

REMINDERS

1. Apply preemergent herbicide to lawn if you haven't already
2. Turn compost pile.
3. Prune spring-flowering shrubs such as forsythia and lilac after blooming if needed
4. This is a good time to plant cabbage, broccoli, cauliflower transplants as well as lettuce, kale, beets, carrots and swiss chard if you haven't done so yet.
5. Sidedress cabbage, broccoli and cauliflower 3 weeks after transplanting. See <https://tinyurl.com/skys3ht> for sidedressing chart.
6. Sidedress onions 2 to 4 weeks after transplanting.

Henbit and Chickweed in Lawns

The plant with the little purple flowers that have been showing up in home lawns is called henbit. If you are not sure this is what you have, check the stems. If they are square rather than round, you have henbit. A plant that also is low growing but has round stems and tiny white flowers is chickweed.

Both these plants are winter annuals and start to grow in the fall. They spend the winter as small plants and so most people do not pay much attention to them until they start to flower in the spring. Trying to kill either one at this late stage with a herbicide usually is a waste of time and money. Though plants may be burned back, they will rarely be killed. So what should you do? Remember, these are winter annuals that will die as soon as the weather turns hot. Keep the lawn mowed until nature takes its course.

However, you can do something next fall that will help next spring. Henbit and chickweed usually germinate about mid-October. Spraying with 2,4-D, Weed-B-Gon, Weed Free Zone, Weed Out, or Trimec in late October to early November can go a long way toward eliminating these plants as they are small and relatively easy to control. Choose a day that is at least 50 degrees F. These herbicides will work at temperatures below 50 degrees but the weeds are killed at a slower rate. You may also use a preemergent herbicide for lawns in late September as long as have not recently put down grass seed. Spraying with the postemergence herbicides mentioned earlier will also catch dandelions which the preemergent herbicides will miss.

Spot treating may be needed in the spring (March) whichever method of control you use but is more likely with the use of preemergent herbicides. Use Weed Free Zone, Speed Zone, Weed Out, Weed-B-Gon, Trimec, or one of the special henbit herbicides early in the spring before they have put on much growth. (Ward Upham)

Fertilizing the Home Orchard

Fruit trees benefit from fertilization around the bloom period, but the amount needed varies with the age of the tree. Normally, trees primarily need nitrogen, so the recommendations are for a high nitrogen fertilizer such as a 27-3-3, 29-5-4, 30-3-3 or something similar. Though recommended for lawns, these fertilizers will also work well as long as they do not contain weed killers or crabgrass preventers. Use the following rates:

Trees 1 to 2 years old, apply one-fourth cup of fertilizer per tree;

Trees 3 to 4 years old, apply one-half cup per tree;

Trees 5 to 10 years old, apply 1 to 2 cups per tree;

Trees more than 10 years old, apply 2 to 3 cups.

You may also use nitrate of soda (16-0-0) but double the rate recommended above.

If a soil test calls for phosphorus and potassium, use a 10-10-10 but triple the rate.

On apple trees, last year's growth should be 8 to 10 inches, cherries should have 10 to 12 inches, and peaches should equal 12 to 15 inches of terminal growth. If less than this, apply the higher rate of fertilizer, and if more, apply the lesser amount.

Spread all fertilizer evenly on the ground away from the trunk of the tree and to the outer spread of the branches. Water in the fertilizer with at least 1/4 inch of water if rain does not do the job for you. (Ward Upham)

There Never Used to be Fruit on Ornamental Pears

The fruit on ornamental pears is quite small; about the size of a marble. However, it can be very messy if it lands on sidewalks or driveways and people squish the fruit when walking or driving. You may have noticed that ornamental pears are producing fruit much more commonly than they have in the past. Why is this so? A little history is needed in order to understand what has happened.

Ornamental pears used to be called Bradford pears. This was a bit of a misnomer as 'Bradford' was a specific variety. Ornamental pears were called Bradfords because this was practically the only variety that people planted. Therefore, if you bought an ornamental pear a number of years ago, it was likely a Bradford. All was well and good until people noticed that Bradfords would fall apart after a number of years due to a weak branching structure. Therefore, nurseries started selling "improved" ornamental pears that were not Bradfords such as 'Aristocrat', 'Capital', 'Redspire', 'Chanticleer' and various other varieties. It was felt that all of these varieties had a stronger branching pattern than 'Bradford' but such may not be the case. Both 'Chanticleer' and 'Redspire' have shown branch breakage. 'Aristocrat' does appear to have better branch angles but more time is needed to make a firm recommendation.

