HOLLY SOCIETY OF AMERICA, INC.

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Membership is open to all interested individuals. Membership in the Holly Society of America is a great way to meet other gardening and horticultural enthusiasts. The purpose of the Holly Society of America, Inc., is to stimulate interest, promote research, and collect and disseminate information about the genus *Ilex*. You will enjoy two *Journals* each year and access to the Members Only web pages. Commercial/ Institutional Memberships have additional benefits.

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Holly Society of America

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Editor

Rachel Cobb
editor@hollysocam.org

Editorial Committee

Julie Hilt
Tom Hilt
Sue Hunter, President, HSA
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On The Cover

Hailey, Grace, and Claire have been instrumental in helping to produce high quality *Ilex* liner (starter) plants at Heartwood Nursery.
See Page 5. Photo by Sue Hunter

If you are interested in joining a committee, you'll be in good hands. We have a dedicated team of committee members who have extensive knowledge and passion for *Ilex*. They are helpful and willing to assist new volunteers. Your unique skills and interests have a place in the Holly Society of America. Depending on your interests, once you have decided to offer your time and expertise, contact Sue Hunter or a Committee Chair. See Website for list.

HOLLY SOCIETY OF AMERICA, INC.

The Holly Society of America, Inc., founded in 1947, is a not-for-profit, 501(c)(3) organization of individuals interested in learning about the genus *Ilex*. Through Society publications, lectures, meetings, and visits to holly collections, information is provided for skilled growers as well as novices.

The Holly Society funds research and serves as the International Registration Authority for cultivated *Ilex*, having been so appointed in 1958 by the International Commission for the Nomenclature of Cultivated Plants of the International Union of Biological Sciences.

Membership Levels and Benefits are available at hollysocam.org/membership.htm.

Inquiries about items published in the *Holly Society Journal* and the *Berry Bulletin Newsletter*, and contributions of articles for publication should be sent to the editor, Rachel Cobb, at editor@hollysocam.org.

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Holly Society of America, Inc.

Holly Society Journal

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Sue Hunter

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From the President

I would like to extend warm greetings to all of you, and I hope this message finds you in good health.

Today, as we celebrate the beauty and importance of nature, we are reminded of the vital role it plays in our lives. The stunning landscapes, rich biodiversity, and incredible flora that grace our gardens and landscapes are not merely scenic backdrops but intricate ecosystems that sustain life in all its forms.

As we navigate the challenges of the modern world, it becomes increasingly important to recognize the importance of protecting and preserving our botanical treasures in the name of *Ilex* and other Genus/species. Plants are not merely symbols of natural beauty, but they also provide essential resources, contribute to our well-being, and offer a sense of tranquility that is priceless.

In my Professional roles as Propagator and Educator, mentoring and teaching those who choose to learn about Horticulture (no matter what field they ultimately choose to pursue) is very rewarding. Helping students understand a difficult concept, learning a new skill and seeing their progress is priceless. I admire and am proud of the three young women featured on the cover of this edition of the Holly Society of America Journal. Hailey, Grace, and Claire have been instrumental in helping to produce high quality *Ilex* liner (starter) plants here at Heartwood Nursery. The efforts they have put into detail and hard work over the years are commendable.

And in their own words:

Hailey's favorite holly is *Ilex* x *attenuata* 'Sunny Foster' because of its strikingly bright yellow, variegated, new growth that contrasts beautifully with the dark green foliage and dark red berries. After propagation, even in its young age, 'Sunny Foster' grows up to become a well-branched and dense tree.



Hailey staking *Ilex* x 'Sunny Foster'

Sue Hunter

Grace's favorite holly is *Ilex opaca* 'Chief Paduke' because of the unique long and narrow, elongated foliage with a more

upright, dense, and compact growth habit.

Claire's favorite holly is *Ilex opaca* 'Satyr Hill' because of the larger, rounded leaves, and faster growth habit. This makes it a popular and desired selection at Heartwood Nursery within wholesale propagation and retail.


Sue Hunter

Claire with *Ilex opaca* 'Satyr Hill'.

