



# Noxious Weeds of Kansas



# Noxious Weed Information

## What is a Noxious Weed?

- A noxious weed is a weed that has been designated by an agricultural authority as one that is injurious to agricultural or horticultural crops, natural habitats or ecosystems, or humans or livestock.

## What are my responsibilities under the Weed Law?

- Landowners, whether they are individuals, families, companies, or organizations are responsible for controlling the noxious weeds on their land or lands they manage.



How many Noxious  
Weeds are in Kansas?

Answer: There are a total of 14  
Noxious Weeds in Kansas, 2 of  
these are county options



County Options:

1. Bull Thistle
2. Multiflora Rose





# Noxious Weeds Most Commonly Found in Douglas County, Kansas



# Field Bindweed (*Convolvulus arvensis*)



# History of Field Bindweed

- Bindweed was introduced in the mid-eighteenth century from Eurasia.
- It was introduced when it was cultivated as an ornamental and medicinal herb.
- By the mid-nineteenth century, it had escaped and naturalized.

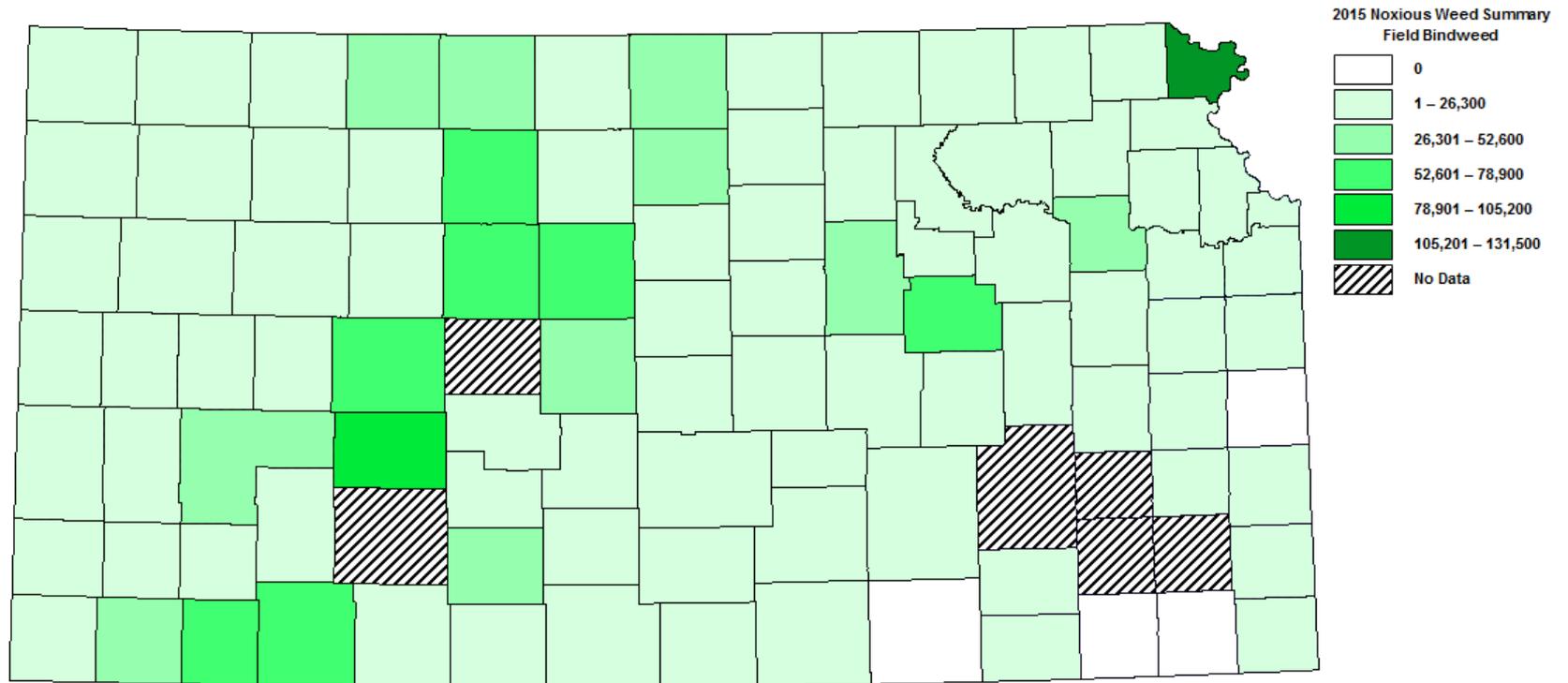


# Description of Field Bindweed

- A vining plant that chokes out most other vegetation.
- The leaves are spirally arranged, linear to arrowhead shaped and 2-5 cm long and alternate.
- The flowers are trumpet-shaped and white or pale pink.
- Flowering occurs in the mid-summer.
- Fruit are light brown, rounded (as shown to the left), and contains 2 seeds.
- Seeds can remain viable in the soil for decades.



# Field Bindweed 2015 Kansas Map



# Control Practices of Field Bindweed

- Control of field bindweed means preventing the production of viable seed and destroying the plants ability to reproduce by vegetative means.



- Seed is viable after remaining dormant in the soil for years. Seeds brought to the surface by tillage, rodents, or by other means will germinate under favorable conditions.

- Effective control can be achieved by applying approved herbicide .

- Other control methods are planting competitive crops to choke it out or using a hoe to cut the plants and roots before seeding.



# Approved Herbicides for Field Bindweed

- Some form of 2, 4-D applied during active growth in spring when the plant is in the bud stage or in the fall after 12inches of new growth.

