

March 2015 Meeting: Weed Project



Thank you!

Presentation Order

- Buttercup
- Chickweed
- Sheep Sorel
- Prunella
- Quack Grass
- Horse Tail
- Yarrow

Creeping Buttercup

Ranunculus repens

Other common names:

- Creeping Crowfoot, Sitfast, Devil's Guts, Granny Threads, Ram's Claws, Tether Toad
- Native to Eurasia, now invasive species elsewhere

- Three-part, flat, grooved leaves
- Bright yellow flowers \varnothing 2-3 cm with ~5 petals
- Stems can be tall: 20 cm, more



Creeping Buttercup

- Habitat
 - Fields, pastures, lawns, exposed soil.
 - Prefers wet soil
- Why is it considered a weed?
 - Spreads through lawns, gardens, other areas
 - Lateral stems run along ground, producing new nodes with roots
 - Forms dense mats with a network of overlapping horizontal stems and nodes, crowding other plants
 - Poisonous to livestock. Excessive skin contact can cause dermatitis.

Creeping Buttercup

- Control
 - Dig it out by hand with a sharp tool (shallow roots)
 - Apply three or more inches of mulch
 - Outcompete it with strong grass
 - Avoid bare patches to prevent germination
 - Smother with black plastic
- Benefits
 - The flowers are kind of nice?

Common Chickweed

Stellaria media

- Other common names:
 - starweed, star chickweed, starwort, winterweed, satinflower, and tonguegrass
- Emerges in cool wet weather of early spring.
- Produces flowers & seeds throughout the growing season.
- Each plant produces 2,500 to 15,000 seeds!
- Seeds that ripen in warm weather can sprout immediately.
- Late seeds sprout following spring.
- Unique, intertwined manner.
- Small white star-shaped flowers.
- Grows in a weave-like pattern.



Common Chickweed

- **Habitat:**
 - Occurs naturally in woodlands, meadows & waste places.
 - Needs disturbed ground to become established.
 - Common weed under trees & shrubs, in gardens & lawns.
 - Grows in full & part sun.
 - Shallow, fibrous root system, reproduces by seed, & grows in a thick mat as its stems spread over the ground.
 - Spreads quickly by sending out new roots from the nodes on the stems.

Common Chickweed

- Why is it a weed:
 - When in lawns or under shrubs, it can form thick quick-spreading mats that crowd out desired plants.
 - It's an alternate host for Yellow Witches' Broom - rust fungus that causes abnormal shoot growth on balsam fir (can be a serious problem in Christmas tree plantations).
- Benefits? YES!:
 - Used to hold soil in place, conserve water, & keep soil temperature constant.
 - Its presence decreases insect damage to other plants.
 - Important food for wildlife.
 - Has medicinal purposes and is used in folk medicine.
 - It's edible and nutritious as a leaf vegetable (with caution)

Common Chickweed

- Controls:
 - Control is difficult due to the heavy seeding.
 - Best controlled before it flowers, but time between germination & flowering is short (5 weeks).
 - Regularly removing the plant will eventually get rid of it.
- In gardens:
 - Key is to prevent seeds from developing and spreading.
 - Pull plants by hand.
 - Remove all plant debris from the area.
 - Cover exposed soil areas with organic mulch.
 - Soil solarization.
 - Pour boiling water onto the plant.

Common Chickweed

- In lawns:
 - Healthy sod is the best defense.
 - For few scattered plants, crush the chickweed slightly & then sprinkle soluble nitrogen fertilizer to burn leaves.
- Pull chickweed to expose the soil, aerate, spread fertilizer & weed killer over the affected area.
- Then seed & water. Leftover chickweed should begin to die while new grass replaces it.
- If chickweed becomes a widespread problem in a lawn, it can be controlled by chemical herbicides - not sure what is allowed in HRM.
- If you find you are unable to remove chickweed from garden areas, chickweed can be cultivated as a crop! 😊

Sheep sorrel

Rumex acetosella vulgaris

- Other common names:
 - Red sorrel, Sour weed, Field sorrel, Spinach dock
- Season - May-October
- Origin - Perennial weed native to Eurasia, British Isles
- Introduced to whole Northern hemisphere
- Habitat- Acid soil of fields, pastures, meadows, highway banks, often 1st species appearing on disturbed land
- Green arrowhead-shaped leaves
- Red ridged stem branching at top.
- Whorled spikes of reddish-green flowers, bloom early summer, becoming purplish.

