

# NORTH CASCADES

## Challenger



North Cascades National Park — Mt. Baker-Snoqualmie National Forest  
1997 VISITOR INFORMATION GUIDE



## Welcome to the North Cascades

**W**e are happy that you have included the North Cascades in your recreation and travel plans. The mountains, watersheds, forests and wildlife of this unique landscape make these protected areas an outstanding part of your public lands. A vast amount of the region is designated wilderness; protecting pristine wild areas is critical to the earth's well being for watershed and air quality, biological diversity and wildlife habitat. The special meaning of wilderness for many is both cultural and personal; wilderness is part of our heritage and can also provide a needed respite from our hectic lives.

The National Park and Forest Service cooperatively manage and protect federal lands in the North Cascades. By working together the two agencies recognize that natural processes happen without regard to political and jurisdictional boundaries. Even distant activities that generate pollution, such as automobile driving and industrial manufacturing, affect wild places. You, too, have a role to play in preserving your national forests and parks.

We hope you will take the time to read through these pages and be inspired to explore beyond the print. Have a safe and rewarding visit to the North Cascades!

William F. Paleck  
Superintendent  
North Cascades National Park

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 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.

*We are interested in any suggestions for improving our management of these public lands. If you have comments, suggestions or questions about the National Park or Forest Services, please contact us at the address in the mailing space.*



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

The **Mt. Baker District** of the Mt. Baker-Snoqualmie National Forest includes over 530,000 acres in northwestern Washington. The District encompasses:

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

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North Cascades National Park (National Park Service)  
Mt. Baker Ranger District (U.S. Forest Service)  
2105 State Route 20  
Sedro-Woolley, WA 98284

TO:

# Wilderness: The Geography of Hope

More than 150 years ago the great nature writer and philosopher Henry David Thoreau stated, "in wildness is the preservation of the world."

Perhaps Thoreau was telling us that raw, untamed wildernesses are more than just features of the landscape; they are also points of connection between an urbanized, modern human population and the land we once lived so much closer to.

You are in the North Cascades ecosystem, one of the largest and most intact wild areas in the contiguous United States. The North Cascades still contain all of the plant and animal

species known at the time Europeans first settled here. Eagles roost in trees along icy rivers; bears feed on the spawned-out carcasses of salmon; bobcats pad softly across snowfields and forest floors as they stalk their prey; alpine meadows blaze in a glory of color.

These things are the heart of wilderness. It is to preserve them now and forever that Congress passed the Wilderness Act in 1964, which required land-

managing agencies to set aside some areas "untrammelled by man" for preservation.

Passing the act was, in a sense, a way of recognizing that Thoreau's *wildness* is fundamental to the human spirit; to extinguish the last vestiges of wildness from the country would be to extinguish something vital within ourselves.

For thousands of years the region's Native Americans understood wilderness in a different

way: wilderness was not "somewhere else" — it was home.

The recreational value of protected wilderness areas is manifold: hiking, fishing, canoeing, camping or simply appreciating the natural beauty around you are all part of the wilderness experience.

Another kind of value is more difficult to measure, but just as important — and that is the wilderness *idea*. It is the idea that just knowing there are still wild, unspoiled places is good for people's peace of mind. These wild places are the remnants of the vast, untamed expanse of wilderness that once characterized our country's landscape; they are a reminder of what once was, and represent the promise of the future.

Another great conservationist, Wallace Stegner, wrote, "we simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity, a part of the geography of hope."



## Here in the North Cascades...

The Cascade Mountain range runs 500 miles from Northern California to British Columbia, but it is not until it reaches Northwest Washington that the mountains are at their most breathtaking. The Cascades are higher in other parts of the range, but nowhere are they as dramatic. Jagged, rocky peaks of up to 10,000 feet give way precipitously to near-sea level valleys; glaciers cling dizzyingly to the sides of foreboding slopes; everywhere waterfalls tumble down from the mountains, the characteristic that gave the Cascades their name.

Many millions of years ago, before it bumped into North America, this region was an itinerant land mass drifting in the Pacific Ocean. The mountain-building forces at work before and since that unification — accumulation of sediment from pre-historic seas, colliding tectonic plates and volcanic activity — have combined to create one of the fastest growing mountain ranges in the world. Indeed, the North Cascades would be even taller if the counteracting forces of water and glaciers did not conspire to keep the mountains at more modest heights.

Still, the elevational distance from valleys to summits throughout the North Cascades can exceed 5,000 feet — a relief as great as any other range in the United States. The steep and imposing North Cascades presented a formidable barrier to early white explorers and the names they gave some of these mountains betray their dread: Mt. Terror, Mt. Challenger, Mt. Fury, Mt. Despair, Mt. Torment, Desolation Peak.

One of the most striking features of the North

Cascades is the fantastic number of glaciers in the region. These mountains are home to more than 300 of them — more than half of the glaciers in the contiguous United States. Glaciers are formed when more snow accumulates than melts or evaporates. The weight of this continuous buildup of snow is immense and causes the snow to compact into ice, which then slowly moves downhill. As glaciers move, they gouge and scrape the land and redefine landscapes. Mountains may appear to be in suspended animation but, like everything else, they are in a continuous state of change.

The reason the North Cascades contain such an abundance of glaciers is because Western Washington receives a lot of snow, especially in the mountains. Weather moves from west to east across North America, so clouds that pick up moisture in the nearby North Pacific must rise to get over the mountains. As the clouds gain altitude the temperature drops, causing the water vapor to condense and fall to earth as rain and snow.

By the time the clouds cross into the rain shadow of the eastern side of the range, they are mostly spent and contain significantly less moisture. The average precipitation on the western slope is 280 cm. (112 in.), but the Pasayten Wilderness on the east side averages only 30 cm (12 in.).

Water is the life force of the North Cascades. It falls from the sky, trickles off mountains, replenishes lakes and flows to the sea. Within the Puget Sound watershed, the Skagit is the largest and most bounteous river. With its 2,900 streams, the Skagit River accounts for 20 percent of the water that empties into Puget Sound.

All five species of salmon and two species of anadromous trout (trout that go from fresh water to salt water and return to spawn upriver) begin life in the cool gravel bottoms of the Skagit River system. In odd-numbered years, as many as one million pink salmon spawn in the Skagit. In 1996, 152,000 Chum salmon — a ten year high — also returned to the Skagit.

Because of the healthy salmon runs, the Skagit hosts one of the largest wintering bald eagle populations in the lower 48 states; spawned-out carcasses of Chum salmon are the eagles' most important source of food during the winter months. In some years, as many as 500 bald eagles spend the winter along the Skagit River.

Between the craggy peaks and the cool rivers, lush, temperate rain forests blanket the lowlands on the western side of the North Cascades. These forests, which are home to some of the nation's most extensive stands of remaining old growth, produce trees of exceptional size and age. Some Douglas-firs, for example, grow to 250 feet and live up to 1,000 years.

Western slope forests also produce an astonishing quantity of vegetation. In terms of sheer plant volume, the forests of the Northwest are unbeatable; they contain more accumulated biomass than any other forests in the world.

From rivers to glaciers, valleys to summits, the North Cascades is one of the most extraordinary ecosystems in the world. North Cascades National Park and the Mt. Baker Ranger District invite you to step into the wild to experience this magnificent wilderness for yourself.

# Whose Home is This?

The temperate forests of the North Cascades are home to a remarkable variety of plant and animal life. Many life zones and habitats straddle these mountains, changing with elevation and distance from the ocean.

More than 1,700 species of flowering plants have been identified and collected in the national park's herbarium. The abundance of non-flowering plant species, including mushrooms, mosses and lichens, rivals any other ecosystem on Earth. They have not been fully inventoried and many may not have even been discovered yet.

Which animals live in the North Cascades and how many are there? This question has also yet to be fully answered. Baseline studies and inventories are still underway, and biologists are discovering new species as they look beyond animals at the top of the food chain.

Bald eagles, wolves, grizzly bears and other top predators require a rich diversity of plants and animals lower on the food chain to survive. As biologists look more closely at the complex connections between different species they are discovering more and more about the North Cascades ecosystem.

We do know that seventy-five species of mammals are native to the North

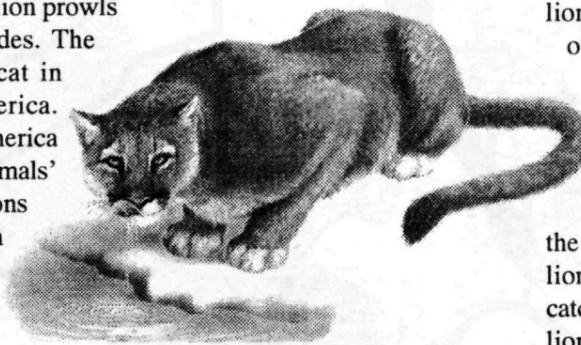
Cascades; more than 200 birds either breed in or pass through the region; and 11 species of fish are indigenous to the lakes and rivers on the west side of the Cascades. Some plants and animals are considered "indicator" species, because they are sensitive to problems in the ecosystem. Salmon, for example, use a variety of habitats and are thus good indicator species; they require healthy watersheds, from forests to streams to oceans.

As you explore the North Cascades you may be lucky enough to see some of the wildlife that live here. Wildlife sightings cards are available at all ranger stations to report animals you may see. Books and other resources to help you identify and learn about plants and wildlife are available through all National Park and Forest Service visitor centers (or order by mail on page 15). Rangers lead guided walks most weekends and provide other naturalist services.

The animals below require large amounts of habitat to survive. Protecting the resources they need also protects the resources for thousands of smaller, less wide-ranging animals. Remember that these charismatic "mega-fauna" share habitat with many other animals, both large and small — including humans.

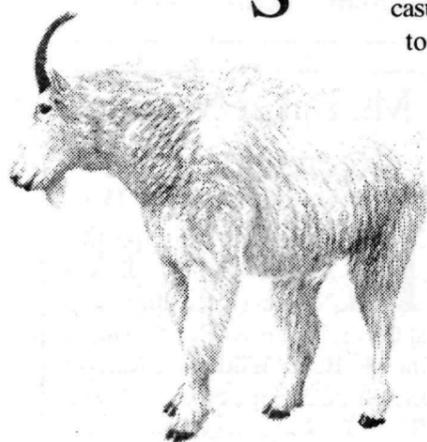
## Mountain Lion

Seeing all but seldom seen, the stealthy mountain lion prowls the forests and mountains of the North Cascades. The solitary mountain lion, or cougar, is the largest cat in Washington and the second largest in North America. Mountain lions once ranged across much of North America but large-scale eradication programs decimated the animals' numbers in many regions. Today, substantial populations of the great cat are limited to parts of western North America. Adult mountain lions vary in size, but average about 7 feet in length (including the long tail) and weigh between 80 and 200 pounds. Mountain



lion habitat is characterized by rocky cliffs, ledges and other areas that provide cover. They are afraid of humans and, consequently, gathering information on the cats is difficult. No one knows how many mountain lions are in the North Cascades or whether the population is increasing, declining or stable. The chances of seeing a mountain lion in the wild — even if you lived your entire life in mountain lion habitat — are very slim. So if by some chance you catch a glimpse of the beautiful and mysterious mountain lion, consider it a gift.

