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Rolling Prairie Extension Upcoming Events

March

19 YQCA Training—Howard Extension Office, 6:30 p.m.

22 Regional 4-H Club Day—Madison

April

24 YQCA Training—Sedan Fairgrounds, 7:00 p.m.

18 **Good Friday—Extension Offices Closed**

20 **Easter**

May

1 State Nominations Due for 4-H Market Beef

11 Fun Fish Clinic—Sedan

26 **Memorial Day—Extension Offices Closed**

June

1 Horse ID Papers Due (Use New Form)

4-6 4-H Discovery Days—Manhattan

15 State Nominations Due For Commercial Heifer, Market Hogs, Lambs, and Meat Goats

July

4 **Independence Day—Extension Offices Closed**

16-19 Elk County 4-H Fair—Howard

23-26 CQ County Fair & Rodeo—Sedan



Old World Bluestems

Two species of Old World Bluestems commonly called OWB are Caucasian bluestem and yellow bluestem. There are several improved varieties of OWB, including King Ranch, Plains, WW B Dahl, WW Spar, and WW Iron Master bluestem. Even though they share the common name 'bluestem,' OWBs are not closely related to native bluestem species such as big bluestem, little bluestem, and broomsedge bluestem.

Old world bluestems are warm-season perennial grasses native to Asia, Africa, and Australia. They were introduced into the U.S. for conservation purposes and as a forage crop for haying and grazing in the early 1900s, with seedings in Kansas probably occurring between the 1930s and 1960s. They are adapted to high calcareous and high pH soils and do well on any well-drained soil. They are very competitive with native species and are prolific seed producers. The invasive nature and relatively low palatability of quickly maturing OWBs allow them to increase once established.

Differentiating between OWB species without seedheads present is challenging because some vegetative characteristics are rather similar, with some range of variation within each species. OWBs are bunch grasses, but yellow bluestem may eventually form a sod with continual heavy defoliation. They stand out in the landscape due to their light green color during the growing season and their light straw color when dormant. Leaves are thin (less than 0.25 inch) and pointed, up to 12 inches long, with sporadic long hairs at the base of the leaf. Leaf sheaths are hairless, and ligules are a hairy membrane.

Seed heads begin to emerge in mid-June to early July, which is earlier than many native species. Plants reach 1.5 to 3 feet in height by mid-summer. Nodes of Caucasian bluestem are purple-tinged and may have short hairs. Inflorescences are typically 2.5 to 6 inches long. Yellow bluestem has 4 to 12 'fuzzy' branches about the same length, arranged in a fan that originates toward the base

of the seedhead. Caucasian bluestem has several more reddish-purple branches that get shorter toward the top of the seedhead.

Both glyphosate and imazapyr (Arsenal, others) can control OWB. Current recommendations include mowing or burning followed by a broadcast application of glyphosate (3 lb ae/A) or imazapyr (0.5 lb ae/A). Ideally, herbicides will be applied before an infestation is widespread, which would allow spot treatment with a 2.5% (5 pints/25 gal) glyphosate solution or 1% (2 pints/25 gal) imazapyr. Also, prescribed burns during the growing season (late July and August) with abundant fuel and slow-moving fires have been able to significantly reduce OWB in native stands.

Re-establishing desirable vegetation may be a challenge with either glyphosate or imazapyr. Native vegetation, especially many native tallgrasses, seems to be more tolerant of imazapyr, which may allow for the survival of many desirable plants if treating invading OWB stands

Fair Dates Are Set

It's Fair Season again. The dates are set for the county fairs in Elk and Chautauqua Counties, the Interstate Fair and Rodeo at Coffeyville, and the Kansas State Fair. The dates are listed below.

- July 16-19** Elk County 4-H/FFA Fair in Howard
- July 23-26** Chautauqua County Fair and Rodeo in Sedan
- August 1-2 Longton Fair
- August 10-16** Interstate Fair & Rodeo at Coffeyville
- September 5-14** Kansas State Fair in Hutchinson

2025 Bluestem Pasture Survey

The Kansas Department of Agriculture is seeking feedback from Kansans for the 2025 Bluestem Pasture Survey to collect information on native tallgrass pasture use and practices. The survey is administered through the K-State Land Use Survey Office and will be open through April 30, 2025.

