Wisterias and Honeysuckles

## Our Native Species Are Equally Beautiful

Carlo Popolizio, Fish and Wildlife Biologist, New Jersey Field Office

erican wisteria Wisteria frutescens)

Geographical isolation has been the factory of evolution, training plant life to modify and adapt to local conditions in exuberant diversity over geologic time. Since the age of exploration, however, the world of plants has never been the same: seeds, roots and cuttings no longer need events of catastrophic proportions to move around the world; now they are quite comfortably carried in a matter of days or even hours by global trade and passenger movements. Three Asiatic vines invaded the U.S. by winning human beings over with their fragrance and beauty: Japanese honeysuckle (Lonicera japonica) and wisteria (Wisteria sinensis from China and Wisteria floribunda from Japan). They exemplify the need to expand the use of native plants for ornamental horticulture.

Japanese honeysuckle was introduced in the U.S. in 1806 to embellish ground cover. It took a while for the species to escape horticultural grounds, but it managed to invade most of the U.S. by the 1900s, thanks in part to birds' predilection for its black, pulpy berry, by which means its seeds were dispersed. A fierce competitor cloaked in an aura of sweetness, Japanese honeysuckle reproduces sexually by attracting a great

number of insect species to its fragrant flowers and vegetatively by underground rhizomes and above-ground runners, and by rooting at the nodes. The species can grow both horizontally and vertically; moreover, it is predominantly everyreen, resuming growth and photosynthesizing before and longer than most native deciduous species. This vine is prized in China for its antiviral and antibiotic properties. Fittingly perhaps, the genus was named after Adam Lonitzer, a wealthy physician and herbalist in Germany during the 1600s.

The English-born botanist Thomas Nuttall named the genus Wisteria after Dr. Caspar Wistar of Philadelphia, President of the American Philosophical Society, personal friend of Thomas Jefferson, and a leading expert in fossils and anatomy. The Chinese and Japanese wisterias were introduced as ornamentals in the U.S. in 1816 and 1830 respectively; they escaped by the 1900s, following the call of the wild. Wisteria takes hold by growing on shrubs and trees, strangling and shading them; the woody vine portion of the plant grows around trunks of host species tenaciously, slowly girdling them. The flowers, which appear in April or May, eventually become

a seeded pod like most legumes. Contrary to honevsuckle, wisteria leaves, flowers, and seeds are poisonous. According to the University of Maryland, two seeds of W. floribunda can kill a child if ingested. Wisteria can live up to 50 years, and can vine up a tree to as high as 65 feet. Unfortunately, introduced wisteria species are highly prized for their ornamental qualities; nurseries provide plentiful advice on how to propagate and care for them. Wisterias are perceived as idyllic, soothing, and healing.

It is little known that these invasive species have native counterparts that are equally beautiful. Trumpet and wild honeysuckle (Lonicera sempervirens and Lonicera dioica) and American wisteria (Wisteria *frutescens*) are showy, native vines which are relatively common in the northeast, central, and southern U.S. The former two differ from Japanese honevsuckle in that they have red flowers and perfoliate leaves; hummingbirds and butterflies relish their nectar, and songbirds eagerly seek their fruits. American wisteria flowers later than its invasive counterparts (early summer), is equally attractive, and can also be distinguished by its hairless pods.

According to the USDA's Economic Research Service, the greenhouse/nursery sector is the sixth largest agricultural commodity group in the United States. Grower cash receipts for greenhouse, nursery, and turfgrass products exceed receipts for all food grain crops, as well as the combined values of all sugar and tobacco crops. The Agricultural Statistics Board estimated that the wholesale value of cut flowers and greens, potted flowering plants, foliage plants, and bedding/garden plants in 36 surveyed states reached \$3.23 billion in 1994. Little will be accomplished in preventing plant invasions in the U.S. by horticultural means until native species capture a much larger portion of this market.

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In St. Louis during December of 2001. global experts discussing the problem of invasive plants issued voluntary Codes of Conduct, which have been adopted by national organizations such as the American Nursery and Landscape Association, the Gardening Club of America, and the American Society of Landscape Architects.

These are some of their suggestions for gardeners:

Visit http://www.mobot.org/invasives

• Ask for non-invasive species when you acquire plants.

 Determine which species of plants in your region are invasive or show aggressive potential.

 Apply environmentally-sound methods to control harmful plant species and remove them from your land.

plants.

Japanese honeysuckle (Lonicera japonica)

> • Emphasize the problem of invasive plants in your local media.

plants.

Chinese wisteria (Wisteria sinensis) in A





• Take advantage of continuing education courses, local workshops, and other opportunities to learn about invasive

By adopting these few suggestions, you can help to grace our land with beautiful native

Wild honeysuckle (Lonicera dioica)



