The last two miles to upper base camp are the hardest. After miles of flat walking up the floor of Lyell Canyon, climbing the headwall seems cruel punishment. We’ve got extra heavy packs for our four days of work in the alpine zone. The air thins as the trail deepens, the creek rushes down toward Tuolumne Meadows, our tired legs need a night’s rest. When we dig into camp and fire up the stoves, we’re satisfied that we’ve already earned our time in Yosemite’s beautiful high country. Thus begin the challenges of seeking to learn more about the Lyell Glacier.
**Yosemite Guide**

**What is a Glacier?**

By definition, a glacier is ice that moves. Such ice, whether in polar latitudes or high altitudes, is derived from snowflakes that accumulate fast enough to outpace their melting rate over many years. Once such a snowfield becomes deep enough, it starts to ooze, either horizontally in the case of the polar ice sheets, or down montane valleys in the case of the alpine glaciers. The Lyell Glacier is more than a kilometer long and, in two adjacent lobes, is about a kilometer in width. This rather humble field of ice is one of the most studied glaciers in the Sierra, with photographic records of its size going back to John Muir’s day. In fact, in 1872, Muir himself measured the rate of ice flow in the nearby Mariposa Glacier.

In 1930, the National Park Service and François Matthes of the U.S. Geological Survey initiated an annual measurement series and photographic survey on the Lyell and several other Yosemite area glaciers. For three decades the Lyell Glacier was photographed from standard reference points, and the position of the ice front and ice surface were measured. When these measurements were gradually discontinued in the 1960s and 1970s, a long data stream was broken.

**Challenges of the Survey**

Last August, a group of interested science teachers spent a few days on the Lyell Glacier starting to revive the data gathering process. It is a long hike from Tuolumne Meadows to the upper Lyell base camp, but the beauty of the landscape and our determination to see what we could learn about Yosemite’s glaciers made it worth it. Lyell Canyon is one of the park’s lesser known delights miles and miles of subalpine meadow, a meandering crystal river, wetlands, and avalanche chutes filling a broad U-shaped valley. We camped near one of the last stream crossings, where Indian people had once camped before us. Our group included a National Park Service wilderness ranger, and three dedicated science teachers who bring their students to Yosemite Institute’s environmental education program during the school year.

**To Learn More...**

- Visit the glaciation of Yosemite Valley exhibit at the Valley Visitor Center.
- Attend one of several ranger walks on Yosemite’s geology (see pages 10 and 11).
- Read about glaciers. Some books available at the Valley Visitor Center include: The Geologic Story of Yosemite National Park by N. King Huber, and Brooms and Butresses, and Baffled by William R. Jones.
- Read “Nature Notes” on page 7.

**Continued from front cover**

Far upstream from Yosemite Valley stands the park’s highest summit, Mount Lyell. On the north slope of this 4,000-meter mountain is Yosemite’s largest glacier, the Lyell Glacier. The major ice rivers that are credit with affecting some of Yosemite’s main landscape features had all melted away by perhaps 10,000 years ago, when the earth warmed up just a few degrees. The Lyell Glacier is a small remnant from a cool period called the Little Ice Age, which lasted roughly A.D. 1350-1850. It is composed of compressed snow layers that represent hundreds and hundreds of Yosemite winters, from a time before Columbus landed in the Caribbean.

**The Living Glacier**

In the end, we could not find all the points we needed. We took all six of the standard reference photographs but they actually show more snow than glacier. Two essential transect end points remain undiscovered; they’ve either eroded away, or were still buried under snow-banks. At this point, we can’t quantify the changes in the glacier as much as we’d like. We know from the historical surveys that the Lyell Glacier shrank steadily between 1930 and 1980; we’d like to be able to compare the recession rate from 1960 to 1999, to see it may have changed. We also know that the Lyell Glacier is still alive; at the top of the ice sheet, a long crack called a bergshrund separates the ice body from the summit headwall, indicating downslope movement. This crack showed fresh activity in unmerged snow while we were up there. The glacier yet moves!

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**Kneedeep in suncups.**

Photo by Tom Slater

**Photo of Tom Slater**

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PARK RULES

It’s the Law

There are federal laws and regulations specific to national parks that protect Yosemite, its biological, historic and prehistoric sites and structures, and natural beauty. Protect your park by following these rules:

- Camping or sleeping in vehicles is permitted only in designated campsites and is prohibited along roadsides, in turnouts, or in parking lots.
- Bicycles (including mountain bikes), in-line skates, and strollers must remain on paved roads and designated paved bike paths. They are not allowed on hiking trails or anywhere off-pavement.
- Motor vehicles must stay on established roads open to public travel. Vehicles are not permitted off-road.
- Store your food properly, keeping it away from bears and other Yosemite animals (see page 3 for details).
- Pets frighten wildlife and disturb hikers. They must be leashed at all times and are not permitted on any park trails, with the exception of paved trails on the floor of Yosemite Valley.
- Do not remove any objects from the park, including pine cones, rocks, leaves, obsidian, historic items, etc. If you find an object that may be prehistoric or historic, do not move it. Note its location and inform a ranger. If you must collect something, please pick up litter!
- The use of metal detectors in the park is illegal. Please report possible violations to a park ranger.
- Firearms and hunting are prohibited in Yosemite National Park. Report possible violations to the park’s tip line, 209/372-0214, or to the Department of Fish and Game’s tip line, 888/DFG-CALTIP, 24 hours a day.
- All public buildings are designated as non-smoking.

Help Keep Wildlife Wild

Did you know that feeding or closely approaching any park wildlife is prohibited by federal law? Your food is a threat to the survival of park animals. It can damage their health, make them vulnerable to death from cars, or lead to dangerous behavior. Treat your food as if it were poison to animals, because the result is often the same. Even though animals may look tame—especially when searching for a hand-out—they are capable of inflicting serious injury, and in extreme cases, causing death. Never attempt to touch or closely approach any park wildlife. Instead, view them through binoculars or telephoto lenses. A good rule-of-thumb: If an animal is aware of your presence, you’re too close.

Recreational Closure on the El Portal Road

No recreational uses are allowed in the construction zone along the El Portal Road (Highway 140). This includes walking, climbing, hiking, swimming, fishing, bicycling, and kayaking. Rough road conditions may be encountered.
- Traffic is not allowed to stop, use turnouts, or turn around.
- Passengers must remain in vehicles.
- No overnight parking is permitted along the road.
- For information on road access and closure, call 209/372-0200 or ask at any visitor center.

Fishing Regulations

Special fishing regulations apply on the Merced River in Yosemite Valley. Happy Isles downstream to Pohono Bridge. In this stretch of the river, it is catch-and-release only for native rainbow trout. Only artificial lures or flies with barbless hooks may be used, and bait fishing is prohibited. Brown trout limits are five fish per day and ten in possession. It is the responsibility of the angler to identify fish species.

Rafting Regulations

Rafting regulations have been implemented to protect river habitat and provide for visitor safety. The entire length of the Merced River within Yosemite Valley will be closed to all flotation devices whenever the river gauge at Sentinel Bridge reads 6.5 feet or higher.

For More Information About...
- Food storage guidelines, see page 3.
- Camping and campfires, see page 4.
- Wilderness regulations, see page 5.
- Fire safety guidelines, see page 6.
- Bicycling rules, see page 9.

Drive Safely

- In 1999, there were 381 motor vehicle accidents in Yosemite National Park. Sixteen bears were hit by vehicles. Speeding kills wildlife and people. Slow down and follow these driving tips to avoid accidents:
  - Obey posted speed limits. Slow down when road conditions warrant. Be alert to rocks in the roadway, wildlife crossing, or9 unexpected slabs.
  - California law requires that all vehicle occupants wear seat belts, and children 4 years of age or under 40 lbs be restrained in an approved child safety seat.
  - Do not stop in the roadway! Find a safe turnout if you wish to take a photo, consult a map, or enjoy park scenery or wildlife.
  - Be courteous. Pull into turn-outs to allow other vehicles to pass.
  - When roads are steep and slippery, shift down. Avoid excessive slowing on curves, or your vehicle may slide.
  - In early spring, road conditions may change suddenly. Wet asphalt may be slippery or icy, especially in shady spots or on bridges. Keep speed down and allow extra distance for the vehicle in front of you.
  - Water from melted roadside snow often freezes on road surfaces, creating treacherous “black ice.” This can occur even when the weather appears dry and fair.
  - Anticipate snowplows as they may be working just around the next curve. Wait for a signal from the plow driver before passing.
  - Stay on your side of the road, especially on tight curves. Be aware of bicyclists and pedestrians.
  - Don’t drink and drive. It’s a fatal combination.

Will I Need Tire Chains?

