

IMPROVED HARVESTING METHODS

EQUIPMENT SURVEY NOTES

MOBILE PULPWOOD HARVESTERS



Advancements in sustained-yield and woodlot management entailing frequent thinning and other light cuts, as well as harvesting of small areas, have emphasized the need for mobile handling equipment. Four machines designed to meet this need as it concerns bucking and loading of pulpwood are here described. Each embodies desirable features.

The Montague "pulpwood harvester" (fig. 1), developed in the South and on trial use in the Lake States, Montana and the Northeast, uses a live (powered) roller next to the saw and a tail carriage to feed tree lengths to the saw. After each tree length is cut up, the carriage is rolled back and a powered cross-haul winch pulls the next one onto the machine. Pulpwood sticks drop upon a pair of conveyor chains that load them on trucks. A 22-horsepower industrial motor located under the conveyor powers the saw and conveyors. The track section is loaded on a truck and the saw and loader section, mounted on two wheels, is towed from place to place.

The Allen machine (fig. 2) is mounted on and powered by a wheel tractor. Tree lengths are cross-hauled or pulled on a chain conveyor with a winch mounted below a swivel arm that permits pulling in logs from a wide angle. The saw and conveyor feeding it are controlled by the sawyer. Each pulpwood stick rolls onto a pair of cross conveyor loading chains.

A machine developed by the Sonoco Company (fig. 3) is trailer-mounted with in-line conveyor chains and top-mounted power unit. Logs are skidded endwise to the feed conveyor by a cable from a winch on the power unit. All mechanisms, including the saw, feed chain, and haul-in, are controlled by the sawyer. When being towed, the feed conveyor serves as the trailer tongue.

A machine (fig. 4) developed by Claude Davis, Arkansas pulpwood contractor, is trailer-mounted and designed for use with either a motor mounted on the unit or an auxiliary power supply, such as a farm tractor. The sawyer sits beside the loading conveyor and operates the feed conveyor and the hydraulically controlled saw by the two levers (fig. 4, A) directly in front of him.

Production figures claimed for these machines range from 35 to 60 cords per day with from 2 to 4 men on the machine, excluding loaders and skidders.

The names and addresses of individuals from whom additional data on these machines can be obtained are as follows:

- Montague (fig. 1) - B. L. Montague Company, Sumter, S. C.
- Allen (fig. 2) - Mr. J. H. Allen, Florida Pulp & Paper Company, Cantonment, Fla.
- Sonoco (fig. 3) - Sonoco Company, Hartsville, S. C.
- Davis (fig. 4) - Claude Davis, Hot Springs, Ark., or the U. S. Forest Supervisor, Forest Service, Hot Springs, Ark.

E. W. Fobes
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Figure 1.--Montague pulpwood harvester.



Figure 2.--Allen tractor-mounted machine.

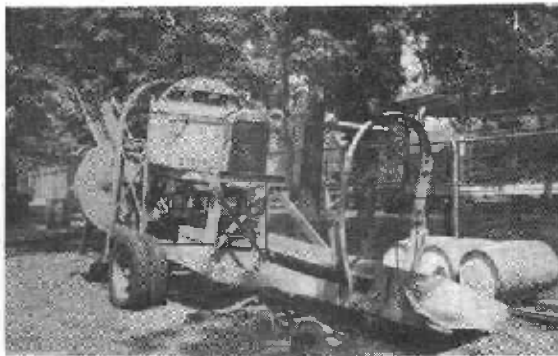


Figure 3.--Sonoco trailer-mounted machine.

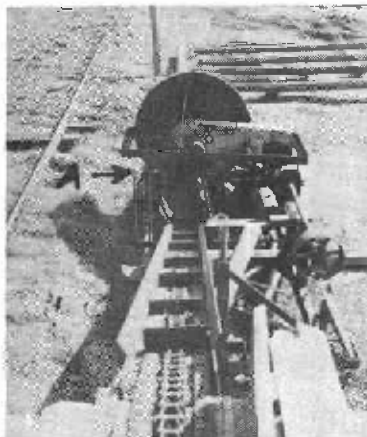


Figure 4.--Davis trailer-mounted machine.