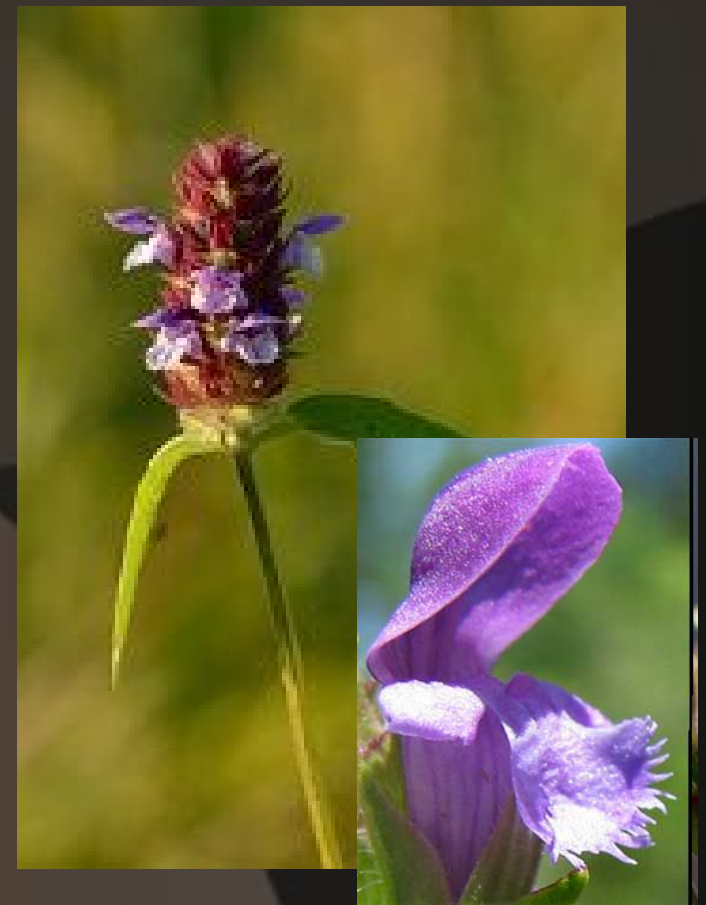


Sheep sorrel

- Reproduces by aggressive spreading rhizomes as well as by seed.
- Contains calcium oxalate, toxic to animals in large amounts. Humans eat sorrel in salad, soups, flavourings, garnishes, etc. The oxalate gives it a “sour” taste (sorrel means “sour”)
- - Certain butterfly larvae like American
- Copper butterfly depends on it as food.
- - Considered a noxious weed in places and difficult to control
- Resources: Wikipedia / Crockett, Lawrence, J: Field Guide To Weeds

Prunella vulgaris

- Common names:
 - Heal-all, Selfheal, Carpenter weed, Prunella
- Seasons: Blooms: June - August
- Origin: Perennial herb Europe, but introduced to most areas of the world.
- Habitat: moist areas, waste ground, grassland, woodland edges, and usually in basic and neutral soils



- Description: 5 to 30 cm (2-12") high, creeping, self-rooting, square (mint), reddish stems branching at leaf axis.
- Opposite, lance shape leaves 2.5 cm long, 1.5cm wide.

Prunella

- Flowers - two lipped, tubular, grow from club-like, square, whirled cluster in leaf axils.
- Propagation:
 - Seed and creeping stems that root at nodes.
 - Mowing causes horizontal spreading by rooting at nodes making it aggressive in lawns and flower beds.
- Benefits:
 - Edible in salads and drinks, and used medicinally as a tea or healing wounds.
 - May have antibacterial properties.
- Resources: Wikipedia / Crockett, Lawrence, J: Field Guide To Weeds

Quack Grass

Elymus repens

- Other common names:
 - Couch Grass, Twich Grass, Quick Grass, Devil Grass
 - Seasons:
 - Grows vigorously in spring & fall
 - Stages of life:
 - Flowers in late June & July
 - Seed matures in early Aug to Sept.
 - Seeds drop in Sept
 - Seeds overwinter on the ground.
 - Seeds can remain viable for 1 to 6 years
 - Quack Grass is a long-lived perennial
 - Propagation via rhizomes & reproduction by seeds
 - Rhizomes are slender smooth, pale white to straw coloured. 2.5 cm of new growth per day.
 - 25 to 40 seeds per stem are produced in green to bluish-green spikes which are 5 to 30 cm in length.
- Leaves are 9-10 cm long and finely pointed. They are flat, pale yellow to green in color.



Quack Grass

- **Habitat**
 - Fine textured soils with neutral to slightly alkaline soil
 - Moderate soil moisture
 - Can be found in sandy acidic soils
 - Drought tolerant and can withstand high quantities of salt
- **Season**
 - Flowers in late June to July and seeds mature in early August to Sept...

