

Soil Sample Collection

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What does my turf really need ?



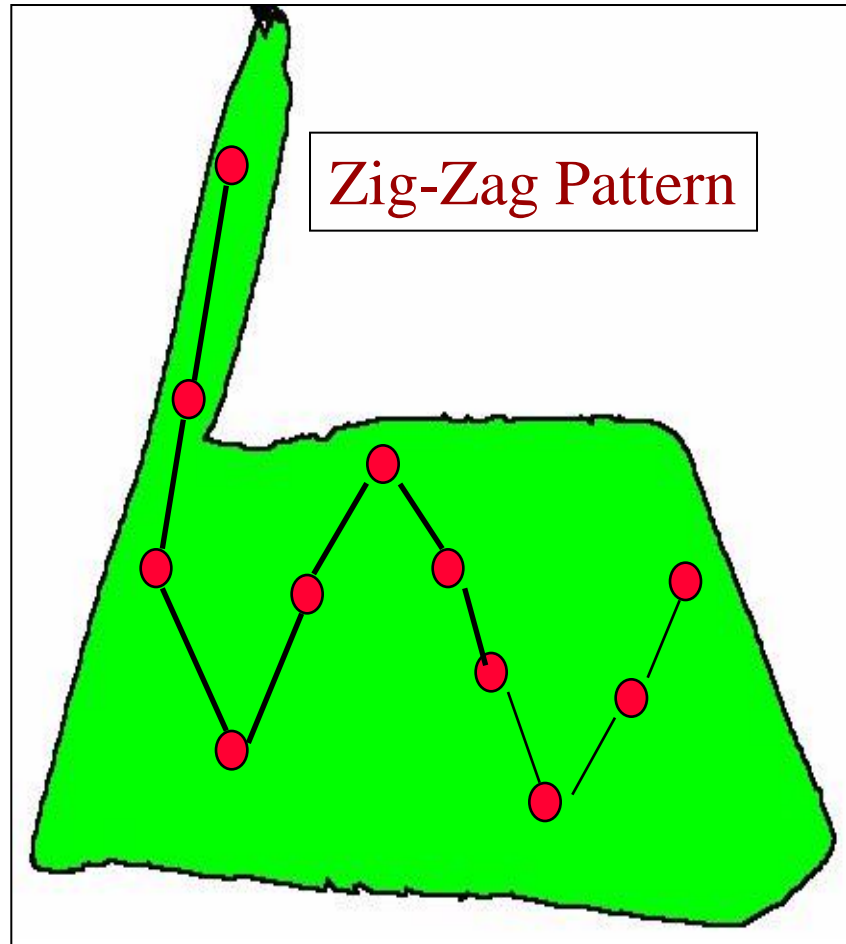
1. Get a soil test
2. Check pH, P, K
3. And

Soil Sampling

- To determine average nutrient levels take 7-10 cores about 6” deep in a zig-zag sampling pattern across the area.



Typical soil-sampling pattern



When to take soil samples?

- For most areas, take soil samples every 2-3 years.
- Take samples about the same time of year to reduce variation in the results due to seasonal fertility fluctuations.

Soil sample collection instructions

- Sample each area separately and label the samples with the area ID.
- Mix all samples from an area together to make a composite sample.
- Be sure the soil is DRY and debris free before submitting sample.
- Soil tests are free to Arkansas residents.

Submitting the soil sample

Take your soil sample to your local county extension office with the following information:

- Area ID for each sample
- Previous crop grown
- Crop to be grown
- Irrigation Source
- Previous Lime application history

A basic routine soil test includes:

- pH
- **PHOSPHORUS (P)**
- **POTASSIUM (K)**
- **CALCIUM (Ca)**
- Magnesium (Mg)
- Sodium (Na)
- Iron (Fe)
- Sulfate (SO₄)
- Manganese (Mn)

- Copper (Cu)
- Zinc (Zn)
- Boron (B)
- Salinity
- ECEC
- Fertilizer recommendations for up to 3 years

Cooperative Extension Service
Soil Analysis Report
Soil Testing And Research Laboratory
Marianna, AR 72360
<http://www.uark.edu/depts/soiltest>

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Date Processed:
Field ID:
Acres
Lime Applied in the last 4 years:
Leveled In past 4 years:
Irrigation:

Producer and Sample ID

County:
Lab Number:
Sample Number:

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	9	18	Very Low
K	60	120	Very Low
Ca	560	1100	
Mg	45	90	
SO4-S			
Zn			
Fe			
Mn			
Cu	1.2	2.4	
B	0.3	0.6	
NO3-N			

Nutrient concentration and rating scale

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.5	---
Soil EC (1:2 soil-water)		umhos/cm
Soil ECEC		cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture		

Soil pH

Crop type and fertilizer recommendation

3. Recommendations (Notice: State and local regulations may vary)

Crop	N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (203)						
Crop 1	40	120	160	0	0	0	4000
Crop 2	60	100	120	0	0	0	4000
Crop 3							

Lime recommendation

4. Crop 1 Notes:

Apply the recommended rates of N, P, and K at the time of establishment.

