When I began my career more than 35 years ago, little information existed about most things aquatic compared to today. Instead of being just a click away, information about individual plants was typically provided via a photocopy through the mail. I would send a check to cover the cost (about 7 to 10 cents per copy) for plant information selected from a hand-typed list of documents of individual plants. These tidbits of information were largely available from Walter Pagels, the former International Waterlily and Water Gardening Society (IWGS) librarian for decades. Pagels was also a world traveler, bringing new plants to the United States and sharing them with many along the way. The hand-typed, black-and-white IWGS Journal was also a much sought-after source of new plant knowledge. The IWGS still maintains a library of books, articles and publications via David Curtright. If you are in need of specific information about an individual plant, you can certainly find it there.

I have long been an advocate of incorporating plants into all water features because there is nothing else out there that can improve water quality, enhance the ecosystem and add stunning plantings to provide nesting sites, food sources, and shelter from predators—all while managing pristine water quality. (Credit: Larry Culver)
ning beauty to the landscape. It has, however, been an uphill battle.

**Distribution History**

In the earlier days, most nurseries were selling locally only or bare root through the mail. Mesh baskets were the norm, typically with oozed roots and mud. They were unstable and often fell over. Bare-root plant quality and size consistency were lacking. In the mid-to-late-80s, several aquatic plant enthusiasts blossomed into more traditional growing operations for aquatic plants.

About 15 years ago, I gave a presentation at a program for pond builders and queried the group of 150 about their use of plants in pond builds. Only 10 contractors were using them at that time — a surprisingly small number! Lack of knowledge and understanding was the noted cause for their hesitation. I am of the philosophy that you don’t start out knowing all the aquatic plants. Start with a few. Get to know them and use them appropriately. Build from there or hire a professional to help you with your plant selection.

**Flash Forward**

More recently, plant usage is up! Now that information is widely available, interest in the aquatic plant hobby is growing significantly worldwide. New waterlilies and lotus cultivars are being created at a rapid pace. Color, flower shape and foliage variations abound. A new database has evolved on the IWGS website (www.iwgs.org). The choices available today can be daunting but are also incredibly exciting. It is still collective knowledge and through trial and error that most cases can be made for which plants are the best choice in certain situations. Experience in the “getting to know each other” phase matters.

More and more contractors are using plants on their projects, and some are taking it to the next level.
Large-scale projects require large-scale plantings. Shy or under-planted projects will face challenges with water quality. All too often, large waterbodies have plants in pots that are inadequate for long-term health. Large planting beds allow the plants to prosper with little maintenance. Small spaces have criteria, too. It is always about knowing the right plant for the right place.

The planting areas should be appropriate for the overall scale of the project, but they should also be incorporated into areas where moving water will enhance their ability to uptake nutrients and balance the ecosystem. When naturalized areas are planned properly and become established, they support a much more diverse network in the food chain. To name a few, fish have fry; frogs and tadpoles have habitat; and dragonflies are abundant.

**Tailor Your Knowledge**

Every client has their own personality and wish list. That personality, along with the space and budget, dictates the scale and scope of the project. No matter how you acquire your plant knowledge, the suitability of the plants and their overall influence on the project are key to success. Knowing which plants are going to provide the elements needed to satisfy the client’s end goals is critical.

These projects are merely a taste of the diversity encountered from client to client. All of them use plants in different applications to ensure beautification and long-term consideration of water quality. Various methods of circulation are implemented in each of these projects to enhance and improve the efficiency of plants to maintain their respective environments. Special thanks to Larry Carnes for sharing some of these waterscapes.

![This large farm pond (above) is surrounded by a horse pasture, and water quality needed to be improved. Massive perimeter plantings added color diversity and plenty of planted shoreline to mitigate nutrient-laden runoff. A 40-by-40-foot wetland (left) bog added above the waterfall is abundantly planted to serve as a vegetative filter. (Credit: Larry Carnes)](image)

**About the Author**

Kelly Billing owns Water Becomes a Garden. She provides planning & design services for appropriate site-specific plant selection. She gives special attention to seasonal interest, nutrient uptake and ecological balance to meet the project goals. A grower specializing in new cultivars as well as providing plant procurement. Access to a supportive network of quality growers across the country is collectively used to ensure the best plants required to suit the destination and design.