Quack Grass

- Why is it considered a weed?
 - Can cause extensive crop losses (19-57%) by absorbing nitrogen phosphorus & potassium.
 - A serious weed because it infests 37 different crops in 65 countries....
- Does it have any benefits?
 - Can be used for pasture or hay
 - Effectively reduce soil erosion
- How can it be controlled
 - Fall tillage effective in reducing amount of rhizomes
 - Herbicides

Field Horsetail

Equisetum arvense

- Other common names: scouring rush, Bottlebrush, Foxtail, Horse Pipes, Pipe Weed, Pine Grass, Snake Grass,
- Among the oldest plants in the world - ancient genus *Equisetum* was dominant plant group during the Carboniferous age more than 230 million years ago
- First vascular plant seen recovering after the 1980 Mount St. Helens eruption!



- 2 types of stems grow from tuber-bearing rhizome:
- Fertile stems emerge mid-April, begin spore production in early May, & die soon after. Resemble short asparagus sprouts, $\frac{3}{4}$ -1 $\frac{1}{2}$ " up to 1' tall.
- Unbranched and leafless, topped by a spore-bearing cone, up to 4" long.

Field Horsetail

- Sterile stems arise as fertile stems die back & persist until frost
- 6" - 24" tall.
- Stems are hollow, & covered with whirls of feathery leaves
- Look like green bottlebrush or miniature conifer



Field Horsetail

- **Habitat:**
 - Grow in landscape beds, fields, wooded areas & along roadsides.
 - Like moist soils, but can grow well in drier places.
 - Individual shoots come up from massive underground root system, up to 6' deep.
 - New plants can arise from both rhizome fragments & tubers.
 - Spreads underground & via spores
- **Why is it a weed?**
 - Spreads among cultivated plants, making for messy appearance.
 - Intense competitor for water & nutrients.
 - Poisonous to livestock (may be more poisonous in hay than in the field).

Field Horsetail

- **Benefits? YES!:**
 - Deposits of silica cover stems - plants used to scour pots, pans, & silver.
 - Planted deliberately as an ornamental.
 - Tubers of field horsetail are rich in starch & eaten by wildlife. Native Americans consumed young fertile shoots.
 - Numerous healing properties: anti-hemorrhagic, antiseptic, antibiotic, astringent, diuretic.
 - Rich in silica & mineral salts, has proven record as re-mineralizer of bones & connective tissues.
 - May accumulate more gold than any other plant (Up to 4 1/2 ounces of gold per ton of fresh plant material).

Field Horsetail

- Controls:
 - Cut back fertile stems in Spring before spore domes ripen
 - Avoid spreading the spores - all debris into sealed plastic bag.
 - Repeatedly remove sterile stems to deplete carbohydrate reserves & exhaust the rhizomes.
 - Soak the soil around the plants, slide trowel underneath each plant & lift out, then mulch with 6" of wood chips for a year.
 - Fill depressions in soil that may hold water / dig perimeter ditch to direct water away from garden.
 - Remove mulch & discard /destroy.
 - Repeated lime & fertilizer application:
 - Apply dolomite lime to the soil around weeds, & work into top layer of soil, water soil thoroughly.
 - Wait at least 2 weeks, & then apply fertilizer (synthetic fertilizers or fish, compost or aged manure).
 - Apply every 1-2 years until horsetail is eradicated. (Can take up to 5 years).
- Tilling can make the problem worse by spreading rhizomes fragments & tubers !
- Be selective about mulch you purchase!

Yarrow

Achillea millefolium

- Native to North America and Europe/Asia
- Ornamental uses: There are many cultivars



- Gordaldo, nosebleed plant, old man's pepper, devil's nettle, sanguinary, milfoil, soldier's woundwort, thousand-leaf, and thousand-seal
- Plumajillo (Spanish for 'little feather')

Yarrow

- Habitat

- Full sun, sandy or loamy soil

- Does it have any benefits?

- Health! “Herbal militaris”: Once used to treat wounds
- Food! Popular vegetable in the 1600s, or if you are a deer
- Beer! Used instead of hops in the Middle Ages
- Pest control! (If you're a bird.)

- Properties

- 1600 long-lived seeds per plant per year
- Rhizomes spread up to 10 inches per year



Yarrow

- So why is it a weed?
 - Just because it grows where people don't want it to.
- Control
 - Dig it out and pull it out: but only if you get it *all*
 - Roots can be deep, like a carrot
 - In a lawn, out-compete it with healthy grass

Thank you!