Establishing conservation plantings by seeding requires attention to details of proper planning, choice of plant species, site preparation, seed quality, seed placement, timing and management of the stand as it establishes and performs the intended objectives.

Planning

Before beginning any seeding project, two basic questions must be answered: What is the primary purpose of the seeding, and is the seeding practical? Is the desired outcome improved forage for livestock or wildlife, or to control erosion, reduce wildfire hazard, or provide habitat for wildlife? Is the soil type capable of supporting your seeding? Do undesirable plants dominate the site? Are there site limitations for equipment? All of these questions need to be answered before seeding.

Species Selection

Determine your objectives and complete resource inventories of the site before making species selections. Plants should be selected based on what they can contribute to your objectives. They must be adapted to the site, must be competitive for longevity, and should be adapted to anticipated animal usage. Check out Idaho Plant Materials Technical Note 24, Species for the Intermountain West (http://www.id.nrcs.usda.gov/programs/plant.html for further details.

Site Preparation

Success in establishing conservation seedings requires careful planning and timely site preparation. Seedbeds need to be weed-free, level, firm and moist prior to planting. To maximize weed-free conditions, clean tillage or chemical seedbed treatment, or a combination of both may be required. Several years of site preparation may be required to obtain a seedbed that wont have weeds to compete with your seedlings.

The seedbed needs to be firm enough that an adult footprint is only slightly visible on the seedbed prior to the seeding operation. Most seeds should be planted at a shallow depth from 0-½ inch. If the seedbed is fluffy, it is impossible to maintain adequate depth control and soil moisture in the root zone of the emerging seedling.

The two main reasons for seeding failure are planting too deep and lack of weed control (both before and after seeding)!
**Seed Quality**

All seed must meet requirements of your State seed laws. Seed should be tested for purity and germination, (aka Pure Live Seed or PLS). A high PLS usually indicates high quality seed. The use of Certified seed can help guarantee this. It is best to use performance tested pre-variety germplasm or cultivars rather than common seed.

**Planting**

Seeding equipment should provide proper depth, uniform seeding rate, and good seed to soil contact. A grass or grain drill equipped with an agitator, double disc openers, depth bands and packer wheels is ideal for planting conservation mixtures. For mixtures containing species that need to be broadcast or surface seeded, alternate row seedings can be accomplished by pulling seed tubes from alternate rows and allowing seed to dribble onto the soil surface. Rice hulls help keep mixture in proportion and aid in seed flow.

For more information on the Aberdeen PMC, contact the Team Leader in Aberdeen at (208) 397-4133, or the Plant Materials Specialist in Boise at (208) 685-6987.

- To date, the Plant Materials Program nationwide has released over 600 conservation plants, many being grown commercially for conservation use.