- It is recommended that you carry tire chains in your vehicle (including rental cars) between November and April, as a sudden storm could make them mandatory at any time. Due to changing weather conditions, any vehicle entering a chain control area must carry chains under park regulations, even if their use is not mandatory at the time. Chains should be obtained in advance; several towns on highways leading into Yosemite rent them. Vehicles over 6,000 lbs. are required to use link-type chains, and on sets of dual tires, only one tire needs chains. Once in the park, tire chains are available at authorized outlets for purchase, but not for rent.
Each year black bears are killed in Yosemite National Park as a direct result of human carelessness and improper food storage. Some call it a “bear problem,” but bears are not to blame.

Driven by their powerful sense of smell, black bears are drawn to human food. Once they get it, they continue to seek it out—from backpacks, picnic tables, ice chests, and even cars. As their natural fear of people fades, they may become aggressive. When bears become too aggressive, they often have to be killed. In 1999, there were 766 incidents involving bears, resulting in over $224,000 in damage and five human injuries. Four bears had to be killed. The only way to stop this devastating cycle is to make sure that all food and trash are stored properly.

No Food In Cars!

In 1999, over 318 cars were damaged by bears in the park, and most of these incidents were caused by improper food storage. If your car will be parked in Yosemite after dark, it must not contain any food or related items.

Federal regulations require that all food and related supplies be stored and secured at all times in the metal “bear boxes” in each campsite (except when food is being prepared and eaten). Each box measures 38”x48”x22”. No food storage is allowed in vehicles.

Clear your car’s interior of clutter. This will reduce the chances of a bear mis-reading an article for food, and increase the chances that you will find any stray French fries or other overlooked food. Child car seats should be removed from vehicles since they often have residual food smells.

Remove all trash and place it in animal-resistant trash cans or dumpsters.

Campgrounds

Federal regulations require that all food and related supplies be stored and secured at all times in the metal “bear boxes” in each campsite (except when food is being prepared and eaten). Each box measures 38”x48”x22”. No food storage is allowed in vehicles.

Keep bear boxes latched and secured with theirclips at all times. Bears enter camp sites during the day, even when people are present.

Dispose of garbage frequently in animal-resistant dumpsters and cans. Don’t leave any garbage in your campsite, especially at night.

Lodging

Remove all food and food-related items from vehicles. Guests staying in hard-sided cabins must store such supplies indoors.

Keep out trash, empty food containers, and scented articles from vehicles before leaving them parked overnight.

Newspaper sightings are rare, so if you encounter a bear, act immediately: throw small stones or sticks toward the bear from a safe distance. Yell, clap hands, bang pots together. If there is more than one person, stand together to present a more intimidating figure, but do not surround the bear. Use caution if you see cubs, as a mother may act aggressively to defend them.

When done immediately, these actions have been successful in scaring bears away. Never try to retrieve anything once a bear has it. Report all bear incidents to a park ranger (see hotline number below).

SAVE-A-BEAR HOTLINE

To report trash problems, improper food storage, bear sightings, and other bear-related problems, leave a message for the Bear Management Team at 209-372-0200 (press 2, then 4). Your call can be made anonymously.

Donate a Canister & Save a Bear

Make a donation to the Yosemite Association’s “Save a Bear” campaign and help eliminate food-related human/bear conflicts in the wilderness. Donations will be used to purchase bear-resistant food storage canisters for use in the distribution program described in the adjacent article. The program makes canisters easily available and encourages their use.

Help save a bear by donating a bear can! Call the Yosemite Association at 209-379-2646 for more information.

NOTE: These regulations and precautions help decrease the chance of personal injury or property damage. However, bear damage and confrontations are still possible, even when all the guidelines are followed.

Bears Are Not To Blame: Store Food Properly

Keep food out of cars! This is what happens when a bear smells food in a vehicle.

Photo by Steve Thompson
Camping Reservations

Reservations are required for Yosemite Valley’s auto campsgrounds year-round and summer through fall for Hodgdon Meadow, Crane Flat, Wawona, and half of Tuolumne Meadows. All other campgrounds (except group and stock campgrounds) are first-come, first-served.

Camping reservations will be available in blocks of 1 month at a time, up to 5 months in advance, on the 15th of each month through the National Park System Reservation (NPRS). Thus, for:

- 30 days when booking in Yosemite Valley
- 30 days when booking at Tuolumne Meadow
- 60 days when booking at Crane Flat
- 30 days when booking at Hodgdon Meadow
- 30 days when booking at Wawona
- 30 days when booking at Bridal Veil Creek
- 30 days when booking at Yosemite Village

Check-in/check-out times for campgrounds outside the Valley is 7 days.

Outside Yosemite Valley

Check-in/check-out times for campgrounds outside the Valley is 7 days. Maximum length for recreational vehicles is 40 feet.

Camp 4 (Sunrise) Walk-in Campground

Campground is open all year on a first-come, first-served basis. There are no wheelchairs accessible. Sites are assigned on a first-come, first-served basis, and six people will be placed in each campsite, regardless of the number of people in your party. Camp 4 (Sunrise) often fills before 9:00 a.m. each day May through September.

There is a 30-day camping limit at Yosemite National Park in any calendar year; however, May 1–September 15, camping limit in Yosemite Valley is 7 days.

Camping In Areas Surrounding Yosemite

The U.S. Forest Service (USFS) operates a variety of campgrounds on a seasonal basis near Yosemite in the Inyo, Stanislaus National Forests. Many of these campgrounds are operated on a first-come, first-served basis; however, some may be reserved. Unlike Yosemite, the national forests allow dispersed camping in some areas (outside of designated campsites). Campsite permits are required. For additional information, contact the local USFS district office.

Wawona Campground

Campgrounds are open all year on a first-come, first-served basis. Pets are permitted only in specific campgrounds (check grid below). Campfires must be on a leash at all times, are not allowed on any hiking trails, and may not be left unattended while left in a campsite.

Quiet hours are from 10:00 p.m. to 6:00 a.m.

Generators may be used sparingly between 7:00 a.m. and 7:00 p.m.

Chemical and sewage disposal is at the discretion of designated utility drains.

Electrical extension cords must not be connected to campground restroom outlets.

Campfire Rules

To improve air quality in Yosemite Valley, campfires are permitted only between 5:00 p.m. and 10:00 p.m. from May 1 to September 15.

Firewood collection is prohibited in Yosemite Valley. This includes “dead and down” vegetation.

Outside the Valley, wood may not be gathered at elevations above 9,600 feet or in sequoia groves.

Please start campfires with newspaper. Do not burn pine needles or cones, as they create unnecessary smoke.

Campfires are permitted only in established fire rings.

See fire safety information on page 7.

Camping Regulations

Camping/sleeping in vehicles is permitted only in designated campgrounds.

Maximum of 6 people (including children) and 2 vehicles per campsite.

Pets are permitted only in specific campgrounds (check grid below). Pets must be on a leash at all times, are not allowed on any hiking trails, and may not be left unattended while left in a campsite.

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**Hiking & Backpacking**

**Spring in the Wilderness**

Spring wilderness users will find lower elevations a little soggy with a new crop of wildflowers waiting for the warmth of the sun. Some trails will be open and clear, but hikers should remember that most of Yosemite's trails rise rapidly from spring thaw to deep snow cover into mid-July, and unexpected snowstorms can bring snow to lower elevations throughout the spring.

**High Water/Stream Crossings**

During the spring and early summer, melting snow and ice will cause high water levels and swift currents in rivers and streams. Do not underestimate the power of rushing water—it can be deadly. When crossing an unbridged creek, look for a natural bridge of logs or rocks. Be careful—they can be extremely slippery. If none are available, cross in a wide shallow spot that is not above rapids or falls. Unbuckle your waist strap, use a long stick for stability, and face upstream while crossing. Do not tie yourself into “safety ropes”—they can get tangled.

**Plan Carefully**

- Use topographic maps and guidebooks to plan your trip. Carry a “topo” map and compass and know how to use them.
- Choose a reasonable route. Cold and altitude can sap energy. Allow plenty of time for rest, food storage, and campsite selection.
- Maximum group size is 15 people for trail travel and 8 people for off-trail travel.
- Check current weather conditions and forecasts prior to your trip. Be prepared for sudden extreme changes in weather.
- Leave an accurate itinerary with friends/family before your trip. Carry a signal mirror and whistle. Don’t go out alone unless you are very experienced.
- Carry plenty of food and water. You will need to eat and drink more in colder weather.
- Be prepared for an emergency bivouac even when out just for the day. Be familiar with your gear and carry minimum repair materials.
- Prevent hypothermia. Avoid the combination of wetness, wind and cold. Know symptoms and treatment methods. Carry emergency fire starting materials.
- Trail maps, hiking guides, and other literature may be obtained at visitor centers or ordered from the Yosemite Bookstore, P.O. Box 230, El Portal, CA 95329, 209/379-2648 or fax 209/379-2486.

