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# **TREE PLANTERS' NOTES**

**A Publication for Nurserymen and Planters  
of Forests and Shelterbelts**



**U. S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE**

WASHINGTON 25, D. C.

## TREE PLANTERS' NOTES

### Tree-Planting Machines

Here is the second issue of TREE PLANTERS' NOTES. It presents a list of the manufacturers and some descriptive information for all of the tree-planting machines now commercially available in the United States and Canada. If such a list is to be good, it must be complete and accurate. We hope that errors or omissions will be called to our attention so that they can be corrected when a new list is issued.

Tree-planting machines by the thousands are now in general use all over the country and a good body of experience has been built up as to their usability, capacities, costs, and tree survival. Yet strangely enough, not enough has been published to guide people who are uncertain about using a machine, or who are making a choice between models.

We urge that you men in the field who use planting machines write to TREE PLANTERS' NOTES and tell what and how you are doing. We do not demand articles couched in scientific English. We do not expect careful engineering studies of machine design, nor compilations by a cost accountant, although of course such information would be welcomed if it were offered. What we especially want are everyday accounts of jobs accomplished--accounts giving such ordinary information as the make of the machine and its tractor, a description of the terrain and the cover, crew organization, wages, number of trees planted per hour worked, and your troubles due to break-downs and other causes of lost time. These are the matters that other tree-planting people want to know about and on which so little is readily available.

Information is also needed as to costs of machine planting compared with hand planting. Articles dealing with this should give simple information about amortization rates and hourly costs for the planting machine and tractor, the wages paid the operators versus what would be paid hand planting laborers, and the costs of housing and feeding large hand planting crews as against smaller machine planting crews. And then we need information about comparative survival rates of machine-planted trees and hand-planted trees. We know that in at least a few places, plantations have been deliberately established to test this very point. Nevertheless, preliminary information is needed pending the publication of comprehensive research results.

January 15, 1951

## TREE-PLANTING MACHINES

There follows a list of tree-planting machines now commercially available in the United States and Canada. In this list each machine is briefly described by giving in a uniform order simple information on the similar points of each and also its manufacturer, price as of last summer, and weight. The list has been compiled from advertising material available, is offered for information only, and implies no recommendation of any individual or firms or their wares, nor any guarantee of their business standing or financial responsibility. Any errors or omissions discovered will be acknowledged and corrected when the list is reissued. Prices quoted may already have changed. Full information can be secured only by writing directly to each manufacturer.

The development of tree-planting machines began in the late 1930's but probably not more than a few dozen machines were in use before the beginning of 1941. Since that time a number of manufacturers have marketed improved and additional models, some of which are especially designed to fit local conditions. Several thousand machines are now in use. In general, if a machine can be used at all the survival rate of the trees it plants will equal or exceed that of hand-planted trees, and at a lower cost if the purchase price is amortized over several years.

## Points Common. to All Machines

All planting machines will plant more than just trees. They are used to plant multiflora rose and farm crops such as sweetpotatoes, mint roots, kudzu crowns, tomato and pimento plants, and also to line out stock in nurseries.

Some of the machines have but one operator in addition to the tractor driver. Others provide for an operator on each side to alternately place trees in the soil, If the terrain is such that the tractor can be driven at double speed, this arrangement permits one machine to do the work of two. When slow speeds are necessary only one man rides the planter, the other seat remaining empty.

Most machines have replaceable plow points, bearings, etc. Some companies feature the availability, simplicity, and cheapness of replacement parts for their machines. See their literature for exact details.

Literature is available directly from the companies for all machines listed.

### Definitions of Terms

For the sake of uniformity the word "trencher" is used in the following descriptions to refer to that part of the machines which opens the slit into which the trees are placed. The various companies refer to this under various names of "plow," "trencher," "subsoiler," and others.

