NORTH CASCADES *Challenger*

North Cascades National Park—Mt. Baker-Snoqualmie National Forest
1999-2000 VISITOR INFORMATION GUIDE

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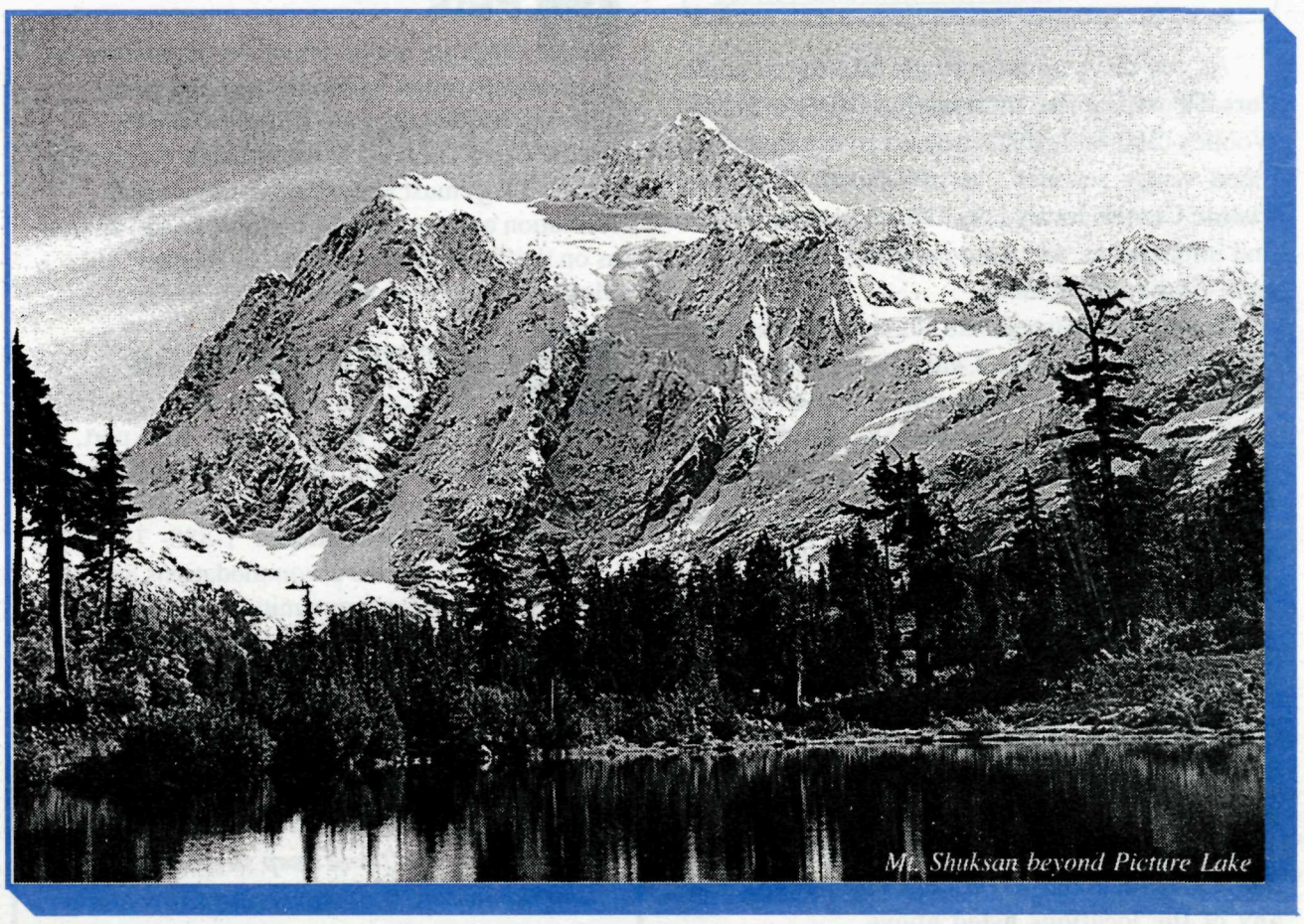


Mt. Shuksan beyond Picture Lake

Benvenuti **Bienvenidos** **Bienvenue** **Добро Пожаловать!**
Welcome **Willkommen** **ノースカスケード国立公園へ、ようこそ。**

Welcome to the North Cascades!

We hope you enjoy your recreation and travel in the North Cascades. The National Park Service and the Forest Service encourage you to experience this unique region in a safe manner, looking beyond the scenery to the essence of the landscape.

Much of the North Cascades ecosystem is designated Wilderness, an area in which humans act only as transient visitors and stewards of the land. Wilderness stewards strive to preserve unimpaired the majestic scenery and unique habitats, biological processes, and cultural resources of the area. Inherent in wilderness is unpredictability; expect and prepare for challenges. Mountain weather can change rapidly. Each turn in the trail may reveal a panoramic view, a hardy flower nestled amongst the rocks, or a glimpse of one of the many wild inhabitants of the region.

The National Park and Forest Services, cooperating managers of federal lands in the North Cascades, urge you to join them in looking to the future by becoming a steward of the land you visit. Consider the people who will follow the path you choose; let them enjoy the same sense of discovery by leaving no trace of your travels. Take memories of this special place home and remember that activities beyond the boundaries of the park and forest affect its future.

We hope this publication inspires you to explore past the print. We invite you to share with us your perspective on the management of these public areas. Feel free to contact us at the mailing address on the label. Have a safe and rewarding visit!

William F. Paleck
Superintendent
North Cascades National Park

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

North Cascades National Park
Mt. Baker Ranger District
2105 State Route 20
Sedro-Woolley, WA 98284-9394

The **North Cascades National Park Service Complex** includes three areas of the National Park System totaling 684,000 acres. The three areas are **North Cascades National Park, Lake Chelan and Ross Lake National Recreation Areas**. Congress has 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.

The **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**
- **Heather Meadows**
- **Mt. Baker Scenic Byway**

What You Need to Know

Ask

Questions? Feel free to stop by or call one of the Park & Forest Information Stations listed on the back page. You can also visit one of our websites:

VIRTUAL VISITOR CENTER:
http://www.naturenw.org
NORTH CASCADES NATIONAL PARK:
http://www.nps.gov/noca
MT. BAKER-SNOQUALMIE NATIONAL FOREST:
http://www.fs.fed.us/r6/mbs

As you drive up State Route 20, stop in at the **Forest/Park Service Information Office** in Sedro-Woolley (360-856-5700), where you can find year-round visitor services. At the **North Cascades Visitor Center**, located near Newhalem on SR 20, find information, naturalist programs, exhibits and multi-media presentations.

Traveling up State Route 542 from Bellingham, **Glacier Public Service Center** at milepost 34 is jointly operated by the Forest Service and National Park Service from mid-May to mid-October. **Heather Meadows Visitor Center** at milepost 56 showcases the natural and cultural heritage of the Mt. Baker area and is usually open from July to October, depending on snow accumulation.

Chelan Ranger Station, operated by the Forest Service and National Park Service, gives information about Lake Chelan NRA and Wenatchee NF. From Chelan or Fields Point Landing, take a ferry to remote Stehekin, where the **Golden West Visitor Center**, is located.

Ask for information sheets about resource management and recreational opportunities at any of the locations listed above.

Camping

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

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 130 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, Twisp, 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 National Forest Trail Park Pass. Overnight visitors to the Mt Baker Natl. Rec. Area, Chain Lakes, and Watson Lakes must camp at designated sites.

Campfires are not allowed in many backcountry areas located in sub-alpine settings. Most backcountry camps are in designated wilderness where regulations designed to protect the resource apply. Visitors are encouraged to contact the Mt Baker Ranger District before heading out to their backcountry destination.

Drive

State Route 20 offers scenic east/west access across the mountains (closed during the winter from milepost 134 to 171). By mid-April it is usually possible to travel the entire Cascade Loop outlined on page 16.

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

Pets

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

Accommodations

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 other private accommodations are available in adjacent communities. Listings are available from visitor information or Chamber of Commerce offices listed on page 9.

Safety Tips

- ***This year's unusually heavy snows may create hazardous conditions in some areas: avalanches, swift and deep stream crossings, and the necessity of traversing snow and ice. Get current information before you go.***
- 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. Water may not be available near camps; treat and/or boil all water.
- Know your limits and when to turn back.
- Hiking over challenging terrain with inadequate skill or equipment is the primary cause of accidents in the North Cascades. Staying on trails, wearing adequate footwear and possessing 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.
- 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.
- Trails suffer storm damage every winter; please use caution and notify the park or forest if you encounter downed trees or washed out sections of trail.
- When horses are approaching, hikers should talk to make their presence known and step off the trail on the low side.

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 park or forest for most up-to-date conditions.**
- √ **Research maps & trail handbooks.**
- √ **Carry the "10 Essentials" (see page 3).**
- √ **Let others at home know your plans.**
- √ **Make the best decision for your safety, including turning back.**

Accessibility Opportunities for All

The National Park and Forest Service have been working hard to make recreational facilities available to everyone. Barrier-free trails, campsites, viewpoints, restrooms, and visitor information centers are being continually 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 boardwalked or surfaced for wheelchairs and strollers as well as for individuals who have difficulty walking long distances.

Accessible trails are indicated on trail lists on pages 6, 7, 9, and 12 with a symbol.

Naturalist Programs

- **Amphitheaters at Colonial Creek:** summer nightly programs, and **at Newhalem Creek:** weekend only; see schedules
- **North Cascades Visitor Center:** daily walks, talks, multi-media and children's programs
- **Heather Meadows:** summer programs
- **Skagit Wild and Scenic River Programs:** winter weekends–slide programs and eagle viewing, summer weekends–river-centered walks and talks
- **Golden West Visitor Center:** summer daily talks and evening, children's, and slide programs

Coexisting with Wildlife

Your presence can affect plants and animals. For example, once accustomed to human food, a bear may seek it aggressively. Careful planning, travel and sanitation will reduce your impacts on wildlife:

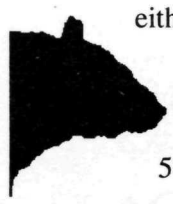
◆ **Cooking.** Try to have your sleeping area and personal gear about 100 yards (90 m) uphill or upwind from your cooking area. Wash dishes at least 100 feet from water sources with small quantities of biodegradable soap (or no soap at all). At frontcountry campgrounds, collect all grey water from cooking and washing in a bucket and deposit it in septic or vault facilities. 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. Lock items in your car trunk if you are in the frontcountry. **Bear-resistant canisters for backcountry use are available commercially and for loan from National Park Service offices where you get backcountry permits.** 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 or any item with an odor.

◆ **Hunting and Fishing.** Where hunting is permitted, store game meat the same as food. Dispose of fish entrails by first puncturing air bladders and then dropping them in deep water.

◆ **Horses.** Store horse pellets the same as food. For information about horse and trail safety and minimum impact riding, ask for a *Stock Use* bulletin from the ranger station or call the Backcountry Horsemen of Washington (360)876-7739.

◆ **Bear and Cougar Sightings.** If a bear comes close to your campsite, you may be able to frighten it away by shouting or banging pots and pans. A bear accustomed to campground food may not be as easily discouraged. **Do not run** from either bears or cougars, as rapid movements may trigger an attack instinct. If you see a bear or cougar, report it to an agency biologist at (360) 856-5700 or the nearest ranger station.



Travel Tips

Special Use Permits and Fees

Persons interested in commercial and non-commercial use of the National Park and National Forest for purposes such as filming, outfitter guides, and research must apply to these agencies for a permit.

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

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

Mushroom Collection 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.

Trail Park Passes are required for Forest Service trailheads in the Mt. Baker District. From July through mid-October a Heather Meadows Pass is required within the Heather Meadows Area. Both of these passes are a part of the National Fee Demonstration Program instituted by Congress. For further information on these programs, see page 6.

NOTE: Where collecting is permitted, collection of any item in quantities more than adequate for personal use is strictly prohibited without appropriate permits.

Hike & Climb

Hundreds of miles of trail lead into the North Cascade Mountains. Many enter designated wilderness.

Day hikes do not require a permit. Overnight stays in North Cascades National Park Service Complex's backcountry do. Hikers parking at National Forest trailheads in Washington and Oregon need to purchase a Regional Trail Park Pass *(see page 6 for details).*

Know rules and regulations and get current trail conditions at all National Park and Forest Service offices. Obtain complete national park backcountry information at the Wilderness Information Center in Marblemount.

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* or a list of outfitter guides.