## Mountain Goat

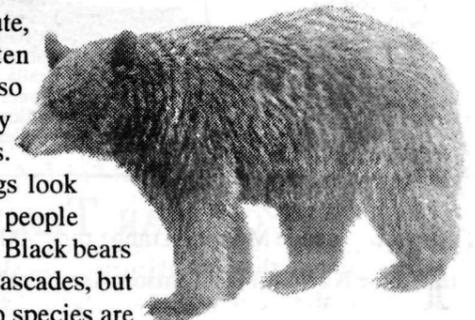


Scrambling across high cliffs and remote peaks, casually edging along precipices inaccessible to other animals, the mountain goat is the ultimate mountain climber. This remarkable animal is actually not a goat at all, but a type of antelope. Their hooves have slightly curved pads that extend beyond the outer shells, which provide them with greater traction and maneuverability than other hoofed animals. Mountain goats have true horns that continually grow and which they never shed. Their pelage (the hair or fur that covers mammals) is white or yellowish-white, with a dense

undercoat of soft wool. During the summer mountain goats are very conspicuous as they stand out against the rocky terrain, but during the winter they blend in with the snow and are nearly invisible. The pelage keeps the mountain goat warm in cold, dry weather, but it is not as effective when it is cold and wet; during heavy rains mountain goats often seek shelter under rock ledges or trees. Mountain goats choose to spend most of their time above timberline near rocky outcrops, where they can withdraw to safety in case of danger. When the snow is deep, however, mountain goats will head for the relatively balmy environment of lower elevations.

## Black and Grizzly Bears

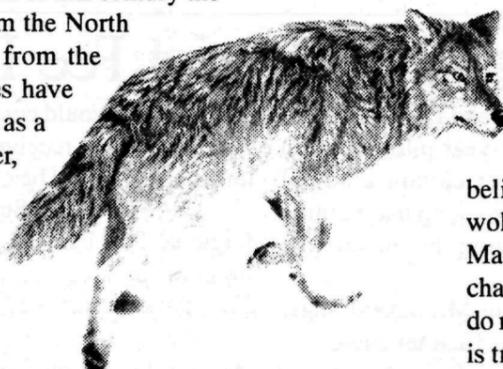
Whether they are regarded as monsters lying in wait or cute, bumbling teddies, bears are often misunderstood. Maybe we are so fascinated with bears because they have so much in common with us. Bears standing on their hind legs look human; they eat the same foods people do; and bears are very intelligent. Black bears are fairly common in the North Cascades, but grizzlies are much rarer. The two species are different in some ways, but they also share some traits.



Both are *omnivorous* — like people, they eat everything. A recent study determined that ten percent of the scat material from 120 North Cascades bears was animal parts, mostly ants. The rest consisted of berries, leaves, seeds (including pine nuts) and flowers. Bears also eat foods left out by people, including camping supplies, horses' oats and dog food. And what we see as garbage, bears see as an easy meal. Bears need to eat a lot, because they have to eat a whole year's worth of food in seven or eight months. During the winter they enter into a highly specialized and unique form of hibernation. While they are in the den, bears do not eat, drink, urinate or defecate. Cubs can even grow while "sleeping" in the den; a person's bones begin to deteriorate after only 96 hours in bed. Black bears typically den under fallen trees or in other existing nooks just large enough for a bear to crawl into or under. Grizzly bears typically dig a new den each year. That's why they have those big fore-claws and shoulder muscles: grizzlies are like animated bulldozers.

## Wolf

Fearing by some, revered by others and demonized in myth, the wolf has never failed to stir people's imaginations. For much of this century the clear, haunting howl of the wolf has been absent from the North Cascades. Trapping effectively extirpated the wolf from the Northwest by the 1930s. In the United States wolves have been reduced to a fraction of their former range, and as a result have been listed as an endangered species. However, there is evidence that during the past decade wolves have begun to return to the Washington Cascades. Just last summer an adult and pup were seen in the Pasayten Wilderness and there have been other observations as far south as the Columbia River. Wolves are highly social animals and live in family



groups (packs) of between two and 12 members. The pack is headed by an alpha pair, which is usually the only breeding couple. There are very strong bonds between the pack members; without these bonds, each individual wolf would go his or her own way and the pack would disintegrate. Wolves primarily eat large mammals such as deer and elk. Wildlife researchers believe that by killing the sickest and weakest of the herd, wolves are helping maintain the vitality of the prey species. Many people form their notions about wolves from story characters such as "The Big Bad Wolf" but in reality wolves do not attack humans. Graceful, intelligent and wild, the wolf is truly a symbol of the North Cascades.

# Mt. Baker Ranger District — North Cascades Highway

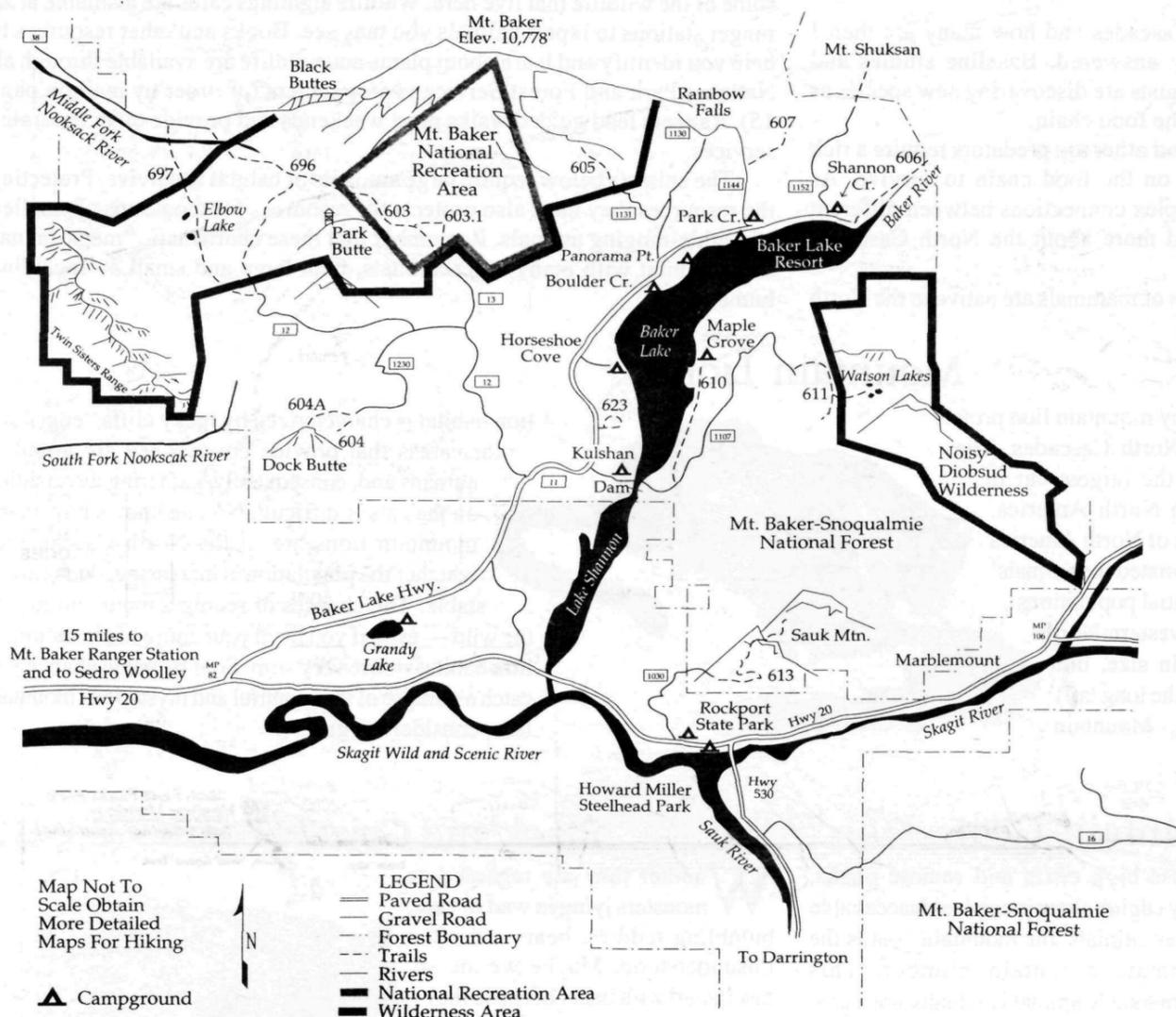
The wild and rugged Mt. Baker Ranger District includes several designations of national forest lands that accommodate a variety of uses. Those seeking a remote backcountry experience can trek into federally designated wilderness areas; water lovers will enjoy the Skagit Wild & Scenic River System; and everybody from hikers to snowmobilers will love the Mt. Baker National Recreation Area.

The Mt. Baker Scenic Byway (State Route 542) delivers visitors to the high country of Heather Meadows. Winter recreationists enjoy the world-renowned slopes of the Mt. Baker Ski Area. Campers may stay in developed

campsites at Baker Lake and along the Mt. Baker Scenic Byway (check page 9 for camping chart).

Over two hundred miles of trails lead hikers and stock parties into the Mt. Baker Ranger District's backcountry. Backcountry camping does not require a permit. Most stock trails are open to use from August 1st to November 1st. Llamas are allowed year-round on all stock trails.

The Mt. Baker Ranger Station and the Glacier Public Service Center offer a full range of guide books and detailed hiking maps. Visitors are encouraged to take the time to plan for their outing, get current conditions and be well prepared.



## 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.

Winter on 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 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.

## Mt. Baker National Recreation Area

8,600 Acres; established 1984

Hikers and stock parties access the Mt. Baker National Recreation Area at the end of Forest Road 13 or on the Mt. Baker Wilderness trails in the Middle Fork Nooksack and South Fork drainage. Stock use the trails from August 1st to November 1st. In winter, recreationists snowmobile, Nordic ski and snowshoe. Hikers are urged to stay on designated trails and respect trail closure signs. Backpackers must camp at designated sites established for their use. No campfires are allowed in the Mt. Baker National Recreation Area.

