

Lake Chelan National Recreation Area



A Place Apart

Embrace the pioneer spirit and journey to the remote community of Stehekin, located on the northern shore of Lake Chelan. Nestled in a serene valley and surrounded by untouched wilderness, Stehekin offers a variety of attractions to suit all visitors. Whether you are seeking a quiet weekend or want to challenge the untamed wilderness, Stehekin and the surrounding trails have plenty of new sights to discover.



Golden West Visitor Center

WHAT TO SEE, WHAT TO DO

The Historic Golden West Visitor Center- knowledgeable rangers can assist you with trail and camp conditions, backcountry permits, and general information. The visitor center also offers daily naturalist programs featuring natural and cultural history, including evening programs, short talks, guided walks, bicycle tours, and Junior Ranger activities.

The Golden West Gallery- located in the visitor center, displays artwork inspired by the North Cascades.

Stehekin Pastry Company-no visit is complete without stopping by the bakery for a fresh, delicious treat.

Buckner Orchard- an intact example of early entrepreneurial farming in the Pacific Northwest and the only farm currently producing Common Delicious apples in the United States.

Hike- more than 11 trails varying in difficulty and length.

Camp- more than 13 campsites are available with locations on the lakeshore or deep in the wilderness.

LODGING

A variety of accommodations are available in Stehekin ranging from resorts to backcountry camping.

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

Traveling to Stehekin

FERRY

Lake Chelan Boat Company provides round-trip service between Chelan and Stehekin with scheduled stops at Field's Point and Lucerne.

- Lady of the Lake II offers one daily round trip from May 1 through October 15.
- Lady Express offers one daily round trip daily June 1 through September 30. May 1 through May 31 & October 1 through October 15 one round-trip shuttle is offered on Saturday and Sunday only.

For up-to-date schedule and rates, regulations regarding transportation of freight and pets, or information regarding private charters call (509) 682-4584 or visit: www.LadyoftheLake.com

ON FOOT OR HORSEBACK

For a wilderness adventure hike or horseback into the Stehekin Valley. Multiple routes transverse the surrounding wilderness areas. For trail conditions and trip planning, contact a Ranger Station.

PRIVATE BOAT

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

FLOAT PLANE

Chelan Airways offers daily flights during summer months. For more information or to schedule a flight visit: www.chelanairways.com or call (509) 682-5555.

Wolverines in the North Cascades

In 2005, the U.S. Forest Service joined with the Washington Department of Fish and Wildlife to begin monitoring wolverine populations in the North Cascades. The five-year project is the first in Washington to study the distribution and ecology of this rare and elusive forest carnivore.

Employing a variety of methods including snowtracking and remote-camera surveys, researchers established several likely locations of wolverine activity. Live capture traps, made from native logs, were placed in four-to-six strategic locations and baited with deer, beaver and salmon carcasses.

During the 2005/2006 winter, one female wolverine dubbed Melaine, was captured and radio collared at the Hart's Pass trap. Shortly afterwards a male, nick-named Thor, was also captured at the same trap site. His radio collar failed shortly after capture, offering limited movement information.

The 2006/2007 winter, one male and one female, named Chewbacca and Xena, respectively, were captured and fitted with radio collars in the upper Twisp River drainage. Thor was photographed near Hart's Pass using a

remotely-censored camera, however, biologists were unable to recapture him to replace the malfunctioned collar. Melanie was recaptured in 2007. Researchers determined she was pregentant, however the fate of her offspring is unknown.



