



## *Protecting Visitors*

According to NPS management policies, the saving of human life takes precedence over all other considerations. Park staff, especially all those who wear the ranger uniform, share responsibility for protecting visitors from harm while they are in the park. Visitor safety and protection are achieved by:

- ⇒ enforcing of applicable laws and park regulations;
- ⇒ reducing hazards and maintaining trails, campgrounds, and other facilities used by visitors ;
- ⇒ educating visitors about how they can help protect the park and themselves; and
- ⇒ providing search, rescue, and emergency medical assistance when needed.

## THE ENFORCERS

The primary responsibility for law enforcement and visitor protection in Yellowstone lies with the Division of Resource Management Operations and Visitor Protection. The park, which was established before the states of Wyoming, Idaho, and Montana, is an area of exclusive federal jurisdiction and the park's law enforcement rangers are authorized by Congress to enforce all applicable federal and state laws. Two district rangers oversee visitor and resource protection in 13 subdistricts and five entrance areas. Each of these has a ranger station that issues permits; provides information to visitors; and conducts daily patrols to check for safety hazards, resource impacts and violations, and opportunities to inform and educate visitors. Educating visitors about low-impact ways to enjoy park resources without danger to themselves or the park is the preferred and often the most successful law enforcement technique.

But when signs, park newspapers, and persuasive conversation fail or a willful violation of law occurs, rangers are prepared to use stronger tactics, such as issuing violation notices or making an arrest. During the 1998 peak season, Yellowstone had 63 full-time patrol rangers and 53 seasonal workers who were specially trained and

commissioned to enforce laws and regulations. To facilitate cross-boundary law enforcement, 20 Yellowstone rangers were also deputized as deputy sheriffs in one or more of the five counties adjacent to the park. Four criminal investigators, two of whom also served as Deputy U.S. Marshals and all of whom were deputy sheriffs, and a legal clerk followed up on serious crimes, advised park rangers on laws and procedures, and presented criminal cases before the resident park magistrate stationed in Mammoth Hot Springs or a federal district court judge.

## THE HAZARDS OF YELLOWSTONE



Yellowstone and other parks appear deceptively tranquil to the millions of visitors who arrive in full vacation mode. Unsuspecting and distracted, travelers are at risk from traffic, an unfamiliar environment, and sometimes from each other.

**Environmental hazards.** Each year some of the visitors who wander off a boardwalk or trail in thermal areas are seriously burned when they fall through the thin crust into scalding water; these falls occasionally result in death. Wading in thermal pools is illegal, but that doesn't stop some visitors from doing it.

Trees that fall as a result of natural causes or human disturbance pose a risk to human safety and property. A high wind event in August 1996 blew down at least 583 trees in developed areas and resulted in 4 reported personal injuries and 29 incidents of property damage with a total estimated monetary damage of \$54,000. As rangers spend more time removing trees that have fallen or that lean over trails, they are less available to patrol busy trails and meet with visitors to answer questions and explain backcountry rules.



Park regulations prohibit approaching within 100 yards of bears or 25 yards of other wildlife. However, elk and bison are often closer than that to roads and sidewalks in developed areas and such easy proximity tends to create an illusion of safety. The major cause of injury by wildlife occurs when visitors seek too close an encounter—a ground squirrel may bite the hand that feeds it, and bison have gored photographers coming in for a close-up. Since the era of roadside bear feeding ended in the 1970s, visitors are more likely to get hurt by a bison, but bears still pose a potential danger, especially to backcountry users who do not follow basic precautions. Rangers spend significant time educating visitors about how to avoid harassing and being injured by animals.



**Traffic hazards.** While park managers hope that Yellowstone provides a respite from urban crowds and the fast pace of the workaday world, the vast majority of park visitors arrive in the same six-week period between early July and mid-August each year—and most want to see the same highlights during their two-day visit. Combined with natural distractions and deteriorating road conditions, this heavy traffic makes for hazardous traveling for the unwary driver. As on other highways across the nation, drunk drivers pose a threat to themselves and other pedestrians and motorists. Rangers documented 518 traffic accidents in the park during 1998 which resulted in \$2.1 million in property damage and 799 personal human injuries, some of which were serious or even fatal.