Please ask for detailed information on designated campsites and trail systems at the Sedro-Woolley Ranger Station.

## POPULAR TRAILS ALONG STATE ROUTE 20

### Mt. Baker National Recreation Area Trails

Trail #	Name	Trailhead	Miles	Remarks
603	Park Butte	Road 13	3.5	Enters wilderness, no fires
603.1	Scott Paul	Road 13	6.0	No camping
603.2	Railroad Grade	Trail 603	1.0	Camp at designated sites, no fires

### Baker Lake Area Trails

604	Blue Lake	Road 1230	0.5	Easy trail for children
606	Baker River	Road 1168	3.0	Enters national park
610	East Bank	Road 1107	14.0	moderate trail with steep side slope; stock
611	Watson Lakes	Road 1107	2.5	Wilderness, no fires
611	Anderson Lakes	Road 1107	2.5	Non-wilderness
623	Shadow of Sentinels	Baker Lake Road	0.5	Universal access; storm damage

### State Route 20/Cascade River

613	Sauk Mountain	Road 1030	2.1	Steep side slopes
743	Lookout Mountain	Cascade River Road	4.7	Fork enters national park; camp only in designated sites
745	Hidden Lake Peak	Road 1540	5.0	Non-wilderness; enters national park

## Mt. Baker Ranger District Fee Information

To help offset the rising costs of administering trails and facilities in the national forest system, Congress initiated a three-year pilot program authorizing the Forest Service to charge fees for certain kinds of recreational use. Eighty percent of the money will be devoted to maintaining the areas where the fees are collected, instead of returning the money to a general fund in Washington, D.C.

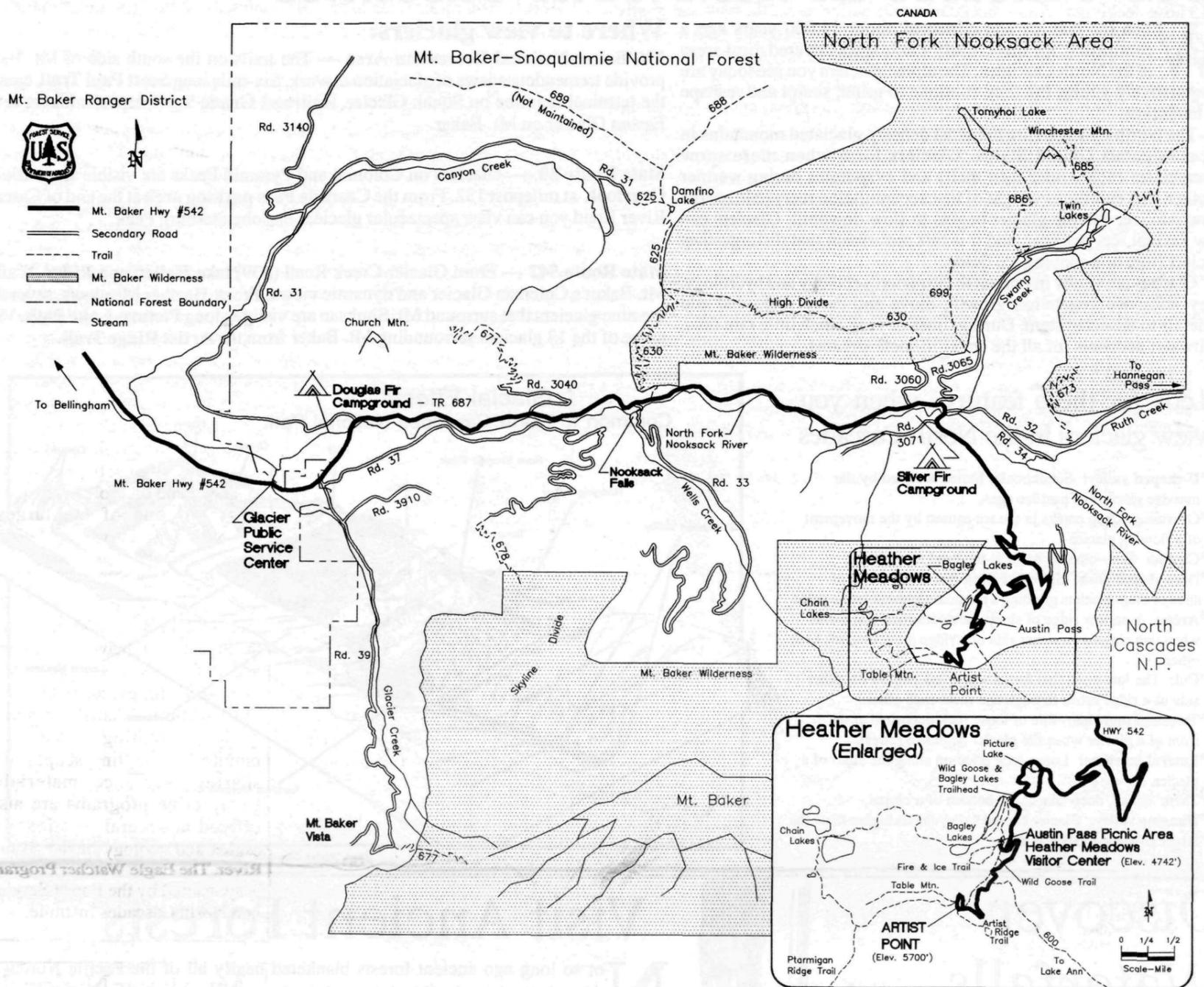
Under the Recreational Fee Demonstration Program, the Mt. Baker Ranger District has proposed to charge a fee for parking in the Heather Meadows Area. A parking pass would cost \$5 and be valid for three days. A seasonal

parking pass would cost \$15. Visitors holding a Golden Age or Golden Access Passport would receive a 50 percent discount. Vehicles carrying more than nine people would be charged \$1 per person.

The Mt. Baker-Snoqualmie National Forest may also participate in a Regional Trail Park Program in which fees will be charged on a daily or seasonal basis for parking at most national forest trailheads. The proposed cost for a Trail Park Permit is \$3 per day and \$25 for a seasonal permit.

Visitors are encouraged to check with the local ranger district for the current status of the fee program during 1997.

# Mt. Baker Ranger District — Mt. Baker Scenic Byway



## 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 5140 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 Service Center (milepost 34)**  
Listed on the National Register of Historic Places. Jointly operated during the summer season by the Forest Service and National Park Service.

**Mt. Baker Vista**  
Dramatic viewpoint at the end of Glacier Creek Road (Forest Road 39).

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

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

**Heather Meadows Area**  
Subalpine setting between Mt. Baker and Mt. Shuksan. Heather Meadows Visitor Center open summer season. Self-guided interpretive trails, vistas, naturalist programs and picnicking.

## POPULAR TRAILS ALONG THE MT. BAKER SCENIC BYWAY

### Glacier Area Trails

Trail #	Name	Trailhead	Miles	Remarks
625	Damfino Lakes	Road 31	3.0	Non-wilderness
630	High Divide	HWY 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	HWY 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 Mountain	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	HWY 542	4.7	Enters wilderness; no fires
615	Ptarmigan Ridge	Trail 682	5.0	Enters wilderness; no fires
681	Table Mountain	HWY 542	1.5	Enters wilderness; no dogs; no fires
682	Chain Lakes	HWY 542	6.5	Wilderness; no fires; camp in designated sites
735	Picture Lake	HWY 542	0.5	No dogs; universally accessible
684.2	Fire and Ice	HWY 542	0.5	Self-guided interpretive trail
684.3	Wild Goose	HWY 542	2.5	Self-guided interpretive trail
669	Artist Ridge	HWY 542	1.0	Self-guided interpretive trail

## Entering Wilderness

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, untrammled 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 twelve, including packing 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.

## Things to See and Do

### See Glaciers in the North Cascades

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 and 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 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:

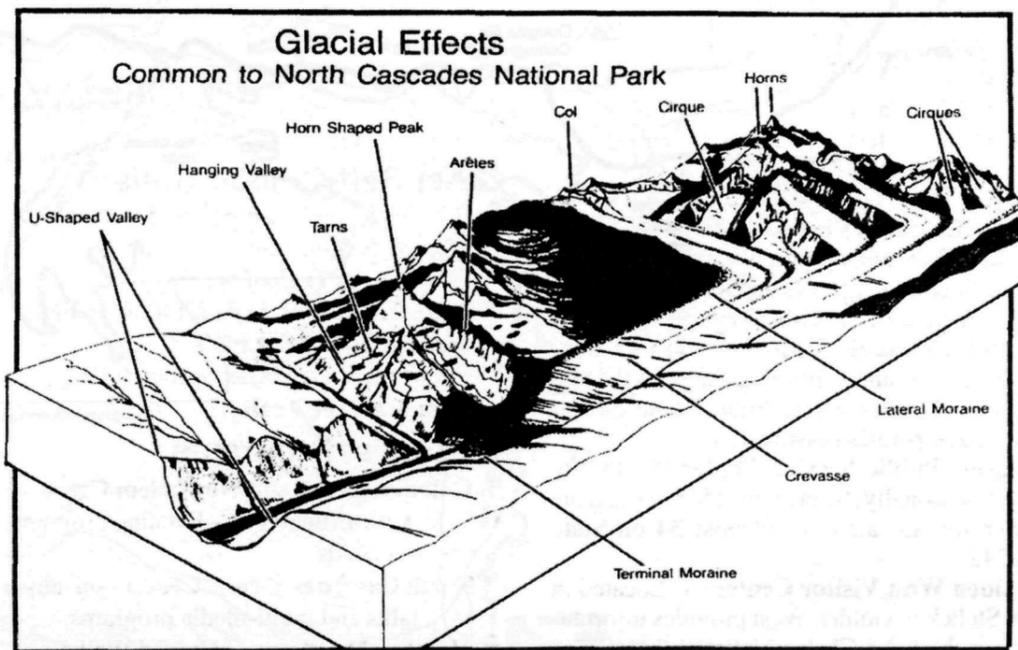
**Mt. Baker National Recreation Area** — The trails on the south side of Mt. Baker provide tremendous views of glaciation at work. Six-mile long **Scott Paul Trail** crosses the terminal moraine on Squak Glacier. **Railroad Grade Trail** deposits hikers at the Easton Glacier on Mt. Baker.

**State Route 20** — Glaciers on Colonial and Pyramid Peaks are visible from **Diablo Overlook** at milepost 132. 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) take **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 Path**. View some of the 13 glaciers surrounding Mt. Baker from the **Artist Ridge Trail**.

