



MRNPA NEWS

A quarterly publication of the Mount Rainier National Park Associates

Volume 7 Number 2

From the Summit

As the article by Ira Spring in this issue reminds us, there has been tremendous growth in back country uses of both the Park, and of wild lands of the Northwest in general. This has created enormous pressure on these fragile and diminishing resources. The Park statistics make this clear; almost a 15% increase in back country campers in just one year (see the Park Service News Briefs). We are, indeed, loving these areas to death.

In the short term, more intensive management (*read \$\$\$*) can help. But the Park Service is faced with long term trends that are going to force us all into some difficult decisions. Will we, the users of the Park, be satisfied with reservations and shuttle-only access? Should we completely "lock up" the Park in order to protect its wildlife and wild lands? Will our grandchildren enjoy an afternoon at Paradise or a week on the Wonderland Trail only through video technology or "Virtual Reality"?

As members of MRNPA, we do what we can to support resource protection, participate in trail maintenance and revegetation, even at times argue with the Park Service and others over road building and other intensive development. This is all essential short term help, and is sure we will all continue to do that.

In the meantime, let's hope the NPS, the national conservation organizations, and a new administration will start some serious preparations for the

Continued on page two

Science and the National Parks

by John Titland

In 1990, National Park Service Director James M. Ridenour stated his intention to place high priority on strengthening research and the role of science in National Park management. He requested assistance from the National Research Council. In response to this request the Council convened the Committee on Improving the Science and Technology Program of the National Park Service (NPS). In 1992, this Committee issued a report entitled "Science and the National Parks." The report examines the importance of science for the national parks, reviews the status of previous and current research programs in the NPS and strongly recommends change. (A copy of the report is available from National Academy Press, P.O. Box 285, Washington, D.C. 200055 for \$19.95.)

Why science in the national parks? In a 1977 review of the NPS natural science program, Durward Allen and Starker Leopold wrote, "The National Park Service has reached a time in its history, and in the history of the nation, when science and research should be given a much greater and clearly recognized responsibility in policy making, planning, and operations. Seat-of-the-pants' guesses in resource preservation and management are open to challenge and do not stand up well in court or in the forum of public opinion. To be right in decisions affecting natural environments, and to serve its educational mission, the National Park Service requires an increasingly sophisticated system of gathering new

Continued on next page

In This Issue...

From The Summit.....	1
Science and the National Parks.....	1
Scientific Research in Mount Rainier National Park	3
Panel Discussion on Wilderness Management.....	4
Study Downplays NW Complaints About Aircraft in Wilderness	5
Overflight, Or How the Researchers Missed the Point	6
Three Editors	7
MRNPA Supports SJM 8002 - Full Funding for Parks	8
Burke Exhibit Underscores Complexity of Timber Issue.....	9
Ancient Forests of Mount Rainier National Park	10
The Untarnished Facts About the 100 Hikes Series.....	10
Ice Cave Glory Melting Away	12
Rainier Has Halo Outside, Fire Inside	13
Mount Rainier Park Service News Briefs.....	15
Book Reviews	15

From the Summit cont'd...

future of the Parks. There has been no shortage of discussion and meetings and publications, but now is the time to start moving!

Jon Soest
President, MRNPA

Science and the Parks cont'd...

facts and getting them applied at all levels, from the back country to the Washington office. This quotation prefaces the report "Science and the National Parks" because it is clearly as appropriate today as it was in 1977.

As the NPS confront the problems caused by increasing visitation and use, development, changing environments adjacent to the parks, etc., NPS resource managers need scientific information to help them quickly identify developing problems, understand the causes and effects, and give them the background to formulate prevention and mitigation strategies. In many cases, the NPS does not currently have even a baseline data on the resources they are mandated to conserve. Without scientific information, it is very difficult for NPS resource managers to be sure that today's activities are consistent with long term preservation of the national parks.

Officers of MRPNA

President	Jon Soest	(206) 863-3507
Vice-President	Bob Aegerter	(206) 547-4492
Secretary	Roger Garrett	(503) 620-2533
Treasurer	John Titland	(206) 747-1698
Editor	Joan Burton	(206) 524-1327
Layout	Bob Landen	(206) 854-2473

The MRNPA News is published periodically by the Mount Rainier National Park Associates of Seattle, WA. for the purpose of providing general information about issues affecting Mount Rainier National Park in furtherance of the goals of the Mount Rainier National Park Associates - *To Maintain, Restore, Nurture, Protect and Appreciate the natural values of Mt. Rainier National Park.*

The opinions expressed in the MRNPA News are those of those of the authors and do not necessarily represent the official position of the MNRPA.

Letters and articles from readers and members are welcomed. We reserve the right to edit for length, grammar or libel.

Unless specifically copyrighted, articles and graphics may be reprinted without prior permission if appropriate credit is given.

In the report "Science in the National Parks" the Committee on improving the Science and Technology Program of the National Park Service made three central recommendations to improve the status of science in the NPS:

1. Legislation should be enacted to establish the explicit authority, mission, and objectives of a NPS science program.
2. The NPS science program should have substantial organizational autonomy and should receive its funding through an explicit and separate budget.
3. Efforts should be made to enhance the credibility and quality of the NPS science program, including employing (a) a chief scientist of appropriate stature to lead the science program and (b) a non-NPS advisory board to provide independent oversight.

These recommendations are not radical, nor are they new. Similar committees have made similar recommendations five times since 1960. Yet little or no progress has been made implementing the recommendations made by any of these committees. Congress and the various administrations have been unwilling, uninterested, or unable to do anything.

Things may be changing. Secretary of the Interior Bruce Babbitt has voiced strong support for national parks and has expressed his concern that the national parks have "fallen into decay". He has proposed that many of the long delayed improvements and urgent unmet needs of the national parks should be included in the Clinton Administration's economic recovery package. However, the needs of the national parks are not limited to construction projects. As highlighted by this report, major organizational changes in the NPS and a redefining of its status may be in order.

The Clinton Administration is currently studying various national problems by appointing task forces and conducting conferences. The report "Science and the National Parks" is the output of just such an effort. This study is complete. It makes recommendations. It calls for action. "Science and the National Parks" provides the Clinton Administration an early opportunity to prove that the reports and recommendations of these task forces and conferences will be acted upon rather than being shelved and forgotten.

We should call upon both the Congress and the Clinton Administration to address the recommendations made in "Science and the National Parks" and to do something. We should make sure that this report is not forgotten.

continued on next page

Science and the Parks cont'd...

Because the Clinton administration is in the process of formulating its proposals and programs, now is an especially effective time to contact Secretary Babbitt, your senators, and your congressional representative. Inform them of your concerns about national parks and your feelings on implementing their recommendations made in the report "Science and the National Parks." Let them know that you would like to see some action. Tell them that you want national parks on the national agenda.

Scientific Research in Mount Rainier National Park

by Frank Brockman
the second Park Naturalist
of Mount Rainier National Park

The progress of scientific research in Mount Rainier National Park, like that of the discovery and exploration of this area, first began on a broad general plan of hasty observation in the entire northwest, gradually narrowed down to the Park area itself, and then began to be concerned with the various scientific details represented here. Consequently we find, as far back as 1787, an Englishman named Archibald Menzies making observations of the flora and fauna along portions of the northwest coast in his capacity of surgeon and naturalist. Again in 1792, we find Menzies with Vancouver, also in the capacity of surgeon and naturalist. He was essentially a botanist.

Hence we find today, in the scientific name of the Spotted Pipsissewa, (*Chimaphila menziesii*) a record of this man's prowess in his chosen science. The same

is true of another plant that is also native to Mount Rainier—the Fool's Huckleberry (*Menziesia ferruginea*).

