

Weed and Brush Control

Doug Shoup

KSU Extension Agronomist

Range and Pasture Weed Management

- **Brush and weeds are unwanted plants that can reduce production**
- **Causes of brush/weed invasion**
 - **Reductions in fire**
 - **Climate fluctuations**
 - **Seed transport by animals, wind, water, etc.**
 - **Decreased fertility in tame pastures**
 - **Grazing by domestic livestock**

Value of Forbs

Different root zone

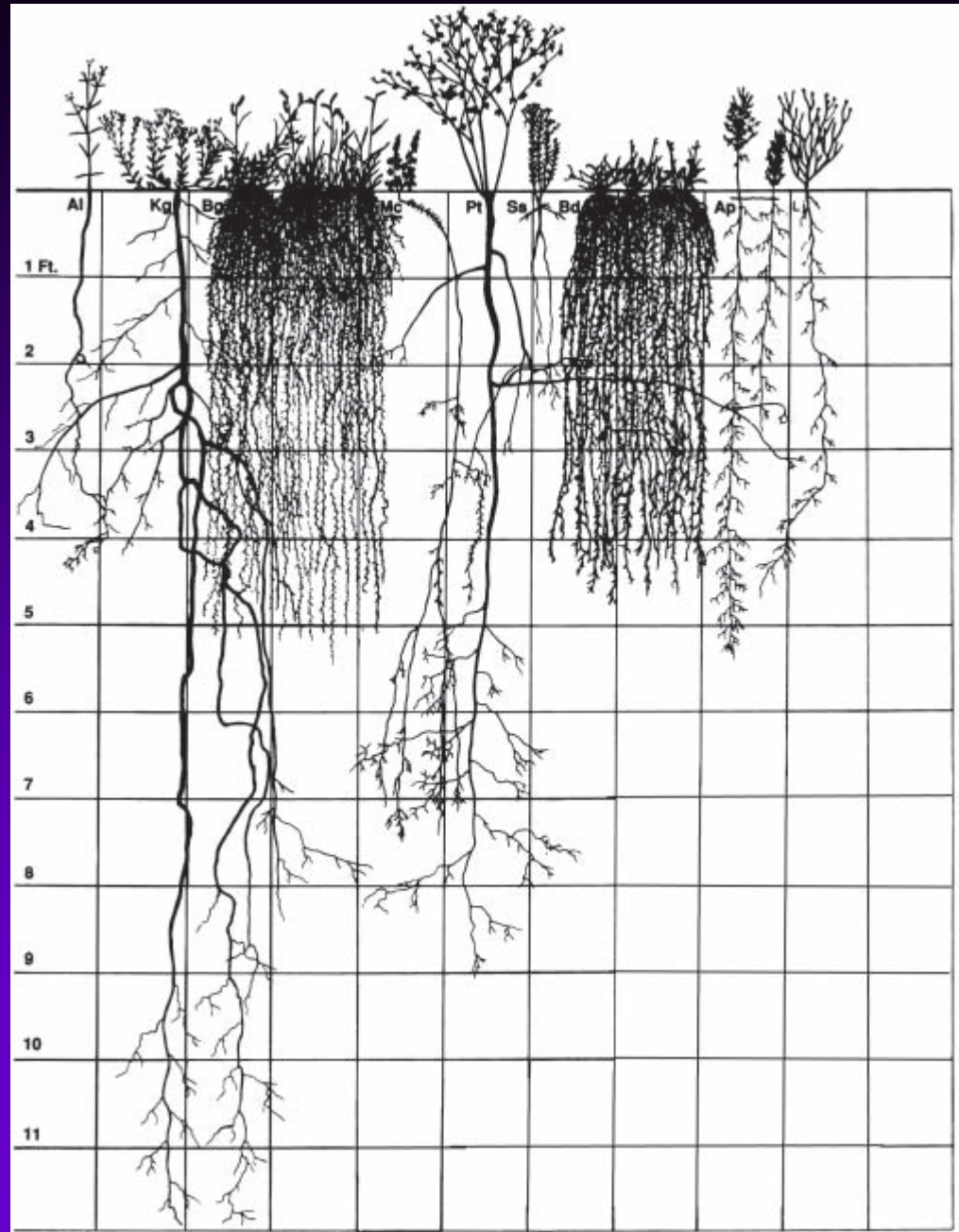
Decrease evaporation

Nitrogen fixation by
legumes

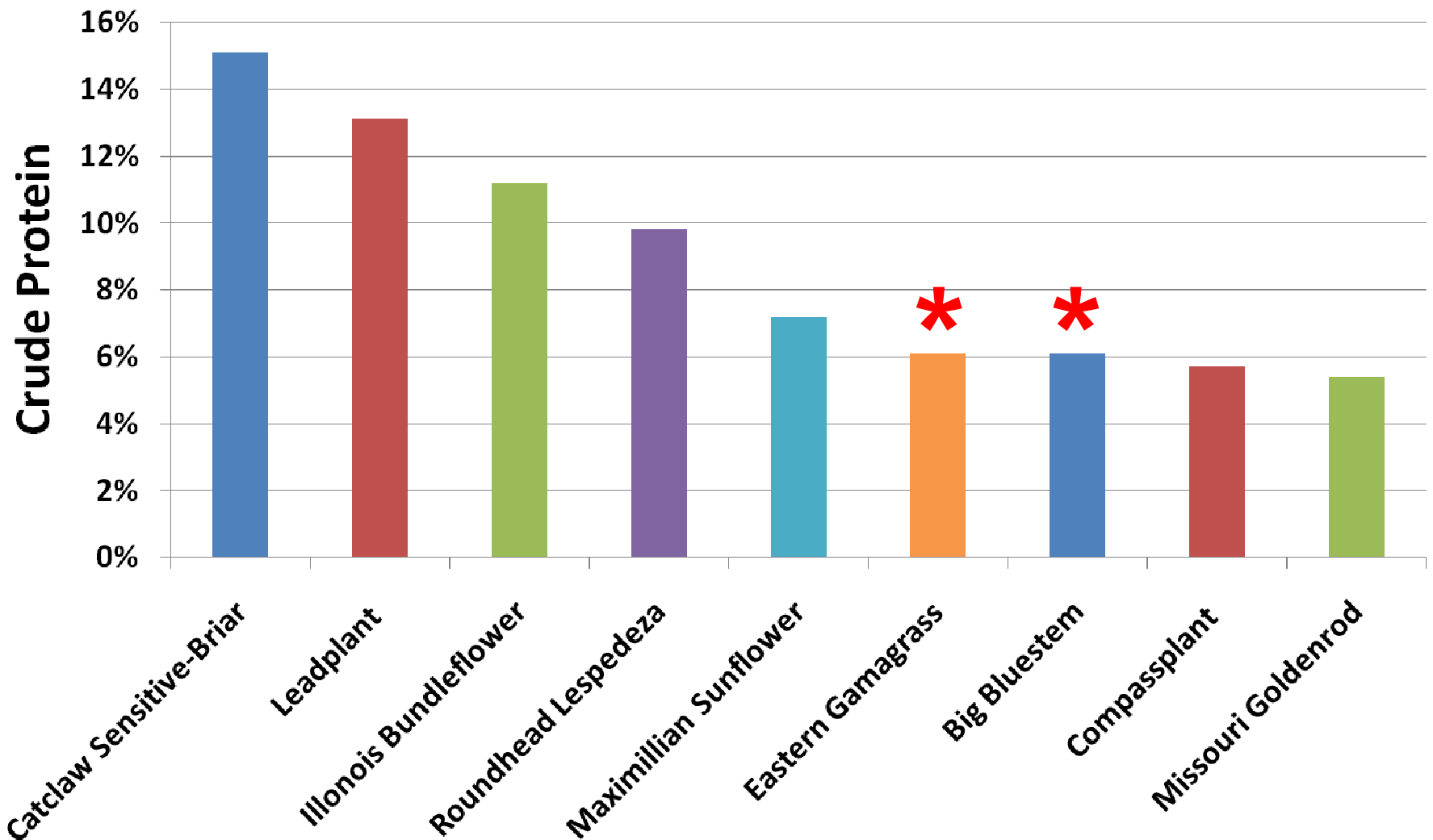
Wildlife habitat

Browse for sheep,
goat, deer, cattle

Add to production
and forage quality



Crude Protein (%CP)