The Bluestem Pasture Survey provides reliable, accurate information to Kansas ranchers and the agricultural community as a whole. The survey asks about native tallgrass pasture availability, leasing rates, and fencing rates, and should only take about 15 minutes to complete.

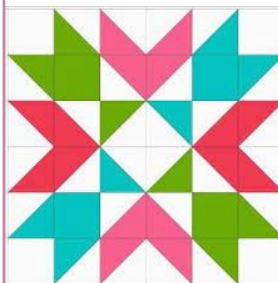
The 2025 Kansas Bluestem Pasture Survey is voluntary, anonymous and confidential. The survey is a collaborative effort between the Division of Agriculture Marketing at the Kansas Department of Agriculture and the K-State Land Use Survey Office within the Department of Agricultural Economics at Kansas State University.

The 2025 Bluestem Pasture Survey collects information on native tallgrass pasture availability, leasing rates, and fencing rates in 14 Kansas counties: Butler, Chautauqua, Cowley, Elk, Greenwood, Woodson, Chase, Coffey, Lyon, Marion, Morris, Geary, Pottawatomie, and Wabaunsee.

To complete the survey, please visit: <https://>

Chautauqua County

Red Bud and Barn Quilt Tour



April 18-20

**Red Bud Tour
Art & Photography Show**

Bake Sale

Saturday, April 19

Kurtis Art Center

**Bring your art to display
the weekend before.**

**Contact: Kathryn Ebersole
at Katz on Main Street
620-3888-4374**

Publications Available at the Extension Office

Available at the Extension Office are some items that producers may want to pick up.

One of these is the new KSU 2025 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland guide -- SRP 1190, is now available. Hard copies are available at both the Howard and Sedan Extension Offices.

The 2025 IRM recordkeeping books, "Redbooks" for cow/calf producers are available at the Extension Office. Only a limited supply is available, so if you would like one, stop by the Extension Office now. The primary use of the IRM Redbook is to record calving information and daily production activities. The book provides over 100 pages to record calving activity, herd health, pasture usage and cattle inventory, plus a calendar and note/address section.



WALK KANSAS

AN 8-WEEK HEALTHY LIFESTYLE CHALLENGE!

March 30 - May 24, 2025

Gather your team of six or go solo this year.

Register online at WalkKansas.org or by contacting your local K-State Research and Extension office.

Register by Friday, March 28th 2025

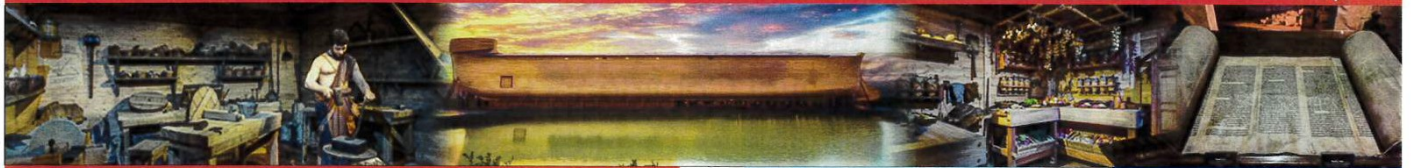
K-STATE
Research and Extension
Walk Kansas

Rolling Prairie Extension District #8
Howard Office 620-374-2174
130 S Pennsylvania
Sedan Office 620-725-5890
CQ County Court House - Third Floor

Kansas State University Agriculture Experiment Station and Cooperative Extension Service
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ROLLING PRAIRIE EXTENSION PRESENTS

The Ark Encounter & Creation Museum



INCREDIBLE PRICE INCLUDES:

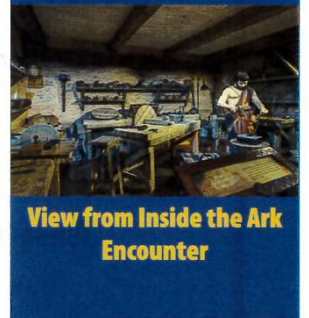
- ◆ Motorcoach transportation
 - ◆ 6 nights lodging including 4 consecutive nights in the Cincinnati area
 - ◆ 10 meals: 6 breakfasts and 4 dinners
 - ◆ Admission to the Stunning – ARK ENCOUNTER!
 - ◆ Admission to the Famous CREATION MUSEUM
 - ◆ Admission to the CINCINNATI MUSEUM CENTER, including an OMNIMAX SHOW
 - ◆ BB RIVERBOATS SIGHTSEEING CRUISE along the Ohio River
- and much more