Hiking with Children

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

Bring along extra items such as:

- wholesome snack foods
- extra water
- sunscreen
- insect repellent
- a whistle for the child to use if lost

Activity Ideas for Children:

Have children bring along a friend. Sing songs. Bird watch around the trunks of trees or in the 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, ears, hands, and nose.

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 their website (*http://www.lnt.org*).

Plan Ahead and Prepare: Design your trip to match your skill level. Carry adequate and appropriate clothing, food, equipment, and fuel. Check with rangers for current conditions.

Camp and Travel on Durable Surfaces: In high use areas, concentrate activity within established campsites and trails where additional use causes little additional 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.

Properly Dispose of What You Can't Pack Out: Dispose of human waste properly. Use vault and compost toilets where available. In backcountry areas, dig a "cathole" 4-6 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 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 such as antlers and fossils, and cultural artifacts for others to enjoy.

Minimize Use and Impact of Fires: Use campstoves instead of fires whenever possible. Collect fuel from a wide area far from camp. Know current regulations and weather concerns. Do not leave until all coals are cool enough to hold.

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.

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 permitted in national forests but must be at least 200 feet from shoreline of any lake. No permit required.
- Grazing is prohibited in North Cascades National Park.
- In wilderness, pack in sufficient processed feed pellets for your trip. Possessing or transporting any unprocessed livestock feed is prohibited.

Bike

Many people tour the North Cascades Highway and Mt. Baker Scenic Byway by bicycle. The remote beauty of these routes offers a unique and challenging experience. Be well supplied with water, food, and warm, waterproof clothing. Travel single file on the right edge of the road and use reflectors and bright clothing.

Hiking trails are not designed for bike use; most trails are closed to motorbikes and bicycles. Most side roads are rugged enough for the most avid mountain biker.

Boat

Recreation in the North Cascades can be water-oriented. For lake recreation, boat ramps are available at Lake Chelan (docking fee at Stehekin, see page 13), Baker Lake, Gorge Lake, Diablo Lake, and the north end of Ross Lake at Hozomeen. Boat rentals are offered at Baker Lake, Lake Chelan, and Ross Lake.

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.

Use of personal watercraft (such as Jet Skis) is prohibited in the North Cascades National Park Service Complex.

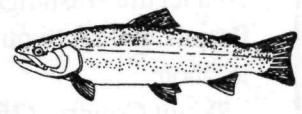
River floating is an adventure worth planning. Experienced boaters run the Skagit, Nooksack, and Stehekin Rivers. For boating trips, plan in advance and ask for schedules, plus a list of *Accommodations and Services* or *Outfitter Guides* from any ranger station.

Fish

Fishing in Washington, including in National Parks and Forests, requires a valid Washington State game fishing license.

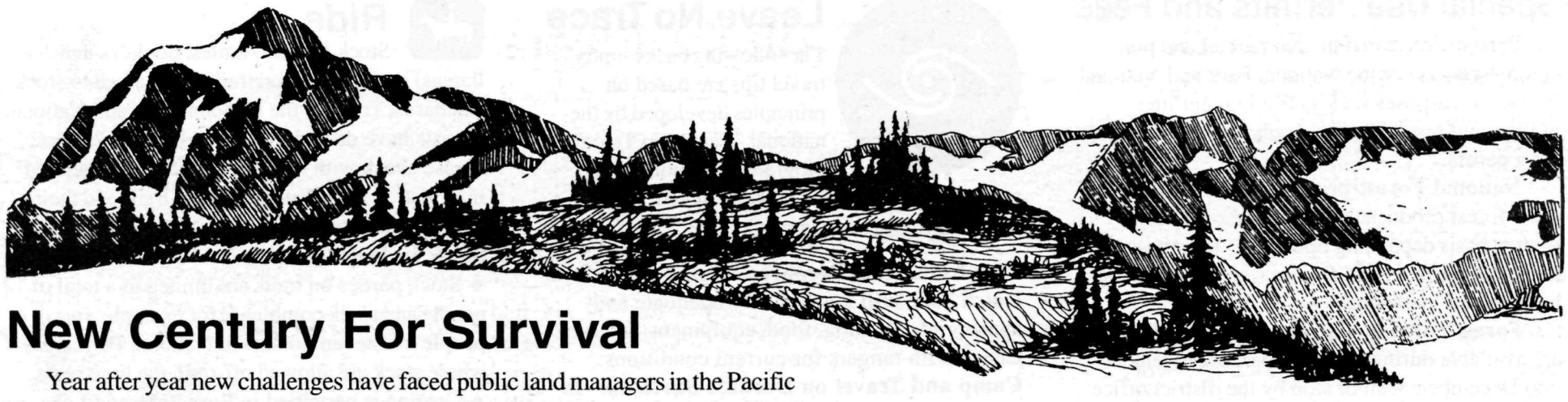
The Skagit River (Washington's second largest after the Columbia) and its impounded lakes are home to seven species of anadromous fish (five salmon, steelhead, and cutthroat trout), as well as several freshwater species.

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.

A Vision for the Future



New Century For Survival

Year after year new challenges have faced public land managers in the Pacific Northwest. Along with the diversity of the landscape comes a constant check and balance to ensure appropriate use of the natural resources inherent here. Ancient forests, heavily timbered slopes, glacial systems that feed rivers and streams, wildlife habitat and opportunities for public recreation interact with one another, adding to the complexities of issues and undertakings within the National Forest and National Park.

The Forest Service works under a basic and essential focus - caring for the land and serving people. In a 1998 speech Forest Service Chief Michael P. Dombeck set out a natural resource agenda for the 21st century with focus on four key areas—Watershed Health and Restoration, Sustainable Forest Ecosystem Management, Forest Roads, and Recreation.

The "gradual unfolding of a national purpose" outlined by Chief Dombeck will help guide future policies and decisions within the agency. Hand in hand with this new charter for conservation is recognition that people should work together to maintain a healthy environment. Natural resource management partnerships are encouraged as well as cooperative efforts in maintenance, facility enhancements, interpretive services and education.

On March 16, 1999, a Federal Government decision to order new protection for nine threatened Salmon populations in the Northwest marked another chapter in conservation history. To local citizens and resource managers this decision did not come as too big a shock. Salmon have long been considered a regional icon with many people devoted to their survival. Stream restoration efforts to improve spawning and rearing habitat for the fish had been gaining momentum for a number of years.

The mighty Skagit River running from Canada through Ross Lake National Recreation Area, the Mt. Baker-Snoqualmie National Forest, State and Private lands is the second largest watershed in Washington. Of the more than 20 species and stocks of native salmon, steelhead, trout and char occurring in the Skagit River, only the chinook salmon was listed as a threatened species in the March decision. Two other stocks, Skagit coho and Coastal sea-run cutthroat trout, are Federal candidate species that may be considered in the future. Bull trout were proposed as threatened by the US Fish and Wildlife Service in June, 1998.

Stretches of the Skagit River along with segments of the associated Cascade, Sauk and Suiattle Rivers were designated the Skagit Wild and Scenic River System over 20 years ago. Effective management of the Skagit W&SR System depends on cooperative stewardship of the outstanding and remarkable values recognized in its designation. Healthy fish stocks as well as abundant wildlife and scenic qualities warrant protection and enhancement.

The Forest Service, North Cascades National Park, non-profit North Cascades Institute, and other partners have organized activities to explore and protect the river as a whole system, with an emphasis on the relationship between watersheds and fisheries. One such activity, designed to reduce human disturbance to spawning salmon, focuses on educating river users to prevent unintended impacts and poaching. Such cooperative efforts between government agencies, educational institutions and private citizens will help move resource management and conservation well into the next century.

Do your part to help spawning salmon!

Be an observant river visitor:

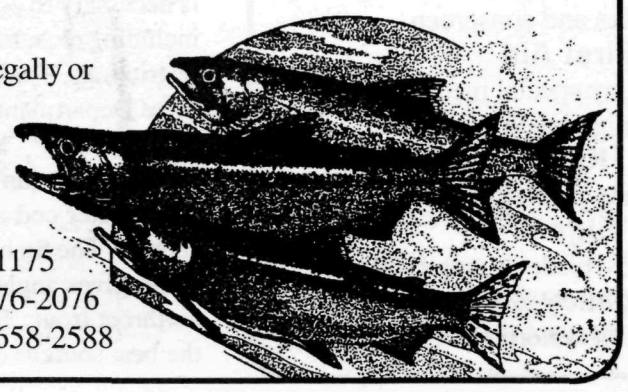
- Don't disturb salmon that are swimming upriver–they use the last of their strength to spawn.
- Avoid riverbed gravel where salmon eggs could be incubating.

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.

Report illegal fishing:

- If you see someone fishing illegally or disturbing spawning salmon, contact the Washington State Patrol Office for your location:
  - Skagit County–(360) 757-1175
  - Whatcom County–(360) 676-2076
  - Snohomish County–(360) 658-2588



Monitoring for Preservation

For thousands of years the North Cascades have evolved little influenced by human activity. Only in the last hundred years have human-caused impacts to the ecosystem become very significant. The first part of the National Park Service mandate is to preserve the natural processes, flora, and fauna within the parks, and to leave them unimpaired for future generations. Reversing the changes that we have caused and preventing further impacts from occurring are imperative to protecting our natural and cultural heritage and allowing our descendants to experience the land as we have, natural and wild. One great challenge is distinguishing between natural variation and human-induced changes; in most cases we have nothing to which to compare current conditions. To establish baseline values for comparison and to detect changes as they occur, the park is establishing a program of Long Term Ecological Monitoring (LTEM). Information obtained will be used to make sound management decisions and reduce further human impact.

North Cascades National Park Service Complex has been selected as a prototype park for the nationwide LTEM program, in part because of its diversity of relatively pristine lakes and rivers. Because the vast number of species and associations make it impossible to measure everything in the ecosystem, inventories are being made of plants and animals that can serve as indicators of change. Species or groups of species are selected as indicators because they are sensitive to changes in their environment, or because they are keystone or umbrella species. A keystone species is one that affects the livelihood of a large, interconnected web of species around it as either a food source or a predator; umbrella species are those that mirror the health of many other species.

Within aquatic ecosystems, several groups of macroinvertebrates (certain insects, for example) have been selected as indicators of water quality. Each body of water has a characteristic distribution of these species; changes in the distribution point to a change in water quality. It is much easier and less expensive to count "bugs" than to perform extensive chemical analyses of water quality. In the case of air quality, lichens are good indicators because they rely upon airborne nutrients and show effects of pollution at very low concentrations.

Populations of keystone species such as salmon and other anadromous fish are also monitored. Salmon play a unique role in the Pacific Northwest—in addition to being a major food source for many animals, they return nutrients from the rich ocean water inland when they swim upstream to spawn. Through the actions of scavenging eagles, bears, and other wildlife, the nutrients carried in the salmon are returned to the forest ecosystem.

Another important part of the North Cascades ecosystem currently being monitored is the advance and retreat of glaciers. Meltwater from glaciers provides much of the water in the streams during the summer months, creating a more continuous flow. The number and size of glaciers has decreased with the warming of the atmosphere since the end of the little ice age in the middle of the 19th century. This decrease could lead to lower summer flows in many streams, impacting the already threatened salmon runs.

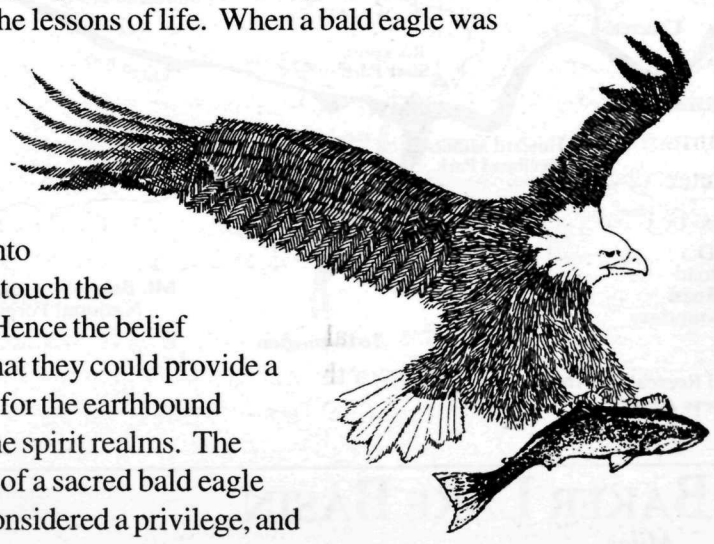
Impacted areas within the park are not the only places where information gathered through the LTEM program can be used. Information gathered in a survey of the Chilliwack River in the northwest corner of the park will help restore impacted lands within the park, to the north in British Columbia, and on adjacent US Forest Service lands. While there is virtually no place on earth that does not show evidence of human impact, the lands in the park are among the most pristine in the world. To preserve and pass these lands on to our descendants should be among our highest goals.

