

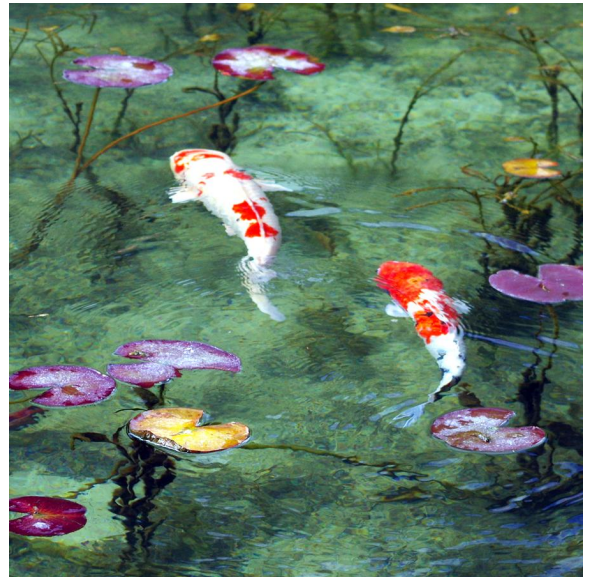
Water Gardening Basics

A Garden Guide

Physical effects and the power of water features

Water gardens can offer so much more than most other types of gardens. People are naturally drawn to water. Just the sight and sound of water is proven to promote peace, relaxation, enchantment and a host of other physical and mental attributes. It offsets sights and sounds from streets and neighborhoods that inhibit peace and relaxation.

The water lily flowers are a magnet for interesting and vital pollinators and insects like bees, dragonflies, and butterflies. There is even such a thing as waterlily honey. The negative ions released by splashing water remove dust, purify the air, and rejuvenate the mind and spirit.



Water is closely related to emotions, and is always a part of sacred rituals and ceremonies around the world. Before mirrors, we looked to ponds to see reflections of ourselves. In the landscape, ponds extend the space visually, and are always reflecting changing images of the land and sky. The immeasurable sense of peace we feel around water is more important than ever to escape the hyper-connected and over-stimulated state of modern day life. People near water are healthier and happier. Studies have shown the beneficial effects on heart rates, and blood pressure. So be happy and healthy and enjoy your pond!

Planning your pond

1- Ideally the sight for your pond should be visible from not just outdoor but indoor living spaces as well.

2- Select a sunny location. Most water plants, including water lilies and lotus, require a minimum of 5 or 6 hours of sunlight to achieve maximum growth and bloom potential. If you have deciduous trees and shrubs nearby, netting will be required in the fall.

3- The pond should be 24" deep in the deepest part to successfully winter over your fish and plants.

4- Avoid low lying areas where water runoff is likely to accumulate. Any runoff from your landscape may carry pesticides, fertilizer and other undesirables into your pond.

5- Make sure electrical outlets are available. Most ponds will require a pump to provide aeration, filtration, a waterfall, or fountain.

Plants for the water garden

Oxygenating plants

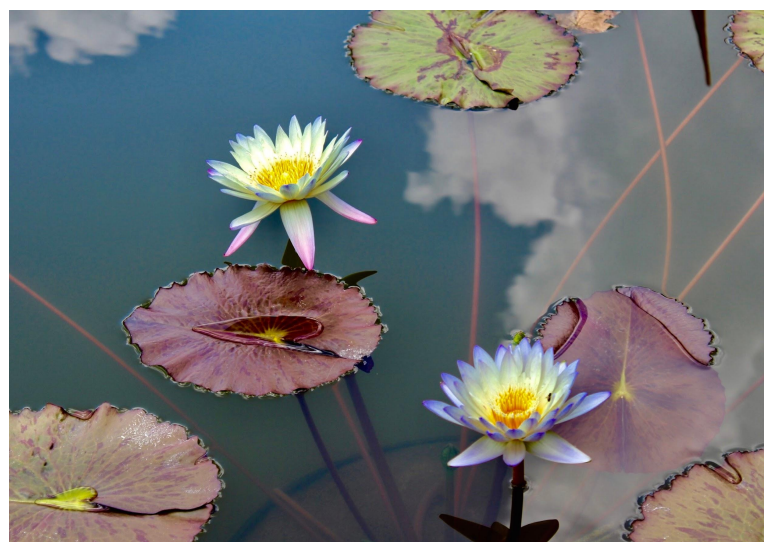
These plants are what we call true aquatics. They spend their lives immersed underwater. They can be free floating or anchored, providing oxygen, food, spawning medium, and hiding places for fish and fry. They absorb dissolved nutrients in the water, and are effective deterrents to the diatomic water borne algae that cause green water. Examples are Anacharis (*Elodea canadensis*), and Hornwort (*Ceratophyllum demersum*).

