

GET WET!

...offers education and fun

By Jim Arneil, Event Chairperson

How can you learn about container water gardens, growing your own lotuses, and major water gardening happenings in 2009? Join us at this year's "Get Wet – Water Gardening Fun in 2009!" in Gates Hall at Denver Botanic Gardens on Monday, April 20.

This annual event is designed to kick off the upcoming season with lots of practical information, inspiring pictures and creative ideas, available resources, and an enjoyable evening with others interested in water gardening.

From 6:30-7:00 pm in the foyer outside Gates Hall, representatives from major garden centers in the metropolitan area, as well as from the Colorado Water Garden Society and Denver Botanic Gardens, will be set up with displays and information about water gardening resources they can provide for you.

The program, which takes place from 7:00-8:30 in Gates Hall, begins with a presentation by Cyndie Thomas on container water gardens. Cyndie's PowerPoint will highlight the multitude of plant possibilities and containers that make this form of water gardening so accessible and popular.

Then Joe Tomocik, Curator of Water Gardens at Denver Botanic Gardens, will share some insights about water gardening and provide updates on the beautiful water gardens he manages. The water gardens at Denver Botanic Gardens are considered some of the finest in the United States.

GET WET!

Monday, April 20 at 6:00 PM
Gates Hall, DBG

Win a
Lotus!

CWGS Lotus Sale

*To be held at Get Wet. See special
Insert for plant selection and Details*

Bob Hoffman caps off the program with his expertise on lotuses. Bob plants and maintains much of the water garden display at Hudson Gardens, including their magnificent lotus collection. You might even take home a piece of Bob's handiwork. The lotus tuber and materials he will use in his planting demonstration will be one of the evening's door prizes.

We'll also take a moment to share information about upcoming water gardening events in 2009.

(continued on page 9)

Visit us online at www.colowatergardensociety.org

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"A great start..."

By Vicki Aber, CWGS President

We are off to a great start for the 2009 season. At the Club's first meeting of the year on March 16, Tim Boettcher of True Pump and Equipment gave a very informative talk about innovations in pond technology. He also highlighted the wisdom of thinking about more than just the purchase price when you buy. The cost of operation and the expected life span of a piece of equipment are often more important contributors to the lifetime expense of your feature.

Tim covered other issues important to "Green" and more sustainable water gardening: Methods of conserving water usage and recycling of water and equipment are just two examples.

Did you know that you can detain and direct rain that falls onto your property, but holding it – say with a rain barrel – is illegal? Tim discussed the implications of western water law in a fascinating look at legal obstacles to rainwater harvesting and reuse of greywater from your home's wastewater plumbing.

If you missed Tim's talk but are interested in topics related to sustainability and conservation in water gardening, Gary Blubaugh was nice enough to record the presentation on disk. If anyone wants to borrow it, let us know.

We had a good turnout for the first meeting in our temporary meeting place in Arvada. It was also our first try at holding a potluck before a monthly program. The food for the potluck was scrumptious. We may have to start a CWGS cookbook.

Photos by
Bill Powell



March 16 potluck
and program

Our next meeting is *Get Wet – Water Gardening Fun in 2009* on the evening of Monday April 20th. We will be back at Denver Botanic Gardens in Gates hall for this one. While we aren't offering a potluck this month, we have multiple speakers on a range of topics as well as lots of pond industry representatives to answer your questions.

For more detail on our April event, read Jim Arneill's article on the front page. And don't miss the Article at the beginning of this issue's special center Insert. It describes in detail the Club's Lotus Sale that's being held in conjunction with Get Wet.

"Get Wet" has always been a great way to kick-start the growing season. Make plans to attend for fun, learning, camaraderie and... a great deal on lotus!

Focus On:



Article by
Bill Powell

Photo by Erv Evans
Consumer Horticulturalist
NC State University

Nymphaea 'Emily Grant Hutchins'

Nymphaea 'Emily Grant Hutchins' (aka Mrs. E.G. Hutchins) placed first in the Tropical Water Lily Division of our "Plant Election," last year.

E. G. Hutchins is described in the "Official Checklist" of Water Gardeners International (WGI) as having an "*Amaranth red*" bloom. Other sources describe the bloom color as purplish pink, or dark pink. The flowers are comparatively large, up to nine inches in diameter, and the leaves are a bronzy green and up to 16 inches in size.

