Overcoming Stand Loss

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MU Extension

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Opportunities Brought on by a Drought

- **Thicken up a stand with desirable forages**
- **Include more legumes in pastures**
- **Convert about 10-25% of acres to a warm-season grass**
- **Develop a simple rotational grazing program**
- **Purchase (or keep) a reserve supply of feed when prices are favorable**

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Short-Term Drought Response

- **Plant an emergency crop in the fall**
  - **Turnips**
  - **Wheat, Triticale, Rye, Ryegrass**

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Turnips, Radishes, Swedes, Kale




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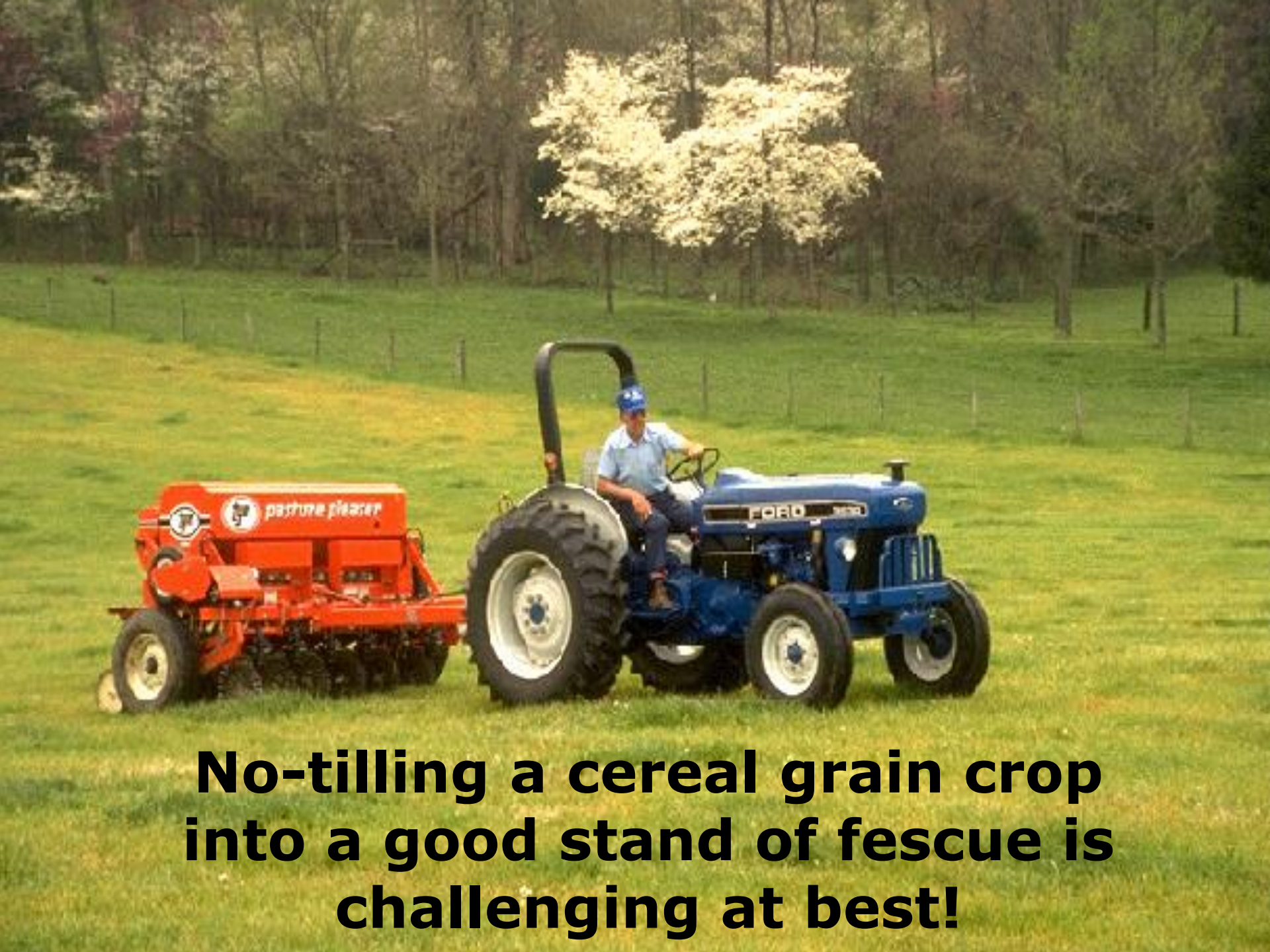
Short-Term Drought Response

- **Plant an emergency crop in the fall**
  - **Turnips**
  - **Wheat, Triticale, Rye, Ryegrass**
- **Plant an emergency crop in the spring**
  - **Spring Oats**
  - **Cereal Rye**

Spring Oats

- **Last-ditch attempt to get some spring forage out of a failed perennial field**
- **Spring oats are typically 10 days – 2 weeks later in maturity than winter wheat.**
- **Quality is comparable to wheat**
- **Tonnage is about 2/3 of wheat**
- **Seed 2.5-3 bu/ac for a solid stand**
  - **Cost - $14-23/acre**
- **Drill February - early March**
- **Producers often have trouble getting adequate growth when no-tilled into an existing cool season sod**



No-tilling a cereal grain crop into a good stand of fescue is challenging at best!