The terms "floating," "semifloating," and "trailer" type are used to describe each machine as follows:

The "floating" type is one which is attached to a tractor draw-bar in such a way that it can be lifted entirely off the ground by the hydraulic lift mechanism of the tractor. In operation such machines are lowered sufficiently to put their trencher into the ground and put a part of their weight onto the packing wheels.

A "semifloating" type machine is one which has its front end carried by the tractor and its back end carried on wheels but which the tractor cannot lift entirely off the ground.

A "trailer" type is a machine which has all or almost all of its weight carried on its own wheels, and which the tractor pulls without bearing an appreciable part of the weight. This type has a coulter and trencher assembly so designed that it will automatically rise out of the ground over immovable obstacles.

Each design has its place, according to local conditions.

CONSERVATION PLANTER

Conservation Planter Works  
(M. E. Chapman)

P: O. Box 951  
Rochelle, Georgia

Floating type.

Ordinarily operated with power-lift equipped wheel tractor, or Monroe equipped Jeep.

Planting slit depth controlled by tractor's lift.

One or two operators, plus tractor driver.

Transported attached to tractor, or dismantled in a pick-up truck.

Weight - 360 pounds

Price - \$200 f.o.b. Rochelle, Georgia

EXPERT TREE PLANTER

Consulting Foresters

Box 501  
West Lafayette, Indiana

The machine is offered in three models. The points common to all are:

Floating type.

Ordinarily operated with power-lift equipped wheel tractor or Monroe equipped Jeep.

Planting slit depth controlled by tractor's lift.

One operator plus tractor driver.

Transported attached to tractor, or dismantled in trunk of passenger car.

Model 1

For attachment to any single or double bottom plow behind tractor.

Weight - 150 pounds

Price - \$150 f.o.b. Lafayette, Indiana

Model 2

For attachment to wheel tractor. Has a scalper.

Weight - 350 pounds

Price - \$265 f.o.b. Lafayette, Indiana

Model 3

Similar to Model 2 except has no scalper.

Weight - 300 pounds

Price - \$225 f.o.b. Lafayette, Indiana

ILLINOIS CENTRAL RAILROAD TREE PLANTER

Mincher Implement Company

310 North 19th Avenue  
Hattiesburg, Mississippi

The machine is offered in two models. The points common to all are:

Floating type.  
Ordinarily operated with power-lift equipped tractor.  
Planting slit depth controlled by tractor's lift.  
Coulter will automatically raise trencher out of ground to ride over obstacles.  
One planter operator plus tractor driver.  
Transported attached to tractor, or in pick-up truck.

Model With Scalper

Trailer section swings free following scalper trench. Will operate on sharp curves.

Weight - 425 pounds (approx.)

Price - \$335 f.o.b. Hattiesburg, Mississippi

Model Without Scalper

Trailer section rigid. Will operate on normal long curves,

Weight - 375 pounds (approx.)

Price - \$280 f.o.b. Hattiesburg, Mississippi

LONESOME PINE TREE PLANTER

Castles Machine Shop  
(T. B. Castles)

Chester, South Carolina

Floating type.  
Ordinarily operated with power-lift equipped wheel tractor.  
Planting slit depth controlled by tractor's lift.  
Coulter and hydraulic lift will automatically raise trencher out of ground to ride over obstacles.  
One planter operator plus tractor driver.  
Transported attached to tractor, or in pick-up truck.  
Weight - 400 pounds  
Price - \$250 f.o.b. Chester, South Carolina

LOWTHER

Harry A. Lowther Company

200 Moen Avenue  
Joliet, Illinois

This Company makes three distinct types of machines. These are:

Standard Model

Trailer type.

Pulled by either crawler or wheel tractor, depending upon local conditions.

Planting slit depth controlled by hand-operated hydraulic lift built into machine, Coulter will automatically raise trencher out of ground to ride over obstacles.

One operator plus tractor driver.

Transported by towing behind automobile on front wheels of machine.