As you will read in my article on page 22 of this *Journal*, "*Ilex* selections ~ Criteria in Choosing and Marketing", one of the first steps in being able to market any holly is to have access to healthy, viable cutting wood. In addition to growing *Ilex* selections here at the Nursery for cutting wood, I am thankful to others who have entrusted me over the years with their own cutting wood from their beautiful landscapes: Jim Resch, Frank and Janet Shriver, Bill Kuhl, the late Charles Anderson, Tom Helm, Mark Chaffins, Paul Lightfoot, Bill Cannon, Sigi and Dan Turner, Bayard Cutting Arboretum, Rutgers University, University of Delaware, Indian Steps Museum, Laurel Hill Arboretum, and the US National Arboretum. It takes a team to keep hollies front and center!


Sue Hunter

Grace with *Ilex opaca* 'Chief Paduke'

We remain committed to the growing and preservation of the Genus *Ilex*. We consistently promote the education and outreach that help and ensure the continued presence of our botanical efforts for generations to come.

As groups such as ours continue to face various challenges and uncertainties, our commitment to serving the Horticulture world has never wavered. We have successfully implemented programs and initiatives that have made a significant difference in the lives of many individuals, families, and communities. However, to sustain and expand our efforts, we rely heavily on the support of generous donors like you.

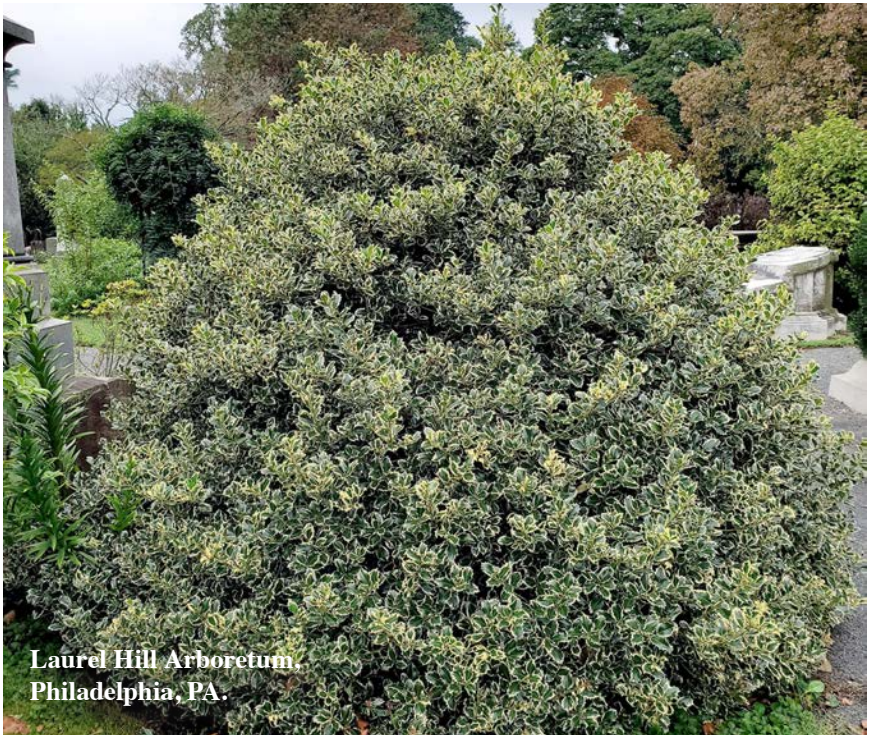
I am reaching out to humbly request your financial support through a donation to help us continue making a difference. Our current focus

is on updating previously published Holly Society pamphlets describing the Care and Culture of Hollies (the Genus *Ilex*). This initiative aims to address public demand for up-to-date information including:

- Informative headlines.
- Subheadings.
- Specific text related to the subheading.
- Educational/procedural photos
- A call to action.
- Organization contact details.

By donating to this project, you will directly contribute to playing an active role in this endeavor.

Thank you, members, for your continued support
Sue Hunter
President, Holly Society of America



Sue Hunter

Laurel Hill Arboretum, Philadelphia, PA.

Holly Society of America

JOIN or RENEW NOW!

hollysocam.org

Welcome New Members

JANUARY 1 - AUGUST 30, 2023

Colonial Williamsburg Foundation

Charles Feld, Birmingham Gardens

Tedd Gorman

Marilyn Gray

Scott Hemler

Steven Hsieh

Rosemarry Klein

Michael Pack

Billie Paskoski

Alan & Joan Perkins

Robert Polomski, Clemson University

Frederic S Rose

Robert Snyder

Gregg Tepper,
The Arboretum at Laurel Hill

Erin Anne Van Yahres

Edward Watanabe

Donglin Zhang - LIFE MEMBER

Donations to HSA

Thank you to everyone who has donated to the
Holly Society of America, Inc.

