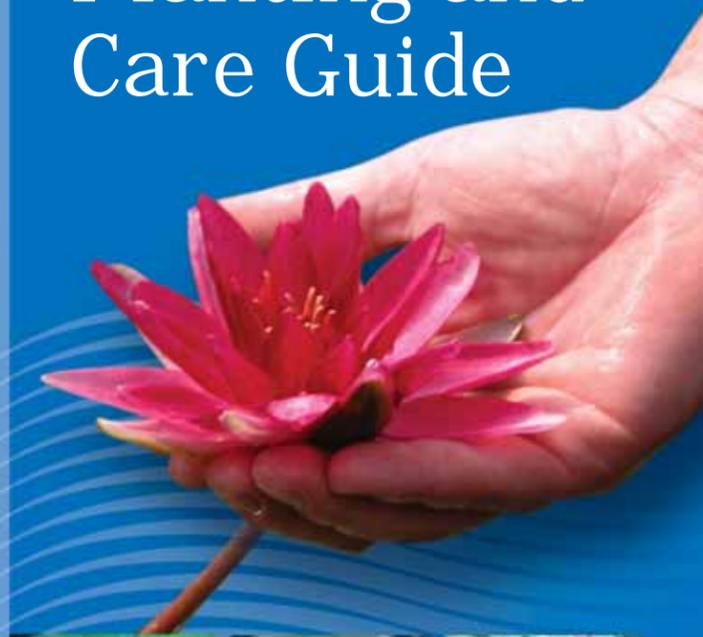


A beginner's guide to growing and caring for aquatic plants

Laguna

Pond Plants: Planting and Care Guide

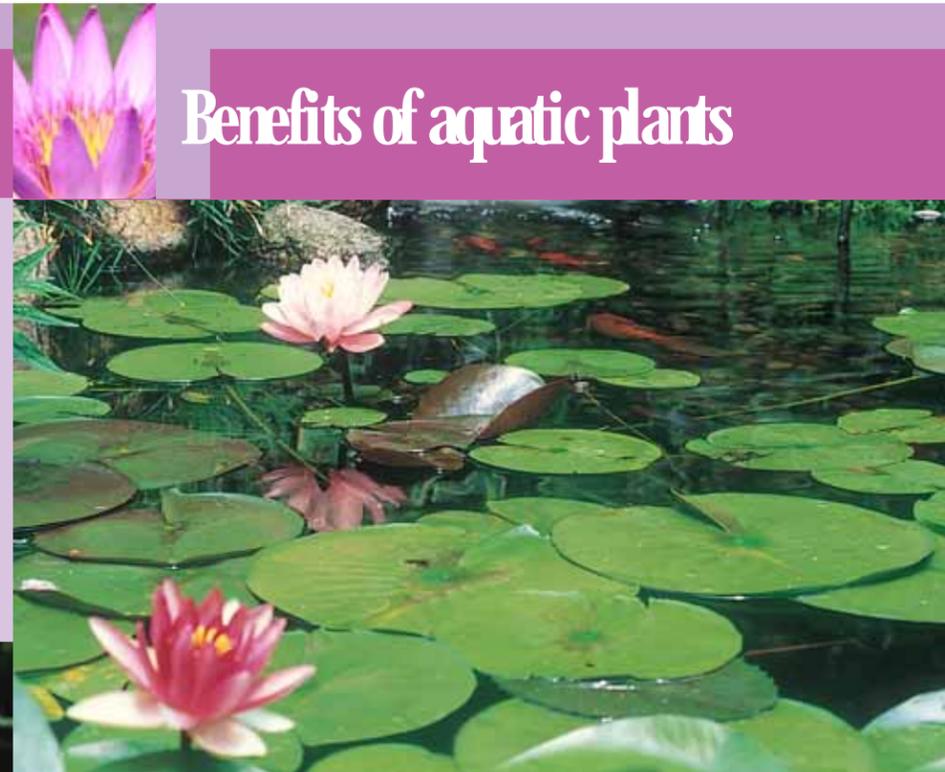


Beautifully simple water gardening
www.lagunaponds.com

Planting Care Guide

Benefits of aquatic plants

Aquatic plants play a very important role in your water garden. They create a natural look while providing shade and shelter for a wide variety of creatures including frogs, fish and dragon flies. With proper care, aquatic plants will not only enhance the beauty of your pond, they will also reduce maintenance and create crystal clear water conditions.