\$896*

7 Days 6 Nights

*PER PERSON, DOUBLE OCCUPANCY

(Sun - Sat)
Oct 19 - 25
2025



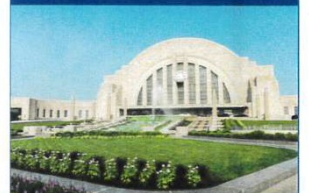
View from Inside the Ark Encounter



Visit to the Amazing Creation Museum!



Enjoy a BB Riverboats Sightseeing Cruise



Incredible Cincinnati Museum Center, including an Omnimax Show

Departure: Howard, KS @ 8 am

Day 1: Depart your group's location in a spacious, video and restroom equipped Motorcoach and set off on your exciting trip! Tonight, settle into a comfortable en route hotel for a good night's rest.

Day 2: Today after a Continental Breakfast, you'll arrive in your destination. Later that day, enjoy a relaxing Dinner and check into your accommodations in the Cincinnati area for a four-night stay.

Day 3: Start the day with a Continental Breakfast before the big event you've been waiting for: THE ARK ENCOUNTER! Bigger than imagination, this life-sized Noah's Ark Experience will amaze you. The Ark Encounter features a full-size Noah's Ark, built according to the dimensions given in the Bible. Spanning 510 feet long, 85 feet wide, and 51 feet high, this modern engineering marvel amazes visitors young and old. From the moment you turn the corner and the towering Ark comes into view, to the friendly animals in the zoo, or the jaw-dropping exhibits inside the Ark, you'll experience the pages of the Bible like never before. This evening, enjoy Dinner before heading back to your hotel.

Day 4: Start the day with a Continental Breakfast before you head to The Ark Encounter's sister attraction: THE CREATION MUSEUM. Prepare to believe as you explore 75,000 square feet of state-of-the-art exhibits, full-size Allosaurus skeleton, stunning botanical gardens, petting zoo, and more. The state-of-the-art Creation Museum allows you to venture through biblical history. Tonight, enjoy a Dinner Party with Entertainment!

Day 5: After a Continental Breakfast, you'll head to the CINCINNATI MUSEUM CENTER, a one-of-a-kind, multi-museum complex housed in Union Terminal, a historic Art Deco train station and National Historic Landmark. Your visit includes an admission to the Cincinnati History Museum, Museum of Natural History & Science, and an OMNIMAX Show. The Robert D. Lindner Family OMNIMAX® Theater takes you to places you can only imagine, as you immerse yourself in epic adventures in the five-story domed theater. Afterwards, you'll enjoy a BB RIVERBOAT'S SIGHTSEEING CRUISE on the Ohio River. BB Riverboat's large vessel has indoor and climate controlled seating, helping to ensure an enjoyable experience. This evening, enjoy Dinner before heading back to your hotel.

Day 6: Enjoy a Continental Breakfast before leaving for the Indiana War Memorial Museum in Indianapolis, IN. This evening, relax at your en route hotel.

Day 7: Today, after enjoying a Continental Breakfast, you depart for home... a perfect time to chat with your friends about all the fun things you've done, the great sights you've seen and where your next group trip will take you!

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Spot Spraying Rates and Recommendations for Brush Control

Richard H Fechter

Rolling Prairie Extension District Agent Agriculture and Natural Resources

This guide offers both per acre rates and spot spraying rates of herbicides to use for controlling brush and costs based on prices from the Kansas State University 2025 Chemical Weed Control Book (SRP 1190).

A list of herbicides that are typically used for brush control and the prices that are used to calculate the cost of treatment.

