



Based on the results of the field tests, shop-quality drawings have been completed for the MTDC Shielded Herbicide Sprayer. You can obtain a copy of these drawings online by going to the MTDC Nurseries Drawings Web site: <http://www.fs.fed.us/t-d/duf/nurseries> (Username: t-d, Password: t-d).

If you encounter technical difficulties using the Web site or would prefer a paper copy of the drawings, you can call Deb Mucci at 406-329-3999.

Sprayer design	Drawing name	Drawing number
MTDC.....	Hardwood Shielded Herbicide Sprayer	MTDC-1031
Southern Weed Science Lab ...	Herbicide Applicator	SFES-1
Winona Nursery	Mississippi Forest Commission, Winona Nursery	
	Hardwood Shielded Herbicide Sprayer	WIN-1
Pinson Nursery	Tennessee Department of Agriculture	
	Hardwood Shielded Herbicide Sprayer	TDA-1

Appendix—Vendor Contact Information



Acura Trak guidance control

Sunco
P.O. Box 2036
North Platte, NE 69103
Phone: 308-532-2146
Web site: <http://www.suncomarketing.com>

Buffalo Scout II Shifter guidance system

Hanke Buffalo
2281 16th Ave.
P.O. Box 848
Columbus, NE 68602
Phone: 402-564-3244

Chemical flow and injection systems

Midwest Technologies, Inc.
2864 Old Rochester Rd.
Springfield, IL 62703
Phone: 217-753-8424
Web site: <http://www.mid-tech.com>

Egedal Sprayer

Timm Enterprises, Ltd.
5204 Trafalgar Rd.
Milton, ON, Canada L0P 1E0
Phone: 905-878-4244
Web site: <http://www.timmerprises.com>

FOBRO Brush Hoe

Baertschi-FOBRO AG
1715 Airpark Dr.
Grand Haven, MI 49417
Phone: 616-847-0300
Web site (Switzerland): <http://www.fobro.com>

Herbi, Herbiflex, Vegedome

BUBCO, Inc.
816 "B" Black Diamond Way
Lodi, CA 95240
Phone: 209-367-3885
Web site: <http://www.bubco.com>

Mankar ultralow-volume and controlled-droplet-application sprayer

Agtec Crop Sprayers
5720 Smetana Dr.
Minnetonka, MN 55343
Phone: 952-935-0468
Web site: <http://www.agtecsprayers.com>

Navigator row crop guidance system

Automatic Equipment Manufacturing Co.
One Mill Rd., Industrial Park
Pender, NE 68047
Phone: 800-228-9289
Web site: <http://www.automaticag.com>

SCS Sidekick

Raven Industries, Inc.
P.O. Box 5107
Sioux Falls, SD 57117-5107
Phone: 800-243-5435
Web site: <http://www.ravenprecision.com>

Slide Guide guidance system

Sukup Manufacturing Co.
P.O. Box 677, 1555 255th St.
Sheffield, IA 50475-0677
Phone: 641-892-4222
Web site: <http://www.sukup.com>

WeedSeeker

NTech Industries, Inc.
740 South State St.
Ukiah, CA 95482
Phone: 707-467-3747
Web site: <http://www.weedseeker.com>



Notes

About the Author

Keith Windell is a project leader for reforestation, fire, and residues projects. He has a bachelor's degree in mechanical engineering from Montana State University. He has worked for the California Department of Forestry, USDI Bureau of Land Management, and the USDA Forest Service.

Library Card

Windell, Keith. 2006. Shielded herbicide sprayer for hardwood nursery seedling beds. Tech. Rep. 0624-2827-MTDC. Missoula, MT: U.S. Department of Agriculture Forest Service, Missoula Technology and Development Center. 18 p.

Describes a prototype for a shielded herbicide sprayer developed by the Missoula Technology and Development Center. Market research found no commercial sprayer

that was inexpensive and met all operational requirements. Shop-quality drawings are available on the MTDC Nurseries Drawings Web site: <http://www.fs.fed.us/t-d/dwf/nurseries> (Username: t-d, Password: t-d).

Keywords: chemicals, chlorophyll, glyphosate, herbicides, injection systems, mechanical drawings, remote cameras, safety at work, sensors, spray nozzles, weeds

Single copies of this document may be ordered from:

USDA Forest Service, MTDC
5785 Hwy. 10 West
Missoula, MT 59808-9361
Phone: 406-329-3978
Fax: 406-329-3719
E-mail: wo_mtdc_pubs@fs.fed.us

Electronic copies of MTDC's documents are available on the Internet at: <http://www.fs.fed.us/eng/t-d.php>.

For additional information about the shielded herbicide sprayer for hardwoods, contact Keith Windell at MTDC.

Phone: 406-329-3956
Fax: 406-329-3719
E-mail: kwindell@fs.fed.us

Forest Service and Bureau of Land Management employees can search a more complete collection of MTDC's documents, videos, and CDs on their internal computer networks at: <http://fsweb.mtdc.wo.fs.fed.us/search/>.