Here is the key. Pears usually require cross-pollination in order to fruit. In other words, you must have two different varieties of pear before fruit forms. When all we had were Bradfords, we had no fruit due to a lack of cross-pollination. Now that we have such a mixture of varieties, we will get fruit as long as two different varieties of ornamental pears bloom at the same time and are close enough that bees can work between them.

This formation of fruit can also lead to a second problem. Volunteer trees can come up from the seed contained in the fruit. Therefore, you may see ornamental pears come up in areas where no one planted them. This has become enough of a problem that several states have added ornamental pears to their invasive plant list.

There are products that are sold as fruit preventers such as Florel but timing and air temperature are critical and our results have been mixed. (Ward Upham)

Planting Easter Lilies Outside

Gardeners often hate to throw out Easter Lilies after they finish blooming and may wonder if they can grow outside. Though not reliably hardy in Kansas, many gardeners have success if they follow a few simple rules.

1. After the flowers have faded, remove the flower stalk so that energy does not go into making seed.

2. Keep the plant inside until the danger of frost is past. Keep soil moist but never waterlogged. Don't allow water to sit in the tray. Continue to fertilize.

3. The pot can be moved outside when frost is no longer a concern. Sinking the pot into the soil up to the brim and placing in dappled shade will help reduce watering. Continue to water and fertilize until the top growth dies down.

4. Choose a sunny, well-drained spot for planting. Good drainage is vital for lilies and so the addition of organic matter is usually necessary for most soils. Till or dig the soil 6 inches deep and add 3 inches of peat moss. Mix the soil and peat moss together. This will form a berm that should drain very well.

5. Plant the bulbs 6 inches deep and 12 to 18 inches apart and water in well. Mulch to conserve moisture. New growth may appear later in the summer or the plant may stay dormant until the following spring.

6. Cover the plants in the fall after the foliage has died down with straw, pine needles, wood chips or other types of mulch to help protect the plant over winter. Use 4 inches of straw or 3 inches of any of the other materials.

7. Uncover the plants in the spring to allow new growth to appear and fertilize according to soil test. (Ward Upham)

Controlling Grassy Weeds in Broadleaf Plants

Most gardeners are familiar with herbicides that can be used to eliminate broadleaves from grasses (i.e. dandelions from lawns). However, gardeners may not be as familiar with herbicides that can take grasses out of broadleaf plants like shrubs. There are two major weed killer types labeled for homeowners that are used to kill grassy weeds in broadleaf plants. On the commercial side, the trade names for these products are Fusilade and Poast. Homeowner labeling is more diverse. I have seen Fusilade sold under the names of Ortho "Grass-B-Gon". Poast is sometimes sold to homeowners under the Poast label but I've seen it more commonly sold as "Bonide Grass Beater", "Fertilome Over the Top II Grass Killer", "Hi-Yield Grass Killer" and "Monterey Grass Getter." There may be other trade names, too. Fortunately, you can identify the product by the common chemical name listed on the label. Fusilade's common chemical name is fluazifop, and Poast's is sethoxydim.

If you decide to use one of these products, read the label carefully. Often, a crop oil must be added to the spray solution for the herbicide to work well. Some grassy weeds are not controlled such as bromegrass and sandbur. Mature tall fescue also is not controlled though seedling tall fescue is. Established bermudagrass is knocked back but rarely killed.

Though both these products can be used over the top of numerous broadleaf plants (including iris), there are some differences in labeling. For example, if you need to control grasses in vegetables, choose Poast as Fusilade is not labeled for vegetables. However,

Poast products cannot be used on all vegetables and the waiting period between spraying and harvest may be so long as to make use impractical. To see a label for one of the products that contain sethoxydim, see Hi-Yield Grass Killer. (Ward Upham)

Videos of the Week: Planting a Garden

<https://kansashealthyyards.org/all-videos/video/planting-a-garden>

and Butterfly Gardens

<https://kansashealthyyards.org/all-videos/video/butterfly-gardens>

Pest Control on Fruit Trees

It can be a challenge to know how to spray fruit trees for pest control. Spray schedules will vary depending on whether the trees have fruit or not. Following are hints on what to spray this year for our most common fruit trees.

