



U.S. Fish and Wildlife Service  
Mountain-Prairie Region, P.O. Box 25486  
Lakewood, Colorado 80228  
phone 303/236-7905, fax 303/236-3815  
website: [www.rb.fws.gov](http://www.rb.fws.gov)



## **How will the Wildfires of 2000 Affect Grizzly Bears in the Rocky Mountains?**

The wildfires of 2000 were widespread throughout the Rocky Mountains and burned portions of all grizzly bear recovery areas in the Lower 48 States: Montana (Yellowstone, Northern Continental Divide, and Cabinet/Yaak Ecosystems), Idaho (Yellowstone, Bitterroot, and Selkirk Ecosystems), Wyoming (Yellowstone Ecosystem) and Washington (North Cascades Ecosystem). The impact of these fires on grizzly bear recovery is largely beneficial. The fires also provide numerous opportunities for future monitoring and evaluation of the affect of fire on grizzlies.

The 2000 fires that occurred within remote wilderness portions of the grizzly bear habitat created a natural mosaic pattern of burned and unburned vegetation, which benefits grizzly bears by increasing the diversity of in the landscape and abundance of bear foods over time. Fires that occurred in lower elevation forested areas generally burned hotter, resulting in areas that may take years to regenerate. Many of these fires occurred adjacent to valley bottoms, on the periphery of grizzly recovery zones, where people also live. Such fires remove cover, which is critical to the bear's use of these more developed areas. As a result, some grizzly bears may avoid these areas because of the reduced cover. Those bears that continue to use these areas will have an increased chance of encountering people and suffering human-caused mortality.

### **Opportunities to Learn from the Fires of 2000:**

Monitoring grizzly bear use of burned areas and effectiveness of habitat management strategies in burned areas.  
Past fires on USDA Forest Service lands inhabited by grizzly bears have led to the development and implementation of fire timber salvage guidelines for grizzly bear management. These guidelines were developed by the U.S. Fish and Wildlife Service through Section 7 consultation with the USDA Forest Service. These guidelines have resulted in limitations on harvesting certain areas of burned timber, to provide cover for grizzly bears. Monitoring of the effectiveness of these management guidelines has been limited due to the small sample of radio-collared bears and limited application of the guidelines. The fires of 2000 provide an opportunity to expand the monitoring of grizzly bear use of burned areas, and the effectiveness of fire salvage guidelines implemented for grizzly bear management.

### Monitoring of post-fire response of regeneration of whitebark pine and other bear foods.

Wherever whitebark pine grows, its cone seeds are an important grizzly bear food source. This species of pine has been declining in many areas of its range due to past fire exclusion and the introduced disease white pine blister rust. Fire plays an important role in whitebark pine ecology by removing competing tree species, which promotes whitebark seedling growth and vigor. Because the 2000 fires burned in both grizzly bear habitat where whitebark is now extinct and where it is still abundant, they offer an opportunity to observe whitebark regeneration in areas with and without significant blister rust infection, to determine if the fires have fostered seedling regeneration and growth. Such information will assist agencies in developing management prescriptions for whitebark pine habitat types, to ensure their persistence on the landscape and availability of this important food source for grizzly bears. Also, monitoring of the regeneration of other important bear foods – such as berry-producing shrubs and forbs – will provide valuable site-specific information on the impacts of fire on the availability and abundance of these foods.