Captain George Vancouver himself, made minor observations concerning the flora and fauna of the Puget Sound country. Brief mention of other early scientific explorations should also be made. In 1804-06 Lewis and Clark, on their famous journey to the Pacific, studied and collected the flora and fauna of the area through which they passed. While they reached the coast via the Columbia River and did not penetrate the region near Mount Rainier, they are credited with being the first to note the Nutcracker or Clark's Crow that is a common bird of the Hudsonian regions of "The Mountain". Lewis' Monkey Flower (*Mimulus lewisii*) and Lewis' Woodpecker, also native to this Park, bear the name of the other of these illustrious Americans.

About 1825 David Douglas explored and botanized up and down the Pacific Coast, and in his journeys he discovered many new plants. The name, Douglas fir, is conferred upon one of the greatest forest trees of the Northwest. In Mount Rainier National Park one finds this species in the forests about the base of the mountain up to the 4,000 foot level.

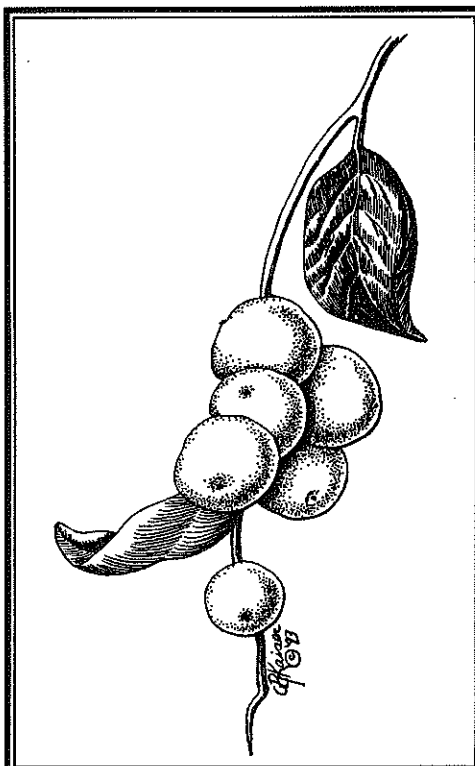
The names of other famous scientists, who studied the natural history of the Pacific Northwest when this region was still young, are also applied to many of the plants and animals found in Mount Rainier National Park. Gairdner's Woodpecker is named for Dr. Meredith Gairdner; Townsend's Solitaire, Townsend's Warbler and Townsend's Mole commemorate the memory of James K. Townsend who visited the coast in 1834; Thomas Nuttall, who collected in the Northwest in 1834, 1835, and 1836, has a beautiful member of the phlox family, which is common on the dry sunny slopes of the Hudsonian zone on Mount Rainier, named for him (*Gilia nuttallii*). The scientific name of the Western Dogwood (*Cornus nuttallii*), an occasional tree in the Park, also honors this man.

First Botanical Collections

The foregoing preceded actual contact with the area that we know today as Mount Rainier National Park. It was not until 1833 that the first white man entered the Park. Dr. William Fraser Tolmie, physician and surgeon in the employ of the Hudson Bay Company, penetrated the wilderness, primarily for the purpose of studying the local flora and gathering herbs suitable for medicinal use. On September 2, 1833, he wrote:

"Collected a vasculum of plants at the snow, and having examined and packed them shall turn in."

This was the first collection of plants made in the Park area. Presumably it was made upon, or near, the sum-



Common Snoberry
(*Symphoricarpos albus laevigatus*)
Sketched by Charlotte Kaiser

continued on next page

A Scientific History continued ...

mit of the mountain we know today as Tolmie Peak. It is not improbable that the plant that now bears this man's name was represented in the original collections, for Tolmie's Saxifrage was first collected by this pioneer botanist on the "northwest coast." It inhabits the rocky soil of the upper Hudsonian and lower Arctic-alpine zones and is quite common in such localities throughout the Park.

Panel Discussion on Wilderness Management

by Jon Soest

During the evening of Thursday, January 21, in spite of windstorm damage, freezing temperatures and power outages, a gang of intrepid souls gathered to hear a panel discussion of wilderness management at our Board of Trustees meeting. (Actually, for some of us it was the first time we had been warm for a day and a half.) As the reader may recall from the previous Newsletter, this panel discussion was prompted by a debate over helicopter removal of downed logs from the MRNP Wilderness.

Several MRNPA members, nearly all of the Board, and their guests listened to Dale Crane, NW Representative of National Parks and Conservation Association, and Jean Durning, NW Representative of The Wilderness Society, as they presented their organizations' views of wilderness management in the National Parks.

We had planned on participation by Mount Rainier National Park and Mt. Baker — Snoqualmie National Forest officials as well, but a combination of storm damage and illness prevented their attendance. In a way, this was to our advantage, because it allowed our members and leadership to consider what our options and philosophy should be, before beginning a nuts-and-bolts issue debate with Park officials. Crane and Durning were able to give us a wide perspective of wilderness management and NPS practices in Parks other than Mount Rainier.

Jean led off the discussion by referring to a document "Keeping it Wild - A Citizen Guide to Wilderness Management," published recently by The Wilderness Society and The Forest Service. (This document can be purchased for a nominal fee from TWS in Seattle.) The guidelines laid down by the Forest Service for management of Wilderness areas on National Forest lands are, in fact, more strict than those written by the Park Service. Quoting from the Wilderness Act (reproduced in "Keeping it Wild"), Jean emphasized the special nature of Wilderness Areas. These are areas that are to

be treated very differently from other federal lands, and the concept of "minimum tool" to carry out a job in these areas must be weighed against the alternative of simply not doing the job at all. Specifically, The Wilderness Society says that helicopters are not suitable for use in Wilderness Areas other than for emergencies.

Dale then followed with his introduction to the discussion. He noted that we have a law - the Wilderness Act - and all agencies are required to obey that law. Each agency lays down its interpretation of the law in the light of that agency's management tasks. MRNP is not alone in the use of helicopters. They have been used at Haleakala and Volcanoes National Parks in Hawaii and in the Everglades. Dale also mentioned the intrusions of private aircraft over the Grand Canyon National Park, and noted that virtually all of us have suffered some experience with military over flights in National Forest wilderness areas in the Cascades.

Why are helicopters used for management in other National Parks? In some cases, simply because there are difficult access problems — volcanoes and swamps being very good examples. But the Park management tasks that lead to these access problems tend to be very severe; feral animals and competing vegetation that is destroying the native vegetation and thus altering the whole ecosystem that the Parks were formed to protect.

This is distinctly not the case for the Mount Rainier example! Removal of downed logs for trail maintenance wouldn't seem to have the same priority as immediate threats to the Park ecosystem. Dale noted that the Park Service has a delicate balancing act to perform, but that MRNPA should provide a definite push to keep impacts to the Wilderness Area to a minimum.

The next couple of hours were spent in a question and answer session. One Board member noted that very little land in the three Washington National Parks qualifies as the "purest" Wilderness. We may need to consider how to stratify user access and usage in order to maintain these areas, or even to extend it.

Another member pointed out that the strictest controls on use are put on climbers, most of who are not on Rainier for a wilderness experience. Perhaps strict controls should also be placed on users at lower elevations, or in specific valleys or parks, in order to enhance the wilderness experience for those who go there.

At the conclusion, both Jean and Dale urged us to think creatively about our approach to wilderness management. Simply adopting a policy that is close to the existing Park Service policy, without thinking it through

continued on next page

MRNPA's Panel on Wilderness continued ...

carefully, is not going to be of much help. After thanking Jean and Dale for their thoughtful and stimulating contributions, the Chair asked for volunteers for a committee that will develop a position paper for MRNPA.

