

Invasive Plant Phenology Report

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This University of Illinois Extension Technical Forestry Bulletin series provides monthly reports on the development of invasive plant species in Illinois. Reports are summarized by region and produced from field observations collected between the 8th and 14th of each month.

Phenology is the study of seasonal natural phenomena. This observational project tracks the phenology of invasive plant species in Illinois throughout the growing season, noting when plants initiate growth, start flowering, ripen seeds, become dormant, etc. Data on the phenology of invasive plants is critical information for the development of effective management programs.

June 2018 General Summary

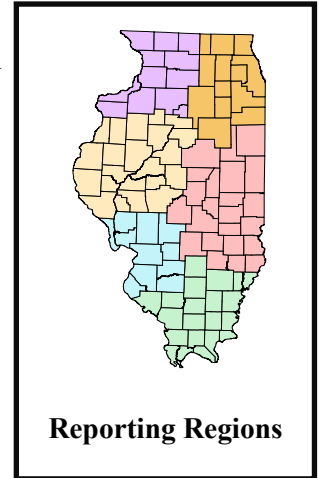
June transitions us from late spring into early summer, when some spring flowering species are setting seed or developing fruits, others are beginning to bloom, and still others are developing resources to use at a later time. As was the case last year, poison hemlock and wild parsnip are either in bloom or just past in all regions. Several grass species are either flowering or nearing flowering stage. Teasel in the south are nearing flowering stage, but are not as far along as they were in June 2017.

Regional Reports

South

- Japanese chaff flower (*Achyranthes japonica*) – Vegetative growth 12”-18” high
- Mimosa (*Albizia julibrissin*) – Full bloom
- Garlic mustard (*Alliaria petiolata*) – Setting seed
- Poison hemlock (*Conium maculatum*) – Flowering but past peak; fruit developing
- Common teasel (*Dipsacus fullonum*) - Flower buds developing but no flowers yet
- Cut-leaf teasel (*Dipsacus laciniatus*) - bolting but no flower buds observed
- Autumn olive (*Elaeagnus umbellata*) – Immature fruit developing, full leaf expansion
- Japanese honeysuckle (*Lonicera japonica*) – Still blooming
- Amur honeysuckle (*Lonicera maackii*) – Full leaf expansion, past flowering, immature fruit developing
- Sweet clover spp. (*Melilotus* spp.) - Blooming

- Japanese stiltgrass (*Microstegium vimineum*) – Vegetative growth ~ 12” high
- Wild parsnip (*Pastinaca sativa*) - Flowering
- Princess tree (*Paulownia tomentosa*) - Past bloom, leaves expanding, immature fruit present
- Reed canary grass (*Phalaris arundinacea*) - Blooming
- Phragmites (*Phragmites australis*) - Vegetative growth, no flower development observed
- Callery (Bradford) pear (*Pyrus calleryana*) - Full leaf out; fruits forming
- Multiflora rose (*Rosa multiflora*) - Past bloom, immature fruit developing
- Johnson grass (*Sorghum halepense*) - Flower heads starting to developing but not yet open



Southwest

- Tree of Heaven (*Ailanthus altissima*) - Fully leafed out with fruits to ~1” long
- Mimosa (*Albizia julibrissin*) - Starting to bloom (~5%); fully leafed out
- Japanese barberry (*Berberis thunbergii*) - Fully leafed out; no flower buds present
- Cheatgrass (*Bromus tectorum*) - Brown with seeds still firmly attached

Interested in becoming an invasive plant phenology observer?

The University of Illinois Extension Forestry Program relies on observations from volunteers to produce the monthly invasive plant phenology report. Anyone interested in becoming a volunteer observer should contact Chris Evans, Extension Forester at (618) 695-3383 or cwevans@illinois.edu. Volunteers are asked to make monthly observations on three to four invasive species in their area.

- Oriental bittersweet (*Celastrus orbiculatus*) - Green berries present; up to 1/4"
- Poison hemlock (*Conium maculatum*) – Plants up to 7', full bloom with some forming seed
- Teasel (*Dipsacus* spp) - Second-year plants ~2' tall with some plants not yet bolting; myriads of tiny first-year plants under most of the rosettes
- Autumn olive (*Elaeagnus umbellata*) – Small fruits to ~1/4" long, green with brown speckles
- Burning bush (*Euonymus alatus*) - Fully leafed out with fruits forming, 1-3 parts up to 1/3" long
- Wintercreeper (*Euonymus fortunei*) - Flower buds present, very tight (only on branches in trees); leaves on branches drooping, 3-4" and somewhat olive green; actively growing
- English ivy (*Hedera helix*) - Vines actively growing both on ground and on branches in trees; flower buds forming
- Japanese hops (*Humulus japonicus*) - No sign of flowers yet; leaves not yet full-sized but sprawling over other plants
- Sericea lespedeza (*Lespedeza cuneata*) - Stems to 4' tall with flower buds in stem axils where leaves are fully grown
- Japanese honeysuckle (*Lonicera japonica*) – Actively growing with scattered populations in bloom
- Amur honeysuckle (*Lonicera maackii*) – No longer flowering; tiny berries present, ~2mm
- White mulberry (*Morus alba*) - Fruits gone
- Beefsteak plant (*Perilla frutescens*) - From 1-12" depending on light; not yet flowering
- Phragmites (*Phragmites australis*) - Plants 6-12' tall; not yet flowering; no seed remaining in last year's plants
- Reed canary grass (*Phalaris arundinacea*) - In full bloom with stalks up to 7' tall in moist areas, most ~4' tall
- Callery (Bradford) pear (*Pyrus calleryana*) - Hard green fruits about 1/3" wide with brown speckles
- Multiflora rose (*Rosa multiflora*) – Bountiful green hips, still ovary-sized with sepals present
- Crownvetch (*Securigera varia*) - In full bloom and growing overtop other vegetation
- Johnsongrass (*Sorghum halepense*) - Stalks to 2.5'; a few plants beginning to flower
- Periwinkle (*Vinca minor*) - No longer flowering; vines growing slowly