Donations From Fiscal Year 2023
(April 1, 2022- Mar 31, 2023) through September 2023

Individuals that contributed $500 or more

Tom & Julie Hilt - Holly Society General Fund

Sue Hunter - Holly Society General Fund

Linda Parsons - Life Membership Trust Fund

Jim and Barbara Resch - Holly Society General Fund

HSA Sponsorship

The Holly Society of America is a non-profit organization devoted to educating and promoting the Genus *Ilex* to all who are interested. For 75 years, our membership has consisted of Professional Horticulturalists, Nursery Professionals, Plant Researchers and Scientists, Home Gardeners, Arboretum Professionals, and those who just love plants. The Educational Programs and Educational outreach we provide through formal on-site presentations, social media, and our website during the year appeal to the public, and are inclusive of all tangents of the Horticultural Industry. Also, in cooperation with the US National Arboretum, the Holly Society of America is the official International Registrar of new selections of the Genus *Ilex*.

Your sponsorship would help enable our group to continue the important work in furthering the aforementioned purposes. We would love to have you be a part of our Holly message!

See our web page for more information.

JOIN US ON SOCIAL MEDIA



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A family owned and operated business for 45 years beginning with Azaleas, *Ilex* and *Taxus* and expanded to over 250 cultivars.

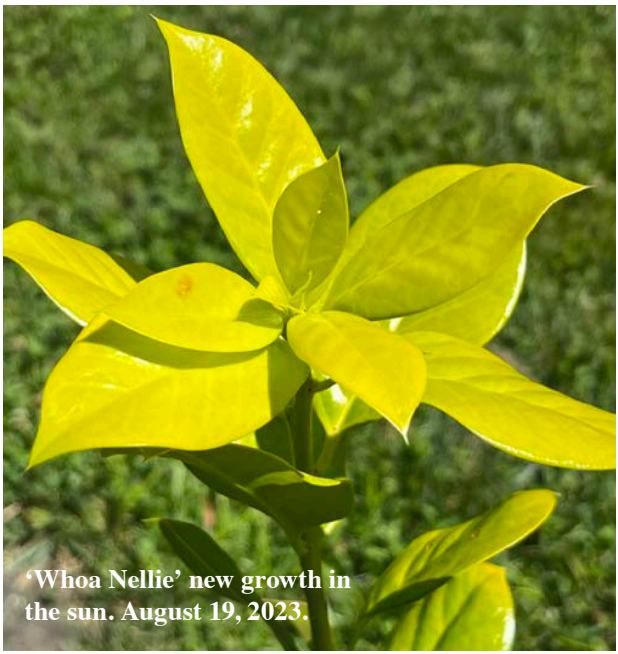
davidsnursery.com

Test Holly for 2023: 'Whoa Nellie'

By Jim Resch

The Test Holly Program puts new holly cultivars into the hands of Holly Society members, who can provide feedback on the plants' performance in a variety of climates and growing conditions. While the program is by no means scientifically rigorous, anecdotes shared by holly enthusiasts on the worthiness of a new plant are of real value. This year, annual meeting attendees will get to take home the hard-to-find *Ilex* 'Whoa Nellie' as this year's Test Holly to try in their gardens.

'Whoa Nellie' was discovered by Michael Dirr as a yellow-leaf branch sport of the familiar *Ilex cornuta* x *aquifolium* 'Nellie R. Stevens'. He propagated it, and found it grew into a yellow-gold pyramid producing red fruit. Dirr named it 'Golden Nellie', and grew it at the University of Georgia trial gardens. In 2001, he shared cuttings of the plant with Tony Avent of Plant Delights Nursery. He allowed Avent to introduce the holly, and to name it 'Whoa Nellie' after the well-known football line of famed sportscaster, Keith Jackson.



Jim Resch

'Whoa Nellie' new growth in the sun. August 19, 2023.

