

What's Up, Doc?



Grayson County Agriculture and Natural Resources Newsletter Vol 2: Issue 6 (June 2023) by D. Chad Cummings

	Door
Contents:	Page
USDA Crop Report Summary	2
New Landowner 101: What to do in June?	3
Recap of the 2023 NETX Small Acreage/New Landow	ner
Conference	3
Wild About Carrots (the Bad Ones)	4
OTC Livestock Antibiotics by Prescription - Jun 11 th	11
Plants, Insects, and Diseases Active Now	14
Events Coming Un in Ag and Nat Resources	15



Poison hemlock (*Conium maculatum*)

Cool-season biennial in the carrot family. Found in bar ditches, roadside and powerline rights-of-way especially in the wetter areas or creek edges.

USDA Crop Report for early June 2023 (Grayson County)

June 5, 2023

The southern 1/4 of Grayson County is drying out significantly and missing many of the rainfall events that come through the area. As of last Thursday, the southern was listed as abnormally dry on the US Drought Monitor.

Wheat and oats look great. Kernel fill and hardening are continuing.

Corn, soybeans, and grain sorghum all look very good and are growing rapidly. Most of the corn is tasseled now. Pastures look weedy, but good. Plenty of moisture for growth, and soil temperatures are rising enough to promote good grass growth, although many fields are still delayed in growth.

The first crop coastal, wheat-Bermuda, ryegrass-Bermuda hay has been cut and baled across many portions of the county. Livestock are in good condition, benefiting from the mild temperatures and rainfall. In many portions of the county, nuisance flies are rampant, and tabanid flies are increasing in the area. For crops, no major insect or disease issues to report.



Photo taken near Tom Bean, TX (Cummings, May 8, 2023)

New Landowner 101: What to Do in June?

- 1. Soil test in food plots and in pastures, lawns, and gardens.
 - a. http://soiltesting.tamu.edu
 - b. Get forms from the website above or at our office (Courthouse, A-G-1)
- 2. Fertilize crop, pasture, lawns, and gardens per soil analysis recommendations.
- 3. Spray summer weeds in pastures and hay meadows many warm season weeds are emerging. Spraying post emergent herbicides is best early (between 4 and 10 inches of growth) for summer annual weeds like sunflowers, ragweeds, marshelder, crotons, and broomweed. Summer perennial weeds like nightshades, dock, blackberries/dewberries should be sprayed after flowering is initiated for best control.
- 4. Monitor brush and woody plants for proper herbicide application timing. Good, mature leaf growth is generally the proper timing. Avoid bean or fruit filling times, but during flowering or post fruit ripening is best in many tree species for foliar herbicide applications.
- 5. Collect, identify, and plan appropriate treatments for pond weedy vegetation and algal species.

2023 NETX Small Acreage & New Landowner Conference *Recap* – Farmersville, TX

Around 100 landowners participated in the conference last Friday, June 2, in Farmersville, TX. Twenty-one different presentations in three subject matter tracks were held at the venue on the Collin College campus. County extension agents from Collin, Denton, Grayson, Hunt, and Rockwall counties coordinated the event.

Attendees got to learn and see demonstrations on Landowner 101 topics, Farm/Ranch Operations, and Livestock and Crops topic areas. Equipment dealers, ag lenders, ag chemical representatives, and government organizations sponsored the event, and organizers hosted a tradeshow for onsite learning and Q/A.

The event will be hosted again in June 2024, we look forward to seeing you there.

Wild About Carrots (Particularly the Bad Ones)

A recent news report in DFW discussed the toxic plant poison hemlock (*Conium maculatum*: Apiaceae). It pointed out that a young person had a run in with the plant that resulted in the development of rashes and swelling on her face and arms. This is a very real plant and a very real result to interactions with poison hemlock. Two species of hemlock can be found in the state and our region, poison hemlock and spotted water hemlock. But there are many other carrot and parsley species that present minimal threat to humans or livestock and supply a significant nectar source for pollinators in the early spring. Here we discuss the



various species of carrots and parsley and provide keys to identifying the friend or foe. In addition, we included a brief discussion of the toxic agents and symptoms for specific species.

Poison Hemlock (Conium maculatum: Apiaceae) Poisonous



Description

Poison hemlock is a biennial of the carrot and parsley family. It has stout, erect, hollow stems that may be purple streaked or splotched and may grow to up to 10 feet tall. Leaves can be 6 inches wide and 12 inches long, with many oval to broadly oval leaflets opposite each other. The leaf stems clasp the main stem at their junction. White flowers are

arranged in umbrella-shaped clusters.

