## THE MIQACLE MAN: William Dhillips

n the hilly woodlands near the river in Memphis, Tennessee, a remarkable garden is being born, where rare and luscious waterlilies thrive far from their habitats, and exotic tropical plants flower and fruit year round. If this seems improbable, or even impossible, don't tell Dr. William Phillips that! He is a man who makes miracles!

Over the past few years William has been assembling a parcel of land that is now just over 70 acres, mostly fields and timberland. The five climate-controlled greenhouses hold much of William's collection of tropical plants. Although he loves all tropicals, the result of a trip to Florida and the Bahamas many years ago, waterlilies were his first interest and are his passion today.

"There was one lady in our small town of Smithville, Mississippi, who had a pond," relates William. "It was the talk of the community. I went to see it and was fascinated. When I was about 16 years old, I decided I would use our farm tractor with its dirt scoop and dig a pond. My mother was working and I knew that I had all day to get it done without her knowing. I was afraid she would object if I asked her first.

"I started in the morning and when she drove up to our house about 3:30 P.M., I had an oval pond dug about 25 feet long and about 14 feet wide. As my mother turned in the driveway, I was finishing the bottom and she could see the top half of a tractor with me by Kit Knotts



Among the seeds sent to William by Andre Leu were ones for the lovely *N*. 'Neorosea'. *Photo by Andrew Lohaza* 

coming out of this big hole in the ground! She was astonished and came running to the pond to see what in the world was going on. I told her that the cement truck was on its way and we had to move the tractor and car so they could pour the cement. It was too late to stop!

"I ordered a lotus and six or seven hardy lilies. It was beautiful! People started coming to see it, and cars driving down the road would



William's interest in the Australian tropical waterlilies began with an avid interest in tropical plants. Here, he shares one of his favorite *Plumeria* in one of his greenhouses. *Photo by Andrew Lohaza* 

pull off to the side and people would come look at the beautiful pink lotus surrounded with lilies full of blooms. It stayed beautiful for years despite my leaving home for college. The pond is still there almost 45 years later."

The total Memphis garden, which William calls Bannoche after one of his favorite *Heliconia*, *H*. 'Iris Bannoche', is in its infancy. The dappled woodlands on the hillsides give way to an expansive lawn near the greenhouses. Several natural streams will be harnessed to create numerous small lakes for waterlilies and lotuses. Existing lotus pools already thrive and the main lake houses *Victoria* and waterlilies in the warm months.

It is in the greenhouses, though, that the



heart of Bannoche beats. Tropical terrestrials love the summer-like environment maintained for them, but much of the space is given to ponds kept at 90 degrees. With these ponds, William has become the premier cultivator of *Anecphya*, the Australian subgenus of *Nymphaea*. The best known of these is *N. gigantea*.

William fell in love with the several gigantea in cultivation in the U.S. — the pale blue to white 'Albert de Lestang', a delightful blue regularly propagated by Rich Sacher, and the pink 'Neorosea' collected by Walter Pagels. Last winter, having recently received a rare start of 'Neorosea', William wrote:

"A couple of days ago I dropped the rhi-



Wouldn't a gigantea look incredible in your garden?

zome in the pond of murky 90-degree water about three feet deep. I couldn't find it. I thought I could take a light under water and Photo by William Phillips

Australian collector, Andre Leu. With his characteristic generosity, Andre shared seeds from the collecting trip with Walter Pagels in

'Yes!'"

William



A seedling of one of Andre's collected wild gigantea responds to William's loving care. Photo by William Phillips

April of 2000 with a number of Anecphya aficionados in the U.S., including William. While all others struggled, the resulting seedlings thrived in Memphis. The stunning, deep pink cultivar named 'Andre Leu' was probably the most exciting of many seedlings.

see it. I couldn't! So I took off my clothes and got on my hands and knees and crawled on the bottom among muck, roots, and all sorts of other stuff. and I found it! I jumped up, covered with muck to my shoulders, and yelled,

A warm, long distance partnership has

developed between

and

After a field collecting expedition with Barre Hellquist in March of 2001, Andre was able to send William seeds of N.



gating the "Aussies", coupled with his success, much is being learned about their requirements in cultivation. They should become more available and easier to grow for all water gardeners in the near future.

In July of this year William and Andre met in person at Bannoche. Andre, his wife, Julia, and their two sons, Asha, 12, and Nick, 9, made an expedition of a different sort – to the U.S. to see a number of water gardening

## Pond & Garden

Within the warmth of his greenhouses, William also maintains the water temperature to allow the tropical N. 'Neorosea' and her cousins, in the background, to flourish. Photo by Andrew Lohaza

friends made through a mutual interest in Australian waterlilies. "They are such delightful people!" William exclaimed after the visit. "It is a day I'll never forget!"