- Glyphosate (Roundup) by following the label.

- Glyphosate and 2,4-D for suppression, apply directly to the weed and allow 7 days after treatment before tillage.

- Tordon 22K which is a restricted herbicide. Follow the directions on the label.

- Be sure to always follow the directions and precautions on the label when using Herbicides to ensure your animals, crops, and land is safe.



# Johnson Grass (*Sorghum halepense*)



# History of Johnson Grass

- Native to the Mediterranean region, but grows throughout Europe and the Middle East.
- The plant was introduced to all continents except Antarctica, and most larger islands and archipelagos.
- It was used for forage and to stop erosion.
- It was named after an Alabama plantation owner, Colonel William Johnson, who sowed its seeds on river-bottom farm land in 1840.



# Description of Johnson Grass

- Upright perennial grass, reproducing by large rhizomes and seeds.
- Stems up to 6 to 8 feet high or more, from a freely branching, stout, rhizome-possessing, fibrous root system.
- Leaves alternate, simple, relatively wide and long.
- Spikelet's 1-flowered, in groups of 3, in rather open large panicles.
- Fruit is a grain type, finely striate, reddish-brown.
- Flowers from May till frost and seeds to frost.





# Control Practices of Johnson Grass

- Preventing the production of viable seed and destroying the plant's ability to reproduce by vegetative means.
- Cultural control practices are used by cutting off the entire plant at each operation, 3 to 5 inches deep at intervals of 14 to 18 days.
- Effective control can be achieved by applying approved herbicide .



## Approved Herbicides for Johnson Grass

- Glyphosate (Roundup) applied to actively growing plants when most have reached boot to head stages of growth. Do not apply after the plant has turned brown in the fall.

- There are other approved herbicides like Plateau and Outrider.



# Musk Thistle (*Carduus nutans*)



# History of Musk Thistle

- A native of western Europe, Musk Thistle was introduced to the eastern United States in the early 1800s.
- It was introduced accidentally from seed mixes.
- It wasn't discovered until 1942 in Davidson County, Tennessee.
- It is now declared a noxious weed in many of the United States that it is present in.



