



Home, Yard, and Garden Pest Newsletter

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It's Dry Out There!

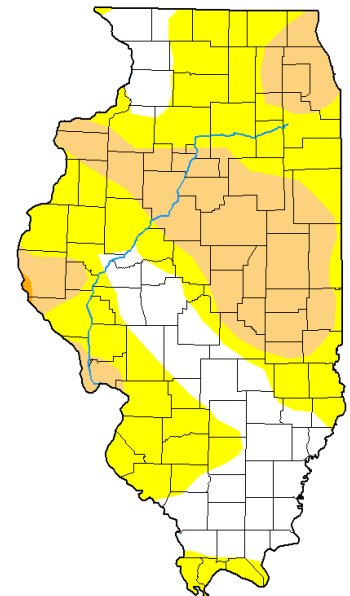
You probably didn't need this newsletter article to alert you to the fact that things are getting a bit dry outside. Much of Illinois has been in a dry pattern since mid-April. Trent Ford, Illinois State Climatologist, recently wrote a detailed blog post on the [Increased Risk of Drought Conditions in Illinois](#). The most recent [U.S. Drought Monitor](#), published June 1, 2023, listed 30.62% of Illinois under moderate drought, and 44.8% as abnormally dry. With above-average temperatures in the forecast and no rain in sight, I expect many garden hoses and watering cans will be working overtime.

Dry weather offers one minor, but temporary benefit to our landscape plants: low disease pressure. I haven't been able to find many diseased landscape plants in east-central Illinois. Apple scab, rust, and many other fungal diseases are uncommon this year. While dry weather may limit many fungal diseases, prolonged drought stress predisposes landscape plants to canker diseases and boring insects. Drought-stressed spruce trees are more susceptible to *Cytospora* canker. *Botryosphaeria* canker is also common on drought-stressed trees.

What can you do to help landscape plants if these dry conditions persist or worsen?

- 1. Mulch:** A 2-4" deep layer of mulching will help to moderate soil temperatures and conserve soil moisture. Be sure to maintain a small mulch-free space near the bases of plants. The mulch should form a donut around the tree, rather than a volcano.
- 2. Control Weeds:** Pull any weeds that may compete with desirable plants for moisture, nutrients, and growing space. Mulch will also help control weeds that may compete with desirable plants for soil moisture.
- 3. Avoid fertilizing** dormant or drought-stressed plants.
- 4. Irrigate:** Newly planted trees, shrubs, and perennials are extremely susceptible to injury from drought. Most trees and shrubs will benefit from one inch of water per week applied in one slow, thorough soaking. It is important to water slowly because this allows the water to soak deeper into the soil.
- 5. Let turfgrass go dormant:** Turfgrasses have an excellent dormancy mechanism that allows them to tolerate most droughts. However, even dormant turfs require some water. If the drought extends beyond six weeks, it is wise to lightly irrigate your turf with approximately 1/4" of water every two weeks.

Travis Cleveland



U.S. Drought Monitor - Illinois. June 1, 2023. Yellow = abnormally dr. Tan = moderate drought

Rose Slugs

We've had several reports of bristly rose slug causing rose foliage to be lacelike. The green larvae are more numerous on the undersides of the leaflets. Although causing window-feeding when young, the larger larvae eat holes in the leaflets and even cause defoliation.

The **bristly rose slug** is green, with fine, hairlike spines, and grows to about 1/2 inch long. **Rose slug** looks like bird manure when young but when older looks like the bristly rose slug without the bristles. Both are present at this time of year.



Bristly rose slug

Remove small infestations by hand. Although these insects look superficially like slugs or caterpillars they are sawfly larvae. They will not be controlled with slug baits or *Bacillus thuringiensis kurstaki*. Acephate (Orthene, Bonide Systemic Insect Control), bifenthrin (Talstar), and cyfluthrin (Tempo) are effective. Insecticidal soap will also be effective with very good coverage. Avoid getting the insecticide on flowers, although most rose varieties have had the nectar and pollen bred out of them and are not attractive to pollinating insects. Species roses and particularly some single-flowered varieties will attract pollinators, which could be killed by insecticide sprays on the blooms.