**Wilderness Permits**

Free wilderness permits are required year-round for all overnight trips into Yosemite’s wilderness. They are not required for day hikes. Yosemite uses a trailhead quota system which limits the number of people who may begin overnight hikes from each trailhead, each day. This system is designed to avoid overcrowding and to reduce impacts to wilderness areas. At least 40% of each trailhead quota is available on a first-come, first-served basis the day of, or one day prior to, the beginning of your trip. Permit stations are located in Yosemite Valley at the Wilderness Center, Wawona, Big Oak Flat, Hetch Hetchy, and Tuolumne Meadows. (Through May 26, there will be limited access to trails departing from O'Shaugnessy Dam due to construction on the Hetch Hetchy Road.) Call 209/372-0200 or go to the wilderness web site for open permit station locations and hours.

**Yosemite Valley Day Hikes**

<table>
<thead>
<tr>
<th>Destination / Trail</th>
<th>Starting Point</th>
<th>Distance</th>
<th>Difficulty / Elevation Gain</th>
<th>Appropriate Hiking Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridalveil Fall</td>
<td>Bridalveil Fall Parking Area</td>
<td>1/2 mile round trip (0.8 km)</td>
<td>Easy</td>
<td>20 minutes round trip</td>
<td>with assistance</td>
</tr>
<tr>
<td>Mirror Lake</td>
<td>Mirror Lake Shuttle Stop #7</td>
<td>1 mile to lake (1.6 km)</td>
<td>Easy</td>
<td>1/2 hour to lake</td>
<td>Vehicle access available with placard</td>
</tr>
<tr>
<td>Lower Yosemite Fall</td>
<td>Yosemite Falls Shuttle Stop #7</td>
<td>1/2 mile round trip (0.8 km)</td>
<td>Easy</td>
<td>20 minutes round trip</td>
<td>with assistance</td>
</tr>
<tr>
<td>Upper Yosemite Fall Trail</td>
<td>Columbia Rock</td>
<td>Camp 4 (Sunnydale Campground) near Shuttle Stop #1</td>
<td>2 miles round trip (3.2 km)</td>
<td>Strenuous 1,000’ (300 m) elevation gain</td>
<td>2 to 3 hours round trip</td>
</tr>
<tr>
<td>Top of Yosemite Fall</td>
<td>Same as above</td>
<td>7.2 miles round trip (11.6 km)</td>
<td>Very Strenuous 2,700’ (810 m) elevation gain</td>
<td>6 to 8 hours round trip</td>
<td>Check conditions at Visitor Center in winter</td>
</tr>
</tbody>
</table>

**Glacier Point Four Mile Trail**

- Same as above 7 miles round trip (11.3 km) | Strenuous 1,900’ (570 m) elevation gain | 6 to 8 hours round trip | Check conditions at Visitor Center Winter route available |

**Valley Floor Loop**

- Yosemite Falls Shuttle Stop #7 | 13 miles full loop (20.8 km) | Extremely Strenuous 4,800’ (1,463 m) elevation gain | 10 to 12 hours round trip | Cables up from June to mid-October; otherwise cable route is closed in winter |

**Watch Your Step!**

- Tripwires and falling are common accidents on park walkways and trails, especially in slippery conditions.
- At night, artificial lighting is kept to a minimum; always carry a flashlight.
- Rock climbing and scrambling are the leading causes of injury and death for unprepared and inexperienced hikers. Routes are often more difficult than they appear, and even a short fall can cause serious injury or death. Before you scramble or climb on Yosemite’s rocks or boulders, be sure you have the proper equipment and training.
- Swift currents and wet, slippery rocks can cause you to fall and be swept over a waterfall. Never swim or wade in streams above waterfalls or in swiftly moving water.
- Any unbridged stream crossing may be hazardous. If a bridge is not nearby and you must cross, do so at a wide, shallow spot that is not above rapids or waterfalls.
- Supervise children closely when around all bodies of water.
Welcome to Yosemite!

The National Park Service is the agency of your federal government dedicated to preserving our nation’s heritage. Our mission was set by Congress in 1916: “to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations…”

Fulfilling that mission is a challenge in any of our nation’s 380 national parks, monuments, and historic sites and is particularly difficult in an amazing place like Yosemite. But, you can help us!

Spring and early summer are special times to be here. And this spring, we will release a draft plan for how to make a visit to Yosemite, and especially the Valley, a more enjoyable experience. The Draft Yosemite Valley Plan will be released for public review in early April and will be open for comments until early July. This plan has several different alternatives that will allow us to provide for your enjoyment of Yosemite, but in a manner that leaves the scenery, the natural and historic resources, and the park’s wildlife “unimpaired” so that future visitors may enjoy Yosemite too.

This Yosemite Guide has a host of information to help your visit be more enjoyable. The center insert contains information on the Draft Yosemite Valley Plan and how you can find out more about the issues. Whether you care about how we should manage traffic in the future, what facilities should be provided or removed, or how to restore the Valley to its previous more wild and scenic splendor, you can make a difference by telling us what you think during the public comment period. Beginning in April, that opportunity will be available to you while you’re in the park. The Guide provides a brief overview of the plan, lists where to drop off your comments, and where to get more information during your visit.

Yosemite is important to all of us. I hope you’ll take a moment to let us know what you think. It’s a way you can help preserve Yosemite for future generations.

Sincerely,

David A. Mihalic

Yosemite National Park is the ideal outdoor classroom for exploring natural and cultural history. Yosemite’s Parks As Classrooms program coordinates with the California State Curriculum Framework for upper elementary grades and offers ranger-led field trips. Each program lasts 1 to 2 hours. Park entrance fees are waived for the visit.

These programs emphasize the National Park Service message of protection and preservation of natural and cultural resources. Fall visits feature a Miwok Indian theme. Reservations are made beginning June 1. Class size is limited to 25 students, although it may be possible to schedule 2 classes the same day.

For further information regarding this and other National Park Service education programs, contact the Education Office at (209) 375-5605, or visit the web site at www.nps.gov/yose turbulence.htm.
GEOLGETISTS DISAGREE: MUIR VS. WHITNEY

Nineteenth-century scientists were puzzled by Yosemite Valley’s origin as many first-time visitors are today. Their efforts to explain what they saw resulted in a variety of theories about the creation of the Valley’s sheer walls and spectacular waterfalls.

Josiah D. Whitney was the State Geologist for California and Director of the California Geological Survey who made many of the first studies of Yosemite during the 1860s. In his view, Yosemite Valley had not been formed by erosion or glaciation or any other traditional geologic force. He believed that a valley so deep could only have been created by a sudden, catastrophic collapse of that section of the earth below it. Because Whitney was an accomplished Harvard professor with quite a reputation as a scholar and scientist, his theory gained some acceptance.

At about the same time, mountain wanderer John Muir was making observations of his own. He, too, was fascinated with the geologic history of Yosemite Valley. Muir advanced the hypothesis that it was the action of glaciers, an “over-sweeping ice current,” that had carved the Yosemite landscape. He worked to popularize the theory and it came to be known as “Muir’s discovery.” Whitney was not impressed nor convinced. He characterized Muir’s ideas as absurd, and passed them off as the ravings of a “mere shepherd.” Doggedly, Whitney defended his “cataclysm” theory for some twenty years until his death. While Muir was not exactly correct in his explanation of the work of the glaciers, he was remarkably close. Later studies proved the basic soundness of this theory and helped establish John Muir’s reputation as a thoughtful and insightful student of the Sierra.

At least one or more glacial advances filled Yosemite Valley to its brim, 1 million to 250,000 years ago.

The Tioga Glaciation, 30,000 years ago.

Glaciers recede, leaving, “Lake Yosemite” 10,000 years ago.

The Lyell Glacier, headwaters of the Lyell Fork of the Tuolumne River. Photo by Kristina Rylands

SPRING RUNOFF—SPECTACULAR, BUT DANGEROUS

The water level of rivers and streams depends on snow-melt, and during warm weather can increase quickly in both depth and speed. A placid stream early in the morning may be a raging torrent by late afternoon. High water is expected throughout spring runoff.

Don’t underestimate the danger and power of moving water in all parts of Yosemite.

Here are some guidelines for safe recreation and hiking:

❖ Stay back from stream and riverbanks and avoid “rock hopping.” Rocks near the water’s edge can be dangerously slippery.
❖ Supervise children closely when around ALL bodies of water.
❖ Hikers and backpackers: Choose routes carefully. Use extreme caution when crossing streams which can be exceptionally hazardous.
❖ Melted snow-water is cold! Hypothermia can be a serious result of continuous cold water contact; don’t venture into water until it warms up, later in the summer.
❖ Rafting and boating are prohibited during periods of high water (see article on page 2 for rafting regulations).

From The Complete Guidebook to Yosemite National Park by Steven P. Medley, available at all Yosemite Bookstores and retail outlets throughout the park.

SAFETY notes

GEOLOGISTS DISAGREE: MUIR VS. WHITNEY

Each year campfires, cigarettes, and human carelessness cause unwanted fires in Yosemite. These fires can be prevented by following a few simple rules.

