furnish spotting scopes and share reference materials with visitors. Interpretive programs on eagles, salmon and river ecology are also offered year-round at several locations.

Check with the Ranger Station for a current schedule of program offerings.

Baker Lake

Nine-mile long Baker Lake offers opportunities for camping, boating, fishing, picnicking, hiking and pack & saddle trips.

- Developed campgrounds and a 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. Boating and fishing at Baker Lake are governed by Washington State regulations.
- For campground information see pages 8-9; for Baker Lake Resort information call 1-888-711-3033; Bayview group camp can be reserved by calling 1-877-444-6777 or *www.reserveusa.com*



Popular Trails - Baker Lake Basin

Trail #	Name	Trailhead	Miles (one way)		Remarks
Mt. Baker National Recreation Area Trails					
603	Park Butte	Road 13	3.5		Enters Wilderness, no fires, stock, leads to lookout
603.1	Scott Paul	Road 13	6.5		No camping, hikers only
603.2	Railroad Grade	Trail 603	1.0		Camp at designated sites, no fires, hikers only
696	Ridley Creek	Road 38	3.5		Rocky sections, primitive, not maintained, Wilderness
697	Elbow Lake	Road 12 Road 38	3.0 3.5		Moderate hike through old-growth, stock, Wilderness
Baker Lake Area Trails					
604.1	Dock Butte	Road 1230	1.5		Great mountain views
604	Blue Lake	Road 1230	0.5		Easy trail for children
606	Baker River	Road 1168	3.0		Old-growth river walk enters National Park
610	Baker Lake	Road 1107	14.0		Moderate trail, steep side slope; stock year-round
611	Watson Lakes	Rd 1107-022	2.5		Wilderness, no fires, camp at designated sites
611	Anderson Lakes	Rd 1107-022	2.5		Non-wilderness
623	Shadow of Sentinels	Baker Lk. Hwy.	0.5	♿	Accessible, self-guided wayside exhibits
State Route 20					
613	Sauk Mountain	Road 1036	2.1		Steep side slopes, great views, wildflowers

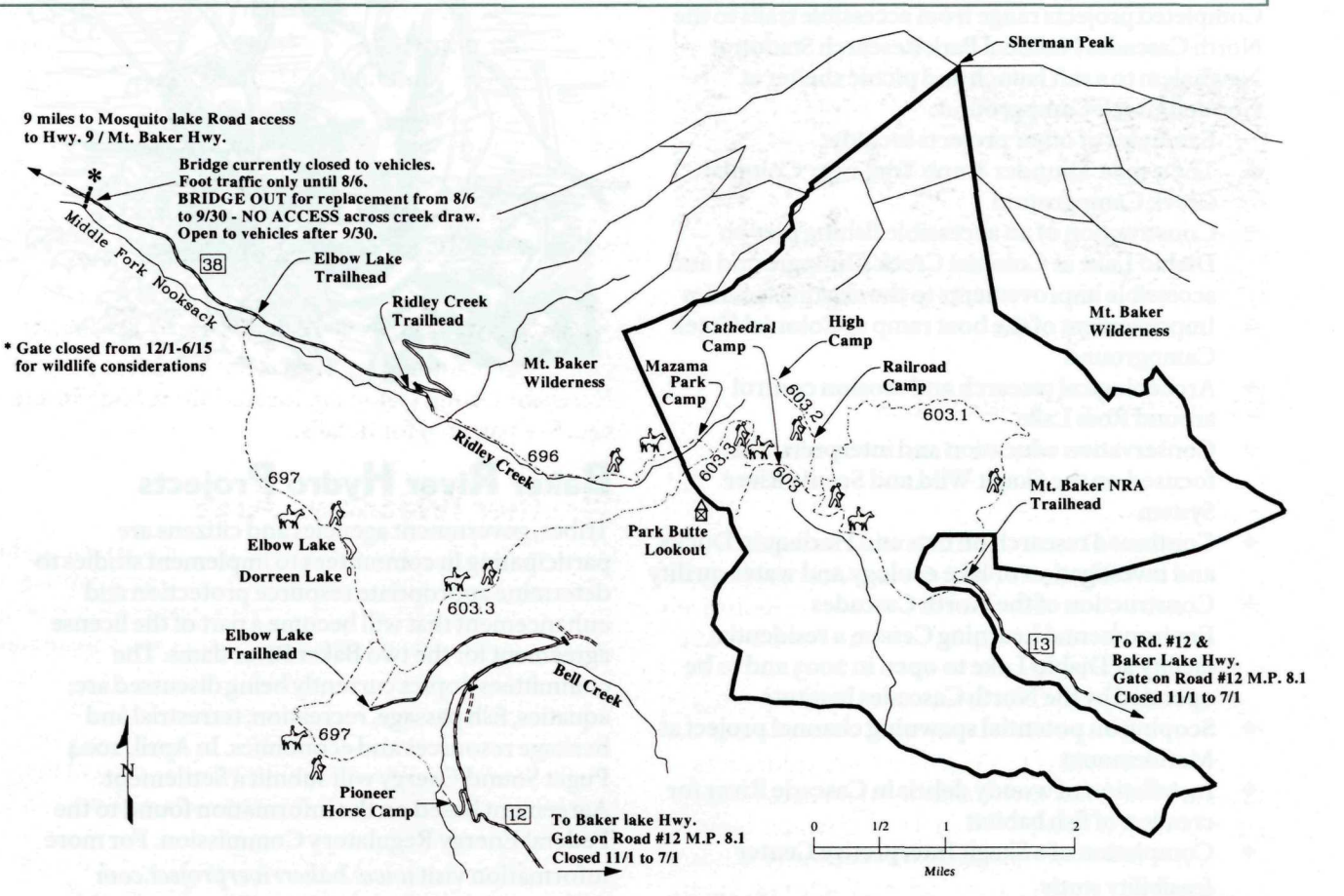
Mt. Baker National Recreation Area

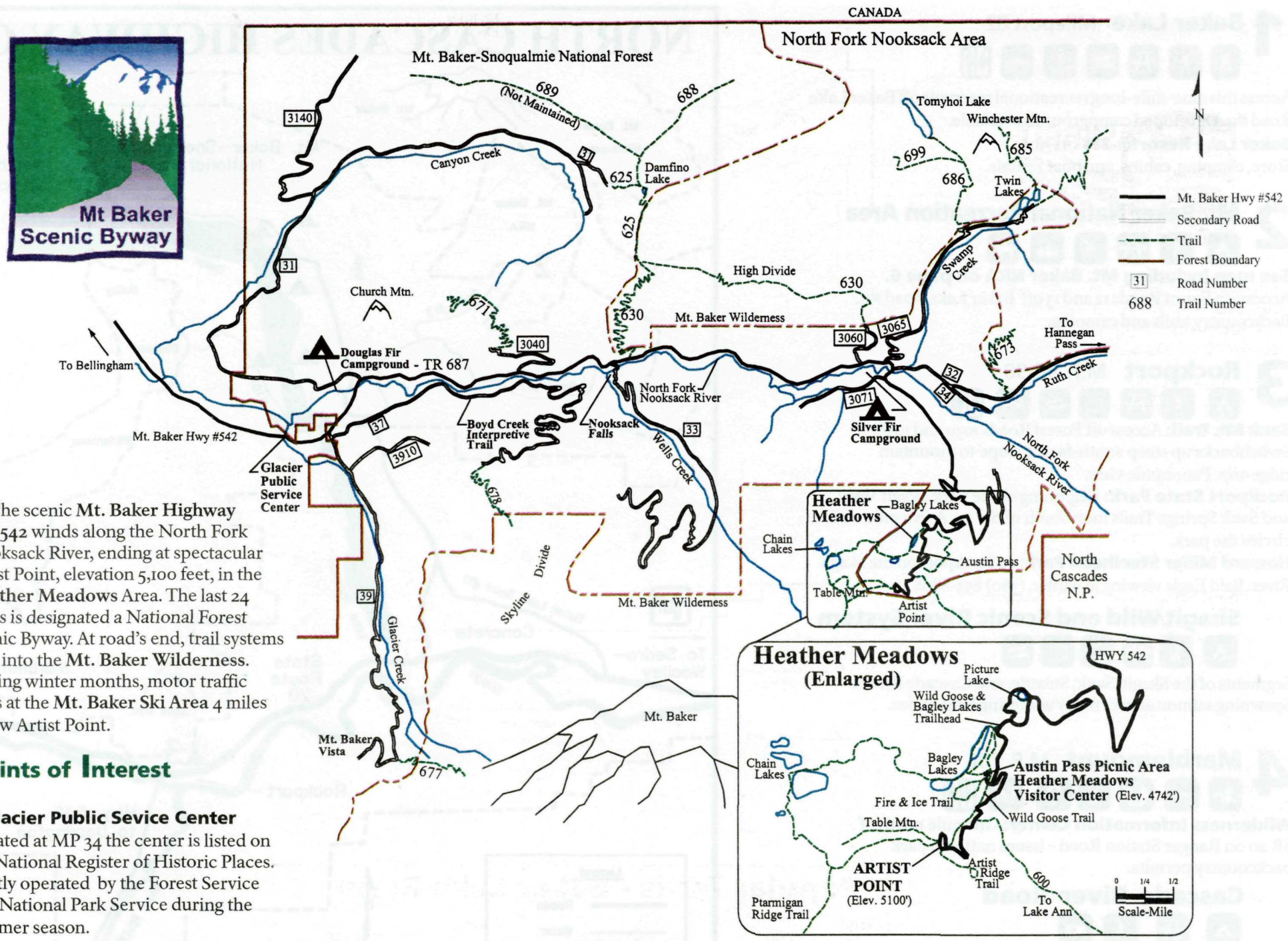
8,600 Acres; established 1984

Appearing on the map as a pie shaped wedge pieced out of the Mt. Baker Wilderness, the Mt. Baker NRA was established outside Wilderness legislation to allow for snowmobile use during months when snow levels are sufficient. This impressive landscape on the southeast flanks of Mt. Baker's slopes is accessible by trail only. Trails lead from the end of Forest Rd. 13 or through the Mt. Baker Wilderness from the Middle Fork and South Fork Nooksack river drainage.

During summer months, hikers share the trails with stock parties. Winter recreation includes skiing, snowmobiling and snowshoeing. Trails are open to stock parties from August 1 to November 1. Backcountry campers in the NRA must stay at designated sites. One night only campsites are established for hikers and/or stock parties at the Mt. Baker NRA trailhead at the end of Forest Rd. 13. No campfires are allowed in the Mt. Baker Recreation Area.

Please refer to the trail chart for information and ask for a detailed handout on designated campsites and area regulations at the district office in Sedro-Woolley.





The scenic **Mt. Baker Highway** 542 winds along the North Fork Nooksack River, ending at spectacular Artist Point, elevation 5,100 feet, in the **Heather Meadows** Area. The last 24 miles is designated a National Forest Scenic Byway. At road's end, trail systems lead into the **Mt. Baker Wilderness.** During winter months, motor traffic ends at the **Mt. Baker Ski Area** 4 miles below Artist Point.

Points of Interest

Glacier Public Sevice Center
Located at MP 34 the center is listed on the National Register of Historic Places. Jointly operated by the Forest Service and National Park Service during the summer season.

Mt. Baker Vista
Dramatic viewpoint at the end of Glacier Creek Road - Forest Road 39.