Six people volunteered, and will begin their work soon, hoping to have results by the time of our annual meeting in May. There is still time to get together with us in this effort — if you want to help, please contact me at 863-3507.

Study Downplays NW Complaints About Aircraft Roars in Wilderness

*by Greg Johnston
Seattle Post-Intelligencer, Sept. 10, 1992*

Local hikers, horse riders and Forest Service officials are expressing surprise over a national study that found most visitors to wilderness areas are not bothered when jet fighters and other aircraft roar overhead.

"The findings are rather surprising," said Dale Potter, assistant recreation chief for the Mount Baker-Snoqualmie National Forest. "They vary with the complaints we get year after year."

The study conducted by the Forest Service's national recreation staff was ordered by Congress as the result of complaints about aircraft noise in Grand Canyon National Park.

It found that "few adverse impacts to wilderness users were found resulting from aircraft over flights of Forest Service-managed wilderness. The worst case found was a fairly small percentage of wilderness visitors who experienced varying degrees of noise-induced annoyance."

It also found that while low-level military over flights were the most bothersome, they posed relatively little danger to horse riders.

Area hikers and back country horse riders, however, say the sound of freedom ringing in their ears is inappropriate in a wilderness setting and spooks horses.

Loren McGovern, executive director of the Back country Horsemen of Washington, said such flights have caused at least two serious accidents in recent years.

"In one situation, a husband and wife were on the top of the Pacific Crest trail, I think over by Crystal Mountain, and a National Guard jet went over real low," he said. "The horses spooked and both went over back-

wards. I know there have been several other incidents."

Jan Miligan, former executive director of the Washington Trails Association, also heard complaints.

"The vast majority of our members are appalled by the noise and disturbance of low-level fly-overs, especially over wilderness," she said.

Potter said that in 1991 rangers in the Glacier Peak Wilderness in the north Cascade Mountains reported over 400 incidents of military over flights.

"There is a steady flow of complaints, both by letter and from people stopping in at our ranger stations," Potter said.

In their annual report to Congress, Mount Baker-Snoqualmie officials wrote that military flights over the Glacier Peak Wilderness "create hazardous conditions for wilderness users, particularly those on horseback. The planes fly at tree top level and are within 100 feet of the ground when crossing ridges and passes."

Bill Makel, coordinator of the Forest Service's study, acknowledges that over flights may pose problems in some areas. Even though the Glacier Peak Wilderness was included in the study, he said the problems were minimal on a national scale.

"They're not a major problem nationally," he said. "The most annoying aircraft were low-level military flights and helicopters, but these are not regularly encountered in most wildernesses."

He said the study found very few reports of accidents over the last 10 years.

"There were instances of serious injury due to horses being spooked," he said "but relative to other accidents in the wilderness this did not seem to be a major-safety problem."

Some believe this region could be particularly susceptible to the over flight problem because of its multiple and heavily used wilderness areas relatively near Whidbey Island Naval Air Station, McChord Air Force Base and military's Yakima Firing Center.

The study included no recommendations. Makel said the National Park Service is conducting a separate study that will include recommendations for the parks.

"On the Forest Service managed wildernesses that do have a problem, I think the first thing we would be looking at would be to try to work locally to solve it," Makel said.

That may prove difficult.

Howard Thomas, a civilian spokesman for the Navy at Whidbey Island, said the air station's A-6 Intruder pilots fly regular training routes over wilderness areas at

continued on next page

Aircraft Noise continued ...

450 mph and 300 feet above ground. Bombing runs require low-level approaches that avoid radar detection, and the wilderness areas provide ideal topography and uncongested airspace.

"We certainly have a concern for the environment," he said. "But the low-level training routes were established more than 30 years ago, and when those areas were designated wilderness, the routes were grandfathered in" the legislation.

Because of increasing air traffic elsewhere and a growing population, "if you now try to go and create a new low-level route, it would be a real struggle," he said.

Overflight, Or How the Researchers Missed the Point

*by Dave Fluharty
from The Wild Cascades, Feb. 1993*

Greg Johnston's article in the Seattle P-I reported the results of a USFS consultant's study about over flight. After reading the full report, I understand how the \$1.5-million-dollar study came to its conclusions. However, I am sad to say that the researchers missed the point, at least for the Cascades. It seems that unless people were physically injured, animals "spooked", or cultural resources damaged as a result of low-level flights, the concerns register as minor or mere "annoyance". Those of us who have experienced military over flight in the Cascades don't find our impressions reflected in the report.

There are methodological flaws with the study (too small sample sizes, little ground truthing of exposure versus survey response of respondents, location, and duration of acoustical tests, etc.) and creative spins put on interpretation of data—all of which seem designed to define away the problem. Lack of systematic

recording of visitor complaints by the U.S. Forest Service, for example, (thus, no evidence of complaints) is considered by the team as showing low level of public concern. If this is true, why is it that when Cascade mountain recreationists get together, almost everyone has some recent story to tell about low-level over flight?

Fortunately, USFS representatives in the Pacific Northwest are expressing surprise at the outcome of the study. It obviously does not represent the situation here, even though a few acoustical measurements were made someplace in the Glacier Peak Wilderness and telephone interviews were conducted with about 100 users. Furthermore, an over flight in the Glacier Peak Wilderness is an indication that the same plane has overflown anywhere from 3 to 7 other wilderness areas in the Cascades enroute. An hour-long training flight can affect the wilderness experiences of virtually all the wilderness users in the Cascades! There is no appreciation of this cumulative impact in the report.

Congress mandated the study because there were significant complaints about low-level flights in national parks and wilderness areas. Congress was not worried about the commercial routes that cross the Cascades at 4000-5000 feet above the tops of the peaks. Congress was concerned about military aircraft flying 100-500 feet above the ground and at 350-450 mph, recreational craft flying below 2000 feet above terrain, and helicopters buzzing skinny dippers at Blanca Lake in the Henry M. Jackson Wilderness. Instead of trying to identify the problem, this study seeks to explain it away by surveying areas where the problems "are" less acute than in the Cascades and then, extrapolating the results to the whole U.S. wilderness system.

I made it out hiking five times last summer and each time was overflown or "underflowed". (The latter case being Huey helicopters flying west to east over Reflection Lakes at Mt. Rainier National Park at an elevation less than 1000 feet above terrain and about 2000 feet below me on the Skyline Trail.) It is my impression that

continued on next page

How to express your opinions to your elected Representatives

State your case simply, clearly and without rancor. Don't use more than two typewritten pages. Write often. If your statements make sense to the staffs, your regular correspondence will be read. Use the correct addresses...

Your U. S. Representative
(Jolene Unsoeld, Jennifer Dunn, etc.)
U. S. House of Representatives
Washington, DC 20515

Your U. S. Senator
(Patty Murray, etc.)
United States Senate
Washington, DC 20510

Overflights continued ...

in the late 1960s and 1970s the National Park Service had an agreement with the Fort Lewis and McChord Fields folks to fly south of the Tatoosh Range except for rescue or special administrative purposes. What has happened to that logical accommodation?

What needs to be done? First, the federal land management agencies with support from us, must contact the military fliers to obtain compliance with the existing routes and, second, change flight routing away from parks and wilderness areas. Where some flights are necessary, attempt to schedule these in a manner that makes them more predictable. (E.g., if the "Sound of Freedom" training flights could come at a regular time, recreational users could have some warning.) Concentrate the impact of military over flights to a limited time period—not random flights all day and night. In addition, helicopters and small plane use should be ordered to maintain sufficient altitude (e.g., 2000 feet above terrain) and a continuous flight path (no circling). Many private pilots already observe such practices because they are prudent. Many do not.

