Aberdeen PMC Works with Region 1 of the Forest Service for Plant Solutions

Derek J. Tilley Range Conservationist Aberdeen PMC

The Aberdeen PMC is cooperating with Region 1 of the Forest Service to evaluate native plant materials for use in the Rocky Mountain and sagebrush steppe ecosystems. Large areas of national forest are in unsatisfactory ecological condition. Many areas are infested with invasive weeds such as cheatgrass, knapweed species, yellow starthistle, and leafy spurge. These weeds cause many problems and detract from the health and beauty of the ecosystem. When dry, the weeds provide flash fuels for fires. Increased fires create the potential for erosion and degradation of water quality and watershed values. Weeds also decrease plant community diversity, reduce habitat for wildlife and compete with threatened and endangered species. Together the Forest Service and Aberdeen PMC are working to evaluate high priority plant materials and associated plant technology to address these and other problems throughout Montana and northern Idaho.

During the 2003 growing season technicians from national forests within Region 1 made 52 collections of eight species of native perennial grasses and forbs. Multiple collections were obtained for each species at many locations to ensure the full range of genetic material was obtained. Typically an individual species collection takes two to three years to complete. Thanks to the hard work and cooperation of the Forest Service employees, the needed collections were completed in a single season.

The collections were then sent to Aberdeen PMC where the materials were stored until the collections could be cleaned, processed and accessioned for further evaluations. Accessions will be planted this spring at the PMC and evaluated over the next two years for germination traits, seedling vigor, stand establishment, biomass production and other criteria to determine which would be most beneficial for future evaluation and production. The PMC will also develop technical materials to facilitate planting, management and to increase the likelihood of success in restoration plantings.

Accessions that perform well will be increased for immediate release and use on high priority conservation needs. The PMC will produce Generation 1 (G1) seed from the original source collected (G0) seed. G1 seed will then be made available to the private industry (commercial seed producers) for larger scale production of G2 and G3 seed. Once under production in the private sector the seed will be available to public and private land managers for revegetation needs.