Weight - 1,300 pounds

Price - \$700 f.o.b. Joliet, Illinois

Model TM

Floating type, but with coulter and trencher on independent plow beam.

Operated with power-lift equipped wheel tractor.

Planting slit depth controlled by tractor-lift. Coulter will automatically raise trencher out of ground to ride over obstacles.

One operator plus tractor driver.

Transported attached to tractor, or in pick-up truck.

Weight - 750 pounds

Price - \$500 f.o.b. Joliet, Illinois

Model Shelter Belt or Nursery

Floating type.

Operated with power-lift equipped wheel tractor.

Planting slit depth controlled by tractor lift.

Two planter operators plus tractor driver.

Transported attached to tractor or in pick-up truck.

Weight - 350 pounds

Price - \$250 f.o.b. Joliet, Illinois

(Intended for use in cultivated areas, Essentially a specialized nursery machine, but would work well planting shelter belts on easy sites.)

## NUWAY TREE PLANTER

Olson Bearing Company

219 Dakota Avenue  
Wahpeton, North Dakota

The machine is offered in two models. The points common to both are:

Semitrailer type.

Two hydraulic cylinders controlled from the tractor are built into the machine. One raises and lowers the machine, the other controls the angle of the trencher.

Automatic spring trip protects against breakage when meeting immovable obstacles.

One or two operators plus tractor driver.

Transported by towing behind automobile after turning packing wheels around into widespread position.

### Model With Electric-Powered Hydraulic Lift

Operated by any type tractor, depending upon local conditions, Hydraulic cylinders operated from storage battery on machine,

Weight -

Price - \$738 f.o.b. Wahpeton, North Dakota

### Model for Tractor-Powered Hydraulic Lift

Operated by any tractor with suitable hydraulic power take-off.

Hydraulic cylinders operated from power take-off on tractor.

Weight -

Price - \$650 f.o.b. Wahpeton, North Dakota

## THE REFORESTATOR

L. W. Merian Company

Elsie, Michigan

Trailer type--two coulters, plows, trencher, and packing wheels carried on a "Uni-carrier."

Ordinarily pulled by crawler tractor, but can be used with larger wheel types.

Plows a furrow of desired depth and makes trench of desired depth in bottom of it. Furrow can be omitted if desired. Coulter will raise trencher out of ground over Obstacles; machine also has spring tension release. Has mechanical power lift to raise it out of ground at end of rows.

One operator plus tractor driver.

Transported by towing behind tractor, or by loading into truck.

Weight - 1,370 pounds

Price - \$635 f.o.b. Elsie, Michigan



ROOTSPRED

Rootspred Tree Planter  
(C. R. Ingling)

318 North Market Street  
Frederick, Maryland

Floating type, but rear portion of machine with packing wheels and operator's seat is articulated to facilitate contour planting and work on uneven surface.

Ordinarily operated with power-lift equipped wheel tractor, or Monroe equipped Jeep.

Planting slit depth controlled by tractor's lift.

One operator plus tractor driver.

Transported attached to tractor, or dismantled in pick-up truck.

Weight - 500 pounds

Price - \$339 f.o.b. Thurmont, or  
Frederick, Maryland

TAG-LITE

Tac -lite, Limited

43 Victoria Avenue  
Galt, Ontario, Canada

The machine is offered in four models. The points common to all are:

Floating type (Models D, DL, and S have rear portion of machine with packing wheels and operator's seat articulated to facilitate contour planting, and work on uneven surfaces.)

Ordinarily operated with power-lift equipped wheel tractor.

One operator plus tractor driver.

Transported attached to tractor, or dismantled in pick-up truck.

Model D

Heavy duty with double buster plow.

Weight - 600 pounds

Price - **\$475** f.o.b. Galt, Ontario

(Canadian funds, duty and sales tax free)

Model DL

Light duty with double buster plow.

Weight - 425 pounds

Price - \$348 f.o.b. Galt, Ontario

(Canadian funds, duty and sales tax free)

Model S

For precultivated land, or areas where sod or heavy vegetation is not a problem.