An older cultivar, E. G. Hutchins was created at St. Louis' Missouri Botanic Gardens prior to 1922 during the time of George Pring, the eminent Horticulturist hired by James Gurney who had headed the Garden after the Civil War.

E.G. Hutchins' parentage is not fully documented. WGI lists the lily as a cross between Nymphaea C.E. Hutchins (an earlier cultivar attributed to Gurney) and an unknown parent. The list attributes origination of E. G. Hutchins to Gurney as well. Whether the

plant was produced as a deliberate cross undertaken by Gurney, or by George Pring, or whether the hybrid was just a lucky accident that occurred on their watch is not clear.

The flowers of E.G. Hutchins are open, cupped shaped, and generally prolific. Two references cite that the plant is "*very free flowering*," and that it "*blooms earlier in the season than most night bloomers*" - attributes that no doubt have helped to maintained the lily's popularity for the past 85 years.

The fact that E.G. Hutchins blooms at night is, for most people, an attraction. Night blooming flowers add an extra dimension to water gardening - anticipation of the hidden. But if you prefer to look at your pond by daylight, don't worry. Night bloomers generally open at dusk and close around noon the following day. So as long as you check in the morning, you won't miss out.

Denver Botanic Gardens usually has several specimens of E.G. Hutchins on display. Look for them to bloom in late July and August. ...And the plant is often sold at the CWGS sale in June.

PROPAGATION AT A GLANCE:

- Tropical waterlily, night-blooming
- Dark pink, 9" cup-shaped blossom
- Slightly fragrant
- Free flowering
- Medium to large plant size - 6 to 8 ft. diameter leaf spread
- Large bronzy-green leaves - 12 in.+
- Tolerates partial shade

Early Spring Pond Care

"Maintenance in spring plays an important role in general pond health and enhances enjoyment throughout the growing season. Spring is a transition time in the pond. Sunlight is increasing, temperatures are warming, fish are increasing their activity, and algae begins its growth cycle."

"Even the best-balanced ponds experience algae growth until the plants grow to a level to provide shade, reducing sunlight that encourages algae growth, and until nutrients in the water are absorbed by the growing plants. A little effort now can decrease water 'greening' that may be unhealthy to pond life and unpleasant to the on-looker."

"Using a pump or siphon, remove 25-30% of the pond water. Move potted plants from the pond to a shady area or, [if] in sun, cover with wet newspaper. Using a fine mesh net, scoop along the bottom and edges to remove leaves, debris and dirt that have blown and fallen into the pond, creating a layer of muck... This blackened 'soil' containing excess fish food, fish excrement, and decaying matter... contributes to the growth of algae and deprives fish of needed oxygen." Recycle the muck to the compost pile. "Leave the moss-like algae growth on the pond's sides, as this has beneficial microorganisms that help balance the pond ecosystem."

Trickle fresh water into the pond slowly to avoid temperature shock to the fish. And, be sure to treat new water with a de-chlorinator additive if you are on a municipal water supply. In all likelihood you'll need to use a de-chlorinator capable of neutralizing chloramines and well as chlorine.

While you've got your water level down, "look closely at the fish for any unusual behavior, injuries, swollen abdomens, or white or red flecks on the fins or bodies. If any problems are apparent, consult your fish supplier for treatment options." Or... visit the Rocky Mountain Koi Club website www.rmkc.net. Look at "Larry's Links" or select "Contact Us" to pose a question about fish health.

Inspect cords, filters, and tubing for damage or wear. It's a good time to inspect the upper reaches of your pond liner and your stream as well. Look for holes, of course, but also inspect for deterioration from ultraviolet and for heaved liner along the edges. More water loss occurs from water escaping over the edge of liner than through punctures.

"If there is a considerable amount of suspended dirt, algae [or discolored water resulting from leaf tannins] consider adding a "Mirgon" filter. This simple, quick filter is named for its originator, a founder of CWGS – John Mirgon."

To construct a Mirgon filter, use "...a bucket with a sturdy handle, place a submersible pump in the bottom and put a few rocks or pebbles around the pump base inlet. Place polyester fiberfill (pillow stuffing) around and on top of the pump, and another rock or two to hold it in place. Put the filter in the pond where it can be easily reached. Tubing from the pump outlet should be placed above the pond surface to increase aeration. Clean and replace the fiberfill frequently. Remove when sufficient clarity is reached."

Reference: Most information and all quotes for this article are taken from CWGS brochure "Pond Care"
By Cyndie Thomas

Rice...

... becoming A "true" water plant after all?

