



**Smokeyjumping
Equipment**



Aerial Ignition



**Tools To Limit
Invasive Species**



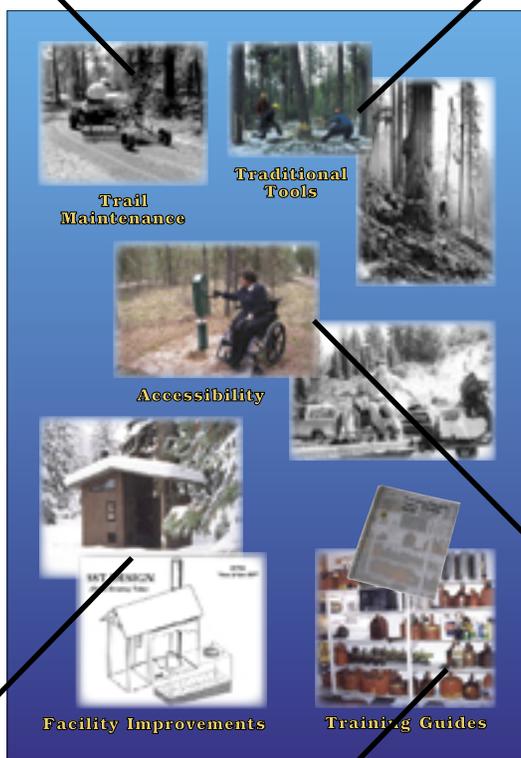
**Evaluation and Testing of
Wildland Fire Chemicals**

Trail Maintenance

With thousands of miles of trails to maintain, the USDA Forest Service needs the best possible tools to do its job. In some settings, one of these tools may be the miniature rock rake modified by the Technology and Development Program.

Traditional Tools

Power tools can't be used in wilderness areas. The Technology and Development Program makes sure that the skills to use and maintain traditional tools, such as crosscut saws, aren't completely lost.



Accessibility

Keeping facilities in remote areas accessible for people with disabilities requires imagination. A new rotary handpump developed by the Technology and Development Program allows anyone to pump water at a campground even if they don't have strong arms and a long reach. Special loading platforms allow persons to transfer from wheelchairs into boats. The Technology and Development Program maintains mechanical drawings that will allow anyone to build accessible loading platforms.

Facility Improvements

Since 1990, vault toilets at USDA Forest Service campgrounds have relied on a passive ventilation system that keeps most of the odor outside. The Sweet Smelling Toilet is just one example of the Technology and Development Program's innovations for facilities.

Training Guides

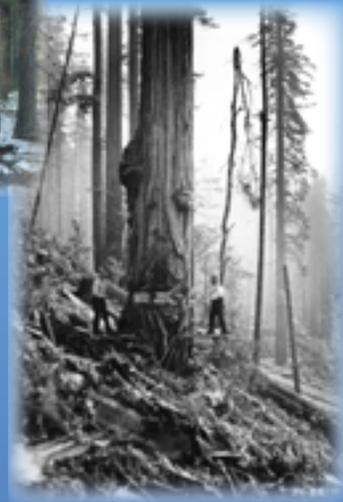
Storing hazardous materials properly requires understanding many laws and regulations. The Technology and Development Program and a private contractor condensed the laws and regulations into easy-to-understand guidebooks.



**Trail
Maintenance**



**Traditional
Tools**



Accessibility



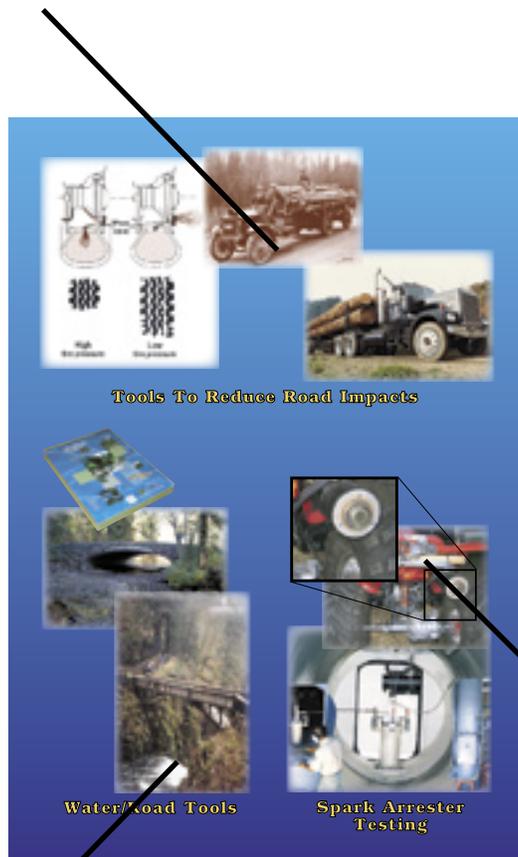
Facility Improvements



Training Guides

Tools To Reduce Road Impacts

Heavily loaded logging trucks are less likely to leave ruts in forest roads if their tire pressure is reduced, allowing more of the tread to contact the road. The Technology and Development Program helped develop central tire inflation systems that allow heavy trucks to deflate their tires when traveling on gravel roads and reinflate them before traveling on highways.



Water/Road Tools

Careful design of roads, culverts, and bridges can reduce their environmental impacts on streams, lakes, and aquatic organisms. The Water/Road Interaction Series produced by the Technology and Development Program includes videos and reports on the topics of surface drainage, subsurface drainage, and drainage crossings.

Spark Arrester Testing

Off-highway vehicles, motorcycles, and chain saws can start forest fires if their exhausts throw sparks. Spark arresters used on these devices must be tested and certified by the Technology and Development Program before they can be used on lands administered by the USDA Forest Service and other Federal agencies.