Floating plants

Floating plants are an inexpensive way to cover some surface of your pond which is essential for algae control, and to provide shade and cover from predators for your fish. Hardy floaters include parrot's feather (*Myriophyllum aquaticum*), yellow water primrose (*Ludwigia peploides*), which sends out long creeping runners with yellow flowers that bloom all season long, and water four leaf clover (*Marsilea mutica*) which has beautiful floating leaves. Tropical floating plants include water hyacinth (*Eichhornia crassipes*), which reproduces rapidly, and has beautiful, if short lived blue and yellow flowers, water lettuce (*Pistia stratiotes*), and the spectacular mosaic plant (*Ludwigia sedioides*) a fast spreading, often intersecting configuration of mosaic patterned leaves.

Hardy water lilies

The water lily is the premier plant in the water garden. There are few other perennial plants that bloom all season long, and in an array of colors, sizes and shapes. In order to be so prolific and spectacular, they need lots of sunshine and food. Most require at least 5 or 6 hours of sun, and need to be fertilized with aquatic plant tabs once a month. When winter comes, cut them back and place them down in the deepest part of the pond where they will store up energy for the next eye-catching summer.



Tropical water lilies

As impressive as hardy lilies are, tropicals are even more amazing.

Commonly producing multiple blooms in exotic, striking colors, many with arresting fragrances. If you're into blue or purple, only tropicals come in these colors. There are tropicals that bloom only at night, opening at dusk, and staying open until late morning. Tropicals are even more vigorous than hardy lilies, and require an extra tab or two of fertilizer per month. You can treat them as an annual, or, if you're an enterprising gardener, they can be wintered over successfully using several methods. All of them involve bringing them indoors in temperatures in the 55°F to 65°F range.

Lotus (*Nelumbo nucifera*)

The hardy lotus, *aka* Sacred lotus, or Indian lotus is a striking perennial, and is considered one of the most famously sacred plants in the world. The flower holds great symbolic weight in many eastern cultures, as well as ancient Egypt, where it was believed to have the magical ability to resurrect the dead. It is a symbol of purity, enlightenment, rebirth, and the human condition, growing



vigorously even under hard pressed and challenging circumstances to produce the most beautiful flower. The seeds remain viable even after a thousand years, and the seed pods that develop after blooming are valued for decorative purposes. It is a staple food in many cuisines, and has been used for centuries for medical purposes. Incredibly, this plant, if you have a pond, can be a part of your back yard landscape. The flowers now come in many hybrid colors, shapes and sizes. They require fertilization similar to tropical lilies, but come winter treat them as you would your hardy lilies.

Bog and marginal plants

These plants like to grow in shallow water, maybe 2 to 6" above the base of the plant. Generally, a mixture of taller, dramatic, and low growing spreading plants will add diversity and interest to your pond. Tall hardy plants include the spiky sweet flag (*Acorus gramineus*), which comes in several varieties including variegated, striped and golden, and water canna (*Thalia dealbata*), which grows to a height of several feet, with orchid like flowers in midsummer sprouting a few feet above that. Taller tropicals include elephant ear (*Colocasia esculenta*), Canna lily, and papyrus (*Cyperus papyrus*).

Low growing perennial water plants placed along the margins of the pond soften the edges, and can grow in and out of the water to add a more natural look to your pond. Some good examples are water Forget-me-not (*Myosotis scorpioides*), Water celery (*Oenanthe javanica*), and Creeping Jenny (*Lysimachia nummularia*).

Fish for the water garden

Koi



In Japanese culture the spirit of the koi is said to attract good luck, material abundance and advancement. Mature koi have a gentleness, and a flowing swimming style that is melodic, relaxing, and a vision of color, grace and beauty. They come in a cocktail of colors, patterns, and scale characteristics. Koi can live up to 100 years, with the oldest specimen said to have been over 200! Koi make great pets and although they aren't exactly

snuggly, they can learn to recognize you and eat out of your hand. They can grow to a length of 4 or 5 feet, and require a fairly large pond. Stocking rate depends on the extent and quality of your filtration system.

Goldfish

Comets are the most common kind of goldfish sold for ponds. They are a streamlined version of the common goldfish with longer fins. They come in orange, and various combinations of white, black, and red. They grow to a size of a foot or so, and are pretty much suitable for any size pond.

Shubunkins are another variant on the common goldfish with longer fins, and elements of extra color and flair. They come in a kaleidoscope of calico patterns of red, blue, orange, gold and black. Their size and pond requirements are similar to comets.

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