By Bill Powell

It may have occurred to those of you who read "Carolina Gold" (December 2008) that common rice is not a water plant in an absolute sense. Rice loves water, of course, but it only tolerates flooding during certain periods and for limited duration.

Unlike submerged water plants or most marginals whose roots are always in water, commercially grown rice – sub-species and hybrids of the genus *Oryza* – are land plants that happen to like a good deal of moisture and that will survive occasional inundation. Man has learned how to use periodic inundation both as irrigation and for weed control for rice, but there are limits. Commercially grown rice will not grow submerged for long. Or will it?

UC Davis professor Pamela Ronald and her colleagues have succeeded by "gene manipulation" in perfecting a rice strain that can survive longer periods of inundation. The development will be of great importance to subsistence rice growers around the world. "Two-thirds of the diet of subsistence farmers in India and Bangladesh is made up entirely of rice. If rice crops suffer, it can mean starvation for millions."¹

"Normal rice dies in three days of complete flooding. Researchers know of at least one



rice variety that can tolerate flooding for longer periods, but conventional breeding failed to create a strain that was acceptable to farmers."¹

Ronald's colleague David Mackill, who works with the International Rice Research Institute and Julia Bailey-Serres, a University of California professor of genetics, succeeded in isolating a flood-resistant gene in an Indian rice that is otherwise undesirable because of low yield. Ronald introduced the gene into a commercial variety of rice using a technique called "precision breeding." The result was rice that produces good yield but was resistant to flood for up to 17 days – a five fold plus improvement.

Precision breeding is not the same as genetic modification, which involves introduction of DNA from unrelated species. "Precision breeding only transfers genetic material which would naturally cross with a particular plant. 'We're only using genes which are already available to traditional plant breeders. But we can transfer those genes responsible for a particular characteristic into a new plant very precisely, in one step' "²

(continued on page 7)

Rice...(continued from page 6)

Because precision breeding replicates, if with more exactness and speed, mixes available in conventional hybridization, results of the process are not subject to regulatory testing that can delay commercial use of genetically modified crops. As a result, it's hoped that flood-tolerant rice may be available in the next two years to subsistence farmers in low-lying areas of Bangladesh and India where rising sea levels threaten crops.

Did You Know?...

- Rice provides more than one fifth of the calories consumed worldwide by humans.³
- Commercially grown rice is monocarpic (i.e. a plant flowers, sets seeds, and dies) although in tropical areas the same species can survive as a perennial.⁴
- Commercial rice is of the genus *Oryza*. Wild rice is of the genus *Zizania*, which unlike *Oryza* is naturally aquatic. However *Zizania* does not satisfy cultural tastes, nor is it ample enough, to fill world food needs.²
- Three species of rice, commonly called "Red Rice" are considered noxious weeds and are on federal and state lists of prohibited plants.⁵

Article and Fact Box References:

1. Quote from "Fighting hunger with flood-tolerant rice" by Peter Ornstein via online cnn.site/science/waterproof.rice
2. Quote from "Precision Breeding: a new genetic technique..." via www.crop.nz
3. "ProdSTAT FAOSTAT. Retrieved on 26 December 2006" via reference wikipedia.org
4. Wikipedia.org
5. USDA list of noxious plants

April Planning Brings... ~~May~~...Our July Pond Tour!

By Michael Weber, Pond Tour Co-Chair

April is when water temperature begins to rise, fish start moving, and some plants start to grow. April is also the time to think about the annual CWGS Pond Tour and Picnic. The Pond Tour will be held on Saturday, July 11, 2009 from 11 AM to 4 PM, with a picnic to follow at 5 PM.

This year, we would like people on the east side of town to volunteer to display their water features on the tour. We are looking for ponds under construction, new ponds, older established ponds, as well as ponds ranging from small to large. Pondless water installations are also welcome. We hope to showcase a variety of ponds, streams, container gardens and fountains in varying stages of completion.

The tour is announced only to members of the Colorado Water Garden Society. Visitors access the ponds through the yard, NOT through the house. The tour is designed to show off your pond and promote water gardens.

Please join the fun and put your pond on tour. For more information or to sign up your pond, please call Michael Weber (303-322-6769) by April 20, 2009 to discuss having your pond on the July 11 Tour.

TREASURER'S REPORT

Balance as of March 29
\$16,148.67

Volunteer and Learn... at Hudson Gardens

Want to know more about aquatic plants and water gardening technique? There's no better way to learn than through hands-on experience, and Hudson Garden's water plants expert Bob Hoffman could use your help readying the summer display. Times, schedules, and tasks will vary.