CAMPFIRES

Build small campfires using only established campfire rings. Be aware of conditions such as weather and items nearby that could accidentally catch fire. Never leave a fire unattended. Put out campfires by stirring with water a half hour before you leave the site, and remember to carefully feel charred material to make certain the fire is out. See page 4 for campfire rules.

PORTABLE CAMPING STOVES

Refuel stoves only when they are cold and in a well-ventilated area.

CHARCOAL BRIQUETTES

Because charcoal uses oxygen rapidly, you should never use it in confined spaces, such as tents or vehicles. After use, dunk charcoal briquettes in water until cold. Check them carefully. Never empty hot or warm briquettes in trash dumpsters.

CIGARETTES

Never smoke while walking or in an area with flammable materials. Crush butts completely before throwing them into a garbage can. Never drop cigarettes on the ground or throw them out of a car window.

SAFE DRINKING WATER

Giardiasis is an intestinal disease caused by Giardia lamblia, a protozoan. Associated symptoms include chronic diarrhea, abdominal cramps, bloating, fatigue, and loss of weight. Treatment by a physician is necessary to kill the organism. Giardia lamblia is carried by humans as well as some domestic and wild animals, and may contaminate lakes and streams. Whenever possible, only tap water should be used for drinking. If using surface water or melted snow, treat by boiling for 5 minutes or by using a Giardia-rated water filter. If used properly, an iodine-based purifier is another alternative.

The National Park Service is working with the U.S. Environmental Protection Agency and the California Department of Health Services to develop a program to ensure that the drinking water in Yosemite is protected. The program, one of the first in California, will be based on an assessment of potential threats to water sources.

TICK-BORNE DISEASES

Be aware that ticks may exist in the park, and consult your doctor if you believe you’ve been bitten. If you are diagnosed with Lyme disease or relapsing fever, and you believe you got it in Yosemite, have your doctor contact the Park Sanitarian at 209/379-1033.
TRANSPORTATION

To and From Yosemite
VIA The Yosemite Connection / Gray Line
209/384-1215 or in CA 800/369-PARK
www.grayline-adventures.com

FRESNO — Service between Fresno/Yosemite International Airport and Fresno hotels to Yosemite Valley, seasonally (May 15 - October 31). Wheelchair-equipped coaches, sleeper services, and reservations available by calling VIA or by visiting their web site.

MERCEDES — Service from Merced Amtrak Station and Transpor to Yosemite Valley Visitor Center and Yosemite Lodge. Deluxe coaches provide several round-trip services daily between Merced and Yosemite. Wheelchair-equipped coaches and sleeper services are available at Yosemite Lodge tour desk, Yosemite Valley Visitor Center, or by calling VIA or visiting their web site. Tickets can be purchased from drivers.

The Yosemite Area Regional Transportation System (YARTS) will begin transit service May 19, with trips originating from Mariposa, Merced, and Mono Counties. Passengers can purchase round-trip tickets on tour-style coaches at reasonable prices. YARTS offers a unique mode of travel for visitors in the region who would like to ride a bus out of outlying communities to Yosemite Valley than drive their vehicles into Yosemite National Park. Buses run at hours most convenient to park visitors and passengers. The existing shuttle system with the existing shuttle bus system will be maintained. Reservations are available throughout the park, beginning May 19. For additional information, call toll-free 877/99-YARTS, (beginning March 20), or visit www.yosemite.com/yarts.

Within Yosemite
Free shuttle bus service is provided throughout the eastern portion of Yosemite Valley year-round. In summer, free shuttle buses run from Wawona to the Mariposa Grove, and from Tioga Pass to Tenaya Lake. Hikers’ bus runs daily to Glacier Point late spring through autumn and to Tuolumne Meadows and Yosemite Valley late June through September. Wawona is a collection of historic buildings associated with Yosemite residents. The Ahwahnee, a AAA Five Diamond hotel, offers a choice to travelers in the region who want a quiet, comfortable experience. Tuolumne Meadows is located at an elevation of 7,000 feet, 7,000 feet above Yosemite Valley, and is the highest of the Yosemite area lodgings. The Mariposa Grove of Giant Sequoias is located 36 miles (1 hour) south of Yosemite Valley via the Wawona Road (Highway 41). 2 miles from the park’s South Entrance Station. The road to the Mariposa Grove is not plowed in winter and is subject to closure for extended periods. Activities include hiking, ranger-led walks, and tram tours of the Grove (weather permitting) late spring through fall. (Road work scheduled for the Mariposa Grove may reduce or eliminate tram operations.) Trail brochures, printed in English, French, Japanese, and Spanish are available at this Grove trailhead. To reduce traffic congestion and avoid potential parking delays, ride the free shuttle bus (spring through fall) from Wawona to the Grove.

Yosemite Valley is available at the Yosemite Valley Visitor Center in Yosemite Village. See map on the back panel, and for scheduled Yosemite Valley activities, see pages 10-11.

LODGING AND ACTIVITIES OUTSIDE THE PARK

YATI (Yosemite Area Traveler Information)
369 W. 18th Street
Merced, CA 95340
www.yati.com

West Highway 120
Highway 120 Chamber of Commerce
Box 1263
Hotel Charlotte, Suite B
Groveland, CA 95321
800/449-9120 or 209/966-2456
www.thegreatunfenced.com

Highway 132/49
Courthouse Visitor Center
P.O. Box 333
5007 Main Street
Courthouse, CA 95313
209/962-3074

Highway 140/49
Mariposa Visitor Center
5136 W. 18th Street
Mariposa, CA 95338
800/208-2434 or 209/966-2456
mariposa.yosemite.net/visiter

East Highway 120
Lea Vining Chamber of Commerce
P.O. Box 130
Lee Vining, CA 93541
760/467-6629
www.leavinings.com

Highway 140
Courthouse Visitor Center
5007 Main Street
Courthouse, CA 95313
209/962-3074

Highway 120
Mariposa Visitor Center
5136 W. 18th Street
Mariposa, CA 95338
800/208-2434 or 209/966-2456
mariposa.yosemite.net/visiter

East Highway 120
Lee Vining Chamber of Commerce
P.O. Box 130
Lee Vining, CA 93541
760/467-6629
www.leavinings.com

Yosemite National Park is open 24 hours a day, year-round. (Fees subject to change)
YOUR VISIT

4 CRANE FLAT
Crane Flat is a pleasant forest and meadow area located 16 miles from Yosemite Valley at the junction of the Big Oak Flat Road and the Tioga Road. To see giant sequoias, park at the Tuolumne Grove parking area located on the Tioga Road (Highway 120), and walk 1 mile down to the Tuolumne Grove of Giant Sequoias. In winter, snowshoes or cross-country skis may be needed. For activities and area information, see page 12.

5 TIoga Road and Tuolumne Meadows
The Tioga Road is generally open from late spring through fall and offers a 39-mile scenic drive through forests and past meadows, lakes, and granite domes. The road’s elevation ranges from 6,000 feet at Crane Flat to 9,000 feet at Tioga Pass. There are many scenic and recreational opportunities along this route. Check visitor centers and park bulletin boards for updated information on available services and activities. From late fall through late spring, this area is only accessible by cross-country skis or snowshoes.

6 Hetch Hetchy
Hetch Hetchy Reservoir, a source of drinking water for the city of San Francisco, is also home to spectacular scenery and the starting point for many less-used backcountry trails. Towering cliffs and high waterfalls are easily seen from the walkway on top of O’Shaughnessy Dam. Hetch Hetchy Reservoir is located 40 miles from Yosemite Valley via Highway 120 and Evergreen and Hetch Hetchy Roads. Vehicles over 25 feet are prohibited on the road due to its narrowness.

The Hetch Hetchy Road will be under construction through May 26, 2000. The road will be closed on weekdays (Monday through Friday) and on some weekends. See “Important Road Information” below.

Visitor Centers
The four visitor centers in Yosemite National Park are excellent resources for park information, wilderness permits, and park-related publications and handouts.

Yosemite Valley Visitor Center
Open daily 8:00 a.m. to 5:00 p.m. See page 10 for more information.

Big Oak Flat Information Station
March 24 to April 30, open Thursday through Monday, 9:00 a.m. to 5:00 p.m. (closed for lunch); open daily beginning May 1. See page 12 for more information.

Wawona Information Station
Open for the season May 12, daily 8:00 a.m. to 5:00 p.m. (closed for lunch). See page 12 for more information.

Tuolumne Meadows Visitor Center
Open for the season in late May or early June, open daily 9:00 a.m. to 5:00 p.m.

Visitor Activities
Programs and Exhibits
Naturalist-guided walks are available. Cultural history demonstrations of basket-weaving, beadwork, or traditional games are offered at the Indian Cultural Exhibit in Yosemite Valley. Other activities are in the Valley Visitor Center, Yosemite Museum, Nature Center at Happy Isles (summer), LeConte Memorial Lodge (summer), Wawona General Store, and The Ansel Adams Gallery. Check park visitor centers and bulletin boards for additional information, and see activities listed on pages 10-12.