Weight - 300 pounds

Price - \$298 f.o.b. Galt, Ontario

(Canadian funds, duty and sales tax free)

Model N

For nursery work.

Weight - 300 pounds

Price - \$298 f.o.b. Galt, Ontario

(Canadian funds, duty and sales tax free)

TIMBER CAT

Forestry Equipment Company

2019 West Beaver Street  
Jacksonville, Florida

This Company makes two distinct types of machines. These are:

Model Heavy Duty Timber Cat

Trailer type.

Pulled by either crawler or wheel tractor, depending upon local conditions.

Planting slit depth controlled by hand-operated hydraulic lift built into machine. Coulter will automatically raise trencher out of ground to ride over obstacles.

One operator plus tractor driver.

Transported by towing behind automobile on front wheels of machine.

Weight -

Price - \$575 f.o.b. Jacksonville, Florida

Model F Timber Cat

Floating type.

Operated with power-lift equipped wheel tractor, or Monroe equipped Jeep.

Planting slit depth controlled by tractor's lift.

One operator plus tractor driver.

Transported attached to tractor, or dismantled in pick-up truck.

Weight -

Price - \$275 f.o.b. Jacksonville, Florida

TREEP

TreeP

P. O. Box 163  
University Station  
Syracuse 10, New York

Trailer type, operating on sled runners.

**Pulled** by either crawler or wheel tractor, depending upon local conditions.

Planting slit depth controlled by hydraulic lift built into machine. Coulter will automatically raise trencher out of ground to ride over obstacles.

One operator plus tractor driver.

Transported by towing behind automobile on wheels which need not be removed when machine is returned to operation.

Weight - 1,159 pounds

Price - \$695 f.o.b. factory, Cortland, New York

(Especially designed for steep and stony soils.)

WEBSTER TREE PLANTER

Herschel L. Webster

Cornelia, Georgia

Floating type,  
Ordinarily operated with power-lift equipped wheel tractor, or Monroe equipped Jeep.  
Planting slit depth controlled by tractor's lift.  
One or two operators, plus tractor driver.  
Transported attached to tractor, or dismantled in trunk of passengar car.

Weight - 270 pounds

Price - \$185 f.o.b. Cornelia, Georgia

(Planter parts can be removed from beam, and machine then can be used as subsoiling plow or ripper.)

WINDY OR WHITFIELD TRANSPLANTER

R. A. Whitfield Manufacturing Company

Route 4, Box 324  
Atlanta, Georgia

Floating type.  
Ordinarily operated with power-lift equipped wheel tractor, or Monroe equipped Jeep.  
Planting slit depth controlled by tractor's lift.  
One or two operators, plus tractor driver.  
Transported attached to tractor, or dismantled in pick-up truck.

Weight - 350 pounds

Price - \$225 (or \$275, depending upon tractor to be used) f.o.b.

Atlanta, Georgia

(Planter parts can be removed from beam and machine then can be used as subsoiling plow or ripper.)

Tell TREE PLANTERS' NOTES what you have done. If you haven't started an article but feel that you might when you get time, drop us a note and let us know what you did and where. We will devote a future issue of TREE PLANTERS' NOTES to such information if we can get enough such articles.

#### Invitation

All persons who work in reforestation, or who are interested in it or some allied field, are invited to send in material for publication in TREE PLANTERS' NOTES. If their material is not yet in final form for publication, they are invited to at least send a letter to TREE PLANTERS' NOTES and tell what they are doing and what manner of information should be published.

The address is:

Chief, Forest Service  
U. S. Department of Agriculture  
Washington 25, D. C.

#### Subscriptions and Mailing List

TREE PLANTERS' NOTES will be sent upon request to persons and organizations doing reforestation work, and to libraries, forest schools, and similar appropriate places. The address is given above.

Roland Rbtt  
TREE PLANTERS' NOTES