

COLLEGE OF MENOMINEE NATION SUSTAINABLE DEVELOPMENT INSTITUTE

The purpose of this research was to collect and analyze information from interdisciplinary sources related to raising various species of tree seedlings for use as ornamentals or productive applications. This research will be collected over a number of years and the information and data combined will be more than likely used for future projects that extend into agro forestry and ethno botany.

PURPOSE

Producing quality seedlings in these nurseries is dependent upon proper coordination and execution of a sequence of steps. Seed must first be appropriately procured, processed, and sown. Seedlings must then be properly cultured during nursery growth. Following the growing season, seedlings must be effectively lifted, packed, stored, and transported. Failure to pay attention to necessary details of any of these steps may result in poor quality seedlings that limit reforestation success.



WHY?

A tree nursery is for producing young trees in abundance for many purposes such as:

- Perpetuating local heritage.
- Making culturally important plants more available
- Providing employment and economic opportunities
- Propagating rare species
- Educating children to pass on traditional values

BASIC REQUIREMENTS FOR STARTING A NURSERY

- Land
- Water
- Climate
- Planting Materials
- Soil
- Labor



LAND

Of these, land is perhaps the most important for two reasons

- You need to have enough
- Must be fertile with appropriate drainage.

Many tree species are fairly forgiving when it comes to optimal soil characteristics versus crop plants.



CLIMATE

Temperatures need to be most carefully monitored and held inside the recommended range during seed germination, rooting of cuttings and graft union formation. The temperature for optimal plant development is 25-35C. Depending on the species and the humidity, it can be slightly high, but avoid air temps above 40C.

SOIL

An integral part of establishing a successful nursery is the proper soil. It is one of the leading contributing factors to the success of producing quality long living plants. The existing predominate soil type throughout the upper to lower mid-west, is Udolphis. It falls under the Udolpho Series under the Udolpho series are orders and sub-orders creating fifty-four distinct soil types.



WATER

Water is the one of the most important factors in plant production. Seedlings contain over 95% water. Proper irrigation and maintenance of high humidity in the propagation environment are prime responsibilities of a nursery manager.



LABOR

The number of employees you need in the nursery will depend on the size of your operation. The nursery business is inherently a seasonal activity with extended labor needs during the fall and spring.



PLANTING MATERIAL

As a combination of soil described previously the numerous plant materials already being produced are at a higher quality. After all, Menominee Tribal Enterprises manages the forest in a sustainable manner. Coincidentally the combination of unique soil types and environment that Menominee County has, tree restoration and reforestation is not a problem.



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