#### Look for these features when you view glaciers in the North Cascades

- **U-shaped valley:** Semicircular basins sculpted by the massive glaciers of past ice ages.
- **Crevasse:** Deep cracks in the ice caused by the movement of a flowing glacier.
- **Cirque:** Semi-circular basin at the head of a glacier.
- **Horn-shaped peak:** Spire-like peak that is the result of three or more glaciers grinding a mountain summit into a point.
- **Arête:** A narrow ridge of sharp, sawtooth rock that forms when two cirques on either side of a ridge grow towards each other.
- **Col:** The low point that forms when two cirques on either side of a ridge break through and meet each other.
- **Terminal moraine:** Pile of loose rock deposited at the front of a glacier when the glacier begins to retreat.
- **Lateral moraine:** Loose rock piled up along the sides of a glacier.
- **Tarn:** Small, deep lake at the bottom of a cirque.
- **Hanging valley:** Glacier-carved valley that is higher than the larger U-shaped valley it joins.



from "North Cascades: Story Behind the Scenery" KC Publications

### Discover Waterfalls

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

Waterfalls are so abundant in these mountains that they are the characteristic that gave the Cascades their name. Below are several waterfalls worth checking out.

**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 is a .4 mile loop that takes you to beautiful pools and falls, colored lights 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):** High above Stehekin Valley in the snowfields of Rainbow Ridge, the waters of Rainbow Creek plunge 312 feet in a misty cascade and end their journey in the Stehekin River.

**Nooksack Falls:** located at milepost 41 on the Mt. Baker Highway (SR 542) near 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 two hydroelectric power plants in Washington uses this drop to generate power.

### Visit Ancient Forests

Not so long ago ancient forests blanketed nearly all of the Pacific Northwest. Abundant rain and mild winters create the perfect environment for trees such as Douglas fir and cedar to grow very large and very old. These trees were so big that after loggers carved the first undercut wedge out of one of the old giants, a dozen or more timber workers could crowd into the gaping cut and pose for a picture. Early settlers would sometimes build roofs over hollow stumps to make homes out of them.

Most of these ancient trees are gone now, 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 old-growth forest.

To be considered an old-growth forest at least some trees need to be 200-300 years old; the forest must have a multi-level canopy; and there must be downed logs and standing dead trees, called snags.

Old-growth forests are characterized by a mixture of old and new, large and small, living and dead — all part of a dynamic ecosystem that is growing, evolving and continually changing.

Centuries-old Douglas-fir may tower over the forest floor, while younger shade-tolerant hemlocks struggle upward far below. Even after a tree dies from old age or disease it is still a vital part of the ancient forest ecosystem. Snags provide homes for dozens of birds and mammals. When the snag falls over, the log becomes a haven for insects and many other animals. The downed log slowly decomposes and returns nutrients to the soil.

However, old-growth forests are not defined solely by trees. Complex, symbiotic relationships develop over centuries between all of the organisms present in the old-growth ecosystem. Lichen in the forest canopy pull nitrogen from the air, which is washed down to the soil and used by the forest's vegetation; symbiotic fungi attached to roots supply plants and tree with water and nutrients and in return take carbohydrates; animals eat tree and plant material and help spread seeds across the forest.

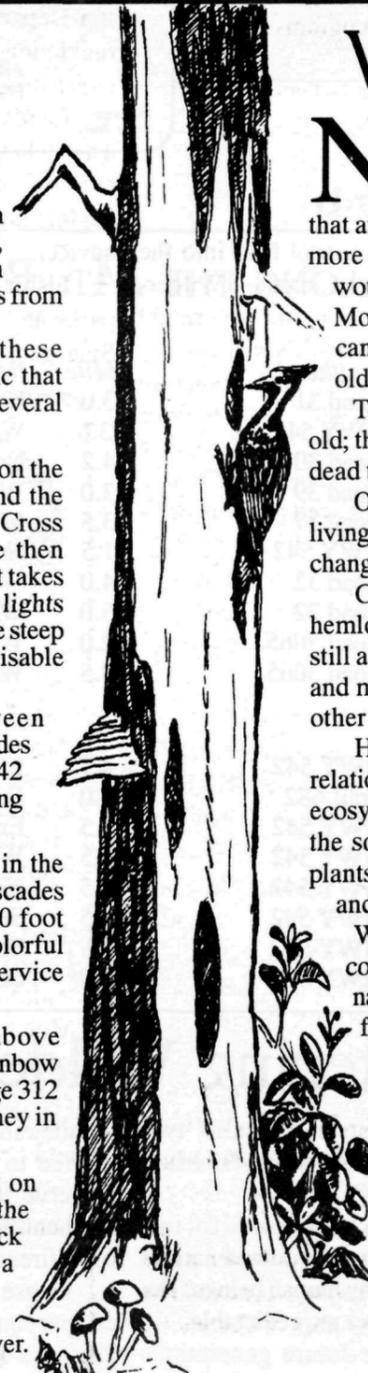
When ancient forests are cut, it takes many years to rebuild all of the severed connections. "When we try to pick out anything by itself," said conservationist and nature writer John Muir, "we find it hitched to everything else in the universe." Ancient forests are a magnificent and complex strand in the web of life.

#### Where you can visit ancient forests

**State Route 20** — **Happy Creek Forest Walk** at mile 134.5. This fully-accessible boardwalk takes you through outstanding western slope, low elevation old-growth forest. For longer hikes, try **Thunder Creek** and **Big Beaver** trails.

**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** — **East Bank Trail** follows the east shore of Baker Lake and enters the Noisy Creek drainage at upper end. **Shadow of the Sentinels** is a barrier-free loop trail through old-growth forest (this trail suffered recent storm damage - check with ranger for current condition).



# Travel Tips



## Drive

Thousands of visitors drive for pleasure along the scenic roads of the North Cascades. State Route 20 offers east/west access across the mountains (this route closes during the winter at milepost 134). The Mt. Baker Scenic Byway leads visitors to Heather Meadows in the divide between Mt. Baker and Mt. Shuksan where the Mt. Baker Ski Area operates during the winter.



## Ask

**Forest/Park Service Information Office** — Offers year-round visitor services. Located on State Route 20 in Sedro-Woolley.

**North Cascades Visitor Center** — Provides information, naturalist programs, exhibits and multi-media presentations. Located near Newhalem on State Route 20 across the Skagit River.

**Heather Meadows Visitor Center** — Showcases the natural and cultural heritage of the Mt. Baker area. Located along State Route 542 at milepost 52. Operates seasonally.

**Glacier Public Service Center** — Jointly operated (seasonally) by the Forest Service and the Park Service. Located at milepost 34 on State Route 542.

**Golden West Visitor Center** — Located in remote Stehekin, Golden West provides information about the Lake Chelan National Recreation Area. Ask for information sheets about geology, glaciers, fire management in Stehekin, mushrooms, snags, salmon or natural resource management issues of the North Cascades.



## 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.



## Ride

Stock (horses, mules, donkeys and llamas) are welcome on trails that are 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 more 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 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 (must be at least 200 feet from shoreline of any lake). No permit required.
- Grazing is prohibited in North Cascades National Park.
- Pack in sufficient grain and processed feed pellets for your trip. Hay and hayfeed are prohibited. A list of acceptable feed is available where permits are issued.



## Enjoy

### Universal Access Trails:

(ask for brochure)

- Baker Lake: *Shadow of the Sentinels*.
- Newhalem: *Sterling Munro*, mountain view at North Cascades Visitor Center. *Trail of the Cedars* near town.
- State Route 20 at milepost 134.5: *Happy Creek Forest Walk* nature trail.
- Rainy Pass: *Rainy Lake Trail*, paved one mile route to Rainy Lake.
- Heather Meadows: *Picture Lake*, *Fire & Ice*, and *Artist Ridge*.

### Other Self-Guided Trails:

- Colonial Creek Campground: *Thunder Woods Nature* trail.
- Hozomeen: *Trail of the Obelisk*
- Stehekin: *Imus Creek*, *McKellar Cabin* and *Rainbow Mist* trails.
- Newhalem Creek Campground: *To Know a Tree Trail*.

### Naturalist Programs

- **Colonial Creek and Newhalem Creek Amphitheaters** — Evening programs on weekends.
- **North Cascades Visitor Center** — Daily walks, talks and multi-media programs.
- **Heather Meadows** — Guided Walks.
- **Skagit Wild and Scenic River eagle watching** — winter weekends. Slide programs and nature viewing.
- **Golden West Visitor Center** — Daily mini-talks and weekend programs.



## Hike & Climb

Hundreds of miles of trail lead into the Cascade mountains. Many enter designated Wilderness. Day hikes do not require a permit. Overnight stays in North Cascades National Park's backcountry do. 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 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 *Climbing Notes* newsletter for more information.



## Stay

Campground options are listed in the centerfold, along with the North Cascades Highway Map. Most vehicle access campgrounds are available on a first come-first served basis. However, both the **Forest Service (1-800-280-CAMP)** and **Washington State Parks (1-800-452-5687)** have expanded their telephone reservation systems. Washington State Parks also have an information line (1-800-233-0321). North Cascades National Park does not have individual camping reservations.

Remote accommodations in the North Cascades include: **Ross Lake Resort**, Rockport, WA 98283, (206) 386-4437; **North Cascades Stehekin Lodge**, Box 457, Stehekin, WA 98816, (509) 682-4494; and **Baker Lake Resort** (360) 757-2262.

Many other private accommodations are available in adjacent communities. Listings are available from visitor information or Chamber of Commerce offices.



## Boat

Much of the recreation in the North Cascades is water-oriented. For lake recreation, boat ramps are available at Lake Chelan, Baker Lake, Gorge Lake and 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 55-mile long Lake Chelan. The Lake Chelan Boat Company operates year-round, daily spring to fall. Schedules are available.

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 a Ranger Station.



## Fish

The Skagit River (Washington's second largest after the Columbia) and its impounded lakes are home to many species of trout and salmon. In order to protect spawning fish populations, it is necessary to comply with special regulations including closures, seasons, bag limits and gear restrictions. These are listed in the Washington Department of Fish & Wildlife game fish regulations and in the *Fishing in the North Cascades* brochure.

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.

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



## 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 and Camp for school age children.

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.

For more information or a catalog, write:

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

# OVER THE NORTH CASCADES ON STATE ROUTE 20

## 1 Baker Lake Milepost 82 (turn off State Route 20)

Nine-mile-long recreational reservoir. Developed campgrounds accessed off the Baker Lake Hwy. Maple Grove Campground on the lake's eastern shore is accessed by boaters or hikers along the East Bank Trail. **Baker Lake Resort:** Store, camping, cabins and boat rentals: (360) 757-2262.