Horseshoe Bend Trail - MP 36
One-and-a-half mile hiker-only trail wanders along a forested ledge above the North Fork Nooksack River.

Boyd Creek Interpretive Trail
Short self-guided nature trail focused on healthy habitat for fish. Located on Forest Road 37.

Nooksack Falls - MP 41
Dramatic waterfall plummets more than 100 feet over rocky outcrops. Fence-lined pathway leads to viewpoint.



Artist Point Ridge Trail

Popular Trails-Mt. Baker Scenic Byway

Trail #	Name	Trailhead	Miles (one way)		Remarks
Glacier Area Trails					
625	Damfino Lakes	Road 31	3.0		Non-wilderness
630	High Divide	Highway 542	13.0		Wilderness; stock; no fires
671	Church Mountain	Road 3040	4.2		Non-wilderness
677	Heliotrope Ridge	Road 39	3.0		Wilderness; no fires
678	Skyline Divide	Road 37	3.5		Wilderness; no fires; stock
687	Horseshoe Bend	Highway 542	1.5		Non-wilderness
673	Goat Mountain	Road 32	4.0		Wilderness; no fires; stock
674	Hannegan Pass	Road 32	5.0		Wilderness; stock; enters National Park
685	Winchester Mtn.	Road 3065	2.0		Wilderness; no fires; leads to lookout
699	Yellow Aster	Road 3065	3.5		Wilderness; no fires
Heather Meadows Area Trails					
600	Lake Ann	Highway 542	4.7		Enters wilderness; no fires
615	Ptarmigan Ridge	Trail 682	5.0		Enters wilderness; no fires
681	Table Mountain	Highway 542	1.5		Enters wilderness; no dogs; no fires
682	Chain Lakes	Highway 542	6.5		Wilderness; no fires; camp in designated sites
735	Picture Lake	Highway 542	0.5	♿	No dogs; accessible
684.2	Fire and Ice	Highway 542	0.5	♿	Self-guided interpretive trail; accessible
684.3	Wild Goose	Highway 542	2.5		Self-guided interpretive trail
669	Artist Ridge	Highway 542	1.0		Self-guided interpretive trail

Experience Wilderness

The Mt. Baker Ranger District contains two wilderness areas, Mt. Baker and Noisy-Diobsud, and part of a third, Glacier Peak.

Keeping wilderness intact requires some regulation. Party size is limited to 12, including saddle and stock animals. To preserve solitude no motorized or mechanized equipment is allowed. Campfires are prohibited in many areas.

When entering wilderness areas, be prepared for risk and challenge. The terrain can be rugged and the weather unpredictable. Once you enter wilderness there are few if any man made conveniences like signing. Be safe and prepared. During winter months check forecasts through the Northwest Avalanche Center. Park and Forest staff are available year round to help you plan your trip into the wilderness areas.

Camping Along the Scenic Byway

Developed campgrounds, Douglas Fir, Silver Fir and Excelsior Group Camp are located along State Route 542. See page 8-9 for details.

Heather Meadows Area

Located along the upper reaches of the Byway, this spectacular subalpine setting offers summer day use recreation along a network of trails. Longer hikes lead into the Mt. Baker Wilderness. Visitors can spread out a picnic lunch at scenic spots in the Austin Pass Picnic Area, attend naturalists programs and enjoy self guided interpretive opportunities. During the winter recreationists enjoy skiing and snowboarding at the legendary Mt. Baker Ski Area operating within Heather Meadows.

Heather Meadows Visitor Center is open seven days a week during the late summer season. **NW Forest Pass** required.



Heather Meadows Visitor Center

1 Baker Lake Milepost 82

Access this nine-mile-long recreational reservoir off Baker Lake Road #11. Developed campgrounds available.
Baker Lake Resort: 1-888-711-3033.
Store, camping, cabins, and boat rentals.

2 Mt. Baker National Recreation Area

See map including Mt. Baker NRA on page 6.
Access via Forest Roads 12 and 13 off Baker Lake Road #11.
Backcountry trails and camping.

3 Rockport M.P. 96-98

Sauk Mt. Trail: Access off Forest Roads 1030 and 1036. Switchbacks up steep south-facing slope to mountain ridge-top. Panoramic view.
Rockport State Park: Beginning at the park Skagit View and Sauk Springs Trails loop south of SR 20. A five mile trail circles the park.
Howard Miller Steelhead Park: At Rockport on the Skagit River. Bald Eagle viewing in winter, (360) 853-8808.

Skagit Wild and Scenic River System

Segments of the Skagit, Sauk, Suiattle, and Cascade Rivers. Spawning salmon attract many wintering bald eagles.

4 Marblemount M.P. 106

Wilderness Information Center: One mile north of SR 20 on Ranger Station Road - issues national park backcountry permits.

Cascade River Road

Cross bridge over Skagit River at east end of town. Rough gravel road leads through National Forest to Cascade Pass Trailhead in North Cascades National Park. NW Forest Pass required at all trailheads and along the road in national park.

5 Ross Lake National Rec. Area M.P 111

117,574 acres; administered by North Cascades National Park; most accessible recreation area *(see page 10)*.
Thornton Lakes Road/Trail: Access 4.7 miles up steep windy, gravel road. NW Forest Pass required.
Goodell Creek Campground: Rustic sites along Skagit River; open all year, but without water and services in winter; $10. Raft launch. Picnic shelter.

6 Newhalem M.P. 120

Newhalem area trail map on page 10.
Newhalem Creek Campground: Open May to September. Individual sites $12. Group sites available $32, limit 24 persons, call (360) 873-4590 ext. 17 for group reservation only.
North Cascades Visitor Center: Interpretive programs, books, and maps. Breathtaking view of the Picket Range. Open daily mid-April through mid-October; weekends only during winter months.
Skagit General Store: Supplies and souvenirs.
Seattle City Light Information Center: Historical highlights of power projects and area maps. Restroom facilities.
Ladder Creek Falls: Located behind Gorge Power House. Loop through flower gardens; lit at night.
Gorge Overlook and Gorge Creek Falls: 242-foot waterfall three miles east of town. Accesible loop trail at rest stop offers views of the gorge and dam.

7 Diablo M.P. 126

*Road across Diablo Dam closes daily at 4:15pm.
Sourdough Trail: Strenuous ten mile round trip hike up Sourdough Mountain.

8 Colonial Creek Campground M.P.130

Campground on Diablo Lake. Camp hosts and naturalist programs in summer. $12 fee from May to October.
Thunder Creek, Thunder Woods, Thunder Knob trails: extend from Campground into a variety of diverse forests and views.

9 Diablo and Ross Lake Overlooks

M.P. 131-134; Winter Road Closure

Diablo Lake Overlook: Spectacular views, map and detailed geology exhibit.
Ross Dam Trailhead: NW Forest Pass required.
Ross Lake Resort: (206) 386-4437. Floating cabins, boat rentals, portage service, and water taxi.
Winter Road Closure: SR 20 typically closes about mid-November and reopens in mid-April.

10 East Bank Trailhead M.P. 138

Panther Creek Trail, East Bank Trail and Ruby Creek Trails converge near here. NW Forest Pass required.

11 Rainy Pass Picnic Area M.P. 158

One-mile accessible paved trail leads to **Rainy Lake**, waterfall and glacier view platform. Longer hikes to **Lake Ann** (2 miles) or around **Maple Pass** loop (7.5 miles). Not snow-free until late July. NW Forest Pass required.

12 Washington Pass M.P. 162

Restroom facilities and accessible viewpoint trail open in July.

13 Upper Methow Valley M.P. 180

Mazama turnoff to Hart's Pass (22 miles): reaches highest point accessible by vehicles in Washington State (closed to trailers), unpaved.
Methow Valley Visitor Center: M.P. 192

Car Camping in the North Cascades

Many public campgrounds in the **North Cascades** are accessible by road.

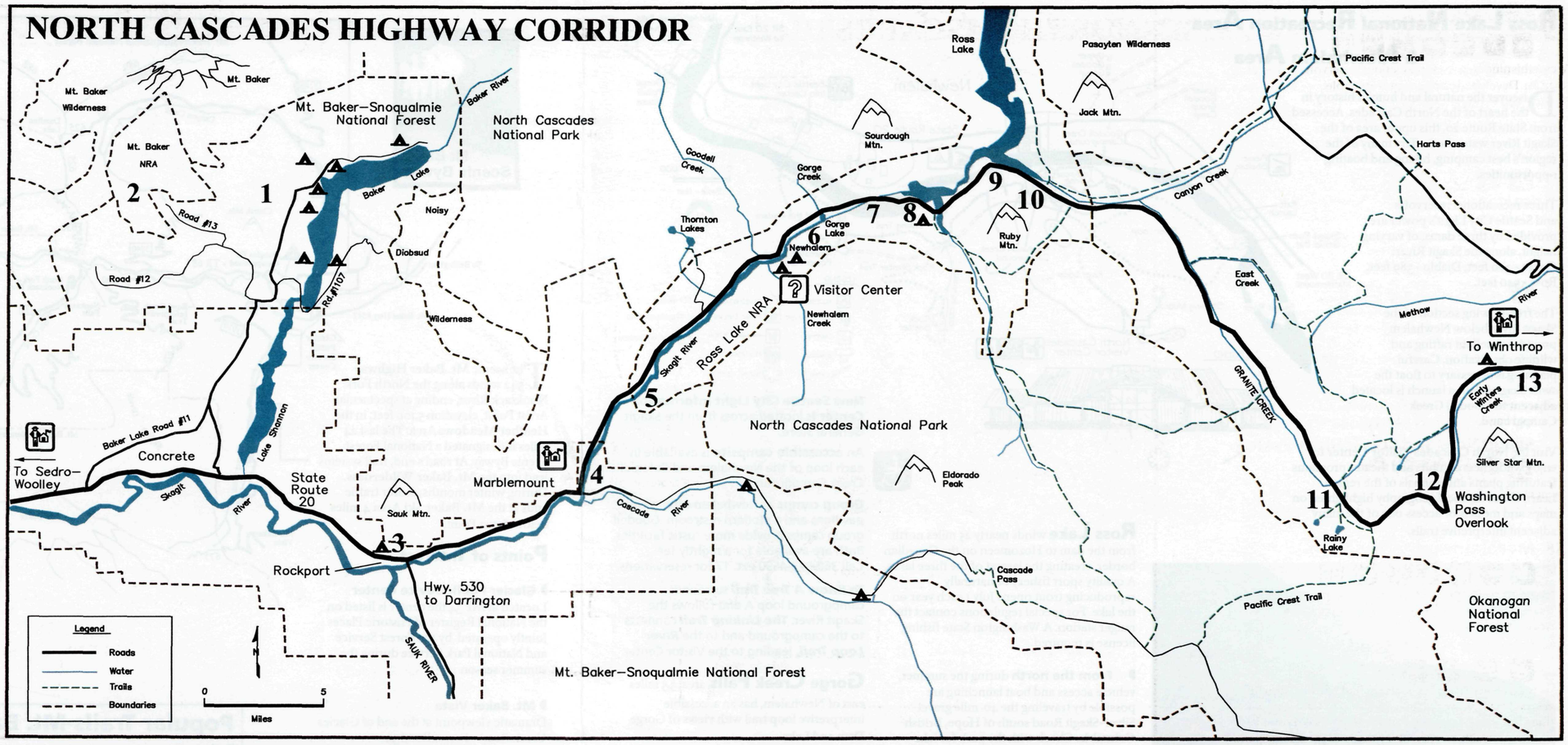
Campgrounds fill quickly on holiday and summer weekends.