Spirit of a Nation

The images we link to the bald eagle are wild and sacred ones. Soaring birds ride the air currents swift as thought and graceful as a breeze. As our national symbol the bald eagle embodies much that we hold to be good and admirable in ourselves. It is a bird full of power and beauty. Its scavenger habits make it a proud survivor. The freedom expressed by a bald eagle on the wing is envied and admired by all.

It is no surprise then that these birds attract a lot of human attention whenever they visit an area in large numbers. The Skagit River is one of these places, attracting one of the largest winter gatherings of bald eagles in the contiguous United States. They travel here from places such as British Columbia and Alaska to take advantage of the late run of fall chum salmon. The spawned-out salmon carcasses are a desired commodity for bald eagles trying to eat enough food to sustain themselves through the winter. The bald eagles in turn provide a much needed service, cleansing the river of decaying remains, and returning the nutrients stored in the fish to the land.

The United States is not the first nation to hold the bald eagle in high regard. Many nations of Native American people viewed this awe inspiring raptor as a sacred being, and a much loved teacher of the lessons of life. When a bald eagle was seen flying at great heights it seemed at times to disappear into the sun, to 'touch the heavens.' Hence the belief prevailed that they could provide a connection for the earthbound people to the spirit realms. The possession of a sacred bald eagle feather is considered a privilege, and perhaps even a mark of courage and honor. *Note: a permit is required for possession of feathers of any bird of prey, including bald eagles.*



There is much to admire about the bald eagle. The Skagit River is fortunate indeed to host this splendid bird in such large numbers every winter. It does not bring just its physical presence to this already rich and diverse area. It also bears the spirit of many nations.

Likable Lichens

Although rangers don't often gossip, you might hear us talking about Alice Algae, who took a likin' (lichen) to Freddie Fungus. But you probably knew that, didn't you? After all, they are seen together frequently. They (the algae and the fungus) are two independent organisms that join together in mutualistic symbiosis to form one composite life form (the lichen). Mutualistic symbiosis is a term biologists use to describe a relationship in which each organism benefits from the other's presence - a partnership of sorts. (However, the extent of the partnership is in debate - some lichenologists dispute how beneficial the relationship really is to the algae.) The type of algae involved are tiny, single-celled forms. Algae have the ability to create food through photosynthesis, but are vulnerable to the elements. Fungi, when alone, are usually found in the form of mold, mildew, or mushrooms. They are better adapted to environmental extremes, but must invade or scavenge for food.

When found together, algae provide carbohydrates to their fungal partner and fungi provide protection to their algal partner. Together, they exploit habitats where they could not survive independently. As a result, the forest in the North Cascades is literally covered with lichens. They are on trees, rocks, and even old buildings. They also display a rich diversity of forms, which to many observers is the beauty of lichens. Lungwort (*Loberia pulmonaria*), looks like a rubbery piece of lettuce and is easy to find scattered along the ground, especially after a windstorm has knocked it out of the canopy above. Common witch's hair (*Alectoria sarmentosa*), looks like green, stringy hair hanging off tree branches. Lichens provide food for animals such as flying squirrels and material for birds' nests, and they also act as a nitrogen fixer for the forest. Now aren't you glad that Alice and Freddie get along?

Twilight Flyers

One of nature's most amazing displays is her nightly "changing of the guard". It occurs when diurnal (daytime) animals are replaced by crepuscular (appearing or flying in the twilight) and nocturnal (nighttime) animals. By splitting up the day into shifts, all animals receive the space they need to hunt, breed, and sleep. To observe this thrilling event, you simply need to find a nice spot by the river where swallows are arcing and diving gracefully over the water. As darkness rises, a subtle replacement occurs of bats for swallows - noticed mainly by the change in flight to a fluttering, indirect pattern.

The bats are busy catching insects using a type of sonar called echolocation. By producing rapid sound pulses and listening to the returning echoes, they can detect objects no wider than a human hair. (Makes one wonder why people say they fly into your hair - why would they want to do that? More likely they are flying overhead to catch the insects swarming around you.) While most bats eat insects, some are carnivorous (eating fish, lizards, etc.), some prefer fruit or nectar, and less than one percent drink blood. Wow! An insect predator that also pollinates flowers and disperses seeds. But that's not all - bats also provide nitrogen for fertilizing fields in the form of guano.

Worldwide, there are over 1,000 species of bats. They range in size from the flying foxes of Asia, with a 6 ½-foot wingspan, to the bumblebee bat of Thailand, with a 6-inch wingspan. Regionally, there are 16 types of bats, all of which are small, insect-eating species. But what kinds of bats live in the North Cascades? Last summer, park biologists Bob Kuntz and Roger Christophersen recorded bat calls and are now using a computer to convert the calls into visual diagrams. These diagrams are then used to identify bat species. So far, they have learned that little brown myotis, Yuma myotis, California myotis, big brown bats, hoary bats, and silver-haired bats are all present in the park. Through continued research, Bob and Roger expect to record additional species, identify occupied habitats, and learn more about bat behavior. Results will be used as a baseline to measure population and distribution changes in the future, and to ensure bat conservation through protection of identified habitats.

A Fishy Meal

Twilight is falling along the river, where high peaks' shadows had begun creeping by late afternoon. Standing in the mud of a quiet pool a bear – a shadow itself in the gathering evening – reaches into the water. It scoops up with dexterous paws the spawned-out carcass of a salmon. Grasping the fish in its mouth the bear moves several meters into the security of the riverside brush before settling down to eat. To the unseen observer across the water the bear seems to melt into those silent willows, bear and fish both ghosts in the blue-cast light of dusk.

This scene is played out wherever grizzly bears and black bears share the landscape with salmon. It is a story of marvelous symmetry, in which the salmon and bear nurture each other.

Bears through the ages have scooped from wild rivers the tired or decomposing bodies of salmon that had returned to spawn. Seeking security, some bears carry their meals a distance from the river. Others feed while in or near the water. On shore their leftovers feed many organisms, from ravens, eagles, foxes and coyotes which scavenge them to microbes that finish them off. The distribution of the fish back into the earth continues wherever the bear and the scavengers relieve themselves – scattering fish fertilizer amidst the forest. The same occurs within the river: microbes break down bears' fishy feces, as well as remaining salmon carcasses.

The return of these nutrients to the earth fertilizes the riparian forest, which in turn protects the next generations of salmon by reducing erosion and providing cooling shade to spawning streams. Nutrients returned directly to the water nurture developing salmon eggs, strengthening them and allowing more to flourish.

This cycle has been disturbed with the salmon's decline. Still, although salmon may never regain their former glory, hopefully it is yet possible to mend this tear in Life's web. In the meantime, bears are resilient. They eat most anything, and the North Cascades provide fine habitat. With effort on our part, both bears and salmon will have a long future together in these wild mountains – and in the hearts of people for whom both life forms hold spiritual meaning as deep as the shadowed river valleys.

National Forest Fee Information

The Mt. Baker Ranger District is continuing to participate in a Recreation Fee Demonstration Project initiated by Congress in 1996. Proceeds from these programs are assisting funding for trails and recreational facilities throughout the National Forest system.

What does this mean to you?

A Regional Trail Park Pass is required at trailheads on national forest lands in Washington, Oregon and parts of Idaho. Trail Park Passes are available as a $3 one day pass or a $25 annual pass at all Forest Service offices and selected local vendors. Golden Age and Golden Access cardholders may purchase passes for half-price.

During the summer season a Heather Meadows Pass is required for parking in the Heather Meadows area. Costs are $15 for a seasonal pass or $5 for a daily pass, good for three consecutive days. Motorcycles as well as Golden Age and Golden Access cardholders enter the area for half-price. Heather Meadows honors Golden Eagle Passports and any other National Forest Annual Pass including the Regional Trail Park Pass.

For more information on the various Fee Demonstration Programs, contact your nearest Forest Service Office. A listing of area offices with telephone numbers is located on the back page of this publication.

Note: The Okanogan National Forest on the east side of scenic State Route 20 accepts the Regional Trail Park Pass at trailheads, but requires their separate pass for overnight use in specific areas. For further information on the Okanogan's program, call (509) 996-4000.

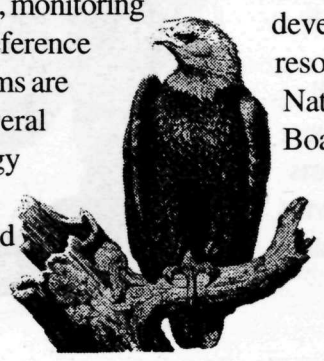
Trail Park Passes are not required for trailheads located within the boundaries of the North Cascades National Park Service Complex.

Skagit Wild and Scenic River System

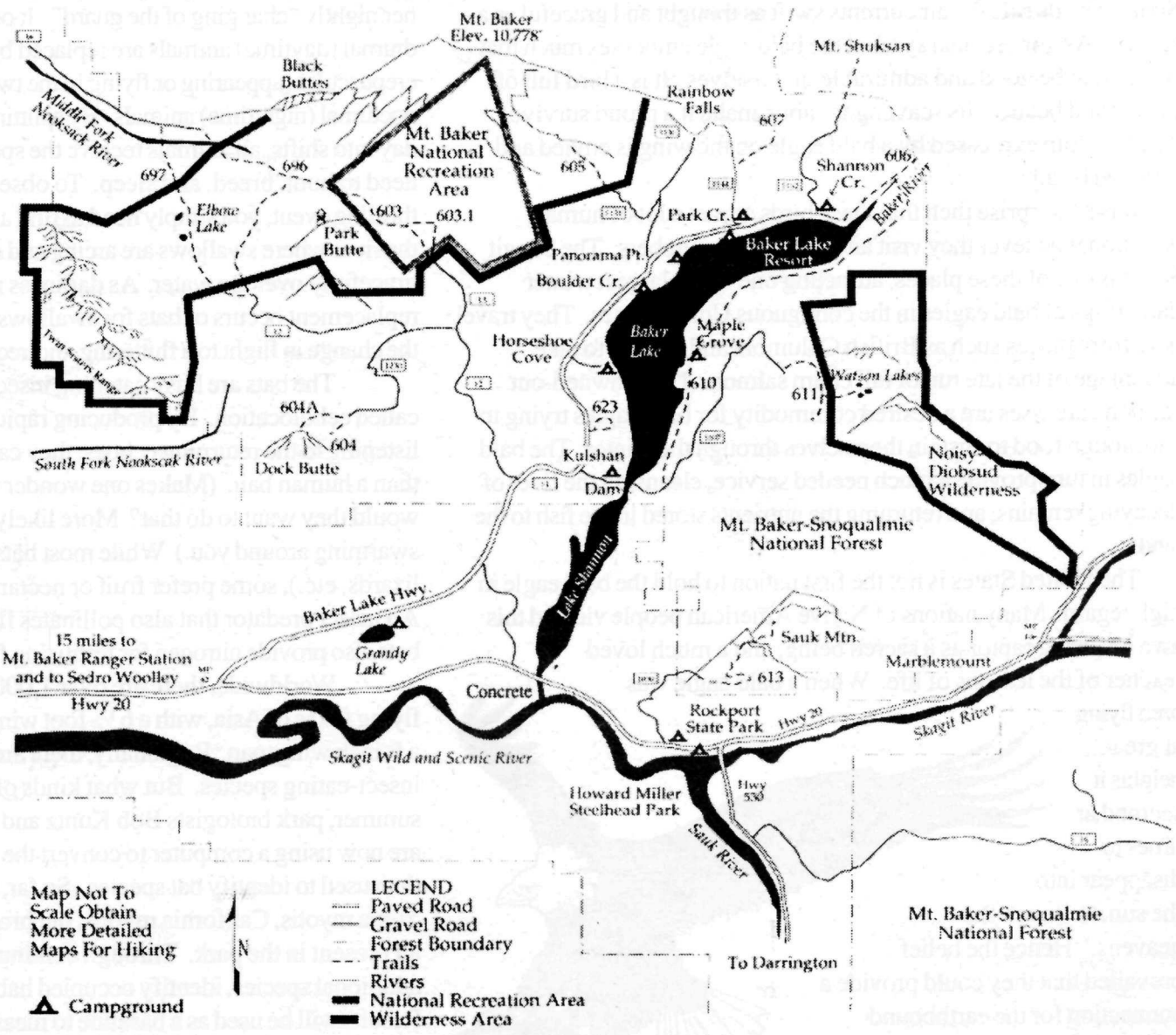
Remarkable fisheries, wildlife and scenic qualities led to the designation of segments of the Sauk, Suiattle, Cascade and Skagit Rivers in the federal Wild and Scenic Rivers System in 1978.