Travis Cleveland (Originally published by Phil Nixon, April 30, 2010)

Woolly Beech Aphid

Large populations of woolly beech aphid, *Phyllaphis fagi*, have been reported on European beech trees this season. Beech trees are the only hosts for this aphid. The woolly beech aphid gets its name because the body is covered with waxy wool-like filaments. These aphids are gregarious and tend to congregate primarily on the undersides of leaves. Often large numbers of the molting or cast skins will be attached to leaf hairs, which gives the leaf a whitish appearance. The woolly beech aphid has piercing-sucking mouthparts, which are used to remove plant fluids. However, woolly beech aphid is not considered an economic pest because beech trees, especially large specimen types, can sustain large populations without suffering any injury. Large populations of woolly beech aphid can, however, produce tremendous amounts of honeydew, a clear, sticky liquid that may attract wasps, ants, or yellow-jackets. In addition, the honeydew serves as an excellent growing medium for black sooty mold fungi. Black sooty mold fungi can detract from the aesthetic appearance of a beech tree and most importantly can reduce the production of food via photosynthesis by blocking the entry of light.



Woolly beech aphids on the underside of purple European beech leaf, Travis Cleveland, University of Illinois.

For large beech trees, control is typically not warranted. A hard spray of water will dislodge aphids from the tree without harming any natural enemies.

Travis Cleveland

Springtime Broadleaf Weed Control in Turf

Actively growing broadleaf weeds can be controlled and prevented with proper practices. Weed invasions can be minimized through proper turfgrass management. Consider use, site, and budget when selecting an appropriate turfgrass. Follow correct selection with appropriate mowing, watering, fertilizing, and cultivating; all can lead to a dense, healthy turf. Reduced weed populations result because weeds have difficulty becoming established in healthy, competitive turf.

In areas where broadleaf weeds are already a problem, mow frequently to prevent seed-head production; and after properly identifying the problem weed species, initiate controls. For assistance with identification, consult with your local University of Illinois Extension office or the booklet, “Identifying Weeds in Midwestern Turf and Landscapes” available at: <https://pubsplus.illinois.edu/collections/gardening/products/identifying-weeds-in-midwestern-turf-and-landscapes>. Learning the weed’s life cycle and preferred growing conditions can greatly assist with control efforts. Perhaps growing conditions can be altered to be less favorable. Mechanical removal of weeds by hand-pulling or hoeing can eliminate small numbers of weeds easily. Be sure to remove as much of the root system as possible to reduce regrowth of perennials. Persistence may be needed but will be rewarded.

Proper cultural practices can greatly reduce weed populations. However, if weed problems persist, herbicides can be used.



Dandelion, broadleaf plantain, and white clover growing in a lawn, Michelle Wiesbrook, University of Illinois.

Postemergence herbicides can provide effective control, and now is an opportune time to apply, as many weeds are actively growing. Individual herbicides or combinations of herbicides are available. Be sure to read, understand, and follow the label directions for proper use of these chemicals. If mishandled or misapplied, these herbicides may damage or kill many desirable ornamental or edible plants in the landscape or nearby garden. Check the label for specific guidance on where the product can or cannot be applied and for rain-free period (rain-fast) information. Follow these general recommendations when using postemergence broadleaf products.

1. Apply these herbicides when environmental conditions are appropriate for control.
 - a. Watch wind speeds to avoid drift. Often, early mornings are less windy than later in the day. A gentle, blowing breeze of 3 to 10 mph is recommended. Be sure the wind is blowing away from sensitive areas.
 - b. Apply these herbicides when air temperatures are between 55 degrees and 85 degrees F.
 - c. Adequate soil moisture is important to maintain growth and translocation of herbicides throughout the entire weed.
 - d. Do not apply when precipitation is expected within 24 hours.
2. Don’t mow for a few days before or after application, thereby allowing maximum leaf surface for interception and absorption of the herbicides.
3. When possible, to reduce unnecessary pesticide use, make spot applications rather than treating large areas.
4. Apply these herbicides to new turfgrass seedlings only after they have been mowed three or four times unless label directions read otherwise. Wait at least 30 days after application before seeding into areas treated with postemergence broadleaf herbicides.
5. Many broadleaf weeds such as dandelion and ground ivy can also be treated effectively during active growth in autumn. Do not ignore treatment during this time when broadleaf weeds

are a turf problem. In fact, autumn is an excellent time to apply these herbicides, as weeds are busy preparing for winter by moving excess carbohydrates to the roots. This can aid translocation. The cooler temperatures of autumn allow for use of ester formulations because there is less risk of vapor drift. Amine formulations should be used instead when air temperatures are warmer. Finally, cool season turfgrasses are actively growing in autumn and more quickly fill in bare areas left by dying weeds.