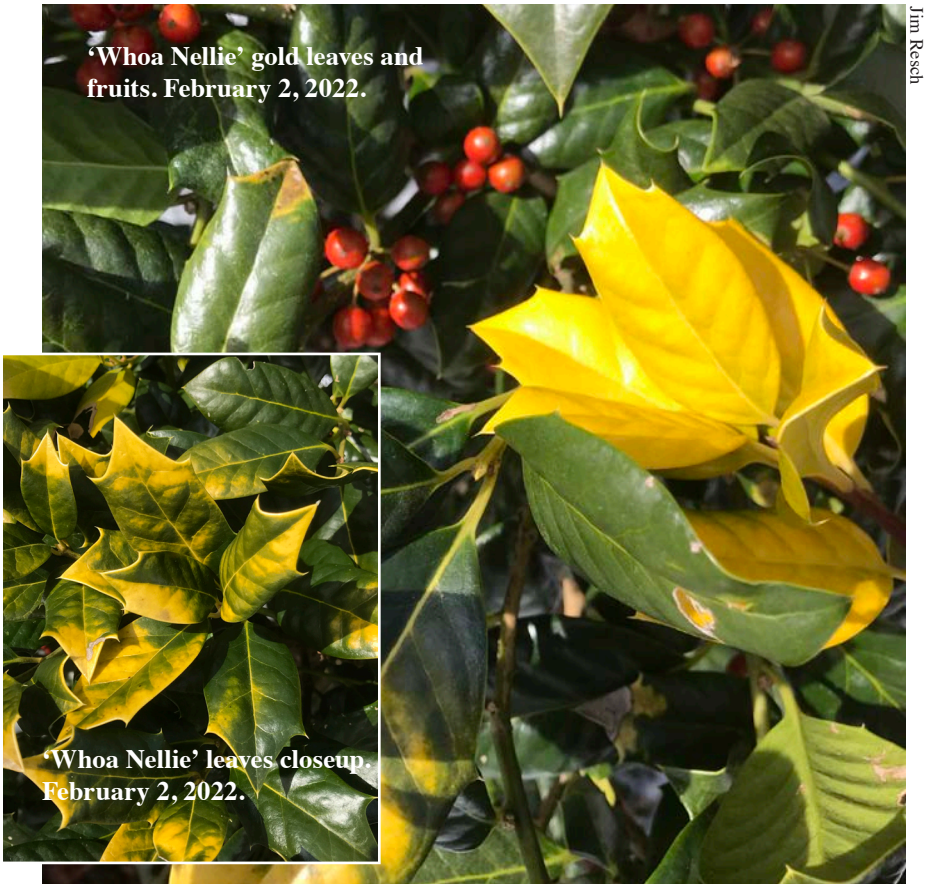


'Whoa Nellie' rooted cuttings in 5 inch containers. May 13, 2023.

Jim Resch

The new growth of ‘Whoa Nellie’ flushes out as a bright gold color, in sharp contrast to the darker green inner leaves on the tree. Full sun is required to develop and retain the best gold color, and the south-facing side of a mature tree will hold its gold color the longest. We expect ‘Whoa Nellie’ to be hardy into Zone 6b like ‘Nellie R. Stevens’ itself, and should thrive in warm, humid climates.

Like many newer hollies, ‘Whoa Nellie’ has been somewhat difficult to find. We obtained a small plant from Plant Delights in 2012, and it has grown rapidly into a ten-foot specimen. In 2022, a large number of cuttings from this tree were rooted for us by Sue Hunter at Heartwood Nursery. We have grown these on in 5-inch square containers, each holding a half gallon of potting mix. After three growth flushes this season, these should reach 18 to 24 inches in time for the annual meeting.



‘Whoa Nellie’ gold leaves and fruits. February 2, 2022.

Jim Resch

‘Whoa Nellie’ leaves closeup. February 2, 2022.



Jim Resch

'Whoa Nellie' tree.
February 16, 2023.

