



The Newsletter LANDIS ARBORETUM

Esperance, New York

Spring 2000

Volume 19, No. 2

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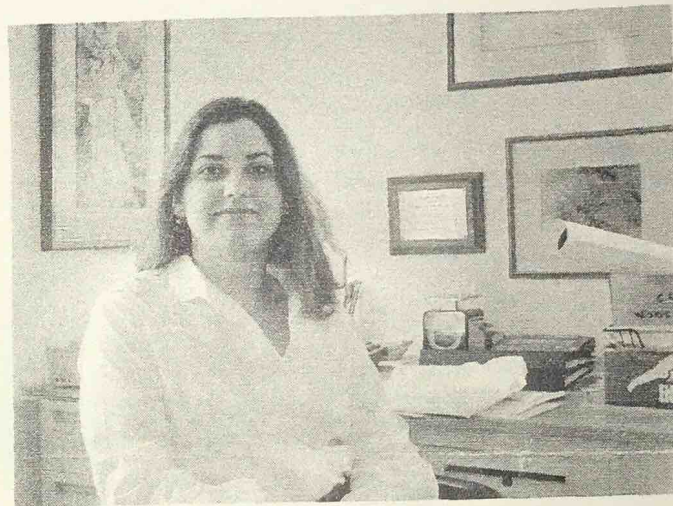
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Upcoming Events

(At the Arboretum unless otherwise noted.)

May 19	Pick of the Pots Preview Party, 5-8
May 20-21	Spring Plant Sale, 10-4
June 3	Family Workshop: Evening Moth Watch, 8-9:30 p.m.
June 16	Family Workshop: Full Moon Campfire Sing-a-Long, 7:30 p.m.- 9
June 17	Quercus Concert, 7 p.m.
June 23	Astronomers, Star Party, 10 p.m.
July 8	Adult Workshop: Pruning I, 9 a.m.-12 noon
July 8	Astronomers, Sun/Moon Picnic, 5 p.m.
July 12	Arboretum Adventures: Reptiles & Amphibians, 10 a.m.-12:30
July 15	Family Workshop: Pond Ponderings, 2 p.m.-3:30
July 19	Arboretum Adventures: Backyard Bugs, 10 a.m.-12:30
July 22	Adult Workshop: Pruning II, 9 a.m.-12 noon
July 22	Family Workshop: Bat Watch, 8 p.m.-9:30
July 26	Arboretum Adventures: Birds, 10 a.m.-12:30
July 29	Concert: Rubber Band Cajun Fiddlers, 7 p.m.

(Continued on page 2)



Landis Welcomes New Director

Helen Phillips began work as Executive Director at the Arboretum on April 10. She came to Landis from Glen Eddy where she worked as a marketing assistant. Her other work experience includes medical transcription and billing, funding consultation and elementary program director for Girls Incorporated of Schenectady, customer service representative for Empire Blue Cross and Blue Shield, and seventh grade health teacher in the Schenectady school system. In between, Helen participated in volunteer projects with the Junior League of Schenectady.

She graduated from Indiana University, Bloomington, in 1988 with a bachelor's degree in Health and Safety Education. She earned a master's degree in management from Antioch New England Graduate School in Keene, New Hampshire in 1995.

Helen and George Phillips were married in 1991 and have two children, Aurora, 6 years old, and Nathaniel, 2 1/2. The Phillips live in Schenectady where one of the first things they did when they moved into their home was to rototill a six-foot wide garden bed around the perimeter of the back yard, and transplant the dogwood that they had raised from a stick. She enjoys co-teaching Aurora's swimming class at the Y, singing in her church choir and playing in the bell choir, and above all, her friends and family. She is also active in the PTO at Aurora's school.

Drop in and say hello!

From the Garden - Helen Phillips

Hello!

I've been at Landis for three days. But something struck me about the Landis Arboretum in my first visits that has continued to be present. What struck me was not just the beautiful landscape or the impressive results of the hard work that keeps our arboretum going. It is the enthusiasm of the people I have met in the short time since I talked about becoming the director. That spark of enthusiasm is in the trustees, staff, and volunteers, and it is the special something that drew me here. There is a real can-do attitude - a sense of belief in the Landis Arboretum - that we're here not just for the present, but for the past and future as well. It is that which excites me. I look forward to meeting and working with more of you in the days ahead - and sharing that enthusiasm. - *Helen*

The Spring Plant Sale - Carol Wock

Since early March the William Thomas Raymond Greenhouse at the arboretum has been filling with plants. Several perennials are starting to bloom, making the greenhouse a wonderful place to work during the recent cold, blustery weather.

