## Sorted by common name

Weed Common	Weed Scientific	Herbicide & Strategy	Comments	Imporatance and Difficulty
asian bushclover	Lespedeza daurica	triclopyr works so Crossbow, Element 3A. Dow says use: Milestone, PastureGard HL, Garlon 4 Ultra water solution. Saxton uses 1-2 oz/g G4 in water on Lespedeza cuniata. Spot spray in June sweeps once plant is noticeable. Continue sweeps through July and into August.	transline does <u>not</u> work on Lespedeza. Hamilton uses Remedy(triclopyr) on L cuneata in summer and Cimarron Plus (metsulfuron met met)in early fall.	High. Hard to find and keeps coming up from the seed bank. Search before vegetation obscures is a challenge. Follow map.
autumn olive, russian olive	Elaegnus umbellata. E angustifolia	triclopyr works: basal bark Garlon4, foliar triclopyr too so use Crossbow, element 3A	basal bark works well	High. Once established they become abundant.
birdsfoot trefoil	Lotus corniculatus	Crossbow, Milestone (has residual), Transline, Element 3A. Spot spray plants. Boom large depauperate areas.		High. Seeds last a long time and emerge annually for years after adults are all gone. Need multiple visits per site annually.
black locust	Robinia pseudoacacia	Basal bark w G4/Vanquish mix. Foliar dilute Roundup on all leaves works said Bill Glass. Walters says 2% foliar Transline w 0.6 oz/g surfactant.	At CCK planting there is amorpha bush which looks similar but no thorns, prickly ash has paired thorns but they are a small shrub w/ straight out w reddish hairs in leaf scar, and C milkvetch is a similar but not woody.	Medium. Big clones are lot of mass and resprout easily.

bouncing bet	Saponaria offinalis	Use 6 oz per gallon Crossbow and have generous amount of MSO for waxy leaves. G3A or glyphosate might work fine. Spray early in bloom or before bloom. Try Telar XP (Hauser)works well and has residual. Bernie used 6ml (0.2 oz) Telar in 2 g water.	Add surfactant to get past wax. Requires multiple returns. Get all rosettes.	Medium. Seed bank is long lasting and plants hard to get at on creek banks.
briars	Rubus sp.	Krenite in fall.		Low. Annoyance on fire breaks.
buckthorn	Rhamnus	basal barn Garlon 4, foliar Crossbow or Element 3A. Basal bark is an efficient method.		Low. Our sandy silt loams don't support it well.
butter and eggs	Linaria vulgaris	Alligare Panoramic 2 SL(Imazapic). 24D (Hauser expects Milestone not to work on this scroph.) Crossbow might be working.		Medium since we have just a few outbreaks, but they have persisted our spraying.
chamomile	Anthemis cotula?	Likley Crossbow will work.	by corral	unknown
Common St Johnswort	Hypericum perforatum	Milestone, Opensight	Learn the native St Johnsworts before	Low.
cow Vetch	Vicia cracca	Milestone, Transline.		Low. Nuisance.
crown vetch	Coronilla varia	Transline 0.5%, Milestone	Check annually. Spray twice a year might do it.	Medium. Few patches here but hard to extinquish.
dames rocket		3% Amine triclopyr w surfactant	Spray fall to early spring rosettes (B Walters 2016)	Low. Gregarious but not spreading.
day lilly	Hemerocallis fulva	Kleiman and Walters using 2% Habitat with 3% glyphosate kills these monocots like Scilla.	Add surfactant to get past wax. Requires multiple returns. Know native blue flag iris.	Medium. Requires numerous returns.

honeysuckle or Amur honeysuckle	Lonicera maackii is what we tend to have	Apply to bark (basal bark) Garlon 4 works. Or 40% Roundup or 17% garlon 4 on cut stems. Foliar 5% Roundup on resprouts after fire works well too, before plants become taller than a foot for overspray control. Foliar Progency at 4 oz per gallon water and add 0.5% MSO. Progeny is MCPA, triclopyr and dicamba. Order from CPS. Bryon W says use Chem 90 surfactant at 0.25-0.50%. MSO rarely used. Says literature supports Chem 90 style surfactants.	Dormant season basal bark gives excellent control	High.
hounds tongue	Cynoglossum officinale	Crossbow should work, Milestone.		Low. Nuisance.
king devil	Hieracium pratense	Crossbow or Element 3a, Milestone. Look for nearby rosettes. Transline supposed to work before bolting.	Haul out flower in a bag. Dispose in kitchen trash.	Medium. Seed blow in the wind and hard to find them all annually.
leafy spurge	Euphorbia eschella	Panoramic [imazapic] Apply in spring blooms and return in fall. This is not imazapyr. See article. Dow suggests Tordon.	blooms May and late August	Hard. We have few of them but keeps coming back. They are on right of ways north of us.
mulberry	Morus alba	Garlon 4 works well. triclopyr so Crossbow or Element 3A	transline does not work	Low. A problem in certain areas where it is abundant.
oxe eye daisy	Leucanthemum vulgare, Chrysanthemum v.	Metsulfurone (Escort), Aminopyralid (Milestone), Aminopyralid + 2,4 D, picloram( <u>Tordon)</u> , Transline, Clopyralid + 2,4-D. I see Trcopyr listed but not % success.	perennial	Medium.
phragmites	Phragmites australis	Walters using 1-2% Habitat with 2-3% glyphosate.		Low as we have none currently, but it was hard to eradicate.
poison hemlock	Conium maculatum	Dow suggests Opensight. Walters says Escort. Telar XP works well (Hauser). Spray before flower if possible.	Blooms in June	increasing on Franklin Creek

red clover	Trifolium pratense	Transline, Crossbow, Element 3A		A problem in new prairie plantings.
reed canary grass	Phalaris arundinacea	We are starting to use clethodin with Cleanse grass herbicide. We have used Poast Plus or Roundup in dense stands. Walters adds 1% Habitat to 2% glyphosate. Craig Annen uses ReQuest agent for neutral pH and to offset hard water. Walters using Habitat only over water as it is approved and works great 2016.	Grass herbicides way to go as sedges and forbs come back strong.	Hard. Requires annually work.
Rubus	Rubus sp.	Milestone, Opensight, Garlon 4 Ultra, Krenite.		Control only on fire breaks
spotted knapweed	Centaurea maculata	Milestone. Opensight. Transline. Have used Crossbow.		Medium. We eradicated it, or almost, at HLP.
sweet clovers	Melilotus alba/officinalis	Crossbow, Milestone, Transline, Element 3A. Spade out plants anytime. Haul plants after flowering is over to remove seed source. Spray plants under two foot tall. Mow big patches when in full bloom.	Walters says Transline works well.	Hard. Long seed bank.
wild parsnip	Sativa pastinaca	Element 3A before it bolts, spade it after. Dow suggests Opensight. Spading works great but haul out plants after full flowering or you may get seed set.	Sap on skin gives sun burn boils.	Low.
willow	Salix sp.	Cut and treat stems 50% glyphosate. Basal bark G4 should work. Foliar G3 or Crossbow.		Low, but dense stands hard to manage.

## CONVERSION FACTORS FOR LIQUIDS

This	Equals this	Equal this too
128 oz	1 gallon	4 quarts
8 oz	1 cup	
4 cups	32 oz	1 quart
16 oz	1 Americn pint	
2 pints	1 quart	
1 teaspoon	0.17 oz	
1 ml	0.034 oz	
1 oz	30 ml	