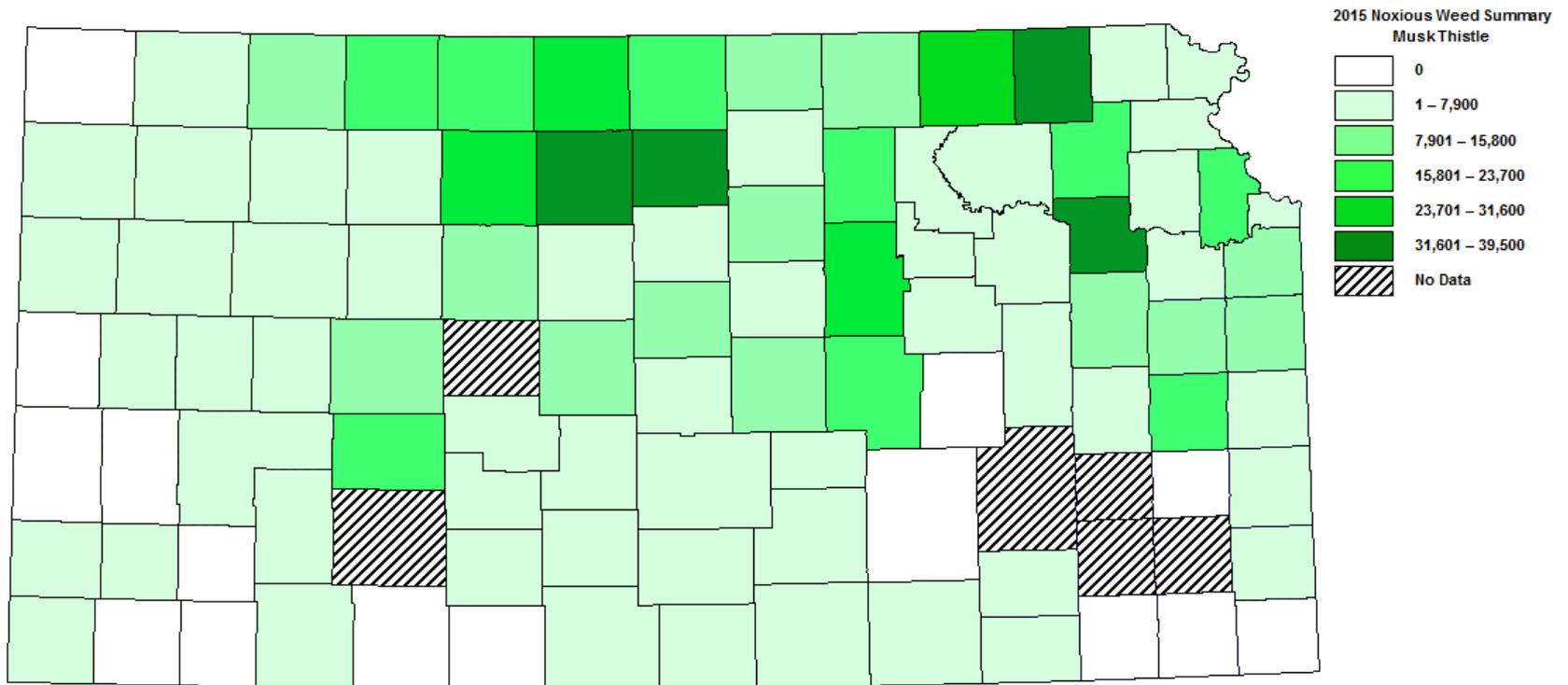
# Description of Musk Thistle

- Primarily a biennial or winter annual but may occur as a summer annual.
- The leaves are deeply lobed, hairless, and dark green with a lighter green mid-line.
- The terminal flower is large, solitary and usually nodding or bent over slightly.
- The flowers are purple and are “powder puff” shaped.
- Seed dispersal begins 7 to 10 days after blooming and are straw-colored and oblong.



# Musk Thistle

## 2015 Kansas Map



# Control Practices of Musk Thistle

- Mowing with a rotary mower before the first appearance of the flowers can help with seed production.
- Hand cutting or digging up the roots between the first appearance of pink and the first appearance of brown on the pappus can help too.
- If digging up the root, dig at least two inches below ground level and remove the whole root from the soil.
- If cutting off the flower heads, cut off the bud and place in a tight container to prevent seeding.
- Effective control can be achieved by applying approved herbicide .



## Approved Herbicides for Musk Thistle

- Some form of 2, 4-D applied during the rosette stage of growth and used during the fall if the soil moisture and air temperature is above 50F.

- Tordon 22K is a restricted herbicide. Apply this during rosette state in spring or fall, prior to soil freeze.

- Tordon 22K + 1lb of 2,4-D Amine will improve the consistency of musk thistle control when environmental or biological conditions are not conducive to good herbicidal activity.

- Always follow the directions and precautions on the labels.