## 2 Mt. Baker National Recreation Area (M.P. 82)

Access via Forest Roads 12 and 13 off Baker Lake Highway. **Mt. Baker NRA** trailhead camp available for one night, for horse users (after August 1) and for hikers.

## 3 Rockport M.P. 98

**Sauk Mt. Trail** access off Forest Road 1030. Switchbacks up 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 miles of trail circle park. **Howard Miller Steelhead Park:** Located at Rockport along 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 Rd.) and **North Cascades National Park Backcountry Permits:** (360) 873-4500. Permits free; available in person only.

## Cascade River Road

Cross bridge over Skagit River at east end of town. Rough gravel road leads to Cascade Pass trailhead in North Cascades National Park.

## 5 Ross Lake National Recreation Area M.P. 112

117,574 acres; administered by North Cascades National Park Service Complex (see pages 11 and 12). **Thornton Lakes Road/Trail:** access 4.7 miles up windy, gravel road (see trail chart on page 12 for details). **Goodell Creek Campground:** Rustic sites along Skagit River; open all year. Raft launch.

## 6 Newhalem M.P. 120

**Newhalem Creek Campground** — Open May to September; \$10. **North Cascades Visitor Center** — Interpretive programs, books and maps. Open daily mid-April through October. Open weekends in winter. **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 Creek Falls** — 242-foot waterfall four miles east of town.

## 7 Diablo M.P. 129

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 five mile 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

**Diablo Lake Overlook** — Spectacular views and detailed geology exhibit. **Ross Dam Trailhead and Happy Creek Forest Walk** **Ross Lake Resort** — Floating cabins, boat rentals, portage service and water taxi, (206) 386-4437.

## 10 East Bank Trailhead M.P. 138

**Trailhead** Panther Creek Trail, East Bank Trail and Ruby Creek Trails converge near here.

## 11 Rainy Pass Picnic Area M.P. 158

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

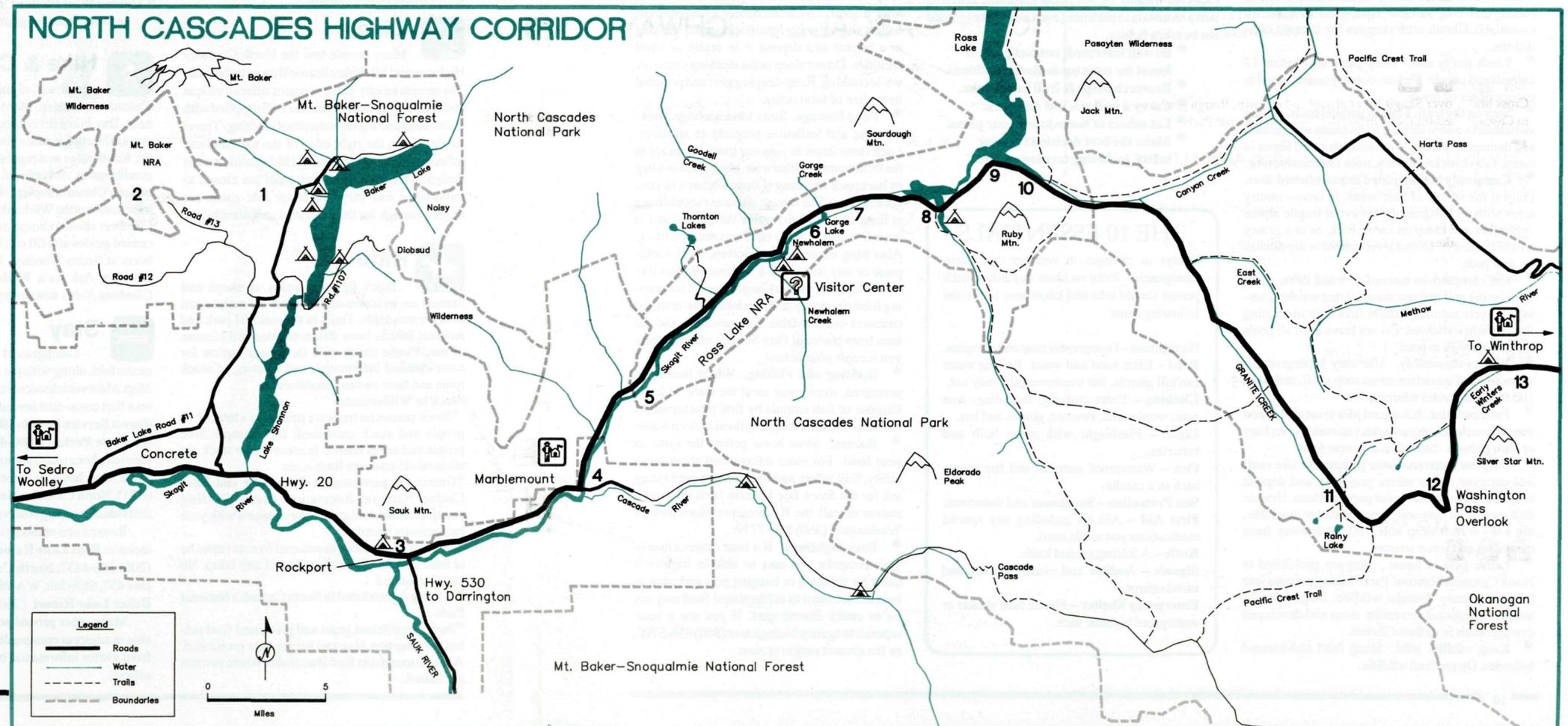
## 12 Washington Pass M.P. 162

**Restroom** facilities and universally 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). **Methow Valley Visitor Center M.P. 192**

For trails information along State Route 20, please see charts on pages 4 and 12.



# OVER THE NORTH CASCADES ON STATE ROUTE 20

Many public campgrounds in the North Cascades are accessible by road. Most sites are filled on a first-come, first-served basis. Some private campgrounds and resorts provide cabins and showers.

Free campgrounds are primitive, requiring that you bring your own water and pack out garbage. Some National Park campgrounds offer ranger/naturalist programs. Reservations are taken at most National Forest campgrounds; call 1-800-280-CAMP for details. Call Sedro-Woolley (360-856-5700) to inquire about National Park and National Forest group camp reservations.

**Legend:**  
 FS = Forest Service  
 SP = WA State Park  
 P = Puget Power  
 NP = National Park  
 Service  
 CP = County Park

### CAR CAMPING IN THE NORTH CASCADES

Location	Campground	Managed By	Accessible Drinking Water	Flush Toilets	Garbage Vault Toilets	Hiking Trail	Boat Ramp	Fishing	Number of Campsites
Hwy 542	Douglas Fir	FS	●	●	●	●	●	●	30
	Silver Fir	FS	●	●	●	●	●	●	21
Baker Lake Road MP.14-MP.23	Kulshan	P	●	●	●	●	●	●	79*
	Horseshoe Cove	FS	●	●	●	●	●	●	34
	Panorama Point	FS	●	●	●	●	●	●	16
	Boulder Creek	FS	●	●	●	●	●	●	10
	Park Creek	FS	●	●	●	●	●	●	12
Hwy 20 MP.96-MP.180	Shannon Creek	FS	●	●	●	●	●	●	20
	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
Cascade River Rd Via B.C.	Klipchuck	FS	●	●	●	●	●	●	46
	Early Winters	FS	●	●	●	●	●	●	13
	Marble Creek	FS	●	●	●	●	●	●	24
	Mineral Park	FS	●	●	●	●	●	●	4
	Hozomeen	NP	●	●	●	●	●	●	122



# What You Need to Know

## Safety

- At trailheads, safeguard your possessions out of sight. Lock your vehicle.
- Use caution on forest access roads.
- Bring extra water on hikes. A special 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.
- Terrain 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 and biting flies.
- Some stream crossings are not bridged. Cross streams in the morning (when they are lowest), scout for the safest crossings, or turn around if the rushing water is unsafe.
- Many trails suffered extensive storm damage this 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.

## Leave No Trace:

### Minimizing Impact

- **Plan ahead.** Prepare mentally and physically. Choose destinations that you are in condition to handle and take suitable equipment (see the 10 essentials). Check with rangers for current conditions.
- **Limit party size.** Keep party size below 12 animals and people. In cross-country zones, travel in groups of six or fewer.
- **Stay on the trail.** Making parallel trails, cutting switchbacks and widening trails cause soil erosion and damage to plants. Wear smooth-soled shoes in camp. Leave rocks, flowers, trees and mushrooms.
- **Camp only in designated or established sites.** Prevent the spread of bare areas. In cross-country areas without designated sites avoid fragile alpine vegetation and camp on snow, rock, or in a grassy area of the forest. Do not level ground or dig ditches for tent pads.
- **Use campstoves instead of wood fires.** Fires sterilize the soil and use material that would otherwise recycle naturally. Build fires only in existing fire pits when allowed. Do not leave until all coals are cool enough to hold.
- **Wash responsibly.** Use only biodegradable soaps in small quantities or no soap at all, and wash 100 feet from water sources.
- **Pack out litter.** It is a good idea to eat all the food you prepare; leftovers may attract animals. Never bury or burn garbage. Store it as if it were food.
- **Dispose human waste properly.** Use vault and compost toilets where provided, and deposit **only** human waste and toilet paper in them. Urinate on a rock or on bare soil. If no toilets are available, dig a 4 - 6 inch deep hole 100 yards away from campsites and water sources.
- **Leave pets at home.** Pets are prohibited in North Cascades National Park. Taking animals into the backcountry disturbs wildlife. Dogs must be leashed in national recreation areas and developed campgrounds in national forests.
- **Keep wildlife wild.** Hang food and scented toiletries. Do not feed wildlife.



## Backcountry Camp

Permits are required for all overnight stays in the park complex's backcountry. More than 200 backcountry campsites are available for hikers and stock users at North Cascades National Park Service Complex. All camps have toilets; signs along trails indicate their location. Permits are available on a first-come, first-served basis from ranger stations on the west side at Marblemount, Sedro-Woolley, Hozomeen, Glacier or on the east side at Chelan, Stehekin, Twisp and Winthrop. For permit information contact:

### Wilderness Center

North Cascades National Park  
Marblemount, WA 98267  
Phone: (360) 873-4500

Camping in the National Forest does not require a permit. Overnight visitors to the Mt. Baker National Recreation 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.

