

Accessible Handpump for Campgrounds

—Bert Lindler, supervisory technical editor, Missoula Technology and Development Center

A handpump that meets accessibility standards is now available for USDA Forest Service campgrounds.

The pump, which has been patented by the Federal Government, is being manufactured by the Simple Pump Co. in Gardnerville, NV, as the ADA 100 Rotary Handpump. A single pump sells for \$2,250, but the cost per pump can be reduced to \$1,900 if 100 pumps are ordered.

If national forests place orders now and delay delivery until spring, USDA Forest Service orders will accumulate, allowing the cost per pump to be reduced.

MTDC developed the new rotary handpump, which meets the standards of the Americans with Disabilities Act (ADA) and the Architectural Barriers Act accessibility guidelines. The standard handpump can be difficult or impossible to operate because it requires strength and a long reach to raise and lower the pump handle. The new rotary handpump takes just 5 pounds of force to operate, can be used with a closed fist, and works even if the handle is pushed back and forth by someone who can't rotate it (figure 1). The new handpump will raise water 60 feet and can pump about 1½ gallons of water per minute.



Figure 1—Operating the handpump can be accomplished easily.

The USDA Forest Service's Technology and Development program was asked to find or produce a hand-operated water pump. Project leader Bob Beckley was unable to find an accessible handpump. He sought the help of mechanical engineer Tyler Kuhn and engineering technician Chuck Harding. They designed a prototype that was produced in the center's metal fabrication shop and tested at USDA Forest Service campgrounds (figure 2). A tech tip, *Accessible Handpump for Forest Service Campgrounds* (0371-2333-MTDC), describes the handpump's development. It is available to USDA Forest Service and U.S. Department of the Interior Bureau of Land Management employees at: <http://fsweb.mtdc.wo.fs.fed.us/pubs/htmlpubs/htm03712333>.

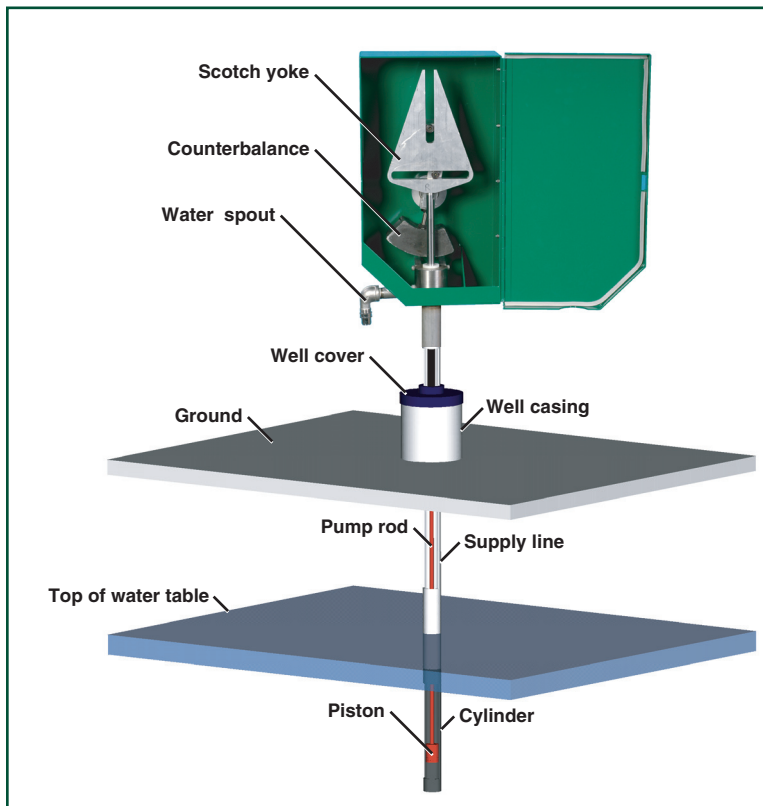


Figure 2—Graphic of the prototype handpump.

To order the ADA 100 Rotary Handpump, contact the Simple Pump Co., 1140 Amarillo Drive, Gardnerville, NV 89460; phone: 877-492-8711; e-mail: gary@simplepump.com. For additional information about the accessible handpump, contact Bob Beckley (phone: 406-329-3996; e-mail: rbeckley@fs.fed.us).