#### A New Generation



It is a quiet struggle, but certainly one of strength, endurance and a little luck. When a hemlock seed lands on a newchances of survival are better than on the crowded forest floor. Still, it must and reach soil first grow more quickly.

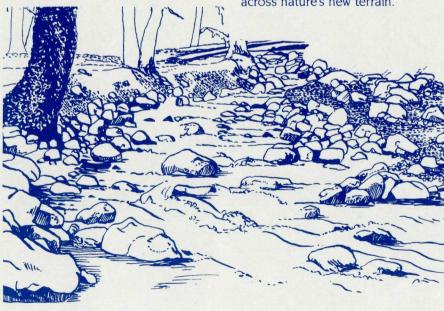
ly fallen nurse log, the hemlock's compete with a multitude of other seeds for water, food and space. Seedlings whose roots grow around the log In several centuries, when this nurse log has decayed, the victorious hemlock trees will stand in a row, or colonnade.

### **Slate Creek**



Periodic flooding is a natural process that remolds the land, often slowly, but sometimes with ferocity and no

In January 1986 Slate Creek flooded. Boulders and rocks were sorted by size and deposited, river fashion, along the banks. The once-gentle creek swelled. Its great force sucked out the wooden pilings of Slate Creek Bridge, and washed the bridge downstream. Voluminous waters realigned the creek and dissolved 600 feet of trail into silt. Today a simple log bridge carries us across nature's new terrain.



#### 'Time. . .



"Upon returning to the Staircase Ranger Station after this arduous three-day winter patrol I saw smoke curling from the chimney and kitchen lights reflecting on new snow. It was a scene from a Christmas card, almost unreal but a very welcome sight."

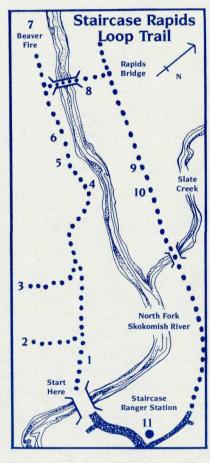
Written by Ranger George Bowen Staircase Ranger Station Log Book

Tales of rain and more rain still enliven the rustic interior of Staircase Ranger Station, built in 1924 by the U.S. Forest Service. In the 1930s Civilian Conservation Corps spike camp workers dried their rain-soaked coats near the everburning woodstove. When Olympic National Park was established in 1938. the station became the center of activity for the Staircase area.

The people of Staircase come and go, but their presence persists. Listen carefully at the river's edge. You may hear their laughter, stories and prose in the river awash with history.

Water . . . we are fed by it inspired by it dependent upon it

where would we be without water?





Rosemary McKeown, Janet Scharf, Writers • Lynette Hartley (map) • Carole Kahler, Artist Janet Scharf, Editor/Designer • First Printing 1989, Revised 1990, 1992 (6,825).

#### Staircase Rapids Loop Trail -Olympic National Park-

Water . . .

we are born of it

composed of it

soothed by it

. . . yet we bemoan its overabundance on these northwest trails.

The 100 inches of annual rain that pours and mists through these lowland evergreens gives life to the forest and shape to the landscape. Water—where would we be without it?

Staircase Rapids Loop Trail begins just across the large concrete bridge and encircles two miles of the picturesque North Fork Skokomish River. Along the way, river reflections show the miraculous story of water's power—a landscape nurtured, sculpted and crushed by centuries of water work.



#### 1. Call Of The Wild



Early morning dew transforms the leaves of Oregon grape into precious jewels. Lt. O'Neil, his 14 men, 11 mules, one pack mare and a dog named Jumbo catch their last moment of slumber on this summer day in 1890. Unexplored terrain, dense with Douglas-fir, western hemlock and thickets of ferns will soon command their every ounce of energy. In a week's time, the expedition will have followed the North Fork Skokomish upriver to Four Stream, a distance travelled today in less than an hour.

## 2. Harnessing Its Power

(800-foot round trip)



In these "modern" times, we seek the challenge of working with nature rather than conquering it. This microhydroelectric power plant was installed in 1981 as an alternative to noisy and costly diesel generators. A diversion of water from Elk Creek, adjacent to the power plant, flows through 640 feet of 12-inch penstock to turn the Pelton wheel and drive the generator. When stream flow is sufficient, this generator produces 7.5 KW of electricity to supply the entire Staircase area.

Big Cedar!
(1000-foot round trip)



Western redcedars thrive on well-drained soil and moist bottomlands. Scores of gallons of water enter their roots and transpire through their foliage each day. This giant is nearly 800 years old. Its 43-foot circumference and 14-foot diameter rival many of Olympic's old-growth trees. Northwest Indians relied on cedar's stringy bark and rot-resistant wood to clothe and house their families for decades.

4 Red Reef



Made from snails, clams and other shells of ancient seas, this red limestone receives its distinctive rosy hue from iron deposits. The graceful limestone formation is also rich in manganese ore—eagerly sought by early miners.

The drama of Red Reef is everchanging, shaped and polished by the river as it rushes along its 14-mile route from First Divide to the park boundary near Lake Cushman.

#### 5. Dolly Pool



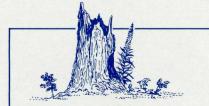
Dolly Pool's deep reflective waters offer solace for the soul and camouflage for the Dolly Varden char. Rainbow and cutthroat trout also dart in and out, searching for caddisflies, stoneflies, and mayflies. Steelhead and several species of salmon once swam in these waters, before the Cushman dams were constructed in the 1920s.

## 6. Dry Side of The Park?



Though drier than the rain-forested western park valleys, the eastern side of the park still receives a hefty 100 inches of rain annually. This prevalent moisture feeds huge western redcedar, Douglas-fir and western hemlock trees. Here, an understory of maples, salmonberries and devil's club provides secret places for black-tailed deer and Roosevelt elk.

# Beaver Fire (one-half mile round trip)



Even the Olympics, of rain fame, can experience drought. During the exceptionally dry summer of 1985, park rangers banned all open fires. However, on August 24, two campers built a campfire in the Beaver Flats area. Sparks ignited nearby logs and the fire was soon out of control. Shifting winds carried burning embers across the river to the slopes of Mt. Lincoln. Even with the efforts of 400 fire fighters and air support, over 1350 acres burned.

Debris from the fire is already breaking down and forming soil that supports new plant and animal communities. Although lightning-caused fires are a natural part of forest cycles, manmade fires ignore nature's patterns.

#### 8. Bridging The Storm



The Rapids Bridge still bears scars from a flood that occurred in January 1986. Eleven inches of rain fell in 36 hours. Floodwaters jammed debris (much of it from the Beaver fire) into the bridge, knocking off one of its footings and making significant dents in the metal supports.

