A Truly "Green" Lawn

Justin Curley Purdue Extension Delaware County



Confessions of a Golf Course Superintendent....

- Greener is better
- Weeds are ugly
- Things need to look perfect!









Part 1. How to optimize turf health utilizing no chemicals or synthetic fertilizers.

Part 2. Re imagining the home lawn





How did we get here?

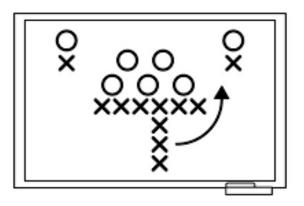




Part 1. Optimum Turf Vigor without synthetics

The best defense is a good offense

- Right Grass species
- Healthy Soil
- Cultural practices





Basic Needs of Turfgrass

- Water
- Soil
- Sunlight
- Air
- Nutrients









Cool Season Turf Grasses

- Kentucky Bluegrass
- Perennial Ryegrass
- Fine Fescues
- Creeping Bentgrass
- Turf Type Tall Fescue











Soil

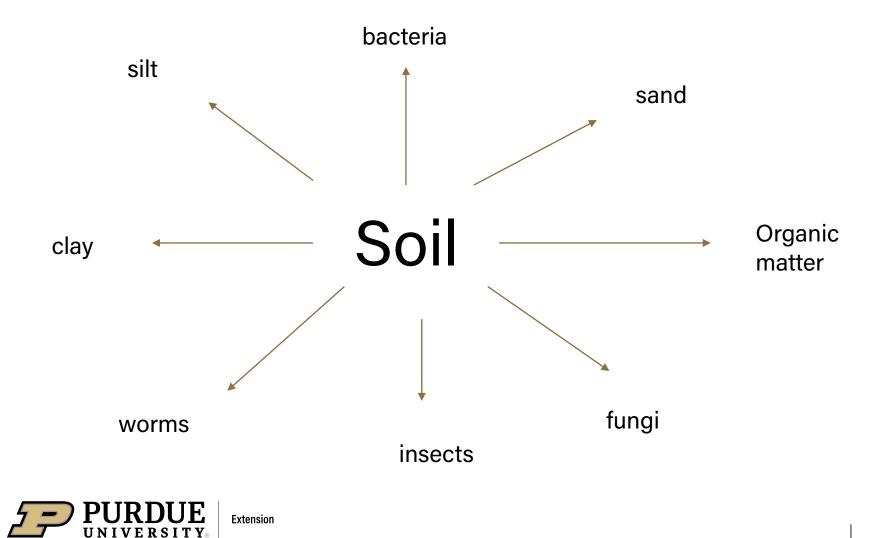
Know your soil

- Soil testing
- Soil Structure
- Ph
- Soil Fertility

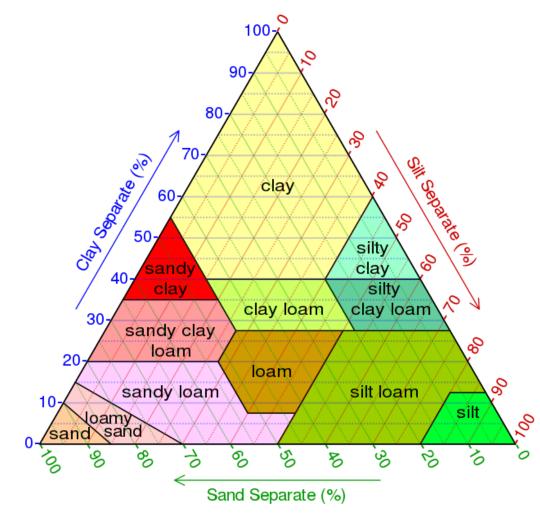














Turf Fertilization

- Nitrogen
- Phosphorus
- Potassium
- Micronutrients

Table 3. Annual Nitrogen Requirement							
Grass Species	Low Maintenance	High Maintenance					
Turf-type tall fescue	1 to 2 pounds	2.5 to 4 pounds					
Fine Fescue	1 to 2 pounds	2.5 to 4 pounds					
Perennial ryegrass	2 to 3 pounds	3.5 to 5 pounds					
Kentucky bluegrass	2 to 3 pounds	3.5 to 5 pounds					



Organic Turf Fertilization options

Organic Fertilizer	% N	% P	% K	Lbs product for 1# N
Alfalfa Pellets	5	1	2	20
Blood Meal	10	1	0	10
Bone Meal		15	0	33
Composted Chicken Manure	.5	.3	.5	200
Cottonseed Meal	3	1	1	33
Feather Meal	12	0	0	8
Fish Pellets	7	7	2	14
Composted Cos Manure	.5	.3	.5	200
Greensand	0	1	6	na

Chart courtesy Ohio State Univ.