Obermeyer and Blocksom, 2009 (Woodson and Wabaunsee Co.)

Control Options

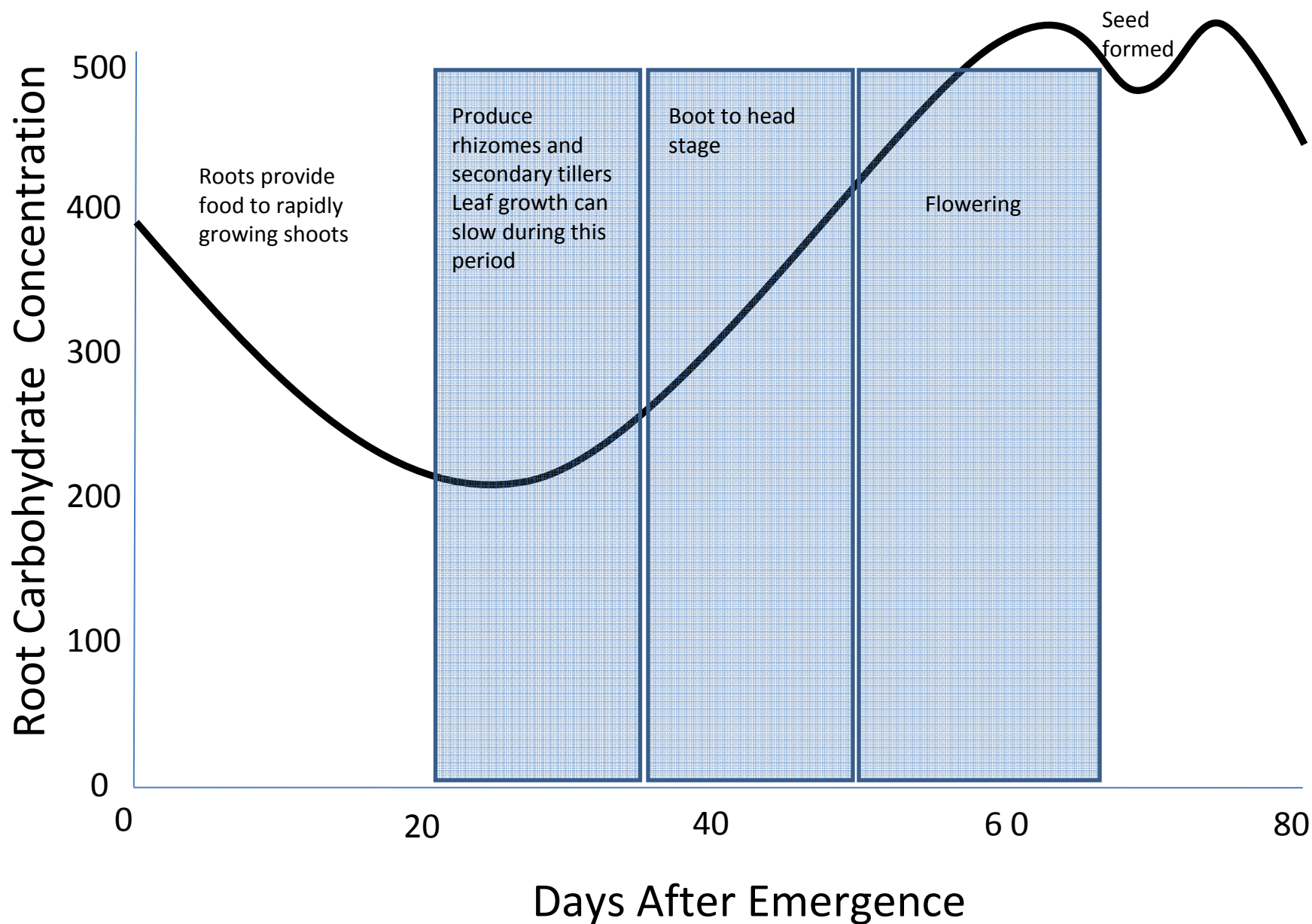
- Prescribed Burning
- Mechanical Control
- Grazing Management
- Chemical Control