The plant sale committee is busy with plans for the sale. Vice-chair Viktoria Serafin has assembled a tempting collection of plants for your purchase. You will find an expanded collection of trees and shrubs, many not available in retail nurseries. The variety of perennials is impressive. She has secured new pulmonarias and heuchera, and two varieties of the purple-leafed cimicifugas which in the past have been difficult to find in the retail trade, and extremely expensive when found. Also featured will be a collection of ferns and wildflowers. We will continue to carry the outstanding dwarf conifers so popular with our customers, the hardy, own-root roses, assorted vines, including clematis, lilies, biennials and unusual annuals, alpinas and herbs.

Members will have the opportunity again this year to attend the Friday evening Preview Party at which time they may purchase plants ahead of Saturday's crowd. Advance orders may be picked up before you leave. Cost for this popular event is \$10; the first 150 members to register are eligible to attend the hot and cold buffet for which there is no further charge. The event starts at 5 p.m. and ends at 8 p.m. Your non-member friends may attend by paying \$35 that includes a \$25, single-person membership, or \$45 for a family membership. The 10% members' discount is in effect during the Preview Party as well as on Saturday and Sunday.

The sale this year will feature an expanded used book sale. Many of the books will be about some aspect of horticulture; look for inexpensive additions to your library.

Plant Sale Weekend also marks the opening of our Acorn Shop that features a variety of items popular with gardeners and nature lovers. The members' discount also applies to purchases in the Acorn Shop.

As you probably know, the plant sale is held regardless of weather. Whether we need sun hats or umbrellas - we hope to see you there!

PLEASE NOTE: If you have a garden cart or "little red wagon" suitable for transporting plant purchases from the sale area to customer's cars, we would appreciate a loan!

And if you bring your dog with you to the sale for a run in the sun, please don't bring the pet into the crowded sales area.... and best to keep your four-footed friend on a leash just for that day. We do thank you for your cooperation.



THE LANDIS ARBORETUM

NEWSLETTER

is published quarterly for its members.

The Arboretum's mission is to provide natural history and horticultural education through its programs and through its plant collection.

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Anne Jaster, John Manion, Helen Phillips,
Viktoria Serafin, Carol Wock

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Upcoming Events, *Continued*

- August 2 Arboretum Adventures: Outdoor Living Skills, 10-12:30
- August 5 Family Workshop: How to Use a Topographic Map, 2-3:30
- August 5 Astronomers, Sun/Moon Picnic, 5 p.m.
- August 9 Arboretum Adventures: Beginning Botany, 10-12:30
- August 15 Astronomers, Star Party, 7:30 p.m.
- August 16 Arboretum Adventures: Pond Study, 10-12:30
- August 17 Astronomers Club, 7:30 p.m.
- August 26 Family Workshop: Herpetology Hike, 2-3:30

Collections News

- Fred Breglia

ENLARGING THE CRABAPPLE COLLECTION

In the last issue of the newsletter we mentioned that Landis is the recipient of a grant from the New York State DEC Urban and Community Forestry Program that we'll use to plant between 20 and 30 two- to three-inch caliper crabapples. These trees are resistant to many of the common diseases of crabapples, such as apple scab, rust, powdery mildew, and fireblight, and they are suitable for planting in tough urban environments that undergo drought conditions and pollution.

Over half of the trees will be planted this spring and we are looking for help to make this happen. If you are interested in learning more about these resistant varieties, about proper planting, and mulching, or if you just want to help make a difference here at Landis, then give me a call (518) 875-6935. We thank you.

ANNUAL NEW YORK STATE RELEAF CONFERENCE

"Releaf NY" is a coalition of groups that increase public awareness of the benefits of stewardship of trees by promoting urban and community forestry. On Saturday, July 15, Landis Arboretum will be one of the tour sites for a Releaf conference. The tour will include visiting our Cornell Urban Tree collection, climbing/pruning demonstrations, mature tree care, selecting quality nursery stock, and plant health care-related demonstrations. If you would like to assist in the day's festivities, call me at the arboretum.

