

Plant Retailers Provide Potential Source of AIS

By Irene Miles

Aquatic invasive species (AIS) are probably available right now at a retailer near you. When University of Notre Dame researchers went shopping for invasive species, they found a number of them for sale in the southern Lake Michigan region.

With funding from Illinois-Indiana Sea Grant, Dr. David Lodge, biologist, and his graduate student Reuben Keller, set out to assess whether the trades contribute to the spread of invasive species. They shopped at pet and nursery retailers both large and small, as well as fish markets in Chicago. The researchers found many invasive and potentially invasive species, often misidentified.



Iris pseudacorus (Photo by Rodney Barton)

“At pet stores, we were able to purchase species that are already invasive, such as goldfish and koi,” said Keller. “With these fish, the biggest risk is increasing their spread in local waterways.”

At Asian markets in Chicago, they found bighead carp—often taken home alive. Both bighead and silver carp pose a serious threat to the Great Lakes ecosystem if they become established in Lake Michigan. (State and federal management agencies have developed barriers and other strategies to try to prevent these Asian carp species from entering Lake Michigan. The State of Illinois has also outlawed the sale of live Asian carp.)

It was nurseries however, that provided the richest source of AIS. “Water gardening poses the greatest risk for new introductions and invasions,” said Keller. “It is a booming business, and shoppers often want the newest and prettiest plants that are hardy for the region. This means that each year there is an influx of new plants that are capable of surviving in the environment.”

Of the plant species for sale, many are already serious invaders in the Great Lakes region, including water chestnut (*Trapa natans*), true forget-me-not (*Myosotis scorpiodes*), and yellow

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IISG Announces Interim Director

As Illinois-Indiana Sea Grant launches into new directions and searches for a new director, Dr. William Sullivan, the director of the Environmental Council at the University of Illinois, will lead the program.

In his role as interim director, Sullivan brings to Sea Grant a background of research on the relationships between people and their environments. He was the co-founder of the Human-Environment Research Lab and is a U of I associate professor of landscape architecture, natural resources and community development.

“This is a great and finely-tuned program,” said Sullivan, “My task is to keep it running, but I also hope to open doors to new partners and expanded visibility, especially in Chicago. The southern Lake Michigan region faces significant concerns related to aging infrastructure, urban growth and sustainability of natural resources. Through Sea Grant science, we can help foster healthy communities.”

In recent years, through two joint appointments, IISG has expanded its partnership with the U.S. EPA Great Lakes National Program Office to address broader Great Lakes ecosystem issues such as monitoring and remediation of contaminants. Sea Grant also played a pivotal role in the

signing of the historic Wingspread Tri-State Accord, an agreement by four regional planning agencies to address economic, environmental, and transportation concerns across traditional boundaries. And, IISG is a key player in the Great Lakes region in efforts to manage and control the spread of aquatic invasive species.

Now, as the program completes a one-year strategic planning process, the focus will be on four new cross-cutting topic areas: Habitats and Ecosystems; Water for our Future; Coastal Cities; and Nourishing Healthy Communities.

“Many problems facing urban areas today need to be addressed from a number of perspectives,” said Dr. Brian Miller, IISG associate director. “Sea Grant’s new progressive approach is designed so that scientists and program staff members work together across a multitude of disciplines to achieve positive impacts in the southern Lake Michigan region.”



Plant Retailers Provide Potential Source (continued from cover)

flag iris (*Iris pseudacorus*). “We came to the conclusion that most aquatic plants sold in the Great Lakes area are not properly identified, making it impossible for consumers to be sure what they are buying, and difficult for agencies to effectively regulate which species are for sale,” said Lodge.

“Roughly half of the plant species we purchased were identified only with common names, which are ambiguous at best,” said Keller. “We also purchased 140 plants that were identified with a Latin name, but only 61 percent of those names were correct.” Many of the species available from water garden suppliers are not yet known to have escaped and become invasive, but they possess characteristics that make them potential threats. Since new species are added to the market each year, Lodge and Keller are developing a risk assessment tool for aquatic plants in the Great Lakes region.

“We are creating a system that many people will be able to use accurately and consistently to predict whether a species is likely to become invasive,” said Lodge. At some point, this tool will be available for use by wholesalers and retailers, and possibly by regulatory agencies to determine which species should be available for sale in the region.

Lodge and Keller are now focused on raising awareness. Along with IISG, they are working closely with the Habitattitude™ campaign, which unites the pet industry and nurseries with federal agencies in an effort to educate aquarium owners and water gardeners to help prevent the release and escape of non-native plants and animals. They are also developing an outreach program that includes input from relevant retail industry leaders, and are cooperating with the Shedd Aquarium in education programming on invasive species.