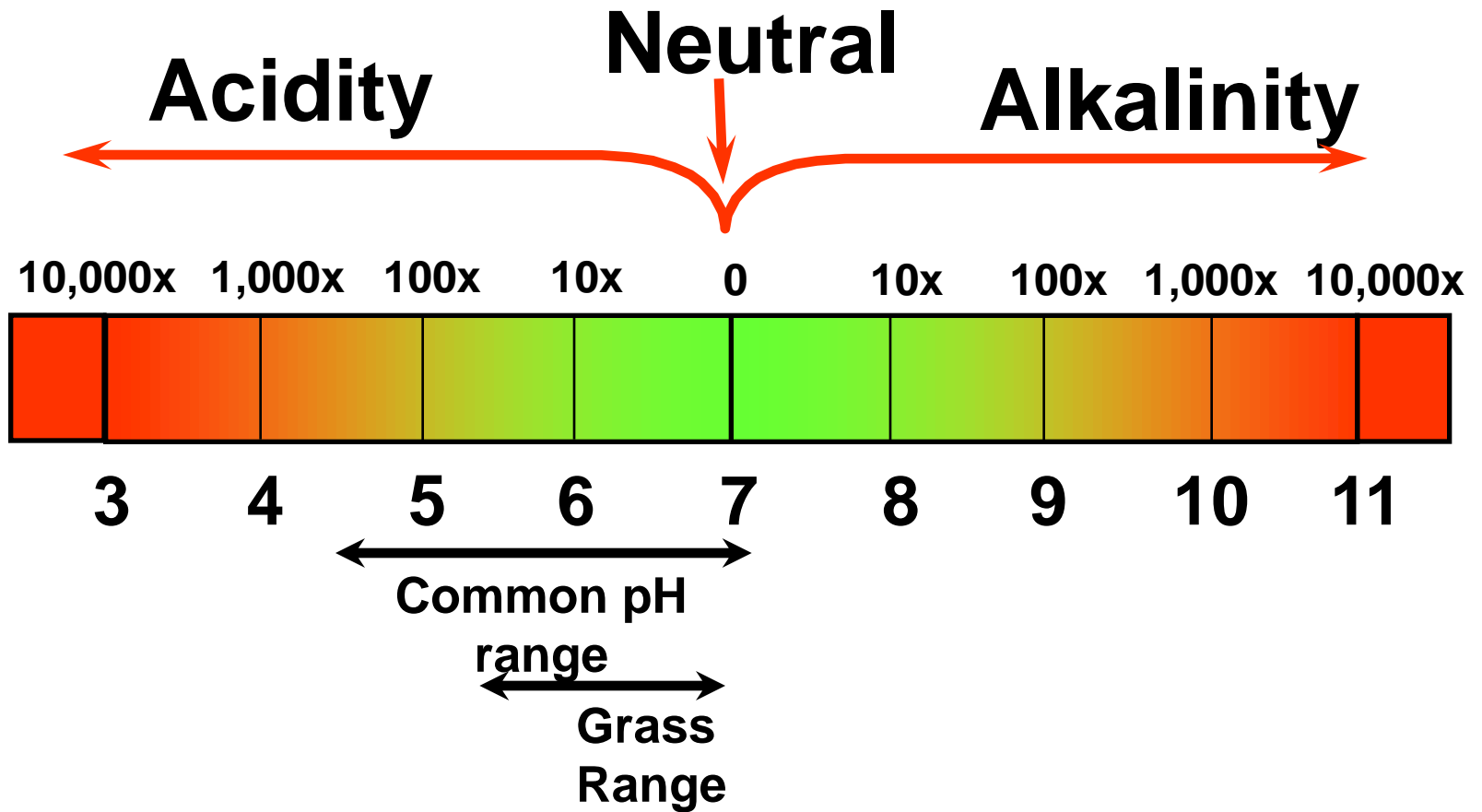
Notes for fertilizer management

5. Crop 2 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

6. Crop 3 Notes:

Soil pH Ranges



How Soil pH Affects Availability of Plant Nutrients