Reservations can be made 3-240 days in advance for many **Forest Service campgrounds** by calling 1-877-444-6777 or on-line: www.reserveusa.com; **Washington State Parks** reserves some sites by calling 1-888-226-7688 or online *www.parks.wa.gov*

North Cascades National Park does not offer individual camping reservations (first come-first served). Limited group camping can be reserved by calling (360) 873-4590 ext. 17

Free campgrounds are primitive, requiring that you bring your own water and pack out garbage. Some private campgrounds and resorts provide cabins and showers.

Some campgrounds offer naturalist programs.



Location	Campground + Reservation Available ++ Reservation Required	Managed By	Accessible Facilities / User Fee	Drinking Water	Flush Toilets	Vault Toilets	Garbage Facilities	Boat Ramp	Hiking Trail	Fishing	Dump Stations	Number of Campsites * = Hook-ups Available
SR542	Douglas Fir +	FS	•	•	•		•	•		•	•	30
	Excelsior Group ++	FS	•				•				•	2
	Silver Fir +	FS	•	•	•		•	•			•	21
Baker Lake Road MP.14-MP.23	Kulshan	P	•	•	•	•		•	•		•	• 108 *
	Horseshoe Cove +	FS	•	•	•	•	•	•	•		•	34
	Bayview Group ++	FS	•				•					2
	Panorama Point +	FS	•	•	•		•	•	•		•	16
	Boulder Creek +	FS	•				•	•				10
	Park Creek +	FS	•				•	•			•	12
	Baker Lake Resort +	P	•	•	•	•	•	•	•		•	90
SR 20 MP.81-MP.180	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	•	•	•	•		•		•	•	• 111
	Colonial Creek	NP	•	•	•	•		•	•	•	•	• 162
	Lone Fir	FS	•	•	•		•	•		•		27
	Klipchuck	FS	•	•	•		•	•		•		46
	Early Winters	FS	•	•	•		•	•				13
Cascade River Rd	Marble Creek +	FS	•	•			•	•			•	24
	Mineral Park	FS	•				•	•				8
Via B.C.	Hozomeen	NP		•	•		•		•	•		• 122

Camping Map Legend:

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

Accessible Interpretive Trails

MAP #	
1	**Shadow of the Sentinels:** 0.5 mile (0.8 km) trail through old growth forest. *
6	**Newhalem Area:** See map & chart on page12. **Sterling Munro:** 330ft(120m) Boardwalk; Picket view **River Loop:** 1.8miles(2.9km) begin at Visitor Center or at Newhalem campground for easier grade. **Rock Shelter:** .25 miles(0.6km) Moderate grade, to Indian campsite above Newhalem Creek.
6.5	**Gorge Overlook Trail:** paved portion offers views of deep canyons, Gorge Lake, and Gorge Dam.
9	**Happy Creek Forest Walk:** .3 mile (.5 km) boardwalk through ancient creekside forest.
11	**Rainy Lake Trail:** One mile (1.6 km) paved trail leads to Rainy Lake, waterfall, and glacier view. *
12	**Washington Pass Overlook:** 270 yd (250 m) loop trail leads to spectacular view from a 700 foot (200 m) bluff at the summit of the Scenic Highway.

**NW Forest Pass required*

Lodging Information

Contact the **Chamber of Commerce** for the town nearest your destination at the number listed below

West Side:

Mt. Vernon
360-428-8547
www.mvcofc.org

Marblemount
360-873-2106
www.marblemount.com

Burlington
360-757-0994
www.burlington-chamber.com

Concrete
360-853-7042
www.concrete-wa.com

Sedro-Woolley
360-855-1841
www.sedro-woolley.com

East Side:

Winthrop
1-888-4-METHOW
www.winthropwashington.com

Chelan
1-800-4-CHELAN
www.lakechelan.com

Wenatchee
1-800-57-APPLE
www.wenatcheevalley.org

Methow Valley Central Reservations
1-800-422-3048
www.mvcentralres.com

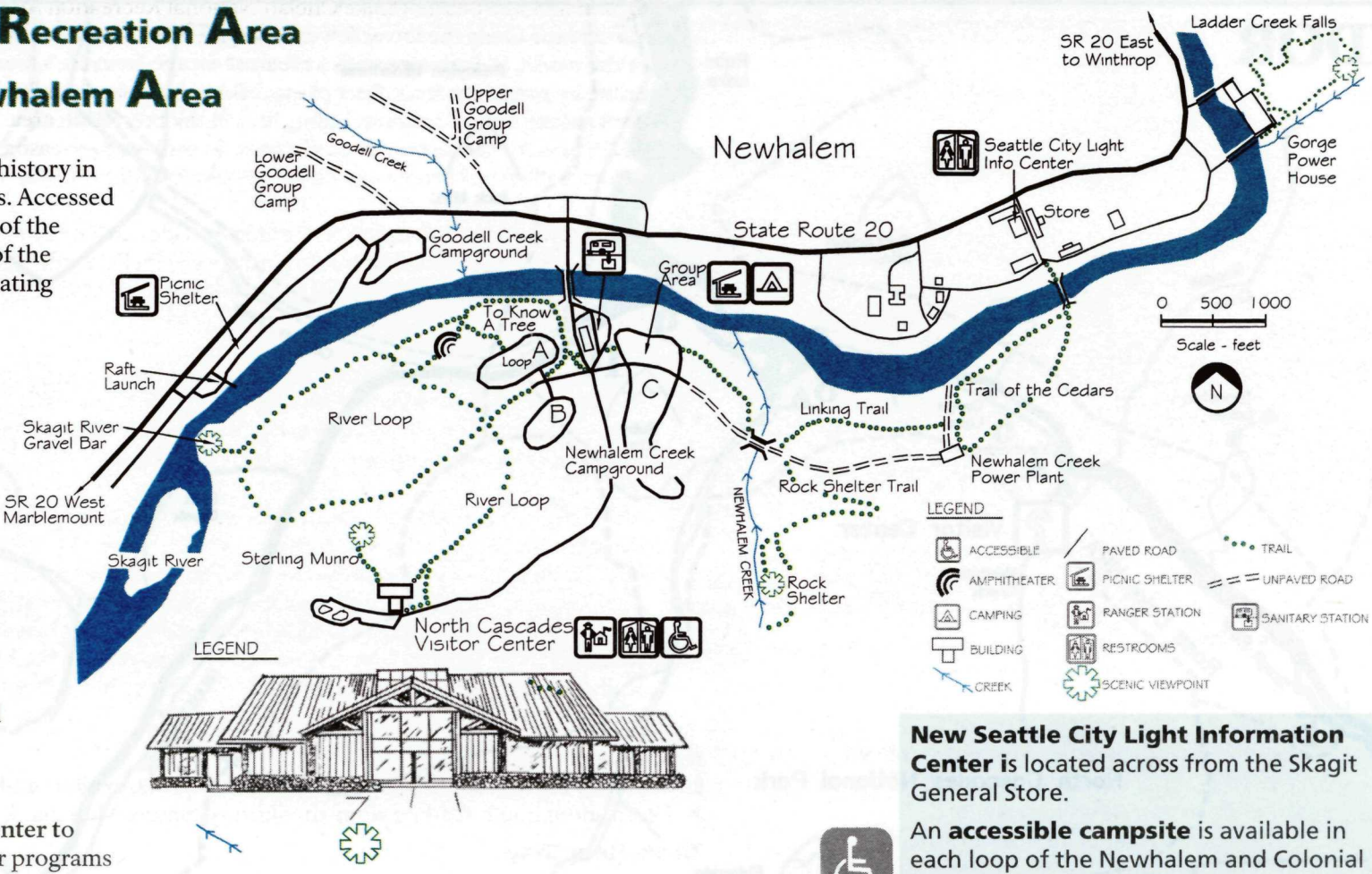
Ross Lake National Recreation Area & Newhalem Area

Discover the natural and human history in the heart of the North Cascades. Accessed from State Route 20, this upper area of the Skagit River watershed offers many of the region's best camping, hiking and boating opportunities.

Three recreational reservoirs and Seattle City Light's power are provided by three dams, of varying height, along the Skagit River: Gorge - 300 feet, Diablo - 389 feet, Ross - 540 feet.

The free-flowing section of the Skagit River below Newhalem provides excellent rafting and wildlife observation. Careful planning is necessary to float the swift Skagit River; a launch is located adjacent to Goodell Creek Campground.

Visit the **North Cascades Visitor Center** to enjoy wilderness exhibits and theater programs featuring plants and animals of the region. Learn about the local geography highlighted on maps and models or access one of the many adjacent interpretive trails.



New Seattle City Light Information Center is located across from the Skagit General Store.

An **accessible campsite** is available in each loop of the Newhalem and Colonial Creek Campgrounds.

Group camps at Newhalem offer picnic pavilions and a modern restroom. Goodell group camps provide more rustic facilities. Both are available for a nightly fee. Call 360-873-4590 ext. 17 for reservations.

To Know A Tree Trail surrounds campground loop A and follows the Skagit River. **The *Linking Trail*** connects to the campground and to the ***River Loop Trail,*** leading to the Visitor Center.



Kayakers on Ross Lake
Courtesy National Geographic Society. Photo by Dan Westergren/NGS

Ross Lake winds nearly 25 miles north from the dam to Hozomeen on the Canadian border, creating the largest of the three lakes. A quality sport fishery of naturally reproducing trout opens July 1 each year on the lake. For special regulations contact the ranger station. A Washington State fishing license is required.

- **From the north** during the summer, vehicle access and boat launching are possible by traveling the 40-mile gravel Silver-Skagit Road south of Hope, British Columbia. Check with the park for lake levels. Hozomeen Campground is primitive with water and vault toilets, but it is necessary to pack out all garbage.

- **From the south** access to Ross Dam and Lake are limited to trail and water routes. Off SR 20 Diablo Lake, Ross Dam, and East Bank trails provide access for hikers from trailheads. Ross Lake Resort, (206) 386-4437, has cabins, small rental boats, and provides portage past the dam and water-taxi service to trailheads and campsites, which require free backcountry permits.

Gorge Creek Falls area, 3.5 miles east of Newhalem, has an accessible interpretive loop trail with views of Gorge Dam and Lake.

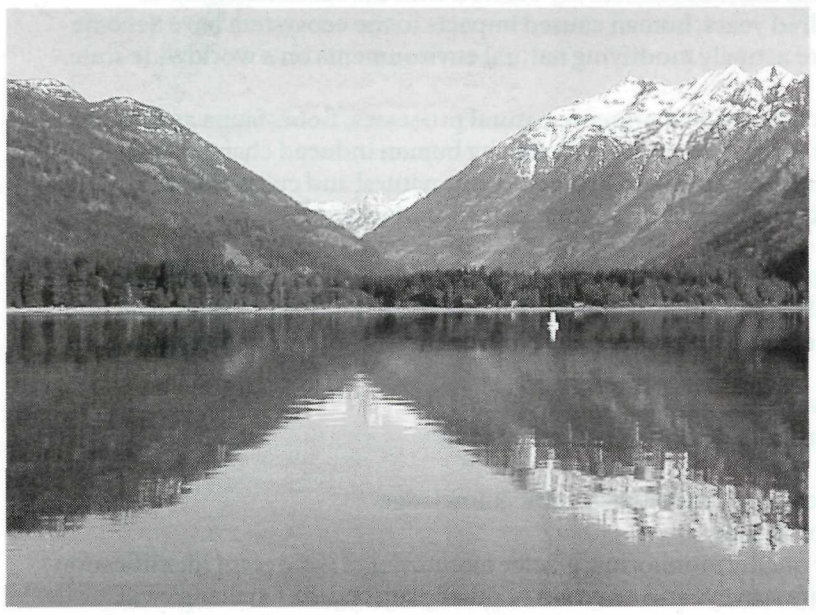
Diablo Lake is the central jewel of the three lakes offering the best accessibility. Thunder Creek, the major tributary, carries the fine glacial sediment that gives the lake its brilliant turquoise color.