Prescribed Burning

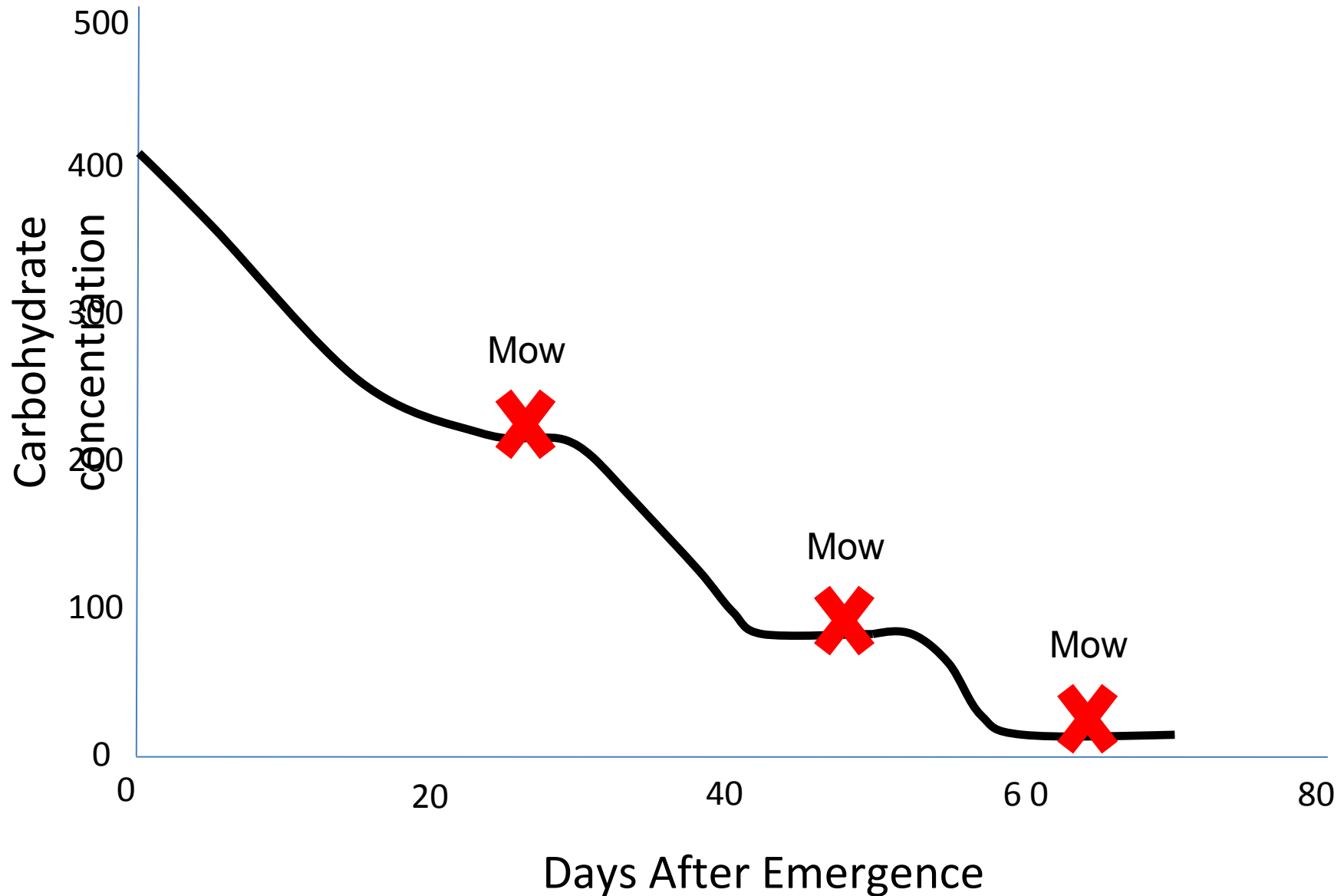
- Several weeds and brush can be easily controlled by fire
 - Must be small
 - Must have adequate fuel
 - Must burn completely to kill plant
 - Timing of susceptibility to fire