Peaches, nectarines and apricots: Most people will not have peaches or nectarines this year due to the cold snap in February. Apricots seem to have fared better. Regardless, check to make sure the fruit buds were not winter killed. Just touching dead buds will cause them to fall off. These fruits are also very susceptible to late frosts as they bloom early. Trees that are in full bloom, become much more sensitive to frost damage than those with buds still closed. Temperatures at 28 degrees and lower will harm buds that are in full bloom.

If there will not be any fruit, there isn't any need for being on a spray schedule. If there is fruit, use a product that contains captan or myclobutanil (Immunox, Fungi-Max, Fertilome F-Stop Lawn and Garden Spray) from now until about two weeks before harvest. Spray about every 10 days.

If a specific problem develops such as borers, peach leaf curl or gummosis on peach, see our listing of common problems at our "Common Plant Problems in Kansas" website. Look under "Peach" for possible problems and what to do about them.

Cherries: We often have good fruit on cherries without spraying. However, a wet spring can lead to problems with brown rot. Myclobutanil (Immunox, Fertilome F-Stop Lawn and Garden Spray, Fungi-Max) or Captan will give good protection. Cherry fruit fly may attack the cherries with the maggot causing damage to the fruit. Malathion (check label), Bonide Fruit Tree & Plant Guard or Sevin can be used for control.

Pears: Pears are often able to escape damage without spraying. If trouble does arise, use the same recommendations given for apples.

Apples: Apples are the crop most in need of a spray schedule. Unless you have disease-resistant trees, cedar-apple rust is a perennial problem. The larvae of the codling moth is the insect most likely to damage fruit. Control can be a challenge due to changing labels and an extended spray season. See our article in our March 24, 2020 newsletter on "Apple Tree Sprays" for details.

We have three publications that give an overview of fruit pest control that are helpful: 1) Spray Schedules for Growing Apples at Home; 2) Spray Schedules for Growing Stone Fruit at Home; 3) Fruit Pesticides, Active Ingredients, and Labeled Fruits.

Don't overlook the "Fruit Pesticides..." pub as it lists trade names as well as other very important information. (Ward Upham)

Fruit Tree Sprays and Rain

A spreader-sticker is used to improve the distribution and retention of fungicides and insecticides on fruit and leaves. Many gardeners may not be familiar with these products but they can help our fungicides and insecticides work better. Look for a product that is called "Spreader-Sticker." Big box stores rarely carry these products but garden centers or well-stocked hardware stores often do. These products should be used with fruit tree sprays as it allows the spray to coat leaves and fruit more thoroughly and to resist being washed off during rain events. However, even with a spreader-sticker, a rain can reduce the length of time the materials are effective. Less than one inch of rain since the last spray will not significantly affect residues. As a general rule, one to two inches of rain will reduce the residue by one half. Reduce the number of days until the next spray by one half. More than two inches of rain since the last spray will remove most of the spray residue. Re-spray as soon as possible. These recommendations apply for a soft, gentle rain. If you have a hard, driving rain, cut the above recommendations in half. (Ward Upham)

Controlling Weeds in Strawberries

Strawberries are one of the most popular fruits, but gardeners often have problems with weed control. Strawberries form a mat of plants, which makes hoeing difficult. Gardeners must pull weeds by hand or use herbicides. In small plantings, hand weeding is usually sufficient as weeds become less of a problem when the plants canopy over to block sunlight to the soil. In larger plantings, herbicides may prove helpful.

Although there are no weed preventers available for homeowners to use on strawberries, Poast (sethoxydim), a grass-killing herbicide, can be used after weedy grasses have emerged. It can be sprayed directly over strawberries without harm but should not be applied within 7 days of harvest. You can find Poast in Fertilome Over the Top II, Hi-Yield Grass Killer and Monterey Grass Getter. (Ward Upham)

Ash/Lilac Borer

Note: Ash/Lilac Borer is a different insect than Emerald Ash Borer. Ash/Lilac Borer has been around for many years while Emerald Ash Borer has been confirmed in only Atchison, Doniphan, Douglas, Jackson, Jefferson, Johnson, Leavenworth, Miami, Shawnee & Wyandotte counties in Kansas.

