

### How to Know What to List

**Special points of interest:**

- Sericea lespedeza was also listed after becoming established. There was more than 300,000 acres when it was declared noxious
- Other species were properly listed before becoming heavily established: Quackgrass, Hoary cress, Russian knapweed, Pig-nut, Canada thistle, Leafy spurge and Kudzu were all listed with fewer than 1,000 acres infested.

Actually, this is not the way it works. The decision of whether or not to list a weed as noxious involves a very complex process that includes determining how invasive the species is, what affect it will have on other species and the environment and whether or not it poses any threat to humans, livestock or crops. There are other considerations that also must be taken into account when considering whether or not a species should be declared noxious.

The first is how wide spread the weed is already and how long it has been established. If there is a large population already established in the state, the chances of being able

to control the species are very slim unless large amounts of both money and time are expended in the effort. The chart below demonstrates the development of a weed infestation and illustrates the need to list a species as soon as possible

Unfortunately there are examples of these strongly established weeds being listed as noxious in the past. Field bindweed, musk thistle and Johnsongrass were not listed until each species infested more than 130,000 acres.

Another factor to consider is the availability of control options. Since the law requires all landowners “to control the spread of and to eradicate all weeds”

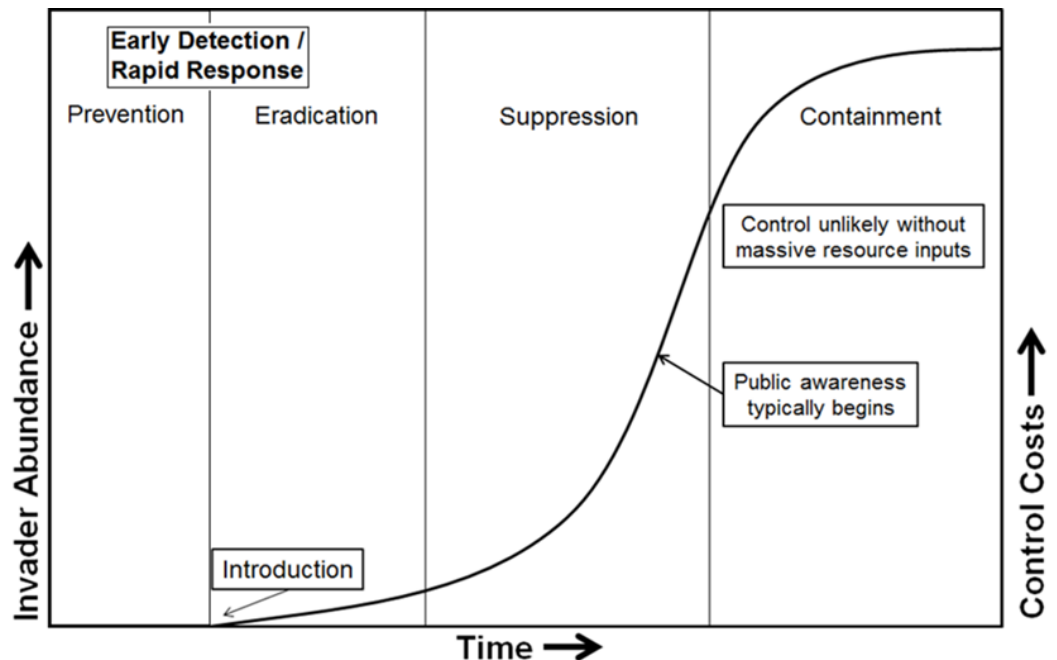
declared noxious, it would be misguided to declare a species as noxious when there were no effective controls available. One example of weeds without effective controls are the Old World bluestems. The only herbicides available that will control these species are only partially effective and will also harm the native and desirable species. There are also no mechanical or biological controls available as alternatives.

The best time to list a species as noxious is before, or very soon after, it gets established because, after all, **the cheapest and easiest weed to control is the first one.**

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## Integrated Weed Management: Part 10 - Chemical Control

The last and yet most commonly used control method within the Integrated Weed Management approach is chemical control. This method involves, of course, the use of herbicides to control weeds.

Herbicides are particularly effective in controlling perennial plants because they can kill the roots of the plant more effectively than other control methods and the only way to permanently kill a perennial plant is to kill the roots, otherwise they will continue to grow, using the nutrients stored below ground.

