Weeds
A few tricks for successful I.D.

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Where do we stand today…

- Of the 3,000 native species of plants in Colorado, 500 (17%) have already been displaced by non-native weed vegetation.
Impacts to Colorado

- If Coloradoans do not take it upon themselves to stop and reverse noxious weed spread, then the future of agriculture, wildlife habitat and native range will be severely impacted.
Education is critical...

- Your interest and participation today can play a key part in reversing weed spread in Colorado if the knowledge acquired is put to use.
Nuisance Weeds

- Black Medic
- Blue mustard
- Chilean tarweed
- Common chickweed
- Common burdock
- Common mallow
- Common mullein
- Common purslane
- Downy brome
- Field bindweed
- Field dodder
- Flixweed
- Kochia
- Netseed lambsquater
- Pigweed
- Poison ivy
- Prickly lettuce
- Puncturevine
- Redstem filaree
- Russian thistle
- Stinging nettle
- Sweetclover
- White prairie aster
- Western salsify
- Western waterhemlock
- Yellow alyssum
Black medic

- A low trailing annual or short-lived perennial
- Flowers produce small pods which are kidney-shaped
Blue Mustard

- Annual from Russia
- Pale purple flowers
- Found in waste areas or cultivated land
- Distinctive odor
Chilean tarweed

- Also known as coast tarweed
- Annual
- Distinctive odor
- Occurs along roadsides, disturbed areas, dry open hillsides and fields
Common chickweed

- Annual
- Occurs in fields, gardens, lawns and ornamental plantings
Common burdock

- European biennial,
- It is found along roadsides, ditch banks, in pastures and waste lands.
- Frequently found in Gambles oak groves and old corrals
Common mallow

- Annual, winter annual, biennial or perennial
- Common in waste areas, gardens and cultivated land and old corrals
Common mullein

- Biennial from China
- Occurs along river bottoms, pastures, meadows, fence rows, waste areas and gravel soils
- Also occurs on rocky slopes and road cuts
Common purslane

- An annual with tear drop shaped leaves
- Has fleshy leaves
- Competes with dry land crops in cultivated fields
Downy Brome

- Annual or winter annual
- Also known as cheat grass
- Increases fire frequency on range
- Good feed up until it matures
Field bindweed

- Perennial
- Leaves are arrow-head shaped
- Flowers are bell shaped
- It can be found at elevations as high as 10,000ft
- 60 plus year seed life
- Forage value rivals alfalfa
Field dodder

- Parasitic annual
- Lacks chlorophyll
- Stems are yellowish, thread-like and twining
- Found starting along roadsides
Flixweed (Tansy mustard)

- Winter annual
- It is found growing in waste areas, fields, roadsides and other disturbed sites
- Poisonous qualities in feed. White haired animals become sensitive to sunlight causing skin to flake
- Can cause death in grazing animals
Kochia

- Annual, 1-6 feet tall
- Tolerates mag-chloride roadsides
- Can cause degenerative liver disease and photosensitization in cattle and sheep
- Ensilaged Kochia can be fed to cattle
Russian thistle

- Also known as tumbleweed
- Bushy annual
- Found in dryer regions
- Tolerates mag-chloride roadsides
Netseed lambsquater

- 1-6 foot tall annual
- It is common in cultivated fields, gardens, waste areas, barn yards and corrals
Pigweed

- Annual
- Spiney seed heads
- Lower stems are often red or red-striped
- It is commonly found in cultivated lands, gardens, waste lands, barn yards and corrals
Poison-ivy

- Perennial native
- Sub-shrub
- Distinctive leaves in groups of three
Prickly lettuce

- Biennial or winter annual
- Has a milky juice
- Found along roadsides, disturbed sites
Puncturevine

- Annual
- Prostrate, mat forming
- Yellow flowers
- “Goathead” seeds spread by tires, etc.
Redstem filaree

- Winter annual or biennial
- Competes with dry land crops
Stinging nettle

- A slow spreading perennial
- It is a native species that is confined mainly to shaded, moist areas
- It is a nuisance to recreationists because of its stinging hairs.
Sweetclover

- Annual, winter annual, or biennial legume
- Yellow and White variety
- Usually follows sunflowers 2nd year on disturbed sites
White prairie aster

- Native Perennial
- Can be very competitive with desirable vegetation in damp soil or irrigated pastures
Western salsify

• Biennial
• Has milky sap
• Also known as goatsbeard
Western Waterhemlock

- Extremely poisonous native
- Often, fatally mistaken for water-parsnip
- Rubber gloves are recommended when handling
- Violent symptoms followed by death in 20 minutes
Slichter 2001
Yellow alyssum

- Annual
- It is common in waste areas, foothills and dry croplands
Established Noxious Weeds (Stress Tolerators)

- A plant that is not native to North America.
- Can produce tremendous amount of seeds.
- May have a large creeping underground root system.
- Most times out competes crops or native range plants.
Leafy Spurge

Creeping perennial which reproduces by roots and seeds.

Root system that can reach 30 ft. depth.

Seeds pop 15 ft. distance.