RECORD TREES IN SCHOHARIE COUNTY

The Schoharie County Big Tree Project began about two years ago under the direction of Chris Cash, SUNY Cobleskill Nursery Specialist, with my help, and that of many volunteers from both SUNY and Landis. The goal was to find, identify and, hopefully, to preserve the largest and oldest trees in the county.

As one of the tree spotters for the project from the beginning, I am proud to say that

I have found and nominated several state champions – in fact, seven new champs have been added to New York State's Big Tree Register. As a kid growing up in Schoharie County, I always liked trees, particularly large ones, and over years of hiking, biking, and driving around I had noticed many big trees. When the Big Tree Project began I compared Schoharie trees to the state champions and found that many Schoharie trees had higher point totals, and I nominated them as possible new state title holders. We received word recently that the following trees are "new" New York State title holders – all of them right here in Schoharie County! They are butternut, Colorado blue spruce, gray birch, serviceberry, silver maple (co-champ), honey locust, and black cherry (Schenectady County).

Awards were presented on April 29 at SUNY Cobleskill.

SPECIAL THANKS

A special thank you goes out to Gil O'Brien for more tool donations, including a cordless drill, runners for our new carpet in the library, and a complete socket set. Gil has also been doing some minor repairs on the farmhouse. Thanks again, Gil.

Thanks to Sonja Javarone for helping with the collections database; to Bob Ringlee and Bob Pommerer for putting in a full day's worth of spring cleanup; to Terry Staley for helping with cleanup, tree removals, photography, and for his secretarial skills; and to Dick Clowe for chainsaw work/tree removals and his work on the buildings and grounds committee.

NYSNLA CERTIFICATION

And, I'm happy to say I've successfully completed the Certified Nursery Professional examination administered through the New York State Nursery/Landscape Association (NYSNLA) and have been awarded NYS Certified Nursery Professional status. The purpose of the program is to improve the level of knowledge and standard of practice within the nursery/landscape profession. NYSNLA is a scientific and educational organization devoted to the dissemination of information about the care and preservation of ornamental plants.



*The Acorn Shop
will be open from
May 6 through mid-October.
Regular hours: Saturday 12-5
Sunday 1-5*

The Shop's annual spring sale will be held
May 19-21, the weekend of the
Spring Plant Sale, during plant sale hours.

**WE NEED SHOP STAFF
FOR THE SEASON.**
Please call Barbara Hunt 762-8390
or Judy Lott 377-0262 to volunteer.



How Does Our Garden Grow?

New Members – Please note that the names listed here are new members that joined during the first quarter of 2000. **We wish you welcome!** A complete list of members and contributors is available once each year.

Carol Akerman
Elaine Bailey
William Bass, Jr.

Susan Decker
Arlene Shako

The Twisted Sister of the Willow Family

- John Manion

John Manion, plantsman and persuasive Spring Plant Sale volunteer, is currently a student in plant science at SUNY Cobleskill.

Certainly no one can question the pronounced presence of the willow as a significant component in history. One can think of hundreds of ways through the ages that it has been incorporated into the genre of the decorative arts. In ceramics, look just to the right of the bridge beneath the two lovebirds on any piece of the so-named Blue Willow china to see the ubiquitous tree. It has appeared also as a pattern in countless numbers of fabric designs especially those with Eastern influence. And, for hundreds of years, in many parts of the world, the willow, with its weeping habit, has been a traditional decorative motif used on grave markers.

Willow has played an important role in the history of medicine. It was an extract of willow bark that was first used by Hippocrates in the fifth century to treat pain and fever. The active chemical (salacin) was initially isolated in 1829 and went on to become the predecessor to aspirin (acetylsalicylic acid).

From a horticultural standpoint, it was found many years ago that water, in which willow had been soaked, held a component that promoted rooting in some plants, notably roses. The planting of willow, which grows quickly, remains an effective method of stabilizing soil in areas that are prone to erosion.

The willow rod, or "withe," has been used for centuries to weave baskets, fences, and furniture. Native Americans had (and still have) a multitude of uses for willow; in Utah, archeologists have found many split willow figures, representing deer, made 3,500 years ago.

And could it have been the willow rod that if spared, would spoil the child?

But this willow, *Salix matsudana* 'Tortuosa' is the twisted member of its family, the Salicaceae, and hails from northern Asia. In 1923, the Arnold Arboretum first received cuttings of this peculiar tree directly from China. It is sometimes listed as *Salix babylonica* var. *pekinensis* 'Tortuosa'. (Those taxonomists really should take up a hobby!) *Salix* is the Latin name for willow and *matsudana* comes from Matsuda, the name of the person that first discovered it. *Tortuosa*, as one might guess, is in reference to the tortuous or twisted pattern in which this tree grows.