## Be Safe in the Backcountry

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 a well stocked day pack.**
- **Let others at home know your plans.**
- **Make the best decision for your safety, including turning around.**

### THE 10 ESSENTIALS

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

- Navigation** – Topographic map and compass.
- Food** – Extra food and water. Boiling water can kill giardia, but 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.
- Signals** – Audible and visual; whistle and metal mirror.
- Emergency Shelter** – Plastic tube shelter or waterproof bivouac sack.

## Suggestions for Hiking with Children

Bring along extra items such as:

- wholesome snack foods
- extra water
- sunscreen
- insect repellent
- a whistle in case they get lost

**Some ideas for keeping children entertained:** Have them bring along a friend; sing songs; bird watch; identify plants; look for animal tracks.



## Mushroom collection is prohibited

in the North Cascades National Park Complex, but is allowed on some state and national forests. Check with local ranger station for rules.

## Visiting Bear Country

Once accustomed to human food, a bear may seek it aggressively. You can prevent bear encounters by following basic precautions of proper food storage and camp cleanliness.

- **Cooking.** Try to have your sleeping area and personal gear about 100 yards (90 m) uphill or upwind from your cooking area. Wash dishes after a meal. 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.** Store food, garbage, cooking gear and toiletries properly at all times. Lock these items in your car trunk if you are in the frontcountry. Otherwise, place them in a bag or backpack and hang it from a branch in your cooking area. The storage container should hang 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 a fragrant or food-like odor. Plastic-coated dry bags are good for hanging food since they seal in odors. Bear-resistant canisters are available commercially and for loan from National Park Service offices where you receive your permit
- **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 your food. For more information about horse safety, trail safety and minimum impact riding ask for the *Stock Use* bulletin from the ranger station or call the Backcountry Horsemen of Washington (360) 876-7739.
- **Bear 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. If you see a bear, report it to agency biologists at (360) 856-5700, or the nearest ranger station.

# North Cascades National Park Service Complex

## NORTH CASCADES NATIONAL PARK

In order to preserve for the benefit, use, and inspiration of present and future generations certain majestic scenery, snow fields, glaciers, alpine meadows, and other unique natural features in the North Cascade Mountains of the State of Washington, there is hereby established...the North Cascades National Park.

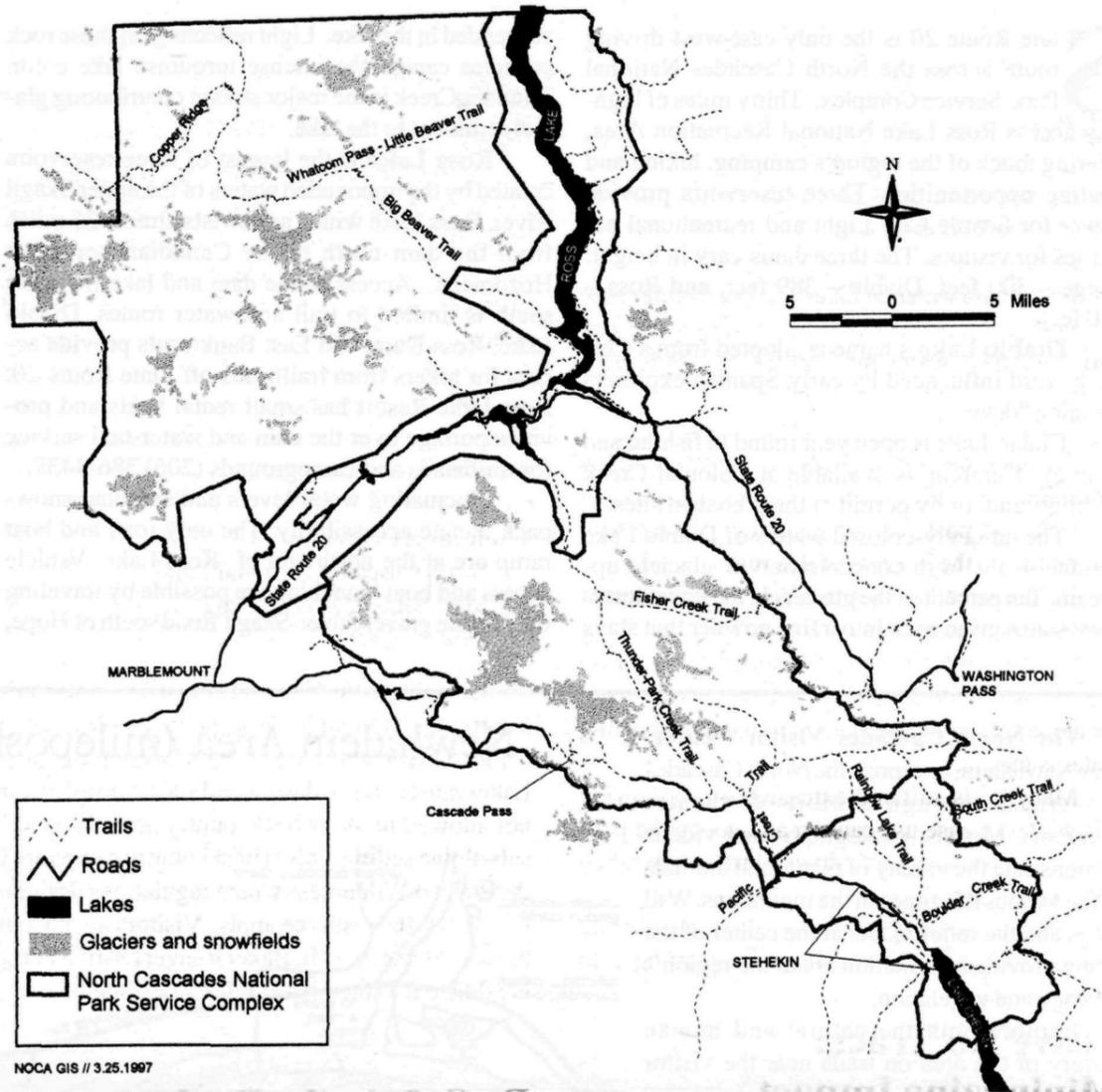
When President Johnson signed the bill that began with the above words on October 2, 1968, it marked the beginning of a new kind of national park stewardship.

North Cascades National Park was among the first national parks to be managed as wilderness. The primary objective is to allow the park to retain as much of its wild character as possible.

To preserve the North Cascades wilderness qualities there is very little development within the national park. Hotels, restaurants, stores and other artifacts of civilization are outside the park's boundaries; inside, wild flora and fauna exist in an ecosystem largely untouched by humans.

Although North Cascades National Park was managed as wilderness from the very beginning, it was not until 1988 that its management policies were given the strength of law. In that year, Congress designated 93 percent of the entire North Cascades Complex as the Stephen Mather Wilderness.

As defined in the 1964 Wilderness Act, "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." This wilderness designation means the vast majority of land in the park is, and will remain, wild and undeveloped.



NOCA GIS // 3.25.1997



Twenty-nine years after North Cascades National Park was established it is regarded as one of the most unspoiled, intact wild areas in the United States. It is home to hundreds of species of birds, plants and animals whose populations are declining elsewhere due to human-caused mortality and habitat loss.

North Cascades National Park is part of a 10,000 square mile recovery zone in the North Cascades ecosystem for the grizzly bear, an animal threatened with extinction in the lower 48 states. The North Cascades is one of only six areas in the United States determined to have the right habitat and to be wild enough for grizzlies.

Wolves, which are on the Endangered Species List, have recently been returning to the North Cascades after nearly being extirpated from the region decades earlier. There is very good evidence that wolves are living and passing through North Cascades National Park Complex and surrounding areas.

The defining characteristic of North Cascades National Park is wildness; the best way to experience that wildness is to leave civilization behind and hit the trail. The rugged and magnificent mountains and valleys of North Cascades National Park await you.

## Walk on the Wild Side! Multi-day Backpacking Hikes in the North Cascades

Day hikes are a great way to see the North Cascades, but there is nothing like a multi-day trip to really experience wilderness. Below are several ideas for hikes you may want to try (backcountry permits required). Two excellent trail books, *Popular Trails* and *Backpacking From Stehekin*, list dozens of other long hikes in the North Cascades. Both are available at all ranger stations.

### McAlester Pass — Rainbow Lake Loop (via Bridge Creek - Pacific Crest Trail)

Loop trip: 25.5 miles Hiking time: 3 days  
High Point: 6,500 feet (McAlester Pass)  
Snow free: Mid-July to October  
Crossing Rainbow Creek and a late-melting snowfield are among the challenges on this hike. Following the Pacific Crest Trail south allows access to several possible loop hikes; other options along this hike include McAlester and Rainbow Lakes.



### Hannegan Pass — Ross Lake

One-way trip: 46 miles Hiking time: 5 - 6 days  
High Point: 5,206 feet (Whatcom Pass)  
Snow free: Mid-July to October

On day 3 of this hike you can take a worthwhile side trip to one of the most scenic areas at this elevation in the park. Wildflowers, views of glaciers and about a dozen waterfalls are all part of the upper Little Beaver Valley around Twin Rocks Camp.

### Colonial Creek Campground — Stehekin Valley

One-way trip: 29.4 miles Hiking time: 3 days  
High Point: 6,040 feet (Park Creek Pass)  
Snow free: Late-July to September

The first ten miles wind through spectacular old growth forest. Terrific views of glaciers and the national park at the upper end of the Thunder Creek Valley. This valley drains 10 percent of all the glaciers in the contiguous United States.



Always check with rangers for more detailed hiking information current conditions

# North Cascades National Park Service Complex

## ROSS LAKE NATIONAL RECREATION AREA

State Route 20 is the only east-west driving route across the North Cascades National Park Service Complex. Thirty miles of highway access Ross Lake National Recreation Area, offering much of the region's camping, hiking and boating opportunities. 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.

Diablo Lake's name is adopted from a Chinook word influenced by early Spanish explorers meaning "devil."

Diablo Lake is open year round to fishing and boating. Camping is available at Colonial Creek Campground, or by permit at three boat-in sites.

The uniquely-colored waters of Diablo Lake are due to the high concentration of glaciers upstream. Ten percent of the glaciers in the lower forty-eight states grind rock into a fine powder that stays

suspended in the lake. Light reflecting off those rock particles causes the intense turquoise lake color. Thunder Creek is the major stream contributing glacial sediment to the lake.

Ross Lake is the largest of three reservoirs created by the impounded waters of the upper Skagit River. Ross Lake winds and twists almost 25 miles from the dam north to the Canadian border at Hozomeen. Access to the 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 has small rental boats and provides portage over the dam and water-taxi service for trailheads and campgrounds (206) 386-4437.