If you have had problems with canes or stems of lilac and privet suddenly wilting, or ash trees that show borer holes in the trunk and larger branches, the ash/lilac borer may be to blame. This insect causes the base of infested lilac stems to swell and the bark to separate from the wood. A fine sawdust-like material is present around holes in the canes. Ash and mountain ash also are affected. The borer attacks the trunk, which may cause bark to swell and crack if there are repeated infestations.

Ash/lilac borers overwinter as larvae in infested trees and shrubs. Moths generally begin to emerge in mid to late April. Emergence peaks in May, dwindles by mid to late June and ends by the first week of July. However, this varies by year. The moth has clear wings and resembles a wasp. There is one generation per year.

Public and commercially managed properties often use pheromone traps to determine the presence of adults. Spray treatments are started seven to 10 days after capture of the first moths.

Sprays also can be timed using phenology, the practice of timing one event by another. The first spray for ash/lilac borer should be applied when the Vanhoutte spirea is in full to late bloom. This is often about the third week in April but can be as early as late March and as late as mid-May. Apply a second spray four weeks after the first. The Missouri Botanical Garden has several images of Vanhoutte spirea.

Thoroughly treat the trunk and larger limbs of ash or the lower portion of the stems of lilac or privet. Heavily infested ash should be cut and burned during the fall and winter. Infested stems of lilac or privet should be removed as well.

Products with bifenthrin or permethrin (Hi-Yield Garden, Pet, and Livestock Insect Control and 38 Plus Turf, Termite and Ornamental Insect Control) are labeled for control. Though there are a number of homeowner products that contain one or the other of these two active ingredients, the permethrin products listed above are the only ones I've found that specifically lists the ash/lilac borer on the label with directions for control. (Ward Upham)

Mole Control

Though moles spend most of their time underground, the damage they cause above ground is all too visible. Meandering paths of upheaved soil are evidence of the small mammals foraging for food. If soil is dry, moles form mounds of soil but do not make the meandering paths. Some tunnels may be abandoned soon after being built while others are travel lanes and used for a longer period of time. Even though moles do not feed on plant matter, they can still cause damage by disturbing roots and uprooting small plants.

Numerous home remedies have been concocted to control moles including chewing gum, noisemakers, broken glass, bleaches, windmills, and human hair. None have been found to provide consistent and reliable control. Poison baits also fail to work because moles feed on earthworms and grubs, not vegetable matter. Even grub control products are ineffective as they do not control earthworms, and earthworms are the primary food source for moles.

The best control method is the use of traps. There are three types of traps (harpoon, choker, and scissor-jawed) and each can be effective but may take some time to master. Try the following suggestions.

Moles use some tunnels more than others. Use a broomstick or something similar to poke holes in a number of runs. Check a day later to see which runs have been "repaired." These are the active runs and should be used for trap placement.

Place a trap in an active run by excavating soil, placing the trap and then replacing loose soil. Secure the trap so that the recoil will not lift the trap out of the ground. Make sure the triggering mechanism is in the center of the run.

Finally, push down two more holes, one on each side of the trap. Moles should be caught when they try to repair the tunnel. Move traps if no moles are caught within three days.

Our KSU Extension Wildlife Management website has information on mole control including videos and printed material. (Ward Upham)

Butterfly Gardening

Butterfly gardening is becoming more popular with Kansans. Providing for the basic needs of butterflies, such as food, shelter and liquids, will encourage butterflies to visit this summer. There are a number of plants that attract butterflies. However, different species of butterflies prefer different plants. Using a variety of plant material that vary in blooming times of day and year helps attract a diverse group of visitors. Plant groups of the same plant together; a single plant is difficult for a butterfly to detect. If trying to attract a certain species of butterfly, learn which plant(s) that butterfly prefers and then emphasize that plant in your planting. Annuals that attract butterflies include ageratum, cosmos, French marigold, petunia, verbena and zinnia.

