

Special points of interest:

- Other weed-related lists are the Quarantined Species List, and the Noxious, Prohibited, and Restricted Weed Seed Lists
- There are also seed banks for preserving seeds in climate controlled buildings for ensuring species diversity into the future.
- Ground fog in the morning is a good indicator of a temperature inversion.

Weeds to Watch List

While everybody knows the state of Kansas has an official noxious weed list and an additional list of species listed as noxious in individual counties, you may not know that we also have an unofficial “Watch Weed” list. This list contains those invasive species that the Kansas Department of Agriculture has identified as potentially damaging to the environment or the agricultural industry and for which we do not have sufficient information regarding their infestations in Kansas

The State Noxious Weed Advisory Committee chooses from those invasive species being considered for listing and those nominated by the general public. If a species is determined to not be qualified as a noxious weed, they will consider it for the Watch List.

Since this list is unofficial, there is no regulatory authority behind it, which means you cannot get into any trouble for having any of these weeds on your land. We do, however, encourage you to report

any of these weeds to your County Weed Director, County Extension Agent or the Kansas Department of Agriculture as soon as you find them so that they can help you control them before they become a problem.

Remember that the cheapest and easiest weed to control is the first one, so be sure to report any new plants you find on your land, identify them so that you know if they are a potentially problem and then eradicate them if they are, or could be, invasive.

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Sign up to receive the Noxious and Invasive Weed Update automatically via email at agriculture.ks.gov

“Banking” on Future Generations of Weeds

No, we are not planning on or hoping for weeds to grow into the future. The weeds themselves however, are doing just that.

You may have heard about the tens of thousands of seeds our noxious weeds can produce each year (Musk thistle can produce up to 10,000 seeds per year). What you may not have heard is that not all of those seeds germinate into new plants the next spring. Many of them, in some cases a majority of them, remain in the soil for many years, even decades after

they were produced (Field bindweed seeds can last for 50 years in the seed bank). They are the weeds’ back-up plan in case the germinating seeds are killed off by responsible, law-abiding landowners.

These dormant seeds in the soil are known collectively as the seed bank. When the soil gets warmer than usual, like when the growing plants die off or other favorable conditions occur, these seeds will germinate into new plants.

You may have noticed that

after you have aggressively controlled every weed you could find, more seem to pop up out of nowhere; these are withdrawals from the seed bank.

Because a well established seed bank can contain thousands of seeds per square foot, the best way to combat the seed bank is to control your weed infestations early before too many generations of seeds are produced and to control the growing weeds before they flower and produce even more seeds.

There's an App for That - Weather Apps

The apps we are reviewing in this issue are those that display the current weather and present forecasts going forward. Some of them are very in-depth in what information they present while some are very simple and show only specific information. This provides you with a choice as to what you are looking for in a weather app.

One of the most thorough weather apps is Wx by Joshua Tee. The Local tab will provide the current weather, an interactive radar shot of your area, and a seven-day forecast of the coming weather. That's the basic stuff that will let you know if it is a good time to spray. It has a large database of maps related to storm and severe weather from the Weather Prediction Centers. You can even have current



warnings National and Storm Centers. even have current

and severe weather alerts to your phone.

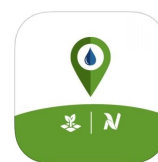
Our second inclusive weather app is Weather Underground by IBM. The main screen shows the current conditions, temperature, the "feels like" temperature (heat index or wind chill), the day's predicted high and low temperature, the percent chance of precipitation, and the wind speed and direction. At the click of a button it will add the accumulated rainfall for the last 24 hours, humidity, dew point, and the barometric pressure, among other information. Back at the main page, there is a weather map that will give you radar images and severe weather alerts if you tap the bottom of the page also a



weather you tap the bottom there is 10

-day forecast by day and by hour.

Two other very simple apps are Pocket Rain Gauge and Spray Smart, both by Agrible and Nutrien. Pocket Rain Gauge will give you're the accumulated rainfall for the last 24 hours, in inches or millimeters, for your location (if you allow it to track your location), or for your individual fields, if you create an account with the app or with Agrible.com. Spray Smart will show you the local weather conditions, temperature, wind speed and direction, and if there is an inversion or not. It will also show this information for your current location and your fields, provided you supply the same permissions. Both apps have hourly updates.



Control Corner: Temperature Inversions

The issue with temperature inversions has to do with herbicide drift. When an inversion occurs, cool air is stuck underneath a layer of warm air, which prevents air from circulating through the atmosphere. Because of this, the vapors released from herbicide applications stay close to the ground and can more easily settle on to someone else's fields. This is why many pesticide labels now have restrictions on applying them during inversions.

These inversions occur most commonly in the evening but can last until morning. The lack of air movement (wind) can even keep them from breaking up all day. To tell if you have an inversion, look for any source of smoke or steam in the area. Normally it will rise directly up, whereas in an inversion it will only

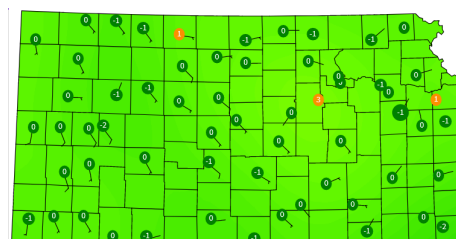


rise to the level of the inversion, and will then move sideways.

If you can't find any indicators like these, you can go online and check out the KSU Mesonet. This is a very useful resource for determining if a temperature inversion is occurring in your area. This is a website rather than an app, but a link to it can be saved to your phone so it is just as easy to access. The Mesonet will show you lots of useful weather information, but most importantly, it will show the presence or absence of

temperature inversions. You can find the Mesonet at <http://mesonet.k-state.edu/>. To check on inversions, tap on the three bars in the upper left-hand corner, select Agriculture, then click on Inversions. Once the map shows up, click on the circle closest to your location and it will show you if you have an inversion occurring.

Even without this technology, a good rule of thumb is to not apply herbicides when there is no wind blowing, too much wind, of course, is bad too.



Mesonet Data - Temp Difference at Sep 07 2023 08:35 (C01)

Any questions comments or article suggestions, please contact:

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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.

Visit our website at agriculture.ks.gov



Invasive Species Spotlight:

Japanese honeysuckle (*Lonicera japonica*)

Introduced from eastern Asian in the early 1800s, Japanese honeysuckle has spread across the entire southern United States, up through the eastern and Great Lakes states, and is now spreading into the Midwest. In Kansas it is

known throughout the eastern counties and is moving into the central part of the state.

A perennial woody vine that will climb trees and shrubs by twisting its stems around trunks and branches, eventually strangling

them by cutting off the flow of water and nutrients from the roots. Birds will eat its small black berries, spreading the seed to new areas. Its flowers are tubular with five petals and occur in pairs along the stem at leaf junctures. They are white but turn yellow to almost orange later in the year as they age. Leaves are opposite, oblong, have short stems and appear in pairs. The leaves may remain green all year or they may fall off in the autumn.

Small patches can be pulled or dug, ensuring to



remove as much of the root as possible. Larger infestations can be controlled through foliar applications of triclopyr or glyphosate. Fall applications, while leaves are still green, will prevent collateral damage. Always read and follow label directions. The label is the law.