# **Sericea Lespedeza (Lespedeza cuneata)**



# History of Sericea Lespedeza

- Native to eastern Asia
- It was introduced as a perennial legume used as well as used for erosion control
- In the 1980s, it started to spread showing the potential for a serious weed problem in southeast Kansas
- In 2000, Kansas declared it a Noxious Weed



# Description of Sericea Lespedeza

- It is a bushy perennial with semi-woody stems and grows up to 5 ft tall.

- Leaves have 3 leaflets that are less than 1in long.

- Flowers are white with yellowish to purple tinged petals.

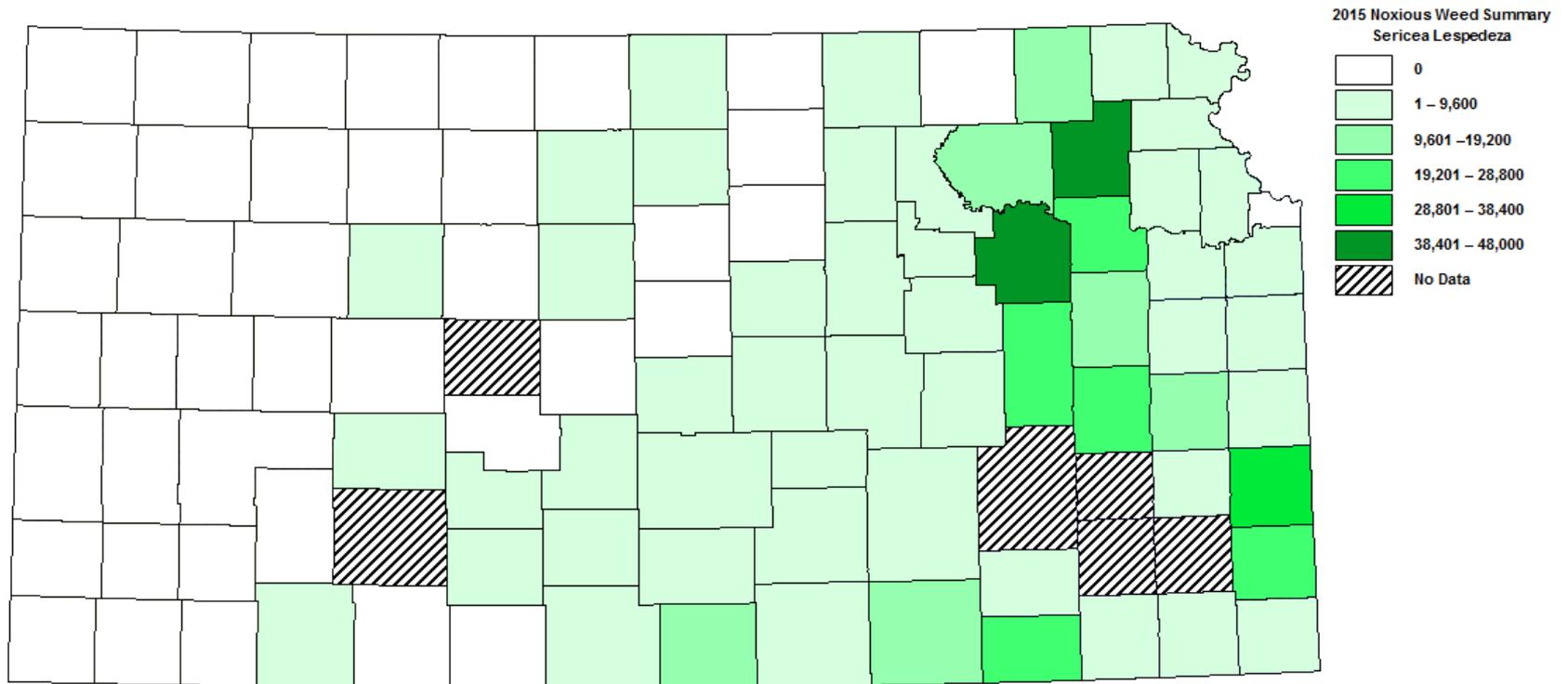
- Flowers will bloom mid or late July to October in Kansas.

- The fruit pod is brown, roundish and flattened with pointed ends containing one seed.