The Skagit River has a special kind of magic–the magic of salmon returning from the ocean to spawn and die, followed by the return of one of the largest populations of wintering bald eagles in the Pacific Northwest.

During the winter months of the eagles' visit to the Skagit, Eagle Watcher Volunteers staff sites along the Skagit River between Rockport and Marblemount. Volunteers help manage visitor use along the river by distributing handouts about eagle watching etiquette, monitoring spotting scopes and sharing reference materials. Interpretive programs are also offered year-round at several locations on eagles and ecology of the Skagit River. The Eagle Watcher Program is sponsored by the Forest Service and North Cascades Institute.



State Route 20 Access Trails Map



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

Baker Lake

This 9 mile long reservoir, formed by the Upper Baker Dam, has been a popular recreation destination for many years. Developed campgrounds operated by a Forest Service concessionaire and a summer resort are located along the western shoreline. Fees are charged for overnight stays in developed campgrounds and at the resort, as well as for parking at National Forest Trailheads. Boating and fishing are governed by Washington State regulations. For campground information see page 9; for resort information call 1-888-711-3033.

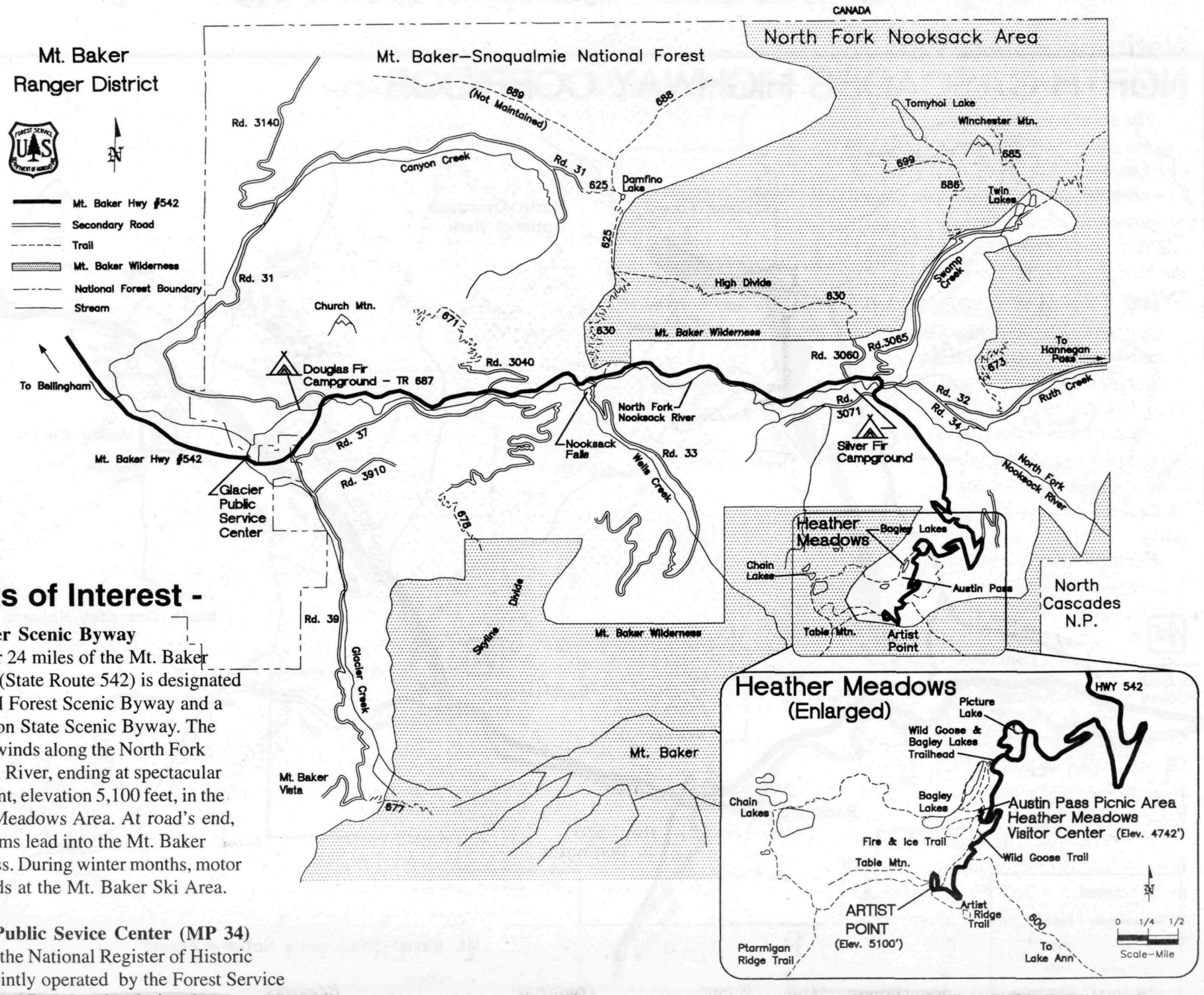
Mt. Baker National Recreation Area

8,600 Acres; established 1984

Appearing as a 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.



Points of Interest -

Mt. Baker Scenic Byway
The upper 24 miles of the Mt. Baker Highway (State Route 542) is designated a National Forest Scenic Byway and a Washington State Scenic Byway. The highway winds along the North Fork Nooksack River, ending at spectacular Artist Point, elevation 5,100 feet, in the Heather Meadows Area. At road's end, trail systems lead into the Mt. Baker Wilderness. During winter months, motor traffic ends at the Mt. Baker Ski Area.

Glacier Public Sevice Center (MP 34)
Listed on the National Register of Historic Places. Jointly operated by the Forest Service and National Park Service during the summer season, mid-May through mid-October.

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
Scheduled for completion mid-June, 1999.
This 0.25 mile travelway will offer visitors a chance to see some of the components of a stream rehabilitation project. Interpretive panels along an elevated boardwalk designed for wheelchair accessibility focus on the importance of streamside support and healthy habitat for the fish. Located on Forest Road 37. Contact the district at (360) 856-5700 for current conditions.

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

Heather Meadows Area (MP 53)
Located along the upper reaches of the Mt. Baker Scenic Byway, this spectacular subalpine setting offers day use recreation to forest visitors. Heather Meadows Visitor Center is open during the summer season. The area has self-guided interpretive trails, vistas, naturalist programs, picnicking, and hiking opportunities into the Mt. Baker Wilderness. Mt. Baker Ski Area operates here during the winter months. Fees charged for parking during the summer season.

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

Entering Wilderness Requires Preparation

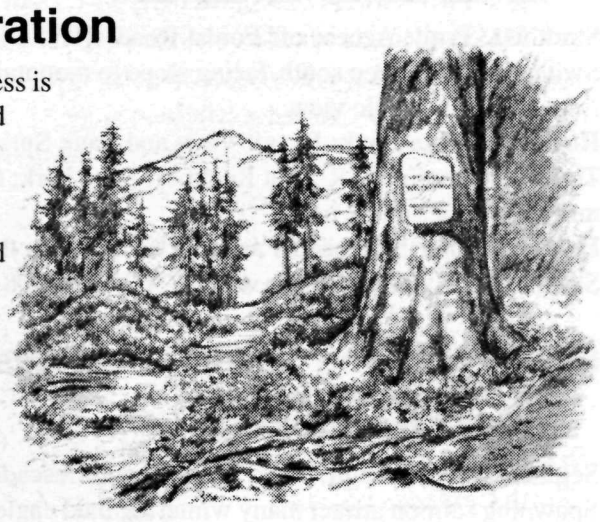
The Mt. Baker Ranger District contains two Wilderness areas, Mt. Baker and Noisy-Diobsud, and part of a third, Glacier Peak.

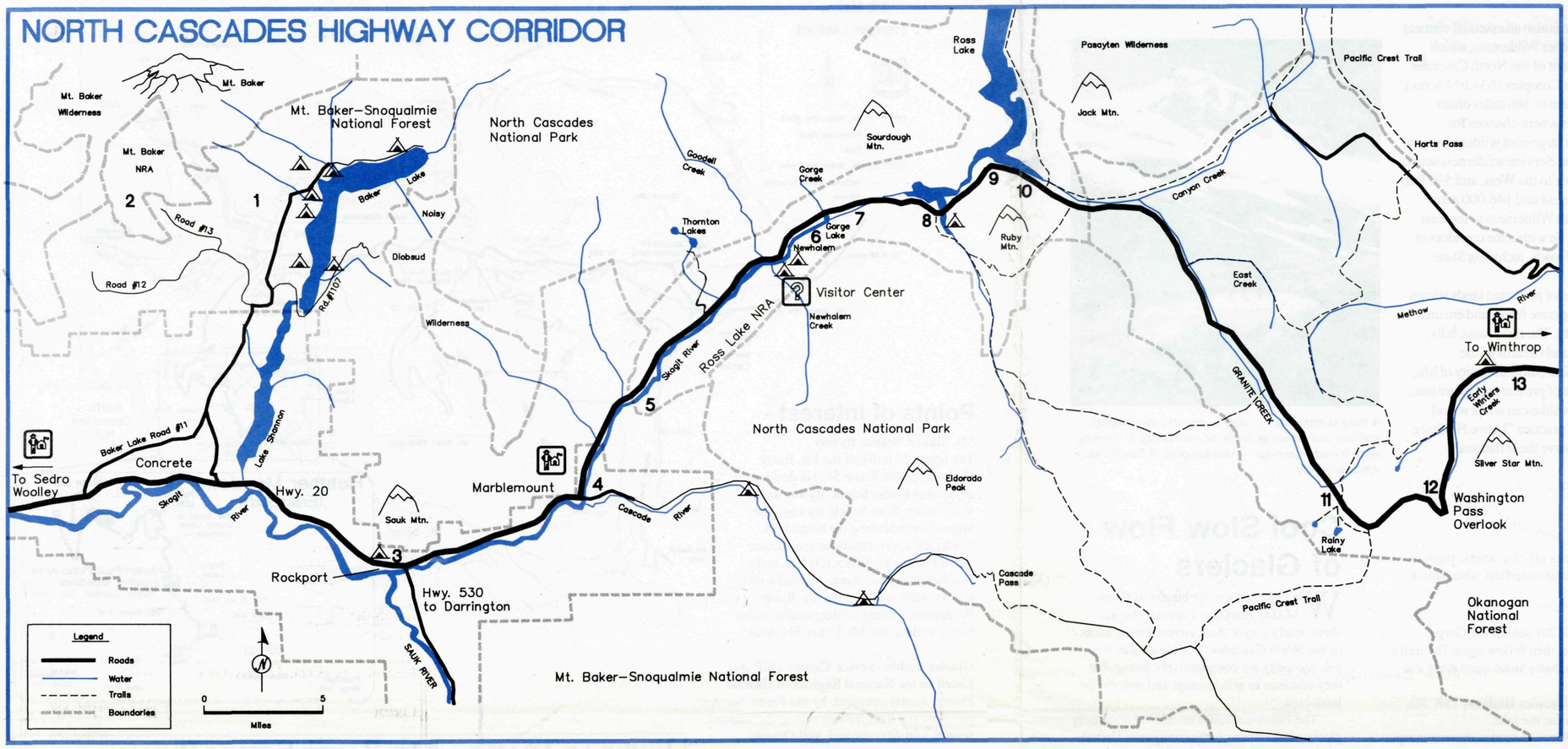
When entering Wilderness areas, be prepared for risk and challenge. These lands remain in a wild and natural state, untrammeled and uninhabited by human beings. The terrain can be rugged and the weather unpredictable.

Keeping Wilderness intact for future generations requires some regulation. Party size in Wilderness is limited to 12, including saddle and stock animals.

To preserve the solitude of others, no motorized or mechanized equipment is allowed in Wilderness, and campfires are prohibited in many areas.

Please check with the nearest ranger station for current conditions before entering Mt. Baker Ranger District's Wilderness areas.





	MAP #	Self-Guided Interpretive Trails
•	1	**Shadow of the Sentinels:** 0.5 mile (0.8 km) trail through old growth forest.
•	6	**Newhalem Area Day Hikes:** See chart on page 12.
•	6.5	**Gorge Overlook Trail:** Opening Summer, 1999; offers spectacular views of deep canyons, Gorge Lake, and Gorge Dam.
	8	**Thunder Woods Nature Trail:** .9 mile (1.4 km) loop above Thunder Arm of Diablo lake with interpretive guide brochure.
•	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 platform.
•	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.