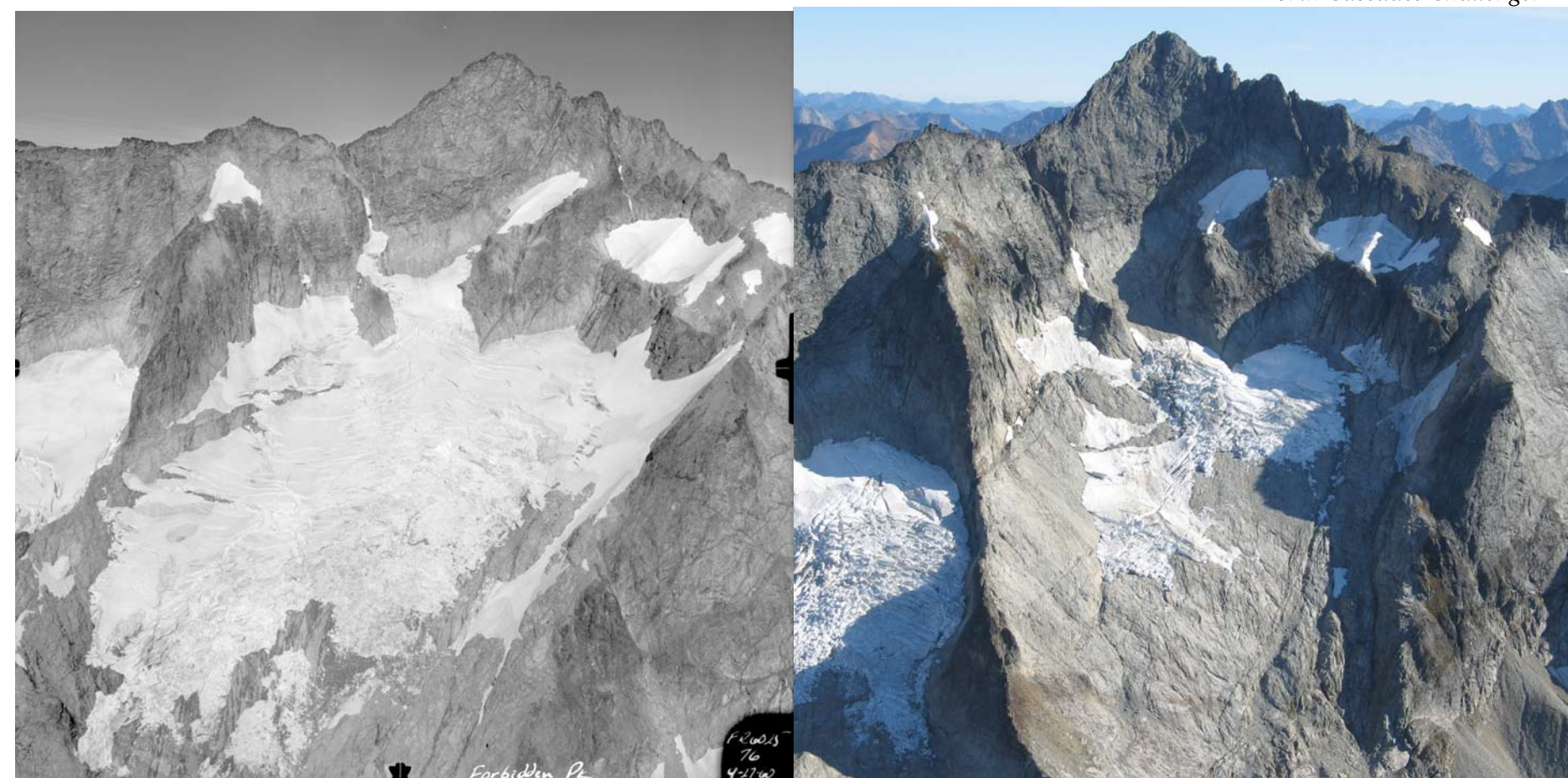
A remote camera captures an image of Melaine.

Success continued during the 2007/2008 winter when a male wolverine named Rocky was captured at the Hart's Pass trap. Satellite data show his movements and activity range parallel that of Melaine, extending into Manning Provincial Park, B.C.

Researchers are experimenting with two types of collars, satellite and GPS to determine which offers the most accurate location data and utilizes its battery life most efficiently. Preliminary data shows the wolverines inhabit large tracts of land ranging through the crest and eastern edge of the North Cascades all the way into

Canada. The wolverines appear to move in a figure-eight pattern, which may increase their likelihood of locating food and mates.

Research is expected to continue in the 2008/2009 winter and may include partnerships with Canadian scientists and eventually expand into more remote areas of North Cascades National Park.



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

Our Changing World

North Cascades National Park is home to 312 glaciers, more than any other state in the lower 48 states. However, these reminders of an icy past may not have a long future in the North Cascades.

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

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

Measuring all the glacier variables (topographical, slope, shade, etc.) involved in the survival of a glacier would be time consuming and nearly impossible. So Riedel focuses on the most important factors: snow accumulation and snow and/or ice melt.

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

To get these measurements, Riedel and his team journey to each of the four glaciers three times per year.

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

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

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

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

With summer temperatures a degree warmer compared to 100 years ago, Riedel estimates that glaciers will need roughly 125 percent of normal snow pack in order to break even each year. With cool temperatures and snowstorms persisting into the late April of this year, the snowpack was 134 percent of average as reported on May 6, 2008, by the Natural Resource Conservation Service. We will not know for several more months if this above average snowpack will balance the glacier "checkbook" at the end of the 2008 melt season.

Climbing in the North Cascades

The prominent volcanic cone of Mt. Baker attracts thousands of climbers who each year attempt the 10,781 foot summit.

The peak offers a variety of approaches and varying degrees of technical difficulty for climbers. All routes enter the Mt. Baker Wilderness where Wilderness regulations apply.

The two favored routes are the Coleman or the Easton Glaciers. The climb is physically challenging and the routes require technical skills and good fitness. Climbers should be experienced in glacier travel and crevasse rescue, proficient at route finding, and have all proper equipment before attempting the summit. As the season progresses, route difficulty increases as open crevasses make route finding more challenging.

Mt. Baker is just one of a multitude of rewarding climbs, with a wide variety of technical difficulty, located throughout the Cascades. Consult one of the many climbing guide books for peaks and detailed route information.

A list of licensed climbing guides and outfitters can be obtained from any ranger station or National Park or U.S. Forest Service Web sites.

Tips for a Safe Trip

- » Climb with an experienced leader.
- » Rope up for all glacier travel; know crevasse rescue techniques.
- » Have at least two experienced people per 3-person rope team.
- » Climbing with less than three people can be hazardous and is not recommended.
- » Be aware of current weather and route conditions.
- » Use good judgment and know your limits—the summit is never worth injury or loss of life.
- » All climbers are encouraged to fill out a Voluntary Climbing Register, available at all ranger stations, as an added safety precaution.

Leave No Trace Concerns for Climbers

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

Sub-alpine vegetation is particularly fragile and susceptible to human disturbance. These plants have short, often harsh growing seasons. Walking, sitting, or camping on the vegetation can easily cause significant damage. Please travel, rest, and camp on trails or in designated sites, or on durable surfaces such as snow, rock, or bare ground.