**Other surprises.** Accidents that range from overturned boats to visitors tripping from canyon overlooks have befallen vacationers and park workers. Rangers are called to respond to domestic quarrels, some of which turn violent, in park campgrounds and housing areas. The park is subject to litigation for perceived acts of negligence; an average of 50 claims are filed each year. While most are for small amounts, a man injured in a snowmobile accident outside the park near West Yellowstone filed a claim for \$40 million, contesting the medical aid provided by park rangers who assisted U.S. Forest Service employees.

**Crime and punishment.** While most park visitors leave Yellowstone after a safe visit, some are victims of offenses such as burglaries, automobile break-ins, and an occasional assault or murder. In 1998, Yellowstone rangers issued 19,560 verbal warnings and 3,888 citations for violations of federal regulations; 97 people were arrested. The park maintains a two-cell jail, built by the Army in 1911, which still holds prisoners when necessary, pending a hearing before a judge. Although 98 percent of the recorded crimes in 1998 were misdemeanors—traffic violations, minor assaults, petty thefts, disorderly conduct, and illegal use of drugs or alcohol—163 known felonies were committed. Rangers on a typical patrol shift must be prepared to deal with anything from a quiet night of educational visitor contacts to a life-threatening attack on themselves, other employees, or park visitors.

**Lost in paradise.** As a routine part of their job, rangers are called upon to search for missing visitors anywhere from the top of Thunderer Mountain to the depths of Yellowstone Lake, and in conditions that range from desert-like in summer, in the Black Canyon of the Yellowstone River, to winter blizzards with “white-out” visibility. Only a tiny fraction of park visitors turn up missing, and most search-and-rescue operations cost less than \$500, but the length, logistics, and cost of such episodes vary tremendously. Since 1994, the number of search-and-rescue incidents has ranged from 9 to 44 a year, costing the park from \$20,000 to more than \$147,000 annually.

## A TENSE DAY AT OLD FAITHFUL

On a June afternoon in 1989, an 18-year-old Louisiana man named Brett Hartley walked into the park's busiest visitor center in sight of Old Faithful Geyser, brandishing a 30-caliber revolver and making threats. Some visitors milling in the lobby fled through the front doors, while a park naturalist quickly entered the auditorium where a film was showing and sent the audience out the back door. After returning to the lobby and telling the gunman the theater was empty, the naturalist became one of three staff and five visitors held hostage in one of Yellowstone's most perilous law enforcement situations. Rangers from around the park were summoned to assist; the best marksmen were stationed at a discreet distance outside the building while medics stood by and others were poised to make an assault on Hartley if the opportunity arose. While the naturalist phoned or radioed information from the disturbed young man to rangers outside the building, the other hostages were forced to lie on the floor for three hours. Criminal investigators had begun a detailed background check as soon as they found out the man's name.

Eventually, Hartley began talking directly by phone to ranger Bundy Phillips, who had basic training in hostage situations but had never dealt with such a dangerous incident. After repeatedly being asked to lay down his gun, Hartley abruptly told the hostages to get out, and they quickly left the visitor center. Several more hours and much conversation later, Hartley, who was distraught about his family and his health, surrendered peacefully. He was charged with a felony, but was found not guilty by reason of insanity, and committed to a mental health institution. Ranger Phillips received an Exemplary Act Award from then-NPS Director Ridenour for his role in diffusing the crisis.

An increasing number of backcountry users appear reluctant to leave the convenience of modern technology behind. A call for help from a cellular phone can cut hours or even days off the standard notification and rescue-response time, or may enable a ranger to guide a stranded party out of a predicament. On the other hand, inexperienced visitors may view their cell phone as a substitute for adequate skills, gear, or reasonable precautions and perseverance, confident in the belief that "help is just a phone call away."



## RENAISSANCE RANGERS

In order to protect visitors from the myriad hazards they may face in Yellowstone, rangers must possess varied technical skills, training, and experience in structural fire, accident prevention and investigation, conflict resolution, and emergency response. The conventional expectation that park rangers can provide nearly any type of public service is increasingly complicated by the standards required for certification or performance of duties, such as technical rescue, law enforcement, and medical treatment.