One statement from the study of over flight is patently false with respect to the Cascades: that wilderness designation came after the establishment of low-level training routes 30 years ago, and therefore, such flights are "grandfathered-in." Not so. Precursors to wilderness areas were established in the Cascades starting in 1931 with Goat Rocks Primitive Area, in 1935, North Cascades Primitive Area, in 1940, Glacier Peak Limited Area, and in 1946, Cougar Lakes, Alpine Lakes, Monte Cristo Peak, Packwood, and St. Helens Limited Areas. However, a map of the training routes shows that many of these routes overfly the previously designated areas and a number of them converge directly over the summit of Glacier Peak. There is no overflight clause in their designating authorities. No environmental compliance has been done for the Cascade wildernesses. It is apparent that the military does not take the wilderness into account in its operations.

The prospects of achieving the desired result of no low-level over flights may be long in coming, however, some positive results have been obtained. North Cascades National Park succeeded in obtaining the assistance of Whidbey Island Naval Air Station in stopping low-level joy-rides up Lake Chelan through immediate reporting of violations of the military training routes.

Most of us lack rapid communication facilities (cellular phone users to the rescue?) and the military tends to stonewall on later reports (What was the plane ID number?" "No planes flew in that area on that day." Etc.) Still, we must start documenting our experiences with low-level over flights. Make our list, including date, time, and location. Send the original to your repre-

sentative in Congress and copies to NCCC, national forest or park where incident occurred, and to the Whidbey Island NAS Duty Officer (206) 257-2681).

The NAS next-day schedule of flights is available by calling 206-257-2877, and same-day schedule is 206-257-4310, according to Steve Smith, Whidbey Island NAS Air Operations.

You can obtain a copy of the report summary by contacting Mr. Bill Makel, National Coordinator for Wilderness Aircraft Overflight Sound Study, U.S. Forest Service, San Dimas Technology & Development Center, 444 East Bonita Avenue, San Dimas, CA 91773. Telephone 714-599-1267.

Three Editors...

The editors of the three national park support groups, the Olympic National Park Associates, the North Cascades Conservation Council, and the Mount Rainier National Park Associates, met recently.

We agreed that we share some common concerns:

1. The need for buffer zones around park boundaries.
2. Disruptive overflights of Park wilderness.
3. Use of helicopters for non-emergencies.
4. Traffic congestion in fragile areas.
5. The need to pull back some roads and to make them into trails.

Would it be valuable if the three citizen support groups were able to write joint statements on these and other issues? First, we need to collect anecdotal specific examples from Park users. Please write your ideas and experiences to the editor of any one of the newsletters.

Here are the addresses:

Joan Burton, Editor
Mount Rainier National Park Associates
4710 129th Ave E
Sumner, WA 98390

Sally Soest, Editor
Olympic National Park Associates
13245 40th Ave NE
Seattle, WA 98125

Betty Manning, Editor
North Cascades Conservation Council
P. O. Box 95980
University Station
Seattle, WA 98145

MRNPA Supports SJM 8002 - Full Funding for Parks

(On January 27, 1993, MRNPA joined Olympic Park Associates and North Cascades Conservation Council in testifying before the Washington State Senate Committee on Ecology and Parks in support of Senate Joint Memorial 8002. The bill was introduced by State Senators Talmadge, Owen, and Fraser. It memorializes the President and the U.S. Congress to increase natural resource protection programs and reduce the backlog of visitor service, repair, and rehabilitation projects in the national park system. The bill notes that meeting these resource protection needs would create jobs and contribute to the economic development of adjacent communities.

Sally Soest of MRNPA presented MRNPA's position at the hearing. The following is the text of the MRNPA's statement.)

"Mount Rainier National Park Associates (MRNPA) commends Senators Talmadge, Owen, and Fraser for introducing this Memorial, and we thank the Committee for the opportunity to register our support.

MRNPA is an independent citizens' group dedicated to the protection of Mount Rainier National Park, according to the terms under which the National Park Service was founded, as stated in Paragraph Three of this Memorial.

The key to National Park stewardship, and the reason why this Memorial is so important, is the mandate that the Parks shall be kept "unimpaired for the enjoyment of future generations." Over the past decade, national parks have confronted dramatically increasing visitor use in the face of shortsighted and progressively worsening underfunding. Last summer, in Mount Rainier National Park, visitor volume was up 76% over 1991, and car camping had increased 89%. Mount Rainier and other national parks are in danger of being loved to death by those for whom they were created.

The mandate to ensure "the enjoyment of future generations" will be impossible to follow unless funding to protect the natural resource base becomes top priority. As examples of specific, park-wide resource-related needs that have gone unmet, the 1991 Statement for Management of Mount Rainier National Park listed the following:

- Need to develop carrying capacity/use limits/monitoring.

- Lack of understanding of external influences/impacts: adjacent tree harvests, power plant/air quality; commercial development...
- Adequate historic preservation utilities infrastructure (water/sewer/electricity/fuel).
- Need to better manage traffic.
- Need to manage Wilderness: maintain backcountry structures, protect endangered species, promote research.
- Need to improve visitor experiences (quality, safety, convenience): update information/interpretation/thematic planning; relocate management non-critical facilities outside Park proper.
- Substandard/leaking? underground storage tanks.

The first item in the above list is crucial: how can a National Park administrator preserve resources for future generations if he does not know the Park's carrying capacity? If we intend for the Park Service to follow its mandate, we must recognize the reality that every management decision must be a function of carrying capacity: capacity and location of visitor facilities, transportation, wilderness management, concessionaire activities, staffing needs, interpretive themes, responses to external influences. We should require that:

- a. Carrying capacity must be established for every national park before any further management decisions are made; and that
- b. All national park management decisions must be consistent with carrying capacity.

To protect resources consistent with carrying capacity will require sufficient funding to hire professional scientific and interpretive staff, and to fill scores of other jobs at all staff levels; sufficient funding to gather ecological baseline data, establish carrying capacity, and monitor conditions to prevent further loss of habitat and species; sufficient funding to repair resource damage, educate visitors to respect the natural Park environment and prevent degradation from overuse in the future; and sufficient funding to repair or restore essential Park structures.

We hear from Park personnel their frustration over crippling budget constraints. We see examples of low-budget management that contradicts the mandates of the Park:

- Use of military helicopters within the wilderness to remove downed logs for bridges. A helicopter would not be the minimum tool as mandated by the Wilderness Act, but was justified partly on the basis of cost-effectiveness, by a Park Service pressed by budget and staff shortages.

continued on next page

MRNPA Supports Full Funding continued ...

- Haphazard, destructive roadside clearing by improperly equipped, inadequately supervised contractors who were not sensitive to Park resource protection.

Volunteers can help alleviate budget shortfalls. MRNPA members have worked side by side with Park Service staff and Youth Conservation Corps, rebuilding trails, repairing trampled meadows, and replanting alpine vegetation. Much can be done with people power and dedication...but not enough. Without adequate funding, the Park loses ground daily.

The three jewels of the National Park System in Washington State are national treasures and, as such, are powerful tourism magnets and strong economic assets. Visitors come because they have heard something of our natural wonders. They come from a variety of backgrounds and interests, and from across state and national borders: families, children and adults of all ages.

These visitors come for many reasons. Some are simply curious sightseers, some seek recreation or spiritual renewal. But invariably something happens to national park visitors: they fall under an unexpected spell. Perhaps you remember when you first entered one of these splendid, hallowed places, and felt that power that is something close to religious. Captivated, park visitors forge lifelong bonds with their cherished national parks. They join groups like MRNPA, Olympic Park Associates, North Cascades Conservation Council, and they pledge their lifelong devotion.

