

THE CROOK COUNTY HOMEOWNERS WEED CONTROL HANDBOOK



**"DON'T THINK OF IT AS WORK, THINK OF IT
AS HUNTING... WITH NO BAG LIMIT"**

**BY: KEV ALEXANIAN
CROOK COUNTY WEED MASTER**



INTRODUCTION

There are a good number of home owners in this County who take great pride in the appearance and functionality of their lawns, gardens, and outlying areas. These are people who, for the most part, have a keen understanding of domestic weeds and the methodology necessary to control them; folks who are savvy about which herbicides are needed to control their nemesis and exactly when and how to apply them. If you are one of those shining individuals then this handbook is not for you! If you are, however, one of those who doesn't know an herbicide from a side of slaw, can no longer find the vegetables in his vegetable garden, and thinks that a dandelion is an African dude than this handbook could be what you've been looking for. Perhaps this minimalistic document will serve as the conduit which transforms your botanical wasteland into a palatial paradise; or, maybe, it will just keep you out of Dutch with the Prineville Police Department. Whatever the incentive, this handbook will attempt to address those weedy issues as simplistically and comprehensively as possible.



KNOW THE LAW

As you may or may not know the City of Prineville Police Department has a weed ordinance which was implemented May 1st of last year. Ordinance 93.40 states: “no owner or person in charge of property may allow noxious vegetation to be on property or in the right-of-way of a public thoroughfare abutting the property.” Common violations include:

- 1) Grass and weeds over 10” in height.
- 2) Weeds going to seed such as dandelions.
- 3) Undisposed of lawn or woody vegetation piles.
- 4) Frontage and reverse frontage not maintained i.e. the area between the curb and sidewalk, and behind a fence along a roadway or alley.
- 5) Vegetation blocking public rights-of-ways such as sidewalks or roadways.

- 6) Vegetation which obstructs view of intersections, driveways, public rights-of-ways, or regulator signs.
- 7) Dead or decaying trees allowed to remain standing within the city limits.

For any one of the fore mentioned violations the “fuzz” can fine you up to \$500.00 and paying the fine does not relieve you of your obligation to correct the violation. This guide should assist you in alleviating weedy situations before they become violations. Don’t think of it as work; think of it as hunting with no bag limit.



KNOW YOUR HERBICIDES

It is not my intent to transform you into an herbicide applicator worthy of certification, but simply to give you enough information to treat your weeds correctly and safely. All of this information is available on the label information packet that comes with every product you purchase and I strongly urge you to read it. In the event that you do not, at least heed these few pointers: All of the herbicides mentioned in this guide are general use herbicides or GUP’s and can be purchased over the counter. There are hundreds of herbicides with an even greater number of uses. To cut the confusion and reduce cost I have selected only three which will work well on all of the weed species in this guide. All of the herbicides, with the exception of glyphosate, can volatilize if you apply them when temperatures will exceed 85 degrees for a three day period. So if you don’t want to put the kibosh on your tomatoes or your grapes, apply those herbicides on days when temperatures are cooler and winds are minimal. Glyphosate is the only herbicide mentioned that will kill grass and for that reason it will never be recommended for use in a lawn; only to kill grasses, broadleaf weeds on the margins of desirable vegetation. Glyphosate is commonly called Roundup, and a multiplicity of other names, and the label should say something like Glyphosate....41% on the container label. If it says RTU (ready to use) then it is not to be mixed.

You do not have to drown the target pests; what runs off the weed leaves will avail you nothing. The term: “spray to wet” should be self-explanatory,

but in case it's not then spray the weeds until they become shiny. That should do the trick. Before you apply be sure to adorn the correct PPE or personal protective equipment which, for you, means: a long sleeve shirt, long pants, boots, and rubber gloves. Okay, you've been warned.