- Follow Thunder Creek to Park Creek Pass and then down the Park Creek Trail - a 27 mile hike to the Stehekin Valley Road.
- A year around boat launch is available at Colonial Creek Campground for fishing and boating. Three boat-in sites along the shore require a backcountry permit (see page 3).

State Route 20 Trails	StateRoute 20 Milepost	Distance (Round-trip)	Elevation Gain	Difficulty	Remarks
Thornton Lakes *	117	10.4 miles	2,300 feet	moderate	Long day hike; permit needed for overnight backcountry camping.
Sterling Munro	120	660 feet	level	very easy	Boardwalk; view into the Picket Range; accessible.
River Loop	120	1.8 miles	50 feet	easy	Forested walk to river; accessible.
Rock Shelter	120	.3 miles	30 feet	easy	Boardwalk to campsite used 1400 years ago by hunting, gathering Native Peoples.
Gorge Overlook Trail	123	.5 miles	level	very easy	Accessible .2 mile paved. Unpaved portion .33 mile compact gravel loop.
Pyramid Lake *	127	4.2 miles	1,500 feet	moderate	Steep forest; stream; small lake.
Diablo Lake	128	7.6 miles	400 feet	moderate	Trailhead located across Diablo Dam.
Thunder Knob Trail	130	3.6 miles	425 feet	easy	Trailhead located N. end Colonial Creek Campground.
Thunder Creek	130	1.6 - 38 miles	6,300 feet	easy-difficult	Easy 1.6 miles round-trip to suspension bridge. Ancient forest along the stream; permit needed for overnight backcountry camping.
Fourth of July Pass/ Panther Creek *	130	10 miles	2,900 feet	moderate	Access trail by hiking 1.8 miles up Thunder Creek Trail; steep to pass; permit needed for overnight backcountry camping.
Ross Dam *	134	1.5 miles	- 500 feet	easy	Short, steep trail from State Route 20 to dam.
Happy Creek Forest Walk	134	.3 miles	level	very easy	Accessible; boardwalk.
East Bank *	138	.5 - 62 miles	1,500 feet	easy	Trail east (Canyon Creek) or west (Ross Lake); permit for overnight backcountry camping.

** NW Forest Pass required*

Lake Chelan National Recreation Area



Head of Lake Chelan

Stehekin, the heart of Lake Chelan National Recreation Area, is a remote community situated along the lower few miles of the Stehekin River. With no road connections to the rest of the world, Stehekin provides a pleasant escape from life's frantic pace. Visitors and residents arrive by passenger ferry, float plane, hiking, horseback and private boat. There are over 16 public docks along Lake Chelan including four in the recreation area. Boaters using any of these federal docks need to purchase a dock site pass. $5 daily or $40 seasonal passes are available to help defray dock maintenance expenses. Passes needed from May 1 - October 31.

The **Purple Point Information Center** provides area information, backcountry permits and daily interpretive programs. The North Cascades Stehekin Lodge offers overnight accommodations, a restaurant, small camp store, boat gas, marina, tours, and bicycle and boat rentals at Stehekin Landing.

Other businesses provide services during the summer season including day and over-night stays, horseback trips into the wilderness, bicycle rentals, guided raft trips down the Stehekin River and a tour to beautiful 312 foot Rainbow Falls. Several businesses provide overnight accommodations and food on private property in the Stehekin Valley.

National Park Service and private shuttle buses provide access to trailheads and campgrounds along the Stehekin Valley Road. Shuttle service begins May 18 to High Bridge and June 14 above High Bridge. The 2.7-mile section of road between the current end of the road, Glory Mountain, and Cottonwood Campground is closed to vehicles due to severe flooding during the fall of 1995. A trail has been constructed along the road wash-out for hikers to reach Cottonwood Camp, and vehicles can go as far as Glory Mountain, 20.1 miles from the Landing. Check the ***Focus on Stehekin*** newspaper for the Stehekin Valley Road Shuttle Bus schedule.

Hour Stay

- Visit the Purple Point Information Center for books, exhibits and the art gallery.
- Learn about homesteading along the short 15-minute McKellar Cabin Trail.

Three-Hour Stay

- Walk the Imus Creek Nature Trail, a 3/4 mile self-guided loop with views. Starts near the Purple Point Information Center.
- Bike 3.5 miles one-way to Rainbow Falls and Buckner Orchard.

Whole Day

- Take a shuttle bus and narrated tour upvalley.
- Stroll down the Lakeshore Trail with a picnic lunch.

Overnight

- Ride a shuttle bus to a trailhead and hike or backpack one of the many area trails.
- Attend a naturalist program at the Purple Point Information Center.

Inspirational Images

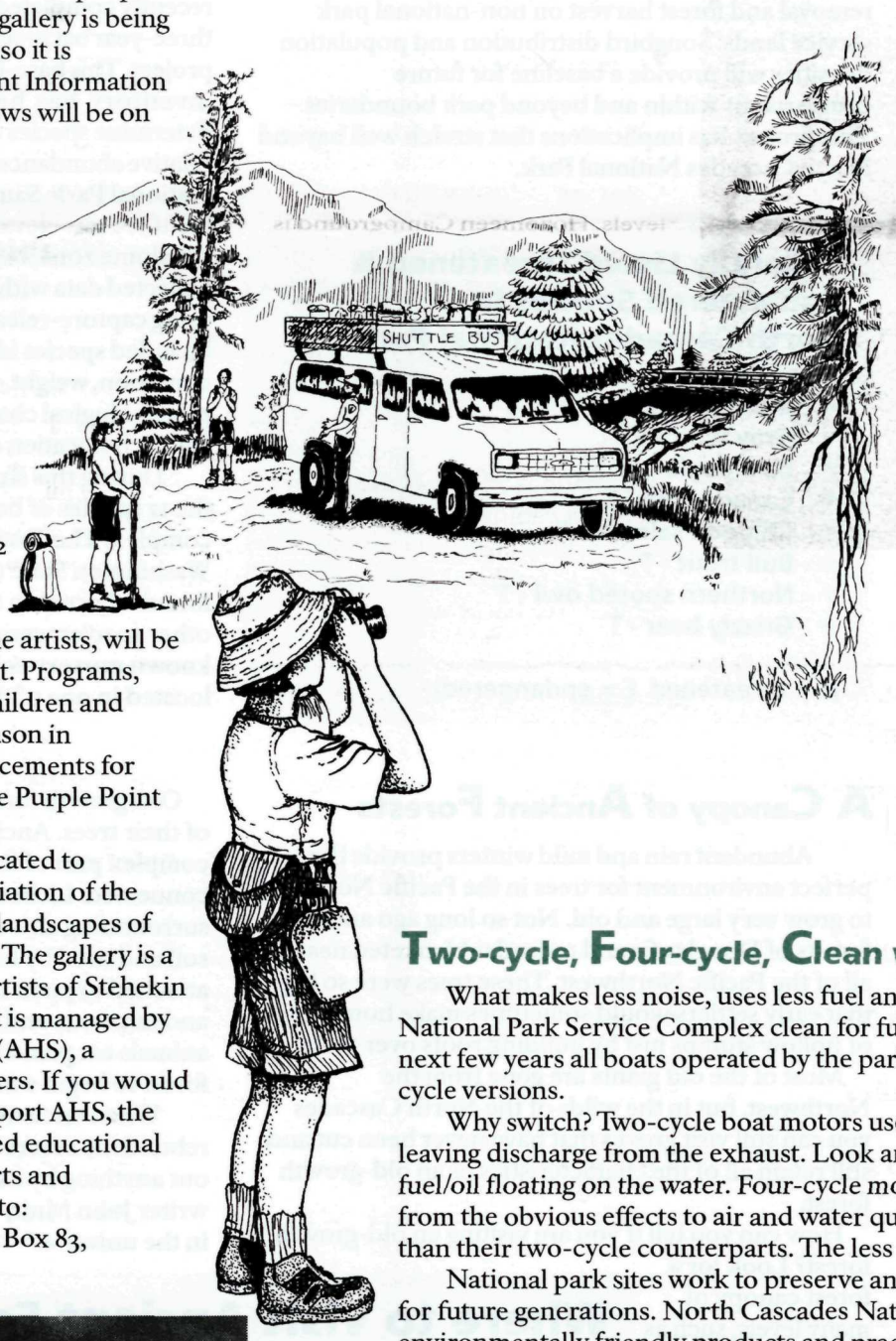
The North Cascades area has inspired people for thousands of years. Native Americans used local pigments to paint pictographs on rocky cliffs. Explorers documented plants, animals and their experiences by drawing what they saw while traveling. Since the turn of the century, artists have painted landscapes on canvas while photographers have captured images with cameras. Many mountain valley settlers perfected their crafts during long winter evenings. Artists and crafts people continue to come to the mountains for inspiration. Majestic mountains, towering trees, and pristine lakes are only a few of the many images people remember after visiting the North Cascades.

The Golden West Gallery offers visitors a chance to view work produced by artists and crafts people inspired by the North Cascades. The gallery is being rehabilitated during the 2002 season, so it is temporarily located at the Purple Point Information Center. This summer season four shows will be on display:

- **Uplake: A Sense of Place**
  Opening - Friday, March 15, 2002
  Show Closes - May 15, 2002
- **The Big Picture: Landscapes**
  Opening - Friday, May 17, 2002
  Show Closes - July 10, 2002
- **Colors and Textures**
  Opening - Friday, July 12, 2002
  Show Closes - August 28, 2002
- **Forest Life**
  Opening - Friday, August 30, 2002
  Show Closes - October 15, 2002

Opening receptions, hosted by the artists, will be held on the first Friday of each exhibit. Programs, including hands-on workshops for children and adults, are offered throughout the season in conjunction with the gallery. Announcements for gallery related events are posted at the Purple Point Information Center.

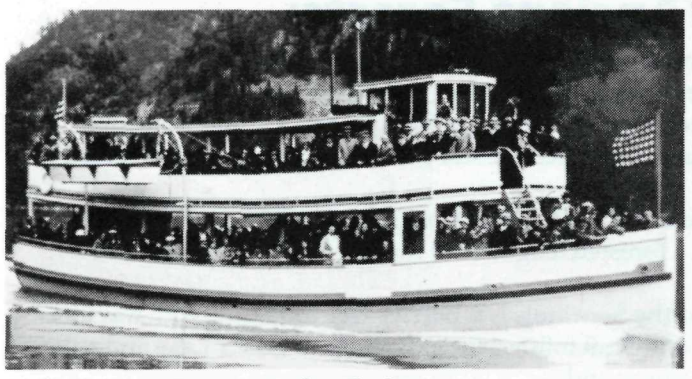
The Golden West Gallery is dedicated to increasing understanding and appreciation of the natural, historic, cultural and artistic landscapes of the North Cascades through the arts. The gallery is a cooperative venture of the resident artists of Stehekin and North Cascades National Park. It is managed by the Arts and Humanities of Stehekin (AHS), a nonprofit group operated by volunteers. If you would like more information or want to support AHS, the Golden West Gallery and its associated educational programs by becoming a Friend of Arts and Humanities of Stehekin, please write to:
Arts and Humanities of Stehekin, PO Box 83, Stehekin WA 98852.