Perennials and shrubs can be split into those that bloom early, mid-season and late. Good choices for those that bloom early are allium, chives, forget-me-not and lilac. Bee balm, butterfly bush, black-eyed Susan, buttonbush, butterfly weed, daisy, daylily, gaillardia, lavender, lily, mint, phlox, privet, sunflower and veronica are fitting picks for mid-season bloom. Late bloomers include aster, glossy abelia and sedum.

There are other things you can do to encourage butterflies. Butterflies are cold-blooded and like open areas where they can sun themselves on cool days and shade to cool off when the sun is too intense.

Butterflies also need water. A simple way to make a butterfly pool is to take a bucket, fill it with gravel, and bury it to the rim. Now add water, sugar water or sweet drinks so that the butterflies can land on the gravel but still reach the liquid.

Monarch Watch is an organization that focuses on Monarch butterflies and supplies free milkweed plants for relatively large restoration projects as well schools and educational non-profits. The site also provides extensive information on the Monarch butterfly and on what you can do to increase the population.

Our Johnson County Master Gardeners have put together a fact sheet on creating a butterfly habitat. (Ward Upham)

Pre-emergence herbicides for grain sorghum

Pre-emergence herbicide programs for corn were discussed in a recent eUpdate. The role of pre-emergence herbicides is similar in both corn and grain sorghum, and some herbicides are similar. But, fewer post-emergence herbicide options, particularly for Palmer amaranth and grass control, make an effective pre-emergence herbicide even more important for successful sorghum production. A table summarizing weed species response

to various grain sorghum herbicides can be found on page 48 of *2021 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland* (SRP 1162) at: <https://bookstore.ksre.ksu.edu/pubs/SRP1162.pdf>

Herbicide groups of soil-applied residual herbicides for grain sorghum

Photosystem II inhibitors (Group 5). Atrazine is a common component of many pre-plant and pre-emergence herbicide premixes for sorghum. It controls a wide variety of broadleaf weeds, including pigweeds, ragweeds, morningglories, and mustards, as well as some grasses. However, atrazine resistance has been reported for many weed species. Atrazine use rate is influenced by soil type, soil pH, and organic matter, and use is prohibited in instances where water contamination is likely. Unless your situation prohibits atrazine use, it is recommended to include atrazine when you apply Group 15 and Group 27 herbicides.

Fatty acid inhibitors (Group 15). Dimethamid-P (Outlook), S-metolachlor (Dual II Magnum), metolachlor, and acetochlor, are also a common component of many pre-plant and pre-emergence herbicide premixes for sorghum. In general, these products are very effective in controlling most annual grasses and small-seeded broadleaf weeds, except kochia. Though resistance to Group 15 herbicides have been reported in other states, resistance has not been confirmed in Kansas to date. Group 15 products are most effective when applied with atrazine, unless atrazine is not allowed.

HPPD-inhibitors (Group 27). Mesotrione (Callisto, others) controls kochia, pigweeds, velvetleaf, and many other broadleaf weeds, as well as grasses. Mesotrione should be applied with atrazine, which is often included in premixes (Lexar EZ, Lumax EZ, others). Some mesotrione-resistant weed populations have been identified in Kansas.

PPO-inhibitors (Group 14). Saflufenacil (Sharpen) controls pigweeds well; however, kochia control is marginal. Verdict (saflufenacil + dimethenamid-P) has excellent activity on pigweeds, kochia, and large-seeded broadleaf weeds. However, the length of residual activity can be shorter than other pre-emergence products.

Another pre-emergence option that is new for grain sorghum in 2021 is *imazamox (IMIFLEX)*. Imazamox is an ALS-inhibitor (Group 2) that will control grasses such as foxtails, crabgrass, fall panicum, and barnyardgrass. It will also control cocklebur, sunflower, velvetleaf, and pigweeds – if the populations have not developed resistance. Imiflex can only be used in igrowth grain sorghum varieties. Additional comments about igrowth grain sorghum can be found in eUpdate Issue 833 in an article titled “[IMIFLEX herbicide receives EPA approval for igrowth grain sorghum](#)”.