# Sericea Lespedeza

## 2015 Kansas Map



# Control Practices for Sericea Lespedeza



- Burning at the proper time (late spring) followed by intensive-early stocking.

- Proper fertilization and grazing during April and May, may reduce the occurrence of Sericea.

- Mowing in the late bud stage for 2 to 3 consecutive years from mid-July to late summer should reduce it.

- Effective control can be achieved by applying approved herbicide .



# Approved Herbicides for Sericea Lespedeza

- Escort XP-Follow the label directions and precautions.
- Pasturegard-Follow the label directions and precautions.





# Other problematic weeds for land owners



# Japanese Honeysuckle



# Description of Japanese Honeysuckle

- Perennial vine that climbs by twisting its stems around vertical structures.
- Leaves are oblong to oval, sometimes lobed, have short stalks, and occur in pairs along stem.
- Leaves remain attached during winter.
- Flowers are tubular, with five fused petals, white to pink, turning yellow with age.
- Flowers are very fragrant and occur in pairs along the stem at leaf junctures.
- Blooms from late April through July and sometimes October.
- Small black fruits are produced in autumn, each containing 2-3 oval to oblong, dark brown seeds about  $\frac{1}{4}$  inch across.



## Control Practices of Japanese Honeysuckle

- Controlling infestations by: mowing, grazing, prescribed burning and herbicides.
- While grazing and mowing reduce the spread of vegetative stems, prescribed burns or a combination of prescribed burns and herbicide spraying appears to be the best way to eradicate this vine.
- Glyphosate herbicide (tradename-Roundup) is the recommended treatment to eradicate Japanese Honeysuckle. This should be applied in the fall before a hard freeze and carefully with a hand sprayer.



# Poison Ivy



# Description of Poison Ivy

- It's a woody shrub or vine with hairy-looking roots.
- It can grow to 10 feet climbing or more.
- Compound leaves consist of three leaflets that tend to be egg shaped with pointed tips.
- Leaves are glossy green early in the season and turn yellow to deep red in the fall.
- Small green to grayish white berries form from flower clusters several weeks after flowering.
- All parts of poison ivy, including roots, are poisonous at all times of the year.
- The toxin in poison ivy is an oil which causes an irritating skin reaction on many people. It causes an itchy rash with clear blisters.



## Control Practices of Poison Ivy

- Spraying herbicides is recommended over burning because poison ivy vaporizes when hot which can cause a severe rash to anyone that comes in contact with the smoke.
- Use can use Glyphosate (nickname Roundup), but always follow directions on the container because it will kill any vegetation it contacts.
- Other herbicides can be used to kill poison ivy as well.
- To kill poison ivy that has climbed a tree, cut the vine off 6 inches above ground level, then treat the stump.
- Poison ivy can be very persistent, so you may have to treat it two or more times for complete control.



# HOW TO IDENTIFY POISON IVY



"If butterflies land there, don't put your hand there."

Some butterflies land on poison ivy, since they are not affected, which provides them protection as their predators avoid eating the plant.



"Leaves of three, let it be."

This old rhyme refers to the grouping of three leaves that are most commonly associated with poison ivy. Though there are many other plants with three predominate leaves, this can be a good starting point for identification.



"Hairy vine, no friend of mine." & "Raggy rope, don't be a dope!"

Poison ivy vines on trees have a furry "raggy" appearance. These rhymes warn tree climbers to be wary. Old, mature vines on tree trunks can be quite large and long, with the recognizable leaves obscured among the higher foliage of the tree.



"Berries white, run in fright" & "Berries white, danger in sight."

The berry-like fruit, a drupe, mature by August to November with a grayish-white colour. Fruits are a favorite winter food of some birds and other animals. Seeds are spread mainly by animals and remain viable after passing through the digestive tract.



"Longer middle stem, stay away from them."

This refers to the middle leaflet having a notably longer stem than the two side leaflets and is a key to differentiating it from the similar-looking *Rhus aromatica* - Fragrant sumac.



"Red leaflets in the spring, it's a dangerous thing."

Sometimes in the spring new leaflets have a red appearance. (Note that later, in the summer, the leaflets are green, making them more difficult to distinguish from other plants, while in autumn they can be reddish-orange.)



"Side leaflets like mittens, will itch like the dickens."