Tuolumne Meadows Visitor Center
The Tioga Road opens for the season in late May or early June, open daily 9:00 a.m. to 5:00 p.m.

Who To Call...

4 Recorded General Park Information including Road & Weather Conditions, Trip Planning Information, etc.
209/372-0200

4 Western U.S. National Parks
415/556-3060

4 On the Web (see page 2)
NPS Home Page
www.nps.gov
Yosemite Concession Services
www.yosemitepark.com
Yosemite Area Traveler Info.
www.yosemite.com
Yosemite Association
yosemite.org
Yosemite Institute
www.yihi.org
Yosemite Fund
www.yosemitefund.org

VIA/Gray Line
www.via-adventures.com

RESERVATIONS

4 Lodging Reservations
559/252-4848
TDD 559/255-8345

4 Campground Reservations (callers from U.S. and Canada)
800/436-7275
TDD 888/530-9796

4 Campground Reservations (International callers only)
301/722-1257

Annual 37.2/94.6

Average Precipitation and Temperatures in Yosemite Valley

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<th>MONTH</th>
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<tr>
<td>February</td>
<td>6.1/15.5</td>
<td>55/13</td>
<td>28/-2</td>
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<td>March</td>
<td>5.2/13.2</td>
<td>59/15</td>
<td>31/0</td>
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<tr>
<td>April</td>
<td>3.0/7.6</td>
<td>65/18</td>
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<td>1.3/3.3</td>
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<td>0.7/18.2</td>
<td>82/28</td>
<td>48/9</td>
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<td>July</td>
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<td>54/12</td>
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<td>September</td>
<td>0.9/2.3</td>
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<td>November</td>
<td>5.0/14</td>
<td>59/14</td>
<td>31/0</td>
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<tr>
<td>December</td>
<td>5.6/14.2</td>
<td>48/9</td>
<td>26/-3</td>
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Reservations
Camping Reservations
www.reservations.nps.gov
Camping Reservations
www.wyndhamholidays.com
Camping Reservations
www.anseladams.com
Camping Reservations
www.yosemite.com
Camping Reservations
www.campingworld.com
Camping Reservations
www.yosemite.com

On the Web
559/252-3060
TDD 559/255-8345

For additional information, call 209/372-1240

www.leovining.com
Lee Vining, CA 93541
Highway 395 and 3rd Street

For unrestricted road use, stop by any hotel tour desk.

Recreation
Bicycling
More than 12 miles of paved bikeways wind through the eastern end of Yosemite Valley. Weather permitting, rental bikes, baby jogging strollers, and bicycle child trailers are available at Yosemite Lodge (all seasons) and Curry Village (summer). Check with rental agent for restrictions on rental bike use.

Bike Rules
For your and Yosemite National Park, please follow these rules:
- California law mandates bicyclists under 18 years of age wear helmets.
- Bikes are allowed only on paved bikeways and park roads (unless the road is closed to bicycle use).
- All bikes are prohibited from pedestrian and hiking trails and off roads.
- Bicyclists must obey all posted traffic signs and travel with the flow of traffic when on roads used by automobiles.
- Bicycles are not allowed in the construction zone on El Portal Road.

Horseback Riding
Weather and trail conditions permitting, 2-hour and half-day rides depart from stables in Yosemite Valley, Tuolumne Meadows, and the Merced Grove of Giant Sequoias, located 16 miles from Yosemite Valley via Highway 120 and Evergreen and Hetch Hetchy Roads. Vehicles over 25 feet are prohibited on the road due to its narrowness.

Hiking & Backpacking
Yosemite offers over 300 miles of hiking trails park-wide. For updated trail information, visit the Wilderness Center in Yosemite Valley or call 209/372-0200. Wilderness permits are required for overnight backcountry users. For wilderness permit information and reservations, call 209/372-0740. For some ideas on hiking, as well as information about backpacking, see page 5.

Rock Climbing Classes
The Yosemite Mountaineering School and Guide Service offers beginner through advanced classes in Yosemite Valley spring through fall, and in Tuolumne (spring through fall). Two-hour moonlight tours show Yosemite in a different light during summer months. In winter, tours are conducted on heated and enclosed motor coaches; stops are made at the best-known scenic locations in Yosemite Valley. There’s also a fee for all sightseeing tours. For reservations and more information, call 209/372-1240 or stop by any hotel tour desk.

Important Road Information
Construction and restoration projects will be ongoing in several locations throughout the park. Specifically, you can expect roadwork between El Portal and the Big Oak Flat Road intersection, and along the Hetch Hetchy Road. Both roads were severely damaged by flooding in January 1997. During construction you may experience rough roads, flagging operations, traffic delays, or restricted access.

For current road information and access schedules, check at any ranger station or visitor center, or call 209/372-0200 (recorded information). For additional information on driving in Yosemite, see “Drive Safely” on page 3.
Welcome to Yosemite Valley!

For the weeks of June 6th-19th, see local bulletin boards for posted activities.

PIONEER WOMAN VISITS YOSEMITE
Sarah Hawkins invites you to share her experience as a pioneer woman in her two performance, "Snake-Ball Championship of Fourth Marriage: Part One: South Snakes, Pickles, and Petticoats. Part Two: Action Center. Performances in the Yosemite Theater at the Visitor Center East Auditorium.

Wednesday

10:00 a.m.
Ranger Walk—Yosemite Art. (begins May 24) 1 to 1½ hours. Please be prepared for exposure to the elements.

10:30 a.m.
Ranger Walk—Yosemite Carvers. (begins May 24) Please prepare for an all-terrain vehicle ride. (YCS)

11:00 a.m.
Ranger Walk—Yosemite's First People. (begins May 24) Please bring a picnic lunch. (YCS)

1:00 p.m.
Yosemite Theater—John Muir: A Life of Discovery. (begins May 24) Please prepare for an all-terrain vehicle ride. (YCS)

2:00 p.m.
Unusual Plants and Their Use. (begins May 24) Please plan for exposure to the elements.

7:00 p.m.
Yosemite Theater—The Spirit of John Muir. (begins May 24) Please prepare for an all-terrain vehicle ride.

8:00 p.m.
Yosemite Theater—The Tramp and the Roughrider. (begins May 24) Please prepare for an all-terrain vehicle ride.

8:30 p.m.

YCS = Yosemite Concession Services
NPS = National Park Service
# = Program offered at a fee

Programs listed below in color are especially recommended for children and families.
Yosemite Theater presents

THE TRAMP AND THE ROUGHRIDER

A New Production

Join John Muir and President Theodore Roosevelt at their historic meeting at Glacier Point! This new production, starring Lee Setson as John Muir and Doug Brennan as President Theodore Roosevelt, illuminates the 1903 encounter between these two extraordinary men as they trade opinions, stories and adventures, and talk of "doing some good."
Big Oak Flat Information Station

March 24 to April 30, open Thursday through Monday, 9:00 a.m. to 5:00 p.m. (closed for lunch). Open daily beginning May 1. Station is located just inside the park at the Big Oak Flat Entrance Station (Highway 120 West), and offers park orientation material, trail information, wilderness permits, books, and maps. Phone 209/379-1899.

Yosemite’s Other Sequoia Groves

Tuolumne Grove

The Tuolumne Grove of Giant Sequoias is near Crane Flat at the intersection of the Big Oak Flat Road (Highway 120 West) and the Tioga Road. The former route of the Big Oak Flat Road leads downhill from Crane Flat into the Tuolumne Grove of Big Trees, a cluster of about 25 sequoias. Now closed to cars, this 2-mile (3.2 km) round-trip hike has an elevation change of 500 feet (150 meters). The downhill walk is relatively easy, though it is moderately strenuous on the uphill return. Once in the Tuolumne Grove, there is an easy half-mile, self-guiding nature trail.

Meredo Grove

Yosemite’s quietest stand of sequoias is the Merced Grove, accessible only on foot. It’s a 3-mile hike into the grove from the Big Oak Flat Road (Highway 120 West). Located 3.5 miles north of Crane Flat or 4.5 miles south of the Big Oak Flat entrance, the trail is marked by a 3.0-mile and a road sign. Allow about 3 hours for the 4-mile round-trip hike to this small group of sequoias (about 20 trees).

Mariposa Grove

The Mariposa Grove of Giant Sequoias, located at the southernmost end of Yosemite, is the largest stand of giant sequoias in the park (about 500 trees).