**Emergency medical services.** Rangers respond to medical calls ranging from twisted ankles and dehydration to more serious illness and accidents in park hotels, along park roadways, and in the backcountry. They also routinely provide medical care and transportation for park employees and for residents and visitors in Cooke City, West Yellowstone, and Gardiner, Montana. The necessary treatment is determined and performed in cooperation with the park's contracted medical providers. (See "Medical Care," page 6-24.)

Yellowstone's isolation from advanced medical facilities, as well as technological advancements and liability issues have increased the need to have highly trained park staff and equipment on hand to perform emergency extrication and defibrillation, and to respond to hazardous materials spills and deal with blood-borne pathogens. The park encourages all permanent field rangers to be certified as Emergency Medical Technicians (EMTs), which requires 120 hours of initial training plus 48 hours of continuing education and a 24-hour biennial refresher class. All park rangers must at a minimum be trained to serve as "first-responders" and have received cardio-pulmonary resuscitation (CPR) training and certification. An emergency medical services coordinator arranges or teaches classes for rangers, other employees, and local citizens who wish to receive the training.

In 1998, the park ranger staff included 80 emergency medical technicians, 38 first responders, 15 park medics, and 2 paramedics. They provided basic or advanced life support care to 730 people, conducted 311 ambulance transports, and coordinated 39 air ambulance transports; only 6 of nearly 3 million park visitors died in Yellowstone.

**Law enforcement.** To become a permanent commissioned law enforcement ranger, applicants are required to complete 480 hours of specialized coursework at an approved federal training academy, in addition to field training experience at Yellowstone or another park. Permanent employees receive the time off for training at the park's expense,

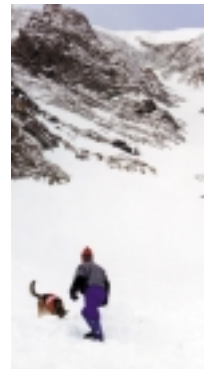
but to become a seasonal ranger candidates typically spend their own time and money to attend a school certified to provide a condensed 360-hour course. Both seasonal and permanent rangers must also attend an annual 40-hour basic law enforcement refresher; additional training is required for such skills as fingerprint classification, defense tactics, radar certification, and firearms instruction.

Compliance with the mandated requirements to conduct background investigations before granting police powers to an employee has been time-consuming and costly. In 1998, the park submitted paperwork to the federal Office of Personnel Management to check on 52 seasonal and 42 permanent rangers, for a total cost of nearly \$232,000. So far the NPS Washington office has paid the cost of these investigations. The park's criminal investigators performed similar background checks on security guards and armored-car drivers contracted to work in the park, and on park staff who handle money.

**Search and rescue (SAR).** Yellowstone rangers manage and conduct search-and-rescue operations in the park and, when requested, outside the park. A 21-member advanced technical rescue team specializing in high-angle rock and technical river operations trains together six times each year and teaches basic rescue skills to other park employees. Five certified SCUBA divers make up the park's dive team, which is used in searching for boats and victims lost in lakes, rivers, and under the ice. Divers must make at least 12 dives each year and attend a biennial 40-hour refresher course to maintain their certification. Yellowstone's certified dive master also conducts training and examinations for other nearby parks, such as Grand Teton and Bighorn Canyon.

In 1998, the park had one SAR-dog team that trained at least once each month with a statewide SAR organization and met NPS standards for certification. A SAR-dog team found two 11-year old girls missing over a rainy night in the Canyon area in 1995. These teams have also located three avalanche victims in various incidents near West Yellowstone, bringing closure to these tragedies and reducing the effort and danger faced by other searchers.

To enhance employees' ability to deal with winter survival and rescues, the park sponsors one-day training sessions in avalanche awareness and safety precautions for all interested staff. More advanced three-day winter survival training is required of all employees who venture into snow-covered backcountry on duty; after a classroom session on preparedness, winter first-aid, and proper clothing and equipment, participants venture out on skis or snowshoes, construct snow shelters, and spend the night winter camping.





Yellowstone is fortunate to have a helicopter stationed in the park during the 100-day fire season (see “Wildland Fire,” page 2–29). When not in use for fire management, the helicopter is available for searches and rescues throughout the park and surrounding area upon request. Specially trained members of the helitack crew can perform highly technical rescues, including being slung on a cable beneath the aircraft in a harness with a victim. The helicopter flies 20 to 60 hours each summer on SAR missions, often helping in a dozen or more major park incidents. When necessary, rangers call for life flights to transport seriously injured victims from the park to regional hospitals.