The common names are, appropriately, dragon's-claw willow, corkscrew willow, and contorted Hankow willow. Normally I'd say that the numerous common names for this tree make a good case for the use of binomial nomenclature, but in this case even that form of identification could be confusing.

The cells in the meristematic area of most plants, where rapid cell division (cytokinesis) takes place and causes growth, have a sense of polarity that normally directs them to grow upward. Botanists think that in plants such as this one, the meristematic cells either lack polarity or lose it, then gain it back, alternating back and forth. This could be the reason why it grows in such a convoluted manner. Even the leaves possess some of this unusual morphology. (This type of growth occurs in other plants, notably, the popular but slower growing *Corylus avellana* 'Contorta', commonly known as "Harry Lauder's walking stick," or contorted filbert.) Because of this pattern of growth, corkscrew willow has been a favorite of floral designers over the years. Adding a few branches (or even just one) to an arrangement of flowers adds drama, intrigue, and a certain sculptural quality. (Continued on page 5)

Drawing by Anne Jaster

SPRING PLANT SALE 2000

Here is a list of what we are planning to have available, barring circumstances beyond our control.

- Adiantum pedatum*
Ajuga reptans 'Chocolate Chip'
Akebia trifoliata 'Deep Purple'
Alcea rosea
Alchemilla alpina, faroensis 'Pumila'
Allium cyaneum, thunbergii 'Ozawa'
Amelanchier x grandiflora
Amsonia hubrichtii
Angelica gigas, pachycarpa
Anthemis 'Snow Carpet'
Anthriscus 'Ravenswing'
Aquilegia alpina, 'Crimson Star',
 canadensis 'Corbett', *chrysantha* 'Yellow Queen',
 flabellata 'Nana Alba' and 'Ministar'
Arctostaphylos 'Massachusetts'
Armeria rubrifolia
Aronia prunifolia
Artemisia lactiflora
Aruncus aethusifolius x dioicus, dioicus, sinensis
Asclepias verticillata
Asplenium ebenoides, trichomanes
Astilboides tabularis
Athyrium nipponicum pictum
Astilboides tabularis (Rodgersia tabularis)
Astrantia major 'Rose Symphony'
Buddleia 'Ellen's Blue'
Callirhoe involucrata
Camassia leichtlinii
Campanula rotundifolia 'Elizabeth Oliver', *takesimana*
Campsis radicans 'Flava'
Camptosorus rhizophyllum
Centaurea cinerea
Cephalanthus occidentalis
Cephalaris gigantea
Chamaecyparis thyoides 'Heatherbun'
Chrysogonum virginianum 'Pierre'
Cimicifuga acerina, ramosa
 Atropurpurea and 'Brunette'
Cladrastis kentuckea
Clematis x heracleifolia 'Mrs. Robt. Brydon', *macropetala* 'Blue
 Bird', 'Violacea Plena', *tangutica* 'Radar Love', *texasensis*
 'Duchess of Albany'
Clethra 'Ruby Spice'
Coreopsis grandiflora, 'Early Sunrise', 'Tequila Sunrise'
Cornus mas xanthocarpa
Corydalis elata, ochroleuca, sempervirens
Delphinium 'Blushing Brides', 'Harlequin', 'Innocence', 'Royal
 Aspirations'
Dianthus japonica
Dicentra eximia 'Aurora'
Dictamnus fraxinella, f. 'Alba'
Diervilla 'Summer Stars'
- Digitalis viridiflora*
Diospyros virginiana 'Meader'
Disporopsis pernyi 'Bill Baker Form'
Disporum sessile
Dryopteris marginalis
Echinacea pallida 'Kim's Knee High', *paradoxa*
Eleagnus 'Goumi'
Epimedium y. 'Niveum', 'Roseum', x. *rubrum, x versicolor*
 'Sulphureum'
Euonymus 'Harlequin'
Eupatorium rugosum 'Chocolate'
Euphorbia exalibur 'Froep', *myrsinites, polychroma*, 'Chame-
 leon'
Exochorda macrantha 'The Bride'
Filipendula rubra 'Venusta', *ulmaria* 'Variegata'
Gaura lindheimeri 'Corrie's Gold', l. 'Siskiyou Pink'
Gentiana septemfida
Geranium himalayense 'Plenum', x *renardii* 'Terra Franche', 'Ann
 Folkard', 'Midnight Reiter', 'Philip Vapelle'
Gillenia trifoliata
Ginko biloba 'Pendula'
Gypsophila 'Viette's Dwarf'
Halesia monticola
Hedera helix 'Goldheart'
Heliopsis 'Lorraine Sunshine'
Helleborus orientalis
Heptacodium miconioides
 Herbs: selection of 10 annual herbs
Heuchera americana 'Dale's Strain', 'Magic Wand', 'Molly Bush',
 'Mint Frost'
Heucherella tiarelloides 'Burnished Bronze', 'Dayglow Pink'
Hippophae rhamnoides
Hosta 'August Moon', 'Banana Muffins', 'Bold Ruffles',
 'Fried Bananas', 'June', *laevigata*, 'Lakeside Kaleido-
 scope', 'Moscow Blue', 'Royal Standard', 'Trail's End',
 others
Hydrangea anomala petiolaris
Hypericum kalmianum
Iberis saxatile 'Pygmaea', *sempervirens* 'Alexander's White',
 'Little Gem'
Ilex 'Sparkleberry', 'Southern Gentleman' (pollinator)
Inula ensifolia 'Sunray', *helenium, royleana*
Iris ensata, pseudacorus 'Variegata'
Isatis tinctoria
Juncus effusus 'Spiralis'
Juniperus communis 'Gold Cone', *squamata* 'Holgers',
 x *media* 'Shimpaku'
Kalmia latifolia 'Carousel', 'Pink Charm'
Kirengeshoma palmata
Lathyrus 'White Pearl'
Lavandula 'Hidcote Blue'
Ledum groenlandicum
Lewisia cotyledon 'Sunset Strain'
Liatris spicata, s. 'Floristan White'