The product 2, 4-D may require a surfactant, i.e. spreader-sticker, as part of the formulation. If so, I would recommend a non-ionic surfactant in the smallest denomination the dealer carries and I would add around one ounce per gallon of water. It's cheap and should last you a lifetime. Some people use dish soap which works poorly and probably costs more than a surfactant.



KNOW YOUR ENEMY

Your ability to control a weed is seldom better than your ability to identify it and by “identify it” I mean recognize it as something more than that green mass with the stickery thingies on it. In the first section we will examine eight prolific weeds that you will need to become familiar with and, to an extent, knowledgeable. Other weeds and the prescriptions for their control will be listed separately.



BUTTONWEED

Over the last 25 years I have fielded more questions pertaining to buttonweed than any other species and until recent years the best prescriptions available were pretty much ineffective. The name buttonweed is derived from the appearance of the fruit and some folks also think looks like a cheese wheel; hence the name cheeseweed. That same fruit is what the ancient Egyptians used to



make the first marsh mallows and some folks still do. The plant is listed as common mallow (*Malva neglecta*) and is a winter-annual or biennial which simply means that the plant has a 1-2 year life cycle. Buttonweed also has a robust root system which makes the plant difficult to control.

Now comes the good part where we learn what will kill this stuff. Thanks to the miracle of science, a product has been developed that will kick the doo-doo out of buttonweed. A relatively newish concoction called Speed Zone is labeled for the control of buttonweed in home lawns. Just mix 1.5 ounces of Speed Zone to one gallon of water in a hand-held or back pack sprayer and go do that voodoo that you do. Speed Zone is available at Helena Chemical located behind Wilco in Prineville.

COMMON PURSLANE



Common purslane (*Portulaca oleracea*) also known as little hogweed is perhaps the most prolific of all garden pests in Central Oregon. Each plant can produce as many as 240,000 seeds per plant and those seeds can have viability in the soil for up 40 years! Common purslane is a fleshy annual which has been grown for over 4000 years as a medicinal

plant and was probably imported to North America for use as a potherb. The positive aspect of this plant is that it has more vitamins than the Flintstones chewable that I'm used to and more minerals than you can shake a stick at. Conversely, it also grows like a knotweed on steroids and tastes like sheep dip with a lemon twist. Just because you can eat something doesn't necessarily mean that you should. That's why we have Safeway my friend.

In Central Oregon, common purslane is perhaps the most ubiquitous and prolific of all the garden pests and you would do yourself a great service to

rid your garden of this menace. Whether you win or lose the battle depends largely upon your methodology and your tenacity. Hand pulling or hoeing can be successful providing that you repeat the process regularly and by regularly I mean often. Tarping with clear plastic can be effective and prevent purslane from seeding and requires far less energy than the manual controls. Herbicides and gardening may seem like two words that are mutually exclusive, but that's really not the case. While it's a no-brainer that that spraying in a growing garden is both a risky proposition and contrary to the label; preplant and post-harvest treatments can be a pretty good idea. The folks at Monsanto have a product called Roundup Quick Pro which comes in a packet. Each packet of dry material will mix with one gallon of water. The product is registered to control common purslane and is a good fit for preplant or fallow control.

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DANDELION



I'll go out on a limb here and assume that dandelion (*Taraxacum officinale*) is the one plant that I won't have to describe. I have very little good to say about this yard pest aside from the fact that it is, somewhat, edible to humans and that sheep

and cattle love this stuff. Unless you have an abundance of sheep or cattle in your yard, let's consider dandelion a yard pest and leave it at that. What should be of some concern to you the yard owner, as it is to the City Police Department, is the ease in which dandelions spread to your, or adjacent, properties. Even if you're the type that doesn't find the weedy appearance of your yard objectionable you still



might take offense to being fined out the gazoo for allowing a pest to propagate on your property.

