



# WIPE PASTURE WEEDS OUT OF YOUR LIFE

The full economic benefit of controlling problem weeds such as Canada thistle, buckbrush and pasture sage in hay and pasture land, still has to be penciled out. But if you can selectively control these weeds for less than \$2 per acre, that may make a lot more sense than plowing and reseeding.

By Lee Hart

Grant Klaiber and John Kalbhen aren't letting buckbrush and Canada thistle become a thorn in the side of their grazing program. These south-central Alberta ranchers are using some relatively new application equipment to knock back the most stubborn weeds.

Once the weeds are in retreat, desirable forages can usually re-establish and provide effective competition. Instead of spending \$150 to \$200 per acre to rework pasture stands, or \$30 or \$40 per acre for other types of treatment, they're getting the job done for less than \$2 per acre in chemical cost.

Klaiber and Kalbhen, who ranch near Strathmore, east of Calgary, are weed wiping these days. They're using an applicator that is pulled over standing weeds, wiping their leaves and stems with herbicide. Desirable grasses and legumes underneath the weeds aren't touched.

The rig looks a little strange, Klaiber admits. The machine they bought and use is the Smucker Super Sponge® Weed Wiper. It's a 30' boom carried on a frame supported by bicycle-type tires and pulled behind an ATV quad. The unit easily folds for road transport.

The spray solution, in this case Roundup®, is carried in a 5-gallon tank mounted on the applicator frame. Chemical is distributed to a heavy duty sponge, protected by netting, running the full width of the boom. Boom height can be adjusted to catch standing weeds but pass over grasses. As the unit is pulled across a field, the sponge, moist with herbicide solution, wipes against target weeds.

Klaiber treated 160 acres of pasture with a heavy Canada thistle infestation in a couple evenings of weed wiping.

The beauty of weed wiping is that you apply herbicide only to the target weeds,

explains Jim Laslo, County of Wheatland ag fieldman. As well, because the herbicide is applied through direct contact, a broad-spectrum systemic product such as a glyphosate can be used without damaging the forage crop.

Laslo worked with Klaiber and Kalbhen on the weed control project. They wanted to see if weed wiping was practical in pastures.

As part of this county project, the producers tested 3 weed wiping systems - the Vogels Wick Weeder and Sumetek Weed Wiper, in addition to the Smucker machine. Smucker is manufactured in Harrisburg, Oregon; Vogels by Paul and Marian Vogels of Kippen, Ont.; and Sumetek by Winfield Manufacturing of Winfield, Alta.

While each system had its pros and cons, Klaiber and Kalbhen preferred the Smucker unit for their specific operations. Instead of a sponge, the Sumetek machine uses carpet material that holds much less chemical. And its small wheels weren't suited to rough ground. Similarly, the Vogels model required more adjustments to control chemical flow; the wick was hard to change and drain; and wheels were also too small for rough ground.

But everyone has his own preferences, Laslo points out. The project was less a consumer rating of application equipment than a test to see if wiping was a practical method of weed control in pasture.

The economics of weed wiping sure panned out for Klaiber and Kalbhen. Since chemical is applied only to weeds that are touched, a small amount goes a long way.

Aerial spraying of a 320 acre pasture of weeds would have cost Klaiber about \$9,600 or \$30 per acre. He estimates farming up a heavily-infested pasture and reseeding would cost between \$150 and \$200 per acre in chemical cost, field work and lost production. Weed wiping a 160

acre field heavily infested with Canada thistle, on the other hand, cost \$186 for the chemical or about \$1.16 per acre.

As well, Klaiber invested 2 evenings of spraying time, and the 30' Smucker weed wiper cost about \$3,500. He and Kalbhen shared that cost, however. "It's the type of machine farmers can easily own jointly," says Klaiber. "It's not something you need every day. Scheduling between owners shouldn't be difficult."

Is weed wiping effective? "It's not a one-shot solution," explains Klaiber. "You're probably looking at a 3-year project to eliminate weed patches." Some pastures, he notes, might have the odd plant scattered about, while others could have patches ranging from a few acres to 100 or 200 acres.

The farmers timed their chemical treatments to hit weeds such as Canada thistle, buckbrush and pasture sage as they were in early to late bud. At that stage, weeds are storing nutrients and readily transfer glyphosate to their roots.

While one pass might kill the tallest weeds (Kalbhen estimates perhaps 95% control the first year), there's usually a new flush the following year. Canada thistle is particularly stubborn since it reproduces by sending up new shoots from its massive root network.

A second and third treatment of weed patches may be needed in subsequent years, points out Laslo. But reduced weed cover stimulates forage growth, and that in turn should help control weed regrowth.

While the weed wiper does an excellent job, Kalbhen says it's not the total answer to controlling pasture weeds. He has one field with a heavy infestation of sage, but the weed is shorter than the grass and legumes. Wiping won't work there. He'll perhaps have to look at hiring a custom applicator to spray that field.

WEED WIPERS



A heavy patch of Canada thistle on Klaiber's pasture starting to turn brown after being treated with the weed wiper



Another typical patch of weeds needing to be treated



A patch of western snowberry or buckbrush turning brown after treatment with the weed wiper