(Continued from previous page)

Visually, perhaps, this tree can best be appreciated after leaf-fall, when its foliage doesn't obscure the fascinating growth pattern. Understandably, this makes an excellent choice of plants for winter interest and is ideally sited with the sky as a backdrop to best view its distinctive silhouette. In spring, it produces flowers that are dense yellow-green catkins that give way to bright green wavy narrow leaves that are two- to three-and-one-half inches in length, and whitened on the undersides. The autumnal color is often golden-yellow, and it retains its leaves longer than other willows. *Salix matsudana* 'Tortuosa' grows relatively fast, is frequently multi-stemmed, and will reach an ultimate height of 20 to 40 feet and a width of 15 to 25 feet if left unpruned. Its growth habit is upright oval to round and its gnarled branches are yellow-brown. Michael Dirr, in his *Illustrated Encyclopedia of Hardy Trees and Shrubs* states: "In many parts of the United States, this is a short lived tree. Use as a short-term investment or cut back heavily (pollard) to encourage vigorous shoots."

Although susceptible to several pests and diseases, apparently none are a significant problem. (I've always believed that the most scientific, the most environmentally sound, and most practical method of controlling pests and disease in a plant is to cut the darn thing down!) And since pollarding produces the most vigorous growth, which in turn produces the most pronounced twisting, it is best to periodically rejuvenate this tree by pollarding. This is a plant that will languish with too little sun. Although it is tolerant of many soil conditions, such as drought and even some salt, it appreciates moisture. It has been assigned a USDA hardiness rating of Zones 5 through 9, although there are plenty of reports of it surviving in Zone 4.

The easiest to locate of Landis Arboretum's three specimens can be reached by follow-



An April Spring Plant Sale planning session in progress. Seated around the table, left to right: Carol Wock, Paul Blair; Barbara Hunt, Judy Lott, Herm Finkbeiner, Fred Breglia, Viktoria Serafin, Anne Jaster and Amy Lent. Photo by Fran Finkbeiner

ing these directions. Stand with your back to the entrance of the farmhouse gift-shop and look south past the Van Loveland perennial borders. At the far end of the field beyond, just this side of the low stone wall that borders the property, is a specimen of this willow that is approximately twenty feet high. The other two specimens at the Arboretum (one of which is our largest) are across the road from the farmhouse, up the hill and to the right, past the rhododendron gardens. New brochures that include a map locating each of the Arboretum's Notable Trees are available in the shed in the parking lot.