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Long-Term Drought Response

- **Overseed clover or lespedeza**
- **Thicken up the stand in the spring or next fall (cool season grasses)**
- **Later in season (May) plant annual sudan or millet, then address a permanent stand in the fall**
- **Convert to a warm season grass**
- **Insure fertility is up to par**
- **Controlled grazing**

Clover

- **Of 37 pasture systems compared, 7 of the 10 most profitable systems involved legumes.** **(Alburn Univ. Study)**
- **Cheaper than topdressing Nitrogen**
- **For each pound of N fertilizer, 3-5 pounds of lime is needed to offset the acidity created.**

Goal → 25-30% legume component in pastures

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Annual Lespedeza

- **Tolerates low pH & drought**
- **Most growth after late June**
- **Must reseed itself**
- **Mixes well with cool season grasses**
- **Less N fixation than clovers**

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Spring Cool Season Grass Establishment

- **Spring is second-best time**
  - **5-6 months behind fall seedings**
  - **Dry season ahead**
  - **Weed competition is great**
- **Drill February - early March**
  - **Avoid tillage**
- **Can sow with spring oats**

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Fall Cool Season Grass Establishment

- **Best time**
  - **True beginning of the CSG growing season**
  - **Roots get well established before the dry summer**
- **Drill late August – early September**

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Fall Grass Options

- KY 31 Fescue
- Friendly Endophyte Fescue
- Orchardgrass
- Annual Ryegrass

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Annual Ryegrass

- **A good fit for thin fescue**
- **Rapid fall growth**
- **Retains green tissue nearly all winter**
- **Remains vegetative through May**
- **Reproduces by seed**

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Annual Ryegrass Cultivars

- **Diploid**
  - **Most common**
  - **May be more winter-hardy than tetraploids**
- **Tetraploid**
  - **Wider leaves, more robust**
- **Italian**
  - **Requires chilling to seed**
- **Westervold**
  - **Does not require chilling to seed**

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Annual Ryegrass Cultivars

- **Marshall (Westervold Diploid)**
- **DH3 (Italian Tetraploid)**
- **Passerel (Westervold Diploid)**
- **Abundant (Tetraploid)**
- **Tetrastar (Tetraploid)**

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Forage Establishment

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Grass Establishment Techniques

Method 1: overgraze → fertilize without N → seed early → flash graze early grass growth

Method 2: retard or kill pasture growth with chemicals (Gramoxone or glyphosate) → fertilize without N →seed early

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Controlling Competition

Grazing can be useful or detrimental

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No-till – A Reliable Choice

- Able to keep existing sod
- Conserves moisture
- Sod competes against weeds
- Greater success than broadcasting
- Less cost and erosion than conventional tillage
- Don’t plant too deep

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Many Seeds Planted Too Deep

- **Most small seeded grasses and legumes should be planted at 1/8-1/4 inch below the soil surface**
- **Depth control on many no-till drills is poor**
- **Seeds planted too shallow have a better chance than those planted too deeply**

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Rental Drills

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Recommended Seeding Rates

Forage	Renovation (lbs PLS / Ac)		Typical Cost / Acre For Interseeding ($)
	Interseeding into Grass Pastures	Solid Stand Rates No-till Drilled	
Fescue / Orchardgrass	6-12	15	6.50 – 8.00
Ann. Ryegrass	10-15	25-30	6.00 – 9.00
Cereal Rye	30-60	110-140	11.40-22.80
Wheat	30-60	100-130	7.20 – 14.40
Turnips	2	2-4	4.00-5.00

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Alternative Establishment Methods

