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32. © Plasticulture for seed production of wetland (*Carex*) species. Houseal, G.
Native Plants Journal 11(1):58-64. 2010.



Figure 1. Bedforming, drip tape unspooling, and mulch laying all in one operation. Photo by Rachel Bench

Plasticulture

for seed production of wetland (*Carex*) species

| Greg Houseal

ABSTRACT

Plasticulture techniques were used for establishment and seed production of native wetland species, primarily of the genus *Carex* (L. [Cyperaceae]). Although plasticulture is commonly used for vegetable, cut flower, melon, and berry production, it is not widely used for native seed production. This article summarizes initial experiences in setting up this system for seed increase of several native *Carex* species during the establishment year.

Houseal G. 2010. Plasticulture for seed production of wetland (*Carex*) species. *Native Plants Journal* 11(1):58–64.

KEY WORDS

bedformer, plastic mulch, drip irrigation, wetland plant materials, seed increase

NOMENCLATURE

USDA NRCS (2010)

Plasticulture, a term used to describe a production system using drip irrigation in beds covered with plastic film, has been used in the vegetable industry since the early 1960s (Sweat 2007). Black plastic film (mulch) covers the bed to provide weed control, and drip irrigation tape is installed beneath the film to provide supplemental moisture (and fertilizer, if needed). The plastic mulch enhances soil warming and moisture and nutrient retention, and it effectively lengthens the growing season, promotes establishment, and increases plant size and thus potential yields (Lamont 2004). The higher yields demonstrated in vegetable production would likely occur with native seed production as well.

Challenges that discourage the use of plasticulture include the cost of specialized equipment and the removal and disposal or recycling of plastic mulch at the end of its productive bed life. Equipment cost may be nominal, however, when compared with the cost of tractors, combine harvesters, and specialized seed processing equipment (Table 1). Biodegradable plastic films are now commercially available and are being evaluated for performance with traditional vegetable crops (Miles and others