Herbicide	Manufacturer	Cost	Active Ingredients
Crossbow	Severl	\$51.50/gallon	2.0 lb 2,4-D & 1.0 lb Triclopyr/gallon
Chaparral	Corteva	\$114.85/gallon	52.5% Aminopyralid & 9.45% metsulfuron
Escort XP	Bayer CS	\$4.40/ounce	Metsulfuron
Grazon Next HL	Corteva	\$59.00/gallon	0.41 lb Aminopyralid & 3.33 lb 2,4-D Amine/gallon
Remedy Ultra	Corteva	\$81.90/gallon	4.0 lb Triclopyr/gallon
Tordon 22K (restricted use)	Corteva	\$81.20/gallon	2.0 lb Picloram/gallon
2,4-D LVE	Severl	\$20.45/gallon	6.0 lb/gallon

HEDGE: (Foliar Application) June - July. Can use Remedy Ultra **OR** Crossbow. Remedy Ultra is cheaper on a per treatment basis. One gallon of Remedy Ultra contains four times as much triclopyr as one gallon of Crossbow.

Sprayer Size/Amount of

<u>Water</u>	<u>Remedy Ultra & Cost</u>	<u>or</u>	<u>Crossbow & Cost</u>
Per Acre Rate	1.5 pints/\$15.36		1.5 gallons/\$77.25
14 gallon	9 ounces/\$5.76		27 ounces/\$10.86
25 gallon	1 pint/\$10.24		1.5 quarts/\$19.31
50 gallon	1 quart/\$20.48		3 quarts/\$38.63
100 gallon	2 quarts/\$40.95		1.5 gallons/\$77.25

GENERAL BRUSH & LOCUST: (Foliar Application) June - July. Whenever you have locust trees you are treating, you need to have some Tordon 22K in your mix for more effective control.

Sprayer Size/Amount of

<u>Water</u>	<u>Remedy Ultra & Cost</u>	<u>Tordon 22K & Cost</u>	<u>2,4-D LVE & Cost</u>	<u>Surfactant</u>
Per Acre Rate	1.5 pints/\$15.36	1 pint/\$10.15	1 pint/\$2.56	1 pint
14 gallon	9 ounces/\$5.76	9 ounces/\$5.71	9 ounces/\$1.44	9 ounces
25 gallon	1 pint/\$10.24	1 pint/\$10.15	1 pint/\$2.56	1 pint
50 gallon	1 quart/\$20.48	1 quart/\$20.30	1 quart/\$5.11	1 quart
100 gallon	2 quarts/\$40.95	2 quarts/\$40.60	2 quarts/\$10.23	2 quarts

Heavy Brush: (Foliar Application) June - July. Very dense with multiple species present.

Sprayer Size/Amount of

<u>Water</u>	<u>Remedy Ultra & Cost</u>	<u>GrazonNext HL</u>	<u>Surfactant</u>
1 gallon	4 tsp/\$0.42	2 tsp/\$0.15	4 tsp
14 gallon	9.5 ounces/\$6.08	4.75 ounces/\$2.19	9.5 ounces
25 gallon	1 pint/\$10.24	8 ounces/\$3.69	1 pint
50 gallon	1 quart/\$20.48	1 pint/\$7.38	1 quart
100 gallon	2 quarts/\$40.95	1 quart/\$14.75	2 quarts

BLACKBERRIES: Apply in spring after plants have dropped their flower petals. Usually late May. Plants flower on year-old wood, so if plants were mowed off last summer or burned this spring, plants will not flower. In this case, wait until new growth has produced 18 inch long stems, then spray. Early June in most years.

<u>Sprayer Size/Amount of Water</u>	<u>Remedy Ultra & Cost</u>	<u>or</u>	<u>Escort XP & Cost</u>	<u>Surfactant</u>
Per Acre Rate	1.5 pints/\$15.36		0.5 ounce/\$2.20	1 quart
14 gallon	18 ounces/\$11.52		0.14 ounce (4.2 grams)/\$0.62	1/2 cup
25 gallon	1 quart/\$20.48		0.25 ounce (7.5 grams)/\$1.10	1 cup
50 gallon	2 quarts/\$40.95		0.5 ounce/\$2.20	2 cups
100 gallon	1 gallon/\$81.90		1 ounce/\$4.40	1 quart

BUCKBRUSH: Apply when buckbrush is nearing full leaf stage and growing actively. Normal treatment time is May 1 - 15. 2,4-D LVE can be used at 1 - 2 quarts/acre or a 1% solution for spot treatments.