International *Ilex* Cultivar Registration

By Jim Resch
Holly Registration Chair

3-23 *Ilex* × 'Mister Bob'
Male

Registered: April 21, 2023
William N. Kuhl
McLean Nurseries
9000 Satyr Hill Road, Parkville, Maryland 21234

This selection originated as an open-pollinated, putative hybrid seedling in the extensive holly collection at McLean Nurseries in Parkville, Maryland, around 2008. The parentage of the plant is completely unknown. Initially, this seedling was dug and grown in containers, but was then planted out in its current location in the nursery for evaluation. Mr. Kuhl named the plant 'Mister Bob' in



Jim Resch

***Ilex* x 'Mister Bob' at McLean Nurseries. September 27, 2022.**



Miriam Miceli

***Ilex* x 'Mister Bob' blooming from Miriam Miceli. April 20, 2023.**



Jim Resch

***Ilex* x 'Mister Bob' flowers closeup on a container plant. May 4, 2023.**

reference to several friends, neighbors, Holly Society members, and volunteers at the nursery over the years.

This original 'Mister Bob' is an upright, narrowly conical evergreen tree, 6.1 m (20 ft) tall and 2.7 m (9 ft) wide after about 15 years. It has a caliper of 12 cm (4.7 in). The plant grows with a single leader and a herringbone branching habit. New leader growth has been about 46 cm (18 in) annually. Lower limbs have been removed for better air flow and traffic near the tree.

The leaves are evergreen with a coriaceous texture. They are oval, with the largest leaves up to 7.5 cm (3.0 in) long and 3.2 cm (1.3 in) wide. The bases are rounded. In side view, the margins are somewhat undulate. In top view, the margins are generally spinose, and quite variable, with 0-6 (typically 4) spines per side, oftentimes asymmetrically so. The spines are forward-spacing and sometimes unevenly spaced. Apices are acute and slightly reflexed, with a tip spine of 1 mm (0.04 in). Petioles are up to 10 mm (0.4 in) long. Upper leaf surfaces are dark green, Green Group N137A, and somewhat glossy, while lower leaf surfaces are dull, Yellow-Green Group 144A (Royal Horticultural Society Colour Chart, 2007).

The plant produces axillary, staminate flowers on second-year wood in mid- to late April in Zone 7a, and in great abundance. These are white, each with four petals and pollen-bearing anthers. The blooming period is concurrent with that of *Ilex pernyi*, *I. cornuta*, *I. cornuta* x *pernyi* hybrids, and with other early-blooming hybrids such as *I.* x 'Nellie R. Stevens'. However, it begins blooming earlier than most *I. aquifolium*, *I.* x *altaclerensis*, *I.* x *koehneana*, and *I.* x *meserveae* hybrids.

Propagation may be accomplished from semi-hardwood cuttings in late summer at ambient temperature. Plants have been available from McLean Nurseries for the past several years. Growth is quite vigorous in container production, and care should be taken not to over-fertilize young plants, lest they produce excessive growth that will not have time to harden off before winter. Hardiness has been established in Zone 7, but has not been demonstrated elsewhere as of this time.

'Mister Bob' was selected for unusual, attractive foliage, rapid growth rate, and consistently heavy flowering.

The standard specimen is deposited in the herbarium of the U.S. National Arboretum in Washington, D.C. 20002.



***Ilex* x 'Mister Bob' tree facing east at McLean Nurseries. April 21, 2023.**

Jim Resch



Sue Hunter

***Ilex opaca* 'Hunter' flowering closeup. May 22, 2023.**

International *Ilex* Cultivar Registration

By Jim Resch
Holly Registration Chair

4-23 *Ilex opaca* 'Hunter'
Male

Registered: May 26, 2023
Susan Hunter
Heartwood Nursery
8957 Hickory Road, Felton, PA 17322

The selection originated as a chance seedling which germinated at Heartwood Nursery in Felton, Pennsylvania, in around 2005. Given the large number of named and unnamed *Ilex opaca* specimens at this nursery, the parentage of this selection is unknown. The original plant has been grown in a forested area at the nursery, located in Zone 6b. Apart from the obvious reference to her surname, Ms. Hunter named the tree as a companion planting for 'Huntress', a female seedling which also originated at the nursery (not yet registered).

The original 'Hunter' is an upright, narrowly conical evergreen tree, 7.6 m (25 ft) tall and 2.4 m (8 ft) wide after 17 years, with a caliper of 15 cm (6 in). The plant exhibits strong apical dominance with a single, robust leader, and displays a horizontal branching habit. Annual leader growth is at least 30 cm (12 in), and sometimes much more.