Discover Buckner Homestead

The Buckner Homestead and apple orchard are located about 3.5 miles up the Stehekin River Valley from the head of Lake Chelan. In 1912, William Van Buckner and his family moved onto their new property and began building their dream—a working apple orchard and homestead. Eventually, the apple orchard was expanded to 60 acres and the home "ranch" featured more than a dozen outbuildings. In 1970, Harry Buckner sold the ranch to the National Park Service, and in 1989 the ranch and 90 acres of surrounding area were listed as the Buckner Homestead Historic district.

Today, the Buckner Homestead remains essentially intact. The structures, buildings and apple trees show the wear of time, but are being maintained. An important part of the community, the Buckner ranch has a special feeling, as if the past, present and future exist at once. The large old apple-packing shed was once a gathering place where folks met at harvest time to help pack apples or attend an occasional dance. The packing shed will soon host visitors again. Washington's National Park Fund's *Adopt a Tree* program ensures the future of common delicous apples and people's use of this historic orchard. Come explore this living example of our cultural heritage and pioneer spirit.



19th Century Boat on Lake Chelan

Two-cycle, Four-cycle, Clean water, Green park

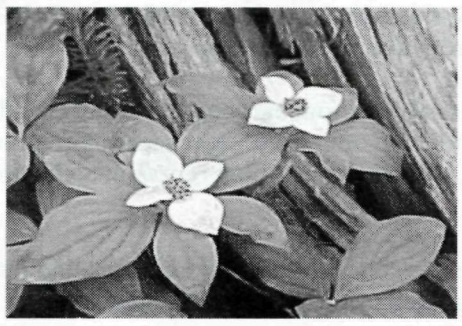
What makes less noise, uses less fuel and helps keep the air and waterways of North Cascades National Park Service Complex clean for future generations? Four-cycle boat motors. Over the next few years all boats operated by the park will have their two-cycle motors replaced with four-cycle versions.

Why switch? Two-cycle boat motors use a fuel/oil mixture that doesn't completly combust, leaving discharge from the exhaust. Look around any marina and you will find iridescent films of fuel/oil floating on the water. Four-cycle motors use straight fuel and operate more efficiently. Aside from the obvious effects to air and water quality, four-cycle motors are quieter and use less fuel than their two-cycle counterparts. The less motor noise, the less impact on wildlife and visitors.

National park sites work to preserve and protect the natural and cultural heritage of our nation for future generations. North Cascades National Park has been among the many parks using environmentally friendly products and practices. Since 1989, the park has been using re-refined, recycled motor oils and antifreezes in all of its vehicles. This year bio-diesel will be used in Stehekin in government vehicles. Other examples include: recycling; buying recycled products; using non-toxic cleaners; minimizing use of herbicides and pesticides; lowering energy consumption; using alternative power sources - such as solar; and educating park staff and visitors.

You play a role in preserving parks too. Before your visit, get information off the park website or via e-mail *NOCA_Interpretation@nps.gov* instead of requesting paper copies. Buying food in bulk and repackaging it in reusable containers will generate less litter. During your visit, sort and place recyclables in proper receptacles or pack them out to recycle at home. Learn about and support initiatives that encourage environmentally sound practices in parks and your community. Live lightly and share your knowledge with others - future generations are counting on you. For more information visit *www.nps.gov/renew*

The Challenge, Big Trees, Bad Weeds



Bunchberry - Native to the North Cascades

Exotic Aliens

Alien plants may be exotic, but are unwelcome here. Exotic plants threaten the ecosystem integrity of the North Cascades. Alien invaders such as knapweed, skeletonweed, knotweed and scotch broom thrive in areas impacted by humans.

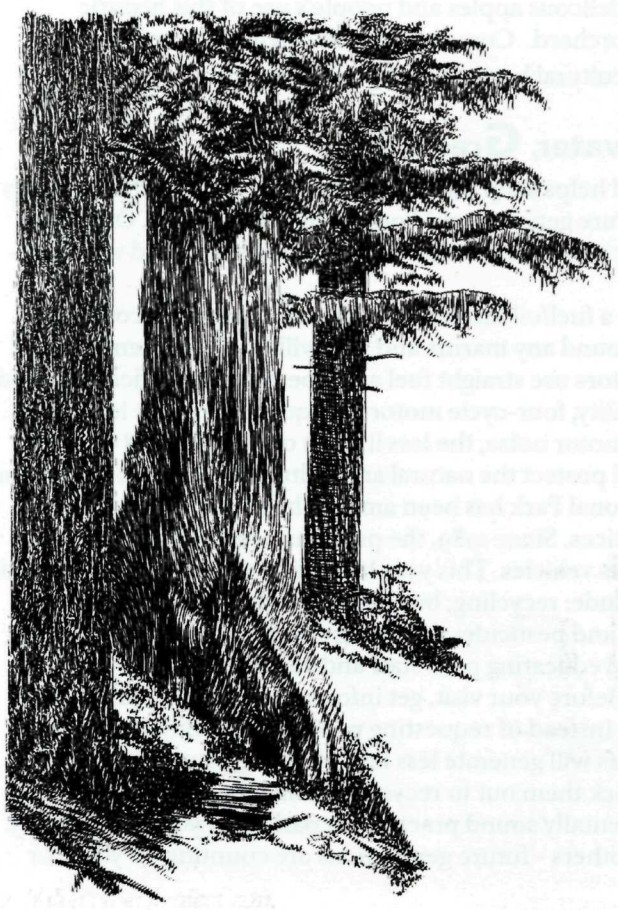
Exotic plants can be brought in as seeds attached to vehicles, pets, cargo or spread by rhizomes. Often plants like English ivy, holly and herb robert are brought in to beautify an area. Because of their adaptability alien plants are more successful than natives at colonizing human-disturbed areas. Without controls, such as competing plants and predatory insects, alien species flourish and out-compete native plants.

Over thousands of years, more than 1,500 native plant species have adapted to successfully fit habitats of the North Cascades. Though hardy enough to survive natural disturbances such as fire, most native plants do not fare as well in areas changed by humans.

To preserve the native landscape, the National Park Service and Forest Service use a range of techniques to control alien plant invasions. This summer a team of National Park Service exotic plant managers will partner with the Forest Service and the Nature Conservancy to eliminate weeds throughout the Northwest. To limit environmental damage most weeds are removed by hand. This method is extremely work intensive because seeds of some exotic plants can lie dormant in the soil for up to seven years.

Exposing alien plants to predators and diseases from their homeland can also help control their spread. These natural controls have not been found to attack plants native to the North Cascades. In 1994, two species of gall-fly, which feast only on knapweed seeds, were used to help limit an infestation in the Lake Chelan National Recreation Area. Though biological control usually does not eliminate alien species, it can slow down the rate of invasion.

When mechanical and biological attempts to control alien plants such as skeletonweed fail, the NPS may employ chemical controls. Because herbicides can cause unwanted damage to native plants and animals, their use is carefully evaluated and administered. Continued efforts to control alien species will help protect natural plant communities in the North Cascades. For more information visit *www.invasivespecies.gov*



Natural Resource Challenge

For thousands of years nature in the North Cascades has slowly evolved with the subsistence use of Native Americans. During the last hundred years, human caused impacts to the ecosystem have become significant. Today, human caused impacts are actually modifying natural environments on a worldwide scale.

The principle mandate of the National Park Service is to preserve natural processes, flora, fauna and cultural resources and to leave them unimpaired for future generations. Reducing human induced changes and preventing further impacts from occurring are imperative to protecting our natural and cultural heritage and allowing our descendants to experience national park lands in their natural and wild state.

North Cascades National Park Service Complex is in a monitoring network with six other national parks in the Pacific Northwest under the National Park Service's Natural Resource Challenge. The Challenge is an action plan to help the park service become more effective in preserving resources for the future. Its five main goals include:

- inventory and monitor natural resources
- develop techniques to protect and restore degraded natural systems
- encourage scientific research
- improve management through a greater reliance on scientific knowledge
- share the knowledge gained with the public

By financing research that focuses on water quality monitoring, glacier monitoring, exotic plant identification and removal, native plant restoration, wildlife surveys and a myriad of other projects, the Challenge will monitor physical, chemical and biological indicators of change in the park's ecosystem.

Specific indicators of change range from growth or shrinkage of glaciers to the presence of aquatic insects at the bottom of the Skagit River. The presence and quantities of pollutants in glaciers and waterways can indicate the extent of human impacts as revealed by indicator species. Indicator species such as macroinvertebrates (aquatic insects) and bald eagles may mirror the health of many other species in the ecosystem.

For these reasons national parks are laboratories, classrooms and libraries of importance to everyone. While few places on earth are not impacted by humans, parklands are among the most pristine in the world. To preserve and pass these lands on to our descendants should be among our highest goals. Learn more about science and resource management in North Cascades National Park at *www.nps.gov/noca/nat.htm*

Nesting Songbirds

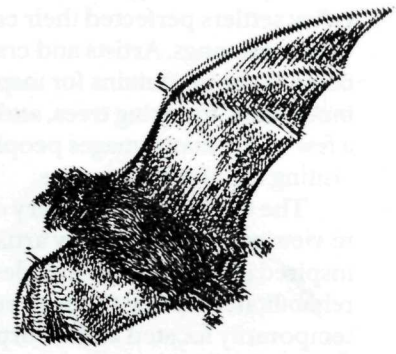
Inventory and monitoring of birds breeding in the North Cascades began in 2001. This two year study will collect data on many birds to indicate and predict resource problems for other species. Habitat relationships help predict the consequences of land management actions including fire, visitor use, snag removal and forest harvest on non-national park service lands. Songbird distribution and population densities will provide a baseline for future comparisons within and beyond park boundaries. This project has implications that stretch well beyond North Cascades National Park.

Federally Listed Threatened & Endangered Species in North Cascades National Park

- **Marbled murrelet** - T
- **Gray wolf** - E
- **Bald eagle** - T
- **Canada lynx** - T
- **Chinook salmon** - T
- **Bull trout** - T
- **Northern spoted owl** - T
- **Grizzly bear** - T

(T = threatened E = endangered)

Going Batty



Biologists at North Cascades National Park recently completed a three-year bat inventory project. This base-line inventory has helped determine species composition, distribution and relative abundance of bats within the North Cascades National Park. Sampling sites in various habitats included low elevation forests, riparian areas, subalpine zone, buildings and caves. Biologists collected data with ultrasonic bat detectors and by using capture-release methods. Information collected included species identity, sex, age, reproductive condition, weight, measurement of several morphological characteristics and recordings of each bat's echolocation calls.

During this study, biologists documented nine of the 12 species of bats thought to occur in the park complex. The Townsend's big-eared bat, a Washington State threatened candidate species was found adjacent to the park boundary, while all the other species were found within the park. The largest known nursery colony in the park complex was located in one of the park's buildings.