Toxic Agent

Poison hemlock contains pyridine alkaloids. The stems and leaves are the most toxic parts of the plant. Cattle and swine are the species affected most often. This plant is hazardous to humans and was used in political executions in ancient Greece (Socrates). Cattle seldom graze the plant but may be poisoned by it in hay or green chop. The roots or young leaves may poison swine. Hay containing poison hemlock is considered hazardous.



Signs of Ingestion

Signs of acute poisoning occur within a few hours of consumption; these include initial stimulation followed by progressive central nervous system depression.

Stimulation: Nervousness; Muscle tremors; Incoordination; Salivation; Gastrointestinal distress.

Depression: Partial paralysis; Slow heart rate; Low body temperature; Slow respiration rate; Coma; Death.

Spotted Water Hemlock (Cicuta maculata: Apiaceae) Poisonous



Description

Spotted water hemlock is a stout perennial herb, 2 to 6 feet tall, arising from a tuberous base bearing fleshy or fleshy-tuberous roots. Its short rootstocks have air cavities or chambers separated by crosspartitions containing a yellowish liquid that turns reddish brown when exposed to air. The stems are hollow except at the nodes and may be purple striped or mottled. The two to three

palm-shaped leaves are alternate, with stems wrapping round the main stem; they grow up to 15 inches long and 10 inches wide. The lance shaped leaflets are 1 to 5 inches long and have saw-like margins. Small white or greenish flowers are arranged at the ends of the stems in umbrella-shaped clusters.

Habitat

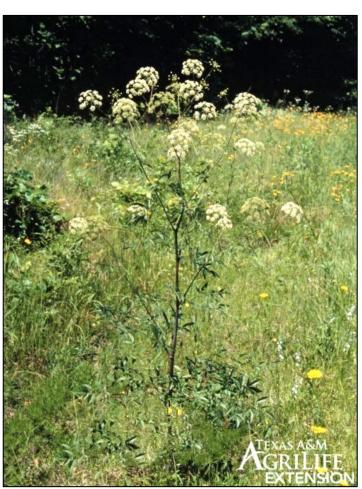
Spotted water hemlock is found in east, central and north Texas. Because it requires ample water, it is found only near streams, marshes, wet meadows and permanent springs.

Toxic Agent

The lower stalk and chambered rootstock of this plant contain most of its toxic alcohol, but hazardous concentrations can also occur in very young leaves. Mature and dried leaves are not toxic. This fast-acting toxin can cause death between 1 and 8 hours after consumption in all animals, including humans.

Signs of Ingestion and in Some Individuals Through Contact

The toxic alcohol is a convulsant, and the clinical signs are the result of its action on the central nervous system. They include: Muscle tremors; Salivation; Grinding of the teeth; Convulsions; Death.



Bishop's Weed (Ammi majus; Apiaceae) Poisonous

Description

Bishop's-weed is a showy, cool season annual up to 3 feet tall. The oblong leaves may be up to 8 inches long and 5.5 inches wide.

The many white flowers are arrayed in an umbrella shape up to 3 inches across located at branch tips. Each flower gives rise to a small, oblong, rough fruit.

Habitat

This plant was introduced from the Mediterranean region and has been widely disseminated in the Western Hemisphere. It is found in east and south Texas, usually along roadsides, as it has apparently been included in some wildflower seed mixes. In the past 15 years, bishop's weed has become more widespread, and is now established in some roadside pastures. It is likely to spread further in coming years, posing a greater threat to livestock.

Toxic Agent

Bishop's-weed contains a furocoumarin in all parts of the plant, but it is especially concentrated in the seed. The compound is photoactive, causing primary photosensitization in cattle, sheep and birds. All animals consuming the seed should be considered at risk.

TEXAS ASM GRILIFE EXTENSION



Signs of Ingestion

Signs in affected humans and animals: increased body temperature; Photophobia (the animals shy away from light); Edema of the muzzle, ears, udder, scrotum and vulva; Sunburn of light-colored skin; Inflammation of skin.

Thin-skinned areas and those having thin, or no hair are often those most affected. Inflammation is followed by swelling, blisters, fluid seepage and sometimes sloughing of the skin.

In dark animals, the skin is not blistered or sloughed, but may become painful and thickened, with crusted hair.

Other Species in the Apiaceae Family in Texas

Texas prairie parsley (*Polytaenia nuttallii*: Apiaceae)

Description

Cool-season, herbaceous, biennial or perennial in the carrot family which grows up to 3 ft tall. Leaves are bipinnately or ternate-pinnately compound. Leaflets are large, crenate to incised or lobed, ovate to oblong. Flowers are yellow. Fruits are 2 to 4.5 inches long and have obvious wings.

