

5 million acres of Montana land are involved in Weed Prevention Areas.

Short term estimates of less than 10 cents per acre to prevent noxious weeds compare favorably to the \$25 or more per acre it could cost to control them if they become established.



Weeds not welcome here

Prevention areas help spot the smoke before weeds become wildfires.

If each acre were a slice of paradise, Montana landowners would own 56 million helpings. But it only takes a few invasive plants to turn a productive landscape into a money pit.

Currently 8.2 million acres of Montana land are infested with noxious weeds, with knapweed alone devouring an estimated \$42 million in annual management costs.*

Luckily for Phillips County, home to long-standing ranching families, large scale range livestock operations and outdoor recreation opportunities, its 3.2 million acres are largely uninfested by noxious weeds. But it takes a collective effort to keep uninfested acres weed free.

Landowners have been proactive in getting involved in Weed Prevention Areas: collective rancher-designed efforts that include ecosystem management, exclusion, detection, eradication and mapping to prevent costly remedies later.

Phillips County's MSU Extension Agent, Marko Manoukian, gives this example: If an acre of spotted knapweed spread unnoticed at a rate of 10% per year, in 15 years it would cover 4 acres. At \$50 per acre, controlling 4 acres could amount to \$200 each year and it could take 10 years to exhaust the seed banked in the soil. If detected and eradicated immediately, the acre would require less herbicide, leave no seed build-up, and cost only about \$200 over two or three years, including monitoring.

In 2002, Manoukian joined Phillips County Weed Board and others in assisting with the birth of the South Phillips County Weed Prevention Area. Starting with a group of producers who were embarking on a common grazing opportunity, and partnering with willing neighbors, the project got off the ground. Since then, it has helped landowners work together to implement intensive weed prevention strategies over 250,000 acres.

COLLABORATION EFFORT: In the Phillips County weed prevention area project, MSU weed prevention and Extension worked with the Phillips County Weed Board, Phillips County Commissioners, BLM, US FWP, The Nature Conservancy and local ag producers. Efforts in other counties involve similar inter-agency teamwork. In addition to the weed prevention areas listed, Extension is involved in weed prevention and management education efforts statewide, as well as providing training and certification for private pesticide applicators throughout the state.

With MSU weed prevention coordinator, Kim Goodwin, Extension raises awareness and teaches best management practices in prevention. Ranchers learn about practical weed prevention tools, like minimizing soil disturbance and recognizing seed importation risks (contaminated hay for example). They also learn to recognize and reduce likely locations for invasion. For example, they may ask hunters to use a single entry and parking location.

"Extension's main focus is to teach early detection, which requires good weed identification skills," said Manoukian. "Landowners in our area may not even have seen knapweed or saltcedar before. In order to have effective early eradication, weed patches must be identified when they are small."

Goodwin coordinates funding opportunities to provide weed prevention area signs, weed alert fact sheets, GPS units and even Conservation Corps crew weed scouts and weed-sniffing canines to help map and monitor uninfested lands. The Phillips County weed prevention project also used Weed Trust Fund/County grants to buy sprayers for landowners to check out and use.

Phillips County isn't alone in organizing and educating landowners to prevent costly noxious weed infestations. Extension is involved in weed prevention areas in Blaine, Custer, Garfield, Hill, Liberty, Prairie, Toole, Teton and Wibaux Counties, with a combined acreage exceeding 5 million acres.

Goodwin estimates the short term cost of prevention at less than 10 cents per acre and even less over the long term. This compares favorably to potential management costs of \$25 per acre. That's a modest estimate, considering that -- in addition to control -- costs include lost forage, and habitat and ecological impacts that can continue indefinitely.

"We have weeds in Montana that you can't get rid of," said Goodwin. "The time to manage weeds is before you get them."