We at the Landis Arboretum invite you to come and see the tree whose name sounds more like an exotic form of rigorous massage than a plant, and whose branches are even more twisted than the person who wrote this piece.

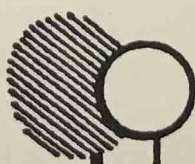
Wish List

There are many items needed to maintain and add to a growing Landis Arboretum – and our Wish List is always active!

- Among the books we often borrow but need as part our own library are the latest printings of: *Hortus Third*; *The Manual of Woody Landscape Plants*, Dirr; *Wyman's Gardening Encyclopedia*; *Manual of Cultivated Trees and Shrubs*, Rader; *The Certified Arborists Study Manual*, International Society of Arborists.
- mulch fork/scoop
- pointed-blade long-handled shovels, good quality for heavy use
- With the expansion of the Arboretum's tree collection we need a larger tractor, both to assist with planting and with mulching and general maintenance – and the myriad of other chores around the grounds. We wish for a John Deere 790, or one of equal quality, 4-wheel drive, 30 HP with backhoe and loader, approximate cost \$20,000. If you can give any assistance in our quest, please telephone.

Gary DeLuxe

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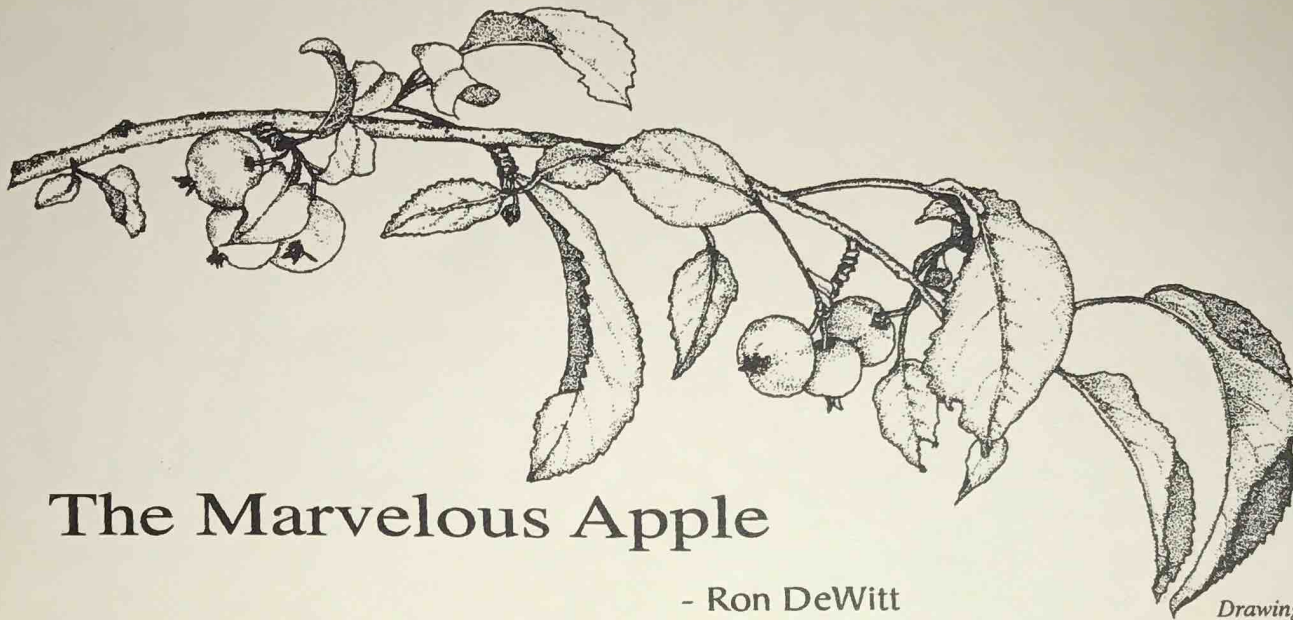
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The Marvelous Apple

- Ron DeWitt

Drawing by Anne Jaster

Ron DeWitt, who lives near Salem, NY is a tree grower, collector, member of the International Wood Collector's Society, and member of the Northeastern Woodworkers Association. He contributed the first article in this Notable Trees series for the Summer 1998 newsletter, an article on larches.