A Canopy of Ancient Forests

Abundant rain and mild winters provide the perfect environment for trees in the Pacific Northwest to grow very large and old. Not so long ago ancient forests of Douglas fir and redcedar blanketed nearly all of the Pacific Northwest. These trees were so big that early settlers would sometimes make homes out of hollow stumps just by building roofs over them.

Most of the old giants are gone from the Northwest, but in the wilds of the North Cascades you can still visit groves that have never been cut and still retain all of the characteristics of an old-growth forest.

How can you tell if you are visiting an old-growth forest? Look for a forest canopy of many levels, such as Douglas fir towering over shade tolerant hemlocks struggling upward. Look for downed logs and standing dead trees, called snags.

Old-growth forests are not defined solely by the size of their trees. Ancient forests are a magnificent and complex part of the web of life where all things are connected. Lichen in the forest canopy absorb the surrounding air's nitrogen, which is washed into the soil and used by forest vegetation; symbiotic fungi attached to plant roots supply their host with water and nutrients and, in return, take in carbohydrates; animals eat plants and help spread seeds across the forest to begin a new cycle of growth.

When ancient forests are cut, it takes decades to rebuild the severed connections. "When we try to pick out anything by itself," said conservationist and nature writer John Muir, "we find it hitched to everything else in the universe."

Where to visit Ancient Forests:

State Route 20: Thunder Creek and **Big Beaver** trails in the Ross Lake National Recreation Area offer long hikes through outstanding western slope, low elevation old-growth forest. **Happy Creek Forest Walk** near Ross Dam is a .3 mile accessible boardwalk with interpretive plaques that tell the story of the ancient creekside forest.

State Route 542: Horseshoe Bend Trail across from Douglas Fir Campground at milepost 36 is a 1.5 mile hike on a forested ledge above the North Fork Nooksack River.

Baker Lake Area: **Shadow of the Sentinels** is a barrier-free loop trail with wayside interpretive signs. The **Baker Lake Trail** follows the east shore of Baker Lake and enters the Baker River drainage at the upper end.

Icy Glaciers

"water is the driver of nature" – Leonardo da Vinci

One of the most striking features of the North Cascades is the incredible number of glaciers in the region. Boasting 316 glaciers and countless snowfields, the North Cascades National Park Service Complex is one of the snowiest places in the world and the most heavily glaciated area in the United States outside of Alaska.

Glaciers are formed when more snow accumulates in winter than melts or evaporates during the following summer. The immense weight of this continuous buildup causes the snow to compact into ice, which then slowly moves downhill. As glaciers move, they gouge and scrape the land redefining the landscape. Mountains may appear to be in suspended animation, but like everything else, they are in a continuous state of change.

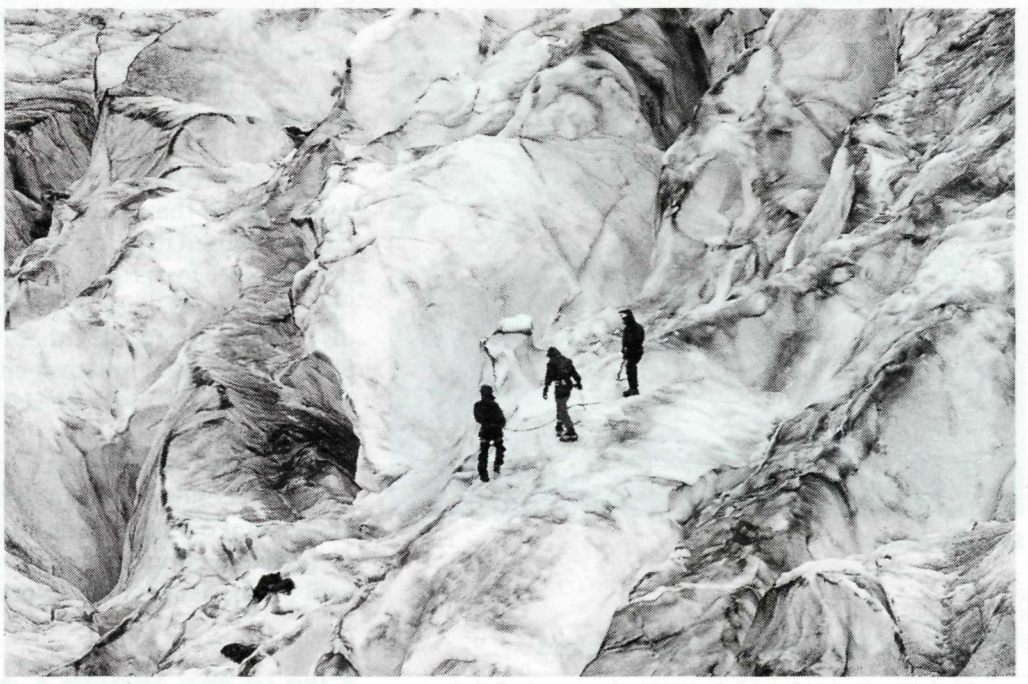
The North Cascades glaciers are disappearing. Since the mid 19th century, most glaciers in this area have shrunk dramatically. This is due to the combined effect of less precipitation and warmer summers. Over 90 percent of the North Cascades glaciers could disappear within 40 years if the annual temperature increases by 2 degrees Celsius.

People in the North Cascades recognize that if glaciers continue to shrink, substantial adjustments to lifestyles, agriculture and industry will be necessary. Salmon and other aquatic life also would encounter difficulties if glaciers disappeared.

Life changes as a result of climate change; glaciers mirror these trends. Glaciers are indicators of climate changes such as temperature and precipitation. As reservoirs of snow from past winters, they can show concentrations of atmospheric pollutants trapped in their ice. Subsequent snow melt may wash the pollutants into mountain lakes and streams where they enter the food chain absorbed by insects, then to amphibians, fish, and fish eaters.

Several related projects are helping scientists understand the ecological importance and changing nature of the park's glaciers. Data collection on the Noisy, Silver, North Klawatti, and Sandalee glaciers provides valuable information about the climate of the North Cascades as well as the amount and timing of meltwater released by glaciers. Through these studies, park managers are developing a greater understanding of the glaciers' ecological role and function and are educating the public.





Climbers on a glacier in North Cascades
Courtesy Salish Sea Photographic; Photo by Greg Mroz © 2000-2002

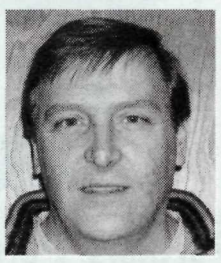
Where to View Glaciers

Mt. Baker Highway SR 542: From Glacier Creek Road (#39) hike Heliotrope Ridge Trail to Mt. Baker's Coleman Glacier and dynamic views. From Heather Meadows, several of nine glaciers that surround Mt. Shuksan are visible along Picture Lake Trail. View some of the 13 glaciers surrounding Mt. Baker from the Artist Ridge Trail.

Mt. Baker National Recreation Area: provides tremendous views of glaciation at work. Six-mile long Scott Paul Trail crosses the terminal moraine below Squak Glacier. Railroad Grade Trail leads hikers to the Easton Glacier on Mt. Baker.

State Route 20: Glaciers on Colonial and Snowfield Peaks are visible from the Ross Dam Trailhead. From the Cascade Pass parking area at the end of Cascade River Road you can view spectacular glaciers on Johannesburg Mountain.

Jon Riedel
- Geomorphologist -



North Cascades National Park Service Complex

His Work:
I am a geomorphologist - a type of geologist who studies earth surface features and processes. My work focuses on monitoring glaciers and streams, mapping the landforms, managing geologic hazards, and addressing erosion issues along streams and reservoirs.

Approach to Solutions:
My training as a geomorphologist has taught me to use a multi-disciplinary approach to solve problems. Most surface processes, and the features they create, are extremely complicated and dynamic. To do my job well, I need to consider climate, geology, soils, vegetation and human use of a given site.

Defining Moment:
As a mountain scientist, it would have been when I was alone in a very remote site at the headwaters of Depot Creek in July, 1985. At this time, I was attempting to make my research proposal jive with the reality of what lay before me.

Dreams:
Of long summer days alone high in the North Cascades, at a place I have never seen, exploring a glacier and the surrounding landscape.

Quote:
"The Earth's rhythms are no longer recognized by most people, especially those whose lives are confined to large cities. In these mountains, the Earth's rhythms are strong and clear to those willing to listen. They are recorded in many ways, but perhaps most strongly by the glaciers and the landscapes they create."

Mt. Baker Stewardship

Mt. Baker has been a magnet to a variety of recreational activities for over a century. An estimated 5,000 climbers attempt to summit in an average year and thousands of day hikers and backpackers enjoy the trails and dispersed campsites around the mountain. Visitors are attracted to the mountain because of the easy access to glaciers and scenic vistas. However, the popularity of the mountain is leading to resource impacts on its slopes.

In response to the impacts occurring on Mt. Baker, the Mt. Baker Ranger District is currently conducting the Mt. Baker Recreation Use Study. The goal of the study is to identify current and potential patterns of use, determine appropriate recreational use levels and define monitoring protocols for assessing impacts.

A component of the Recreation Use Study is the Mt. Baker Climber Survey. The Climber Survey will be conducted this 2002 season. The goal is to determine what social issues are important to the user groups on Mt. Baker and to determine the attitude of the users towards these issues.

The district has also developed a partnership with North Cascades Institute to create the Mountain Stewards Program. The program, beginning this season, will utilize volunteers to engage with visitors on Mt. Baker. Mountain Stewards will interact with visitors about resource management issues and a variety of other topics. They will help increase the public's knowledge and support for natural resources and improve the visitor's enjoyment of Mt. Baker.

Through efforts of the Mt. Baker Recreation Use Study and the Mountain Stewards Program the Forest Service and the public will held refine future management direction for the mountain. Hopefully, the next century will continue to provide for the public all the unique recreational opportunities on Mt. Baker as the century before it did.

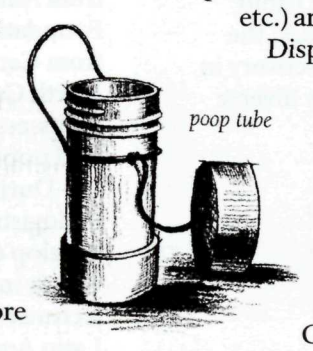
If you would like to learn more about the Mountain Stewards Program, please contact the Mt. Baker Ranger District, or the North Cascades Institute, at (360) 856-5700.

Chilly Bathroom Blues

"Donde esta el bano?" "Ninihitaji kujisaidie?" No matter how it's said "Where's the bathroom?" is an important question, even in wilderness. Where there is no bathroom per se, answering nature's call involves a little pre-planning, some initiative and a bit of creativity.

Winter conditions present unique challenges. High visitor use, sparse soils, rock, snow and ice all conspire to make the cat hole less than ideal in alpine areas. On glaciers in the Pacific Northwest, the practice of depositing waste in crevasses has been challenged as research has shown that waste in temperate glacial crevasses is quickly washed out by glacial run off introducing pathogens into the watershed. On Mt. Rainier, the transport time for some glacial underdrain systems has been found to be as short as one hour. Another common technique, "smearing", has led to unpleasant encounters in heavily used areas.

To combat these problems, the park and forest highly recommend that you pack out human waste when in high alpine or glacial areas. The "blue bag" system has become well known to climbers of several Olympic and Cascade volcanoes and are available for free at stations that issue backcountry permits (see pg 3). "Poop tubes" or other pack out products (wag bags, etc.) are commercially available as well. Dispose of contents according to package instructions. Check with the Wilderness Information Center for specific regulations before setting out.