The leaf texture is coriaceous. Leaves are stiff, generally flat to slightly convex, and not significantly keeled. They are broadly oval, with the largest leaves up to 7.8 cm (3.1 in) long and 6.3 cm (2.5 in) wide. The bases are rounded. In side view, the leaf margins are only slightly undulate. In top view, the margins are spinose, typically with 4-5, though sometimes up to 7, spines per side. Apices are acuminate, with a sharp tip spine of 1 mm (0.04 in). Petioles are 7 mm (0.28 in) long. Upper leaf surfaces of mature leaves are dark green, Green Group N137A, while lower leaf

surfaces are dull yellow-green, Yellow-Green Group 144A (Royal Horticultural Society Colour Chart, 2007).

The plant produces fragrant, staminate flowers in axillary cymes, on the current season's growth. Flowering is in late May to early June in Zone 6b, typical for other *Ilex opaca* growing in that region. Flowers have four (or sometimes five) white petals and four (or sometimes five) stamens, each bearing an abundance of yellow pollen.

Propagation may be accomplished from semi-hardwood cuttings beginning in late July under intermittent mist at ambient temperature, or through fall and early winter with bottom heat. Cuttings root readily, becoming well-rooted in six weeks. Propagation was begun in 2017, and the plant has been available from Heartwood Nursery since 2018. Hardiness has been established in Zone 6b, but has not been demonstrated elsewhere as of this time.

'Hunter' was selected for its unusually large leaves and overall vigor, both in the landscape and in container production. The tree's strong apical dominance carries over to rooted cuttings, lessening the need for staking in container production. Its large, broadly oval, flattened leaves are similar to those of 'Huntress', another seedling from the same nursery, and are reminiscent of *Ilex opaca* 'Satyr Hill', which is grown commercially at this location.

The standard specimen is deposited in the herbarium of the U.S. National Arboretum (NA) in Washington, D.C. 20002.



***Ilex opaca* 'Hunter' trunk, May 22, 2023.**

Sue Hunter



Sue Hunter

***Ilex opaca* 'Hunter' tree.**
May 22, 2023.

Ilex selections ~ Criteria in Choosing and Marketing

By Sue Hunter

President, Holly Society of America

Details matter more than ever when it comes to selecting, registering and introducing new hollies. How often have you noticed something pleasingly different about a particular holly tree you may have walked past on a trail in the woods, or in a random group of seedlings in a Nursery flat? Maybe you were lucky enough to find a chance variegation on a branch from a tree that was planted in your yard or in your field inventory.

Plants are typically selected based on several factors including their suitability for a given location (such as USDA agricultural zone or environmental conditions), a specific purpose for planting (e.g. aesthetic, erosion control, cut holly production, cutting wood production) and appeal to the wholesale horticulture growing industry and retail garden center marketability. Common criteria for initial selecting include:

1. Adaptability: The ability to thrive in a specific Agricultural Zone, climate and growing region of a given location.

2. Growth Habit: How will this selection serve the intended use and location it will be planted in (e.g. Suburban, City Park, Formal Arboretum, re-forestation, informal landscape)? Does it deviate from the average characteristics of the species? Is it compact, dense, columnar, conical, tall, vigorous, short and slow growing, trailing or pendulous?

3. Immediate visual appearance: There is a very broad range of diversity in the size, shape, and color of the berry-like drupes on female plants. Equally diverse is the range in shades of green and size and shape of the leaves. Infrequently, a naturally occurring color variegation in leaves may occur as a "sport" (an off-shoot on a given plant supporting a genetic mutation). Consistent, careful observation over many years is needed for assurance that these outstanding variances remain stable as the plant grows. Consultation with a Horticulturist who is familiar with and has grown hollies is most important.



Sue Hunter

Holly selections for future promotion.

I am frequently asked "How can we get this selection out into the trade?" There is more to it than people realize.

The next step is finding an appropriate propagator/grower to propagate the selection.

First and foremost, the Holly propagator needs access to healthy, available cutting wood. This is why it is so important to build and maintain relationships with Horticulture organizations, Nurseries, Institutions and Arboretums. Obtaining the needed amount of cutting wood to produce rooted starter plants to take to a trade show is important. Many large-trade wholesale growers will not even try to grow less than 100 plants (of one selection) at a time. Planting out 10 or 15 plants doesn't pay them to do so; nor can they properly evaluate such a small number of plants.