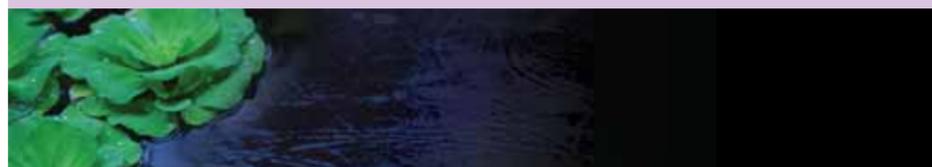
Aquatic plants offer an attractive, dynamic element that changes with their growth and reproduction, giving your pond a natural look.

More than just ornamental, aquatic plants filter the pond water by absorbing metals, ammonium, nitrate, and phosphate. They also provide oxygen. During daylight hours, plants photosynthesize, taking in carbon dioxide (CO₂) and giving off oxygen. Plants improve water quality and provide a more natural stress-free environment for fish. A planted pond provides fish with shelter and hiding places. Ponds that contain a large population of lush healthy plants will result in less maintenance, healthier fish and superior water quality.

Benefits of aquatic plants:

- Supplemental filtration - plants absorb ammonium, nitrates and phosphates. Plants also assimilate other undesirable substances, such as metals, from pond water helping to improve water quality.
- Supply food and shelter for fish.
- Compete with algae through the intake of essential nutrients, while shading the pond from light.
- Helps keep a biological balance.
- Helps prevent water from overheating.

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Benefits of aquatic plants

Special care should be taken to keep plants healthy. Like fish, they need proper nutrients in order to grow and flourish. In particular, they consume large amounts of minerals and elements, which often become scarce in a closed environment such as a pond.

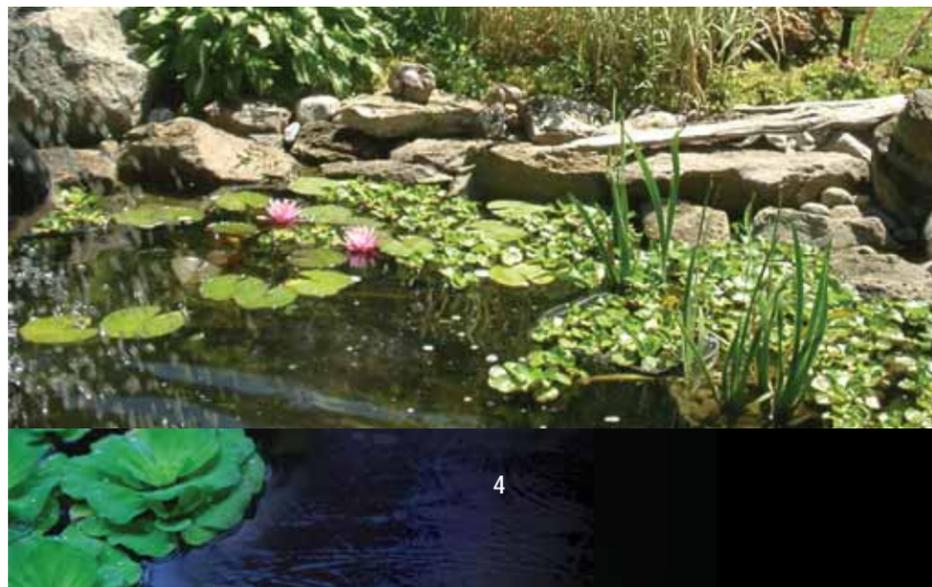
Laguna offers two products that effectively promote healthy aquatic plant growth.

Laguna Plant Grow is a micronutrient liquid fertilizer specifically designed for aquatic pond plants. Phosphate and nitrate free, pond water quality is uncompromised. After being introduced to the pond, it quickly goes to work to provide the following key benefits:

- Helps keep plants strong and vigorous.
- Stimulates growth.
- Helps plants efficiently utilize nitrate and phosphate, both naturally present in pond water.
- Increased flower production.



Laguna Once-a-Year Fertilizer Pond Spikes are specifically designed for potted pond plants. Easy to use and effective, they are inserted into the soil near plant roots. The spikes supply important nutrition to aquatic plants for one full year. The temperature-activated spikes slowly release a well-balanced feeding formula that maximizes the size and color of all aquatic plants while having no negative impact on water quality.



