



# 2023 USU Crop School Cache County Vegetation Management Division

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# Noxious Weed Control Laws



- Rule R68-9 (Utah Noxious Weed Act)
  - Cache County Ordinance No. 2015-06
- [Cachecounty.org/vegetationmanagement/](http://cachecounty.org/vegetationmanagement/)



# Statistics

- 12% US crop production destroyed annually
- Exceeds \$20 Billion crop loss in US
- \$3 Billion spent annually on Herbicides

**“Prevention is the best weed control method”**





# Three Key Facts to Weed Control



- Don't uncover a worse problem than what you already had.
- Fastest solution is not always the best solution.
- Perennial grasses are one of the best noxious weed competitors.





## Name Change



Old Name:

**Cache County Weed Division**

New Name:

**Cache County Vegetation Management Division**



# Cache County Vegetation Management Division Team



- **Jake Forsgren**    Cache County Noxious Weed Supervisor
- **Alex Wilhelm**    Municipalities/Non Grant Operation Assistant
- **Brad Ashcroft**    Grants/S.P. Operation Assistant
- **14 Seasonal Technicians**





# Cache County Noxious Weed Program



- Grants (EDRR, UWSA, Phragmites, and Goatsrue)
- Non Grant
- Waterways
- Vacant Lots
- Municipalities
- County Roadsides/Right-of-ways
- Railways
- Special Projects

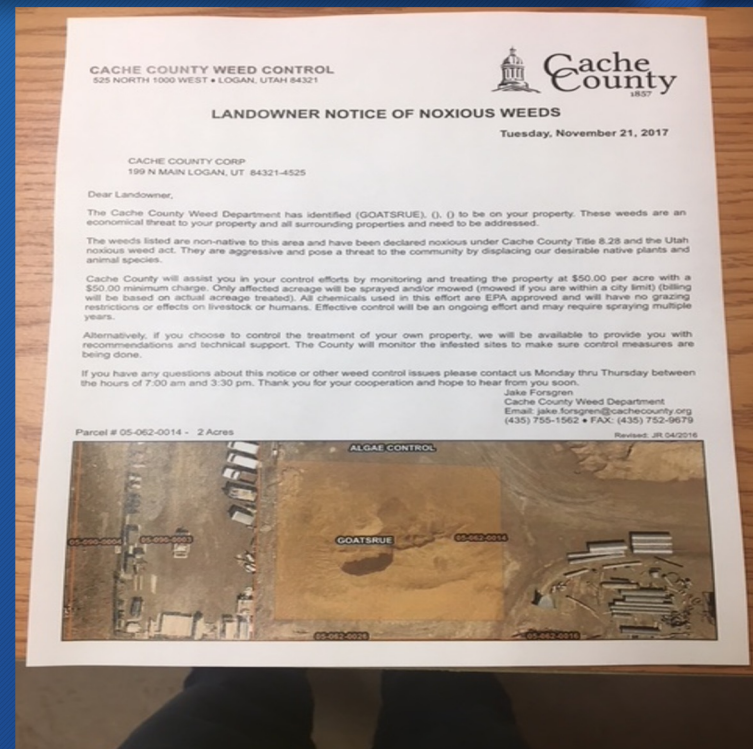




# 2022 Landowner Notification Letters



- **2411 Total Sent**
- **908 County Treated**
- **995 Owner Sprayed**
- **508 Monitored**





# 2022 Cache County Year End Totals



**16,000 Total Acres Monitored**

**4,017 Total Acres Treated**

**2,462 Total Infested Parcels Identified**

**2,411 Total Landowners Notified**





# Basic Plant Life Cycles

- Annuals
- Biennials
- Perennials





## Areas of Concern

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# Vacant Lots





# Dry Farms

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# Along Waterways

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# Pastures/Irrigated Fields

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# Rangelands

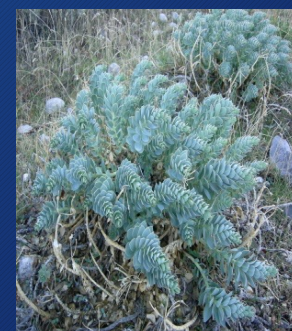
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# Landscaping

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# Right of Ways





# Utah Declared Noxious Weeds



## 1A EDRR Watch List

- African Rue
- Common Crupina
- Malta Starthistle
- Mediterranean Sage
- Plumeless Thistle
- Small Bugloss
- Spring Milletgrass
- Syria Beancaper

## 1B EDRR

- Camelthorn
- Common St. Johnswort
- Cutleaf Vipergrass
- Elongated Mustard
- Garlic Mustard
- Giant Reed
- Goatsrue
- Japanese Knotweed
- Oxeye Daisy
- Purple Starthistle
- Sahara Mustard
- Viper's Bugloss
- Ventenata