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
Sedro-Woolley	360-855-1841
Concrete	360-853-7042
Marblemount	360-873-2250
East Side:	
Winthrop	1-888-4-METHOW 509-996-2125
Methow Valley Central Reservations	1-800-422-3048 509-996-2148
Chelan	1-800-4-CHELAN 509-682-3503
Wenatchee	1-800-57-APPLE 509-662-2116

1 Baker Lake Milepost 82 (off SR 20)

Nine-mile-long recreational reservoir. Developed campgrounds accessed off the Baker Lake Highway. Maple Grove Campground on the lake's eastern shore is accessed by boaters or hikers along the Baker Lake Trail (formerly East Bank Trail).
Baker Lake Resort: 1-888 711-3033. Store, camping, cabins, and boat rentals.

2 Mt. Baker National Recreation Area M.P. 82

See map including Mt. Baker NRA on page 6.
Access via Forest Roads 12 and 13 off Baker Lake Highway. Backcountry trails and camping.
Mt. Baker NRA trailhead camp available for one night, for horse users (after August 1), and for hikers.

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: Skagit View and Sauk Springs Trails loop south of SR 20 at Rockport State Park; five more trail miles circle park.
Howard Miller Steelhead Park: At Rockport on the Skagit River. 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) and **North Cascades National Park Backcountry Permits, (360) 873-4500.** Permits are free; available in person only.

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.

5 Ross Lake National Rec. Area M.P 111

117,574 acres; administered by North Cascades National Park Service Complex *(see pages 12-13).*
Thornton Lakes Road/Trail: access 4.7 miles up steep windy, gravel road *(see trail chart on page 12 for details).*
Goodell Creek Campground: Rustic sites along Skagit River; open all year, but without water and services in winter; $7. Raft launch. Picnic shelter.

6 Newhalem M.P. 120

More detailed map of Newhalem Area on page 12.
Newhalem Creek Campground - Open May to September; $10.
North Cascades Visitor Center - Interpretive programs, books, and maps. Breathtaking view of the Picket Range. Open daily mid-April through October; weekends only during winter months.
Newhalem Area Trails - Rock Shelter, To Know a Tree, River Loop, Trail of the Cedars; Historic Walk.
Skagit General Store - Supplies and souvenirs.
Ladder Creek Falls - Located behind Gorge Power House. Loop trail through flower gardens and pools; lit at night.
Gorge Overlook and Gorge Creek Falls - 242-foot waterfall three miles east of town.

7 Diablo M.P. 126

Seattle City Light tours of **Ross and Diablo Dams**. Informative presentation, boat trip, and dinner. Summer Thursday through Monday only. Fall weekend tours. Museum and snack bar at tour office (206) 684-3030.
Sourdough Trail: Strenuous ten mile round trip hike up Sourdough Mountain.

8 Colonial Creek Campground M.P. 130

Campground on Diablo Lake. $10 fee from early May to October.

9 Diablo and Ross Lake Overlooks M.P. 131-134; Winter Road Closure

Diablo Lake Overlook — Spectacular views and detailed geology exhibit.
Ross Dam Trailhead and Happy Creek Forest Walk.
Ross Lake Resort — (206) 386-4437. Floating cabins, boat rentals, portage service, and water taxi.
Winter Road Closure — SR 20 typically closes around 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.

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.

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

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

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. Reservations can also be made at some Washington State Parks by calling 1-800-452-5687. North Cascades National Park does **not** offer individual camping reservations.

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 National Park and Forest Service campgrounds offer ranger/naturalist programs.

Location	Campground + = Reservation Available	Managed By	Accessible Facilities	User Fee	Drinking Water	Flush Toilets	Vault Toilets	Garbage Facilities	Boat Ramp	Hiking Trail	Fishing	Dump Stations	Hook-ups Available	Number of Campsites
Hwy 542 *Map page 7*	Douglas Fir +	FS	•		•		•		•	•				30
	Silver Fir +	FS	•		•		•		•	•				21
Baker Lake Hwy. MP.14-MP.23	Kulshan	P	•	•	•	•		•	•				•	79*
	Horseshoe Cove +	FS	•	•	•	•	•	•	•			•		34
	Panorama Point +	FS	•		•		•	•	•			•		16
	Boulder Creek +	FS	•				•	•						10
	Park Creek +	FS	•				•	•				•		12
	Shannon Creek +	FS	•		•		•	•	•			•		20
Hwy 20 MP.81-MP.180	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					•							4
Via B.C.	Hozomeen	NP			•		•		•	•	•			122

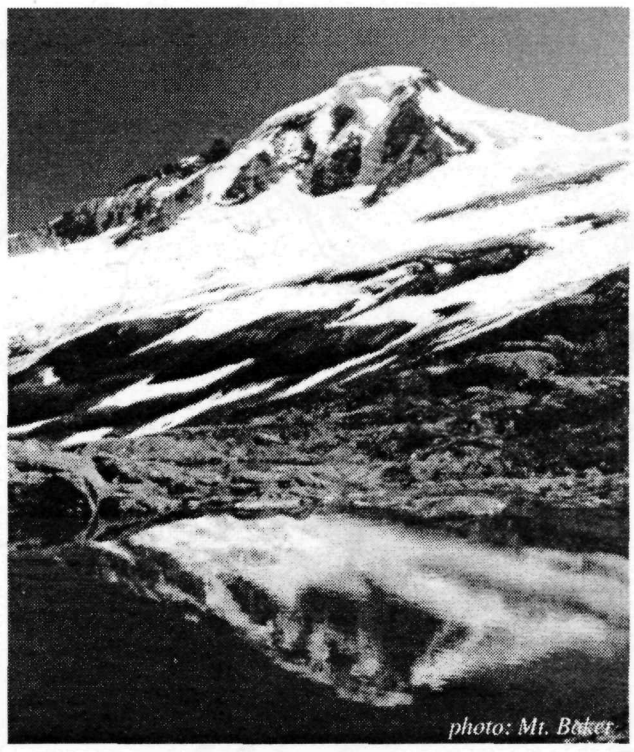
A Wilderness Treasury

For over a decade, the Forest Service and the National Park Service in Washington State have celebrated the challenges associated with managing large tracts of designated wilderness. Many of the wilderness areas in the North Cascades are adjacent to each other, creating a nearly contiguous ecosystem of about 2.5 million acres. Cooperative management of these areas allows natural processes to occur without regard to political boundaries.

In the Mt. Baker Ranger District, National Forest Wilderness areas include the 117,900 acre Mt. Baker Wilderness, the 14,300 acre Noisy-Diobsud Wilderness, and part of the Glacier Peak Wilderness. The Mt. Baker Wilderness offers opportunities to mountain climb, hike, ride stock, and experience subalpine environments. Trails are relatively short, allowing travel through forested slopes to scenic ridgelines and alpine lakes. In comparison, the Noisy-Diobsud Wilderness has only a single access trail, which leads to Watson Lakes. Chances to explore beyond this trail exist for backcountry travelers proficient with orienteering over rugged terrain.

Personal challenge is also an essential element of visiting Stephen Mather Wilderness, which encompasses 93 percent of the North Cascades National Park Service Complex (634,614 acres). An extensive trail system of 386 miles offers access to remote areas where chances for solitude abound. This large core wilderness area is surrounded by Forest Service wilderness areas: those mentioned above to the West, and 530,000 acre Pasayten Wilderness and 146,000 acre Lake Chelan-Sawtooth Wilderness to the East. Non-wilderness areas lie within the corridors of the limited network of roads, including State Route 20.

This large expanse of protected lands allows natural processes to operate freely and ensures their continued integrity. The mountains, hills, valleys, lakes, rivers, and streams of the Northwest include an incredible diversity of life, hanging in the balance of present and future use. Managers and visitors alike can adapt sound wilderness ethics and practice "Leave No Trace principles to help preserve these national treasures.



A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise. --Aldo Leopold, A Sand County Almanac (1949)

The Wonder of Waterfalls

Water is the essence of the North Cascades. Water falls from the sky, melts off of glaciers, rages in rivers and — most dramatically — plunges from high places in spectacular waterfalls, abundant in these mountains.

Where to discover waterfalls:

Ladder Creek: Located at milepost 121 on the North Cascades Highway (SR 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. The trail includes some steep steps and handrails. Flashlights are advisable at night.

Gorge Creek Falls: Located between Newhalem and Diablo on the North Cascades Highway (SR 20), Gorge Creek drops 242 feet in a breathtaking plunge. A large parking area is near the falls.

Rainbow Falls (Baker Lake): Located in the Baker Lake Basin, Rainbow Creek cascades down a steep gorge with more than a 100 foot drop. On a sunny day you will see 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 Highway (SR 542) past the town of Glacier, the North Fork Nooksack River drops more than 100 feet into a roaring mass of boiling water. One of the first hydroelectric power plants in Washington uses this drop to generate power.

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 red-cedar blanketed nearly all of the Pacific Northwest. These trees were so big that a wedge cut in a trunk could hold a dozen or more timber workers posing for a picture. Early settlers would sometimes make homes out of hollow stumps just by building roofs over them.

Now most of these old giants are gone, but in the wilds of the North Cascades, you can still visit forests that have never been cut and still retain all 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, downed logs, and standing dead trees, called snags. To be considered an ancient grove, these trees must be at least 200-300 years old.

Old-growth forests are not defined solely by trees. Ancient forests are a magnificent and complex strand in 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 years 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. Interpretive plaques tell the story of this ancient creekside forest.

State Route 542 — Horseshoe Bend Trail across from Douglas Fir Campground at milepost 36. 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; **Baker Lake Trail** (formerly known as East Bank Trail) follows the east shore of Baker Lake and enters the Baker River drainage at the upper end.

Cool Slow Flow of Glaciers

When the last ice age climaxed about 14,000 years ago a continental ice sheet nearly a mile thick covered most areas of the North Cascades. The alpine glaciers you see today are comparatively young, but they continue to grind, sculpt and reshape the landscape.

The North Cascades are the most densely glaciated mountains in the contiguous United States. Glaciers form when more snow accumulates each winter than melts or evaporates during warmer weather. The enormous weight of that accumulation recrystallizes the snow into ice, and the glacier begins to flow downhill. Glaciers can flow several feet per year, and it is this movement that distinguishes glaciers from non-moving ice fields.

Glaciers are vitally important to the North Cascades region's ecology and hydrology. They influence vegetation growth, move and carve rock, and add minerals to the ecosystem. During times of year when little rain falls, meltwater accounts for all the water in some streams.

Where to view glaciers:

Mt. Baker National Recreation Area — The trails on the south side of Mt. Baker provide tremendous views of glaciation at work. Six-mile long **Scott Paul Trail** crosses the terminal moraine below the Squak Glacier. **Railroad Grade Trail** deposits hikers at the Easton Glacier on Mt. Baker.

State Route 20 — Glaciers on Colonial and Snowfield Peaks are visible from the Ross Dam Trailhead at milepost 134. From the **Cascade Pass parking area** at the end of Cascade River Road you can view spectacular glaciers on Johannesburg Peak.

State Route 542 — From Glacier Creek Road (#39) hike **Heliotrope Ridge Trail** to Mt. Baker's Coleman Glacier and dynamic views. From Heather Meadows, several of the 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.**

More than Majestic Mountains:

The Significance of North Cascades National Park Service Complex

The North Cascades NPS Complex was established by Congress to preserve the majestic scenery and unique natural features of this beautiful landscape. Since its inception in 1968, the park's mission has evolved to include concerns for the entire ecosystem.

- Ice Sculpted Mountains: Jagged peaks of the North Cascades rise above deep forested valleys—terrain carved by moving ice. The Park Complex contains more glaciers than any other national park in the United States outside Alaska. These glaciers are an important source of water for salmon, other wildlife, plants, and people in the Puget Sound region.
- Richness of Life: The Park's 9,000+ feet of vertical relief and the great contrast between climates east and west of the Cascade crest provide habitat for one of the greatest diversities of plant life in North America and for varied fauna including rare and sensitive species. Ancient forest holds millions of living organisms and thousands of diverse life forms.
- Cascading Waters: The variety of waters (lakes and rivers) and topography provides a large and expanding nearby population with a wide array of recreational opportunities, from boating and camping to climbing and backpacking.
- Vast Wilderness: The Complex, which adjoins public lands preserved in Canada, is the core of one of the largest protected wild areas in the United States; a substantial portion of it is designated Wilderness. Humans here are visitors, who come to enjoy nature on nature's terms.
- Human History: The Complex includes 49 National Register structures and sites, 3 National Historic Districts, and over 250 archeological sites. It was home to at least 4 tribes whose descendants now live nearby and includes, within its boundaries, three contemporary communities.