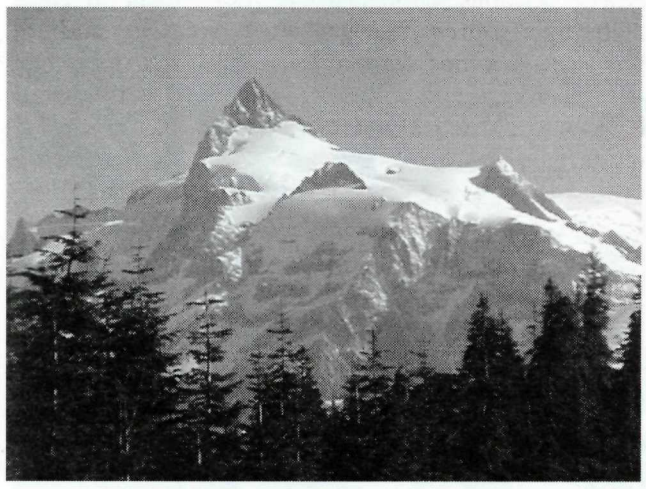


poop tube

On glaciers and snow, urine leaves unsightly yellow stains. At camp, designate an "outhouse" and concentrate urine in one location, preferably on the periphery of camp. Cover stains with snow as possible.

Likewise, don't create stains by scattering wastewater. Designate a "sump" - a cat hole where strained gray water is poured. Naturalize the sump before leaving.

Connecting Pathways



Mt. Shuksan

Make It Happen, Volunteer!

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

Volunteer Trail Coalition (VTC) began in 1996 with fifteen allied groups wishing to strengthen coordinated trail work. Among them Washington Trails Association (WTA) and Volunteers for Outdoor Washington (VOW) promote education and enhance recreational opporotunties. Volunteer hours may be good towards a NW Forest Pass.

VOW:
(206)517 4469
www.trail-stewards.org

WTA:
(206) 517-7032
www.wta.org

VTC:
www.trailwork.org

Or contact the **North Cascades National Park** and the **Mt. Baker Ranger District** for volunteer opportunities within the park or forest.

North Cascades Institute

Founded in 1986, North Cascades Institute is the Northwest's premier natural history education organization. Our mission is to conserve and restore Northwest environments by building an ecologically literate and engaged public.

From ancient people and ancient trees to wildflowers and winged things, we offer dozens of field programs for children and adults, including summer camps, natural history seminars, teacher workshops, internships and a new graduate program in environmental education.

In 2003, we will open the North Cascades Environmental Learning Center in partnership with Seattle City Light and the National Park Service. Located on Diablo Lake in North Cascades National Park, the Learning Center will be a hub of discovery in one of the wildest, most biologically diverse landscapes of North America.

Contact us for a free catalog!

North Cascades Institute
810 State Route 20
Sedro-Woolley, WA 98284
Call (360) 856-5700 ext. 209
nci@ncascades.org
www.ncascades.org

North Cascades Highway turns 30, sort of...

State Route 20, the main road through the North Cascades, turns 30 this year. On September 2, 1972, local, state and federal representatives joined Governor Dan Evans in an official ribbon cutting ceremony to open the paved North Cascades Highway. It was a day filled with festivities all along the route, but the history of the highway began much earlier.

The creation of a route over the North Cascades began centuries ago. Ancient trading paths between Native Americans of the coast and the Plateau tribes were established long before Europeans and Americans arrived. Explorers used these paths and eventually the most widely used path over Cascade Pass was proposed as the perfect place for a road. In 1897, the Washington State legislature named the road Highway 1. Never having been completed, it is known today as the Cascade River Road. The idea for a Cascade Pass route was discarded in the 1940s. Other routes that were proposed were over Whatcom/Hannegan Passes, and up the Skagit River Valley and over either Hart's Pass through Canyon Creek or over Rainy/Washington Passes. Eventually in the 1950's, the last option would gain the most momentum.

The highway's history is a checkered one with many different possible outcomes. Its main purpose in the early days was economic, meant to be a bridge between eastern and western Washington economies. However, it has become a major scenic attraction inviting people to explore the many trails, campgrounds, and other recreational opportunities. The highway's paved history began in 1972. Since then it has given us 30 years of varied experiences in the North Cascades.

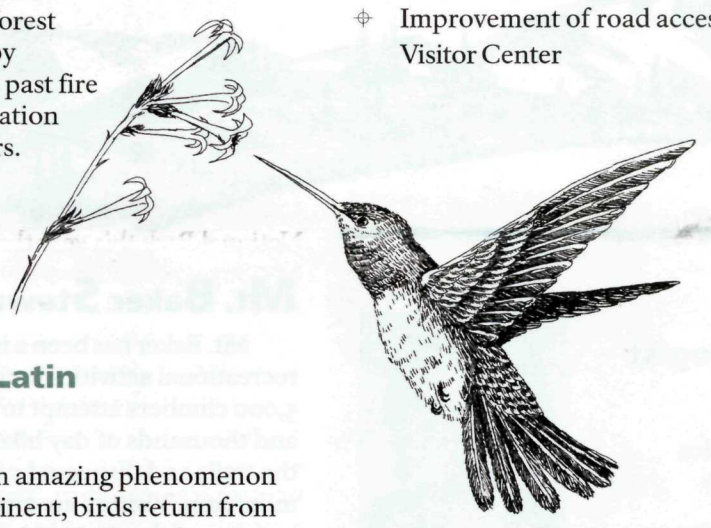
Fire in the North Cascades

Fire plays a vital role in maintaining and restoring ecosystems. In the North Cascades National Park, the fire team also recognizes that some fires in the wrong place can lead to tragic loss of human life, structures and alter vegetation types. The potential benefits and losses are weighed carefully in each fire management decision. Options for suppression, wildland fire use (lightning fire management) and prescribed fire are included in the fire management plan. This year community fire protection treatments are planned for Stehekin and Hozomeen. Prescribed burning is closely monitored by fire personnel. Through long term monitoring, fire treatment effects are recorded and used to measure progress toward meeting program goals. These goals are met in cooperation with neighboring agencies and in collaboration with park fire and resource specialists. Currently, historic fires and forest dynamics are being studied by scientists. Information about past fire frequency and forest regeneration will be used by park managers.

North CascadesNational Park Fees Improve Facilities

There are no entrance fees at North Cascades National Park, but fees are collected for frontcountry camping, using the docks on Lake Chelan and for parking at certain trailheads, via the Northwest Forest Pass. Among the projects completed with fee revenues in 2001 or underway in 2002 are:

- Accessibility improvements at park facilities in Marblemount and on the Stehekin shuttle bus system
- Rehabilitation of wilderness camps
- Support for Public Land Corps enrollees helping with a wide range of maintenance and restoration projects
- Replacement of the Colonial Creek Campground kiosk
- Improvement of road access to the Golden West Visitor Center



Birds Connect National Parks to Latin America

Each spring, as part of an amazing phenomenon that happens across the continent, birds return from Central and South America to North Cascades National Park. The Rufous Hummingbird, a familiar sight in suburban yards as well as in the park, winters thousands of miles away in southern Mexico. Swainson's Thrush, a robin-like summer resident more often heard than seen in the park's lower elevations, winters from central Mexico to northern Argentina and Paraguay. Three-quarters of North America's more than 650 bird species are migratory. Impressive feats of long-distance flight and navigation are accomplished by many of the birds that summer at North Cascades National Park.

Unfortunately, as human population and development expand throughout the Americas, habitat for such ecologically important migratory species shrinks. Long-term studies show declines in many bird populations. The U.S. National Park System provides critical habitat for migratory birds. Now, to improve protection of these birds and their habitat, North Cascades National Park and other national parks in the U.S. and in Latin America have joined in the *Park Flight Program* - a coordinated approach to migratory bird conservation. Funding from American Airlines through this National Park Foundation program will bring several biologists from Central America to work with scientists in North Cascades National Park on refining methods for assessing the status and condition of migratory bird populations.

During their visit, the Central American biologists will also help the National Park Service develop exhibits about birds that breed here and winter in the tropics and will present a public lecture on this topic. We share with the citizens of Latin American nations some of the birds which most characterize the Northwest. Survival of this important aspect of the North Cascades ecosystem depends on caring people protecting the habitat birds need in each season.

Partners, Partners, Partners!

Northwest Forest Pass Accomplishment Report 2001

Revenue generated through Northwest Forest Pass sales has provided a steady source of funding over the last several years. This program has helped forge new partnerships and provide funds that can be used as matching dollars to apply for grants. This allows the Forest to expand their ability to put volunteers on the trails, give young people a chance to work outdoors, buy materials for projects and provide opportunities for highly skilled trail contractors to complete difficult projects. The Forest Service greatly appreciates the contributions all of these partners make to the public lands under their care.

Fee revenues from the Mt. Baker-Snoqualmie National Forest in 2001 funded:

- **Trail maintenance:** More trail miles were maintained last year than in 2000. Trail crews started earlier encountering fewer down trees than previous years. This work was accomplished using a variety of contracts, volunteer, partner and Forest Service crews.
- **Trailhead maintenance:** The Forest provided maintenance and additional security at 140 trailheads. Funds from fees also allowed for toilets to be flown into areas within the Mt. Baker National Recreation Area where sanitation is an ongoing problem.
- **Heather Meadows:** The Forest hired staff to: operate the Heather Meadow Visitor Center on a daily basis from July to mid-October; clean toilet facilities daily and maintain area trails, picnic tables, trailhead and interpretive signs. The lower Bagley Dam trail was repaired and railings added to enhance visitor safety.

A detailed account of the Northwest Forest Pass program is available at *www.fs.fed.us/r6/mbs*

Establishing Connections



Boston & Forbidden Peaks from Cascade Pass Trail

Earthwatch Creates

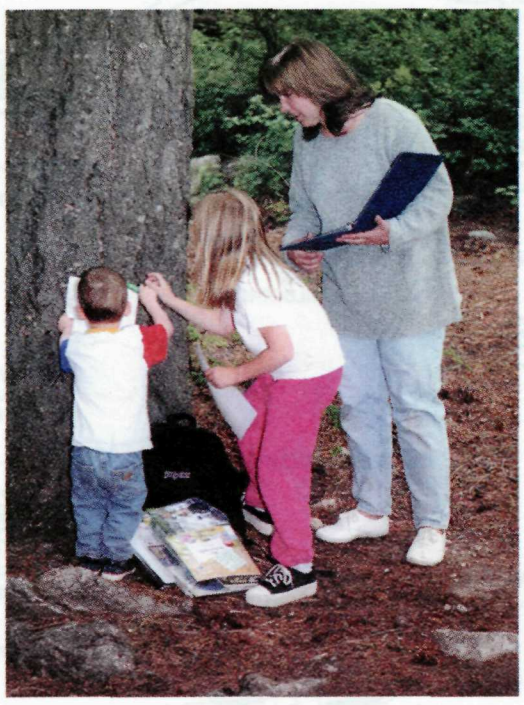
Final touches are being put on agreements to develop a North American Conservation Resource Center (CRC) here in the Skagit Watershed. The center, operated by Earthwatch Institute in partnership with the Skagit Watershed Council and North Cascades National Park, is one of five being established in the world. Earthwatch chose this area for its North American center. It will become the focal point for unique conservation and education programs. Earthwatch is making a long-term effort to better understand threatened environments and seek solutions for a sustainable future through scientific field research and data collection. In 2002 Earthwatch volunteers will contribute to knowledge of North Cascades National Park by assisting with an ongoing study of the park's glaciers. This is part of a holistic plan of study of the Skagit Watershed from its glaciers to estuaries and beyond to the sea. For more Earthwatch projects and volunteer opportunities see *www.earthwatch.org*



Park Ranger on Mt. Shuksan

Washington's National Park Fund

Every year millions visit Washington State's spectacular national parks: Mount Rainier, North Cascades and Olympic. Protecting the parks while providing for their enjoyment often requires funds greater than those available. Since 1993, Washington's National Park Fund has helped fill the gap between park needs and available resources. The Fund helps ensure that visitors have high quality, memorable experiences by sponsoring educational and trail projects, resource assessment and restoration and fish and wildlife projects. By securing financial contributions 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, visit the website at *www.wnpf.org*, or look for the Fund's brochure in any of the park's visitor centers.