The art of controlling dandelion has changed little over the years. Digging out the roots with a hand tool is still popular, particularly if you have few of them to contend with, but herbicides work better for larger scale treatments; just make sure that you are using the correct product for the job. There are several herbicides that will control dandelion. Speed Zone is probably the Cadillac, but Cadillac's don't come cheap. 24-D amine is very inexpensive and mixed at a rate of 1.5 ounces per gallon should do the job nicely. For the record, the ONLY time you use Roundup herbicide in your lawn is if you intend to kill grass.

PROSTRATE SPURGE

Prostrate spurge, AKA spotted spurge, comes from a long line of trouble makers, the spurges, and this one is no exception. This annual yard and garden pest has been making a real statement in Central Oregon over the last two decades and if you haven't seen it on your place just blink and you probably will. Like the



name suggests, prostrate spurge forms a ground hugging mat, up to a few feet in diameter, from stems originating from a central tap root. The leaves are small and have a reddish spot on the center; hence the name spotted spurge. Whatever the common name I'm confident that you will come up with a few of your own after experiencing the botanical mess that prostrate spurge makes out of your yard and garden.

If you're the masochistic type and feel that all weed solutions lie in the arduous labor of hand pulling just be sure to wear gloves; like all spurges

prostrate spurge exudes milky latex that is quite irritating to the skin. Or better yet, don't pull it at all. You won't get rid of this pest by hand pulling; however, you will have some success by mulching with several inches of newspaper. Mulching will prevent the plant from seeding and can be quite effective in a garden situation where you may not wish to use an herbicide. I would, however, advise you to use an herbicide for prostrate spurge control in lawns. Speed Zone herbicide is registered for control of this pest at a 1.5 ounce per gallon of water rate.

CLOVERS



Clovers are a common yet uninvited component of domestic lawns in our neck of the woods and often are an indicator of low nitrogen levels, soil compaction, or poor competition from healthy grass. In Crook County the villains are usually black medic (*Medicago lupulina*), often mistakenly called Japanese clover, and white clover (*Trifolium repens*). Black medic is a summer annual that has

low-growing square stems that extend under the turf canopy to lengths of two feet. Leaves grow in three leaf clusters and flowers are yellow. White clover is a perennial which, like the black medic, has trifoliate leaves and both are legumes, meaning that it has the capabilities to fix its own nitrogen allowing it to out-compete turf in nutrient-poor soils. Some people actually like white clover. Some people like prickly heat too, but we're not concerned about either of them.



I have had folks tell me that

they attained pretty good of clovers using Roundup herbicide. Once again and for the record, your lawn is no place for Roundup control of broadleaf weeds...ever! It's, in part, a lack of competition from desirable grass that got you into this weedy mess in the first place; using Roundup will simply insure that you lose more of it. Once again, use Speed Zone at the 1.5 ounce per gallon rate and say adios to your clover problems.

KOCIA

Kocia, oh how we detest the name, but 30 years ago nobody had any idea what it was. Today there is nowhere in town or country where this annual pest cannot be seen. Roadsides, cropland, waste areas, gardens, and even in lawns in poor condition are all areas with the potential for the establishment of this pest. Kocia can germinate from a seed, grow to a height of six feet and become a fire hazard all in one season.

Kocia (*Kocia scoparia*) is an annual, broadleaf forb of the goosefoot family that was originally imported as an ornamental and later utilized as drought resistant forage and called "poor man's alfalfa". In our attempt to build a better mouse trap we introduced a plant that we thought could satisfy multiple needs without considering the negative consequences. The consequences being that a single kocia plant can produce 25,000 seeds. Germinating populations are so dense that they have to be seen to be believed. No problem....we have plenty to see. The fire hazard component of this plant is very real and I can think of few other species that serve better in that capacity.