To Get to the Grove

Cars are prohibited beyond the parking area in the Grove, but several giant sequoias can be seen from there. Allow 1½ hours driving time to the Mariposa Grove from Yosemite Valley. Information about handicapped accessibility is available at the tram boarding area. The access road to the Grove may close intermittently due to limited parking and/or snow. Please use the free shuttle service between Wawona and the Mariposa Grove. Trailers and motor homes are prohibited on the free shuttle service to help alleviate congestion and lengthy parking delays. Scheduled to begin May 6. Due to narrow roads and very limited work scheduled for the Mariposa Grove may reduce or eliminate (weather permitting) in the Mariposa Grove of Giant Sequoias when the Mariposa Grove Road opens, trams run every day (weather permitting) in the Mariposa Grove of Giant Sequoias for a 3-hour tour through the lower and upper groves. Information about handicapped accessibility is available at the tram boarding area. The access road to the Grove may close intermittently due to limited parking and/or snow. Please use the free shuttle service between Wawona and the Mariposa Grove. Trailers and motor homes are prohibited on the shuttle service.

Tuolumne Grove

The Mariposa Grove of Giant Sequoias is near Crane Flat at the intersection of the Big Oak Flat Road (Highway 120 West) and the Tioga Road. The former route of the Big Oak Flat Road leads downhill from Crane Flat into the Tuolumne Grove of Big Trees, a cluster of about 25 sequoias. Now closed to cars, this 2-mile (3.2 km) round-trip hike has an elevation change of 500 feet (150 meters). The downhill walk is relatively easy, though it is moderately strenuous on the uphill return. Once in the Tuolumne Grove, there is an easy half-mile, self-guiding nature trail.

Walking

The trailhead for walking up through the Grove is located at the far end of the parking area. Interpretive signs between the trailhead and the Grizzly Giant provide a self-guiding tour. Written translations are available at the trailhead (Spanish, German, French, Japanese).

Distance & Elevation

<table>
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<tr>
<th>Destination</th>
<th>Distance from Trailhead</th>
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<td>400 feet/122 m</td>
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<tr>
<td>Grove Museum</td>
<td>2.1 mile/3.5 km</td>
<td>800 feet/292 m</td>
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<tr>
<td>Fallen Tunnel Tree</td>
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<tr>
<td>Wawona Point</td>
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</tbody>
</table>

Mariposa Grove Museum

Learn about the history of the Grove in this small, historic log cabin. Opens for the season May 12, daily 9:30 a.m. to 4:30 p.m. (closed for lunch).

Free Mariposa Grove/Wawona Shuttle Bus

Beginning weekends only on April 22, the free shuttle bus stops at the Wawona Store, South Entrance, and Mariposa Grove from 9:00 a.m. until 5:00 p.m. (weather permitting). Daily service is scheduled to begin May 6. Due to narrow roads and very limited parking, visitors are strongly encouraged to use this free bus service to help alleviate congestion and lengthy parking delays. Visitors may park at the Wawona Store to board the shuttle bus.

Wawona Information Station

Opens for the season May 12. Open daily 8:00 a.m. to 6:00 p.m. (closed for lunch). Offers information about park activities, wilderness permits, trail information, books, and maps. From Highway 41 in Wawona, take the Chilnualna Falls Road to the first right hand turn past the statues. Phone 209/375-9501.

Evening Program

Wawona Hotel entertainer, Tom Bopp, presents programs featuring music and stories detailing Wawona’s colorful history. Drop by the hotel lounge on Tuesday through Saturday nights from 5:30 p.m. to 9:30 p.m., to see what Tom has cooked up for the evening! Programs with slides, historic Yosemite music or Wawona history are presented on some Thursday and Saturday nights at 8:30 p.m. Schedule subject to change; please inquire at the hotel front desk. (YCS).

Pioneer Yosemite History Center

Take this 30-minute self-guiding tour and learn about the people, events, and issues of Yosemite’s early years. From April 24 through May 25, Monday through Thursday, come see school groups participate in an environmental living program—brought to you by the past. You are welcome to ask questions of these costumed participants. Watch the stagecoach, walk across a covered bridge, and visit historic buildings out of Yosemite’s past. The Center is always open, and explanatory signs and brochures are available. Beginning May 26, the Pioneer Yosemite History Center Bookstore will be open daily 9:00 a.m. to 5:00 p.m. (closed for lunch).
The Yosemite Association is a non-profit organization dedicated to the support of Yosemite National Park through a program of visitor services, publications, and membership activities. For over 70 years, the Association has provided important financial support to the National Park Service, and has made possible the funding of many projects and purchases otherwise not affordable through normal government appropriations.

The Yosemite Association:
- Provides over $300,000 annually to the National Park Service for its use in visitor information, educational, and interpretive programs.
- Publishes popular and award-winning books on Yosemite and operates bookstores in the park.
- Provides member-volunteers to work on meadows, trails, and other much-needed park restoration projects.
- Organizes over 60 outdoor classes and field seminars on natural history, Native Americans, art, and photography.
- Sponsors the Ostrander Ski Hut, Yosemite Theater, Art Activity Center, and other valuable programs.

Anyone who loves Yosemite and wishes to become a member of the Yosemite Association. Sign up for a membership through this page and receive as a free gift The Complete Guidebook to Yosemite National Park. This book is informative and useful, lively and humorous, having earned the “Best National Park Guidebook” award from Guidebook to Yosemite National Park. Anyone who loves Yosemite and wishes to become a member of the Yosemite Association. Sign up for a membership through this page and receive as a free gift The Complete Guidebook to Yosemite National Park. This book is informative and useful, lively and humorous, having earned the “Best National Park Guidebook” award from Guidebook to Yosemite National Park.

As a member, you will:
- Enjoy a 15% discount at Yosemite Association shops on all books, maps, and publications, as well as qualify for a discount on most field seminars.
- Have an opportunity to volunteer in Yosemite.
- Receive the quarterly journal, Yosemite, which features informative articles on both the natural and human history of the park.
- Have a chance to attend special members’ events in the park.
- Have access to a members-only information line.
- Have the satisfaction of knowing that you are supporting significant projects in Yosemite National Park.

Please enroll me as a member of the Yosemite Association

Enclosed is my check or money order for $ or charge to

Name (please print)
Street Address
City            State    Zip
Daytime Phone Number

I want to become a friend of Yosemite

Enclosed is my tax-deductible gift of:

- $25
- $50
- $100
- $1,000*
- Other

Name
Address
City            State    Zip

Charge my Visa/Mastercard/American Express
Card #    Expiration Date

* A gift in this amount enrolls you as a participant in the John Muir Heritage Society, donors who are invited to special events at Yosemite National Park.

The Yosemite Association
P.O. Box 230, El Portal, CA 95318
209/379-2646
www.yosemite.org

The Yosemite Fund
Helping to Restore Habitat

The Yosemite Fund is a non-profit organization that raises money to help protect and restore Yosemite and enhance the visitor experience. Evidence of the Fund’s work can be seen throughout the park, specifically Glacier Point, Mirror Lake, and Happy Isles. But some Fund projects are less obvious because they focus entirely on restoring Yosemite’s natural scenery.

New visitors to Cook’s Meadow, near Yosemite Lodge, will enjoy the beautiful stretch of open grass leading to the riverbank. Even regular visitors might not notice much change. But in fact in the last two years, the Fund has supported a significant habitat restoration project here. While meadows make up only 4% of Yosemite in area, they contain 40% of its species and provide over 50% of its animal habitat. Small changes to restore Cook’s Meadow to a more natural state provide big results in enhancing Yosemite’s richness of plant, animal, and bird life.

With help from The Yosemite Fund, National Park Service restoration specialists and volunteer work crews from Chevron set about removing asphalt and filling in man-made ditches and an old roadbed that cut across the meadow. These changes will allow the natural water flow across the meadow that is so important for the health of meadow plant communities and the creatures that feed upon those plants. Volunteers also helped remove invasive plants such as blackberry vines and salvaged native meadow grasses for subsequent replanting.

The project will continue with asphalt paths being removed in favor of boardwalks that do not interrupt water flow. This will cause less disturbance to habitat, while allowing visitors to experience the meadow and its superb views of Yosemite Valley.

Join the Friends of Yosemite, with a gift to help protect and restore Yosemite National Park, and you’ll receive:
- The Fund’s newsletter Approach, featuring updates on the park and the latest information on Fund projects in progress or completed.
- Listing of your name on the Friends of Yosemite Honor Wall at the Valley Visitor Center.

Fill out the coupon below and help preserve Yosemite for generations to come.
EMERGENCY 911
Fire - Police - Medical Emergency: Dial 911, 24 hours a day (from hotel room 9-911)

MEDICAL
Yosemite Medical Clinic
Emergency care 24 hours daily
Drop-in and Urgent Care
Daily 8:00 a.m. to 9:30 p.m.
Scheduled appointments:
Monday - Friday 8:00 a.m. to 5:00 p.m.
Saturday 9:00 a.m. to Noon
Located at Ahwahnee Drive in Yosemite Valley. The clinic provides routine and emergency medical care for park employees, residents, and visitors. Experienced nursing staff, emergency physicians, nurse practitioners, and support staff on duty. Services include a limited pharmacy, lab, x-ray, and physical therapy. 209/372-4637
Paramed/Lodging Service
24 hours daily

Dental Services
Adjacent to Medical Clinic. For hours, call 209/372-4200. If no answer, call 209/372-4637.