It takes YEARS to develop relationships between growers and years for growers to make their money from a long term crop such as *Ilex*. That holly you see in the garden center or Nursery may have been grown at four or more Nurseries over a period of four-to-eight years before it reaches its final selling destination.

Thanks to the Coordinator of our Research Committee and Test



Mid Atlantic Trade Show (MANTS) held every January in Baltimore.

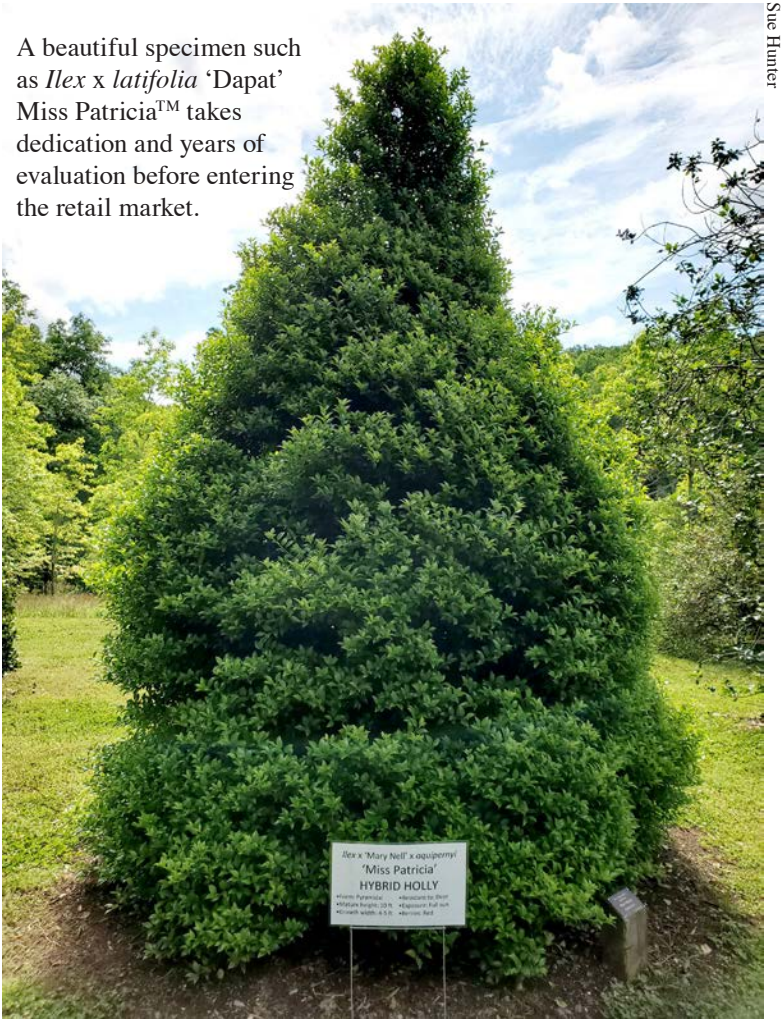
Sue Hunter

Holly Program, Jim Resch, who has generously provided cutting wood every summer from his collection of *Ilex*, I am able to begin including many newly registered selections to root and promote to wholesale growers at the Mid Atlantic Trade Show (MANTS) held every January in Baltimore, MD.

Ilex opaca 'Bear Crossing', 'Uncle Sam', 'Maryland Spreader', 'Martha's Vineyard' and 'Clarendon Spreading' and various Yellow fruited *opacas* are lesser known selections that I have worked hard at getting more of into the wholesale trade over the past fifteen years. It's not that growers were unfamiliar with these selections, they just didn't know where to get them because no one was growing them. Such is the case with many other note-worthy hollies that deserve a place in the trade.

When naming your holly selection, it is necessary to take into account whether your selection is a male or female. Giving male names to female selections proves confusing in promoting hollies and educating the public. Descriptive names relative to a characteristic or location are good choices. *Ilex opaca* 'Satyr Hill' is a fabulous selection with a catchy name. It is in great demand because the growing results and

sales results have been proven by Nurseries over the decades. However there are customers who say "Do you have anything else besides 'Satyr Hill'?" There are growers who are willing to grow lesser known selections if they are available. Diversity of available selections is vital to the continued promotion of any genus. One year I had a customer who ordered a large number of *Ilex opaca* 'Miss Helen'. He called and cancelled the order because he "had read somewhere that 'Miss Helen' was difficult to work with in the field." My response was not to try to change his mind about cancelling the order, rather that what he read was one person's experience. Growers share information with each other.