The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply non-approval. Always consult the herbicide label for the most current use requirements. Sarah Lancaster, Extension Weed Science Specialist

Kansas Mesonet adds a new tool for tracking days between rainfall events

The Kansas Mesonet has created a new tool that reports the number of days since a measurable precipitation event. This information can be helpful when tracking activation of chemicals, assessing crop performance, and evaluating drought or flood risks.

The new page, located at <https://mesonet.k-state.edu/precip/consecutive/>, gives the number of consecutive days without rainfall for seven different thresholds ranging from 1/10th (0.10") of an inch to 2 inches. Stations that have gone more than a year without a given amount of rainfall are capped at 365 days.

The map provides a statewide overview, each number representing the current number of days since rainfall at Mesonet stations (Figure). Click or tap a station to get details for that location. Use the "Change Map" drop down menu to change the threshold.

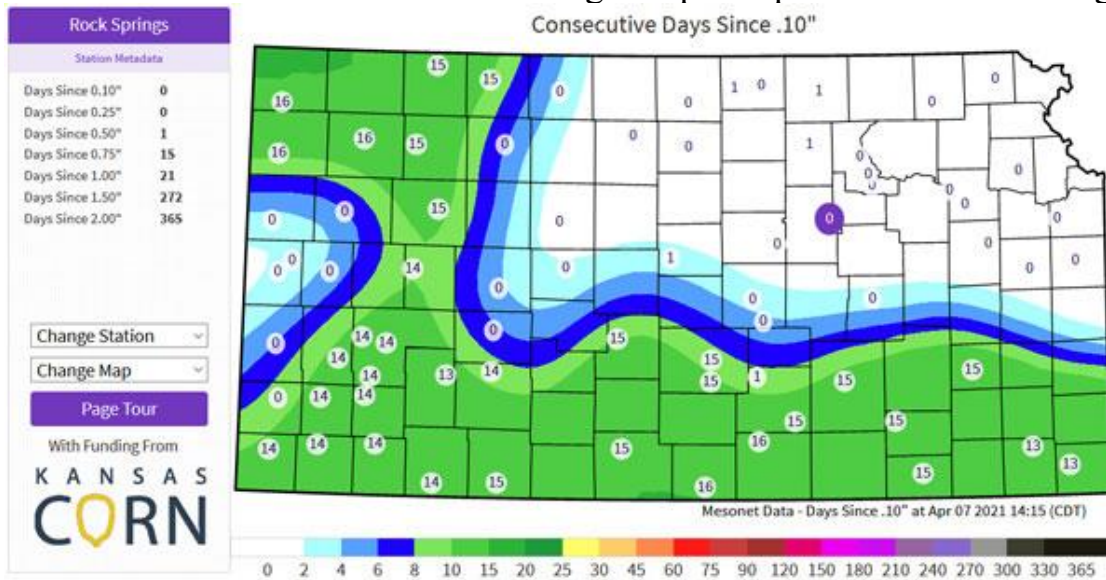


Figure 1. Example of the new tool that tracks the number of consecutive days since a measurable rainfall event. The statewide map provides an overview of all Mesonet stations. Users can select an individual station in the "Change Station" dropdown menu or by clicking on the map at their chosen location. The "Change Map" menu will allow users to choose from 7 different rainfall thresholds.

Source: <https://mesonet.k-state.edu/precip/consecutive/>.

The Chart tab provides data for the past 365 days. Columns (black) show the daily observed precipitation (Figure 2). Shaded areas (blue) show the number of days since precipitation for the given threshold, falling to zero when the daily observation surpasses that threshold.

