featured

C–V Ranch goes from baby steps to leaps and

By Amy Jerup

Weed control is often a challenge in Wyoming, especially when managing some of the state's highly aggressive noxious weeds.

Weed management can be especially challenging when short on time and resources. Such was the case for the C–V Ranch near Wilson. The C–V Ranch is a private, kindergarten though senior, school that helps special needs children achieve their full potential and personal independence. The school is staffed by dedicated individuals, such as Patty Talley, C–V program director for 31 years, who is committed to helping these children grow and succeed.

C–V Ranch program director Patty Talley

Patty has seen everything from the smiles of each student to the "pretty" Dalmation toadflax and spotted knapweed flowers that are taking over the grounds. She has spent years focused on helping children through thick and thin; therefore, land management was slightly lower on her "to-do" list.

"Battling these noxious weeds on our property has been a gradual process. I am learning more about the land each year," Patty explains.

Spotted Knapweed Unwelcome Resident

The C–V Ranch owns 38 acres of land that went into a conservation easement with the Jackson Hole Land Trust (JHLT) in 1992. Spotted knapweed was identified in the original survey of the property. Integrated weed management – the use of multiple weed control methods (mechanical: hand pulling, shoveling; chemical; biological: root-boring weevils; and cultural: tilling, crop rotation) – has been deployed against this and several other noxious weeds. Dalmation toadflax, common mullein, and musk thistle along with knapweed were eventually identified on the property.

It's been an evolving process.

The weed control story began when Jim Gores, former Teton County Weed and Pest Control District (TCWP) supervisor, started herbicide test plots for knapweed control in 2001. Goat grazing was attempted in 2001 and 2002 but was not successful in this situation. Mechanical weed pulls were employed from 2003-2008 along with spraying. Pulling the weeds involved 10-15 excited children from the school who loved getting outside to help. From 2005-2008, the JHLT financially assisted C–V with the weed control spraying by joining the Teton Conservation District's (TCD) Noxious Weed Cost Share program, which reimburses up to 50 percent of all monies spent controlling noxious weeds.

In 2008, the custom applicator estimated a 75-percent decrease in spotted knapweed. However, weed spraying was stopped in

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Dalmation toadflax

landowner bounds with integrated weed management

2009 due to lack of funds. As expected, these areas reseeded with spotted knapweed and Dalmation toadflax.

Ranch Launches Counterattack

In 2010, ranch personnel regrouped their weed control efforts and came back stronger than ever. They not only participated in TCD's cost-share program but played an important role in a Wyoming Youth for Natural Resources grant called Wyoming Youth for Biological Control.

TCWP was granted $2,100 to purchase a Juno GPS unit and Terra Sync software. C–V students and Wildlife and Habitat 4-H Club members worked together on this project. TCWP staff members provided technology training and helped students collect from a local site and then release *Mecinus janthinus,* an insect used to help biologically control Dalmation toadflax.

Mecinus janthinus is a stem-boring weevil. As adults, they chew into the stem and lay one egg per chewed-out cavity. Larvae hatch from the eggs and eat the nutrients inside the stem. Once they hatch, the adults emerge and cause substantial damage to the leaves. Students are hoping to see reduced Dalmation toadflax plants resulting in less seed production over the years.

Youth from the C-V Ranch near Wilson prepare to pull noxious weeds on ranch property.

During the release, students collected data for the biocontrol release, i.e., temperature, soil type, number of insects released. They also did vegetation monitoring, during which they counted and measured toadflax stems and took note of other vegetation present. C–V youth and 4-H'ers will monitor the site, along with a control site where no insects are present, for five years.

C–V Ranch is a perfect example of the difficult nature of noxious weed control where one method alone often is not enough to control an aggressive weed infestation.

All four methods of integrated weed management are being used to control these obnoxious noxious weeds on the ranch. The ranch personnel's persistence in trying new methods and integrating technological and biological tools with people power is not only making the land healthier but also is allowing the children involved to grow and develop their full potential. This project gets the youth outdoors and lets them study the issues and hone their decision-making skills.

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