Bare-Root Forbs: What, Why, How

Q&A with Wendy Kral, Ecologist at Scholls Valley Native Nursery in Forest Grove, OR

What is bare-root planting and why forbs?

Bare-root planting is the installation of plant material that is not packaged with a rooting medium. Unlike a containerized plant that is grown and distributed in a pot with soil, a bare-root plant is grown in a nursery bed or field, harvested, and freed of excess soil prior to distribution. While containerized plants are available year-round, bare-root material is seasonally available during its most dormant time of year. Advantages of bare-root planting over container planting include:

- lower product cost,
- reduced labor for transportation and installation
- reduced plastic-input during growing and distribution
- Reduced risk of weed, pest and pathogen dispersal via soil

Who should be thinking about incorporating bare root forb planting into their plans?

The herb layer is an important component of any site because it adds a habitat layer at ground-level, supports pollinators, and promotes soil health by limiting erosion, among other benefits. Often, the initial planting on a restoration site focuses on establishing woody trees and shrubs to provide shade, habitat, and weed exclusion. One emerging opportunity to employ bare-root herbs is on older restoration projects that have had their tree and shrub layers restored. These sites, typically within 5-10 years of initial planting, have closed canopy and shaded out many of the weedy understory herbs that tend to persist in the early years of establishment. These projects are often in riparian

Heracleum lanatum rhizome

zones where agencies, watershed councils and soil and water conservation districts have focused restoration work to improve water quality and fish and wildlife habitat.

In addition to agencies and landowners, restoration field crews interested in year-round work should get excited about planting bare-root upland herbs, many of which become dormant during the late summer and early fall when weed control and tree and shrub planting activities are limited by dry conditions. This is the perfect time of year to plant many species of bare-root bulbs and rhizomes because dormant upland rootstocks are naturally prepared to sit inactive in dry soil until the fall rains return. These species can be employed to fill critical habitat niches, and at the same time fill gaps in the schedules of our hard-working crews on the ground.

Where has it or will it be successful?

Scholls Valley Native Nursery is currently working with grant funds from Tualatin Soil and Water Conservation District to explore the benefits of introducing an herbaceous layer in non-crop areas of our production fields such as irrigation lines, furrows, and headland roads. We have had the opportunity to utilize several stock types, including seed, plugs, bulbs and bare-root material, and the bare-root plants have performed at least as well as any of the containerized stock types.

Which plant species are most successful with this approach?

We have been successful growing and transplanting many species of perennial herbs as bare-root stock. Our current crops include over 80 species from several Willamette Valley plant communities including oak savanna, wet prairie, upland prairie, forested wetland, riparian forest, and mixed oak/conifer forests. Our goal is to increase the traction and availability of bare-root herbs within the restoration community and make herb-layer restoration and enhancement feasible on a landscape scale. Just a few of the genera that are suited to bare-root production include:

- Allium
- Trillium
- Prosartes
- Camassia
- Lilium
- Erythronium
- Iris (winter)
- Maianthemum
- Hydrophyllum
- Viola
- Delphinium
- Achlys
- Wyethia
- Chamaenerion (winter)
- Symphiotrichum (winter)
- Heracleum
- Asclepias

Bare-root herb beds at Scholls Valley Native Nursery

Seed source population for 2021 Asclepias speciosa crop