This refers to the appearance of some, but not all, poison ivy leaves, where each of the two side leaflets has a small notch that makes the leaflet look like a mitten with a "thumb."



# Crabgrass



# Description of Crabgrass

- An annual weed, but it acts like a perennial and is from the grass family.
- Grows about 1-3' long and has several branching culms at the base.
- The sheaths are light green, finely ribbed, and hairy.
- It has an indeterminate growth pattern and is prolific, producing over 150,000 seeds per plant.
- Seeds stay dormant in the soil for many years.
- This grassy weed germinates in late spring, grows slowly during the early part of the summer and then explodes in growth at the onset of the oppressive heat.



# Control Practices for Crabgrass

- Lawns mowed higher than 2 ½ inches tend to have less problems with crabgrass. This is because the grass will block sunlight to the soil to prevent crabgrass germinating.
- Manually digging up the crabgrass before seeding and put them in the trash, not in compost or mulch with it.
- Pre-emergence herbicides should be applied to the lawn in late spring before it gets too hot.
- Shallow and infrequent watering will allow the growing crabgrass to thrive. It is best to water lawns deeply and less frequently.



# Teasel



# Description of Teasel

- Short-lived perennial plants that grow up 3-8 ft tall.
- They have prickly stems and leaves with a purple or lavender flower that form on a head at the end of the stem.
- The first flowers begin opening in a belt around the middle of the oval flower head.
- Seeds mature in mid autumn and are an important winter food for some birds.
- An average teasel plant produces about 3300 seeds.
- Leaves are shiny green, rosette with scalloped edges that form a saucer-like shape around the stem.



## Control Practices for Teasel

- Young rosettes can be dug up and disposed of.
- Once the plant flowers, cut the head off and dispose of before seeding. Stalks than can be removed.
- Spot spraying herbicides can work at controlling teasel. 2,4-D Amine should not harm the lawns around the teasel if used correctly.
- Application of herbicides can be made after bolting then again late fall.
- When using Glyphosate, it will kill anything green so read the directions carefully.



# Nutsedge



## Description of Nutsedge

- Nutsedge is a prolific perennial weed, capable of producing tons of underground tubers.
- It can grow up to 3 feet tall.
- Leaves are green with a yellow spikey head.
- It blooms in late spring and early summer.
- Sedges can be identified by their triangular stems where as grass stems are flat or oval.
- One tuber from a nutsedge is capable of producing as many as 1900 shoots and up to 7000 additional tubers in a year.



## Control Practices for Nutsedge

- Pulling nutsedge will increase the number of plants because dormant tubers are activated.
- Herbicide treatment is the best way of controlling nutsedge.
- Usually it takes multiple applications and maybe a couple of years to clean up a heavy infestation.
- Some people have known to control nutsedge by using pigs which can root out and eat the tubers.



# Red Cedars



## Description of Red Cedars

- Red cedars are very dense, columnar ornamental which is used for windbreak or privacy.
- Can reach heights of 40 ft and most of the wood is rot resistant.
- There are both female and male cedars. The females produce miniscule flowers and blue berries when the males produce pine cones which are actually pollen producing structures.
- Red cedars are considered a type of evergreen with scaly and green short leaves.
- The bark is reddish-brown and peels off in shreds.



# Control of Red Cedars

- There are three methods to controlling cedars: fire, mechanical, and chemical.
- Fire-can control cedars 6ft tall or less .
- Mechanical-include chainsaws, bow saws, axes, dozers, and skid steers. Can be labor intensive.
- Chemical-using a liquid or pellet based chemical for this target species. Pellets are placed under the tree and require  $\frac{1}{4}$  to  $\frac{1}{2}$  inch of rainfall to dissolve.
- Target the young and “female” trees first because they can produce thousands of seeds.



# DriftWatch – Sensitive Crop Listing



- Driftwatch helps reduce the risk of pesticide drift damage to sensitive crops
- If a crop is grown for commercial purposes and represents a legitimate source of income for the grower, can be economically damaged by herbicides, or if it is under organic certification, the grower should register their crop as a sensitive crop with the Kansas Department of Agriculture
- Register for free on <https://agriculture.ks.gov/divisions-programs/pesticide-fertilizer/sensitive-crops-driftwatch>

# DriftWatch – Sensitive Crop Listing



- Hovering over the sensitive crop on the Kansas Department of Agriculture map, a type of sensitive crop will pop up.
- Clicking on this will open who the sensitive crop registry is and what type of sensitive crop they own.