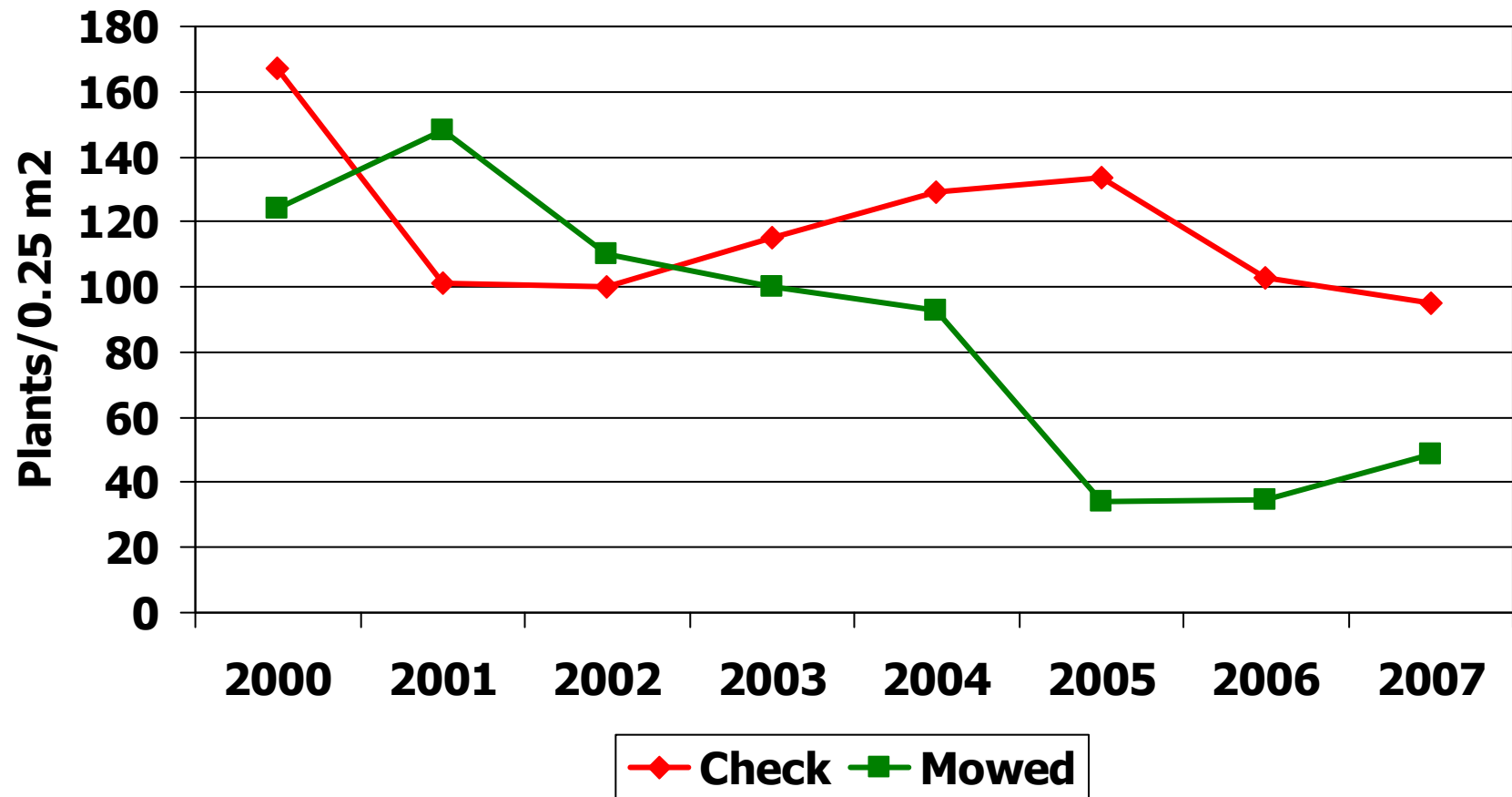
Mowing to Control Johnsongrass



Mowing to Control Johnsongrass