Fluctuating water levels and seasonal snow-pack dictate accessibility. The only road and boat ramp are at the north end of Ross Lake. Vehicle access and boat launching are possible 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 litter and refuse. Ross Lake's limited access helps protect the pristine quality of the lake and its environment.

Ross Lake has a quality sport fishery of naturally reproducing trout, which opens July 1 each year. The catch limit is three rainbow trout (13 inch minimum) per day. No bait or barbed hooks are allowed. If bull trout and Dolly Varden are hooked, they must be carefully and immediately released. A Washington State fishing license is required.

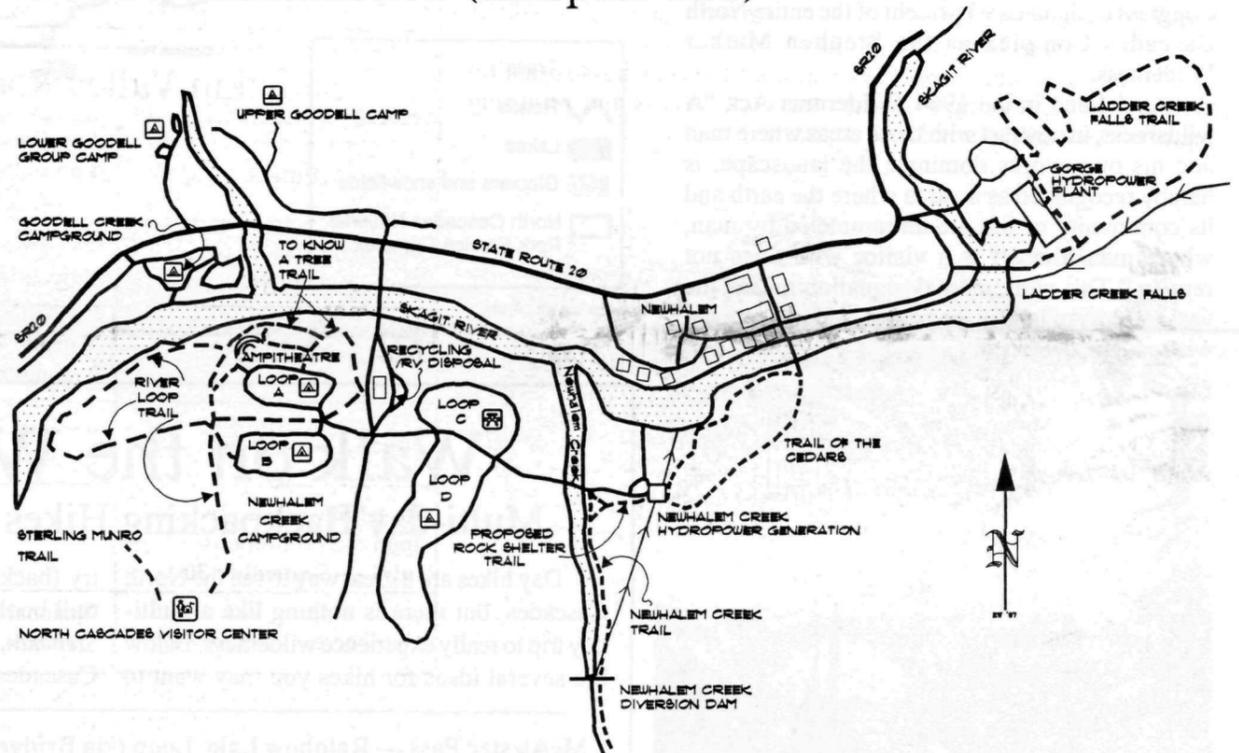
Ross Lake's natural fishery is unique, since the pressures of over-fishing have made it necessary to stock other lakes and many creeks with hatchery fish. Natural spawning occurs in the Skagit River above Ross Lake and in the tributary streams like Big Beaver, Lightning, Roland, Dry, and Ruby Creeks. 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.

The North Cascades Visitor Center, near Newhalem, interprets the North Cascades wilderness through exhibits & theater programs. Models, photographs and videos demonstrate the variety of plants and animals of the various life zones in the mountains. Wall maps and the relief model at the center of the lobby provide information about the region's geology and vegetation.

Explore both the natural and human history of the area on trails near the visitor center. New trails are being developed that highlight the Skagit River and Native American life. Check with rangers about local hikes and programs. Exploring the trails beyond the visitor center can give you a taste of the wilderness of the North Cascades.

Newhalem Creek Campground, located on the south side of State Route 20 in Newhalem, has one universally accessible campsite in each of the campground's three loops. Colonial Creek Campground, located at milepost 130 on State Route 20, has two universally accessible campsites, one each in the north and south units.

### Newhalem Area (milepost 120)



Trails	State Route 20 Milepost	Distance (Round-trip)	Elevation Gain	Difficulty	Remarks
Thornton Lakes Trail	117	10.4 miles	2300 feet	moderate	Long day hike; permit needed for overnight
Sterling Munro Trail	120	660 feet	level	very easy	Boardwalk; view into the Picket Range; universally accessible
River Loop Trail	120	1.8 miles	level	easy	Forested walk to river; universally accessible
Pyramid Lake Trail	127	4.2 miles	1500 feet	moderate	Steep forest; stream; small lake
Diablo Lake Trail	128	7.6 miles	400 feet	easy	Trailhead across Diablo Dam
Thunder Creek Trail	130	1.6 - 38 miles	6300 feet	easy-difficult	Easy 1.6 miles round-trip to suspension bridge
Fourth of July Pass/ Panther Creek	130 138	10 miles	2900 feet	moderate	Access trail by hiking 1.8 miles up Thunder Creek Trail; steep to pass
Ross Dam Trail	134	1.5 miles	- 500 feet	easy	Short but steep trail from State Route 20 to dam
Happy Creek Forest Walk	134.5	.3 miles	level	very easy	Universally accessible
East Bank Trail	138	.5 - 34 miles	1500 feet	easy	Trail east (Canyon Creek) or west (Ross Lake)

# North Cascades National Park Service Complex

## LAKE CHELAN NATIONAL RECREATION AREA

**S**tehekin, in the heart of Lake Chelan National Recreation Area, is a remote community situated along the lower few miles of the Stehekin River. No roads connect Stehekin to the rest of the world; accessible only by passenger ferry or private boat, floatplane, hiking or horseback, the beautiful Stehekin Valley is a pleasant escape from life's frantic pace.

When you arrive at Stehekin, come to the National Park Service's Golden West Visitor Center for information, exhibits, books, maps, backcountry permits, and programs by ranger-naturalists.

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

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.

There are trailheads and small campgrounds along the Stehekin Valley Road. The date for opening this road from High Bridge to Bridge Creek will depend on the time needed to repair road damage. Repairs beyond Bridge Creek will take the remainder of the 1997 season, preventing shuttle service beyond that point this year. As soon as trail damage is repaired hikers, horseback riders and bicyclists will be able to reach Cottonwood Camp at the road's end, and motorcyclists will be able to go as far as Flat Creek (3 miles below Cottonwood).

During the summer season the lodge operates a tour bus to beautiful Rainbow Falls, leaving just after the boat arrives and returning approximately one hour before it departs.



	Stehekin Sampler What to do when visiting Stehekin	
Hour Stay	<ul style="list-style-type: none"> <li>Visit Golden West Visitor Center, which has exhibits, an art gallery, programs, books and naturalist talks.</li> <li>Learn about homesteading along the McKellar Cabin Trail. Allow 15 minutes walking time.</li> </ul>	
Three Hour Stay	<ul style="list-style-type: none"> <li>Walk Imus Creek Nature Trail (3/4 mile self-guided loop with views). Starts at Golden West Visitor Center.</li> <li>Pedal a bike 3.5 miles to Rainbow Falls, Old School and Buckner Orchard.</li> </ul>	
Whole Day	<ul style="list-style-type: none"> <li>Take the shuttle bus and narrated tour up valley.</li> <li>Stroll down the Lakeshore Trail with a picnic lunch.</li> </ul>	
Overnight	<ul style="list-style-type: none"> <li>Ride a bus to a trailhead and day-hike or backpack one of the many trails listed below.</li> <li>Attend a naturalist program at the Golden West Visitor Center. Check at the front door for program schedule.</li> </ul>	

Stehekin Valley Road Shuttle Bus Service		
Date	Service between Stehekin Landing and High Bridge (One Zone)	Service between High Bridge and Bridge Creek (One Zone)
Memorial Day Weekend May 23 — May 26	Stehekin Adventure Co. 4 round-trips daily*	
June 1 — June 12	National Park Service 2 round-trips daily**	
June 13 — September 30	Stehekin Adventure Co. 4 round-trips daily*	
Target Start Date (dependent upon road conditions) July 1 — September 30		National Park Service 4 round-trips daily**
October 1 — October 13	National Park Service 2 round-trips daily**	National Park Service 2 round-trips daily**

\* NO reservations required; \$4 per one way trip (Stehekin Adventure Co. shuttle)  
 \*\* Reservations REQUIRED; \$5 per one way trip per zone (NPS shuttle)  
 For reservations or shuttle times call (360) 856-5700 x-340 then 14

Trails	Distance to Trailhead	Distance (One Way)	Elevation Gain	Difficulty	Remarks
Rainbow Loop Trail	2.6 miles	4.4 miles	1,000 feet	moderate	Bluffs overlooking Stehekin Valley and Lake Chelan
Lakeshore Trail	Golden West Visitor Center	17.2 miles	500 feet	moderate	Trail follows north shore of Lake Chelan with scenic views of the lake
Purple Creek Trail	Golden West Visitor Center	7.5 miles	5,700 feet	Strenuous	Hike an additional 1/2 mile to Boulder Butte for a panoramic view
Cascade Pass Trail	22.8 miles	12.6 miles	2,600 feet	moderate	Well-used trail through talus slopes and wooded ridge to Cascade Pass
McGregor Mountain Trail	11.1 miles (at High Bridge)	7.7 miles	6,525 feet	very strenuous	Steep hike to excellent views. Check at Golden West Visitor Center for route
Agnes Gorge Trail	11.3 miles	2.5 miles	400 feet	easy	Excellent views of Agnes Mountain
Coon Lake Trail	11.1 miles (at High Bridge)	1.2 miles	600 feet	moderate	Coon Lake is an excellent place for watching birds
Goode Ridge Lookout Trail	16.1 miles	5.4 miles	4,800 feet	Strenuous	Trail ends at old fire lookout with a panoramic view
Stehekin River Trail	4.4 miles (at Harlequin Camp.)	4.0 miles	level	easy	Trail follows river. Beaver ponds; birds; fishing holes
Bridge Creek Trail	15.9 miles	14.3 miles	2,600 feet	moderate	Pacific Crest Trail heading north

# Alien Invasion

By Helen Buller

They may be pretty or they may be plain. Either way, exotic plants threaten North Cascades ecosystem integrity. Alien invaders such as knapweed, skeletonweed and scotch broom thrive in areas disturbed by humans.