# Utah Declared Noxious Weeds cont.



## 2 Control

- Black Henbane
- Dalmation Toadflax
- Diffuse Knapweed
- Dyers Woad
- Leafy Spurge
- Medusahead Rye
- Purple Loosestrife
- Rush Skeletonweed
- Spotted Knapweed
- Squarrose Knapweed
- Yellow Starthistle
- Yellow Toadflax

## 3 Containment

- Bermudagrass
- Quackgrass
- Russian Knapweed
- Saltcedar
- Scotch Thistle
- Puncturevine
- Canada Thistle
- Field Bindweed
- Hoary Cress
- Houndstongue
- Jointed Goatgrass
- Musk Thistle
- Perennial Pepperweed
- Perennial Sorghums
- Phragmites
- Poison Hemlock



# Utah Declared Noxious Weeds cont.



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- Russian Knapweed
- Saltcedar
- Scotch Thistle



# Utah Declared Noxious Weeds Cont.



## 4 Prohibited

- **Congongrass**
- **Damesrocket**
- **Myrtle Spurge**
- **Russian Olive**
- **Scotch Broom**



# 2022 Prioritized Cache County Noxious Weed List



- Monitoring and education
- Help track and achieve possible eradication.
- Help with application process for Grants.
- Help to plan upcoming year projects.
- Save time and valuable resources, treating weeds that are a priority.

[www.cachecounty.org/vegetationmanagement/](http://www.cachecounty.org/vegetationmanagement/)





**What does EDRR mean?**

**Why Do We Care?**





# Weed Alert

## Early Detection Rapid Response



### Cache County EDRR

- Vipers Bugloss
- Elongated Mustard
- Giant Reed
- Rush Skeletonweed
- Ventenata
- Japanese Knotweed
- Dalmation Toadflax
- Oxeye Daisy
- Black Henbane
- St. Johnswort
- Spotted Knapweed
- Diffuse Knapweed
- Yellow Starthistle

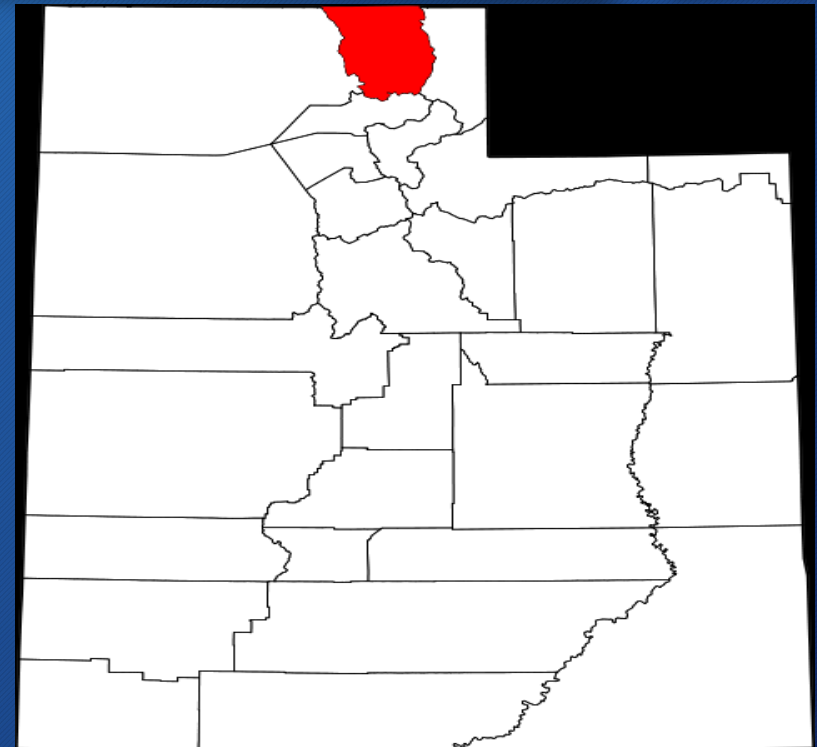




# 2019 Cache County EDRR Parcel Infestations



• Vipers Bugloss	2
• Elongated Mustard	42
• Giant Reed	1
• Rush Skeletonweed	15
• Ventenata	10
• Japanese Knotweed	7
• Dalmation Toadflax	8
• Oxeye Daisy	20
• Black Henbane	35
• Com. St. Johnswort	15
• Spotted Knapweed	122
• Yellow Starthistle	43
• Diffuse Knapweed	10





# Vipers Bugloss

- Short-lived perennial
- Stems and leaves are rough and hairy.
- Flowers funnel shaped bright blue
- Each flower produces 4 seeds that can be viable for 3 years.
- Toxic to horses and cattle.
- A host to several crop diseases.
- Deep taproot



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# Elongated Mustard

- Short-lived perennial
- Grows 3 feet tall
- Lower leaves are flattened and slightly toothed margins.
- Bright yellow flowers in Mid-summer.
- Plants produces abundant amounts of seed that are dispersed by wind, and become “sticky” with wet conditions.
- Thrives in Dryland settings.
- Cache and Box Elder is the only counties in the state

15 parcels county wide

Located in Newton, Clarkston, Petersboro areas.