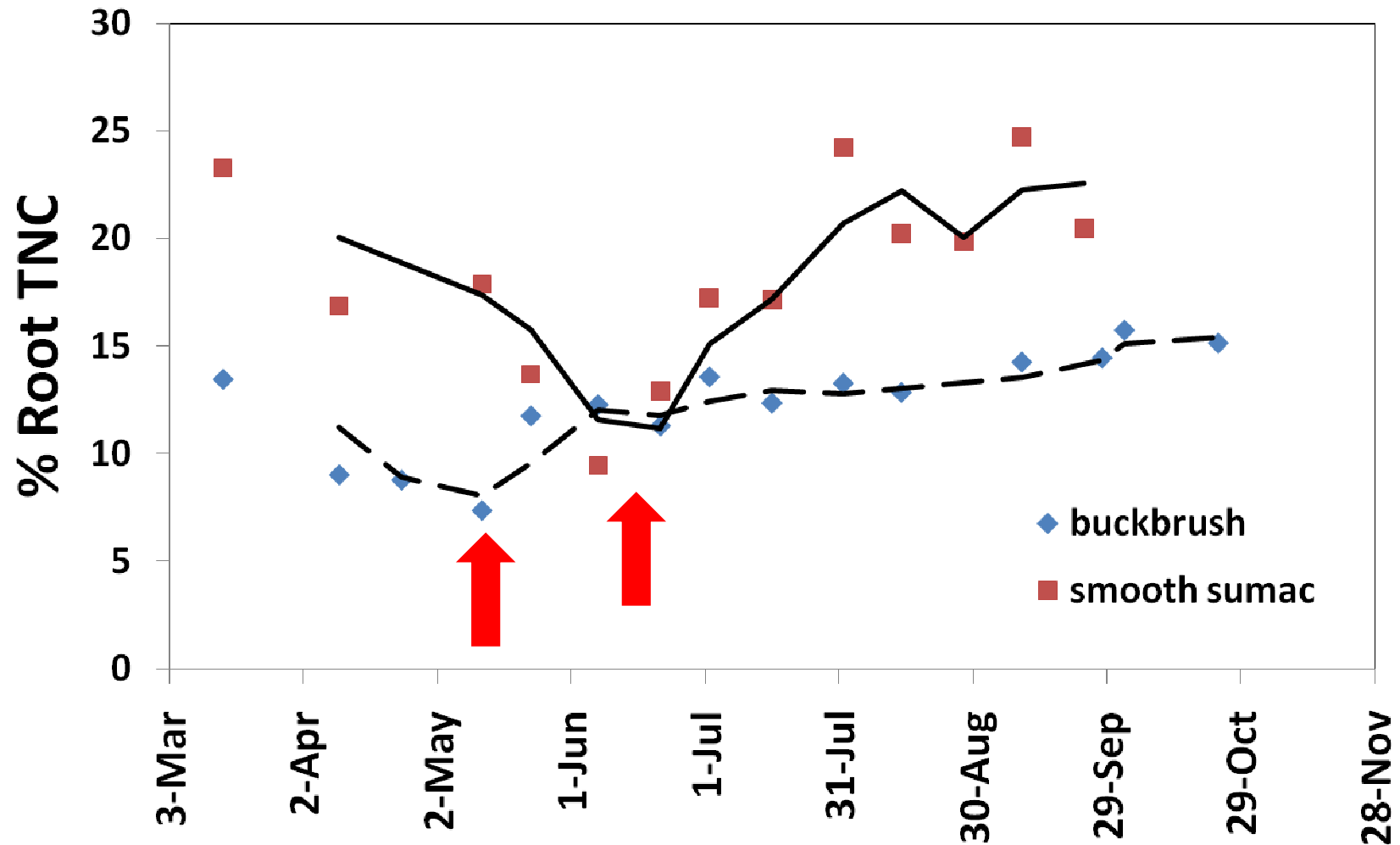
Mowing effects on sericea lespedeza density