<u>Sprayer Size/Amount of Water</u>	<u>2,4-D & Cost</u>
Per Acre Rate	2 quarts/\$10.23
14 gallon	18 ounces/\$2.88
25 gallon	1 quart/\$5.11
50 gallon	2 quarts/\$10.23
100 gallon	1 gallon/\$20.45

SERICEA LESPEDEZA: Two chemicals work well on Sericea Lespedeza. They are Remedy Ultra and Escort XP. Remedy Ultra applications work best when the new growth is 12 to 15 inches tall, which usually occurs in June. The broadcast application rate for Remedy Ultra is 1.5 pints per acre. Triclopyr is the active ingredient in Remedy Ultra. Escort XP works best when applied in the fall when the Sericea Lespedeza plants are flowering. Depending on moisture, that could be as early as mid-August, but generally occurs in September. If fall weather is dry, delay application until flowers open. Dry weather will result in poor herbicide uptake and poor control. Add a non-ionic surfactant to Escort XP.

<u>Sprayer Size/Amount of Water</u>	<u>Remedy Ultra & Cost</u>	<u>or</u>	<u>Escort XP & Cost</u>	<u>Surfactant</u>
Per Acre Rate	1.5 pints/\$15.36		0.5 ounce/\$2.20	1 quart
14 gallon	18 ounces/\$11.52		0.14 ounce (4.2 grams)/\$0.62	1/2 cup
25 gallon	1 quart/\$20.48		0.25 ounce (7.5 grams)/\$1.10	1 cup
50 gallon	2 quarts/\$40.95		0.5 ounce/\$2.20	2 cups
100 gallon	1 gallon/\$81.90		1 ounce/\$4.40	1 quart

Spray Solution - In order to get good control, the amount of spray solution per acre must be increased. This is necessary to insure complete coverage of the sericea lespedeza plant. The recommended rates are:

- ☛ By air -- minimum of three gallons per acre to as much as five gallons per acre for dense stands.
- ☛ By ground -- a minimum of 10 gallons per acre to as much as 20 gallons per acre for dense stands.

All chemicals are subject to label statements. Those who apply chemicals are responsible for correct use. **ALWAYS READ THE LABEL BEFORE PURCHASE AND/OR USE.** Be sure you know how to apply, rate to apply, time of year to apply and use restrictions. **The user is responsible.**

Helpful Measurement Conversions

3 teaspoons = 1 tablespoon	1 pint = 2 cups = 16 ounces = 1 pound
2 tablespoons = 1 ounce	1 quart = 4 cups = 2 pints = 32 ounces
1 cup = 16 tablespoons = 8 ounces	1 gallon = 16 cups = 8 pints = 128 ounces



Play time is learning time for children, says K-State child development specialist Bradford Wiles.

Get out and play: K-State expert says outdoor time is learning time for kids

MANHATTAN, Kan. – Turns out, time spent outside is good not only for children’s ability to be physically active. Kansas State University child development specialist Bradford Wiles says it’s pretty valuable for their minds, as well.

“Mentally,” he adds, “there are just so many cool things happening. Trees are growing, plants are no longer dormant, there are insects everywhere and other parts of the natural environment are starting to emerge. Getting outside is a really good opportunity to spend time with your family just having a good time.”

Unplanned activity “gives your children an opportunity to do some self-determination,” he said. “They are continually being told what to do and how to do it, so going outside opens up the possibilities for them to engage in self-directed play. Let them choose what they’re going to do. That’s really empowering for them.”

Wiles describes play as “the work of early childhood.” “For children, they’re completely learning about their world through play. They are learning cause and effect – they are beginning to understand what happens if I do ‘this.’ That’s part of growing up and so the opportunity to engage in self-determination builds their self-esteem.”

Wiles said children develop self-efficacy – an individual’s belief in their ability to making things happen – by exploring their world. He notes it can be simple things, such as throwing rocks or drawing in the mud. “All of those things feed into a mental health compo-

nent of child development,” Wiles said. “There’s always value in getting some energy out; that’s a short-term effect. But the longer term is very much about increasing self-efficacy and making sense of what they can and can’t do.”

“That’s an important part of growing up. What we know is that children who get experiences in managing frustration and solving problems from an early age, and learn those skills, end up being much healthier mentally going forward.”

The same skills can be learned during indoor play, but getting outside as the temperatures get warmer provides a larger world to explore.

Nutrition: Not Just the Food We Eat

Eating healthfully also includes *who* you’re eating it with. “When we eat with somebody else, that’s a connection. We might prepare food for somebody else; there’s a connection there, too.” says Priscilla Brenes, a K-State Research and Extension specialist in the Department of Food, Nutrition, Dietetics and Health.

