

Using Native Species for Prairie Reclamation in Alberta

Heather Sinton¹ and David Walker²

¹Alberta Environment, Calgary, Alberta, Canada; ²David Walker & Associates Ltd., Calgary, Alberta, Canada

Native species have been used to reclaim prairie disturbances in Alberta since the 1980s. Initially, only a few native grass species were available, and these tended to be seeded at heavy rates (sometimes exceeding 24 kg/ha). In the mid 1990s, it was realized that the short-term result of heavy seeding was a grass stand with one canopy layer and low species diversity. Seeding rates have been lowered since and more thought is given to stand structure and inter-species competition in seed mix design. Small disturbances with low potential for weed invasion and erosion are often simply seeded with a light cover of a non-native annual. Minimal disturbance practices and more careful salvage and replacement of topsoil mean that the seed bank can often provide most of the native species for revegetating reclaimed areas. The Alberta government is currently revising reclamation criteria for assessing reclaimed sites. Emphasis is being placed on establishing clear goals and re-establishing ecological structure and function. Revegetated areas should support a sustainable desired plant community that is compatible with the agreed upon end land use and land management objectives. Consideration is being given to using a revised range health assessment to determine reclamation success.