5408017

Habitat

Common and conspicuous in prairies and roadsides, open woods, able to grow in many soil types.

Other Considerations

Non-poisonous to humans or livestock. In some communities this plant can be used for foraging.



Hedge parsley (*Torilis arvensis*; Carrot/Parsley family) MOST COMMON SPECIES AROUND HOMES, GARDENS, and FARMS

Description

Herbaceous biennial in the carrot family. Flowering plants have erect, ridged, branched stems and grow 2-6' tall. This species is common in working pens, under trees, fence lines, or on roadsides.





One key identification is the Velcro-like seed capsules that love dog and cat fur. Additionally, it will not have the purple splotchy stem that is common in the hemlock (hedge parsley is usually

all green or all purple as below). Last, it is less than $\frac{1}{2}$ the size of poison hemlock – which can get up to 10 ft tall this time of year.

This species is generally non-poisonous to humans or livestock.

Wild carrot (Queen Anne's Lace; Daucus pusillus) Potentially Poisonous

Description

Wild carrot is an introduced, cool-season annual that is also commonly named southwestern carrot or rattlesnakeweed. It grows as an erect, single-stemmed plant reaching 1 to 3 feet tall. When



crushed, the taproot has the characteristic odor of a carrot.

The leaves and stems are covered with stiff hairs, making the plant rough to the touch. The leaves are divided pinnately, having leaflets arranged on each side of the stalk, and can be from 1 to 7 inches long.

The flowering stem is a flat-topped cluster of white flowers in which each flower stalk arises from about the same point. When the fruit ripen, they may cling to passing animals or the clothing of people for seed dispersal.

Wild carrot may be mildly poisonous to humans or livestock.



In Summary

As with any good news story, there is some truth to the need for awareness with poison hemlock and spotted water hemlock. Both species pose real threats to humans and livestock and it's best to control the species early in the spring to prevent rosettes and later bolted plants from causing health issues. Due to the toxic nature of the plants, digging or pulling the weeds up is not advised. Chemical weed control options are available and should be applied to target the rosette growth stage in late winter or early spring. Contact your local county extension service for details on herbicide weed control options.

Compiled and formatted by D. Chad Cummings, chad.cummings@ag.tamu.edu

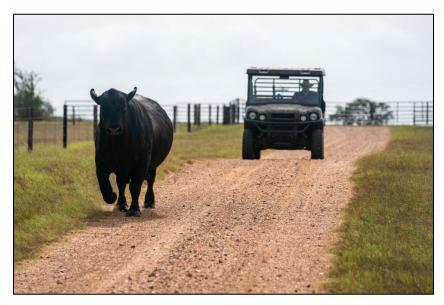
Sources of Information and Photos

- <u>Plants of Texas Rangelands (tamu.edu)</u>
- Karan A. Rawlins, University of Georgia, Bugwood.org (Texas parsley)
- Illustrated Flora of North Central Texas by Shinners and Mahler. 1999.

Over-the-counter livestock antibiotics will require prescription after June 11

AgriLife Extension experts answer frequently asked questions to prepare livestock owners

Don't wait. Get to know your local veterinarian now and establish a veterinarianclient-patient relationship if you expect to treat livestock in the future, as over-thecounter livestock antibiotics will soon require a prescription.



That is the advice of a team of Texas A&M AgriLife Extension
Service experts trying to help livestock owners who are used to going to the local feed store to buy some of their antibiotics and administer treatment themselves.

All of that will change on June 11, when these

medically important antimicrobial drugs will require veterinary oversight.

The following experts answer some frequently asked questions to let livestock owners know what to expect:

- **Tom Hairgrove, DVM, Ph.D.,** AgriLife Extension cattle veterinary specialist in the Texas A&M College of Agriculture and Life Sciences Department of Animal Science, Bryan-College Station.
- **Joe Paschal, Ph.D.**, former AgriLife Extension livestock specialist, now representing industry as the executive vice president of the American Brahman Breeders Association, Corpus Christi.

— **Billy Zanolini, Ph.D.**, assistant professor and 4-H and youth development specialist, Bryan-College Station.

What is the new rule?

The Food and Drug Administration recommends manufacturers of medically important antimicrobial drugs that continue to be available over the counter and are approved for use in animals, both companion and food-producing, regardless of delivery mechanism, to voluntarily bring these products under veterinary oversight or prescription marketing status.