# Douglas County Public Works-Sensitive Crop Listing

- If you live in Douglas County, you can register for free on <https://douglascountyks.org/depts/public-works/sensitive-crops-registry>
- Always register on both the Counties website and Kansas Department of Agriculture website.

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## How to Register

### County

To register with the county please complete the following registration form, print it, sign it and mail it to:

- Sensitive Crop Registry
- 3755 E. 25th St.
- Lawrence, Kansas 66046
- [Douglas County Sensitive Crop Registration Form \(fillable form\)](#) (PDF format)

### State of Kansas

To register with the state program, please visit the following page: [KDA Sensitive Crop Registration](#) (External link)

# Douglas County Public Works-Sensitive Crop Listing Form

**Douglas County Noxious Weed Department** **FORM**

John Landon, Director  
Noxious Weed Division  
3788 E 28th St.  
Lawrence, Kansas 66044

Telephone (785) 331-1331  
Fax (785) 842-1209  
Cell (785) 691-9136

**MEMORANDUM FOR RECORD**

Land Owner \_\_\_\_\_ Business Name \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Address of Crop \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email: \_\_\_\_\_

Type of sensitive crops: \_\_\_\_\_

I, \_\_\_\_\_, request Douglas County Noxious Weed Department **not** apply herbicide from:  
\_\_\_\_\_ to \_\_\_\_\_  
( start point address) ( end point address)

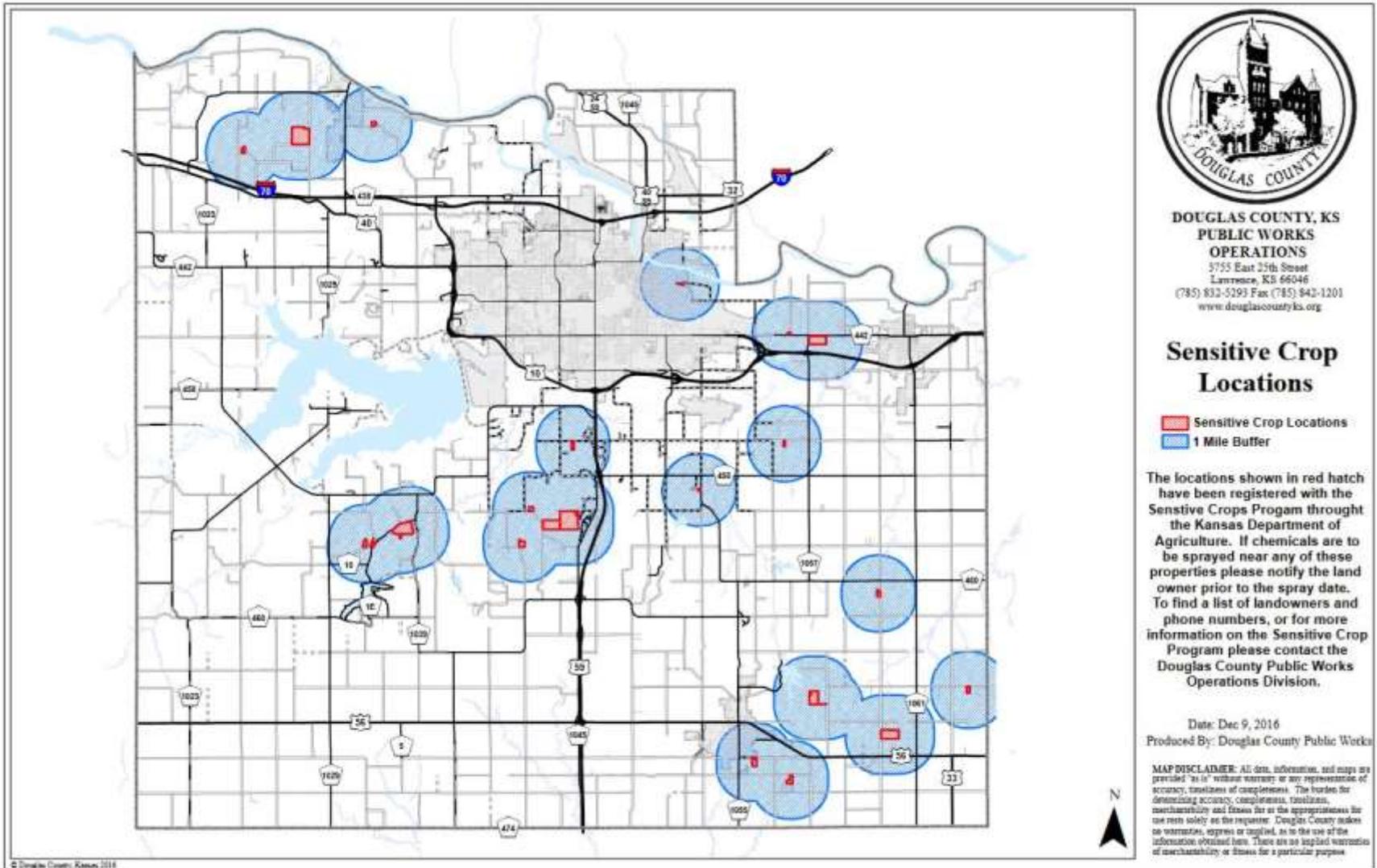
I agree to allow the County to place and maintain signs stating "SENSITIVE CROP AREA" or "NO SPRAY AREA" at the beginning and end of above designated area.