Organic Turf Fertilization options

Organic Fertilizer		% P	% K	Lbs product for 1# N
Kelp Meal	2	1	3	50
Organic Pellets (various ingredients)		6	6	16
Corn Gluten Meal		0	0	10
Seabird Guano		8	2	8
Shellfish fertilizer	3	3	1	33
Soybean Meal		1	3	14
Erth Rite		3	2	33
Milorganite		2	0	16
ReVita Compost	3	4	3	33

Chart Courtesy Ohio State Univ.



Turf Fertilization

Fertilization Timing

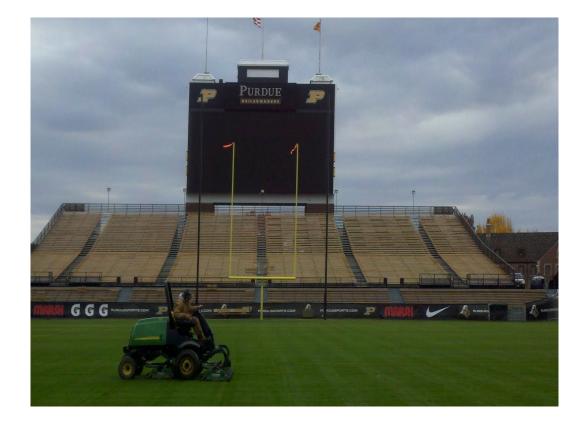
- Early Fall •
- Late Fall ۲
- Late Spring/Early ۲ Summer





Mowing

- The goal of your mowing regiment should be to maintain a healthy turfgrass plant.
- Every time you cut your grass you are injuring the turf plant. Let's learn to minimize the injury and the corresponding stress on the plant, which will result in a healthier, greener lawn!

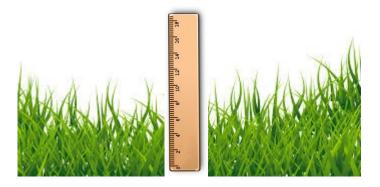






Height of cut

- Most common lawn grasses prefer a higher height of cut, usually at least 3".
- This leaves enough leaf material present for the plant to photosynthesize at an appropriate rate to ensure plant health.

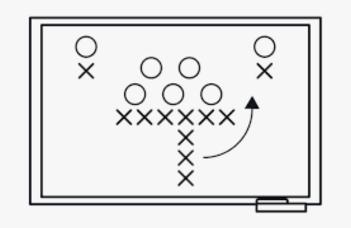




Controlling Weeds in turf without pesticides

Have a plan!

- Work to address cultural issues ٠
- Identify your problem weeds ٠
- Pre-emergence control is easier ٠





Controlling Annual Grassy Weeds in turf

Why do I have weeds in my turf?

Soil ph

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Shade

- Compaction
 - Excessive moisture
- Cultural practices
- Poor fertility





Annual Weeds in turf

What are "annual weeds?"

• Annual weeds are weeds that germinate from seed, mature and die in under 12 months.

Winter Annuals

• Germinate in the fall, overwinter as plants, mature in the spring, flower set seed and die during the summer.

Summer Annuals

• Germinate in the spring, grow throughout summer, flower and set seed in late summer, die in the fall.



Weeds in turf

Corn Gluten Herbicidal Soaps Salt and Vinegar based herbicide







Weeds in turf

Best Practices for controlling weeds organically

- Pre emergent control is best
- Mow turf at least 3" high
- Time mowing to prevent weeds from going to seed
- Spot spray and overseed to encourage turf density
- Maintain ideal turf fertility



RE IMAGINING THE HOME LAWN



What is the purpose or function of your home lawn?





Re Imagining the Home Lawn





Re Imagining the Home Lawn

- Groundcovers
- Prairie Grasses
- Plant a Tree or Trees
- Flower Beds
- Vegetable Garden
- Very low maintenance turfgrasses such as fine fescues or buffalograss







Groundcovers

- Creeping Thyme •
- Moss \bullet
- Pachysandra •
- Creeping Jenny
- Liriope \bullet
- Periwinkle (vinca minor) •
- Phlox \bullet
- English Ivy ullet
- Miniature Brass Buttons •
- clover



THANK YOU!!!!!

Justin Curley Purdue Extension Delaware County



Extension