By June 11, labels of the remaining over-the-counter antibiotics for livestock use will be required to read: "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian," and the purchaser must have a prescription or drug order to buy it.

How does this differ from the Veterinary Feed Directive and why are the two confused?

Over-the-counter antibiotics used in animal feed were moved to Veterinary Feed Directive, VFD, in 2017, allowing closer veterinarian oversight of antimicrobial use in animal feeds. All over-the-counter antibiotics placed in the drinking water were moved to prescription status at the same time. This new rule concerns the few antibiotics that remained available over the counter in the form of injectables, intramammary tubes and boluses.

What does medically important mean?

Medically important drugs are essential to human medicine and also used to treat animals.

What antibiotics does this affect?

Prescription-only items will include injectable tylosin, injectable and intramammary penicillin, injectable and oral oxytetracycline, sulfadimethoxine and sulfamethazine, gentamicin, cephapirin and cephapirin benzathine intramammary tubes.

How and where can these items be purchased after the rule goes into effect?

Individuals with veterinary-client-patient relationships, VCPR, may purchase antibiotics directly from their veterinarian or from a distributor with the vet's prescription.

What constitutes a VCPR?

Three requirements must be met:

- (1) The veterinarian has assumed the responsibility for making clinical judgments regarding the health of the animal and the need for medical treatment, and the client has agreed to follow the veterinarian's instructions.
- (2) The veterinarian has sufficient knowledge of the animal to initiate at least a general or preliminary diagnosis of the animal's medical condition. This means that the veterinarian has recently seen and is personally acquainted with the keeping and care of the animal by examining the animal or by medically appropriate and timely visits to the premises where the animal is kept.
- (3) The veterinarian is readily available or has arranged emergency coverage and follow-up evaluation in the event of adverse reactions or the failure of the treatment regimen.

What's your advice to livestock owners without a VCPR?

Producers who already have a VCPR in place and purchase their animal health products through their veterinary office or through other distributors under an existing prescription system will likely notice little change. However, this may have significant impacts on how the livestock owners can access antibiotic therapy for their animals, so contact your local veterinarian as soon as possible.

Why shouldn't I go ahead and stock up on antibiotics now?

Do not stock up on these products to avoid needing a prescription once this change takes effect. Animal health products are expensive, have expiration dates and are sensitive to storage time and conditions.

Are there any specific instructions that should be given to livestock show exhibitors?

Livestock exhibitors, like all producers in animal agriculture, are responsible for understanding animal treatment regulations. For junior shows, students complete the "Quality Counts" quality-assurance curriculum that stresses the importance of VCPR.

What health/medical items can livestock owners continue to purchase over the counter?

Most vaccines, dewormers, injectable and oral nutritional supplements, ionophores, pro/prebiotics and topical nonantibiotic treatments will not require a veterinary prescription. However, there are some exceptions. Always read the label.

Kay Ledbetter

806-677-5608 skledbetter@ag.tamu.edu

Plants, Insects, and Diseases Active Now

Plants

Cool season weeds and grasses have senesced and gone to seed (ryegrass, wheat, buttercup, curly dock, red sorrel). Warm season plants have started to grow rapidly now. Warm season weeds including goatweed, bitter sneezeweed, ragweeds, lambsquarters, marshelder, and sunflowers are growing quickly. Milkweed has also gone to seed production.

Wildflowers senescing and going dormant. Many mowing or haying operations are now in full swing. First crop of hay is cut and baled in many areas.

Insects

June bugs, butterflies, moths, and flies are very active in urban environments. Stable flies, horn flies, and Tabanid flies are active. Mosquitos benefit from wet conditions and standing water. Please be vigilant to clear standing water environments regularly. Some noctuid moths and larva (armyworms, cutworms) are present and feeding, but no major outbreaks currently.

Diseases

No major disease issues to report currently.

D. Chad Cummings, PhD

chad.cummings@ag.tamu.edu





Events Coming Up in NTX

Jun 9

Jun 14-16

Jun 26-27

Jun 29

- NTX Cattleman's Field Day (Savoy)

https://www.eventbrite.com/e/north-texas-cattlemans-field-day-tickets-626125978657

- District IV 4-H Horse Camp and Show (youth) (*Gainesville*)
- Steer and Heifer Validation for Major Livestock Shows (youth) (*Whitewright*)
- Goat and Lamb for Major Livestock Shows (youth) (Location *TBD*)

Visit our website at <u>Welcome to Grayson County - Grayson (grayson.agrilife.org)</u> (https://grayson.agrilife.org/) to sign up for the events.

Texas A&M AgriLife Extension provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, or veteran status. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

