Establishment of native species for commercial seed production

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**Issue:** Some native species are highly desirable in reclamation and restoration settings; however, availability of seed is often very limited. Seed production and availability may be negatively impacted because species are challenging to establish and grow or because their seeds are difficult to efficiently and effectively harvest.

**Goal:** Evaluate methods for increasing seed availability of desirable, but largely unavailable, native plant species.

**Objectives:** In 2016–2017 we initiated a long-term project to evaluate growth and production of grasses and forbs including: Letterman’s needlegrass (*Achnatherum lettermanii*), western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Nassella viridula*), prairie sandreed (*Calamovilfa longifolia*), desert biscuitroot (*Lomatium foeniculaceum*), sulphur-flower buckwheat (*Eriogonum umbellatum*), scarlet globemallow (*Sphaeralcea coccinea*), and fourwing saltbush (*Atriplex canescens*). Work on these species is ongoing with first seed collection projected to occur at the earliest in 2018, but some species require three or more years before seed production occurs.

**Expected Impact:** Identifying the best methods for germination and growth for each species will allow that information to be shared, and seed production at the Sheridan Research and Extension Center will proceed as a first step in increasing seed availability.

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**Figure 1.** Scarlet globemallow (*Sphaeralcea coccinea*). (Photo courtesy Katie Estep)