

ARTHRAOXON GRASS (Small carpetgrass or Joint-head grass)

Arthraxon hispidus (Thunb.)

Arthraxon grass is a surreptitious invader found across all ecoregions of North Carolina. The species prefers wet habitats like stream banks, pond and lake margins, and wetlands, and is particularly aggressive following major disturbances such as flooding or soil movement. Dense monocultures can form within as little as 3 years, out-competing surrounding herbaceous vegetation.

Arthraxon is an annual, warm season (C4) grass growing up to 18 inches in height and having

distinct, heart-shaped leaves that clasp the stems and that have a notably hairy margin. The grass flowers in fall, and the inflorescence has an appearance similar to that of big bluestem, only miniaturized. Seeds are distributed throughout late fall and winter. Seeds are adapted for aquatic distribution.



Figure 1. The distinctly clasping, heart-shaped leaves of small carpetgrass are a good identifying character. Also look for fine but noticeable hairs along the edges of the leaves.

A native of Asia, it is difficult to point at a single instance of introduction of Small carpetgrass into the US. Rather, patterns of distribution indicate multiple points of introduction along the east coast over the course of decades. As of 2019 this species is known to occur over 50 North Carolina counties, with a generally north-central distribution and outlying occurrences in the far eastern and western parts of the state. Populations extend northward and southward well beyond the state line, covering much of Virginia and northern South Carolina, respectively.



Figure 2. As its name implies, carpetgrass spreads through an area via its ability to root at each node that contacts the ground. Large, dense masses form this way and crowd out native plants.

Control efforts for the species should be focused on elimination of the plant prior to any seed formation. Thus, hand-pulling and mowing are the most appropriate manual techniques to utilize, especially in smaller infestations. Larger monocultures can be controlled using chemical means; glyphosate-based products are the most effective, but care

should be taken when selecting herbicide products due to the propensity of the plant to occur in and around wetlands, where pesticides use is restricted to certain aquatic-safe formulations.

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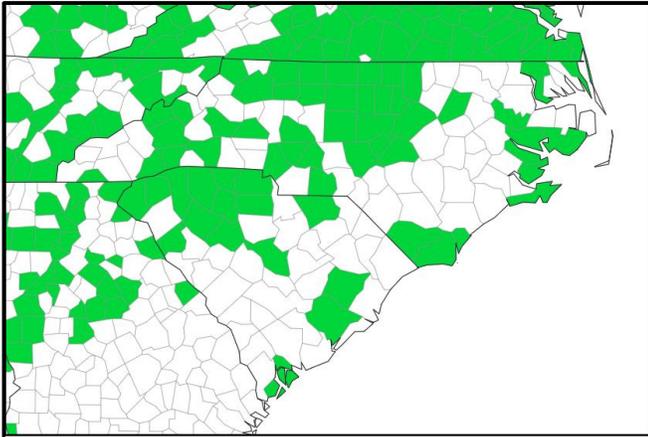


Figure 3: *Arthraxon hispidus* distribution within the Carolinas and adjoining states. (source: EDDMaps)

There have also been studies directed at biological control methods. Several fungi and at least a dozen insects parasitize and forage the grass, indicating the potential to isolate and utilize a biocontrol, but this is currently still in research phase.

The North Carolina Invasive Plant council strongly suggests that you discourage planting this plant, and to report naturalized incidences to www.EDDMapS.org.



For more information on this invasive plant, and others, please visit the North Carolina Invasive Plant Council website (nc-ipc.weebly.com).

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