

rhizome, cut away any dead portions, and divide the rhizome into sections, each with one or two growing tips. Each section when repotted will produce a new plant, so you'll have plenty of plants to grow, or give away to friends. This may need to be done each season, or less often depending on the variety and the pot size.

At the end of the season, remove dead and dying foliage, and lower the pot to the bottom of the pond, where it will not freeze. If your pond freezes solid, or must be drained in winter, you will need to remove the lilies. You can store the entire pot (if kept moist and cool in a plastic bag), or remove and clean the rhizome and store it in moist peat moss at 40-50 degrees F.

In spring, return the pots to their previous level in the pond. Pot up stored rhizomes as described and place them in the pond.

Selecting Your Hardy Water Lily

Hardy water lilies come in many varieties, which differ in size, color, form and preferred conditions. To avoid disappointment, be sure you know which lily you are getting, and keep them labeled for future reference.

Miniature hardy lilies, especially good for containers or small ponds, include:

- Nymphaea pygmaea 'Helvola' (yellow)
- N. laydeckeri 'Fulgens' (red)
- N. 'White Laydeker' (white)
- N. 'Indiana' (changeable)

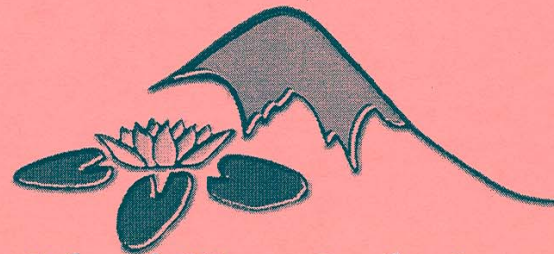
Hardy lilies that can tolerate more shade (but at least 3-4 hours of sun per day) include:

- N. 'Charlene Strawn' (yellow)
- N. 'James Brydon' (red)
- N. marliacea 'Carnea' (light pink)
- N. marliacea 'Chromatella' (yellow)
- N. 'Virginia' (white)

Other water lilies recommended for beginning water gardeners in Colorado include:

- N. 'Gladstone' (white)
- N. 'Pink Beauty' (pink)
- N. 'Clyde Ikens' (peach)
- N. 'Colorado' (peach)

To read more about hardy water lily varieties, and sizes we recommend "*Ornamental Water Gardening: How and What to Grow*," The Shereth Group, 1991, written by Doris Freestone, Len Freestone, John Mirgon, Mary Mirgon and Ellen Westbrook, members of the Colorado Water Garden Society. This book was written specifically to address water gardening in the Colorado region. "*Water Gardening*," Pantheon Books, 1996, by Denver Botanic Garden's Aquatic Curator, Joe Tomocik, has additional information on hardy lilies.



Colorado Water Garden Society

For more information about water gardening contact the
Colorado Water Garden Society:
Cyndie Thomas
303.755.1885

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Hardy Lilies



The hardy water lily (*Nymphaea*) is the jewel of the water garden, known for its floating leaves and its brilliant flowers which sit on the surface of the water.

These lilies are also the staple of the water garden. The hardy water lilies are the only plants native to every USDA hardiness zone in North America, from 2 to 10.

The hardy water lilies bloom from May to September and are also called the perennial water lilies, as they all share the ability to go dormant during colder winter months, and rebound again the next spring. This is in contrast to their cousins, the tropical water lilies, which will not survive the winter in most areas.

The flower of the hardy lily is elegant and fascinating. Once the flower bud reaches the surface of the water, it will open in the morning and close in the evening for three successive days before sinking beneath the surface again. The hardy lilies bloom in all the colors except the blues and purples (for those colors you must look to the tropical varieties).

The leaves, or pads, of the hardy lilies come in many variations and sizes. Some plants have smaller pads, flowers, and spread (the diameter at the surface), and can be suitable for containers or smaller water gardens, while others are much bigger, with spreads up to seven feet or more. These are better suited to larger ponds. The size of your plant will be influenced by pot size, amount of fertilization, sunlight, water depth and temperature, as well as variety.