And you can be pretty sure, once captivated, they will return. Let us promise that, when they do return, they will find their national park "unimpaired for (their) enjoyment" because the National Park Service has been funded sufficiently to carry out its mandate."

Burke Exhibit Underscores Complexity of Timber Issue

*By Debbie Thompson
U.W. Daily, Feb. 18, 1993*

What exactly is an old growth forest? And what should we do with the remaining 10 percent of original old growth forests in the Pacific Northwest (most of which are on public land)? These questions, and many others, are posed in a new exhibit at the Burke Museum called "Old Growth Forests: Treasure in Transition." This exhibit opens today and runs through June 13.

Deborah Easter, public relations coordinator at the museum, hopes that "Treasure in Transition" will "educate people and clarify the complexity of the issues" involved. Easter explained that the exhibit, on loan from the World Forestry Center in Portland, does not advocate one side over another in the controversy over old growth forests. The point is to "give all sides a place to speak," said Scott Freeman, director of public programming at the Burke Museum.

The exhibit begins with a section of the history of Northwest forests. After that, a 17-minute slide show provides information on what old growth is. A section called "The Forest" explores the different components that make up an old growth forest: large live trees (at least 200 years old), multi-layered canopies, snags (standing dead trees), and down woody material (fallen, decaying trees). The section features photographs, graphics, charts, and displays to further explain how the different animal species use and interact among the four components.

Other parts of the exhibit deal with the different recreational, timber, spiritual and ecological resources that the forests provide. One section even provides a room for children to get hands-on learning experience about old growth forests.

Two sections, "Forum" and "Points of View," present the different points of view that loggers, environmentalists, scientists, organizations, and resource managers have about how old growth should be used. A video program shows people expressing their opinions, while several panels contain statements from organizations such as the Society of American Foresters and the Oregon Ancient Forest Alliance on their positions on old growth forests.

"The Future" highlights current events and issues and gets visitors involved with a game called "The Forest Manager." The game puts people into the position of a manager who must listen to people's concerns in a town meeting format, and then make decisions on what to do with the forest. It is intended to show the difficulty of reaching a decision that will benefit everyone, and at the same time benefit the forest.

Ultimately, the main point of the exhibit is that this is not an issue that can be solved easily. It involves understanding all of the different points of view and trying to "find some sort of consensus in terms of what to do with the forest," Easter said.

Ancient Forests of Mount Rainier National Park

Some of the most magnificent ancient forests remaining in the Northwest can be found within Mount Rainier National Park.

The Grove of the Patriarchs, near Ohanepecosh, contains 36 trees over 25 feet in diameter, some over 300 feet tall, and all estimated to be between 800 to 1,000 years old. Some hemlocks stand in midair on giant fork-like roots. The trees were germinated and grown on nurse logs that long ago decayed and disappeared. Through the centuries fires traveled around the island in the midst of Ohanepecosh Creek where the trees stand. Black scars embedded in their bark show how close the flames came, but the creek protected the venerable patriarchs when everything else was burning.

Another ancient forest that is also technically a rain forest lies along the Carbon River. The valley is closed-in, so moisture brought by prevailing winds can't escape; the annual rainfall varies between 180-210 inches a year. The stand contains giant true firs, cedars, and Douglas firs centuries old. Their trunks are like tall pillars and their size dwarf the new trees germinating on the forest floor and waving their tiny tops like green feathers. Some logs have fallen above the path, forming bridges to be walked under. These too are studded with tiny ferns and trees.

What are the identifying characteristics of an ancient forest?

1. Its large living trees are at least 250 years old.
2. Standing snags offer sanctuary to birds, small mammals, and insects. Some 39 birds and 24 mammals live in old snags.
3. There are varying canopy heights, that is, tree tops stretch up to different levels, reflecting their widely different ages and species.
4. Decaying logs and stumps remain on the forest floor for hundreds of years, enriching soils and providing germination beds.

Partly because of high rainfall the trees along the Carbon River are wrapped in sphagnum velvet—their branches embellished with epiphytic fungi, lichens, and ferns. The trees are nutrient storehouses. Biological richness in Mount Rainier's northern old growth forests means understories of salmonberry, yew, the source of taxol, vine maple, and big-leaf maple, conorted by winds and snow loads.

Among the many jewels in the Park, one that should neither be forgotten nor overlooked is the magnificent ancient forests.

The Untarnished Facts About the 100 Hikes Series

by Ira Spring

Producing the first 100 Hikes books was not my idea. In fact, I doubted we would ever sell enough to pay for the film, gas, and shoe leather that would be used to research 100 trails. After all, I reasoned, who would buy a book when all a hiker needed was a Forest Service map and an imagination?

The idea for 100 Hikes came from Tom Miller, Chairman of the Literary Committee, who had found similar trail guides on a hiking vacation in Switzerland.

In 1964 Tom brought together Harvey Manning, who knows how to spell, Marge Mueller, skilled with maps, Louis Marshall, who had just started a mimeographed sheet called Signpost Magazine, and me with a camera and long legs. The enthusiasm of the other four overcame my reluctance, and reminded me that I had already worn out several pairs of boots hiking half the 100 trails.

In July of 1966 the first edition of 100 Hikes of Washington was printed with a two-year supply of 5,000 copies. The two-year supply sold out in three weeks, so another 5,000 was printed, which also sold out in five weeks. Once more another 5,000 copies were printed; they lasted through Christmas.

15,000 copies in one year. Although we never sold that many again in one year, it was enough to alarm Harvey and me. That was too many hikers to put on 100 trails. We needed to disperse hikers by offering more trails to choose from. With the blessing of the Mountaineers' Literary Committee, we immediately started working on the next 100 hikes.

Starting from scratch, it took several summer seasons to hike the next 100, and they eventually expanded into four volumes of 100 hikes, plus the 50 Mount Rainier hikes. I remember on one of them running into a government surveyor who was delighted we were doing another book because his mother had already hiked every trail in the first 100 hikes!

The hiking explosion occurred at the time the Wilderness Act passed Congress in the 1960's. Within a few miles our mountain trails became overwhelmed with people. The Mountaineers were quick to develop no-

Ira recalls continued ...

trace camping ethics and worked to stop the loss of trails being turned into logging roads. It would be nice to turn the clock back to the "good old days," but with more hikers to help, we had the power to pass the 1984 Washington Wilderness Bill and generate over 10,000 letters asking for trails in the Baker-Snoqualmie Plan.

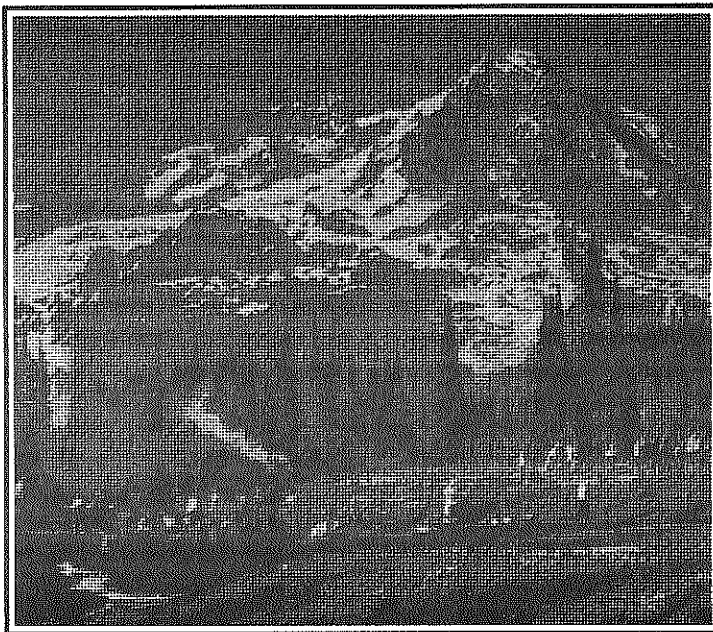
The following is Ira's recollection of those first hikes in Mount Rainier...