In past research conducted over several years at the University of Illinois Landscape Horticulture Research Center, several herbicides provided effective postemergence control of common broadleaf weeds such as white clover, dandelions, and plantains. These herbicides are 2,4-D + MCPP + dicamba; triclopyr + clopyralid; and 2,4-D + triclopyr. For additional information regarding other chemical weed controls or other weeds, see the 2014 Commercial Landscape and Turfgrass Pest Management Handbook if you have a copy. An updated version has been long awaited but a revision is being planned. While you wait, you could also check out, "[Turfgrass Weed Control for Professionals](#)", which is published by Purdue University but is a multi-state collaboration that includes University of Illinois recommendations.

Information about common postemergence herbicides follows. Trade names are given as examples only and should not be considered endorsements of any kind. Although one or two trade names are provided, realize that there may be more products available as product names change frequently. Always refer to the active ingredients listed on the product label rather than the trade name.

2,4-D; MCPP (mecoprop); MCPA; and 2,4-DP (dichlorprop): These herbicides are in the phenoxy acid family. These synthetic auxins have been termed Group 4 by WSSA, which is helpful to know for weed resistance management. In this group, 2,4-D is the oldest and most widely used. It is effective on taprooted weeds such as dandelion and broadleaf plantain; but, by itself, 2,4-D does not control white clover, chickweed, purslane, ground ivy, or violets very well. Ester forms of 2,4-D are recommended for wild garlic and onion control. MCPA is very similar to 2,4-D but does not control the broad spectrum of weeds that 2,4-D controls. If chickweed

or white clover is a problem, MCPP is a recommended control. Dichlorprop is combined with other broadleaf herbicides; control of henbit, knotweed, and spurge is usually improved when it is combined with 2,4-D.

aminopyralid (NativeKlean): Combined with 2,4-D. For native and naturalized areas.

carfentrazone-ethyl (Quicksilver T&O, Speed Zone, Power Zone): With 2,4-D + MCPP + dicamba in Speed Zone; with MCPA + MCPP + dicamba in Power Zone; labeled a "reduced risk" herbicide by EPA; disrupts chlorophyll synthesis; increases speed of activity compared to traditional postemergence broadleaf herbicides.

chlorsulfuron (Chlorsulfuron 75, Telar XP): Labeled for use on unimproved industrial turf, this formulation is not to be used on lawns. It controls a broad spectrum of weeds.

clopyralid (Lontrel): For use on non-residential turf, clopyralid is very active against white clover and thistle.

dicamba (Banvel, Vanquish): Dicamba, a benzoic acid, works similarly to the phenoxy acid group and is effective against knotweed, purslane, and spurge but does not control buckhorn or broadleaf plantains well. Dicamba is relatively mobile in the soil.

flumioxazin (Sure Power): A newer active ingredient combined with 2,4-D, triclopyr, and fluroxypyr to broaden the spectrum of weeds controlled and offer improved resistance management in cool season turf. Provides some preemergent control of certain annuals.

fluroxypyr (Vista XRT, Flagstaff): Similar in activity to triclopyr. Can be effective on ground ivy, dandelion, and white clover.

halauxifen-methyl (GameOn): A newer active ingredient combined with 2,4-D and fluroxypyr to broaden the spectrum of weeds controlled. This specialty product is not for residential use.

penoxsulam (LockUp): This low use product can be used to control many broadleaf weeds including white clover.

pyraflufen (Octane): Controls chickweed, dandelion, and white clover. It can be used in newly seeded areas that are not under stress.

quinclorac (Drive XLR8): An unusual product, as quinclorac is active against white clover, veronica, dandelion, and crabgrass.

sulfentrazone (Dismiss, Select, Spartan): Found in various 2- and 3-way products. Effective on various broadleaf weeds and sedges. Used on warm and cool season turf.

topramezone (Pylex): This product has a bleaching effect on susceptible species such as carpetweed, chickweed, and clover.

triclopyr (Turflon Ester Ultra): Less broad-spectrum than the commonly used combination of 2,4-D + MCPP + dicamba, triclopyr is very active against ground ivy and oxalis.