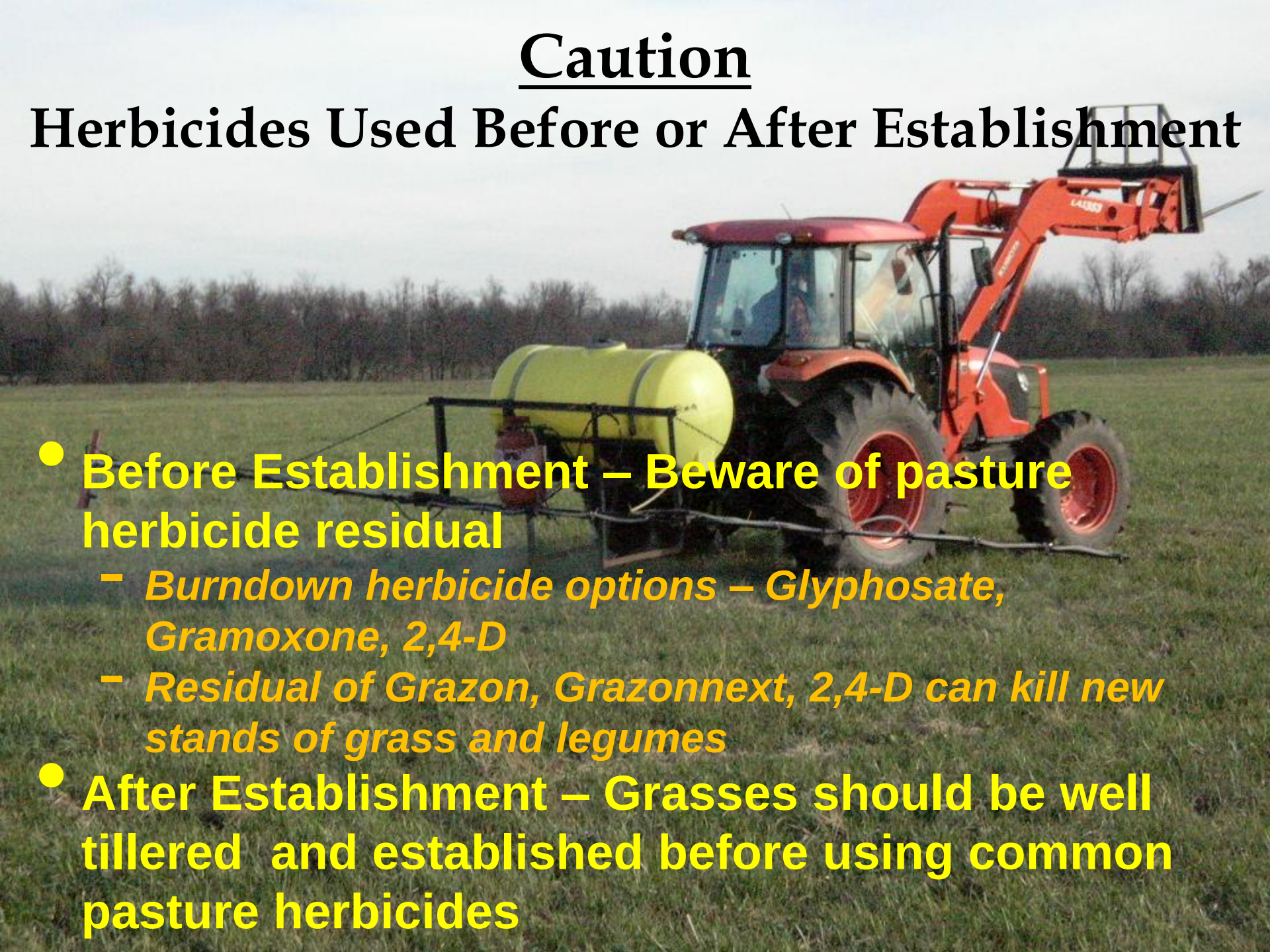
General Weed Control

Spring/Summer

- **2,4-D**
  - ***Ragweed, Thistles, Plaintain, Croton, Perilla Mint, Spiny Pigweed***
- **Grazon P+D/Hired Hand/Gunslinger**
  - ***Ragweed, Thistles, Horsenettle, Knapweed, Poison Hemlock, Perilla Mint, Spiny Pigweed***
- **Remedy Ultra/Relegate/Clear Pasture**
  - ***S. Lespedeza, Ironweed, Blackberries***
- **GrazonNext**
  - ***Ragweed, Thistles, Horsenettle, Mullein, Dock, Chickory, Nightshade, Locust, Croton, Knapweed, Wild Carrot, Plaintain***

Caution

Herbicides Used Before or After Establishment



- **Before Establishment – Beware of pasture herbicide residual**
  - ***Burndown herbicide options – Glyphosate, Gramoxone, 2,4-D***
  - ***Residual of Grazon, Grazonnext, 2,4-D can kill new stands of grass and legumes***
- **After Establishment – Grasses should be well tillered and established before using common pasture herbicides**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Questions?
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