Ross Lake Enhancements Underway

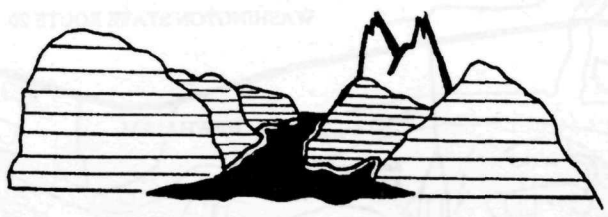
Visitors and the natural and cultural resources of Ross Lake National Recreation Area will be the beneficiaries of innovative agreements reached through the Skagit River Hydroelectric Project relicensing, approved in 1995. The Project includes three dams and associated power facilities owned by Seattle City Light within Ross Lake National Recreation Area.

The agreements were negotiated among Seattle City Light, tribes, conservation groups, and various state and federal agencies, including the National Park Service. They provide project funding of more than $100 million over the 30 years of the license.

The projects are designed to mitigate the effects of the dams in five categories: fisheries, recreation and aesthetics, wildlife, erosion and cultural resources.

Under the agreements, Seattle City Light will fund the North Cascades Environmental Education Center, one of many exciting projects.

North Cascades Institute, a non-profit educational organization, will operate the



center with oversight from Seattle City Light and the National Park Service. Construction will begin in 2000, and the center will open in 2001 to offer classes to school groups, adults and Elderhostel participants.

Other projects include:

- Gorge Falls overlook and interpretive trail (open Summer 1999)
- Wildlife monitoring
- Salmon studies in the Skagit River
- Greenhouse propagation of native plants for revegetation of impacted sites
- Protection plan for Ross Lake archeological sites
- Improved raft launch and new picnic shelter at Goodell
- Improvements around the boat launch at Hozomeen

Events to consider

as you plan your visit to the North Cascades

1999

Celebrating Wildflowers, various places around the Mt. Baker-Snoqualmie National Forest and North Cascades National Park Service Complex ..... Spring/Summer

Lake Fishing Season Opens ..... April 24

State Route 20 Opens ..... Late April–Mid-May

Glacier Public Service Center Opens ..... Mid-May

Earth Day Activities and National Parks Week. North Cascades National Park. Call (206) 386-4495 for details ..... April 18-25

Ski to Sea Race. Starts at Mt. Baker Ski Area, ends at Bellingham Bay ..... May 30

National Trails Day ..... June 5

Wildflower Festival, Darrington ..... June 19

Possible opening of Heather Meadows Visitor Center ..... Mid-July

Alpine flowers in bloom ..... July-September

National Park Day ..... August 25

National Public Lands Day, Mt. Baker Ranger District ..... September 25

Fall colors in high country begin to peak ..... End of September–Beginning of October

2000

Skagit Bald Eagle Festival, Concrete, Rockport, Marblemount ..... February 5-6

Trailsfest, Seattle ..... Mid-March

A Different Breed of Volunteer

Volunteers do many things to help the staff in the North Cascades National Park Complex. In 1998, volunteers donated approximately 22,000 hours of work helping the National Park Service with projects ranging from trail maintenance and revegetation of impacted areas to historical fire research.

Each volunteer brings special skills and abilities to his or her work. One volunteer in Lake Chelan National Recreation Area uses his great sense of smell to help the National Park Service. His name is Trace and he's a six-year-old border collie trained for search and rescue. Trace uses his nose to help rangers find lost people in the park and surrounding areas.

Trace and his handler, Kelly Pontbriand, live in Stehekin and have undergone extensive training to become a search dog team. The training of a search dog starts when the dog is a young puppy. It takes approximately two years of training before the dog and handler are certified to respond to search and rescue missions as a search dog team. Search dogs are trained to locate human scent above the ground, in water, and under snow and other types of debris.

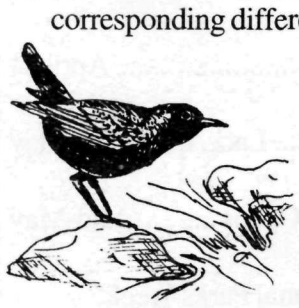
Kelly started search dog work in 1989 with another border collie named Sweep. Sweep and Kelly assisted with searches in Acadia National Park, Wind Cave National Park, Badlands National Park, Rocky Mountain National Park, and Dinosaur National Monument. Trace is Kelly's search partner now that Sweep has retired. Trace has responded to calls for searches in Colorado's Rocky Mountains, Olympic National Park and the area around Lake Chelan.

Hopefully your visit to the North Cascades will not require a wilderness meeting with the park's shaggy volunteer. While exploring the park and surrounding areas, keep safety in mind, carry the ten essentials in your pack, and let somebody know about your plans. Following these backcountry basics and using a little common sense will help you have a safe and enjoyable wilderness experience.

Ross Lake National Recreation Area

Thirty miles of State Route 20 access Ross Lake National Recreation Area, offering many of the region's camping, hiking and boating opportunities. The highway follows the upper sections of the Skagit River Watershed. The free-flowing section of the Skagit River below Newhalem provides excellent rafting and wildlife observation. A raft launch is located adjacent to Goodell Creek Campground near the new picnic shelter. Careful planning is necessary to float the swift Skagit River.

Three reservoirs provide power for Seattle City Light and recreational activities for visitors. The three dams vary in height: Gorge – 300 feet, Diablo – 389 feet, and Ross – 540 feet, with corresponding differences in lake size.



American dipper

Gorge Dam and the Gorge Creek Falls area, 3.5 miles east of Newhalem, will have improved facilities with a new interpretive overlook trail opening this summer.

Diablo Lake is the central jewel of the three lakes, offering the best accessibility. It is open all year to fishing and boating; a boat launch is available at Colonial Creek Campground. There are three boat-in sites along the shore of Diablo Lake, which require a free backcountry permit (*see page 2*). Thunder Creek, the major tributary to the lake, carries the fine glacial sediment which gives the lake its brilliant turquoise color. A 28 mile hiking route through the park into the Stehekin Valley follows Thunder Creek to Park Creek Pass. This classic trail has beautiful ancient forest along the stream.

Ross Lake is the largest of three reservoirs created by the impounded waters of the upper Skagit River. Ross Lake winds nearly 25 miles from the dam north to the Canadian border at Hozomeen. During the summer, vehicle access and boat launching are possible from the north by traveling the 40-mile gravel Silver-Skagit Road south of Hope, British Columbia. Hozomeen Campground is primitive, and it is necessary to pack out all garbage.

Access to Ross Dam and Lake from the south is limited to trail and water routes. Diablo Lake, Ross Dam, and East Bank trails provide access for hikers from trailheads off State Route 20. Ross Lake Resort, (206) 386-4437, has cabins, small rental boats, and provides portage over the dam and water-taxi service to trailheads and remote backcountry campsites, which require free permits.

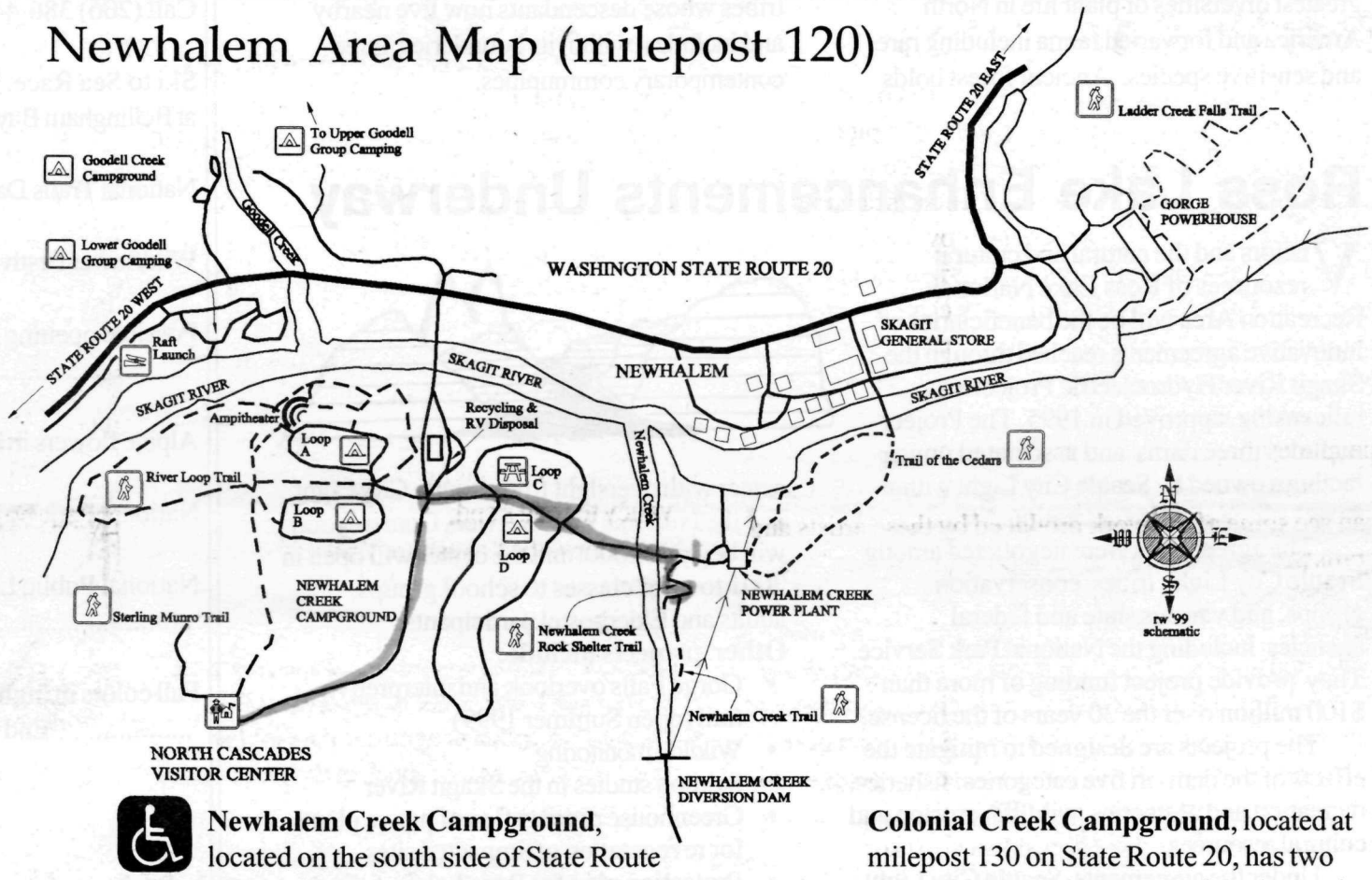
Ross Lake has a quality sport fishery of naturally reproducing trout that opens for fishing July 1 each year. The catch limit is three rainbow trout (13 inch minimum) per day. No bait or barbed hooks are allowed. If Dolly Varden or bull trout are hooked, they must be carefully and immediately released. Ross Lake's natural spawning occurs in the Skagit River above the lake and in the tributary streams like Big Beaver, Lightning, Roland, Dry, and Ruby Creeks. All of Ruby Creek and 1/4 mile upstream from the mouth of Big Beaver are closed to fishing. All other tributaries are closed for one mile upstream. A Washington State fishing license is required. Ross Lake's limited access helps protect the pristine quality of the lake and its environment.

Discover the natural and human history in the heart of the North Cascades along trails or at the Visitor Center near Newhalem.

In addition to the trails listed below, **To Know A Tree Trail** surrounds campground loop A and follows the Skagit River. Also, a **Historic Walk of Newhalem** loops around the Seattle City Light settlement for highlights of local culture and scenery.

Begin your visit at the **North Cascades Visitor Center.** Enjoy wilderness exhibits and theater programs. Plants and animals of the the mountain lifezones are highlighted through models, photographs, and videos. The region's geology and geography is detailed in the main lobby with wall maps, a relief model, and activity drawers.

Newhalem Area Map (milepost 120)



Newhalem Creek Campground, located on the south side of State Route 20 in Newhalem, has one accessible campsite in each of the campground's three loops.

Colonial Creek Campground, located at milepost 130 on State Route 20, has two accessible campsites, one each in the north and south units.

