

## Getting Your Feet Wet With Aquatic Plants and Displays

James L. Gibson and Lane Greer North Carolina State University

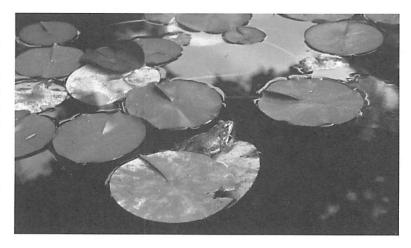
Another article on water gardens? NO!!! How many of those have you read lately? Most grower-retailers do not have time to sell fish, liners, pumps, filters, snails, hoses, sand, gravel, stone, algaecides, water pots, water fertilizers, and all the other paraphernalia that's associated with water gardens. The focus of this article is not on creating an aquatic garden but rather on the marketing of aquatic plants. After all, growing and selling plants is what we do best.

In order to sell aquatic plants, one has to create a soothing and inviting environment for consumers. Does this mean that you have to design an extravagant water garden? That is one option, but with your present resources and time, a simple display area can be established without a lot of effort.

What will you need to sell aquatic plants?

- A display site
- · Healthy plants and good quality water
- Knowledge of the plants that perform well in your region
- Waterproof, aesthetically pleasing containers for the plants
- Access to an individual or organization that can answer questions on equipment, pond design, fish, etc. This will abbreviate the amount of time and investment needed by busy grower-retailers.
- Signage

The Display for Grower-Retailers Most grower-retailers think that, in order to have an aquatic garden, you have to have the rubber-lined, inground, 1/4 acre water garden with waterfalls and koi, all surrounded by weeping willows and ornamental



stone pathways. There is no doubt that this would be an awesome display, but, remember, you are not running a garden center. Don't make the display area a burden to your business. A practical display area can be composed only of plastic tubs containing plants, but even this can resemble an aquatic garden. Soften the area with colorful bedding plants, statuary, and edge plants such as irises and grasses. Create gradations in elevation with containers of different heights. Large containers can be placed on either side of a dry bridge to create an impression of walking over a body of water.

The best site for an aquatic plant display is a large, open area away from trees with a minimum of 6 hours of sunlight. Keep in mind, however, that shallow pools that receive direct sun all day in summertime can overheat and are more prone to algal blooms that detract from selling blooms. Buildings can provide some shade without contributing organic matter that will accumulate in containerized displays. If the display incorporates pumps for fountains or waterfalls, organic matter has to be removed regularly.

The first consideration is size and appearance. While the kiddle pool is a common choice for beginners, it has numerous negative qualities. Most of them are too shallow for moderate and deep water plants, they are overly attractive

to small children, and the traditional blue color can promote algae growth. Black is the preferred color display for containers. Build display nice structures that will last. In order to sell a collection of aquatic plants, present them in one large, narrow container. Large rectangular displays can be easily built out