Now that we've established that we have a real stinker on our hands just how do we get rid of this stuff? Fortunately for us, killing kocia is no mean feat. If pulling weeds is something you don't mind doing than be my guest, but you

would rather do it the easy way spray it. If you're treating an area where koccia has been established for a number of years, the germinating populations will appear as a silvery mat. Wait for the plant seedling to grow to about the size of a quarter before treating them. This will give the seeds more time to germinate and reduce the need to retreat. If you have the Speed Zone on hand that we've recommended for just about everything else, that will work fine. If not, then use 24-D amine at a rate of about 1.5 oz. per gallon of water with a jigger of spreader sticker and will do the job nicely. Be advised, this plant will grow quickly so spray it before grows to ma height of 10 inches to be compliant with city ordinance.

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BROADLEAF AND BUCKHORN PLANTAIN

Both of these plantains have a track record in Central Oregon. Broadleaf (*Plantago major*) and buckhorn (*Plantago lanceolata*) plantain are perennial weeds which had old world medicinal and culinary uses. It was like one-stop shopping; you could heal wounds, the runs, a sore throat, and stings and then make one mean tossed green salad with the leftovers. With the advent of doctor's offices and super markets, the two plantains have been relegated to the role of garden and yard pests.



The plantains will grow to a height of about 10 inches, which is the height at which weeds become enforceable. This weed, therefore, will not be the most conspicuous of the yard pests, but because they can produce up to 20,000 seeds per plant they can become exceedingly prolific. The two plantains are species which usually indicate soil nutrient deficiencies or poor competition. Rather than allowing a stupid weed to insult my lawn, I would choose to rid myself of the pest. This can be accomplished one of two ways; remove it or spray it. The removal thing usually requires an implement of some sort to dig out the

roots; pulling is only successful in light, sandy soils and the process must be repeated frequently. The other option is to spray it with Speed Zone at 1.5 ounces per gallon rate.

WHITETOP

We tend to think of noxious vegetation as agri-warfare; the stuff that farmers and range folk have to go through to keep the bad guys in check.

Unfortunately, some of our noxious adversaries are just as well suited to urban environs and whitetop is one of those. Whitetop (*Cardaria draba*) is a

perennial member of the mustard family and no stranger to city life. A quickie survey of the Prineville area revealed that nearly one hundred properties were infested with whitetop within the City limits alone.















Whitetop reproduces quite well from rootstalk, so pulling or cutting the plant will yield little success. What is required here is a little urban warfare. T Zone, available at Helena Chemical in Prineville, is possibly the only

product that will work on whitetop that is safe enough for domestic use. One that will work and is safe around the house is T Zone at 1.5 ounces per gallon of water. Spray when the whitetop is in the early bud stage. Repeat applications may be necessary in upcoming years. T Zone is a little pricey so you may want to go in sharezies with a neighbor. This should be no problem...after all you've been sharing whitetop for years.



ADDITIONAL WEED PRESCRIPTIONS

<u>Plant species</u>	<u>Photo</u>	<u>Application Timing</u>	<u>Control</u>
1) Redstem Filaree (<i>Erodium cicutarium</i>)		Spring, early summer prior to seed development	Speed Zone 1.5 oz. / gal.
2) Red Root Pigweed (<i>Amaranthus retroflexus</i>)		Spring, early summer	Speed Zone 1.5 oz. / gal.
3) Prickly Lettuce (<i>Lactuca serriola</i>)		Spring, summer	Speed Zone 1.5 oz. / gal.
4) Russian Thistle (<i>Salsola iberica</i>)		Spring, early summer	2,4-D amine 2 oz. / gal. Speed Zone 1.5 oz. / gal.
5) Puncturevine (<i>Tribulus terrestris</i>)		Throughout the summer	2,4-D amine 2 oz. / gal.