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	New boardwalk to campsite used 1400 years ago by hunting, gathering Native Peoples
Trail of the Cedars	121	.3 miles	level	very easy	Accessible. Loop trail through large old cedars. Interpretive plaques.
Pyramid Lake	127	4.2 miles	1,500 feet	moderate	Steep forest; stream; small lake
Diablo Lake	128	7.6 miles	400 feet	easy	Trailhead located across Diablo Dam
Thunder Creek	130	1.6 - 38 miles	6,300 feet	easy-difficult	Easy 1.6 miles round-trip to suspension bridge; permit needed for overnight backcountry camping
Fourth of July Pass/ Panther Creek	130 138	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	134.5	.3 miles	level	very easy	Accessible
East Bank	138	.5 - 34 miles	1,500 feet	easy	Trail east (Canyon Creek) or west (Ross Lake); permit needed for overnight backcountry camping

Lake Chelan National Recreation Area

Stehekin, in the heart of Lake Chelan National Recreation Area, is a remote community situated along the lower few miles of the Stehekin River. It is a small community with no road connections to the rest of the world, making it a pleasant escape from life's frantic pace.

Visitors and residents arrive by passenger ferry or private boat, hiking, horseback, or float plane. Boaters using federal docks on Lake Chelan need to purchase a dock site pass to utilize any of the 16 public docks provided there. A $5 daily or $40 season pass is available to help defray dock maintenance expenses.

When you arrive at Stehekin, come to the National Park Service's Golden West Visitor Center for information.

In the Golden West Gallery, the Arts and Humanities of Stehekin presents arts, crafts and programs by local and regional artists. Shows change every four weeks from May through October.

Golden West Visitor Center

The North Cascades Stehekin Lodge offers overnight accommodations, a restaurant, store, gasoline, boat moorage, bus tours and bicycle and boat rentals at Stehekin Landing.

Other businesses provide services during the summer season, including transportation, day and overnight horseback trips into the wilderness, bicycle rentals, and guided raft trips down the Stehekin River. Several businesses provide food and overnight accommodations on private property in the Stehekin Valley.

Trailheads and campgrounds along the Stehekin Valley Road can be accessed by National Park Service and private shuttle buses. The date for opening this road from High Bridge to Bridge Creek is June 18. The shuttle will begin service to the current end of the road, Glory Mountain, on July 1. Currently, the 2.7-mile section of road between Glory Mountain and Cottonwood Campground is closed to vehicles due to severe flooding during fall of 1995. Hikers, horseback riders and bicyclists will be able to reach Cottonwood Camp at the road's end, and motor vehicles will be able to go as far as Glory Mountain (21.2 miles from the Landing).

During the summer season the lodge operates a tour bus to beautiful Rainbow Falls. The tour bus leaves from the Landing just after the boat arrives.

Images of the North Cascades

The North Cascades area has inspired people for thousands of years. Native Americans used pigments found in the area to paint pictographs depicting animals and other images 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 the landscapes on canvas while photographers have captured images using their cameras. Many settlers living in the mountain valleys perfected their crafts during long winter evenings. Artists and crafts people continue to come to the mountains for inspiration.

The Golden West Gallery is a place where visitors can see some of the work produced by these artists and crafts people. The gallery, located in the Golden West Visitor Center in Stehekin, will feature six exhibits between May 7 and October 15 this year. The gallery is dedicated to increasing understanding and appreciation of the natural, historic, cultural, and artistic landscapes of the North Cascades through the arts. Exhibitors give talks, demonstrations, workshops and other programs in conjunction with their exhibits. The gallery is a cooperative endeavor of the resident artists of Stehekin and the North Cascades National Park. It is managed by the Arts and Humanities of Stehekin, a nonprofit group operated by volunteers.

This year the gallery is pleased to offer the following exhibits:

May 7 - June 2: *Art from Holden Village Winter Community.*
June 4 - June 30: *Chelan County Centennial Exhibit featuring photos, memorabilia, and experiences of these who came to Stehekin one hundred years ago.*
July 2 - July 28: *Photographs by Nancy Barnhart; Jewelry by Cheryl Farmer; Wall hangings by Jean Vavrek.*
July 30 – August 18: *Quilts by Little Sister Quilts.*
August 20 - September 15: *Mosaics and paintings by Michael "Dutch" Story; Batiks by Lori Story*
September 17 – October 15: *Stehekin Community Show*

Receptions for the exhibitors will be held on the first Friday of each new exhibit. Announcements for these upcoming events will be posted at the Golden West Visitor Center. For gallery information please write to the Arts and Humanities of Stehekin, PO Box 83, Stehekin, WA 98852.

What to do when visiting Stehekin

Hour Stay

- Visit Golden West Visitor Center, which has books, exhibits, and an art gallery.
- Learn about homesteading along the McKellar Cabin Trail. Allow 15 minutes walking time.

Three-Hour Stay

- Walk the Imus Creek Nature Trail, a 3/4 mile self-guided loop with views that starts at Golden West Visitor Center.
- Pedal a bike 3.5 miles (one way) to Rainbow Falls, The Old School and Buckner Orchard.

Whole Day

- Take the shuttle bus and narrated tour up valley to road's end.
- Stroll down the Lakeshore Trail with a picnic lunch.

Overnight

- Ride a shuttle bus to a trailhead and day-hike or backpack one of the many area trails.
- Attend a naturalist program at the Golden West Visitor Center. Check at the front door for program schedule.

312 foot Rainbow Falls

Stehekin Valley Forest Health Plan

This summer marks the 5th anniversary of the 4000-acre Boulder/Butte Fire, which burned above the Stehekin Valley. No homes were destroyed and fire did not reach the valley floor due in large part to the efforts of the firefighters. The experience gained during the 1994 fire season has helped shape the ongoing efforts to manage for a healthy forest ecosystem in the Stehekin Valley.

Fire has long played an important role in the natural environment. Stehekin Valley falls within a natural fire frequency category described as moderately severe, with substantial lightning-caused fires usually occurring every 25-100 years. These fires would historically last for weeks to months, with periods of intense burning mixed with moderate to low intensity smoldering.

Periodic fires can help keep a forest ecosystem healthy. Species such as lodgepole pine and snowbrush depend on fire for germination. Without fire, these species die out or are replaced by others, decreasing plant and animal diversity in the area. In addition, fires promote forest health by thinning out weak trees that would otherwise fall victim to disease or high winds.

The natural process of fire may have unnatural effects if it burns in forests where humans have altered species composition and structure. Past wildland fire suppression has led to such unnatural conditions in the Stehekin Valley. Fuel such as dead wood, thick brush, and leaves has built up to the point where any fire, natural or unnatural, could lead to a destructive inferno. These large, unplanned fires may produce clouds of smoke which affect many more people than the flames.

National Park Service fire management personnel are working actively with the Stehekin community to improve forest health and protection of human life and property in the valley. The goals of the management plan are to encourage late successional stage Douglas-fir/ponderosa pine forests, to protect natural and cultural resources, and to evaluate these efforts with a long-term monitoring program. Visitors to the valley may see the plan in action this spring or fall. Crews work around the Stehekin Landing in the spring thinning selected trees and limbs. Management-ignited prescribed fires are usually done in the early spring or late fall if conditions are acceptable. The combination of manual thinning and prescribed fire improves conditions for suppressing wildfires and promotes overall forest health. Using these fire management techniques, the National Park Service balances the preservation of America's natural and cultural heritage with concerns for public health and safety.

For additional information on the fire management program, stop by a park visitor center or attend a related interpretive program.

Volunteer, Make a Difference

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 appreciation of the many issues related to management of our National Forests and National Parks. As visitation increases, maintenance and staffing needs at visitor centers, recreations sites and trails often exceeds the agencies' resources. Combined efforts from people with all levels of skill and talent can help make a difference.

Organized volunteer groups like Washington Trails Association (WTA), and Volunteers for Outdoor Washington (VOW) have moved forward to promote education and enhance recreational opportunities on public lands. These groups help coordinate volunteer work projects along forest trails. Participants can join and earn volunteer hours good towards an annual Trail Park Pass, among other perks depending on hours worked. The WTA also coordinates "Trail College", a work party that emphasizes trail construction training. Contact the WTA at (206) 625-1367 or VOW at (206) 517-4469 for more information or visit www.trailwork.org on the World Wide Web to find out more about outdoor volunteerism in Washington State.

Students seeking internships and the chance to put to practice some of the theory they have learned in school can also benefit from volunteering in the National Forest and Park. Some of the positions that may be available are wilderness rangers, visitor center staff, forest recreation maintenance, trail work and biological monitoring.

Please feel free to seek more information if you or your group is interested in volunteer opportunities. A volunteer packet is available from both North Cascades National Park and the Mt. Baker Ranger District.

Fee Demonstration Program Benefits Park Visitors

The North Cascades National Park Service Complex has received $403,000 this year from the Recreation Fee Demonstration Program, established by Congress in 1996. Twenty per cent of the fees collected in national parks under this program fund projects in parks with few fees, such as North Cascades. These funds will benefit park visitors by:

- Rehabilitating wilderness campsites, such as those at Thornton Lakes and along Copper Ridge
- Building a group camp and picnic area in Newhalem Creek Campground
- Rehabilitating lakeshore campsites at Colonial Creek Campground
- Replacing the Brush Creek trail bridge and deteriorated sections of the Beaver Loop Trail
- Replacing a deteriorated topographic map at Field's Point on Lake Chelan

Through the Public Lands Corps, also supported by the 20% fund, North Cascades will have:

- Two Student Conservation Association (SCA) volunteer trail crews to restore wilderness camps and repair trails along or near the Beaver Loop
- Two SCA Conservation Associates to update information on trail and wilderness camp conditions and to help coordinate volunteers

In addition, through a cooperative demonstration fee program with the Wenatchee National Forest, the park will spend $1400 to repair the Flick Creek Dock on Lake Chelan.

Environmental Education Center Destined to Expand Discovery and Understanding

The North Cascades Institute, North Cascades National Park and Seattle City Light are putting their talents together to design a residential Environmental Education Center on the shore of Diablo Lake in Ross Lake National Recreation Area. The Environmental Education Center (EEC) will be a great support for field-based education about the natural and cultural environments of the North Cascades Region.

The EEC, to be constructed on the site of the old Diablo Lake Resort, will include dorms, classrooms, labs, staff housing, cafeteria, library and trails.

The three-group partnership will collaborate on the EEC throughout the development process. North Cascades Institute (NCI) will provide educational programming and operations at the center. The National Park Service will dedicate the land for environmental education and provide additional support. Seattle City Light will provide the funding through the relicensing agreement.

Conceptual view of entrance: Sketch by architect David Hall.

National Parks Fund Supports North Cascades

Washington State's national parks (Mount Rainier, North Cascades and Olympic) are its crown jewels. Drawing millions of visitors each year, they face increasing pressures from high visitation and tight budgets.

The Mount Rainier, North Cascades & Olympic Fund aids and supports the three national parks of Washington State. Founded in March 1993, the *Fund* leads private conservation efforts to support National Park Service goals of preservation and protection.

The *Fund* helps ensure visitors have a high quality, memorable experience through 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 recommended projects.

By securing financial contributions from individuals, corporations, foundations and businesses, the Fund supports park recommended projects.

Here are some examples of projects the *Fund* is supporting at North Cascades National Park Service Complex:

The Newhalem Rock Shelter Trail, a fully accessible interpretive trail to an archeological site, was dedicated May 30, 1998. The trail helps park visitors learn about how people lived in the North Cascades for thousands of years.

Funding is being provided for NPS to find partners to assist with the maintenance and preservation of the historic Buckner Orchard at Stehekin. For the second year, children's environmental education, known as Junior Ranger programs is being supported in both the Skagit and Stehekin Districts of the Park Complex.

For more information about how you can help Washington's national parks, call (206) 770-0627 or look for the *Fund's* brochure in any of the park's visitor centers.

Learn with North Cascades Institute

North Cascades Institute is a nonprofit educational organization dedicated to increasing understanding and appreciation of the natural, historical and cultural landscapes of the Pacific Northwest.

The primary focus is field-based, environmental education for children and adults; from Elderhostel for seniors to Mountain School for upper elementary students.

NCI's Mountain School recently won the first national Wilderness Education Leadership Award presented by the National Park Service. This award recognizes NCI's Mountain School program for educating young people in ways that honor the spirit and values of wilderness.

Nearly a thousand people are involved in this program annually and learn to appreciate the wild lands and watersheds of the North Cascades.

North Cascades Institute
2105 State Route 20
Sedro-Woolley, WA 98284
Call (360) 856-5700 ext. 209

National Forest Recreation Fee Dollars At Work

Recreation users of the Mt. Baker-Snoqualmie National Forest helped make the second year of the Regional Trail Park Fee Demonstration Program a success. This program was instituted by Congress to assist funding for the shrinking recreation budget. Under this program, 80 percent of the monies collected go directly toward maintenance and enhancement of the areas in which they were collected.