Name	Description	Planting Comments
	SUBMERGED PLANTS	
Hornwort (Ceratophyllum demersum)	Free-floating green plants with 1-2' stems.	Plant 2' below water surface. For still or moving water
Elodea canadensis	Helps control algae.	Plant in gravel. Can be quite aggressive. Prefers coole water (below 70°F).
Water violet (Hottonia palustris)	1-3' tall. Lavender flowers.	Plant 1-2' deep. Grows in still or moving water.
Hardy water canna (Thalia dealbata)	Small, dark-blue flowers. Foliage can reach 3' tall.	Plant 1-2' deep.
Common bladderwort (Utricularia vulgaris)	Cold-hardy perennial. Carnivorous.	Plant up to 3' deep.
	FLOATING PLANTS	
Water hawthorn (Aponogeton distachyus)	Fragrant white flowers produced in spring. Mottled leaves float on water surface.	Plant 1-3' deep. Prefers cool water.
Fairy moss (Azolla caroliniana)	Green fronds turn red in bright sun and in autumn.	Free-floating.
Yellow pond lily (Nuphar lutea)	Yellow, aromatic flowers that resemble water lilies. Very large leaves and plant.	Plant 1-8' deep. Good for running or still water. Better in large water gardens in shade.
Water poppy (Hydrocleys nymphoides)	Yellow flowers and thick, shiny leaves.	Plant 6" deep in topsoil. Requires high light.
Frogbit (Hydrocharis morsus-ranae)	Leaves resemble a miniature water lily.	Free-floating. Can be invasive.
	WATER LILIES (Nymphaea spp.)	
Wood's White Knight (white), Nora (lavender-pink, mottled foliage), Panama Pacific (purple), Mrs. Martin E. Randig (dark blue), Director George T. Moore (violet blue)	Tropical day bloomers. Flowers open from mid-morning to late afternoon. Usually hold their blooms well above the water. Very large plants with showy flowers.	Place rhizomes in the center of the pot and pack soil tightly around them. Make sure tip of crown is exposed Annuals north of Zone 10. Place outside after water temperatures have reached 70°F. Can grow in shallower water than hardy lilies (about 1' deep).
Red Flare (red), Antares (red), Mrs. George C. Hitchcock (pink), Missouri (white)	Tropical night bloomers. Open from late evening to mid- morning. Most are fragrant.	
Red blooms: Vesuve, Escarboucle, Sultan	Hardy perennial. Day bloomers. Do not bloom as prolifically as tropicals. Some evs. can bloom in high temperatures. Begin blooming in late spring.	Plant rhizomes against the edge of the pot and point crown towards the center. Plant in early spring. Plants like deep water.
Pink blooms: Arc en Ciel (mottled foliage), Lily Pons, Pink Beauty		
Yellow blooms; Charlene Strawn (fragrant), Chromatella, Helvola, Texas Dawn (fragrant)		
White blooms: Marliac Albida, Perry's Double White, Virginia, Virginalis		
	LOTUSES (Nelumbo spp.)	
Momo Botan	Dwarf. Dark rose flowers.	Fertilize sparingly. Good for small containers.
Mrs. Perry D. Slocum	4-5' tall. Flowers change color from deep rose to creamy yellow.	Best planted in large, round containers. Plant against the side of the pot.
The Queen	4-5' tall. Creamy yellow flowers.	Best planted in large, round containers. Plant against the side of the pot.
	MARGINAL PLANTS	
Sweet flag (Acorus gramineus 'Ogon')	Variegated foliage. 1' tall.	Plant in soil up to 3" below water level. Zone 6.
Dwarf papyrus (Cyperus haspan)	12-18" tall.	Plant up to 3" below water level. Zone 9.
Lobelia siphilitica	Blue flowers in late summer.	Less tempermental than Lobelia cardinalis. Zone 5.
Pickerel weed (Pontederia cordata)	Hardy. 18-24" tall. Produces blue flowers in summer.	Plant 3-5" below water level. Zone 4.
Louisiana iris (Iris spp.)	1-3' tall. Numerous flower shapes in colors including white, yellow, blue, maroon, and rust.	Plant in container 2-4" below water level.

of landscape timbers and black liners made of PVC or synthetic rubber. Stock tanks made of galvanized metal or structural foam (Rubbermaid®) are other good choices.

While considering the structure to be used, think about overwintering the plants. If large display structures are built, moving these may not be feasible. Constructing a frame around the display area is one strategy, so that white plastic can be used to cover the frame in winter and shade cloth can be used in summer. High tunnels or A-frames should be used so customers can shop comfortably.

Smaller displays such as plastic-lined whiskey barrels are more easily transported into greenhouses to be overwintered.



Drainage of these containers will be necessary, and you can take advantage of the dry condition to clean up spilled soil, algae, and dead plant parts.

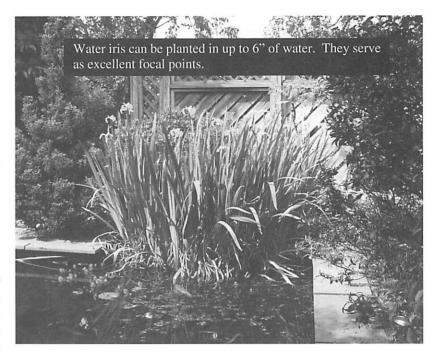
Whatever display you choose, it should be visible to staff at all times so they can keep their eyes on potential customers and curious children. Large aquatic displays are permanent and take up space, so be mindful of future building and parking areas when installing ponds or other large display structures.

## The Plants

Large areas are needed for display because of the tremendous variety of aquatic plants. Aquatic plants are usually separated into categories based on their oxygen requirements. Aquatic plants can be divided into five categories. Submerged plants,

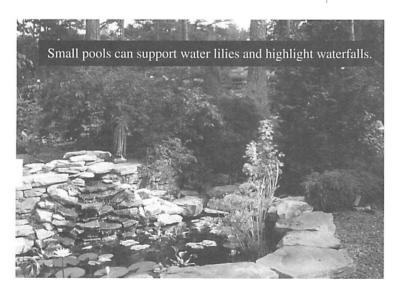
sometimes called oxygenators, can have their roots in or out of soil, with all plant parts underwater. Floating plants have their roots in soil, while their leaves float on the water's surface. Hardy water lilies and lotus are considered floating plants, and they are usually more suited to deep water (over 1' deep). An additional category, bog or marginal plants, includes those that thrive around pond edges. Designate these categories with large, eye-catching signs. Within each category, provide smaller signs that contain information on growth habits, flowering or foliage characteristics, and color pictures. Refer to Table 1 for recommended aquatic plants.