Many postemergence combination products are manufactured to increase the spectrum of weed control. A few included in this group are:

- 2,4-D + MCPP + dicamba (Trimec, Triplet, others)
- 2,4-D + MCPP + 2,4-DP (Triple Threat, Triamine)
- MCPA + MCPP + dicamba (Tri-Power)

For properties that may be sensitive to the use of 2,4-D or if potential 2,4-D resistance is a concern, combination products exist that offer alternatives to 2,4-D, such as:

- MCPA+MCPP+dicamba+carfentrazone (PowerZone)
- dicamba+fluoxypyr+MCPA (Change Up)

For those who want to avoid the Group 4 auxin herbicides altogether, there are options for selective, postemergent, broadleaf control such as: carfentrazone, flumioxazin, penoxsulam, pyraflufen, and sulfentrazone. This list may not be all inclusive.

Several preemergence herbicides can be applied to control broadleaf weeds in turf. It is not too late to use these herbicides for controlling such species as prostrate spurge that require warmer soil temperatures (even up into the low 90s) to germinate. Keep in mind that these herbicides must be applied prior

to germination to be effective. Existing weeds can be controlled using the methods previously discussed. General recommendations can be made when using these products in turf.

1. Conduct any cultivation practices based on label directions; when in doubt, core-aerify or de-thatch before herbicide application.
2. Water following application according to the herbicide label direction.
3. To lengthen the period of weed control, make a second application of the herbicide at a later date. Follow the specific label directions for rates and timing.
4. Consult individual preemergence herbicide labels for the specific waiting period between herbicide application and overseeding or reestablishment. Avoid applying a preemergence herbicide immediately before installing sod.

Various preemergence herbicides are available for controlling broadleaf weeds. The following are used on cool season turf and control several species:

dithiopyr (Dimension): According to the label, this herbicide controls chickweed, henbit, purslane, spurges, and yellow woodsorrel when applied before weed emergence.

isoxaben (Gallery): According to the label, this herbicide controls many weeds, including dandelion (see label for recommendations). It has no postemergence activity, so control existing weeds with post emergence spray.

pendimethalin (Pendulum): According to the label, this herbicide controls chickweed, henbit, knotweed, prostrate spurge, purslane, and yellow woodsorrel when applied before weed emergence.

prodiamine (Barricade): According to the label, this herbicide controls common chickweed, henbit, knotweed, prostrate spurge, purslane, and yellow woodsorrel when applied before weed emergence.

Michelle Wiesbrook

Abnormal Ginkgo and Beech Trees

Recent high temperatures have reached into the 90s. That makes it easy for us to forget that we had some very cold nights in late April and early May. Overnight lows dipped into the 20s injuring some plants that had broken dormancy and started to leaf out. Frost injury may explain the odd appearance of some ginkgo and European beech trees. I've received several reports of thin, sparse canopies and deformed leaves on both species.

Common symptoms on Ginkgo include:

- Thin, sparse tree canopy
- Older leaves with tan-brown necrosis advancing from the apex to the petiole
- New growth green, but stunted and straplike



Ginkgo tree browning leaves from suspected frost injury, Travis Cleveland, University of Illinois.

Common symptoms on European beech include:

- Thin, sparse tree canopy
- Stunted distorted leaves
- Terminal buds failed to open
- American beech, *Fagus grandifolia*, seems unaffected.



Purple European beech with suspected frost injury, Travis Cleveland, University of Illinois.

The good news is that frost injury won't affect the long-term health of the tree. Damaged or destroyed leaves may drop from the tree, but new leaves will develop by early summer. Consider providing extra care to any affected trees. The moderate drought and abnormally dry conditions covering much of the state could cause additional stress and injury.

Travis Cleveland

Modified Growing Degree Days

Station Location	Actual Total	Historical Average (11 year)	One-Week Projection
Base 50° F - March 1 through May 10			
Freeport	645	518	752
St. Charles	645	504	750
DeKalb	660	517	768
Monmouth	815	640	946
Peoria	789	676	912
Champaign	869	717	988
Springfield	858	816	987
Perry	853	762	980
Brownstown	1020	752	1151
Belleville	962	898	1102
Rend Lake	1023	973	1164
Carbondale	988	924	1123
Dixon Springs	995	957	1130

Insect development is temperature dependent. We can use [degree days](#) to help predict insect emergence and activity. Home, Yard, and Garden readers can use the links below with the degree day accumulations above to determine what insect pests could be active in their area.

[GDD of Landscape Pests](#)

[GDD of Conifer Pests](#)

Degree day accumulations calculated using the [Pest Degree-Day Calculator](#) (a project by the Department of Crop Sciences at the University of Illinois and the Illinois Water Survey).

Kelly Estes



Illinois Extension

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