6) Canada Thistle <i>(Cirsium arvense)</i>		Spring or fall (no glyphosate in lawns)	Speed Zone 1.5 oz. / gal. Glyphosate 2 oz. /gal.
7) Bull Thistle <i>(Cirsium vulgare)</i>		Spring, summer	Speed Zone 1.5 oz. / gal.
8) Cheat Grass <i>(Bromus secalinus)</i>		Spring (March) (no glyphosate in lawns)	Glyphosate 1-2 oz. / gal.
9) Bur Buttercup <i>(Ranunculus testiculatus)</i>		Spring (Feb.-March) (no glyphosate in lawns)	Glyphosate 2 oz. / gal.
10) Henbit <i>(Lamium amplexicaule)</i>		Spring-early summer (manual control only In vegetable gardens)	Speed Zone 1.5 oz. / gal.
11) Hare Barley <i>(Hordeum leporinum)</i>		Early fall (No glyphosate in lawns)	Glyphosate 3 oz. /gal.
12) Annual Mustards		Spring-early summer	2,4-D amine 2 oz. / gal.



KNOW YOUR YARDS CONDITION

If your yard is a weedy mess it is beneficial to understand how it got this way and by that I don't mean: did you choose to watch football instead of work in your yard? Personally, I find the former quite admirable. What I do mean is that weedy yards are generally a symptom of the condition of the yard itself. If your lawn is not robust and density is poor it makes the establishment of weeds a piece of cake. Conversely, if your lawn is in good shape then it becomes difficult for weeds to get a foothold. A healthy lawn makes for good prevention.



KNOW HOW TO MIX

If you have a lot of spraying to do and the ol' one gallon hand held sprayer simply isn't feeding the bull dog then you may want to consider using a backpack sprayer. They generally hold at least three gallons and cost around 80 bucks. If you need one, but don't wish to purchase one, don't despair. We have a backpack check out program at the OSU Extension office on Lynn Boulevard. Just tell the ladies behind the counter that you would like to borrow a backpack sprayer and you may check one out free of charge, just like a book. When you're done with it simply rinse it out and return it. It's that simple. When mixing in the three gallon backpack sprayer tank simply triple the amounts cited for the one gallon hand sprayer. Whether you use a three gallon backpack or a one gallon hand sprayer be sure to fill the tank half full of water then add the spreader sticker first, herbicide next, and top off with water in that order and all will be right with the world. If you are mixing a formulation based upon label information, the mixing could go something like this:

- 1) The label for product "A" calls for an application rate of 4 pints per acre.
- 2) A 3 gallon backpack sprayer will treat about 1/10 of an acre.

- 3) 10 loads times 3 gallons equals thirty gallons of carrier per acre which is about right.
- 4) 4 pints equals 64 ounces which divided by the 10 loads equals 6.4 ounces.
- 5) 6.4 ounces of product "A" will be added to the tank to achieve the label requirement of 4 pints per acre.



LIQUID CONVERSIONS

- | | |
|------------------------------|-----------------|
| 1 teaspoon (tsp) = | 1/3 tbsp |
| 1 tablespoon (tbsp) = | 3 tsp |
| 1 fluid ounce (oz) = | 2 tbsp |
| 1 cup = | 8 oz |
| 1 pint (16 oz) = | 2 cups |
| 1 quart (32 oz) = | 2 pints |
| 1 gallon (128 oz) = | 4 quarts |



If you have any questions regarding plant identification, herbicides, application, or mixing please feel free to contact:

Crook County Weed Control
Kev Alexanian
Crook County Weed Master
1306 N. Main Street
Prineville, OR 97754
kev.alexanian@co.crook.or.us
541-447-7958

Oregon Department of Agriculture
Mike Crumrine
Integrated Weed Specialist
mcrumrine@oda.state.or.us
541-604-6580

Crooked River Weed Management Area
Debbie Wood
Coordinator
510 SE Lynn Blvd.
Prineville, OR 97754
Debbie.wood@oregonstate.edu
541-447-9971

OSU Extension
498 SE Lynn Blvd.
Prineville, OR 97754
541-447-6228

NOW, GET OUT THERE AND MAKE ME PROUD!

**DON'T BE
THIS
MAN!!!!**