When people excavate soils or build roads they create an ideal environment for alien plants. Usually brought in as seeds attached to vehicles, pets and cargo, alien plants are more successful than natives at colonizing human-disturbed areas. Without controls, such as competing plants and predatory insects prevalent in their homeland, alien species flourish and out-compete native plants.

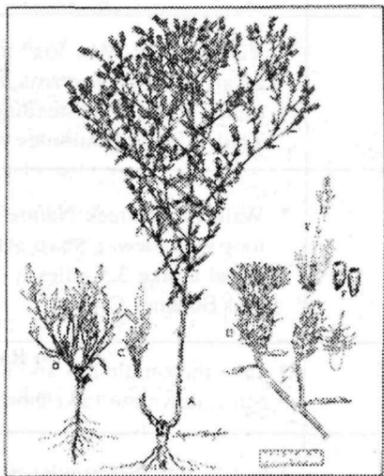
Over thousands of years, more than 1,500 plants have adapted to successfully fit specific North Cascades habitats. Though hardy enough to survive natural disturbances such as fire, these native plants do not fare as well in areas disturbed by humans. Native plant communities have the toughest time in disturbed habitats at dry, low elevations and high, cold elevations.

To preserve the native landscape, the National Park Service (NPS) and Forest Service use a range of techniques to control alien plant invasions in the North Cascades. These include mechanical,

biological and chemical methods. (The Forest Service only hand-pulls; it does not use chemicals).

Because the NPS strives to limit environmental damage, the agency prefers to pull, by hand, invaders that do not grow back from broken roots. This mechanical method is extremely work intensive. Seeds can lie dormant for up to seven years and areas must be repeatedly revisited.

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



Knapweed

species, it can slow down the rate of invasion.

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

## North Cascades Environmental Education Center



The North Cascades Environmental Education Center is a new partnership project between North Cascades Institute, North Cascades National Park and Seattle City Light.

The partnership is designing a residential environmental education center to be built on the shore of Diablo Lake in Ross Lake National Recreation Area. The learning center will be constructed on the site of the old Diablo Lake Resort and is targeted for completion in 1999.

Seattle City Light will build the environmental education center as part of the relicensing agreement for three dams the utility operates on the Skagit River. The National Park Service will dedicate the land for environmental education and provide additional support.

The learning center will include dorms, classrooms, labs, staff housing, cafeteria, library and trails. North Cascades Institute (NCI) will be responsible for educational programming and operations at the center. NCI is a nonprofit environmental education organization dedicated to promoting ecological literacy to citizens of the Pacific Northwest.

The learning center will provide a wonderful opportunity to reach a wider audience and build new partnerships in support of environmental education in the Pacific Northwest.

## Helping Hand Extends to North Cascades N.P.

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 tightening 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 projects, trail improvements, vegetation restoration, vegetation theft prevention and fish and wildlife projects. By securing financial contributions from individuals, corporations, foundations and businesses, the *Fund* supports projects that are recommended by the various Parks.

Thanks to a grant from the *Fund*, North Cascades National Park staff were able to provide evening naturalist programs in the park's busiest campgrounds throughout the summer of 1996. This year, the *Fund* is supporting the construction of a fully accessible interpretive boardwalk trail to an archeological site. The project, which will be completed in 1998, will help park visitors learn about how people lived in the North Cascades for thousands of years.

For more information about how you can help give nature a helping hand, call (206) 621-6565 or look for the *Fund's* brochure in any of the visitor centers located at all three Washington national parks.

# Skagit Relicensing Agreement

In 1995 the Federal Energy Regulatory Commission approved a new 30-year license for the Skagit River Hydroelectric Project. The Project includes the three dams and their related reservoirs, powerhouses and transmission lines along the Skagit River owned by Seattle City Light. The utility company is owned by the City of Seattle. All three dams are within Ross Lake National Recreation Area, one of the three National Park Service areas comprising North Cascades National Park Service Complex. All three predate the establishment of the complex in 1968.

The new hydropower license includes settlement agreements designed to mitigate the effects of the dams in five categories: fisheries, recreation and aesthetics, wildlife, erosion and cultural resources. The agreements were negotiated among Seattle City Light, tribes, conservation groups and various state and federal agencies, including the National Park Service.

Under the settlement agreements, Seattle City Light will fund a wide variety of projects over the 30 years of the license. An example is the North Cascades Environmental Education Center. 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 1998 and the center will open in 1999, offering classes to school groups, adults and Elderhostel participants.

Another major mitigation project is an interpretive trail and other improvements at the Gorge Falls parking area along the North Cascades Highway. Wildlife monitoring, studies of salmon in the Skagit River, the propagation of native plants in a greenhouse to revegetate impacted sites and preparation of a plan to protect archeological sites around Ross Lake are examples of other settlement agreement projects beginning this year.

Unprecedented in their scope and in resulting from willing negotiation among so many parties, the settlement agreements provide funding of more than \$100 million over the 30 years of the license. Visitors and the natural and cultural resources of Ross Lake National Recreation Area will be the beneficiaries of this innovative approach.

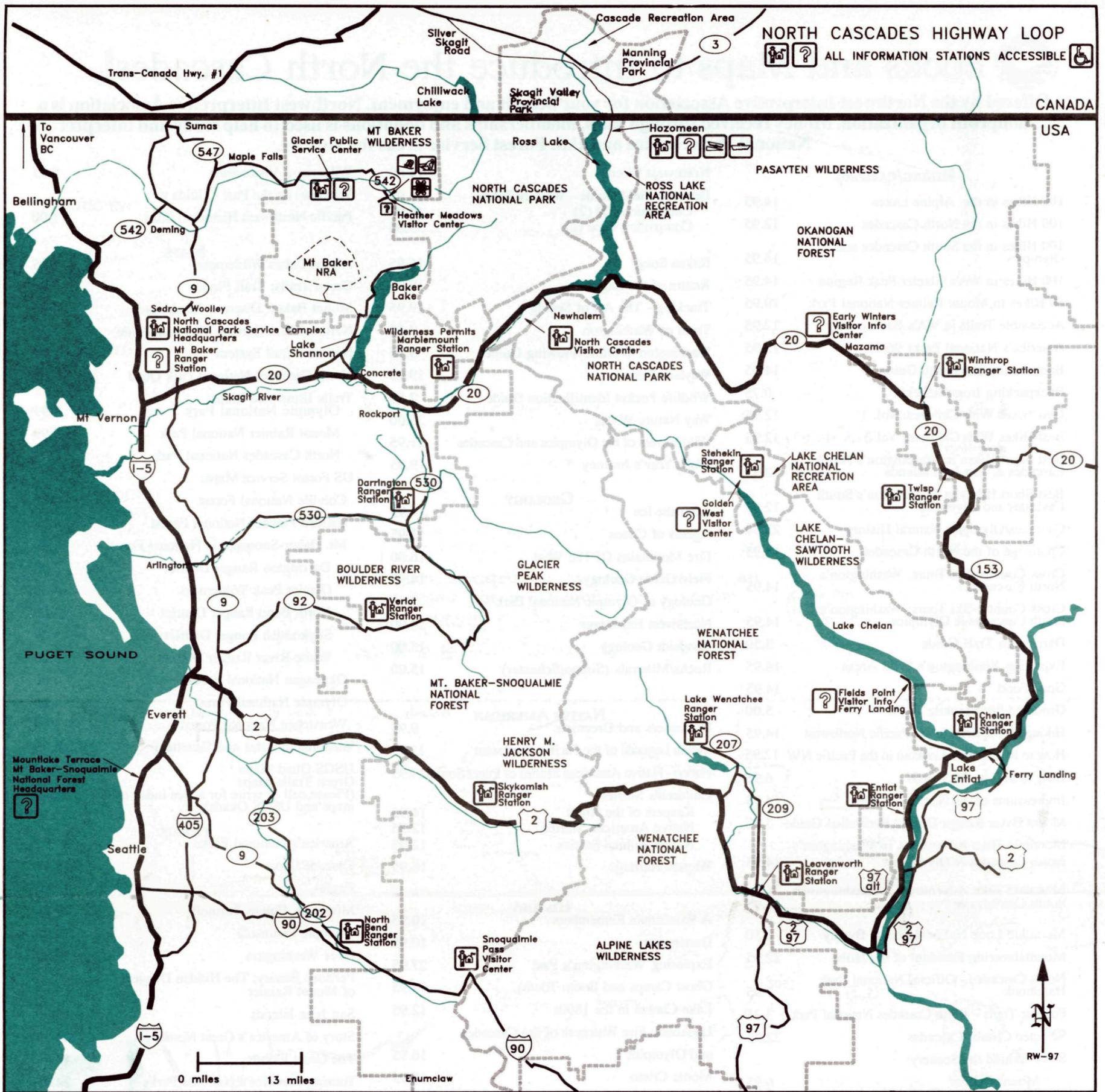
### North Cascades Challenger

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

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Mt. Baker-Snoqualmie National Forest:  
<http://www.wiredweb.com/mbs>





**Park & Forest Information Stations**  
**Cascade Loop--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**  
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 2105 State Route 20, 98284  
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 Fri., 8:00am-6:00pm  
 Weekends in summer only  
 (360) 856-5700  
 TDD (360) 856-5700 x-310

**MARBLEMOUNT**  
 Wilderness Center  
 Ross Lake National Recreation Area (NPS)  
 Backcountry Information/Permits  
 \*Fri. - Sun., 7:00am-8:00pm  
 \*Mon. - Thurs., 7:00am-6:00pm  
 (360) 873-4500 (ext. 37 or 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, 8:00am-4:30pm  
 (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) 782-1413

**LAKE WENATCHEE Ranger District**  
 Mon. - Sat., 8:00am-4:30pm; closed Sundays  
 except for holidays  
 (509) 763-3103

**Outdoor Recreation Information Center**  
 (For help in planning trips)  
 (206) 470-4060

**Mt. Baker-Snoqualmie National Forest**  
 Supervisor's office: (425) 775-9702  
 1-800-627-0062 or TDD 1-800-272-1215  
**GLACIER PUBLIC SERVICE CENTER**  
 Daily, 8:30am-4:30pm (360) 599-2714

**HEATHER MEADOWS Visitor Center**  
 \*Daily, 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