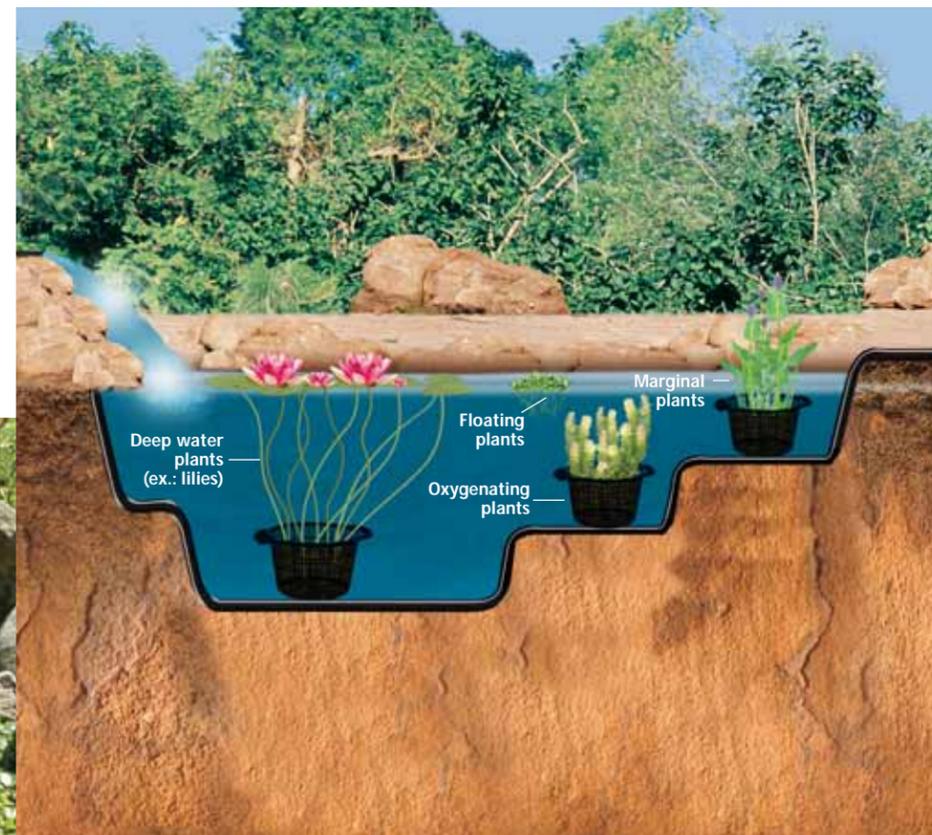
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Planting a new pond

Arranging aquatic plants is a matter of personal taste and style.

Most pond keepers strive to recreate a pond that is as close as possible to something found in nature. Therefore an ecological balance is essential. Aquatic plants play an essential role in maintaining balanced and stable water quality. Plants help filter water by removing toxins and stabilizing water conditions. Therefore, to have a successful pond a full range of complementary plants are needed. A large assortment of oxygenating, floating, marginal and deep water plants will help achieve a natural balance.



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Tips for selecting healthy plants

When purchasing aquatic plants, there are several important points to consider:

- 1 Ensure that you are actually purchasing aquatic plants. Some plants sold are not truly aquatics and will not do well in a pond environment. Consult knowledgeable garden center staff and books.
- 2 Look for healthy specimens. Avoid plants that are damaged (holes, broken leaves and/or stems) or exhibit yellow or brown leaves. Rooted plants should have clean-looking (usually white) healthy root masses (note: exception = bunch plants).
- 3 Look for proper, clean plant holding facilities. Aquatic plant vats should be clean, warm and well lit.
- 4 Make sure plants stay wet or damp during the journey home; do not allow any part of the plant to become completely dry. Plants can be wrapped in damp newspaper and placed in a plastic bag or styrofoam cooler to keep damp and cool for the trip home.



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Oxygenating and floating plants

Oxygenating plants

Pond fish and water quality will benefit greatly from oxygenating plants. These plants use fish waste and decaying organics as fertilizer and provide oxygen to the water. Most importantly, they help maintain a natural balance by competing with algae for nutrients, helping reduce unsightly algae growth.

For best results, this type of plant should be added early in the spring when other plants have not started growing and ingesting nutrients. There are hundreds of options when it comes to oxygenating plants. Some examples of common oxygenating pond plants include:



Ceratophyllum demersum
(Hornwort)



Hygrophila Difformis
(Wisteria)

Note: Oxygenating plants may not be able to provide all the oxygen necessary for your pond's livestock. Help may be needed from a fountain, waterfall or aeration kit.

Floating plants

Floating plants, including lily pads, should cover a large percentage of the pond water surface. This will inhibit algae development and provide important shade, which will in turn aid plants like water lilies until they mature and have leaves large enough to take over this role. Common floating pond plants include:



Eichhornia crassipes
(Water hyacinth)



Pistia stratiotes
(Water lettuce)

Note: Depending on the type of floaters you have, it is important to wait until the risk of frost is over before introducing them to your pond.

