

WATER PLANTAIN *Alisma plantago-aquatica*

Market: ODOT, WDOT, ADOT, USFS, SCS, USFWS, public agencies and landowners. For deep marshes, swamps, wet meadows, vernal pools, muddy substrates along lakeshores and in ditches. It is a superior species for mitigation, restoration and enhancement of wetland sites.

Characteristics: Water plantain is a perennial emergent forb with flowering heads elevated above short oblong leaves at the base of the plant. It has no true stem; leaves and flower stalk arise from fleshy, vertical, underground corm (stem). Flowers are clustered at the top of a tall, slender stalk (scape) that rise above leaves; individual flowers are on many whorled branches arranged like umbels. Leaves are oblong-oval and somewhat heart shaped or sometimes lance-shaped, 3-15 cm wide. Seed size is approximately 90,000 seeds per pound. Mature plant canopy height range from 30-60 cm and reproductive stalks and flowers 100-120 cm in height under optimal growing conditions. Water plantain unlike many emergent forbes is competitive with weedy invasive grasses such as reed canarygrass *Phalaris arundinacea*. This is particularly true when establishment of water plantain seed is preceded by multiple systemic herbicide application(s) to completely control invasive grasses prior to seeding. Water plantain provides excellent habitat for feeding waterfowl.

Comments: Water plantain should be planted in fall in hydraulically appropriate soils. Water plantain will remain dormant (cold and water stratification requirement) until spring of the following year. Water plantain is an obligate wetland species that requires water submergence (anaerobic conditions) for germination. Once fully established it will survive during summer when some wetland soils become dry. Water plantain exhibits poor seedling vigor but once established it dominates hydraulically appropriate wetland sites.

Seeding rate: Seed @ 4-8 lbs. per acre. Drill seeding requires 30% less seed than broadcast seeding. Lower seeding rates are recommended on prepared dry soils. Higher seeding rates are recommended if broadcast seeding wet and muddy soil sites. Obligate wetland species such as water plantain are often seeded in late summer when the water table has dropped enough to dry out soils. This facilitates mechanical seeding (drilling). Water plantain seed will remain in the soil dormant until spring of the following year.

Availability: **Mid Willamette Riverbottom** is population adapted to western Oregon and sourced from the Willamette River plain north of Albany, Oregon. It is characterized by herbaceous succulent appearance, lanceolate leaves and is one of the best wetland sources of seed for waterfowl. It has good seed production potential and has excellent reseeding capability for a perennial wetland forb.