The apple took a bad rap after that incident in the Garden of Eden. The stigma is still there. The generic name for the common apple is *malus* from the Latin for malicious or bad. This is especially unfair since the apple, still called the love fruit, is hardly considered bad in any way and Biblical scholars seem to agree that the apple was not the forbidden fruit but, rather more likely, it was the pomegranate.

The apples number about 30 species worldwide, all in the temperate zones or occasionally in the higher elevations of the tropics. Of these, four species, all crab apples, are native to the U.S. One other species, the "common," "orchard," or "modern" apple, has become naturalized here.

Although somewhat uncertain, the origin of the apple is believed to have been in the Caucasus Mountains of Asia. From there it spread across Europe. It is clearly a temperate fruit requiring about three months of 45 degrees Fahrenheit or lower temperatures to complete its dormant cycle.

The crab apple and the common apple are believed to have developed from different species, the result of man's manipulations over thousands of years. Of the crabs, the sweet, wild or American crab apple (*Malus coronaria*) is probably the most familiar. The crab apple, once popular as a source of fruit for preserves, has been more thoroughly exploited as an ornamental. The crab apple orchards at the Landis Arboretum contain many fine examples of this tree.

Crab apples are especially popular as ornamentals with varieties available that grow in all but the warmest, driest areas of Zones 2 to 8. As with all of the apples, two varieties should be planted to assure cross-pollination. Good gardeners have also been rewarded with apples trained in fine espalier form.

The most important is the common apple (*Malus sylvestris*), the apple of classical literature, inseparably associated with the growth of civilization. This is the apple first taken to England by the Romans and much later introduced into the colonies by early Americans.

The apple hybridizes easily and has generated 6500 registered horticultural varieties – truly a nightmare for taxonomists and botanists.

The tough, hardy common apple will grow in almost any soil condition or location, a factor in choosing it as an ornamental. If left on its own, it becomes a small- to medium-size tree with a dense rounded form, short stem and branches starting close to the ground. The toothed two- to four-inch leaves are usually oval with rounded bases and pointed tips. Leaf topsides are bright green; undersides are lighter in color and covered with fine white fuzz – easily noted with a hand lens. Leaves grow alternately and in clusters. Leaves of the crabs have a much greater variation of forms.

A favorite feature of all of the apples is the two- to seven-blossom clusters of the perfect, beautiful white five-petal flowers, often over-spread with pink and having a delightfully pleasant rose-scented aroma. On a general basis the flowers of the crabs have more color than the common apples. The blossoms are reason enough to justify them as ornamentals and to occasionally save one that might otherwise be considered poorly placed or of shabby appearance.

Branches are stout with many sturdy twigs and short fruit-bearing spurs that are often tipped with a sharp spine. The branches have lots of knuckles and elbows. The bark is gray to reddish or purple-brown, peeling in small, thin, brittle flakes. (Continued, p. 7)

The Marvelous Apple (Continued from p. 6)

Although crab apple trees tend to be smaller, common apple trees will grow to 40-50 feet with stem diameters of 20-30 inches and will live over 100 years. Orchards prune them heavily to open their tops and keep the fruit closer to the ground, often replacing matured trees after 40 years or so.

A few years ago an apple tree 70 feet tall and almost 12 feet in diameter, growing in Virginia, was reported to be the national champion. The current National Register of Big Trees lists a tree 44 feet tall and almost five feet in diameter, growing in Bedford, NH, as the champion.

Apple fruit has been a staple for centuries and volumes have been written on the subject. Perhaps no group of people relied upon the apple for food, drink or games more than did early Americans. Every home or farm had at least a few trees and they were spread across the country with the pioneers, usually as a scion or sprout as, in spite of the lore, apple seeds do not reproduce reliably.

Apples had a long shelf life, dried or wrapped in straw and buried in dry dirt. Cider was an important beverage, fresh or aged. Hard cider contains about eight percent alcohol (16 proof) as fermented in the barrel for four to six months at 40-50 degrees Fahrenheit. Applejack, further fortified by hard freezing and discarding the ice (fractional crystallization) contains as much as 30 percent alcohol! Cider in drinks was as common as apples in cooking. And there was also apple soup, apple butter and apple vinegar.

Cider was taken as a cure for rheumatism, gout and bladder stones, to reduce fevers and to prevent scurvy. Apple pulp blended in water was used to treat gonorrhea; apples distilled with camphor and buttermilk to

remove smallpox scars. Apples in excess, as many know, are an effective laxative. Apple skin poultice was used to beautify the skin, and apple pulp ointment, made with hog fat and rose water, was a famous hair dressing (pomade). An apple for the teacher never hurt either. The list goes on.

