

Cost Effective Small-Scale Harvesting

The Challenge

Forest fragmentation and parcelization are expected to continue throughout the Eastern U.S. Forest management plans are being written for this growing segment of smaller parcels that include practices to improve their forest value. However, landowners of these 10-acre or smaller parcels are finding it difficult to afford the recommended silvicultural treatments. One of the major challenges for landowners is finding an operator who will provide appropriate services for their woodlots.

The Solution

To keep smaller parcels in forest use and improve forest health, the Maryland Forest Service developed the *Working Woodlot Initiative*, funded by the Northeastern Area State and Private Forestry to demonstrate the use of small harvesting equipment for low-volume harvests. The initiative will generate information about the marketability of forest products from small parcels, the social acceptance of small-scale harvesting, and the economic feasibility and level of resource protection provided when using small harvesting equipment.

Frostburg (MD) State University developed a GIS database from Forest Stewardship plans to determine the availability of small forest parcels and estimate the potential forest products from these ownerships. Pennsylvania State University designed a study to determine the willingness of landowners to harvest, and West Virginia University is tracking costs and profits to determine if any or all aspects of small-scale logging activity are economically feasible. A forest products operator also searched for and found 22 pieces of small-scale equipment that can efficiently operate on small woodlots typically found in western Maryland and southwestern Pennsylvania. After using an ATV to skid logs at three different sites, he provided a report for each site that describes the appropriateness of the equipment,

A forest products operator testing ATV use on small woodlots reported that he is breaking even, but his profit is expected to improve as he moves on to higher-quality harvest areas.



A Polaris Sportsman ATV was used to skid logs.

landowner satisfaction, market acceptance of the harvested products, financial capabilities or limitations of the equipment, and suggestions for improving the project.

Resulting Benefits

- Woodlot owners will have a greater ability to contract desired forest management services.
- Local resource-dependent economies and the forest industry will have a continuous flow of forest products.
- Forest managers will be able to provide services to owners of smaller woodlots.
- Woodlots will be improved with sound silvicultural management prescriptions.
- Forest products that are historically underutilized on small parcels, including veneer, lumber, pulpwood, artisan materials, and firewood, will be produced.
- A business model to increase the profitability of small harvesting operations will be developed.

Sharing Success

This study of small-scale logging activities can be shared throughout the Mid-Atlantic region and beyond. Information will be gathered to develop factsheets for outreach efforts, and study findings from the universities will be summarized in a final report and placed on the Maryland DNR Web site. Landowner tours will also be provided.



USDA Forest Service
Northeastern Area
 State and Private Forestry

For more information, contact:

Kathryn P. Maloney, Area Director
 11 Campus Blvd., Suite 200
 Newtown Square, PA 19073
 Phone: 610-557-4103
 E-mail: kmaloney@fs.fed.us

Karen Sykes, Forester
 180 Canfield Street
 Morgantown, WV 26508
 Phone: 304-285-1532
 E-mail: ksykes@fs.fed.us