Memories of the 1946 Wonderland Trail Outing

by Ira Spring

By 1946 World War II was over, and Bob and I were at long last starting our photography careers. Together with Bob's wife, Norma, we joined the 1946 Mountaineers summer outing and spent three weeks circling Mount Rainier on the Wonderland Trail.

From the beginning The Mountaineers have been leaders in protecting our mountains. However, as I look back, 100 people wearing hobnails and tricounis along with 20 pack animals must have made a huge impact on our mountain environment. Before criticizing our generation, remember though that hikers were few and far between. The meadows had time to recover before the next hikers came along. If a mistake was made, it was in having no idea how much the Washington population would grow in 50 years, or not recognizing that the popularity of hiking would explode with passage of the Wilderness Bill in the 1960's, crowding trails, so now we must stand in lines to go backpacking.



Indian Henry's 'campout' in 1946

Most of the outing members were from Puget Sound, but a few came from as far away as Boston. We gathered at Longmire Campground in preparation for an early start. The next morning our tents and sleeping bags were loaded on pack animals, and, carrying only light day packs, we were off on a great adventure. The first three nights were spent camping at Indian Henry's.

The camp kitchen, under the direction of Nashie, was set up, complete with tables, wood stoves, and enough pots to cook for 100 people. The horses dragged in dead trees and we cut them into firewood with crosscut saws. We had our own tents: either surplus Army pup tents, which, even in clear weather were always dripping, REI's Highlander, designed by Lloyd Anderson, or a homemade tent of our own design. There was no hanky panky allowed with the Mountaineers sleeping arrangements. Married couples' tents were in the center with single men to the far left and single women somewhere to the right.

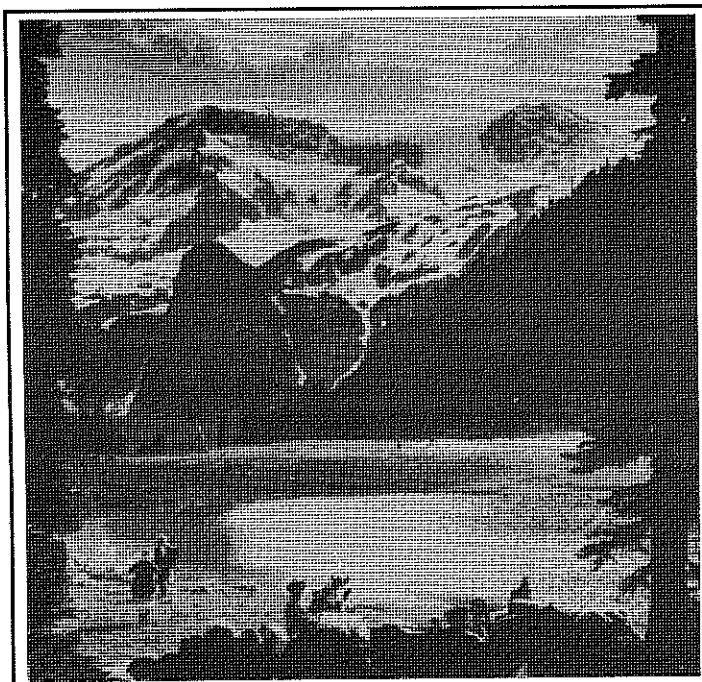
For the next two days people broke up into groups, depending on their special interests. There were bird watchers who roamed the meadows, scramblers, who bagged Pyramid and Mount Ararat, and climbers high on Success Cleaver. On the fourth day camp was loaded on the horses and moved to Klapatche Park.

The next day was spent moving to Golden Lakes. Part of the outing followed the horses on the Wonderland Trail, but at least half of us took the high route, climbing above 7,675-foot Takloo Rock, contouring across the Puyallup Glacier, crossing the rocky slopes under the Colonnades cliffs to the Colonnade fire lookout trail, and down to our camp near the Golden Lakes patrol cabin. It proved to be a grueling day for some of the party, and it was dark before we reached camp. On the sixth day camp was moved to Mowich Lake where a truckload of fresh food awaited us.

The next move was to Spray Park for three nights and two days of exploring Mother Mountain, Knapsack Pass, Echo, and Observation Peaks. On the 11th day we moved again, dropping under the Carbon Glacier to Mystic Lake. I remember the last two miles well. The group started out together, but everyone hiked at his own speed. Eventually there were three gung-ho guys with about two miles to go before we caught up with Eleanor Buswell, who kept going faster and faster. We couldn't let someone at least five years

continued on next page

Photographs in this issue are courtesy of Ira Spring's personal collection. Your editor wishes to thank Ira for these wonderful scenes of a vanishing era in the history of Mount Rainier.



Camping Solitude in 1946

The First 100 continued ...

older, especially a mere woman, outpace us, so we kept at her heels.

At the pass above Moraine Park all four of us collapsed in agony. When we asked Eleanor why she was going so fast, she said it was we who were going fast. She didn't want to hold us back!

At Mystic Lake we had time to explore Vernal Park, Elysian Fields, old Desolate, and to climb high alongside Willis Wall.

Our next move was dramatic. From Mystic Lake while the pack string followed the trail over Skyscraper Pass, the whole group crossed the Winthrop Glacier, climbed over St. Elmo Pass, and slid down Inter Glacier to a camp in Glacier Basin. It was a difficult and thrilling adventure for some people had never been on a glacier.

We spent the next morning exploring the deserted Storbo Mine buildings, and then 50 of us trudged up to Steamboat Prow and climbed Mount Rainier the next day. After 12 days on the trail we were in great shape, and everyone who started made the summit. Of course it was only 14,408 feet high then. It didn't obtain the lofty height of 14,410 feet until the 1970's when a new survey was made.

Unfortunately, Bob and I had other commitments and left the outing after the climb, so I missed Indian Bar and the camp at Reflection Lake (before the road was built).

Bob and I were lucky to be young when hikers were few and far between. We had the chance to enjoy the comradeship of a large outing with the roaring campfires and the sharing of the day's adventures. But best was the opportunity to go backpacking with a friend or two at a time when we could camp wherever and whenever we wanted, build campfires, drink from any stream, and go for days without meeting other hikers. If by chance we did meet another hiker, it would almost always be someone we knew.

Ice Cave Glory Melting Away

*by Paul Shukovsky
The Seattle Post-Intelligencer, Sept. 1992*

Mount Rainier's ice caves, at one time the most extensive known in the world, have all but disappeared with the retreat of the once-mighty Paradise and Stevens glaciers.

Thousands of visitors used to trek to the enormous caverns lit by an eerie blue glow as sunlight filtered through snow and ice. But on a sunny day last week, just a handful of hikers walked the 2.75 miles from Paradise to the glaciers' sad remnants.

Once honeycombed by at least 14 miles of caves with names like Suicide Passage and Paradise Lost, the remaining ice mass is about 30 feet thick at its highest point and just a few hundred yards long. Inside are a scant few passages.

The earliest written record of the caves was made around the turn of the century in books such as "The Mountain That was God." In the 1920s, a guide service provided popular tours into the Paradise Ice Caves. If necessary, the service would use dynamite to blow open entrances to the caves if they were covered by heavy snow.

