

Water Garden Plantings

Water gardens of all types are one of the more appealing features of gardens; finding a place for water in the garden brings us just a little bit closer to paradise. A water garden or Aquatic plant is any plant that can grow with its roots in water or in permanently saturated soil. Water gardens depend on the right balance of plants that perform different functions to keep a pond well oxygenated, clear and free of algae that cause green water.

Types of Water Gardens

The plants chosen depend on what type of water feature you have, its location, and whether you choose to have fish. Water features include wildlife and informal garden ponds, bog gardens, mini ponds in a container or tub, ponds with waterfalls, fountains, and dry streams or streams with flowing water. Each have unique planting requirements.

The Plants

The water plants below are suitable for wildlife and informal garden ponds with depths between 1 to 3 feet.

Water garden or Aquatic plants are generally divided into 3 main categories. Each has a different use and requires a different approach to planting and maintenance.

1. Submerged or Deep Aquatic Plants

These plants live almost completely under the water with leaves or flowers that float on the surface and are the workhorses of the aquatic environment by using the energy of the sun to produce food as they release oxygen into the water as a byproduct. They help keep water clear by competing with algae for nutrients by reducing the amount of light which reaches the water surface and can also process fish waste by reducing the buildup of toxins. A healthy pond requires about one-third to one-half of plants with floating leaves to cover the water's surface. Submerged plants thrive at depths of 1 to 3 feet and are generally so vigorous and easy to grow that they must be thinned out regularly and so are usually planted in a pot or aquatic basket placed below the water surface so they can be lifted to divide and repot as they outgrow their containers. Some Submerged plants are called Oxygenators, submerged and fast-growing plants that compete for the minerals on

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which algae thrive to keep the water clear and to create oxygen for the fish that live in the pond. Examples of Submerged plants which are generally available locally include:

- Water lily (*Nymphaea*) both Hardy and Tropical, the classic pond plant which requires an open, sunny and calm pond to flower. Showy white, yellow, pink or blue flowers
- Water hawthorn (*Aponogeton distachyos*) – small, scented white flowers
- Floating heart (*Nymphoides peltata*) – white or yellow flowers
- Lemon bocapa (*Bocapa caroliniana*)
- Water poppy (*Hydrocleys nymphoides*) – bowl shaped yellow flowers
- Curly-leaf pondweed (*Potamogeton crispus*) – can be aggressive in earth bottomed ponds.

Some native species of Submerged plants are:

- Water smartweed (*Persicaria amphibia*) aka *Polygonum amphibium* – spreader, pink spikes of flowers
- Water lily (*Nuphar polysepalum*) – yellow flowers

Water lilies grouped by size:

- Dwarf Lilies – with a spread of 12 – 24” and covering between 1 – 3 square feet, are ideally suited to small ponds, while some of the smallest can safely be used in tubs and half barrels. They need a planting depth of 6”.
- Small Lilies – with a spread of 2 – 4 feet and covering around 3 – 12 square feet. They typically need a planting depth of 12”.
- Medium Lilies – perfect as a specimen lily in larger ponds, they will cover up to 20 square feet of the surface when fully grown, having a spread of 5’ per plant. They require a planting depth of 18 – 24”

2. Marginal Plants

Naturally found in the shallow waters at a pond’s edges, Marginal plants grow with their roots under the water or in permanently damp soil at depths between 1 to 12 inches of water, with their stems and leaves above water. They are grown for their beauty alone to naturalize the look of an artificial water feature and can give shelter to creatures such as

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birds, amphibians, and insects. Marginal plants are often potted and placed on shelves built into the pond so that the top of the pot is barely below the water level or planted directly in soil on the permanently damp pond margins. Examples of Marginal plants which are generally available locally include:

- Water iris (*Iris leavigata*) -Siberian, Blue Flag irises
- Water mint (*Mentha aquatica*) – lilac flowers in dense clusters
- European speedwell, Water pimpernel (*Veronica beccabunga*) – blue flowers in loose racemes
- Marsh marigold (*Caltha palustris*) – yellow buttercup flowers in March

Avoid Yellow Flag iris (*Iris pseudacorus*) that is extremely invasive

Some native species of Marginal plants are:

- Cattail (*Typha latifolia*) – aggressive spreader. Attract birds. 4-12 ft tall.
- Wapato (*Sagittaria latifolia*) aka Broadleaf Arrowhead. 1-3 ft tall. White blooms
- Water Plantain (*Alisma plantago-aquatica*) 2-4 ft tall. White flowers
- Marsh cinquefoil (*Potentilla palustris*) aka Bog Strawberry. Attracts bees. 1 ft tall. Red flowers.

3. Floaters

Not anchored to soil at all, these plants are free-floating on the surface of the water, are often extremely fast growing, and used for filtration as their roots absorb nutrients from the water that might otherwise cause algae. As Floaters spread across the waters' surface, they provide shade for pool creatures such as fish.

Some common examples of Floaters which are generally available locally include:

- Water Hyacinth (*Eichornia crassipes*) – blue/white flowers in spikes
- Water Lettuce (*Pistia stratiotes*) – rosette shaped leaves
- Sensitive Ferns (*Neptunia aquatica*)
- Frogbit (*Limnobium spongia*)
- Duckweed (*Lemna minor*) – often used but considered invasive. Each plant is ¼” long. Plant in container.

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- Water soldier or water pineapple (*Stratiotes aloides*) - often used but considered invasive. White cup shaped flowers. Plant in container.

Native Plants that Grow Well Around Ponds Include:

- Red Osier Dogwood (*Cornus stolonifera*)
- Blue Elderberry (*Sambucus racemose*)
- Willow (*Salix*)
- Thimbleberry (*Rubus parviflorus*)
- Ocean Spray (*Holodiscus discolor*)
- Salmonberry (*Rubus spectabilis*)
- Pacific Ninebark (*Physocarpus capitatus*)
- Hardhack (*Spirea douglasii*)

References

- Practical Guide to Gardening in Canada, Christopher Brickell & Trevor Cole, editors, 2001. See Chapter 10 ‘The Water Garden’.
- American Horticultural Society Gardening Manual, Gillian Roberts, editor, 2000. See ‘Water gardening’, pages 198 – 222.
- Habitat Acquisition Trust –Victoria’s Local Land Trust. See ‘Gardening for Nature Create A Wildlife Pond’. hat.bc.ca
- Water Garden Plants for Canada, Beck, Alison. Lone Pine Publishing, 2005.
- A-Z Encyclopedia of Garden Plants, Bricknell, Christopher, DK Publishing, 2004

Visiting Water Gardens

- International Waterlily & Water Gardening Society iwgs.org – 6 Member Gardens in BC with 3 Member Gardens in Victoria: Horticultural Centre of the Pacific, Royal Roads University Botanical Gardens, Butchart Gardens
- Annual water garden tour sponsored by the Love of Africa Society showcasing Victoria and area water gardens and water garden designers watergardentour.ca

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