# Comparison

Elongated Mustard



Dyers Woad





# Giant Reed

- Perennial
- Rhizomatous root system
- Wetlands and disturbed sites
- Fire hazard
- Can be propagated from stem cuttings
- Do not mow or till, will encourage new growth
- Often mistaken for Phragmites.
- **Eradicated 2022**

Was located in Logan.





# Comparison

Giant Reed

Hairless Stems



Phragmites

Hairy Stems





# Rush Skeletonweed

- Deep tap-rooted perennial.
- Stems are nearly leafless.
- Stems are covered with prickly hairs.
- Plant parts extrude milky sap when damaged.
- Root fragments can generate new plants.
- Yellow Flowers
- Individual plants can produce 20,000 seeds each.
- 7 parcels countywide

Small infestations that are located in: Clarkston, Cache Junction, Smithfield, and Mt. Sterling.





# Comparison

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**Rush Skeletonweed**



**Chickory**





# Ventenata



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- Winter annual grass.
- Stems have reddish-black joints.
- Seed heads are produced in loose, branching clusters.
- Seeds resemble wild oat seeds.
- Found in grain crops, rangeland, and on disturbed sites.
- Found in Cache and Box Elder Counties.
- 10 parcels

Located in Mt. Sterling and  
Hardware Ranch Areas.





# Oxeye Daisy

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- Perennial
- Rhizomatous root system.
- Leaves are lance-shaped with coarse teeth.
- Flowers 1-2 inches in diameter, and usually appear from June to August.
- Can give a “off-flavor” in milk If consumed by dairy cattle.
- Thrives in meadows and along stream beds.
- 20 parcels countywide.

Located in: Wellsville,  
Hyrum and Paradise. (along  
the Little Bear River)





# Comparison

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Oxeye Daisy



Shasta Daisy





# Black Henbane

- Biennial
- Grows along fence lines and wasted areas.
- Pointed lobes and prominent veins.
- Flowers off-white with purple centers.
- Pineapple shaped seed pods.
- Hundreds of seeds can be produced from one plant.
- Poisonous to both animals and humans.
- 35 parcels countywide
- Located in Richmond, Logan, College ward, Young ward, and Bear Lake Summit.



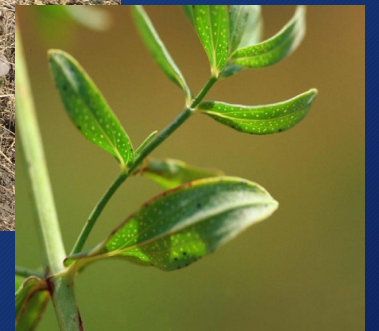


# Common St. Johnswort

- Thrives in sandy, gravelly soils.
- Spreads by seeds and short runners.
- Stems are woody at the base.
- Leaves have prominent veins and transparent dots.
- Flowers bright yellow with five petals.
- If white haired animals ingest it they will lose weight when exposed to sunlight, and develop skin irritations.
- 15 parcels countywide
- Found in Smithfield area.



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# Spotted Knapweed

- Biennial /short lived perennial
- Taproot
- Basil leaves
- Flowers are purple, with black spots on the bracts.
- Competitive for soil moisture and nutrients
- Releases chemical substance into soil to inhibit surrounding vegetation.
- Released Bio-control
- 122 parcels countywide

Located in High Creek, Richmond, Mendon, Millville, South Canyon, and Hardware Ranch



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# Comparison

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Spotted Knapweed



Wild Aster





# Diffuse Knapweed

- Annual/short lived perennial
- Leaves have divided lobes
- Flowers white/rose color
- Straight toothed spines on flower bracts.
- Releases chemical substance into soil to inhibit surrounding vegetation.
- Competitive for soil moisture and nutrients

10 Parcels Countywide

Located in Paradise Area





# Yellow Starthistle

- Annual
- Tap root
- Found in waste areas and roadsides.
- Basil leaves that are sharply pointed.
- Flower heads are yellow, located on ends of branches.
- Flower heads are armed with sharp thorns.
- Released Bio-control
- 43 parcels countywide

Located in Paradise, Richmond, and Trenton.







## **Cache County Vegetation Management Division**

**1020 East 600 North**

**Hyrum, Utah 84319**

**435-755-1562**

**[jake.forsgren@cachecounty.org](mailto:jake.forsgren@cachecounty.org)**