

WATER GARDENING

Stocking/Planting the Pool

Stocking the pool includes plants as well as other aquatic life such as fish, snails, etc. Pools can be balanced through proper selection of plants and aquatic life. An environmentally balanced pool is one in which the interaction of life in the pond creates a clear and attractive pool. Remember, however, that crystal clear pools are not necessarily healthy. Plants absorb carbon dioxide during the day and produce oxygen. Fish use the oxygen and produce carbon dioxide. All pools should be sited in sunlight. The plants require sunlight for best performance. Algae growth is also promoted by sunlight. Shade must be provided directly on the water's surface to discourage the growth of algae. Floating foliage plants such as water lilies water hyacinth and lily-like aquatics will accomplish this. Submerged aquatics provide oxygen, a food source and a place for fish to hide. Additionally they provide a place for fish to lay their eggs. Marginal plants take up excess nutrients in the water inhibiting the growth of algae. Marginal plants also assist the pool by absorbing heavy metals and other common pollutants. Fish control mosquitoes by eating larvae. Snails and tadpoles are the scavengers of the pool eating algae and decaying vegetation. All combine to create the naturally balanced environment of a good garden pool.

Water Lilies are planted in containers of heavy garden soil. Do not use commercial potting mixes. They are too light. The containers are placed in the pool with 6-18 inches of water over the top of the pot. Forty to sixty percent of the water surface should be covered with floating foliage plants. The smaller the pool, the more coverage required.

Marginal Plants are containerized and planted at a depth of 1-12 inches. See the individual plant descriptions for specific depths. Selection of marginals is similar to selecting perennials for the garden. Flower time, height and texture being important considerations.

Lily-Like Aquatics are floating leaf plants that are planted 6-12 inches deep. They also serve as shade producing plants for the pool.

Floating Plants merely float on the surface of the water. They provide shade and the root system is often used as a place for fish to lay eggs. They also serve as an oxygenating system.

Submerged Aquatics are also known as oxygenating plants. They are planted in pots and placed on the bottom of the pool. The plants generate oxygen which is important to the fish.

Fish: Normally pools are stocked with goldfish or koi. Fish add to the excitement of the pool. Selection of goldfish or koi is a matter of personal taste. Koi sometimes are aggressive and bother plants. Plants can be protected with a screen to keep the koi from the new growth, yet allowing the plant to grow to the surface.

Snails: Scavengers perform a very useful function in the water garden. Snails eat decaying vegetation and algae. The best little cleaner in the pond. Stock your pond with these undemanding, hardworking snails and you'll see the difference this season. Vacuuming, trash pickup, you name it, and the little snail does it.

Tadpoles: Are another scavenger that eat algae and also turn into frogs. Every pool should have at least a few tadpoles. Aside from being great scavengers, eating the debris left behind by fish and lilies, they often turn, this summer or next, into bull frogs! The transition is one of nature's wonders. See it yourself.

Pond Stocking Guide:

1. Floating Foliage: Cover 40-60% of pool surface. (Water lilies, floating and lily-like aquatics)
2. Oxygenating Plants: One bunch per two square feet of surface area.
3. Fish: One inch of fish per 1-2 gallons of water.
4. Snails: One per square foot of bottom surface area.
5. Tadpoles: Same as snails.

Note: These stocking factors are suggested. The larger the pool the less applicable they are. Large pools are easier to balance because water temperature does not vary as much over a twenty four hour period as small pools.

Clear Water in the Pond

Algae cause green water in a pond. These simple forms of plant life occur wherever water and light exist together. A crystal clear pool that becomes clouded with algae can be frustrating. The secret to maintaining clear water is providing a balanced ecology in the pond. It takes a period time to establish the natural balance of water, plants, fish and bacteria that combine in a healthy pond environment.

New ponds or ones that have been recently cleaned will turn cloudy and have some algae. It is important to **not drain** the pond. The water must age and establish the necessary microorganisms and plant populations that will help control the growth of algae.

Understanding algae

- Free floating algae – single-celled algae. Green water is caused by an overabundance of single-celled algae. These microscopic plants take advantage of the sunlight, mineral salts and nutrients in water and multiply quickly causing the green, cloudy water. This condition is usually prevalent for around 60 days and can vary depending on weather, water chemistry, plants, fish, etc.
- Hair algae – string algae. This filamentous algae is recognizable as clumps of long stringy, green “hair” that floats in the water or on the surface. Excessive amounts of this type of algae can be easily removed, however some hair algae is beneficial in the pond and helps to control the abundance of the single-celled algae.
- Slime – The green growth on the sides of the pond, rocks or containers in the water. Slime produces 60% of the oxygen in the pond. Ponds require a good layer of slime and once it develops, do not remove it.