**General assistance.** The typical patrol shift does not require all of a ranger’s specialized skills in law enforcement, medical assistance, or search and rescue, but providing assistance to park visitors is also important, and ranges from helping them find a needed facility or popular destination to extracting keys from an accidentally locked vehicle. Visitor service is also provided at ranger stations, where staff, student interns, and volunteers provide information and issue permits for boating, angling, and backcountry use. Broad knowledge of park resources and services is required of all rangers, as is patience and a courteous attitude.

#### RECENT ACCOMPLISHMENTS

**Removing hazards.** Rangers and other employees are expected to be alert for safety hazards. Along roadsides, rangers direct traffic and keep visitors at safe distances from animals and passing cars. Broken boardwalks and guardrails, major potholes in roads, scattered glass or hazardous trash, and leaning trees must be tended to by rangers on patrol or reported to maintenance crews for major repair. The ever-changing thermal features sometimes require re-routing visitors in thermal areas as the forces of geology overtake a trail.

**Saving human lives.** During the 1990s, on average nine visitors died in the park each year. Park staff continue to seek better training and equipment to reduce the incidence of these tragedies. The EMS program has acquired eight ambulances since 1993 to replace transport vans and suburbans which were being used as for emergencies. Each of the new vehicles has defibrillation equipment that, when used by staff trained in advanced life support techniques, has enabled rangers to save one or two lives each year that otherwise would have been lost. Two new oversnow ambulances and avalanche safety gear, including

beacons and probe poles that can be used by employees heading into the backcountry, provide for improved winter safety. Throughout the park, rangers' rescue caches are being supplied with updated equipment for SAR missions.

**Assisting neighboring communities.** For Yellowstone's gateway communities, the park rangers are often the only trained personnel available to help with law enforcement, search and rescue, and emergency medical incidents. The park has mutual aid agreements with Park and Gallatin counties in Montana where, at the request of law enforcement authorities, Yellowstone's SAR teams have searchers, dog teams, and helicopter assistance for incidents outside the park. They have also conducted training for employees of Park County, Montana and Park County, Wyoming.

Since 1993, Yellowstone has participated in the national Drug Abuse Resistance Education (DARE) program, aimed at kindergarten through fifth-grade youngsters. The park's DARE officer spends several days each week during the school season working with local communities. Program goals are to enhance drug and alcohol awareness and promote positive alternatives to substance use among youths.

In January 1998, the park received \$2,400 from Montana's Gallatin Project for a new computer system to track domestic violence and child victimization cases in and near Yellowstone; rangers have been involved in investigating eight such cases under a new cooperative agreement. A collateral benefit from all these community efforts is improved rapport between park rangers and local residents.

### A NOT-SO-ROUTINE PATROL

A routine patrol along Yellowstone Lake shore turned into a life-saving incident for seasonal ranger Dino Nicholau. On a July evening in 1998, he noticed a recreational vehicle parked in a picnic area with its engine off and its windows closed, but the generator was running. When a knock on the door brought no response, Nicholau looked in a window and saw what appeared to be an unconscious person. He went in the door and, although nearly overwhelmed by the heat and fumes, found three unconscious people—an elderly couple from Mississippi and their 5-year old granddaughter. Nicholau carried two of the tourists to safety, by which time help had arrived to assist him in carrying the third. While other family members were out fishing, Charles, Edwina, and young Sarah Royce had almost succumbed to carbon monoxide poisoning. After the rangers provided emergency medical care, the three patients were transported to area hospitals for further treatment. Nicholau's quick thinking saved three lives and averted tragedy for this family.



*Program Needs*

• **ADDITIONAL STAFF AND STREAMLINED SERVICE.** Obtaining qualified seasonal staff has become more difficult as job requirements have increased and funding has not kept pace with growing visitation, and with the lengthening of the peak season into spring and fall months. While visitation grew 32 percent between 1987 and 1996, the number of seasonal rangers dropped by 33 percent. This staff reduction limited the park's ability to both carry out routine activities and respond to emergencies. Despite the best efforts of existing staff, rangers are spread thinly throughout the park. A common visitor complaint is that "you can never find a ranger when you need one."