For more information, call Bob Hoffman at 303.978.0124

BOARD MEETING SCHEDULE FOR 2009:

April 19, 1:00 PM— Powell residence
May 17, 1:00 PM— Weber residence
June 28 — location and time TBD
July 19, 1:00 PM— Lange residence
Aug. 16 — Denver Botanic Gardens, time TBD
Sept. 20, 1:00 PM — Oleson residence
Oct. 18, 1:00 PM — Weber residence

Club members are welcome to attend !

CWGS members staff the Water Plants booth... at DBG's 60th Annual Spring Sale

On May 7, 8, and 9, Club members will be helping to staff and operate the Water Plants Division of Denver Botanic Gardens' May sale. A long-standing tradition, this volunteer service by CWGS helps the Garden raise operating funds as it fulfills the Society's mission to educate and interest the public in water gardening. Club members will fill almost sixty volunteer person-shifts. Novice and experienced, alike, participate in the three day event.

Thursday May 7 involves set-up. Friday and Saturday are sale days. Volunteer positions are still open. For more information, call Bill Powell 303.355.8098 or by email at wbpow@comcast.net.

And...be sure to visit the booth. We'll be offering a wide selection of hardy waterlilies, lotus, carnivorous plants, and both tropical and hardy marginals.

Link to Events:

A calendar of non-club water garden related activities

May 8/9	Denver Botanic Gardens Plant Sale	www.botanicgardens.org
May 16	Rocky Mountain Koi Club Auction	www.rmkc.net
July 18/19	Rocky Mountain Koi Club Tour	
July 25/26	Pikes Peak Pond Tour	www.ppwgs.org
Aug 9/10	RMWS Water Garden Tour	www.rmwaterscape.com
Aug 22/23	Colorado Parade of Ponds	www.brdlandscape.com

CWGS-sponsored activities are listed in the club calendar on the outside of this newsletter.

Spring at DBG

Each spring volunteers solicited by CWGS help set the stage for Denver Botanic Gardens impressive summer water garden displays. With the advantage of early, warm weather we're well into our sessions for this spring. In fact, the pools are now filled and many hardy waterlilies and marginals are in place and growing.

Still, much work remains to be accomplished. Division and repotting of hardy species are ongoing, and work on tropical plants has only just begun.

GET WET! (continued from front page)

The evening concludes from 8:30-9:00 in the foyer with another opportunity to visit with representatives of local garden centers, pond businesses, Denver Botanic Gardens, and the Society, which will be holding its Lotus Sale in conjunction with Get Wet. You won't find a better selection of lotus at more reasonable prices anywhere. To learn about the sale's offerings, see the special insert at the center of this newsletter.

Admission to Denver Botanic Gardens for the program is free, as is the program itself! When you arrive, walk past the temporary admissions trailer located on the south side of the temporary parking (north of the education building, just west of York Street.) Enter the education building as directed, and follow signs down the corridor and up the stairs to Gates Hall.

The evening promises to be one of learning, fun, and even door prizes. We hope you will mark your calendars and join us for this special evening!



Photos by
Joe Tomocik

Our Sunday
Volunteers



New and Returning Members:

(Feb - March 2009)

Joanne Bowen
Boulder, CO **NEW**

Melba Johnston
Lakewood, CO

Jim Carlson
Denver, CO

Georgia Keller
Lakewood, CO

Cathi & Thom Edmund
Evergreen, CO **NEW**

Bud & Debbi Kiebler
Franktown, CO

Linda Gardner
Littleton, CO **NEW**

Marge Oleson
Lakewood, CO

Keith & Terry Grisham
Elizabeth, CO

Deirdre Parker
Boulder, CO

James Howell
Denver, CO

Andi Sahlen &
Dan Fyles
Aurora, CO

Trina Jacobson /
Les Petrash
Denver, CO

Danny & Suzanne
Williams **NEW**
Westminster, CO

Welcome All!

Express Membership Application

Membership Fees: \$15.00 Individual; \$20.00 Family

Join or Renew Today!

Make checks payable to Colorado Water Garden Society;
DO NOT send cash; Check or Money Order only, please. Thank you.
Return this form with your payment to:

CWGS Membership
100 Glencoe St.
Denver, CO 80220

(Please Print)

Name(s) _____

Street _____

City _____ State _____ Zip _____

Home Phone () _____

E-Mail * _____

Signature _____

Date _____

Pond Experience (Beginner) _____ (Some Skill) _____ (Pro) _____

Check one:

- ☐ I would like my contact information included in a membership list that will be distributed only to the members.
- ☐ I do not want my contact information published in the membership list.