 The County will apply Milestone to the right-of-way after October 15<sup>th</sup> to assist in the prevention of noxious weeds during the next growing cycle. 

This agreement will be in force from January 1, 2016 through December 31, 2018 (2 year agreement). A 30 day written notice is required by either party to terminate this agreement.

- Filling this out online and mailing, faxing, or emailing it to DGCO PW is the best way to get on the registry.
- Please note that DGCO PW will spray after Oct. 15<sup>th</sup> for the next growing cycle.

# Douglas County 2016 Sensitive Crop Listing Map



# How is the Noxious Weed Law is Enforced?



- Published in the newspaper for around 5 days.
- The landowner will receive a warning either verbally or by mail.
- If there is still issues, the landowner will receive a legal notice by certified mail.

# How is the Noxious Weed Law is Enforced?



- After the 3<sup>rd</sup> legal notice, we will spray and the landowner will be charged cost of the chemical, labor, and include penalties.
- If the landowner does not pay, the payment will be added to their property taxes.

# Douglas County Public Works Spraying Team



- DGCO PW has three employees that do most of the spraying and provide services for Townships, City of Eudora, and KDOT.
- A Noxious Weed Spraying Contract is signed with these outside entities and they are billed accordingly.
- The DGCO PW department has 3 white trucks similar to the above picture that is used to spray Douglas County right of way as well as the contracted areas. The department has one gator pictured above that is used to spray around sensitive crop areas.

# Douglas County Public Works Cost Share Chemicals & Rental Equipment

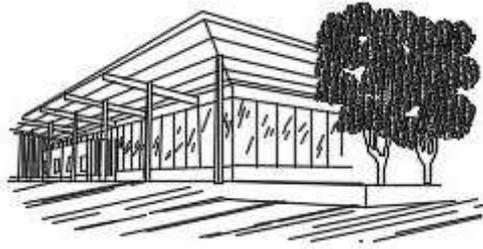
- 2-4, D 4lb Amine
- Tordon 22K
- Glyphosate
- Pasturegard
- Escort
- Milestone
  
- Rental Sprayers-3 pull behind like pictured
  
- Call 785-331-1322 to schedule the rental
  
- \$40/day or \$60/weekend



# Reminder:



- Douglas County spray season is April to October
- Seeds can stay in the soil for many years depending on the type of Noxious Weed so even though you spray this year, it will mostly like come back next year.
- Spraying is about controlling the weeds not necessarily completely eradicating them.



# Alan Hollinger

Park and Vegetation Superintendent

Noxious Weed Director

Contact Information

Work Phone: 785-331-1331

Work Cell Phone: 785-424-4863

Email: [jhollinger@douglascountyks.org](mailto:jhollinger@douglascountyks.org)