

# Four HERBICIDES for the

By Brian Connely

Weed control can be difficult and frustrating. Having a “basic toolkit” readily accessible at all times helps – much like the general purpose toolkit we carry in our vehicles.

This kit should include a shovel (for digging up annual and biennial weeds), a stout rake for preparing small-scale seedbeds, appropriate seed mix for your management goals (out-compete the weeds!), and a few herbicides that will control weeds in the short-term.

This “weed kit” must be used in conjunction with a good weed management plan, i.e.: good grazing practices, weed prevention, desirable plant species, proper water and fertilizer management if appropriate, and all the other tools used to establish healthy, productive land.

Many modern herbicides have the benefits of being relatively low in animal toxicity, are very effective, and have relatively short persistence in the soil. Many of our modern herbicides are also fairly selective in the weed species they will control.

So what we want for our “herbicide toolkit” is a small sampling of herbicides that will control a broad spectrum of weeds. When we start to look at the options available, we quickly see the selection is huge. There are literally thousands of herbicides on the market, each filling a niche. When talking with professionals, we find there are almost as many opinions as there are herbicide choices. What follows is one person’s opinion (albeit informed and experienced)

on four herbicides that will control most of the weed problems encountered by Wyoming landowners.

These four herbicides each have a broad spectrum of weeds they will control. The herbicides are listed by either the common chemical name or the trademarked name. The herbicides recommended by the common chemical names (2,4-D amine and glyphosate) are listed as the active ingredient in many brand name herbicides. Examples are Riverdale’s WEEDestroy AM-40 (2,4-D amine) and Monsanto’s Roundup and Roundup Pro (glyphosate).

## 2,4-D Amine

The “old standby.” This is a selective herbicide (acts on broad-leaved plants, not grass) that inhibits normal growth. This is used on annual weeds and some biennial weeds. This herbicide will control most annual weeds including kochia (young), knotweed, black medic, puncturevine, annual mustards, tumbleweeds, cocklebur, ragweed, dandelions, lamb’s quarters, and many, many others. This product is used on young, annual weeds before they make seed! This product will also control many problem biennial weeds like common burdock, musk thistle, and houndstongue. 2,4-D amine has a relatively short persistence in the soil (about three weeks), so it can be used in a pre-planting situation. It is safe around trees, providing none contacts the foliage.

## Glyphosate

This is the common name for the active ingredient of Monsanto’s

Roundup and Roundup Pro herbicides. Many manufacturers now provide a 40- to 55-percent active ingredient glyphosate product. This is a non-selective herbicide (kills grass and broad-leaved plants). This is used where bare ground may be desirable – areas like building perimeters, windbreak borders, corrals, and driveway edges.

This herbicide has very little persistence in the soil and, therefore, is commonly used in pre-plant situations to create a “stale seedbed” (nothing is germinating). Land is often cultivated, the seedbed prepared, and then left fallow during a short period in the early growing season. The weeds/grass/etc. are allowed to germinate, and the glyphosate is used to kill these plants. A short time later seed is planted.

## Redeem

Redeem is a Dow AgroSciences product labeled for rangeland and pasture. It is a mixture of triclopyr and clopyralid. It is an absolute Canada thistle HAMMER! Canada thistle is the number one noxious weed in the world! It is one of the species on the Wyoming Designated Noxious Weed List, and it is found on every continent in the world, except Antarctica, and I haven’t checked down there lately!

# landowner

Redeem has a broad weed spectrum and is effective against Canada thistle, Russian knapweed, spotted and diffuse knapweeds, Scotch thistle, common burdock, curly dock, and many annual weeds (chickweeds, knotweeds, annual mustards, purslanes, ragweeds). Another distinct plus for this product is it is a selective (broad-leafed) herbicide that is safe to use around trees as long as you don't get any on the foliage! This product does have a substantial persistence in soils (approximately six months if planting back to grass and 12-plus months if planting back to a broad-leaf plant). Do not use treated plant material for mulch or compost.

## SpeedZone

The afore-mentioned herbicides will treat the annual weeds (mustards, et al), grass weeds, Canada thistle, the knapweeds, and the biennials. What's missing? What about field bindweed (aka creeping jenny, wild morning glory)? In a lawn? Around trees? In the early, cool season? SpeedZone is a PBI/Gordon Corp. product and can do all of these things. Not in one application, but by using this product as part of a yearly maintenance program and maintaining a good stand of



*Dalmatian toadflax*

competition (grass) it is an effective tool. This is a great broad-leaf herbicide for early-season use. It controls most early-season annuals. Grass can be reseeded two weeks after use.

The herbicides mentioned above will control a majority of problem weeds. A big hole in the list is the perennial mustards, i.e.: hoary cress (whitetop) and perennial pepperweed (giant whitetop), leafy spurge, and Dalmatian toadflax. Please contact a local weed and pest control district for recommendations on these problem invaders. Contact information is at [www.wyoweed.org/wp\\_dist.html](http://www.wyoweed.org/wp_dist.html).

So, there is my 2 cents worth. I know many others would recommend other herbicides and with good cause! But, that is what makes horse races. These herbicides will indeed help control most of the problem weeds encountered in Wyoming. These herbicides are all non-restricted use herbicides and therefore don't require a private pesticide applicator's license.

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It is VERY important to carefully read the entire label found on herbicides. Follow the restrictions, recommendations, and precautions found on the label. Use common sense.

The most important tools in your weed kit are the planting components. The Intermountain Planting Guide (see below) is an excellent place to start. Competition from desirable, adapted plants is the way to achieve long-term control of weeds. Herbicides are one step in getting there. A sound land management plan for your place that includes good grazing practices, water/fertilizer management, weed prevention, and applicable selection of adapted, competitive plants will all help to achieve weed control on your place.

## Resources:

*Intermountain Planting Guide* – This is probably the best grass/forb selection and planting guide for this region. This pdf is more than 100 pages! <http://extension.usu.edu/rangelands/PDF%20Files/Intermountain%20Planting%20Guide.pdf>

*Creating an Integrated Weed Management Plan* – This is a comprehensive guide to holistic weed control with more good info thrown in. It is available at [www.cnap.state.co.us/IWM\\_handbook/IWM\\_index.htm](http://www.cnap.state.co.us/IWM_handbook/IWM_index.htm)

*(Mention of products does not imply endorsement.)*