Several reputable aquatic plant wholesalers have established themselves nationwide. These firms have developed their



own marketing programs and provide cultural information to grower-retailers. Refer to our website for a list of plant suppliers of aquatic liners.

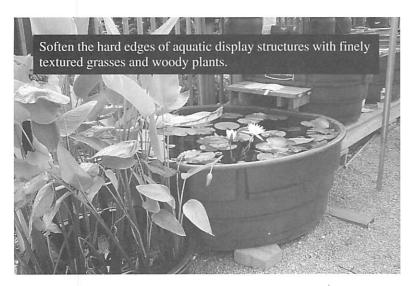
There are two things to keep in mind with aquatic plants. First, plants are necessary for water oxygenation and are an essential component of the homeowner's water garden. Second, most water plants grow very quickly so maintenance in the display is crucial for retail sales. Periodically, plants will need to be groomed and divided. Yellow, sickly foliage should be removed on a constant basis to avoid a buildup of organic material in the water. Regularly inspect the crowns of aquatic plants for signs of overcrowding. Smaller flowers and foliage indicate the need for division. Rootbound plants also need to be divided on a recurring basis.



When potting, select a heavy medium with a pH close to neutral. Aquatic potting soils that do not decompose (thereby releasing nutrients into the water) are ideal. Heavy clay loam, sand, gravel, and topsoil are most often used for potting aquatic plants. Whatever medium is chosen, it is important to remember to keep the plant crowns above the level of the soil. Pea gravel is recommended as a top layer, to prevent loss of soil from the pot.

Containers come in many shapes and sizes. Traditional nursery pots like squat pots or mum pans, or mesh baskets, are the preferred containers for growing and selling aquatic plants that will go directly into a homeowner's water garden. Consider marketing smaller





containers (4-6" azalea or quart pots) of floating, submerged, and bog plants. Water lilies and lotuses need to be placed in larger containers initially. Fertilizer should be added at planting time. Granular fertilizers such as 10-10-10 can be incorporated into the medium, as can slow release spikes or tablets.

## **Marketing Aquatics**

Summer is the best time for sales of water gardens and their accessories. The image of relaxing by the water garden dances in the heads of homeowners. Water gardens invite us to meditate, cool off, and spend long summer afternoons daydreaming. The water gardening industry has capitalized on this fantasy world.

Have you looked around lately at the marketing push for aquatic gardens? Here are some successful strategies for selling aquatic plants.

- Tie your summer sales to the aquatic garden: grasses, heat-loving annuals, and summer perennials should be displayed in and near the aquatic area. These plants are essential in offering a balance between terrestrial and water plants in the homeowner's garden.
- 2. Provide a repotting service to your water garden customers. This service may include new containers, fresh media, slow release fertilizer, and gravel.
- 3. Decide how far you want to go with sales of hard goods related to aquatic gardening. Pots, whiskey barrels, fountains, bird baths, and other statuary may add too much to your inventory.
- 4. Offer an overwintering service to your water garden customers. Boarding plants may be a lucrative business in your community.
- Develop a library of resources that will help you and your customers identify aquatic plant disorders and pests. This allows you to become the expert on water plants and their problems.

## **Grow Along with Your Customers**

The most effective way to sell aquatic plants is to host seminars on water gardening. Team up with a local expert on pond construction and maintenance or find out if there is a rep from a large aquatic garden firm in your area. Someone with knowledge on fish, frogs, and other water wildlife is an added bonus. (Check our web site for a list of nationally recognized aquatic garden specialists.) Try to establish a partnership with one of these specialists, where you are the plant source and they handle all other aspects of water gardening. A relationship like this can bring you great benefit, as a demonstration water garden can be constructed on your premises during the early seminar sessions. This allows the

seminars to become more advanced each year and include topics such as maintenance, fish, filter systems, and algae control compounds.

Adding aquatic plant inventory can really enhance your business. Once established, your customers will think of you as *the* source of well-grown aquatic plants. Leave the water garden accessories to the pond specialists. Keep in mind that the garden center aquatic pond is not your short-term goal. The amount of information that has been written on pond construction and maintenance is astronomical. Check our website for an extensive list of extension publications that focus on pond construction, fish, equipment and maintenance.

Additional photographs can be viewed at the North Carolina State University website, listed under the Retail Reflections icon: www.floricultureinfo.com

