

## Area V Canada Thistle Biological Control Initiative

Dakota West RC&D, Dickinson, ND

Canada thistle infests more than one-million acres in North Dakota, recently surpassing leafy spurge as the state's most prevalent noxious weed. Canada thistle is an aggressive, creeping perennial that infests cropland, pasture, rangeland, roadsides and non-crop areas. Since cattle typically will not graze near infestations, Canada thistle reduces forage production and consumption.

Dakota West RC&D, in cooperation with the Stark County Weed Board, secured funding through the North Dakota Invasive Species Partnership to purchase and release the Canada Thistle Stem-Mining Weevil throughout ten counties of southwest ND and the Fort Berthold Indian Reservation. The Stem-Mining Weevil eats only Canada thistle and, as the name implies, the insect larvae bore into the plant and mine towards the main stem, crown and root, inhibiting the plant's ability to produce seeds and grow roots. Testing in the U.S. and Canada indicate the root reserves of a plant attacked by the insect are reduced, this making the plant vulnerable to attack by other insects and disease. One adult female can lay 120 eggs in young shoots and about six larvae are needed in the shoots to effectively weaken the plant.

Only private grazing lands were eligible and sites considered poorly suited for chemical control were prioritized. Similar to the establishment of the leafy spurge beetle many years ago, establishing colonies of the stem mining weevil is initially a costly proposition. As more viable weevil colonies become established, those colonies could one day serve as collection sites to increase distribution and at a lower cost. Enough Stem Mining Weevils were ordered to release on 160 sites throughout the project area. A Memorandum of Understanding was executed with each County Weed Board and the Three Affiliated Tribes to release the Weevils.



Stem Mining Weevils ready to be released



Releasing Stem Mining Weevils on Fort Berthold