March is National Nutrition Month, sponsored annually by the Academy of Nutrition and Dietetics. This year’s theme is ‘Food Connects Us.’

“Think about this: If you’re eating in front of the television, what type of connection are you making there?” Brenes said. “By contrast, if I’m eating with family or friends, you may be talking about what you did during the day, or talking about your goals. Maybe you’re talking about things that you want to accomplish.”

“Connecting with other people can help you be more mindful about the foods that you’re eating and how much you’re eating.”

Brenes said that even preparing meals, particularly when children are involved, builds connections around food that become family memories.

“Family meals are a great way to share with your children, or to teach them how to set the table, or the ingredients in the food that they are putting on the table,” she said. “There’s a family connection that starts forming there and those memories can bring good emotions when we are grown up.”

Grillin' and Chillin'? Remember Food Safety

The weather's getting warmer and it's time to start up that grill. Here are a few safety tips to remember for warm weather food preparation.

⇒ **Wash your hands** anytime you start handling food. Then wash them again after you've handled any kind of raw meat.

⇒ **Use a food thermometer.** Keep a thermometer handy when you're grilling; not only for safety, but also to keep the meat from being overcooked. Here are the common temperatures for meat (it's often written on your thermometer as well). This includes products that are smoked, cooked on a grill, or indoors. Stick the thermometer into the center of the thicker part of the meat, or through the side of burgers.

- 145 degrees Fahrenheit for steaks, roasts, chops, fish and other whole cuts of meat.
- 160 F for ground meat, including beef, pork and lamb
- 165 F for all types of poultry.

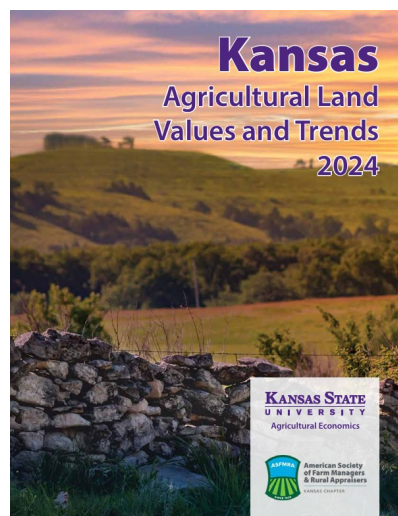
⇒ **Keep the meat cold until you're ready to use it.** Resist letting the meat sit on the counter for more than 30 minutes. Longer than that, you are inviting bacteria to your cookout.

⇒ **Freeze meat that won't be used soon after you buy it.** Thaw frozen meat in the refrigerator, not on the countertop. Steaks can typically be thawed in a refrigerator in 24 hours; a brisket might take 3-4 days.

⇒ **Keep hot foods hot and cold foods cold.** Cold foods should be kept in the refrigerator or in an ice chest (with ice) and hot foods should be kept at 140 F or higher.

⇒ **Store food and eat leftovers promptly.** Store foods within 1-2 hours of serving them. Modern refrigerators are very efficient, so you do not need to set them on the counter until they cool.

⇒ **Give Mayo a break.** Mayonnaise often gets a bad rap for being a food safety concern, but the popular dressing is high in acid and can fend for itself. It is often the foods we mix into the mayo that needs special care. If you are mixing in cooked potatoes or hard boiled eggs, those ingredients need refrigeration to reduce food safety risks.



<https://www.agmanager.info/sites/default/files/pdf/2024%20KS%20Ag%20Land%20Values%20Web%20version.pdf>

Did you know that Chautauqua County sold 5% of its total acreage and Elk County sold 2.9% in 2024? Or that soybeans are by far the largest crop in Southeast Kansas with 833,700 planted acres?

The Kansas Agricultural Land Values and Trends 2024 has arrived! We have 15 hard copies in each of the Extension Offices. If you would rather read it online, copy and paste the link above.

What A Garden Soil Test Doesn't Tell You

Though soil tests are useful for identifying nutrient deficiencies as well as soil pH, they do not tell the whole story. We often receive soils from gardeners that are having a difficult time growing crops even though the soil test shows that nothing is deficient. Following are some factors that can affect plant growth that are not due to nutrient deficiencies or pH.