Forest visitors and hikers demonstrated a very positive attitude toward investing in recreational use and were pleased to see their dollars at work on needed repairs and maintenance of favorite areas. From January 1, 1998 through mid-October, 1998, the Mt. Baker-Snoqualmie National Forest collected $532,378. The Forest spent approximately $460,000 on trail/trailhead maintenance and administrative services in 1998 as listed below.

SERVICES:

- 24 trail maintenance workers ($240,000)
- 2 trail maintenance contracts ($53,669)
- 4 Northwest Youth Corps Crews ($22,400)
- $20,000 partnership agreement with Washington Trails Association, which resulted in a $180,000 value worth of trail maintenance.
- Worked with over 20 volunteer organizations to accomplish trail work.
- Hired the equivalent of 5 part-time seasonals for information services and sales; funded part-time accountant and processor.

TRAIL MAINTENANCE:

- 741 miles of trails cleared (removed downed trees,branches, rocks, stumps)
- 409 miles of trails brushed
- 93 miles of trail tread repair
- 203 miles of trail drainage work
- 546 feet of puncheon repaired or replaced
- 1080 feet of trail tread elevation

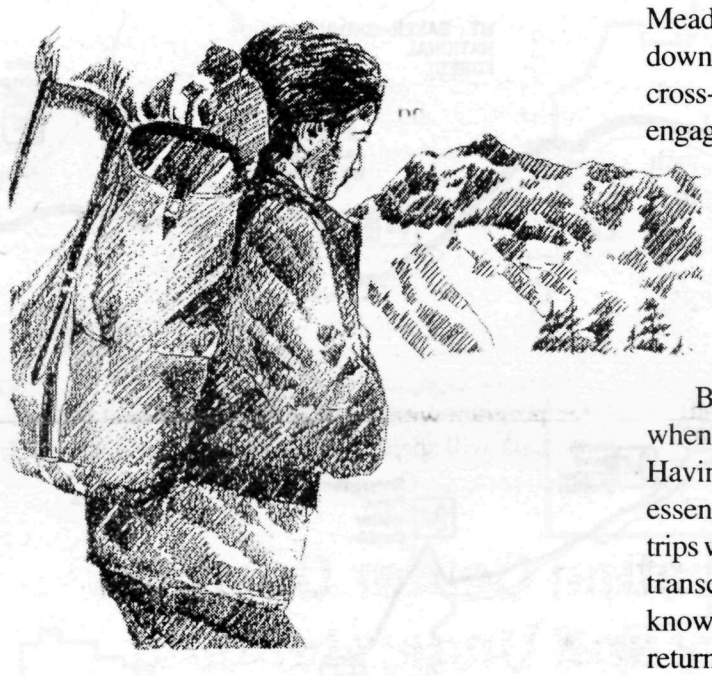
TRAILHEAD MAINTENANCE:

- 61 trailhead toilets maintained (cleaned on average of twice/week)
- 136 trailhead bulletin boards maintained and updated.

FEEDBACK FROM 1997 PROGRAM RESULTED IN THE FOLLOWING:

- Sales began earlier. Were available in December for the following year.
- Trail maintenance began earlier, weather permitting, at lower elevation trails.
- Additional volunteer groups were used for maintenance.
- Hired seasonals to help with sales & visitor information (did not exceed 15% of collections).
- Washington Trails Association made Trail Park Pass sales available on-line.
- From feedback, the following dollar distribution formula was developed for Trail Park Pass 80 percent amount of collections within the Mt. Baker-Snoqualmie, Wenatchee, Olympic and Okanogan National Forests:
  -Mt. Baker-Snoqualmie National Forest 48%
  -Wenatchee National Forest 33%
  -Olympic National Forest 14%
  -Okanogan National Forest 5%

Comment cards are available at Forest Service offices throughout the Mt. Baker-Snoqualmie National Forest. Please feel free to pick one up and let the Forest Service know how you think the Fee Demo Project is going.



Winter Wonders

During winter months snows accumulate in the higher elevations of the Cascades opening up opportunities to view the wonders of the landscape from a different perspective. For those who are prepared to venture out during colder weather, activities include downhill skiing, cross country skiing, snowshoeing, and snowmobiling. As always visitors need to be prepared for changing weather conditions.

Vehicle access across State Route 20 closes for the winter at milepost 134 on the west side of Washington Pass and at milepost 171 on the east side. The North Cascades Visitor Center at Newhalem is open Saturdays and Sundays throughout the winter.

Washington State Parks works in cooperation with the Forest Service to groom snowmobile trails and maintain Sno-Park areas. Seasonal fees paid for parking in Sno-Park areas are used to help sustain this program. For more information call the State Parks Grooming Hotline at 1-800-233-0321.

The Mt. Baker National Recreation Area located on the southeast slopes of Mt. Baker offers opportunities for winter activities including snowmobiling when snow levels are sufficient. The Mt Baker Ski Area, located in Heather Meadows at the end of State Route 542, offers downhill runs, lessons, ski rentals, day lodges, and cross-country ski opportunities. Visitors may also engage in snow play activities like sledding and tubing. For ski conditions and information, call the Mt. Baker Ski Area information line at (360) 671-0211 or visit their web site at *http://www.mtbakerskiarea.com*

Avalanche Danger

Be prepared for extreme avalanche conditions when heading out on snow covered slopes. Having the proper equipment and the knowledge is essential. Study the area you wish to visit. Plan trips with avalanche in mind, bring snow shovels, transceivers, and a buddy. Be sure to make it known where you are going and when you will be returning. With the right knowledge and skills your trip can be both wondrous and safe.

Important Contacts

Northwest Avalanche Center Hotline:
(206) 526-6677, or *http://www.seawfo.noaa.gov/data/forecasts/00latest.SEASABSEA*
Washington DOT Pass & Road conditions:
1888-766-4636 or *http://www.wsdot.wa.gov*

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

100 Hikes in the North Cascades	$14.95	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 the North Cascades National Park.
Mt. Baker District Guide	$3.25	A general introduction to various aspects of the district with important facts and features
Heather Meadows - Mt. Baker Ranger District	$3.95	An introduction and guide to the Heather Meadows Area of the Mt. Baker Ranger District
North Cascades National Park - The Story Behind the Scenery	$7.95	A pictorial guide of the North Cascades National Park, highlighting facts and features.
North Cascades - Official National Park Handbook	$7.95	A good reference to the many varied features of the North Cascades National Park

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, 291 or 515.

North Cascades *Challenger*

1999-2000 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).
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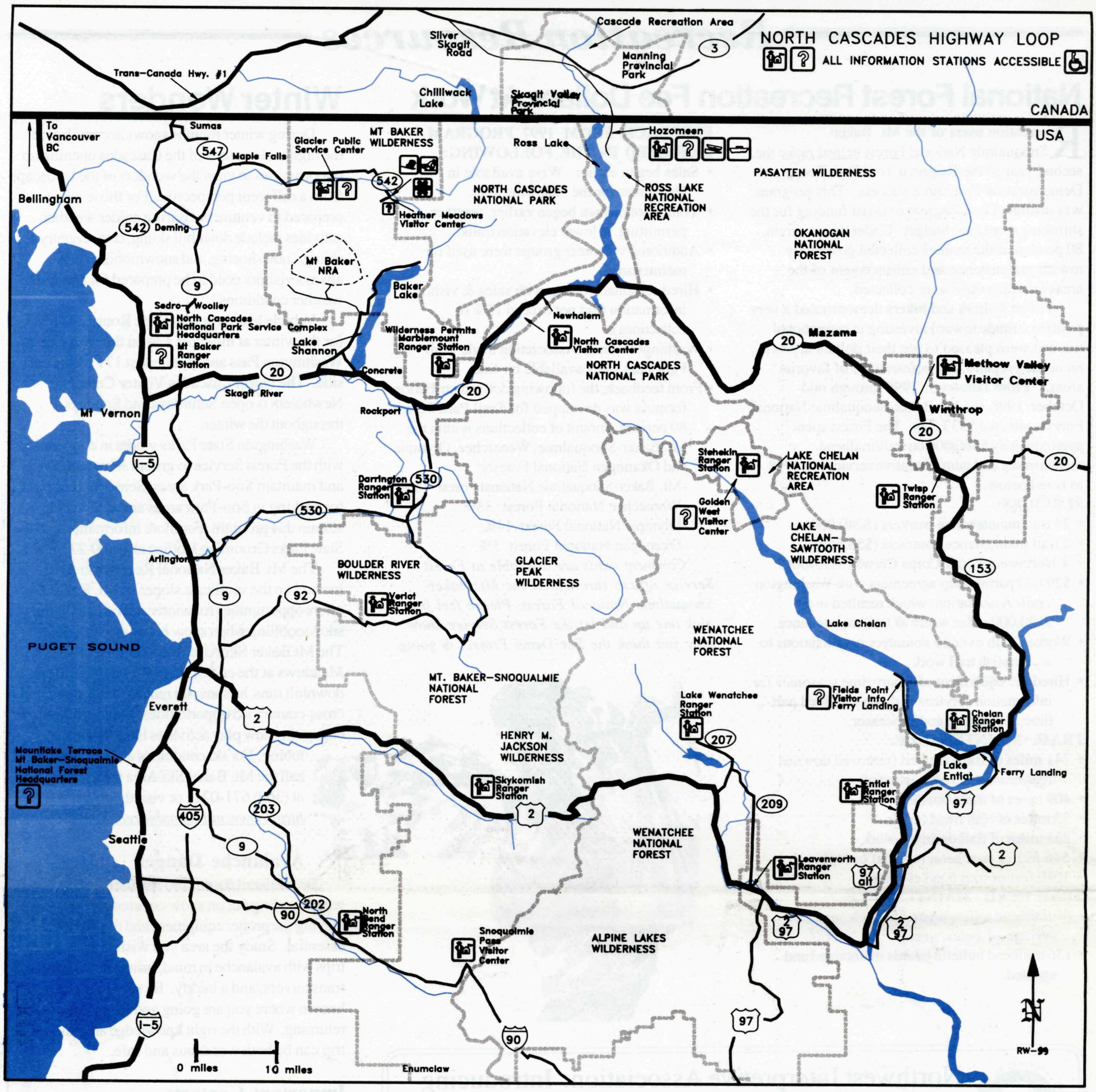

Park & Forest Information Stations

— Summer Hours —

The 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
2105 State Route 20, 98284
Mon. - Fri. 8:00am-4:30pm
Summer Hours:
Sat. - Thurs., 8:00am-4:30pm
Fri., 8:00am-6:00pm
(360) 856-5700
TDD (360) 856-5700 x-310

MARBLEMOUNT
Wilderness Information Center
Ross Lake National Recreation Area (NPS)
Backcountry Information/Permits
*Fri. - Sat., 7:00am-8:00pm
*Sun. - Thurs., 7:00am-6:00pm
(360) 873-4500 (ext. 39)

NEWHALEM
North Cascades Visitor Center (NPS)
Daily, 8:30am-6:00pm
(206) 386-4495

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

* ***July & August***

Okanogan National Forest; Methow Valley Ranger District

WINTHROP Methow Valley Visitor Center
8:00am-5pm daily
(509) 996-4000

TWISP Office
Mon. - Fri., 7:45am - 4:30pm
Closed Saturday and Sunday
(509) 997-2131

Wenatchee National Forest

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

LEAVENWORTH Ranger District
Mon. - Sat., 7:45am-4:30pm
Sunday morning permits only
(509) 548-6977

LAKE WENATCHEE Ranger District
Mon. - Sat., 8:00am-4:30pm; closed Sundays except for holidays
(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
Supervisor's office: (425) 775-9702
1-800-627-0062 or TDD 1-800-272-1215

GLACIER PUBLIC SERVICE CENTER
Mid-May to Mid-October,
8:00am-4:30pm (360) 599-2714

HEATHER MEADOWS Visitor Center
Daily in summer, 10:00am-5:00pm

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

VERLOT (Darrington Ranger District)
Daily 8:00am-4:30pm (360) 691-7791

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

NORTH BEND Ranger District
Mon. - Fri., 8:00am-4:30pm (425) 888-1421

SNOQUALMIE PASS Visitor Center
Thurs. - Sun., 8:30am-4:45pm
(425) 434-6111

WHITE RIVER Ranger District
Mon. - Sat., 8:00am-4:30pm
(360) 825-6585

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