ACCOMMODATIONS
For advanced reservations or information (rooms or activities), call 559/292-4848 (www.yosemitepark.com)

RESTAURANTS
These hours are approximate. For current dining hours, call 209/372-1000, extension 8.

Food Service Price Key:
$ = entrées under $7
$-$ = $7-$14 entrees
$-$-$ = $15-$20 entrees
$-$-$-$ = more than $20 entrees

Yosemite Village
Breakfast: 8:00 a.m. to 11:00 a.m. Lunch: 11:30 a.m. to 2:00 p.m. Diner: 5:00 p.m. to 10:00 p.m. (diner open until 7:00 a.m. after April 21) Meals served daily in one of more of the locations below:

Descans's Delicatessen
Sandwiches, soups, pasta, and salads $-

Descans's Food & Ice Cream

The Village Grill
(opens May 19) Hamburger, chicken nuggets, frosted, and soft drinks $-

Yosemite Lodge
Breakfast: 7:00 a.m. to 10:30 a.m. Lunch: 11:30 a.m. to 2:00 p.m. Diner: 5:00 p.m. to 9:00 p.m. Meals served daily in one of more of the locations below:

Cafeteria & Coffee Corner
Sandwiches, soups, pasta, and salads $-

Garden Terrace Salad Buffet
All you can eat, self-serve salad bar featuring soups, pasta, and at dinner, optionalaced-to-order meats $-

The Mountain Room
Spectacular views of Yosemite Falls with steak, prime rib, fresh fish, and other specialties $-$-$-$

Mountain Room Dining Room & Lounge
Light snack service available $-

The Ahwahnee

FOOD, BEVERAGES, GIFTS
Gifts are available at Yosemite Village, Tuolumne Meadows, Wawona, and Ahwahnee.

Yosemite Village
For current dining hours, information (rooms or activities), or after exploring $-

Dining Room
Breakfast 7:00 a.m. to 9:30 a.m. $-
Lunch 12:00 p.m. to 2:00 p.m. $-
Dinner 5:00 p.m. to 9:00 p.m. $-$-$-$-

Meals are served family style and reservations are advised, call 209/372-8413

Tuolomne Meadows Lodge

Dining Room
Breakfast 7:00 a.m. to 9:00 a.m. $-
Lunch 12:00 p.m. to 2:00 p.m. $-
Dinner 5:00 p.m. to 9:00 p.m. $-$-$-$-

Yosemite Village

The Ahgel Adams Gallery
Open daily 9:00 a.m. to 5:00 p.m. Located at the Valley Visitor Center. Books, original photographs, cards, Native American crafts, photography supplies, cameras, rentals, and more. 209/372-4413

www.anseladams.com

The Ansel Adams Gallery
8:30 a.m. to 10:00 p.m. Beginning May 26
9:00 a.m. to 10:00 p.m. Beginning May 27
Village Store
8:00 a.m. to 9:00 p.m. Beginning May 25
9:00 a.m. to 10:00 p.m. Beginning May 26
9:00 a.m. to 10:00 p.m. Beginning May 27

Gifts, Books & Apparel

GROCERIES

MARCH 14 – JUNE 19, 2000
ALL SERVICES AND HOURS OF OPERATION ARE SUBJECT TO CHANGE

Yosemite Village

Yosemite Village
The Ansel Adams Gallery
Open daily 9:00 a.m. to 5:00 p.m. Located at the Valley Visitor Center. Books, original photographs, cards, Native American crafts, photography supplies, cameras, rentals, and more. 209/372-4413

www.anseladams.com

Nature Shop
10:00 a.m. to 6:00 p.m. Unique sculptures of the natural world, distinctive apparel, music, and videos

The Ahwahnee

Gift Shop
8:30 a.m. to 9:00 p.m. Features signature Ahwahnee apparel, china, jewelry, and Native American crafts

Sweet Shop
7:30 a.m. to 10:00 p.m. Magazines, newspapers, distinctive candies, cookies, and souvenirs

Curry Village

Mountain Shop
10:00 a.m. to 5:00 p.m. through May 25; 9:00 a.m. to 6:00 p.m. in June. Signature Yosemite merchandise, dehydrated food, and camping supplies

Curry Village

Mountain Shop
 scalable grab and go items
3:00 p.m. to 6:00 p.m. carrots, grapes, and meats

Yosemite Village

Housekeeping Camp
(opens April 14)
Breakfast: 7:00 a.m. to 10:00 p.m. until May 26; 8:00 a.m. to 8:00 p.m. beginning May 27

Curry Village Store
8:00 a.m. to 7:00 p.m.

Wawona Store
8:00 a.m. to 6:00 p.m.

Crane Flat
9:00 a.m. to 5:00 p.m.

Tuolomne Meadows Store
(opens with Tioga Road)
8:00 a.m. to 5:00 p.m.

El Portal Market
9:00 a.m. to 7:00 p.m.

GROCES

Yosemite Village

Yosemite Village

Village Store
8:00 a.m. to 9:00 p.m. until May 25; 9:00 a.m. to 6:00 p.m. beginning May 26
Full service grocery store

Deegan's Delicatessen

Housekeeping Camp
(opens April 14)
Breakfast: 7:00 a.m. to 10:00 p.m. until May 26; 8:00 a.m. to 8:00 p.m. beginning May 27

Curry Village Store
8:00 a.m. to 7:00 p.m.

Wawona Store
8:00 a.m. to 6:00 p.m.

Crane Flat
9:00 a.m. to 5:00 p.m.

Tuolomne Meadows Store
(opens with Tioga Road)
8:00 a.m. to 5:00 p.m.

El Portal Market
9:00 a.m. to 7:00 p.m.

Yosemite Village

Yosemite Village

The Ansel Adams Gallery
Open daily 9:00 a.m. to 5:00 p.m. Located at the Valley Visitor Center. Books, original photographs, cards, Native American crafts, photography supplies, cameras, rentals, and more. 209/372-4413

www.anseladams.com

GIFT BOOKSTORE
Open daily 9:00 a.m. to 5:00 p.m. Located at the Valley Visitor Center. Books, maps, posters, and information

Yosemite Museum Book Shop
(opens April 14)
9:00 a.m. to 6:00 p.m. beginning May 27
9:00 a.m. to 4:00 p.m. until May 26; 9:30 a.m. to 5:00 p.m. after May 27
Books, traditional Indian arts and crafts 209/372-0295

Village Store
8:00 a.m. to 9:00 p.m. Beginning May 25; closes 7:00 p.m. beginning May 26.
Features signature Yosemite apparel, books, glassware, and postcards

Habitat Yosemite
(weekly only April 22 to May 26)
9:00 a.m. to 5:00 p.m. Located in Degnan's building. Gifts and souvenirs inspired by nature

Sport Shop
9:00 a.m. to 5:00 p.m. Fishing rods, tackle and gear, camping supplies

Art Activity Center
9:30 a.m. to 5:00 p.m. Located in Yosemite Village, south of Village Store. Free art classes daily. Books, art supplies, and fine local art

WILDERNESS CENTER
8:30 a.m. to 5:00 p.m. beginning April 7
Guidebooks, maps, wilderness permits, bear canisters, and trip-planning displays

Nature Center at Happy Isles
(opens May 12)
9:00 a.m. to 4:00 p.m. (closed for lunch)
Family-oriented bookstore

Yosemite Lodge

GIFT/APPAREL
8:00 a.m. to 7:00 p.m. Snacks, souvenirs, film, and limited groceries

Tuolomne Meadows

GIFT BOOKSTORE
(opens with Tioga Road)
9:00 a.m. to 5:00 p.m. Located in the Tuolomne Meadows Visitor Center

Wawona

HUNTING & FISHING GIFT SHOP
(opens March 1, weather permitting)
9:00 a.m. to 5:00 p.m. Cards, maps, gear, and supplies

Pioneer Gift Shop
(opens May 20)
9:00 a.m. to 5:00 p.m. An ample collection of field crafts

Pioneer Yosemite History Center Bookstore
(opens April 26)
9:00 a.m. to 5:00 p.m. (closed for lunch)
Books, maps, and information

GROCERY STORE
9:00 a.m. to 6:00 p.m. Essential supplies, ice cream, snacks, books, cards, and canister renters rental

Cane Flat

GROCERY STORE
9:00 a.m. to 5:00 p.m. Camping supplies, snacks, and bear canisters rental

Mariposa Grove

GIFT SHOP
(opens with Mariposa Grove Road)
9:00 a.m. to 5:00 p.m. Cards, bottled water, snacks, and memorabilia from the big trees

Museum Shop
(opens May 12)
9:30 a.m. to 4:30 p.m. (closed for lunch)

Glacier Point

Food, Beverages, Gifts
(opens with Glacier Point Road)
9:00 a.m. to 6:00 p.m. Star charts, apparel, books, and souvenirs
MARCH 14 - JUNE 19, 2000
ALL SERVICES AND OPERATIONS ARE SUBJECT TO CHANGE

Recreation

**Yosemite Lodge Tour Desk**
8:00 a.m. to 5:00 p.m. 209/372-1240

**Sightseeing Tours**
Two-hour open-air tram (weather permitting, or, bus depart daily from lodging facilities in Yosemite Valley. Inquire at tour information desks

**Bicycles**
Available for $3 per day ($2 at Glacier Point) with a deposit at Yosemite Valley rental outlets, Glacier Point Gift Shop, and transportation kiosks.