West Central

- Garlic mustard (*Alliaria petiolata*) – Seed pods developing in some areas, fully developed and beginning to dry in other areas; occasional flowers on lower stems in some areas
- Musk thistle (*Carduus nutans*) - Full flower

- Poison hemlock (*Conium maculatum*) – Multiple white umbels, with most flowers open; stems up to 6' tall
- Teasel (*Dipsacus* spp) - Bolting with 5 or more pairs of serrated leaves
- Yellow sweet clover spp. (*Melilotus officinalis*) - Full flower
- Wild parsnip (*Pastinaca sativa*) - Plants with multiple umbels, some flowers open in some areas; other areas in full flower
- Reed canary grass (*Phalaris arundinacea*) - Flowering in some areas; likely with seed developed in some areas

East Central

- Garlic mustard (*Alliaria petiolata*) – Seeds are beginning to turn black and hard on most plants
- Spotted knapweed (*Centaurea stoebe*) - Beginning to flower
- Canada thistle (*Cirsium arvense*) - In full flower, and some seeds are starting to mature
- Poison hemlock (*Conium maculatum*) – Going out of flower and seeds are beginning to develop
- Cut-leaf teasel (*Dipsacus laciniatus*) - Fully bolting, but not yet flowering
- Bird's-foot trefoil (*Lotus corniculatus*) - Flowering, with some development of seeds
- Yellow sweet clover spp. (*Melilotus officinalis*) - Forming seeds
- White sweet clover spp. (*Melilotus alba*) - Beginning to flower
- Wild parsnip (*Pastinaca sativa*) - In full flower, and some seeds are starting to mature
- Reed canary grass (*Phalaris arundinacea*) - Seedheads are half full of hardened, developed seeds

Northwest

- Garlic mustard (*Alliaria petiolata*) – Done flowering and seeds set in some areas; some plants beginning to bolt in other areas
- Poison hemlock (*Conium maculatum*) – In full flower
- Cut-leaf teasel (*Dipsacus laciniatus*) - Rosettes growing vigorously, with some adding a second leaf ring; bolting in other areas, 1-3' tall
- Autumn olive (*Elaeagnus umbellata*) - Flower buds have mostly dried and dropped off; some immature fruit present
- Bush honeysuckle (*Lonicera sp.*) – Mature red fruit observed on most specimens (likely *L. tartarica*)
- Amur honeysuckle (*Lonicera maackii*) – Most plants between flowering and developing fruits
- Phragmites (*Phragmites australis*) - Bolting with plants 3-5' tall; no sign of seedheads

- Common buckthorn (*Rhamnus cathartica*) - Fully leafed out and small green berries present
- Multiflora rose (*Rosa multiflora*) - White flowers just emerging in some areas; flowers beginning to fade and fruit forming in other areas
- Crownvetch (*Securigera varia*) - Most plants in full bloom

Northeast

- Garlic mustard (*Alliaria petiolata*) – Seeds setting
- Canada thistle (*Cirsium arvense*) - Nearing full bloom in some areas; 1-3' tall; not quite flowering yet in other areas
- Bull thistle (*Cirsium vulgare*) - In full bloom
- Poison hemlock (*Conium maculatum*) – In full bloom
- Teasel (*Dipsacus* spp) - Some plants bolting and other plants with rosettes 2-8" in diameter; flower heads beginning to appear
- Autumn olive (*Elaeagnus umbellata*) - Fruit appears to have begun to set but aborted in at least one location
- Amur honeysuckle (*Lonicera maackii*) - Some plants are still blooming; others beginning to form fruits
- Morrow's honeysuckle (*Lonicera morrowii*) - Fruit is forming
- Tatarian honeysuckle (*Lonicera tatarica*) - Fruiting
- Bird's-foot trefoil (*Lotus corniculatus*) - Full bloom
- Yellow sweet clover spp. (*Melilotus officinalis*) - Most plants in full bloom; some plants in bolting stage
- Wild parsnip (*Pastinaca sativa*) - In full bloom
- Reed canary grass (*Phalaris arundinacea*) - Flowers fading, but no seed present yet
- Callery (Bradford) pear (*Pyrus calleryana*) - Fruit is setting and expanding
- Multiflora rose (*Rosa multiflora*) - Flowering with some flowers starting to fade but no fruit as yet.
- Crownvetch (*Securigera varia*) - In full bloom

Using phenology data to inform invasive plant management

- Chemical treatments to annual or biennial plants should be applied before the plants start flowering
- Once annual or biennial plants have fruit forming, the most effective control measure is mechanically removing the plant, making sure to remove the fruits/seeds from the area. When the fruit start to mature and fall off of the plant, mechanical treatments should be halted
- When fruit mature on some invasive plants, such as garlic mustard Japanese stiltgrass, and Japanese chaff flower, care should be taken to avoid accidentally spreading the seeds of these plants.
- Chemical treatments on woody invasive plants should not be applied after bud swell/bud break until the plants have reached full leaf expansion
- Foliar chemical treatments should be applied to healthy, green, actively-growing foliage. When the foliage starts to turn its fall color, then foliar treatments are not effective

Common and scientific names adhere to:

ITIS (Integrated Taxonomic Information System). 2016. Online Database (<http://www.itis.gov>, 1 January 2016). Smithsonian Institution, Washington, DC.

Invasive plant observations used to produce this report were provided by the following individuals:

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