A few openings that remain along the snout and flanks of the ice mass provide access to what's left of the caves. Inside, the beautiful stalactites, pillars and other ice formations are gone. All that is left are tunnels with bluish, scalloped walls and thin roofs that could collapse at any moment.

Intrepid cave explorer Charles Anderson Jr., in dozens of trips during the 1960s and 1970s, mapped the maze of tunnels. His report speaks of numerous streamlets that cut the caves through the ice—the same streams that converge to form the Paradise River and Stevens Creek.

To study the caves, Anderson braved the hazards of falling ice blocks weighing several tons and sudden tidal waves of ice water rushing through pitch black

The First of 100s... continued ...

tunnels. In February 1968, Anderson, his wife Edith and another man were returning from the caves when they were caught by a blinding whiteout of snow. Edith, 22, died of hypothermia.

Anderson continued his explorations until 1975 and wrote a scientific report describing the cave system, saying it was the most extensive in the world.

Most of the Big Room, a virtual cathedral under the ice, caved in in 1969 and 1970. The two decades since have brought steady deterioration. In the fall of 1991, the ceiling of the last large cave finally collapsed, according to *Tahoma*, a National Park Service newsletter.

Today, hikers who make the relatively easy three-hour round trip trek to the remnant caves are rewarded by stunning vistas of the Tatoosh Range with Mount Adams and Mount St. Helens looming in the distance. Numerous wildflower species grace the sub-alpine meadows. Those who remain alert could well be rewarded by glimpses of black bear, elk, deer and marmot.

Signs are posted near the caves to warn the curious:

"Caution. Hazard near ice caves. Collapsing snow over caves and rivers. Falling rock. Changeable weather."

Last week, two German tourists were not deterred by the danger. Burkhard Schicklang and Andrea Thiele had read a guide in Germany that described the sound of the winds "singing" through the caves.

"We didn't hear it," said Schicklang. But he was not disappointed by Mount Rainier.

"Moon country," he said as he shuffled along the trail of gray glacial till and looked out over the barren moraines.

"It is very beautiful."

Rainier Has Halo Outside, Fire Inside

by Bill Cannon
University Week, Dec. 3, 1992

On a clear day Mount Rainier's albino-haystack dome, irresistible to postcard photographers, seems to hover over Seattle like a halo.

Scientists know that Rainier is more than just a pretty face.

"It's one of the most dangerous volcanoes around—a big, 14,000-foot chunk of mountain surrounded by 2.5 million people," says UW seismologist Steve Malone.

He and other scientists say Tacomans, Seattleites and others who live under the volcano would be wise to harbor a healthy respect for it.

At worst, Rainier may be due for an explosive eruption that could cloak Puget Sound cities in a commerce-crippling ash fall. Such an event would melt Rainier's icy cap, triggering unimaginably huge mud flows in which liquidized mountain chunks could erode valleys and wipe out bridges, road and anything else in the way.

Other dangers may be more mundane but may come without warning—for instance, small mud flows unassociated with eruptions.

Remarkably, the mountain has never been the subject of a comprehensive study. In fact, much of what we know is based on 40-year-old research, which was the basis for the first risk assessments. The risk was deemed by the International Association of Volcanology and Chemistry of the Earth's Interior, or IAVCEI, as worthy of extended study. Top U.S. researchers met at the UW this fall to draft a science plan that will guide their studies over the next decade. The IAVCEI accepted Hawaii's Mauna Loa as the United States' only other so-called decade volcano, but researchers have decided to put their funding efforts behind Rainier. The workshop was sponsored by the National Academy of Sciences.

"Rainier was an overwhelming consensus," says Donald Swanson, a U.S. Geological Survey scientist and a UW affiliate professor of geological sciences who, with Malone, led the session.

"We need a more sophisticated plan for dealing with mud flows and/or an eruption," he says. "Area governments must get involved to pool resources for a regional council. That's the only rational way to deal with natural hazards. You can't stop them from happening."

Among Cascade Range volcanoes—from Northern California through Oregon and Washington into British Columbia—Rainier, the chain's biggest mountain, is probably the most seismically active beside Mount St. Helens, which blew its top in 1980. Over the past 20 years, Rainier has been jolted by more than 800 earthquakes, including six large enough to be felt.

"Seismic monitoring is a quantitative way of saying something about the vigor of a mountain," says Malone, a research professor of geophysics who specializes in volcanic seismology. "I don't know if that's a valid predictor of volcanic activity, but as a seismolo-

continued on next page



A long climb to the summit - 1946

The Halo of Fire continued ...

gist that's what I go by. If nothing goes bump in the night, nothing is going to happen."

If the earthquakes come in furious succession—"swarms," Malone calls them—and continue for three days while growing in intensity, an eruption is likely. Swarms preceded the eruption of Mount St. Helens, but they are missing at Rainier.

Malone believes most of the seismic activity is related to regional tectonics—the Juan de Fuca oceanic plate butting up against and subducting beneath the North American plate. He hopes new work on Rainier will enable seismologists to hone techniques for distinguishing between tectonic and volcanic events.

For example, the west side of the mountain is more seismically active than the east side. Why? "If it was a simple matter of a massive load like Rainier putting stress on the underlying plate, you'd expect quakes on both sides. Are these tectonic events or do they have something to do with a volcano being there?"

Geologists like Swanson look at the big picture such as eruptive histories. Rainier's most recent eruption was 150 years ago, a minor dusting of ash. "And there were newspaper accounts from 1890 of eruptions," Swanson says. "But it could have been dust from rock falls or clouds boiling up from the summit that resembled a volcanic plume."

The last explosive eruption happened 2,200 years ago, judging from carbon dating of plants killed in the blast. They were buried by thick deposits of ash and pumice on the mountain's east flank. "We think that's

when the center cone, Columbia Crest, was constructed in the crater," Swanson says, "and that ice at summit is 2,200 years old."

Between 30,000 and 100,000 years ago—dating methods are imprecise for the period—the entire mountain blew up. "There are poorly preserved deposits east of the mountain—a 6-foot layer of coarse-grained pumice found about seven miles northeast of the summit. That's a large eruption we don't know much about."

Swanson says the mountain itself may have formed from a proto-Rainier 1.5 million years ago. "Whatever was there was buried by Rainier, except for a deposit of volcanic rocks of that age in the northwest corner of Rainier National Park that are blocky and rubby, indicating hot mud flows from some nearby source."

Volcanic histories defy simple categorizing. "Volcanoes can remain active for tens of thousands of years, even hundreds of thousands of years," Swanson says. "We want to know a volcano's capabilities. Volcanoes evolve just as humans do. You can't compare the capabilities of someone in kindergarten with someone in college."

For example, geologists knew that Mount St. Helens was volcanically "mature"—that is, capable of erupting. "But we knew of nothing in its past that would have warned us about the landslide and explosion that blew the mountain apart," Swanson says. "We want to come up with better models. We can't just depend on what happened in the past."

Swanson and Malone warn that Rainier's most likely threat may not be from an eruption at all but from the glaciers that smother the mountain. Rainier's volume of snow and ice—which, at 156 billion cubic feet, is equivalent to nearly two century's worth of Seattle water use—is tops in the lower 48 states and dwarfs that of other Cascade mountains. By comparison, Oregon's Fujii-esque Mount Hood contains 12 billion cubic feet of ice.

One morning, for example, a colleague of Malone's traced a seismic signal to a "glacial outburst" near the South Tahoma Glacier, on the southwest flank of the volcano, Malone says. "Melt water collects in ponds, breaks loose and carries rock and mud in slurry like concrete—real wet concrete—tearing along and ripping things up. They happen frequently in the late summer." This one took out a picnic area and frightened a tourist, who was muddied but survived.

