REFERENCES

Bonner FT, McLemore BF, Barnett JP. 1974. Presowing treatment of seed to speed germination. In: Schopmeyer CS, technical coordinator. Seeds of woody plants in the United States. Washington (DC): USDA Forest Service. Agriculture Handbook No. 450. p 126–135.

Dreesen DR, Harrington JT. 1997. Propagation of native plants for restoration projects in the Southwestern U.S.—preliminary investigations. In: Landis TD; Thompson JR, technical coordinators. National proceedings, forest and conservation nursery associations. Portland (OR): USDA Forest Service, Pacific Northwest Research Station. General Technical Report PNW-GTR-419. p 77–88.

Dreesen DR, Harrington J, Subirge T, Stewart P, Fenchel G. 2002. Riparian restoration in the southwest: species selection, propagation, planting methods, and case studies. In: Dumroese RK; Riley LE; Landis TD, technical coordinators. National proceedings: forest and conservation nursery associations—1999, 2000, and 2001. Ogden (UT): USDA Forest Service Rocky Mountain Research Station. Proceedings RMRS-P-24. p 253–272.

USDA NRCS. 2002. The PLANTS database, version 3.5. URL: http://plants.usda.gov (accessed 10 Jun 2003). Baton Rouge (LA): The National Plant Data Center.

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LOW COST TOOLS FOR SEED COLLECTION AND SEED SOWING

Dawn Thomas |

ABSTRACT

A modified 35-mm film canister is a useful tool for controlled sowing of small-seeded native species, and a simple, metal, custom-made harvester makes for efficient collection of late-season fleshy fruits.

KEY WORDS

Salicaceae, *Populus, Salix, Philadelphus lewisii,* Hydrangeaceae, *Carex, Schoenoplectus,* Cyperaceae, *Juncus,* Juncaceae, *Rosa woodsii,* Rosaceae, *Symphoricarpos albus,* Caprifoliaceae

NOMENCLATURE

USDA NRCS (2002)

In my nursery program, I find that simple, inexpensive tools often work well. Two tools that I use regularly are a 35-mm film canister with a hole punched in the lid, and a custom-made, "fingered," tin fruit harvester.

FILM CANISTER FOR ACCURATE SEED SOWING

I use a film canister to accurately sow small seeds. First, I measure the size of seeds of the species I intend to sow to get an idea of how large or small to make the hole in the film canister lid. Next, I heat the tip of a piece of wire and melt a hole in the center of the lid from the bottom side out. I found that if I melt the hole from the top inward, seeds will hang up on the plastic edges around the hole and will not shake through easily. I test the shaker to see how many seeds come through the lid by simply turning it over with 1 or 2 shakes. I modify the size of the opening on a new film canister lid based on the results.

For willows (*Salix* L.), quaking aspen (*Populus tremuloides* Michx.), and black cottonwood (*Populus balsamifera* ssp. *trichocarpa* (Torr. & Gray ex Hook.) Brayshaw [Salicaceae]) seeds, I try for a hole of sufficient size to allow 2 seeds to easily fall through the opening per shake so that nursery workers do not have to vigorously shake the containers. By taking time to make the hole size accurate, I reduce the amount of seeds sown per container, the time it takes to sow the crop, and eliminate hours of thinning multiple germinants per container (Figure 1).

This method works well for other small-seeded species, such as Lewis' mockorange (*Philadelphus lewisii* Pursh

Figure 1. Melting a hole in film canister lid converts it into an inexpensive but effective device for sowing small seeds.

Figure 2. A custom-made metal harvester for collecting fruits.

Photos by Dawn Thomas

[Hydrangeaceae]) and for many wetland species, such as sedges (*Carex* L.), bulrushes (*Schoenoplectus* (Reichenb.) Palla [Cyperaceae]), and rushes (*Juncus* L. [Juncaceae]).

CUSTOM-MADE TIN FRUIT HARVESTER

I designed a metal fruit harvester out of tin so that we could efficiently harvest large quantities of late-season fleshy fruits, such as woods rose (*Rosa woodsii* Lindl. [Rosaceae]) and snowberry (*Symphoricarpos albus* (L.) Blake [Caprifoliaceae]). The end of the scoop has several metal fingers that are spaced so that when the fruit-bearing stems are combed through the fingers, the fruits are pulled off but the stems pass through the fingers undamaged. This creates an easy and debris-free harvest of fruits when used after leaf fall in late autumn. The tin fruit harvester can be made cheaply by any local sheet metal shop and customized for late season fruits in your area (Figure 2).

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REFERENCE

USDA NRCS. 2002. The PLANTS database, version 3.5. URL: http://plants. usda. gov (accessed 3 Dec 2003). Baton Rouge (LA): The National Plant Data Center.