* Note: Providing your e-mail address authorizes and enables CWGS to send you notifications of interest from time to time. CWGS does not share e-mail addresses with other entities.

Contact me concerning volunteer opportunities I have checked below:

DBG Volunteer Sundays _____ Water Plants booth, DBG May Sale _____
Hudson Gardens _____ Newsletter _____ CWGS Plant Sale (June) _____ Pond Tour (July) _____
Water Blossom Festival (July/Aug) _____ Holiday Party (Dec.) _____

Or...Did you know?

You can now pay your dues online at www.colowatergardensociety.org
using PayPal

Colorado Water Garden Society
1210 Clayton Street
Denver, CO 80206-3214

DENVER CO 802
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FIRST CLASS MAIL



This Year:

Monday Apr. 20:

GET WET!

**WATER GARDENING FUN
IN 2009!**

*Multiple speakers. Meet local
vendors. Lotus Sale. Door prizes.
6:30 to 9:00 PM, Gates Hall
Denver Botanic Gardens*

**May 8/9: CWGS staffs the Water
Plants Division, DBG Spring Sale**

May 18: Plant Swap & Pot Luck
6 to 8:30 PM, ACC Arvada

June 7: CWGS Annual Plant Sale
9AM to 3PM, Hudson Gardens

June 28: Waterside Program
2:00 at the home of Terry and Keith
Grisham

July 11: Pond Tour/Picnic
11 AM to 4PM, Picnic at 5:00

**Aug. 16: Water Blossom Festival /
Featured Speaker TBA**
10AM to 3PM - program at 1PM
Denver Botanic Gardens.

Aug. 30: Waterside Program
2:00 at the home of Doris and
Len Freestone

**Sep. 21: Annual Meeting,
Elections, & Pot Luck**
6 to 8:30 PM, ACC, Arvada

Oct. 19: Program & Pot Luck
6 to 8:30 PM, ACC, Arvada

Dec. 7: Holiday Banquet
6 to 8:30 PM, ACC, Arvada

CWGS Lotus Sale

This year, back by popular demand, we're holding a sale of lotus tubers in conjunction with *Get Wet 2009*, our signature season kick-off event.

We'll have a great selection of lotus for purchase at *Get Wet* on Monday, April 20th. We have tried to get a variety of colors and sizes to fit in any water feature. (See the following pages for photographs and descriptions of all six of the varieties we're bringing in.) There's no pre-order. Just show up at *Get Wet* with your list. The article on the front page of this newsletter gives all the information you'll need to join us on April 20th.

We will be selling the lotuses after the talks just outside of Gates Hall. Each tuber is only \$20.00. You would be hard pressed to find these cheaper anywhere.

Bob Hoffman, a longtime CWGS member, past Board President, and Hudson Gardens' resident Lotus expert will talk to us about the care and feeding of lotus, so by the end of the evening we will all be lotus experts and ready to buy some tubers to try!

Read the following descriptions and gaze at the pictures. Imagine one of these beauties gracing your pond or container. Add a little of the Orient this year.

Vicki Aber

...on behalf of the Sale Committee

PS: A new book "The Lotus: Know It and Grow It" is just out and looks interesting. Investigate it at...

www.aboutthelotus.com



Photos of a lotus bog in Brookgreen Gardens, SC...

...but Lotus will grow well and flower along the front range, too.



Pull this insert and bring it with you to the Sale at "Get Wet" on April 20.

Turn page for sale list

April 20 Lotus Sale



N. 'Evening Shower'

Growth type / size:

Miniature (bowl) plant. A good choice for a container. Green leaves, approx. 12 in. wide. The plant grows 1 - 2 ft. in height and spreads 2 - 3 ft.

Bloom:

Semi-double pink

N. 'Green Maiden'

Growth type / size:

Grows to 1-3 feet tall with leaves 18-20 inches across.

Bloom:

Flowers change from soft pink the first day to pale yellow by the third day. Flowers are 2-3 inches across.



N. 'Momo Botan'

Growth type / size:

Small to medium. Can be grown in a container or pond. Plants grow to 1-2 feet tall with leaves 4-10 inches across.