"A new theory," Swanson says, "is that a glacier can trap gases and hot liquid that convert mountain rock to slippery clay"—a mineral Jell-O that could begin to slide. "Lots of the soupy rock could be up there now. A small or large collapse of a flank could occur without

continued on next page

The Halo of Fire continued ...

an eruption at all, in an earthquake or rock slide or simply from the pull of gravity. We have to be more alert to all glaciated volcanoes—part of our work is to devise ways to monitor slope stability.”

The Osceola mud flow from Rainier that stretched to Puget Sound to the West 5,000 years ago could have begun as an alteration of the mountain rock, Swanson suspects. “This is one of the things we want to investigate.”

Mount Rainier Park Service News Briefs

from MRNP, Ashford, WA 98304

The Park's main entrance, the Nisqually Entrance, and the road from Nisqually to Paradise remain open throughout the year. Highway 410 on the north side is closed at the north boundary arch just south of the Crystal Mountain ski area junction. Highway 123 on the south side is gated just north of the Stevens Canyon Entrance.

Visitors are reminded that there is no longer a groomed sliding area at Paradise. Sliding is still permitted, but it is important that those involved in this type of snowplay be very careful when choosing sliding areas. Grooming and monitoring have always been done for winter visitors. More than 3,000 visitors have come this winter to sled on their own, but spokeswoman Gail Purifoy says without the usual four rangers and one groomer, there's worry about accidents. “There are places where there can be a five- or six-foot fall.” If in doubt, contact a Ranger and ask where it might be safe to snow play.

Travel for December	Dec. '92	Dec. '91	1992	1991	Per cent
Visitors	34,087	40,643	2,358,296	2,235,591	+5.5%
Hotel Guests	744	671	43,756	42,862	+2.1%
Auto Campers	128	184	111,352	123,315	9.7%
Backcountry campers	438	383	40,509	35,383	+14.5%

Roads: All roads within Mount Rainier are closed for the winter with the exception of the Nisqually to Paradise Road. It should be noted that the road to Paradise above Longmire is gated at 4:30 PM and re-opened the following morning sometime after 8:00 AM depending on the weather and road conditions.

Park Information: Call (206) 569-2211, 7:30 am to 6:30 PM daily.

Book Reviews

by Bob Aegerter

My reading this year has had an unintentional theme. You will find something significant for Mount Rainier National Park in these publications.

I heard an interview with Helene Norberg-Hodge on National Public Radio and went to meet her at a reception following a reading from her book, *ANCIENT FUTURES*. I have an eco-travel interest in Ladakh, a little-known province of northeast India, north of Kashmir. Helene had gone there, first to produce a video documentary to celebrate Sven Svenson, an early Swedish explorer in the Western Himalayas, and later stayed to learn the language and found the Ladakh Project.

The Ladakh Project is a non-profit foundation dedicated to working out and promoting alternative futures for this small alpine region. This a place of limited resources and extreme climate. It faces rapid industrialization in the western tradition. Norberg-Hodge sees value in this traditional thriving culture. With traditions of frugality, cooperation, and knowledge of the environment, the Ladakhis have prospered.

Recently they have been introduced to “development” and now she finds pollution, intolerance, and greed. Traditional ecological balance and social harmony are threatened by Western consumerism. After a detailed explanation of the existing culture, and the change Western exposure has brought, Helena Norberg-Hodge shares her vision of ways sustainable development initiated by and for the Ladakhis could be accomplished.

The value to the Western reader is that she sees parallels with our own need for change. “We need to return to a more empathetic relationship with the living world and learn to see broader patterns, process and change... These trends are often labeled “new”, but, as I hope Ladakh has shown, in an important sense they are very old.” Thus, *ANCIENT FUTURES*.

Along with the election campaign, I had to read Al Gore, Jr.'s book. The effort was rewarded. *EARTH IN THE BALANCE* is a significant book from his own hand, well researched and documented. Al Gore's interest in global warming was sparked by a college professor, Dr. Roger Revelle, responsible for the inclusion of the regular monitoring of atmospheric carbon dioxide as a part of the International Geophysical Year in 1957. Better that being invited back to your alma ma-

continued on next page

Book Reviews continued ...

ter to lecture must be inviting your professor to testify before your congressional committee!

Gore quotes George Bush favoring birth control, (during the Nixon years), and makes a strong case for dedicated political leadership to reduce the international addiction to carbon based fuels. Gore's critique of classical economics is worth the price alone.

During what I remember as the "first environmental movement" Donella Meadows wrote *LIMITS TO GROWTH* using the newly discovered concepts of Systems Dynamics and recently affordable computer simulation techniques. The original study was funded by The Club of Rome and was based on the work of Jay W. Forrester, the MIT professor whom first applied systems thinking to the behaviors of economic and environmental systems. This is an update, with more on oil, carbon dioxide, and ozone, problems not covered in their first book. In this revision they make the point that like old growth trees, carbon based fossil fuels are not a sustainable energy source. We can change now or we can change later, but change we must.

Edward O. Wilson, the dean of biodiversity studies has written the definitive layperson's guide to biodiversity in *THE DIVERSITY OF LIFE*. This book reads with more passion than his earlier *BIODIVERSITY*, which together with the Nova Video documentary following The National Forum on Biodiversity in 1987, brought his name before the general public.

His personal passion and scientific concern is the Tropical Rain Forest, but his presentation is for all ecosystems. Wilson notes that are the species at the top of the food chain are most severely at risk with loss of

biodiversity. In case you haven't noticed, that's us, folks.

This brings me to R. Edward Grumbine's *GHOST BEARS, EXPLORING THE BIODIVERSITY CRISIS*. There is a rush of adrenaline to see the names of friends like David Fluharty, John Miles, Charlie Raines, Bill Dietrich, and others in print. This book is about the Greater North Cascades Ecosystem, and the author has spent time with students "on the ground." Grumbine opens with Soul's "Thinking Like a Mountain" using Koma Kulshan (Mt. Baker). Here is a pure, reasoned plea for an Ancient Future. Read it with an open mind to the necessity for change. We need to re-discover our proper place in nature.

Gore, Senator Albert, Jr., *EARTH IN THE BALANCE; ECOLOGY AND THE HUMAN SPIRIT*, Houghton Mifflin, New York, NY, 1992. \$22.95

Grumbine, R. Edward, *GHOST BEARS, EXPLORING THE BIODIVERSITY CRISIS*, Island Press, Washington, D.C. 1992. \$25.00

Meadows, Donella H. with Dennis L. Meadows and Jorgen Randers, *BEYOND THE LIMITS, CONFRONTING GLOBAL COLLAPSE, ENVISIONING A SUSTAINABLE FUTURE*, Chelsea Green Publishing, Post Mill, Vermont, 1992. \$19.95

Norberg-Hodge, Helena, *ANCIENT FUTURES, LEARNING FROM LADAKH*, Sierra Club Books, San Francisco, 1991. \$25.00.

Wilson, Edward O., Editor, *BIODIVERSITY*, National Academy Press, Washington, D.C., 1988. \$19.50.

Wilson, Edward O., *THE DIVERSITY OF LIFE*, Harvard University Press, 1992. \$29.95.

**Keep your calendars open for
May 20, 1993!**

**The MRNPA's Annual Meeting is in the final planning stages.
Always an enjoyable evening with an important speaker
on the future of Mount Rainier.**

Plan on attending this year!

***Watch for the announcement soon in your mailbox
or call any MRNPA Board Member for more details.***