Chemical Control

- **Soil applied**
 - Pellets or granular
 - Liquid
- **Cut stump/basal bark**
- **Foliar applied**
 - Broadcast spray
 - Spot spray

Timing of Foliar Chemical Control



Weed Control in Cool Season Grass

- Weeds can be suppressed by increasing health of brome or fescue
 - Soil pH, fertility, fall fertilization
- Beneficial legumes
 - Legumes can increase ADG
 - Decrease endophyte toxicity
- Herbicides that control weeds and brush also injure legumes
 - Exception: lespedeza can tolerate moderate levels of 2,4-D



Sericea Lespedeza

Remedy 1.5 pt/a (Pastureguard 2 pt/a)

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply from June 15 up to flowering

Escort 0.5 oz/a + 0.25% NIS

- 0.3 gram/gallon water + 2tsp NIS
- 7.5 gram/gallon water + 8oz NIS

Apply from at full bloom and beyond



Eastern Red Cedar

- Burning complete
- Cut at soil surface
- Tordon applied on soil 3cc/3ft of tree in April-May or Sep-Oct



Hedge

Remedy 1.5 pt/a

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply from June 15 thru summer

Pastureguard 2 pt/a

- 1.8 floz/gallon water
- 48 floz/ 25gallon water

Apply from June 15 thru summer



Honey Locust

Tordon 1 pt/a

- 0.64 floz/gallon water
- 16 floz/ 25gallon water

Apply from June 15 thru summer

Grazon P+D 8 pt/a

- 5 floz/gallon water
- 1 gal/ 25gallon water

Apply from June 15 thru summer



Smooth Sumac

Remedy 1.5 pt/a (Pastureguard 2 pt/a)

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply mid June for Sumac

2,4-D 2qt/a

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply mid June for Sumac



Buckbrush / Coral Berry

Remedy 1.5 pt/a (Pastureguard 2 pt/a)

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply in late May

2,4-D 2qt/a

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply in late May



Blackberry / Multiflora Rose

Remedy 1.5 pt/a (or Pastureguard 2pt/a)

- 1.33 floz/gallon water
- 32 floz/ 25gallon water

Apply at mature blooms or when new grow of canes are 18"

Escort 0.5 oz/a + 0.25% NIS

- 0.3 gram/gallon water + 2tsp NIS
- 7.5 gram/gallon water + 8oz NIS

Apply at mature blooms or when new grow of canes are 18"

Multiflora rose



Virginia Tech Weed ID Guide



Blackberry



Summary

- Many forbs that exist on pastures and rangelands have forage value to livestock
- Many weed problems can be solved with management
 - Best to use an integrated approach
 - Combine of burning, fertility, mechanical, grazing, and herbicide control
- There are several chemical control methods for both weeds and brush and are effective if applied at the appropriate time

A photograph of several Black-eyed Susan flowers (Rudbeckia hirta) in a field. The flowers have bright yellow petals and dark brown centers. They are surrounded by green foliage and some dry, brown grass. A semi-transparent white rectangular box is overlaid in the center of the image, containing the word "Questions?".

Questions?