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Deep water plants

These types of plants provide decoration, flowers, shade and shelter for pond inhabitants. One of the most common examples of deep water plants are water lilies.

Hardy vs. Tropical Lilies

There are two categories of water lilies – hardy and tropical. Hardy lilies are the easiest to keep and offer a vast selection to choose from. These types of lilies will only bloom in daylight.

Tropical lilies, on the other hand, require some additional care. But the extra attention is well worth the reward. In addition to the incredible flower colors they share with hardy lilies, tropical lilies can also be found in shades of blue, lavender and deep reds. Lily pads can also be textured or have turned up or serrated edges.

There are generally more blooms on a tropical lily and the blooming season lasts longer. In fact, some tropical lilies can generate huge flowers (up to 12" across), and their fragrant scent will fill the entire garden. Because plants do not go dormant in the winter, the plants will keep blooming well into the autumn season. Treat tropical lilies as an annual or bring them inside during the winter months.

If you are interested in planting tropical lilies in your water garden, you can choose between adding day or night bloomers or a combination of both. Day blooming tropical lilies will open during daylight hours, while night bloomers will open at sundown and close again in the mid-morning (when the sun is bright).



TIP

Use Laguna Plant Grow liquid fertilizer and Laguna Once-a-Year Fertilizer Pond Spikes to help provide essential nutrients and ensure your plants grow healthy and maximize flower production.



Marginal plants

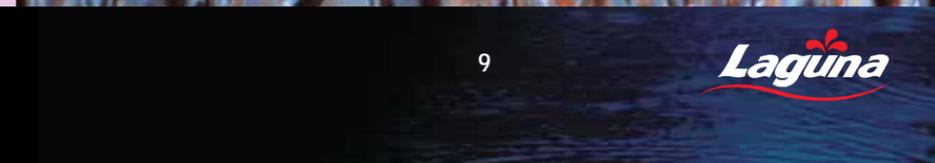
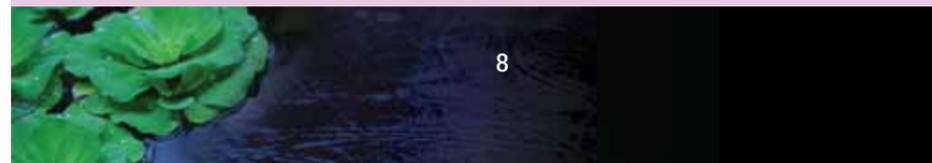
The heart of natural filtration, marginal plants are placed in planting pots or planted in a naturalized pond and submerged on pond shelves so that water only covers the pots by a couple of inches. These plants give a natural, soft appearance and add a splash of color.



Note: Avoid placing the plants directly in the path of the water flow as this may inhibit their growth.

TIP

Laguna offers a wide range of Planting Baskets in different shapes and sizes to accommodate all pond plants. Colored to blend in with the pond environment, they come with convenient features such as handles for easy maneuvering and placement as well as the ability to float and protect plants such as water hyacinth or water lettuce from hungry Koi.



How to care for your newplants

Most aquatic plants are quite hardy and their care involves a regular maintenance schedule to ensure that their growth is kept in check. All that is normally required is some light pruning. The Laguna Pruning Tool will help keep plants looking neat and well manicured. You don't even have to get your hands wet. The scissor head cuts and removes leaves from pond plants in one easy step, while the pincer head allows for grasping and removal of debris.



The closed nature of a pond means that some vital nutrients (ex.: trace elements and other micro-nutrients) are absorbed by the pond plants and will require replenishing. Laguna Plant Grow fertilizer contains a complete range of these necessary nutrients. Its use in your pond will result in the healthy growth of your plants. Laguna Once-a-Year Pond Spikes are a great way to treat marginal and deep water plants individually. These spikes contain a slow-release, well-balanced feeding formula which is low in phosphorus and will have no negative impact on water quality.



Preparing for the winter

With cold weather approaching, it is important to take the necessary steps to prepare your pond plants for the winter months.

Trim hardy lotus and lilies and then put them into the deepest part of your pond. Use a burlap bag and string for easy removal. Other hardy plants (grasses, cattails, and iris) do not need to be trimmed back. You can leave them on the shelf in more temperate areas (ex.: garden zone 7 or above) or put them at the bottom of the pond in colder climates. Remove and/or compost tropical oxygenators and floating plants (ex.: lettuce and hyacinths).

If you have space, you can bring your plants inside. Put them in boxes (or plastic tubs) lined with trash bags and place them in your basement. You need to provide them with a lot of light and keep them damp. Check on your plants at least once a week.

Bring tropical plants inside as they will not survive the winter.





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