William's story cannot be really told without mentioning some special circumstances that have influenced his life. At his birth, the doctor detected a problem with his heart but was unable to diagnose it. As a youngster, William

developed rheumatic fever and his activities were limited from time to time. A good student, he attended the University of Mississippi and Tulane Medical School.

While at Tulane, students performed EKG's on each other for the experience. When William's EKG would not read normally, the professor immediately sent him to Tulane Hospital where he remained for four months with viral myocarditis. When released from the hospital, William was given a life expectancy of two years and was not allowed to remain in school.

After three weeks at home, William caught a bus to Memphis. Having also been accepted at the University of Tennessee Medical School, and without revealing his medical problem, he persuaded the Dean to allow him to transfer to UT. The Dean soon learned the truth, but he allowed William to continue in school and to gradually build up to a full course load.

William was placed under the care of a cardiologist while at UT

and, although there were some problems with his health during the period, he was an honor student and graduated with his classmates. When his physician wouldn't allow him to practice private medicine, he went to UCLA and earned a Masters Degree in public health. He spent the next ten years in the public health field



Seeds from the rare "24-hour-blooming" white *gigantea* that were collected by Andre Leu and Walter Pagels were sent to William for growing in his Memphis greenhouses. This seedling was selected and named by Andre to honor William, *N*. 'William Phillips'. Andre's research into the status of the plant's species will continue this winter when the plants will be in bloom in Australia. *Photo by William Phillips* 



William showed Andre one of the lotus ponds in the garden. Photo by John Butkiewicz

and teaching. His spare time was spent learning about the subtropical plants in the area.

Having been advised early in his career to save and invest wisely, since his physicians believed that he wouldn't be able to work long, William was prepared for an early retirement. He participated as a "guinea pig" in endless research studies on devices and medications under development throughout the world. He did manage to travel extensively in Europe, the Mediterranean, the Middle East, South and Central America, and Hawaii, but at his own pace, remaining longer in an area if he became tired. On each trip, he concentrated on the conservatories, gardens, and the flora of the area.

In 1996, after several months on life support, William received a heart transplant. "I received a healthy heart from a young man in his early thirties who had an aneurysm," says William. "The family donated the organs to the people of Memphis and five lucky Memphians are very grateful for their generosity in letting us be the stewards of their loved one's organs in order to give us a second chance at life."

The transplant team calls William their "Walking Miracle" and monitors not just his health, but his life, at regular intervals. The transplant program documents that organ recipients have worthwhile lives that deserve the funding of the program costs. They encourage him to do whatever in life makes him happy. For William, that includes his plants and the building of Bannoche.

The Miracle Man is not just a miracle to his transplant team. He has taken a special gift and combined it with his own gifts and the magic of Bannoche to give us all the beauty of *Anecphya* as we have never seen it before.



our summertime reading might have included a recent article from National Inquirer titled "Nymphaea Maniac Lilies Astound Pondowners." Some imaginative folks thought that what goes on in a water garden should be X-rated. It is true that water lilies (botanical genus Nymphaea) do reproduce sexually, via flowers and seeds, but in reality, it's a very sedate and subdued affair, a process that goes almost unnoticed in your pond and that would never draw the attention of the tabloids. However, there are similarities to animal reproduction: not all seeds are fertile, it takes a long time to reach maturity, and it's not certain the resulting offspring will look like the parents.

Nature has devised a shortcut through this elaborate and time-consuming routine by inventing an additional manner of reproduction, one that doesn't require two parents, and one that produces an adult in a much shorter time. This method of reproduction is called vegetative propagation, wherein a single parent plant forms the offspring directly, either by division or by cuttings. In a few unusual cases, the babies grow piggyback on the parent's leaf and are called "viviparous." The term means "live birth" (vivip=live, parous=birth), and it is a quick way to get little clones, plants who grow up looking just like Mom. This unusual characteristic is a feature of some of the tropical dayblooming water lilies. Other plants with this by Paula Biles

trait are the mangrove, piggyback plant, papyrus, and mother fern.

Being a "chip off the old block" is almost literally true, since new little plantlets sprout on top of the lily pads (with root systems underneath), right where the leaf joins the stem. After the parent leaf begins to yellow and die, the



The recently introduced N. 'Queen of Siam' offers spectacular color in its leaves, a vivid flower, and easy reproduction from its viviparous leaves.

baby plants start to grow leaves and roots. In the wild, once developed enough, these miniature plants fall off, float away, and then drop to the bottom of the pond where they root and grow into full-sized plants. In our ponds, we can speed up the process by cutting them off and potting them into small containers.