Difficult to control.
Spotted knapweed

Leafy spurge in Montana
Russian Knapweed

- Deep rooted, creeping perennial, poisonous to horses, creates a monoculture, no forage value for wildlife.
Spotted knapweed

- Reduces wildlife carrying capacity by 90%.
- Decreases plant diversity by 85-100% depending on weed density.
- Decreases mammal diversity by 60-80%.
- Up to 2400 seeds per plant w/ 90% plus viability.
- 15 year seed longevity.
9,000,000 + acres in Montana
Diffuse knapweed

- Tremendous problem on the front range.
- Estimated acres infested in Colorado is about 400,000 as of 1996.
- Plant breaks off in the winter and tumbles spreading the seed as it goes. This gives the plant the ability to spread rapidly.
- Same management strategy as SK
Houndstongue

- Biennial
- Appears as a leafy rosette in its first year.
  - 2nd year stem is erect, stout, 1½ to three feet high, usually branched above.
- Clinging seeds a problem in wool.
- Toxic to the liver in grazing animals particularly in baled hay winter feedings.
Oxeye Daisy

- Reproduces by seed and spreading underground roots. Tends to create monoculture stands
- Escaped from ornamental and roadside plantings
- Still sold on the market today
- 15 year seed longevity
- Animals do not eat
Mayweed (False) Chamomile

- Annual reproducing by seed only.
- Prolific seeder (200,000 per plant) with several generations in one growing season.
- Blisters muzzle in cattle.
Seed production chart (one growing season)

1st generation
200,000 seeds

2nd generation
200,000 seeds
200,000 seeds
200,000 seeds
200,000 seeds
Chamomile in Crested Butte, CO.
Canada thistle

• Has a root system that goes down about 15 feet
• The most abundant noxious weed in Colorado
• Has been recorded growing at 13,000 ft. elev.
• Prefers wetland or riparian habitats but can grow in dry ground as well.
Musk thistle

- High seed producer.
- Seeds can survive in the soil for 8 years.
- Documented up to an elevation of 12,000 feet.
- Seeds can travel many miles on the wind.
Yellow toadflax

- Also known as “Butter & Eggs”.
- Escaped from flower beds and now has become one of the most threatening weeds in Colorado.
- Has been found above 12,000 feet
- Difficult to control with herbicides
Dalmatian toadflax

- Taller than YT. Broad clasping leaf.
- Single plant can produce up to 400,000 seeds, also spreads by roots.
- Found from lower elevation habitats up to 10,000 ft.
Hoary Cress (Whitetop)

- Hoary cress was first found in Colorado in 1911.
- First weed to appear in Spring
- Deep rooted perennial mustard
Perennial Pepperweed
(Tall whitetop)
Perennial pepperweed

2002 Quarterquad Survey
Distribution and Abundance
in Colorado

51,311+ infested acres

Distribution Legend:

0 acres/quarterquad
1 - 5 acres
6 - 50 acres
51 - 300 acres
301 - 5000 acres

Acreage estimates supplied by County Weed Supervisors and compiled by Colorado Department of Agriculture and Colorado State University
Potential Invaders

- Dyer’s woad
- Orange Hawkweed
- Purple loosestrife
- Yellow star thistle
Dyer’s woad

- Can be a winter annual, biennial or short-lived perennial
- Found along roadsides and disturbed sites
- Has become a problem in Utah
Orange Hawkweed

- Currently in Eagle, Jefferson and Douglas Counties.
- Creeping perennial
- Will grow in similar sites as oxeye daisy
Landscape of orange hawkweed in a mountain meadow.

Orange hawkweed leaves have bristly hairs.
Yellow Starthistle (annual)

- Yellow starthistle currently has invaded more than 40 million acres in California (37 times the area of La Plata County)
- As been found in north Ouray County and on top of Grand Mesa
- Causes chewing disease in horses, mules and burrows
Yellow starthistle

2002 Quarterquad Survey
Distribution and Abundance
in Colorado

157+ infested acres

Distribution Legend:
- Blue: 0 acres
- Light orange: 1 - 5 acres
- Pink: 6 - 50 acres
- Red: 51 - 300 acres
- Dark red: 301 - 5000 acres

Acreage estimates supplied by County Weed Supervisors and compiled by Colorado Department of Agriculture and Colorado State University
Purple Loosestrife (perennial)

- First found in Colorado 1978 in south Denver
- It grows to be 3 to 8 feet tall.
- Produces 3 million seeds per stem.
- Problem along ditches, streams and lakes.
Weeds impact agriculture

- Increase soil erosion
- Reduce yields
- Reduce product quality
- Cost time and money to battle
Negative impacts to Wildlife

- Our native wildlife has evolved over thousands of years using native species of plants for food and cover.
- When non-native plant species invade, many kinds of wildlife are unable to utilize exotic weeds for food and cover.
- The end result is fewer wildlife species in an area as well as fewer animals of the species remaining.
Don’t Delay…

- Manage small starting infestations early.
- Delayed action increases control costs.
- Delayed action reduces chances of eradication.