Not enough sun: Plants need a certain minimum amount of sun before they will grow well. As a general rule, flowering (and fruiting) plants need at least six to eight hours of full sun per day. There are, of course, exceptions such as impatiens that bloom well in shade. Move sun-loving plants out from the shade or use plants that are better adapted to shady conditions. Cool-season

grasses such as tall fescue and Kentucky bluegrass can take more shade than warm-season grasses (zoysia, bermuda or buffalograss) but even cool-season grasses will die out under heavy shade.

Poor soil physical characteristics: Roots need oxygen as much as they need water. A tight clay soil can restrict soil oxygen levels as well as make root penetration of the soil difficult. Increasing the organic matter content of clay soils can help break them up. Add a 2 inch layer of organic matter and till it in.

Walnut trees: Walnuts give off a natural herbicide that interferes with the growth of some plants such as tomatoes. Vegetable gardens should be at least 50 feet away from walnut trees if possible. For a listing of plants that are susceptible to walnut, go to: http://www.omafra.gov.on.ca/english/crops/facts/info_walnut_toxicity.htm

Tree roots: Trees not only compete with other plants for sun but also for water and nutrients. Extra water and nutrients may be needed.

Shallow soils: When new homes are built, the topsoil is often stripped off before the soils are brought to grade. Though the topsoil should be replaced, it sometimes is not or is not replaced to the same depth as it was originally. You are left with a subsoil that usually does not allow plants to grow well due to a lack of soil structure. Adding topsoil to a depth of 8 to 12 inches would be best but this often is not practical. In such cases, try to rebuild structure by adding organic matter and working it into the soil.

Also, check for shallow soils if you see spots appear in a lawn that are not easily explained by disease or a female dog urinating. Sometimes new developments have large rocks that are thinly covered with soil or buried debris that will limit the depth of the root system of the turf. Therefore it dries out and goes off color before the rest of the lawn.

Added Soil: Sometimes soil is added to smooth out an area or topsoil is added but only a shallow layer is used. Roots will not go from one soil type to another. Always blend in added soil to existing soil so there is a gradient from one to the other. For example, let's say you want to add 6 inches of topsoil. Add 3 inches and till in to a depth of 6 inches and then add the remaining three inches of topsoil. You now have a gradient that goes from the topsoil to the existing soil.

Continued



Garden Soil Test (continued)

Improper watering: Roots develop where conditions are best for growth. Shallow, frequent watering leads to roots developing primarily near the surface of the soil where the soil is moist. Such shallow root systems are easily damaged by heat and any interruption in the watering schedule. It is better to water less frequently and to a greater depth to encourage a deeper root system that is less sensitive to heat and water stress. It is best to water deeply (eight inches for turf, flowers and small shrubs and about 12 inches for large shrubs and trees) so that the majority of the root zone is moistened. The depth of watering can be checked by pushing a wooden dowel or metal rod into the soil.

Watering during the evening can also be detrimental to plants if the irrigation wets the foliage. Many diseases are encouraged by free water on the leaves. Watering late in the day often will keep the foliage wet until dew forms. Dew will keep the foliage wet until it evaporates the next

morning. It is better to water early in the morning so leaves do not stay wet as long. If you must water late in the day, use drip irrigation if that is practical (such as in a vegetable garden).

Gas Leaks: Make sure that a natural gas line does not run under the affected area. Leaks from that line can kill existing vegetation. If this is the cause, everything in that area will be killed.

Too much phosphorus: Most Kansas soils are naturally low in phosphorus. However, soils that have been fertilized for a number of years may have phosphorus levels that are quite high. As a matter of fact, the majority of soil tests we receive show phosphorus levels in the "high" category. Too much phosphorus can interfere with the uptake of some micronutrients such as iron, manganese and zinc. This will rarely, if ever, kill plants. High phosphorus soils should only be fertilized with fertilizers that have relatively low amounts of phosphorus.

Publications Available at Extension Offices

Several new items are available to producers that may be of help to them starting the new year.

- 2025 Chemical Weed Control Guide
- 2025 IRM Redbooks
- Farmers Tax Guide - For Help in Preparing 2024 Tax Returns
- Farm Account Books
- Kansas Agricultural Land Values and Trends 2025

Stop by either office to get your copy.





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