

Background: *Bromus Inermis*, a perennial, cool-season grass, was introduced in 1884 for erosion control and for use as a forage crop. It currently thrives throughout the U.S. Grasslands, savannas, and meadows are susceptible to invasion due to brome's preference of moist and sunny locations.



Invasive brome before treatment

Smooth Brome (*Bromus Inermis*)

Impact on Native Habitat: This cool season grass generally forms a monoculture over time without any management. Brome has little use for shelter and nesting cover by various birds and small mammals due to their inability to penetrate the dense mat of grass and evade predators. Brome is tolerant to a wide variety of conditions and spreads into degraded prairies, roadsides, ditches, and moist wooded areas. It grows aggressively; therefore, native species can quickly become overwhelmed.

Identification

Leaves: Leaves are flat and range up to 15mm in width. The length ranges from 4-14 inches. Brome's leaves are characterized by visible "M" or "W" shaped marks below the tip.



Stems: Brome's erect stems stand 1.5-4 feet high. They may grow singularly or in multiples. Sheaths are split. The hairless collar is light/yellow-green in color, and the ligule is commonly brown towards its base.



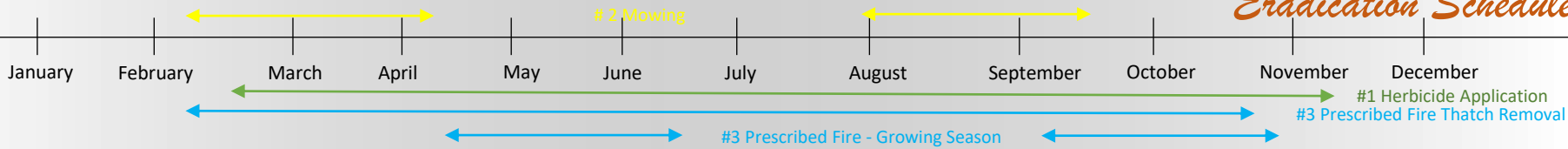
Flowers/Panicles: Flowers bloom from May-June and are yellow during this period. The flower panicles have 4-10 erect branches. Spikelets ranging up to 1.5 inches in length turn a purple-bronze color as the plant matures and sets seed.



Seeds/Rhizomes: Seeds are brown in color and range from 4-8 inches in length. The seeding period is during Summer. Reproduction is carried out through seeds as well as rhizomes. Rhizomes form new roots, which produce new plants.



Eradication Schedule



How to Kill: Eradication

- Mowing** – Mowing will not eradicate brome, but can prevent the plant from setting seed. This practice is primarily used to bring vegetation down to where it can be treated with herbicide.
- Foliar Spraying** – This involves spraying the leaves with a solution of properly labeled herbicide plus surfactant, which improves the chemicals ability to adhere and absorb into the plant. Fields of brome can be treated throughout the growing season. If brome is intermixed with some desirable species, wait till fall to treat when brome is still actively photosynthesizing while most native vegetation has set seed and went into dormancy. May take multiple treatments to remove species.

- Prescribed Fire**- This practice will not eradicate this invasive species, but may help to control its growth by removing excess biomass. May also be used to remove thatch prior to herbicide treatment. Timing of burning may set back actively growing plants to allow other species to prosper.



Invasive brome before (right) and after (left) treatment/eradication



State of Illinois
Illinois Department of Natural Resources