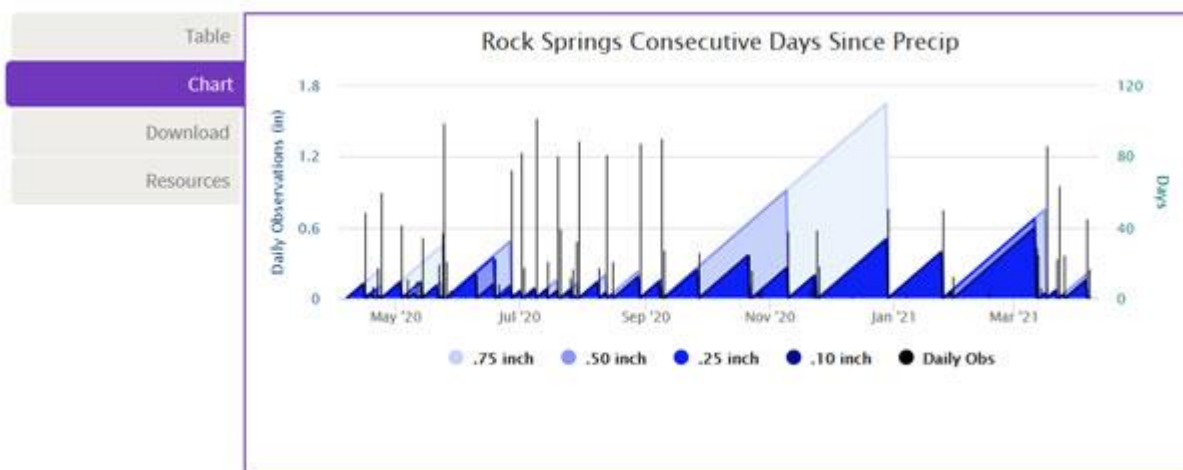


Figure 2. Example of the "Chart" feature for the new Mesonet tool that measures the number of days since the last rainfall event.

As with other Mesonet tools, all data and maps are available in the Download tab (Figure 3).

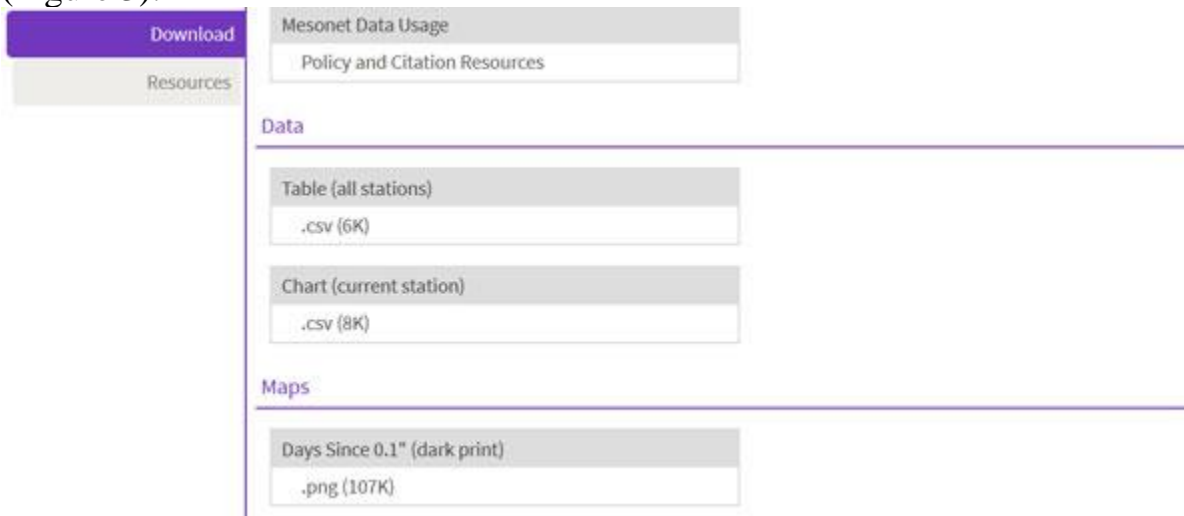


Figure 3. The "Download" feature allows users to save the data in various formats (table, chart, and map).

Here are some considerations for understanding the data:

- Amounts are reported as total observed precipitation in a period from midnight to midnight, CST. If a station receives an inch before midnight and an inch after midnight, it reports two 1-inch events rather than a single 2-inch event.
- Rainfall can be extremely localized. The measurement at one station may differ even a short distance away and not match interpolations between locations. For another source of observed totals, see [CoCoRaHS](#) and consider becoming a CoCoRaHS observer.
- Mesonet stations measure liquid precipitation. Freezing rain and snow are not measured until they melt, which may be some days after they fell, assuming it didn't blow out.

Dan Regier, Weather Data Library Developer; Christopher Redmond, Kansas Mesonet Manager; Mary Knapp, Assistant State Climatologist