Bloom:

Very free flowering. Flowers are cupped, double, dark rose pink, fragrant, and large for the plant (about 5"). Flowers stay open later in the day and it has a long blooming season. First-day flowers close in mid afternoon; second-day flowers stay open until after 6 PM; older flowers stay open all night.

Sale Insert

Lotus sale list - smaller varieties



N. 'Lavender Lady'

Growth type / size: The plant grows to 4-6 feet with leaves 24-26 inches across

Bloom:

Flowers are lavender pink with darker veins fading to white near the center. The blooms are very large (6-14 inches.)

N. 'Red Scarf'

Growth type / size:

A larger variety growing 3-7 feet tall with leaves 12-24 inches across.

Bloom:

Very good bloomer. Flowers are about 6 inches across. The bloom is unique in that the petals are quite narrow. The color is reddish purple.



N. 'Russian Red' (N. nucifera)

Growth type / size:

Grows to 3-5 feet with leaves 20-24 inches across. This is the Asiatic species lotus.

Bloom:

Free flowering. Blooms are rose pink with a yellow center and 8-12 inches across. They are slightly fragrant.

About Lotus

History of Lotus Species and Cultivars:

Originally Lotuses were classified with waterlilies as a common family. The authority Perry Slocum writes "Most experts now believe that, due to the great differences between rhizomes, flowers, and leaves of lotuses and waterlilies, lotuses should be in a family by themselves, *Nelumbonaceae*, rather than within the family *Nymphaeaceae*."

Two naturally-occurring lotus species exist. "*Nelumbo lutea* is native to the eastern and central United States, and *N. nucifera* is native to Asia, the Philippines, north Australia, Egypt (probably introduced from India about 500 B.C.), and the Volga River delta at the Caspian Sea. It should be noted that the 'blue lotus of the Nile' and the 'blue lotus of India' are not lotuses but *Nymphaea caerulea* and *Nymphaea nouchali* (syn. *N. stellata*) respectively."

Climate, Range, and Habit:

"In North America, lotuses do well over most of the United States and southern Canada as long as there is enough summer heat to bring plants into flower. Lotuses require two to three months of temperatures in the 75-85 [degree] F (24-29 [degree] C) range. Regions of the United States where lotuses do not perform at their very best are the very hot Southwest, ...and the cooler mountainous regions of the Pacific Northwest..." Lotus - at least all the cultivars marketed by CWGS - are perfectly hardy along the front range of Colorado, although achieving bloom can be a rewarding challenge.

"All lotuses are day bloomers, with the exception of...N. 'Night and Day.' Lotus flowers usually open quite early in the morning and close by mid-afternoon on the first day. Then they stay open continuously, night and day, for five or six days. The cultivar N. 'Momo Botan' is also an exception as older blooms frequently last for nearly a week, often without ever closing." (The CWGS Biennial Lotus Sale is marketing 'Momo Botan' this season. It's a cultivar that is also noteworthy for its suitability to smaller container gardening.)

Planting and Propagation:

"Round containers are preferable for lotuses because the tubers and runners can jam up in the corners of square planters. ...For best performance of the large lotuses, plant them in large round containers 20-24 in. across and 10-12 inches deep." Any closed container will work. Even if you are submerging your planting pot in a pond or larger decorative container, plant the lotus tubers in a pot without holes. Lotus is a strong grower and can be invasive where it escapes into a pond. The plant's tubers can also become entangled in pot openings, making repotting difficult.

"The soil needs to be heavy enough so that it will not float, eliminating...most potting soil mixes found at garden centers...A heavy loam topsoil from the garden is excellent." Although Slocum notes that well-rotted and composted cow manure can be used in the bottom half of the lotus pot "if mixed one part composted manure to two or three parts topsoil," commercial tablets are available and are probably better suited to convenience and concerns regarding salts that are present in manures. But, "beware of too much nitrogen...Look for an N-P-K ratio of 10-10-5 or 10-14-8." Slocum recommends you start out with four to six tablets.

Elevate the planting pot to within 4-6 inches of the water's surface. Fertilize with two or three tablets per month - or more. Lotuses are very heavy feeders! And they're sun lovers. While they'll grow in shade, producing dramatic elevated vegetation, a location providing six hours of sun is helpful to promote blooms.

Reference:

Above historical notes, propagation information, (other than local observation), and all quotes are from Chapter 8 of *Waterlilies and Lotuses - Species, Cultivars, and New Hybrids* by Perry D. Slocum.