Improved facilities and sharing training and responsibilities that are split between two uniformed divisions and facilities could help Yellowstone continue to provide basic services to the public. To maintain optimum levels of proactive ranger patrols and provide better visitor service, more positions are needed.

The park would also benefit from the addition of full-time SAR and EMS program coordinators to oversee more professional programs with better planning, training, interagency cooperation, logistics, and managing for incidents. These specialists would also undertake more proactive efforts to educate visitors, employees, and local community residents in how to prevent accidents and SAR incidents.



• **EQUIPMENT.** Costs to meet agency-mandated standards for rangers' personal protective equipment such as firearms cleaning kits and targets, soft body armor, and ammunition have escalated. Each subdistrict ranger station needs SAR equipment to meet the area's needs. Some stations need whitewater rescue gear, while others need ropes, webbing, and other technical climbing equipment; many need All Terrain Vehicle (ATV) wheeled litters and a "sailing winch" to extricate and transport victims from backcountry accidents. Needed EMS equipment includes more oversnow ambulances or transport vehicles, automated digital blood-

pressure machines, evacuation chairs, and care-provider restraint systems for park ambulances, some of which will need to be replaced soon.

- **TRAINING BUDGET.** Funding is also inadequate to support the continuing education and training of park rangers. While many supervisory rangers have taken basic training in search management, it has been five years or more since most have received any refresher in new skills and techniques. More employees should receive basic training in EMS and SAR, and practical field-training exercises should be conducted at least twice a year to keep staff current. Staff turnover creates a continual need to provide new members of EMS, SAR, SCUBA, and other skills teams with the knowledge and experience needed to protect the safety of park visitors, other employees, and themselves.





## VISITOR PROTECTION

### STEWARDSHIP GOALS



Fully trained professional staff proactively protect visitors and enhance visitor enjoyment through high-quality visitor service and assistance throughout the year and throughout the park.



Rangers reduce safety risks and increase public safety awareness through on- and off-site patrols, actions, and educational outreach efforts.



Visitors are assured of rapid response to emergencies and receive appropriate assistance in keeping with the setting and other park goals.



Rangers assist neighboring communities and jurisdictions with law enforcement, search and rescue, emergency medical situations, and other needs as requested or appropriate.

### CURRENT STATE OF RESOURCES/PROGRAMS



Most visitors have safe and satisfying park visits, but rangers receive minimal training needed for their own and visitor protection, and limited staff results in barely adequate resource protection and safety patrols.



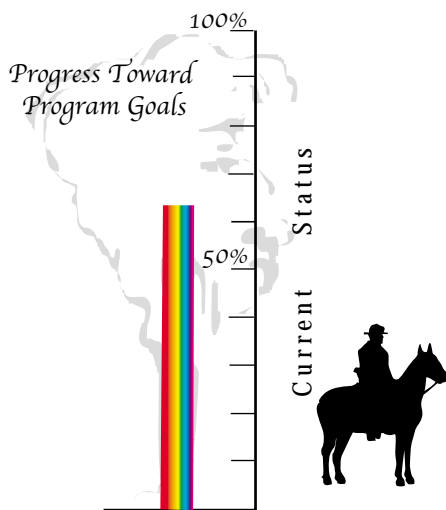
Rangers respond to immediate safety threats, but staff have little time for proactive programs in or out of the park.



Top priority is given to missing or injured persons, reported crimes and other emergencies, resulting in an overall low incidence of visitor accidents and victimization.



Mutual-aid agreements with gateway communities are well-established and appreciated; special programs such as DARE and shared training have increased cross-boundary cooperation.



### 1998 FUNDING AND STAFF

<b>Recurring Funds</b>	
Yellowstone N.P. Base Budget	\$ 3,713,000
Cost Recovery/Special Use Fees	\$ 40,799
<b>Non-Recurring Funds</b>	
One-time Projects	2,000
Fee Demonstration Program Projects	\$ 15,000
Staff	72 FTE

The human resources and funding necessary to professionally and effectively manage the park to stewardship levels will be identified in the park business plan.