Presentation for December 2019 BCH meeting

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Identifying Weeds:

By Flower, stems, roots, leaves.

Annuals complete in one year. Ex. Cheatgrass

- Summer annual
- Winter annuals: Cheatgrass. Can't get a jump on them and they outgrow our natives

Biennials: Two Year cycle. First year doesn't produce a seed; does so in 2nd year.

Ex: Houndstongue...it is important to identify in year one before seeds are produced.

Perennials: Leafy spurge...once you have it, can't get rid of it.

Lives from year to year. Reproduces above and below ground. Rhizomes and seeds. Often has a tap root.

Creeping perennials are where the plant rhizomes out and there is as much below ground as above ground growth.

Persistence

Common weeds: More persistent and may or may not be vigorous.

Serious problems to farmers because they reoccur so often

Mostly annuals

Noxious weeds:

Most undesirable

Persistent growth and hard to control

Designated by law: very vigorous process exists for designation.

In Montana, we have 36 (Washington has over 100!) designated.

Plant ID

Flowers

Leaves

Root systems: bulbs, tap, rhizomes, etc

Stem

Vectors

Terrestrial: Animals, birds, humans, hay/straw, roads/gravel

Aquatic

Montana's Noxious weeds

36 of them but not all covered in this presentation.

Prioritized by establishment and management

Priority 1A

Not in Montana but knocking on our door or very limited presence

Approach is one of eradication, education and prevention.

Early detection and rapid response

- 1. Yellow starthistle: (thistles puncture tires)
- 2. Dryers woad (Idaho, Utah)
- 3. Common reed
- Medusahead (wild rye: has long awns that are twisted midway through): In bison range in W
 Mt...these never fall off the plant. Creates thick layers
 Lookalikes: Foxtail barley, bottlebrush squirreltail but here the leaves fall off.

Priority 1B

Limited in the state

Knotweed complex

Purple loose strife

Rush skeletonweed: Yellow sunflower family: limited to Bison Range and W MT. No leaves on stem. Milky latex in it

Scotch broom

Blueweed (Ravalli county)

Priority 2A and 2B

Here and established

- Canada thistle Rhyzome growth
- Leafy spurge: milky latex, with yellow flowers. Very rhizomous...can be 20 feet deep and long.

Toxic to horses, cattle and humans

- Knapweeds:
 - Spotted knapweed named for spots on the bud, purple flower
 Short lived perennials. Can spray out but comes back in a couple years. Seed bank won't go.
 - o Russian knapweed: true perennial. Very rhizomous. Bracks are smooth.
 - o Diffuse knapweed: white flower with thorny knaps. More in eastern MT

Always look at knaps to identify which kind.

Mustards: All have four petals per flower

- Whitetop: first weeds to flower. Perennial and grows out with smooth waxy leaves. Creates a uniform canopy of white flowers. Toxic to cattle.
- Perennial pepperweed: toxic to cattle.
- Hoary alyssum: white flower. Purple hairy stem. Very toxic to horses.
 Not to be confused with Western yarrow. Not a mustard. Fern like leaf structure and not a weed.
- Sulfur cinquefoil: yellow flower, Western MT. Palmate leaf structure. There is a native cinquefoil: native greyish silver underside of leaves.

Field bindweed.

 Arrowhead shaped leaves. Creeps on the ground, morning glory family. Produces morning glory flowers. Seeds live for 50 years. Toxic to horses.

Dalmation toadflax

- Heartshaped waxy thick leaf that clasps around stem. Flower grows along stem like a snapdragon.
- Taproot.
- Don't bother hand pulling: if you snap off at the root, even more will grow

Yellow toadflax

- Yellow Flowers all at top
- Long leaf with one main stem

Houndstongue

• First year growth low to ground with purple coloration wavy leaves like a dogs tongue. If you kill year one, good deal. Second year, shoots up and produces seeds that won't quit.

St Johns Wort

- Mostly W Montana problem.
- Weedy growth with yellow flowers with translucent cell structures in leaf. Hold up to sun and can see through it
- Toxic to horses, cattle, sheep and goats.

Ventenata: New and BAD. added in July as noxious weed aka No African wiregrass

- Often mistaken for cheatgrass, it's ventenata.
- Has no feed content at all. It's 15% silica. In Elliston and Mac Pass and on Bison Range.
- Winter annual.
- Awn, when ripens, bends to 90 degree angle. Shallow root structure so can pull it out easy.
- Silvery shiny look in fall. Look for dark red to blackish node.
- Can look like hairgrass.
- The one chemical that shows promise is esplanade. With a four to six year residual.

Other Priority Twos

Common tansy

Flowering rush

Hawkweed

Oxeye daily

Tall buttercup

Priority Three

Cheatgrass: no great way to manage. Allow spring grazing... Cheatgrass: turns purple. The node and stems are dark where in ventanata just node is dark.

Hydrilla

Russian olive

Brazilian waterweed

Parrot feather watermilfoil

County designated weeds

Poison hemlock: fern like leaves, toxic to all

Garlic mustard: big after disturbances and toxic

Common mullein: eds favorite food!

Common burdock: rhubarb family

Musk thistle: Ed's second favorite food!

Scotch thistle: thorns all the way to the top and giant leaves

Black henbane: biennial

Contact: MT Dept of Ag

https://agr.mt.gov/Weeds

County Weed district which produces the weed booklets for a small price.

https://www.lccountymt.gov/weed-district.html

County Extension office

NWSFF Program Overview

Certified forage.

Noxious weed seed free forage program: preventing the spread of noxious weeds. Required on all public lands state and fed.

Began with 1995 Legislature.

Map of counties showing producers and counties without producers. Most without are in eastern MT. but that is changing.

The state provides approval. There is zero tolerance for noxious weeds with viable weed seeds or even fields that appear weedy or show poor crop.

Who's involved:

- Producers
- Inspectors
- Certified forage users including BCH members!

Approved markers: orange and blue strings on hay bales and stickers for pellets.

Note: not all pellets are weed seed free though all pellets through the production process are inherently weed seed free. But you still need the sticker on the pellet bag.

Only producers have stickers, not retail merchants who sell the pellets, Murdoch's for ex.

So it is incumbent on the consumer to look for the sticker when you buy pellets.

Agency partners: Forest Service, BLM, DNRC, MDT

Go to the website at MT Dept of Ag and search for certified weed seed free suppliers

https://agr.mt.gov/Noxious-Weed-Seed-Free-Forage

NAISMA: National Organization.

Each state has different rules: look on each website or look at NAISMA.org site.

https://www.naisma.org/