## Invasive Species of the Month for April 2018

### **Bull Thistle (Cirsium vulgare)**

Origin: Europe, West Asia, & North Africa

**Interesting Fact:** Thistles can be difficult to identify to the species level. If possible, make sure to avoid harming the native Field Thistle (*Cirsium discolor*), which is a great plant for pollinators. Field Thistle can be distinguished by its stark white undersides to its leaves.

**Description**: Bull Thistle is a biennial plant in the Aster family and can grow up to 7 ft. tall and 3 ft. wide. It overwinters as a basal rosette of densely hairy, spiny leaves and will bolt around early to mid-summer, producing numerous pink-purple flowerheads.

### **Defining characteristics:**

- Alternate, divided leaves with numerous spines and hairs
- Leaves are up to 12 in. long and have "spear-like" tip
- Pink-purple flowerheads up to 2 in. long, made up of many flowers (not nodding)
- Densely hairy/spiny, more so than other thistles
- Light/dull green undersides to the leaves



Images from left going clockwise:
Foliage in the summer (showing "spear-like" tip), Bull Thistle flower in midsummer, and standing dead stalks in the winter showing the seeds, which are wind dispersed.



# Knox County Cooperative Invasive Species Management Area

Habitat: Woodland edges, old fields, roadsides, ditches, riparian areas, and other disturbed places



Left to right: Bull Thistle seedlings and a Bull Thistle basal rosette in the early spring.

**Ecological threat:** Bull Thistle is a prolific seed producer; an individual flowerhead can produce up to 300 seeds, and a single plant can have up to 400 flowerheads! These seeds are wind dispersed and can form dense patches. In addition, because of its dense hairs/spines, Bull Thistle is unpalatable to livestock and wildlife.

#### **Control Methods:**

- <u>Manual</u>: Pulling can be effective on small rosettes, but thick gloves are advised. Severing the tap root can also be effective. Mowing once or twice is not generally effective as Bull Thistle can easily produce new flowers on regrowth. If mowing is chosen as a management strategy, it must be done continuously throughout the growing season.
- <u>Chemical</u>: Several herbicides will effectively control of Bull Thistle. Foliar application\* of clopyralid, triclopyr, or 2,4-D have been shown to be effective when applied at the basal rosette stage, either in Fall or Spring. Addition of a surfactant can improve control.

### References

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<sup>\*</sup>Always follow herbicide label instructions.