MOUNTAINEER SCHOOL
Yosemite Mountaineer School offers lessons and guided climbing at all levels, overnight backpacking, sking adventures, and guided day hikes to spectacular areas of Yosemite.

**CURRY VILLAGE** (April 10 through mid-summer)
8:30 a.m. to 5:00 p.m. 209/372-8345

**TOULUMNE MEADOWS**
mid-season conditions permitting 8:30 a.m. to 5:00 p.m. 209/372-8345

**BIKE RENTALS**
Daily, weather permitting, with hourly and daily rates. Baby joggers, wheelchairs, and six-speed bikes with trailers for towing small children are available.

**YOSEMITE LODGE**
10:00 a.m. to 5:00 p.m. 209/372-1208

**CURLY VILLAGE**
(even season
8:00 a.m. to 4:30 p.m. 209/372-1209

**El Portal Post Office**
Monday – Friday 8:30 a.m. to 12:30 p.m., 1:30 p.m. to 5:00 p.m.

**Services for Disabled**
An accessibility brochure is available at park entrance stations and visitor centers. Wheelchair rental available at Yosemite Medical Clinic, 209/372-4367, and bike stands, 209/372-1208.

Lost and Found
To inquire about items lost or found at one of Yosemite's restaurants, hotels, lounges, shuttle buses, or tour services, call Yosemite Concession Services at 209/372-4375, or write YCS Lost & Found, P.O. Box 578, Yosemite National Park, CA 95389.

For items lost or found in other areas of the park, call the National Park Service at 209/379-1001, or write to NPS Warehouse, 5083 Foresta Road, B-759, El Portal, CA 95318.

**Recreational Areas**

**River Rafting**
Rafting may be available, weather and river conditions permitting. Raft rental available at Curry Village Raft Stand, located at the ice rink (shuttle bus stop #13).

**Stables**
Two-hour, half-day, and all-day rides depart daily. Private pack trips into Yosemite's spectacular backcountry may also be arranged. Book rides at tour desks or stables.

**YOSEMITE VALLEY**
(April 21, conditions permitting)
7:30 a.m. to 4:00 p.m., to be extended as conditions permit. 209/379-1357, or write to NPS Warehouse, 5083 Foresta Road, B-759, El Portal, CA 95318.

**TOULUMNE MEADOWS**
(April 21, conditions permitting)
7:30 a.m. to 5:00 p.m.

**WAWONA**
(April 30)
8:00 a.m. to 8:30 a.m.

**Showers & Laundromat**

**Showers**
Curry Village
24 hours
8:00 a.m. to 10:00 p.m.

**Laundromat**
Housekeeping Camp
8:00 a.m. to 8:00 p.m.

**Gas Stations**
Crane Flat
9:00 a.m. to 6:00 p.m. Diesel available. Gas available 24 hours with credit or debit card.

**TOULUMNE MEADOWS**
(open with Tioga Road)
9:00 a.m. to 5:00 p.m.
Gas available 24 hours with credit or debit card.

**Miscellaneous**

**Baby Sitting**
Limited babysitting available for registered guests in YCS accommodations. Front desk or concierge for additional information.

**Kennel**
Open early spring, weather permitting. Located at the stables in Yosemite Valley, Proof of shots or license required. 7:30 a.m. to 5:00 p.m.

**Volunteers in Parks**
Individuals and groups interested in community service projects in Yosemite can call the Volunteer Program Manager at 209/379-1800. Free camping is provided and entrance fees are waived during your work project.

**Employment Opportunities**
Contact Yosemite Correlation Services Corporation at the General Offices in Yosemite Village or call 209-372-1236.

**Environmental Education**

**Yosemite Association**
Outdoor seminar, slide show for college credit.
P.O. Box 230, El Portal, CA 95318
209/379-2332 yosemite.org

**Yosemite Institute**
Non-profit environmental education organization. Weak-end, field-based seminars for school groups, free for educational groups, and other groups. P.O. Box 487, Yosemite, CA 95389. 209/379-9511 www.yni.org

**NPS Education Branch**
Ranger-led programs, resource information, teacher workshops. Wawona Ranger Station, P.O. Box 227, Wawona, CA 95389 209/375-9050. For entrance waivers for educational groups, call 209-379-1876 www.nps.gov/yose/educ.htm

**FACILITIES & SERVICES**

**Services and Facilities**

**Services at Chapel**

**Special Services**

**Special Events**

**Churches**

**Community Center**

**Events**

**Services and Amenities**

**Transportation**

**Community Services**

**Other Services**

**Church of Jesus Christ of Latter Day Saints**
Doug Wurman, 209/772-7263
John Talbot, 209/772-4136

**Yosemite Valley Sacramento Service**
1:00 p.m. to 5:00 p.m. Monday through Labor Day at Yosemite Chapel

**Roman Catholic**
Rev. Dennis Alvernaz, Resident Pastor 209/372-4729

**Yosemite Valley (until May 24)**
Saturday 5:30 p.m., Sunday 10:30 a.m., Visitor Center Great Auditorium

**Mass in Yosemite Valley (after May 24)**
Saturday 7:30 p.m., Sunday 8:00 & 10:00 a.m., Visitor Center Great Auditorium Wednesday, Thursday, Friday 4:00 p.m., Yosemite Chapel

**Mass in Wawona (after May 24)**
Saturday 4:30 p.m., Old School House

**Special Events in Yosemite Valley**
Mass: Holy Thursday, Good Friday, Easter Vigil, 7:30 p.m., Visitor Center Great Auditorium

**Seventh-Day Adventist**
Pastor Frank M. O'Mara, 209/372-0029
Yosemite Valley ( Memorial Day through Labor Day) at Lower Pines Campground AmphiTheater (near shuttle bus stop #19)

**Yosemite Chapel**
Sunday 10:00 a.m.
Yosemite Community Church*
Saturday 11:00 a.m.

**Yosemite Christian Ministries**
Pastor Steve Hughes 209/379-2423
For information on weddings, call number above.

**Wedding Services (begin May 30)**
Sunday 7:00 p.m., Yosemite Chapel

**Worship Walk**
(ends May 30)
Sunday 9:00 a.m., Happy Isles, starts at Lower Pines Campground Amphitheater (near shuttle bus stop #19)

**Solid Rock/ Climbers for Christ**
Pastor for location, times, and additional information.

**El Portal Community Church**
Pastor Rob Roper, 209/372-4729

**Wawona Christian Fellowship**
Pastor Aaron Stanford, 209/372-4329

**Wawona Community Center**
Worship Service: Saturday 9:00 a.m.

**Women's Bible Study**
Wednesday 1:00 p.m.

**March 2000**
15

**March 2000**
15

**March 2000**
15

**March 2000**
15

**March 2000**
15

**March 2000**
15

**March 2000**
15
**Visiting a Yosemite Glacier**

By Pete Devine

The last two miles to upper base camp are the hardest. After miles of flat walking up the floor of Lyell Canyon, climbing the headwall seems cruel punishment. We've got extra heavy packs for our four days of work in the alpine zone. The air thins as the trail steepens, the creek rushes down toward Tuolumne Meadows, our tired legs need rest. Thus begin the challenges of seeking to learn more about the Lyell Glacier.

The view inside:

**Shuttle Bus Route:**
- Shuttle Bus Stop
- Bicycle Path
- Road designated for bicycles and shuttle bus

**Campground:**
- Parking
- Campground
- Picnic Area
- Restrooms
- Parking

**Yosemite Valley destination areas:**
- Visitor Center
- Yosemite Village
- Yosemite Village/Day Use Parking
- Sentinel Bridge
- Yosemite Chapel Parking
- Housekeeping Camp
- LeConte Memorial Lodge
- Ice Rink/Bike & Raft Rentals
- Curry Village
- Happy Isles
- Upper Pines Campground

Gasoline is not available in Yosemite Valley.

Schedule and routes may vary. Shuttle buses operate daily at 15 to 20 minute intervals. All routes follow the same route, serving stops in numerical order.

**Schedule:**
- March 14 - 30, 9:00 a.m. - 10:00 p.m.
- March 31 - June 19, 7:00 a.m. - 10:00 p.m.

*Continued on page 1*