

We are unable to supply this entire article because the publisher requires payment of a copyright fee. You may be able to obtain a copy from your local library, or from various commercial document delivery services.

From Forest Nursery Notes, Winter 2011

46. © Successful propagation of native plants. Rogers, G. W. International Plant Propagators' Society, combined proceedings, 2009, 59:430-432. 2010.

Successful Propagation of Native Plants[®]

Glenn W. Rogers

Pinelands Nursery, Inc., 323 Island Road, Columbus, New Jersey 08022 U.S.A.

Email: glenn@pinelandsnursery.com

I have not always grown native plants. It was not too long ago that many of the herbaceous plants I am growing now were sprayed with herbicide! After graduating college I was hired by Richard Hesselein at Princeton Nurseries in Allentown, New Jersey. Little did I know I would be there for 23 years and I would manage the Allentown seed beds and later become their propagator. I learned seed production, grafting, budding, rooted cutting, tissue culture, and container production of shade trees and shrubs. Princeton Nurseries was a great place to work since the Propagation Department was always well funded. But all good things must come to an end, and with the passing of Bill Flemer III, I knew it was time for a change. Lucky for me, I accepted an offer from Pinelands Nursery & Supply in Columbus, New Jersey, which allowed me to continue to live in the community where I grew up and my daughter did not have to switch schools.

Pinelands Nursery specializes in wetland mitigation, coastal plant restoration, stream bank stabilization, storm water basins, and erosion control products. The goal is to be a "major source of plants and products for storm water management projects." As the propagator, my responsibility is to "propagate plants from regional seed sources that are genetically adapted to local conditions." We grow native trees, shrubs, ferns, grasses, sedges, and wildflowers at our facilities in New Jersey, New York, and Virginia. Founded in 1983 by Don and Suzanne Knezick, Pinelands Nursery produces plants on 30 acres of production space for landscape contractors, municipalities, and re-wholesalers throughout the Northeast.

Seed collection of woody and herbaceous plants from local provenances is a cornerstone of what we do at Pinelands. Correctly identifying adequate seed sources often requires driving great distances to find natural stands and securing permission (usually) to collect seed. With three nurseries in the region where we market our plants, we are able to provide customers with regionally adapted plants. We believe plants of local seed sources are better adapted to local conditions on restoration sites. I was surprised to learn how many thousands of acres of preserved land are in the Garden State. We have permission to collect seed from the Brendan T. Byrne State Forest, Bass River State Forest, and the Franklin Parker Preserve, as well as from many county parks.

Identifying adequate seed sources and checking for the correct time to harvest the seed can be very time consuming. We may check a site four or five times before the seed is actually collected. Every year is different. Some collection dates can vary by up to a month. Some sites are very easy to collect and others require hip waders and even boats. Collection of seed can be by hand, tarps, rakes, ladders, and sickles. As a propagator it is my responsibility to assure that we will have ample seed yearly. Furthermore having multiple sites for collection (3 to 5) increases my chances of success.

Processing of collected seed takes place at our New Jersey nursery. *Aronia*, *Celtis*, *Cornus*, *Nyssa*, and *Viburnum* are stored in buckets and allowed to ferment until ready to clean.

These seeds are cleaned in a seed macerator to separate the seed from the pulp. Many of the *Quercus* are collected with rakes and floated in water (bad ones float),