Recent medical studies reveal that those who eat apples regularly have fewer colds. A tea made from dried apple peels is taken to ease muscle and joint stiffness. Pectin, common in apples, has been shown to perform some vital functions; it eliminates toxins, stimulates digestion and helps balance cholesterol levels.

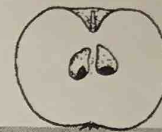
The apple was an important aid to science, also, serving as the tool used by Sir Isaac Newton in formulating the law of gravity.

Apple wood is pinkish-tan to cinnamon brown, usually marked with narrow to wide bands of various shades of brown in an attractive figure. This is a heavy wood—about 48 pounds per cubic foot— heavier than most native hardwoods including maple and oak.

Apple wood has had almost as many uses as the fruit. It was used for mauls, gavel, mallets, wedges, handsaw and tool handles, machinery bearings, shoemaker lasts and chair rockers. It was also used for flutes and other musical instruments, bowls and woodenware, toys and cabinet specialties. Apple wood is used to smoke-flavor food and is a favorite firewood because of its delightful odor when burning. An apple stick is still the wood of choice for divining rods used in dowsing for water.

Apple is a favorite of woodworkers. It machines well with sharp hand or power tools. Dry wood has little taste or odor. The wood glues easily and finishes well taking a beautiful high luster polish. It is not very durable when exposed to the soil. Apple wood is not often found in sizeable

straight logs so is rarely cut for the cabinetmaker. It is frequently found at orchards in small log form or pieces suitable for sawing out on your home bandsaw.



From Fred Lape

"I was once shown a planting by an arboretum superintendent where the day before an untrained college student had completely eliminated a 2-acre (0.8-ha) planting of newly set out crabapple whips. When older trees are debarked at ground level, they are rarely able to overgrow the damage, which becomes an entrance for disease and decay. More small trees are killed by careless mowers than by rabbits or mice combined! The late Fred Lape, founder and director of the Landis Arboretum, Esperance, NY, was once asked by a visitor why he planted three trees of the same kind in all plantings. 'Two for the mowers, and one to survive,' came his ready reply." — From *Flowering Crabapples: The Genus Malus*, by John L. Fiala, Timber Press, 1994.

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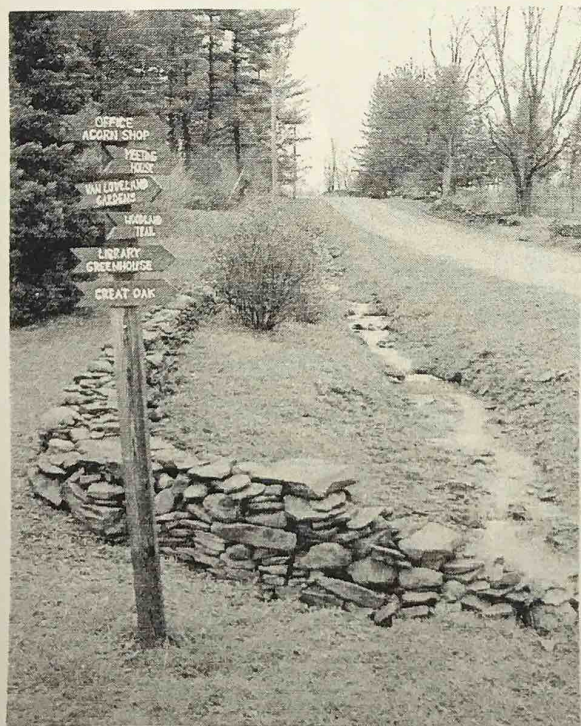


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Pasture Spring

Grasses stay green here all winter under ice.
In spring the cattail spears rise up like knives,
and moss and lichen spread over the rock basin.
Now in the season's peak the green frogs sit
and raise their onyx eyes up from the water,
and darning needles skim over and back, and settle.

Here in late afternoon the sheep come
in a long line and touch their lips to the cool water,
and drink daintily and stand content a while.
And later yet the cows sink their warm mouths deep
and lift them dripping, and run their tongues
over their nostrils and stretch their necks.

Shadows cross the fences and cover the hill flanks,
and the far valley side holds all the sun's light
like a bowl filled to the edge with fresh cream.

- Fred Lape, Barnyard Year