



Tips for Successful Establishment of Woody Plantings on the High Plains Using a Mechanical Tree Planter and Fabric Layer

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Site Preparation

During fall/winter, the planting (center) line of each row should be measured and staked, and a 10'-12' wide "planting bed" chiseled to a depth of 18". Subsequently, each bed should be prepared by disking and/or pulverizing with a roto-tilling implement. ***Proper planting bed preparation is critical to the success of the project.*** Final preparation will include beds being worked prior to planting in late March-early April. Note: The term "bed" does not mean raised. Beds should be prepared flat for the tree planter and fabric layer to work properly.

Planting Stock

Deciduous shrubs and trees should be 1 year old bare-root seedlings and the evergreens should be 1 year old *containerized seedlings*. Locally grown seedlings are available from Texas Forest Service through local Soil & Water Conservation Districts.

Planting Method and Supplemental Watering

A tree planter (3-point hitch) is the preferred method for planting. Supplemental watering will be provided using the "water-harvesting" technique afforded by installing a 6' wide woven weed barrier fabric by machine (3-point hitch) immediately behind planting. The seedlings are then pulled through a slit cut in the fabric which has been marked over each seedling during fabric installation. Companion pins are placed 1' on either side of each seedling and in between each seedling by a "finishing crew", followed by a water tank or truck which applies water @ 2-3 gallons per seedling for initial watering. During the first year, trees should be watered (2 gallons/tree) at least once a month during the growing season. In the second and third year, watering should be increased to 4 gallons per tree once a month during the growing season.

Protection, Weed Control, and Tree Replacement

Evergreen (conifer) seedlings will need to be protected from the wind during the first season by placing windscreens on the west and south sides of each plant. 10'-20' wide firebreaks should be mowed outside the fence as needed. The weed barrier fabric will provide good weed control in the rows, but a tractor width may need to be mowed adjacent to both sides of each row at times to prevent "vegetation shading" while the planting is young. Seedlings lost less than three (3) years from original planting date should be replaced.

*The author gratefully acknowledges the expertise of **Mr. Robert Fewin, Texas Forest Service** in Lubbock, who pioneered and refined this technique throughout the Texas Panhandle, and without whose guidance and assistance, numerous demonstration plantings would not have been possible.

***Information for Landowners Interested in Woody Plant Establishment
in Northwest Texas***

- Contact **Mr. Robert Fewin**, Area Forester, Texas Forest Service, should any technical questions arise concerning woody planting materials, growth form of trees, etc. @806/746-5801 in Lubbock (FAX @ 806/746-6610).
- Contact Mr. Fewin or **Gene Miller**, Technical Guidance Biologist, Texas Parks & Wildlife Department, for additional information or clarification concerning obtaining materials or site preparation. Gene's number is 806/655-3782/3975; FAX @ 806/655-4045; e-mail gene.miller@amaonline.com for Internet users.
- **Planting materials (woody plants)** - In a spirit of cooperation with local Soil & Water Conservation Districts, we recommend that you order plants through them. (Prefer locally-grown, adapted plants from TFS Nursery in Lubbock).
- **Wind screens** - To be used on conifers, i.e. Rocky Mountain juniper or Eastern red cedar, for wind protection for the initial growing season, available from Terra Tech, Inc. @ 1-800-321-1037; referred to as "shade cards" and wire wickets (make up one screen). Preassembly is recommended on large plantings.
- **Tree protector tubes** - To be used to protect deciduous species like hackberry or shrubs from rabbit or deer browsing. Available from Terra Tech, Inc.; also need long stakes and plastic ties and preassembly is recommended for larger plantings.
- **Weed barrier fabric mulch** - Contact Shaw Fabric Products @ 1-800-359-1912 (written 5-year warranty) or your local SWCD; however, specs are figured on and we prefer to use 500' rolls; recommend Lumite. Also available in 3', 4' or 6' fabric squares.
- **Companion pins** - Contact Shaw Fabric Products for standard 6" pin; however, we prefer 10"x2" 9 gauge pins (Terra Enterprises @ 208/285-1000 through Shaw), or contact Mr. Fewin for a local source.
- **Water tank or truck** - Must be clean water...prefer tank that has never had chemicals.
- **Installation** - Mechanical tree planter and fabric laying machine is recommended for larger installations. Tractor-mounted post hole digger can be used for smaller jobs.

These suggestions are based on several years of planting experience and are offered to help insure a successful project. Thank you.

Gene T. Miller