In some viviparous varieties, this tendency is very strong and almost every leaf develops a new plantlet. Others are more seasonal, growing ordinary lily pads most of the time. Then during



As the mother leaf yellows and dies, the developing vivip produces both roots and tiny leaves, a perfect clone of its parent. These tiny plantlets can be used for propagation or for wintering over a specimen of your favorite viviparous tropical.

spring or fall, depending upon the type of lily, the leaves grow a little protuberance (a "chubby nubby") ready to develop into a full-fledged baby lily.



Nearly every leaf of the pale blue, versatile N. 'Dauben' produces a viviparous clone of its parent.

The steps required to grow these 'vivips', as they're affectionately known, into full-sized plants are very simple. Watch for development of the nub into a miniature plant. Once the plantlet gets a strong pair of leaves, cut away the leaf on which it is growing, leaving some of the stalk attached and keeping as many roots as possible. Carefully separate the vivip from the leaf. Sometimes more than a single plant will start from each nub. If you want only one per pot, use a knife to cut them apart. Anchor them firmly

in place in a shallow pan with soil, or on top of soil in 3-4" pots, using a U-shaped piece of wire or unbent paperclip. Cover the soil with sand, and be sure to leave the growing tip exposed. As with all water lilies, the growing tip or crown of these baby plants needs light and warmth to grow. Place the pots in your pond just below the water's surface or cover the soil with water an inch or two deep. As the little lily grows larger, gradually lower it in the water.

This is the quickest way for water lilies to reproduce and results in a vivip becoming an adult plant within a season. Especially in Northern climates, it's the perfect way to hold over lilies from one season to the next. The baby clones can be collected late in the season and kept indoors until the water reaches 70 degrees the following spring. Many people prefer viviparous lilies so they have a steady supply of new plants for their ponds...and their friends' ponds...and their neighbors' ponds...

Other advantages of this propagation method are for the water gardener. This is a cheap, quick, clean, and easy way to propagate new lilies, since it's not necessary to muck around in the dirt to divide them or attempt the prolonged routine of growing them from seed. The entire viviparous process happens right on the water's surface, in full sight, away from the mud.

Originally, I became interested in viviparous tropical lilies because they kept showing up in books and catalogs. Whenever there was a list of lilies to fill special requirements, vivips were on it: for partial sun, for container gardens, easy to grow, dependable tropicals, easy to propagate, and blue/purple flowers. Of course, I grew many varieties to see what the hullabaloo was all about. It took only a season or two before I was

convinced, and soon almost all my lilies were "live bearers." Now, when I'm asked to recommend a water lily for someone here in Florida, chances are good that it will be viviparous. After considering the climate, type of pond, and growing conditions, I often end up suggesting one. Vivips are multi-purpose, attractive, easy to grow, fragrant, good in lower light, good in higher light, take the cold, take the heat, reproduce easily, and keep on a-bloomin'. What more could anyone want? Well, there is that *Nymphaea* Maniac variety....

## Multi-talented Vivips – What Else Can They Do?

Besides being able to produce little miniature plants on top of the leaves, nature has made viviparous water lilies exceptional in several other respects. They are strong plants and can tolerate a wide range of growing conditions. Vivips are usually robust growers, require less care, are very fragrant, and are usually the last to stop blooming at the end of the season. It's almost as if their adaptability extends to areas beyond reproductive techniques.

The best example of their talents is their flexibility in size. Most of the viviparous lilies are recommended for little ponds and container gardens. They don't mind being grown in small, confined quarters, continuing to bloom and produce leaves. However, what's amazing is these same varieties can also be quite happy in a large pond. In fact, some of the tiny lilies (especially 'Dauben') become almost unrecognizable in big ponds. Instead of diminutive 4" leaves and 3" blooms, they grow 10" pads and 6" blooms. They easily transform themselves from "Tiny Tim" to the "Green Giant."

The same thing holds true for temperature and sunlight flexibility. The vivips are known to be the best tropicals for their adaptation to cold weather, being the last lilies to stop blooming when winter shows up. In fact, some never



(inset) Not many pink day-blooming tropical lilies are viviparous, but N. 'Madame Ganna Walanska' is a vip-lover's dream come true. (above) "Chubby nubbies" that develop at the parent leaves' sinuses foretell the growth of miniature clones to come. Notice that the leaves typically accept a small puddle of water to keep the developing vivip moist and viable.

pause and bloom continuously for 12 months, even though fewer leaves grow ('Panama Pacific' is legendary for its cold tolerance). It's hard to believe these are the same plants that can withstand brutal summer heat in the South and the Southwest, but they do. Likewise, vivip-