These plants grow from a rhizome (similar to that of an iris) which is planted into a pot of soil, which in turn is placed into the pond in the desired location. Though native lilies grow wild directly in the mud of the pond bottom, it is recommended that cultivated lilies be kept in containers for control and ease of maintenance.

Hardy water lilies are most often propagated by dividing the rhizome to form new plants, each of which is identical to the mother plant. This is called asexual propagation. While some water lilies can be pollinated and produce seed, this is not usually done except by bees and plant hybridizers. Further, many of the popular hybrids are sterile, and can only be propagated asexually.

The hardy water lily existed only as a few species, found in different parts of the world, until the mid-1800's when Joseph Bory Latour Marliac of France began to develop hybrids. In time, he created lilies of many shapes and colors, including most of what we now regard as the "classic" water lilies. These were the lilies Monet bought for his ponds, and most are still in cultivation today. New hybrids continue to be produced by today's growers, expanding the range of color and form.

Planting Your Hardy Water Lily

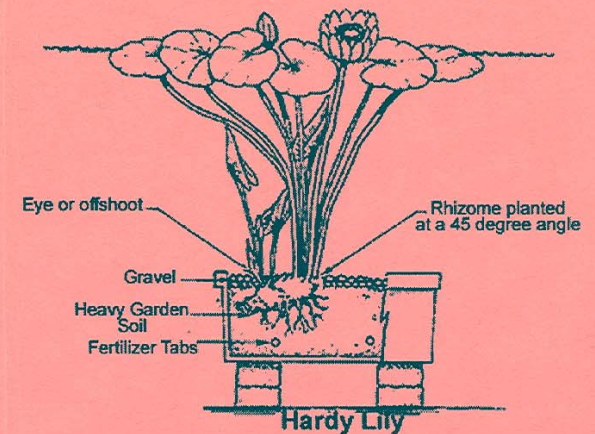
These plants are actually quite easy to grow. If the lily is already potted up, just place it in the pond at a depth that keeps the pads at or near the surface. Adjust the depth gradually if needed, and the pads will grow to reach the new surface level.

If the lily arrives bare-rooted or as a newly-divided rhizome, it will need to be planted. Be sure to keep the plant moist and out of direct sunlight while working with it. Be aware that handling the rhizome can stain bare hands.

Since the rhizome grows horizontally, use a container that is wide and shallow (12-18" wide by 6-10" deep). The pot can be with or without holes (or even a mesh basket) as long as you line it with something to keep the soil in the pot and not in the water. Use a heavy soil (Colorado clay is well-suited for this) and enrich it with aquatic fertilizer. Avoid light materials such as perlite, vermiculite, or peat which will float up out of the pot and foul the water.

Remove old leaves from the rhizome, as well as the thick fleshy old roots, which will only decay. Leave only the emerging leaves and buds, and the newer, hair-like roots which absorb nutrients. Plant the rhizome against the side of the pot, with the

growing tip pointing upwards (about 45°) and toward the center. This will anchor the plant, leaving the growing tip at the surface of the soil and give maximum room for growth before repotting is necessary. Cover the soil with a layer of rock or pea gravel to reduce erosion of soil into the water. Lower your lily gently into the pond at an angle to allow the air to escape from the soil. Keeping a newly planted lily in shallow water at first may speed its early growth.



Caring for Your Hardy Water Lily

Once planted, hardy water lilies don't need much care. They like to have six to eight hours of direct sun each day (although there are some varieties that will tolerate less). They prefer quiet water, without splash or strong currents. Old yellowed pads and spent blossoms must be removed periodically (with their stems) so they don't decay in the pond. The plants should be fertilized monthly during the growing season (every two weeks in warmer months) with aquatic fertilizer tablets pushed into the soil.

The lily will need repotting when the rhizome has grown to reach the other side of the pot. At that time, hose the soil off the