













What is this grass?

21 22



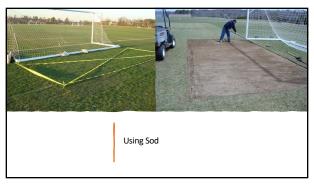


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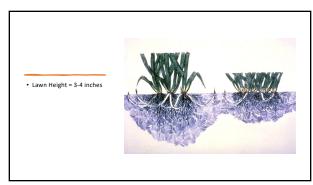
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## Dormant Seeding — some thoughts In February-March 2023, if there is no snow cover, and if weather allows, apply dormant seed to bare/thin spots, using walk-behind equipment that won't cause soil disruption and compaction. During the freezing and thawing cycles in late winter, the soil structure changes due to the swelling and shrinkage of soil particles, the volume of frost-susceptible soils increases, and pores expand due to ice expansion during freezing. These soil pores offer a great opportunity for seed/soil contact. Once the soil temperatures get consistently about 50 degrees Fahrenheit, the seed is in place to germinate. Dormant seeding offers a kick-start to the season, but seed rates should be slightly higher to compensate for any seed loss. Dormant seeding during the "off" season might also offer a benefit to turf managers who are struggling with labor during the busy season.

27 28

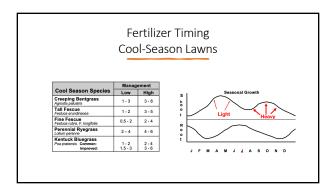




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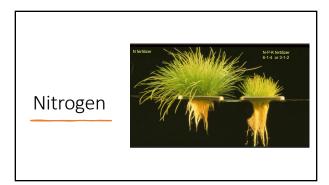


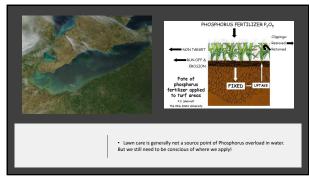






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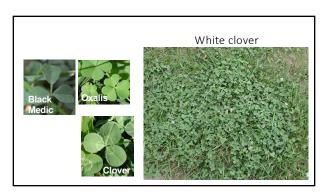


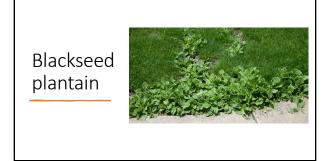
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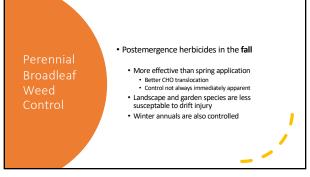
Removing broadleaf weeds from the lawn  $_{\mbox{\tiny Ref: Dr. Dave Gardner}}$ 













Broadleaf Herbicide Combination Products	2,4-D	2,4-DP	MCPA	MCPP	Dicamba	Clopyralid	Fluroxypyr	Quinclorac	Triclopyr	Carfentrazo	Sulfentrazo	Pyrfaflufen	Florasulam	Flumioxazir
Gordon's Amine 400														
Scotts Step 2, Turf Builder Weed & Feed, Gordon's Weed & Feed														
Gordon's Trimec, Preen Lawn Broadleaf Weed Control, Spectracide Weed Stop For Lawns Plus Crabgrass														
Preventer, Ortho Weed B Gon, BioAdvanced Weed Killer for Lawns, Ace Lawn Weed Killer Concentrate, Ferti-Iome														
Weed-Out Broadleaf Weed Control														

**Broadleaf Herbicide Formulations** 

- Granular
   More acceptance among consumers
  ...
  - Often formulated with fertilizers
  - · Most broadleaf herbicides are soil-active, root absorbed
- Liquid
   Far more effective
  - Better coating, more penetration

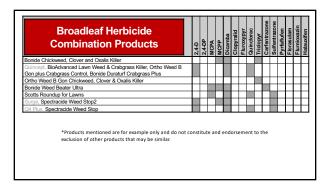
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47 48





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51 52

Annual Broadleaf Weed Control

- Spring Annuals such as knotweed
- Summer Annuals such as spurge
- Winter Annuals such as henbit
- All germinate at different times of year and come back each year from seed. Control before they set seed.



54 53





Winter annual broadleaf weed control

- Preemergence herbicide in September
- Is better than:
- Postemergence in November
- Is better than:
- Post emergence in April

Familiarize yourself with natural/organic products if interested in using them

57 58

What is Organic?

Natural Non-toxic Low impact Minimum risk

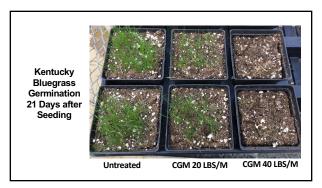
Non-selective Selective

Various plant oils
Horticultural Vinegar
Herbicidal Soaps
Pelargonic acid

Selective
Corn Gluten Meal
Chelated iron
A.D.I.O.S.
Halo

59 60





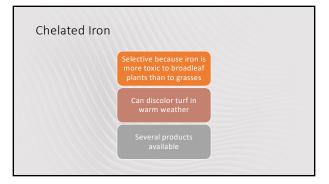


## How to Use Corn Gluten Meal

- Spring application for crabgrass
- Fall application for broadleaf weeds
- 20 lbs product per 1000 square feet

  - 10% N by weight 2 lbs N per 1000 square feet

63 64



Some Chelated Iron Containing Products

- Fiesta
- Iron X
- Natria
- All are 26.52% Iron

65 66

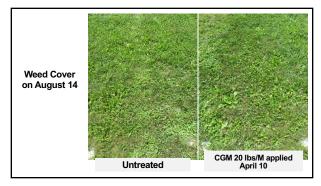


Fiesta

• Dandelion
• White clover
• Applied: Sept 20, Oct 11
• 4% Solution
• 5 gal per 1000 ft²

September 21 (1 DAI)

67 68





69 70





71 72



Remove perennial grasses from the lawn after they have greened up

73 74



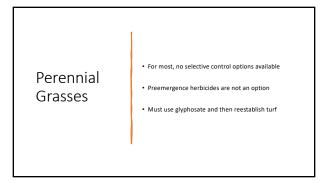


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77 78









81 82