Family Fun Packs

Proud Partners

Cameras, scanners, and film came to North Cascades National Park this year thanks to a grant from the National Park Foundation through the generous support of Kodak, Proud Partner of America's National Parks. With these items park staff are obtaining photographs for use in publications, exhibits, and the park website. Another Proud Partner, American Airlines, is supporting research and education at North Cascades on the topic of neotropical migratory birds, which breed in the Cascades and winter in Central or South America.

World Wide Websites

Both the Mt. Baker-Snoqualmie National Forest and North Cascades Naional Park web sites are good trip planning resources. Navigate through the sites and find the following information:

North Cascades National Park:
www.nps.gov/noca
Mt. Baker-Snoqualmie National Forest:
www.fs.fed.us/r6/mbs

- **Tourism & Accommodations:**
  www.tourism.wa.gov
- **Camp Reservations:**
  www.reserveusa.com
- **Northwest Avalanche Center Hotline:**
  (206) 526-6677
  www.seawfo.noaa.gov/products/SABSEA
- **Washington DOT Pass & Road Conditions:**
  1-800-695-7623
  www.wsdot.wa.gov or
  www.atmos.washington.edu/data/pass_report.html
- **Travel & Traffic Information:**
  www.smarttrek.org
- **Weather & Climate Change Information:**
  www.wrh.noaa.gov/wrhq/javaLinks
  www.epa.gov/globalwarming
- **Wildlife & Endgangered Species:**
  www.wa.gov/wdfw/viewing/wildview.htm
  (view eagle cam online)
- **Washington Dept. of Fish & Wildlife:**
  www.wa.gov/wdfw
- **Cascade Loop Association:**
  www.cascadeloop.com
- **Washington State Parks:**
  www.parks.wa. gov
- **Nature of the Northwest:**
  www.naturenw.org
- **Washington's National Park Fund:**
  www.wnpf.org
- **Skagit Watershed Council:**
  www.skagitwatershed.org

North Cascades Challenger

2002-2003 Visitor Information Guide

Produced and published cooperatively by North Cascades National Park (USDI), and Mt. Baker Ranger District of Mt. Baker-Snoqualmie National Forest (USDA).
Funded by the Northwest Interpretive Association.

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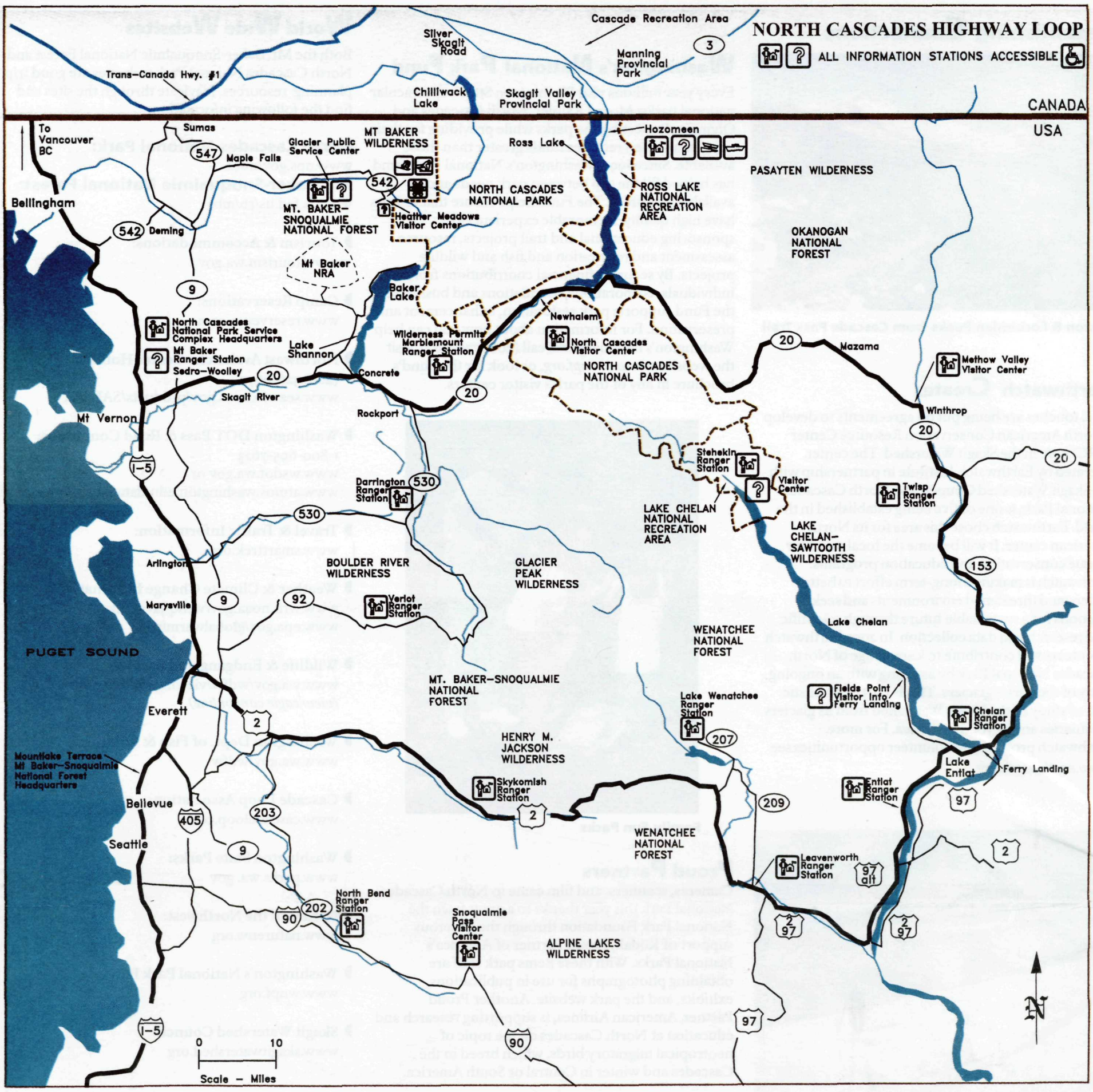
Northwest Interpretive Association: Introducing the North Cascades through Books and Maps

The Northwest Interpretive Association is a non-profit organization that works cooperatively with public agencies throughout the Northwest to promote historical, scentific and educational activities. Money received through local sales, memberships and donations is used to help study and interpret areas of both North Cascades National Park and the Mt. Baker Ranger District. The association helps make books and maps available to visitors. Sales items may be purchased on site at various offices and through mail order. For further information about NWIA, visit its website at *www.nwpubliclands.com*

A few of the items that may prove helpful when planning a trip are:

100 Hikes in the North Cascades	$16.95	Describes a variety of hikes for all skill levels.
Trails Illustrated Map for the North Cascades National Park	$9.95	Good overall hiking map for the Mt Baker Ranger District and the North Cascades National Park.
Popular Trails - North Cascades National Park	$3.25	Highlights 30 of the most popular trails within North Cascades National Park
Geology of the North Cascades	$19.95	A complete geologic pciture of the North Cascades mtn. range. Highlights 150 sites of geologic interest.
Mt. Baker Ranger District Map or Darrington Ranger District Map	$4.00 each	A topographic map of Mt. Baker-Snoqualmie National Forest. Good referance for recreation & trail information.
Hiking the North Cascades	$15.95	A comprehensive guide to help plan short - long trips for over 100 hikes. Index of topgraphic maps.
North Cascades National Park - The Story Behind the Scenery	$8.95	A pictorial guide to North Cascades National Park, highlighting facts and features.

To order any of the above items or to receive a catalog with a more detailed listing of the multitude of available items covering flora, fauna, geology, history, etc., call (360) 856-5700 ext. 515 or 291.



Park & Forest Information Stations

Times listed are subject to change. Please call in advance for more information.

North Cascades National Park; Mt. Baker Ranger District; Mt. Baker-Snoqualmie National Forest

SEDRO-WOOLLEY
810 State Route 20, 98284
Daily: 8:00 am-4:30 pm
(360) 856-5700
TDD (360) 856-5700 x-310

MARBLEMOUNT
Wilderness Information Center
Backcountry Information/Permits
Summer Hours:
Fri. - Sat., 7:00 am-8:00 pm
Sun. - Thurs., 7:00 am-6:00 pm
(360) 873-4500 (ext. 39)

NEWHALEM
North Cascades Visitor Center (NPS)
Daily: mid-April to mid-November
July & August: 8:30 am-6:00 pm
(206) 386-4495

STEHEKIN
Lake Chelan National Recreation Area (NPS)
Purple Point Information Center
Daily, 8:30 am-5:00 pm
(360) 856-5700 x-340 then 14

EXPERIENCE YOUR AMERICA

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

Okanogan National Forest; Methow Valley Ranger District

WINTHROP Methow Valley Visitor Center
Summer Only
9:00 am-5 pm daily
(509) 996-4000

WINTHROP Ranger Station
- winter hours -

Wenatchee National Forest

CHELAN Ranger District
Lake Chelan National Recreation Area
Daily, 7:45 am-4:30 pm
(509) 682-2576 (USFS)
(509) 682-2549 (NPS)

LEAVENWORTH Ranger District
Daily, 7:45 am-4:30 pm
(509) 548-6977

LAKE WENATCHEE Ranger District
Mon. - Sat., 8:00 am-4:30 pm;
(509) 763-3103

For help in planning trips, contact the Outdoor Recreation Information Center located in the REI flagship store in Seattle at (206) 470-4060

Mt. Baker-Snoqualmie National Forest

MOUNTLAKE TERRACE - no visitor services
Supervisor's office: (425) 775-9702
1-800-627-0062 or TDD 1-800-272-1215

GLACIER Public Service Center
Late-May to Mid-October,
8:00 am-4:30 pm (360) 599-2714

HEATHER MEADOWS Visitor Center
Daily in summer

DARRINGTON Ranger District
Daily, 8:00 am-4:30 pm (360) 436-1155

VERLOT Public Service Center
Daily, 8:00 am-4:30 pm (360) 691-7791

SKYKOMISH Ranger District
Daily, 8:00 am-4:30 pm
(360) 677-2414

SNOQUALMIE Ranger District
North Bend Office
Mon. - Sat., 8:00 am-4:15 pm
(425) 888-1421
Enumclaw Office
Mon. - Sat., 8:00 am-4:15 pm
(360) 825-6585
SNOQUALMIE PASS Visitor Center
Friday- Sunday, 8:45 am-3:45 pm
(425) 434-6111

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