The herbicides available today have been rigorously researched and tested to

provide the maximum control with a minimum impact on the environment, humans and other organisms. They target specific sites at a plant's tissue or cellular level that disrupt vital processes within the plant, causing it to die. Different types of herbicides affect different processes. These are called modes of action and are very important in selection which herbicide, or herbicides, to use.

I am sure you have either heard of or experienced herbicide resistance. This is the result of certain species of plants finding a way to work around the damage caused by a particular, regularly used herbicide. Once this happens, no

herbicides with that particular mode of action will work on that species of plant. Because each mode of action affects the plants in different ways switching back and forth between herbicides with different modes of action can prevent any species from adapting to any one of them.

There are those who disagree with the use of chemicals to control weeds, which is why the Integrated

Weed Management approach is such an all inclusive program. It allows more than one control method to be used to control weeds based upon an individual's needs. In fact, using multiple methods on any particular weed is more effective than just one. The only requirement in determining which method or methods to use, at least when dealing with noxious weeds, is that they "prevent the spread of and eradicate" the noxious weeds, as is required in the state noxious weed law.

Always remember, and don't ever forget, to read and follow the label whenever applying herbicides.



## Control Corner: Noxious Weed Control Programs

As I mentioned in the last Update, and as I am sure you already knew, herbicide drift is a serious issue. If you grow a specialty crop that is sensitive to certain herbicides, it can be a critical issue. Therefore, it would be a great help as a sensitive crop grower to be able to let applicators know where your fields are and what you are growing.

That help is out there with the Drift Watch program. As part of the nationwide Field Watch program, it was developed as a way to help specialty crop growers and pesticide applicators communicate and



to help prevent and manage drift effects. Kansas is one of 13 states participating in the program, as are Colorado, Nebraska and Missouri.

To participate as a sensitive crop grower, simply go to [driftwatch.org](http://driftwatch.org) and sign up as a commercial crop producer. You will have the option of allowing your

fields to be shown on a map that can be viewed by applicators or other interested parties. There is also a Bee Check program that provides the same type of service for apiarists. ([beecheck.org](http://beecheck.org))

If you are an applicator, you can sign up with Field Watch at [fieldwatch.com](http://fieldwatch.com) to view all of the registered producers and apiarists to know who in the area you will be spraying in you might need to contact before you spray.

If you are not interested in signing up but still want to warn people that you

have sensitive crops on your land, you can order "Sensitive Crop Grown Here" signs from the K-State Research and Extension bookstore at [www.bookstore.ksre.ksu.edu](http://www.bookstore.ksre.ksu.edu)





Plant Protection and Weed Control

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Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

#### Our mission is to:

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantined pests;
- Provide customers with inspection and certification services.

## Invasive Species Spotlight

### Knotweeds (*Polygonum* spp.)

Imagine a stand of brush so tall you can't see over it, so thick you can't walk through it and so aggressive it can grow through cement and asphalt. Nasty stuff, right? It is actually worse than that. I am describing the four species of highly invasive knotweeds that, unfortunately, have already started to invade Kansas. The four species are Japanese (*P. cuspidatum*), Giant (*P. sachalinense*), Himalayan (*P. polystachyum*) and Bohemian (*Polygonum ×bohemicum*) which is a hybrid between Japanese and giant. The knotweed invasion was first noticed in Crawford county but has since been found

in several eastern counties as far north as Shawnee



county. These infestations have been found mostly along water or on roadsides.

The knotweed plants are easy to identify because they have large, heart-shaped, red-stemmed leaves and bamboo-like stems which can grow as tall as 15 feet. The showy

white flowers grow on spikes along the stem and are very conspicuous when they appear in late summer. They die off in the fall, leaving standing canes and occasionally fruit. Do not think you have won the battle because the large, woody root mass is simply waiting out the short days and cold temperatures to send out new stems. They also produce rhizomes, which are long, underground stems that will pop out of the ground and form new plants as much as 20 feet from the original plant.

Control is difficult because of the need to kill the existing stems, the roots and

the rhizomes. Glyphosate, Imazapyr, Triclopyr and Aminopyralid products have been found to be effective in killing knotweeds and can be applied to the leaves, the cut stems or even injected into the stem. Be careful if you decide to use the cut stem method because the stem pieces you leave lying around can take root and create new plants.

Don't like using herbicides? You can try digging the roots up or cutting the above ground stems to prevent them from producing seed but you will have to do so repeatedly for 5 or more years.