

Invasive plant is seductive menace

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Garden Tales

Sweet Autumn Clematis (*Clematis terniflora*) is blooming now, and it is hard to miss. In August and September, the plant is a profusion of bright white flowers.

Its tightly intertwined vines covered with flowers create an effect like a mound of snow. Both up close and from a distance, it is a very attractive plant. It is easy to grow in a wide range of soils and light conditions, grows quite rapidly, and flowers well even in times of drought.

Sweet Autumn Clematis is a wonderful plant for the garden, and it is easily available from local and online nurseries (where it is also known as *Clematis flammula*, *C. paniculata*, or *C. maximowicziana*). The trouble is that it doesn't stay in the garden. Despite being native only to eastern Asia, Sweet Autumn Clematis now occurs in the wild in 32 states of the U.S.A. and one province of Canada.

Its flowers are succeeded by abundant, wind-dispersed fruits that have established populations in local natural areas, especially along streams. Within the past few years, I have witnessed its appearance in many areas. A couple of places where the rapid spread of this plant is evident are tributaries of the St. Jones River in and around Dover (visible from several roads), as well as the Christina River at the south end of Wilmington (visible from I-95).

Sweet Autumn Clematis is an example of an invasive species. Invasive species are plants, animals, fungi, and microbes that are not native to a particular region. After their intentional or unintentional introduction, they spread into natural areas, where they displace and otherwise disrupt the life cycles of native plants and animals.

The advent of an invasive species usually leads to a decline in the frequency of native species, resulting in economic and environmental harm.

The very characteristics that make Sweet Autumn Clematis such a good garden plant also make it invasive: rapid growth, adaptability to a wide range of environmental conditions, and abundant flower production fol-

lowed by high seed set.

Once this species becomes established in natural areas, its vigorous growth permits it to overtop and shade surrounding vegetation, resulting in reduced growth, flowering, and fruiting of native plants. Then, birds and insects that feed upon the native plants and use them for nesting find fewer and fewer plants on which they depend. The effects of one invasive species can be so severe that a multitude of native species are lost from a natural area within a relatively short period of time.

Like Sweet Autumn Clematis, many of our region's worst invasive plants began as attractive garden plants. Oriental Bittersweet (*Celastrus orbiculatus*), Purple Loosestrife (*Lythrum salicaria*), and Lesser celandine (*Ranunculus ficaria*) are all beautiful, easy to grow, previously popular in horticulture, and tremendously invasive.

Other invasives, such as Autumn Olive (*Elaeagnus umbellata*), Japanese Honeysuckle (*Lonicera japonica*), and Multiflora Rose (*Rosa multiflora*), were intentionally introduced as wildlife food or to help prevent erosion.

This is an exciting era in gardening. As gardeners, we have a tremendous variety of plants from which to choose, and more and more species are being introduced to horticulture by the nursery trade. This is also a time of challenge, for we must be vigilant to avoid introducing a new generation of invasive plants.

If you are considering buying plants for your garden or landscape, investigate their invasiveness by checking literature, Web sites, and horticulturists at your local nursery or university. It is always best to choose native plants because they are non-invasive and already adapted to local climates, soils, and pests.

The Delaware Invasive Species Council (DISC) is dedicated to preventing the introduction and reducing the impact of invasive species. The DISC Web site (<http://www.delawareinvasives.net/home>) provides a list of the state's invasive plants, and much



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information about them. The DISC annual meeting provides a wealth of information, as well as boundless opportunities to interact with experts and others interested in the problems of invasive species.

This year, the annual meeting will be Nov. 7 at the St. Jones Reserve (open to the public, nominal registration fee, registration information forthcoming on Web site).

Another Web site that is a very helpful source of information about invasive plants is the United States Department of Agriculture's Plants Database (<http://plants.usda.gov/>).

Editor's note: On the campus of Delaware State University, the Claude E. Phillips Herbarium is Delaware's center for research, education, and outreach about plant identifications, locations, and uses. Call (302) 857-6452 (Dr. Susan Yost) to arrange a tour of the Herbarium, and call (302) 857-6450 (Dr. Naczi) for more information about this article.