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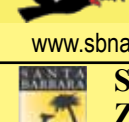
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## This Month's Theme: Lotus Lore and More!



Lotus flowers open in the morning and close at night.

### Aquatic Plants

Lotuses are aquatic plants, meaning that they grow only in the water, in lakes and slow-moving rivers. Dormant through the fall and winter months, they begin to send their leaves up to the water's surface in late spring.

In the spring, the lotus rhizome grows horizontally under the surface of the mud. At each node one leaf, one flower, and a cluster of roots develops.

### Lotus Flowers

Lotus flowers grow quite differently than any other flower. First, their position relative to the leaves is unlike all other plants, whose flowers develop on the side of the leaf closest to the growing tip of the plant. Lotus flowers are formed on the opposite side of the leaf, away from the growing point.

As the bud develops and rises above the surface of the water, the outer petals turn green because of the presence of chlorophyll, the major pigment used by many plants for photosynthesis. The flowers open in the morning and close at night for only three days before the petals are shed. After the petals drop, the receptacle (sometimes called a "pod") continues to expand as the seeds mature.

The leaves and pods stop growing in the fall and turn brown. In gardens they are removed, but in nature they decompose in the water. In late summer, lotus plants store starch in tubers under the surface of the mud to survive their winter dormancy after the leaves are gone.



The lotus rhizome grows horizontally under the surface of the mud.



These are mature lotus pods, after the petals have fallen away.



### Lotus History

Paleobotanists have found fossils of *Nelumbo* species from the late Cretaceous, meaning that lotuses were growing on earth as long as 125 million years ago. Lotus seeds have survived for over a thousand years buried in old, dry lake beds and still germinated when planted. There are lotuses growing and flowering now in gardens whose parent plants died hundreds of years ago.

Today, there are two subspecies of the single species of lotus. The American lotus (*Nelumbo nucifera ssp. lutea*) grows in lakes and slow-moving rivers and creeks from central Texas east to Florida and north to southern Canada.

The Asian lotus (*Nelumbo nucifera ssp. nucifera*) grows in similar habitats throughout Asia and India. The basic difference between the two subspecies is the color of the flowers. The American lotus flowers are yellow. The Asian lotus flowers are white, pale pink, or dark pink.

Lotus leaves are covered with nanostructures of a waxy substance. These tiny projections produce what is known as the "lotus effect." Because of these structures, lotus leaves are called "self-cleaning." Dirt and water do not stick to their surfaces.

### Lotus Cuisine

Many parts of the lotus plant are used for either food or medicine throughout Asia. Native North American people also harvested lotus for food. The tubers and dried seeds are good sources of starch, fresh seeds and new shoots are cooked as a vegetable, and the leaves are used to wrap food before cooking it, similar to the way corn husks are wrapped to make tamales. Fresh lotus seeds are peeled and eaten raw or cooked. The green pods and petals are often used as decoration for the prepared food. Some botanists believe that the lotus may hold the key to slowing down the aging process.

## A Symbol of Beauty and Enlightenment



The lotus flower is often found in many kinds of art, in either a stylized or realistic rendering. This beautiful silk garment (on left) was worn during church services in the early days of the Santa Barbara Mission. It is made of Chinese silk embroidered with beautiful lotus flowers. This Santa Barbara Mission Museum exhibit piece was brought from the Philippines on a "Manila galleon," the sailing ships that carried wonderful arts to the coastal towns of Mexico and California in the 1700-1800s.

Long before lotus grew here, the beauty of these flowers was known and admired through the arts of Asia, where lotus has been a symbol of purity and spiritual transcendence.

In Buddhist practice, the lotus is particularly revered. Buddha is often depicted seated on a lotus flower, as seen in this photo. Statues are seen at shrines and temples all over Asia.



Lotus products in a market in Hoi An, Vietnam. From top left: pods, tubers, shoots, and leaves.



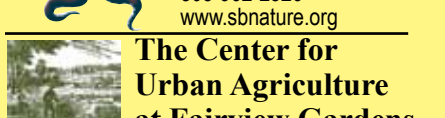
Statue of Buddha seated on a lotus at the Royal Palace in Bangkok, Thailand.

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