Sue Hunter

A beautiful specimen such as *Ilex* x *latifolia* 'Dapat' Miss Patricia™ takes dedication and years of evaluation before entering the retail market.

Once something like that is said, people remember it and won't put their money there even if what they heard isn't true for everyone. Growers will ONLY grow what they feel they can sell.

WHAT STEPS CAN THE HOLLY SOCIETY TAKE?

Personally, I don't like "Favorites" lists. Regarding the public, those who have little knowledge will grasp onto a "Favorite Hollies" list they have read in a horticulture publication and will not settle for anything else but what is on that list. The Holly Society may consider a "Featured Holly" supporting the use of all hollies within a species instead of supporting one or two selections.

Thinking of the broader connection when choosing a Holly of the Year, such as *Ilex glabra*; not 'Shamrock', 'Compacta', or 'Wye River' serves to simplify customer choice and relieves growers of having to explain why they may not be able to carry and promote that particular selection on that particular "Favorites" list.

Featuring just *Ilex glabra* at least opens the door for any selection of Ilex glabra a consumer may find at their local Nursery.

Let's think outside the horticulture box on this one. I am open to conversation regarding availability and marketing of hollies.



Sue Hunter

The Holly Azure

By Jim Resch

Fifty years ago, I spent a lot of time collecting and identifying the butterflies in my area around Baltimore, Maryland. Some were easy to recognize, while others were quite a bit harder. None were quite as difficult as the tiny, fast moving, pale blue butterflies known as the azures. There were two common, generally recognized species back then, the Spring Azure (*Celastrina ladon*) and Summer Azure (*Celastrina neglecta*), and they looked pretty much identical to each other. Some people even regarded the Summer Azure as a subspecies of *C. ladon*. Fortunately, they were easy to distinguish according to the season, as the Spring Azures only flew in the spring, while the Summer Azures… well, you get the idea.

I hadn't given the azures much thought until recently, when David Layne, a friend from Maryland, piqued my curiosity with a Facebook post. He had gotten some nice photographs of one of the azures, enjoying the nectar from the flowers of common winterberry, *Ilex verticillata*. Which species of azure did he have, and how could he tell for sure? Helpful local entomologists were quick to chime in with their opinions.

Azures are among the earliest butterflies to be found in the spring, are quite commonly seen sipping nectar from holly and other flowers. But if you look carefully, they may be doing more than just feeding there – sometimes the females are also ovipositing (laying their eggs) on the flower buds. These hatch into tiny green caterpillars which feed on the buds and other tender new growth, generally going undetected. Compared with larger and showier butterflies, the azures attract little attention.

All this would change when two expert amateur lepidopterists, David Wright and Harry Pavulaan, began to suspect that there were more than just one or two species of *Celastrina* inhabiting our region.[1] Based on two decades of careful field work in the Pine Barrens of New Jersey, they were able to discern three separate populations of azures. The first, which appeared in early spring, was the classical Spring Azure. It was univoltine (i.e. producing just one brood per year), with its caterpillars feeding on our native dogwood (*Cornus florida*), though blueberries and viburnums could be used as well. A second wave of azures, peaking in

May, seemed to use only inkberry (*Ilex glabra*) or American holly (*Ilex opaca*) as larval food plants, and was similarly univoltine. Later flights, from late May onwards, were from the Summer Azures, which fed on racemose dogwood (*Cornus racemosa*) and New Jersey Tea (*Ceanothus americanus*), among other plants.

Focusing on those holly-feeding butterflies in the second wave of emergence, Pavulaan and Wright examined these insects in minute detail. Under extreme magnification, there were indeed differences between these holly-feeders and the other azures. The males, in particular, had distinctive scales on the upper surface of their forewings, and microscopic differences in their genitalia as well. (Entomologists attach great importance to such findings, since structurally incompatible genitalia can prevent interbreeding and thereby enforce speciation.) Based on this evidence, in 1999 they published the first description of this new species, which they named *Celastrina idella*, the Holly Azure.[2] It had been hiding in plain sight, having been collected and (mis)identified countless times by butterfly collectors along the Atlantic coastal plain for centuries, going all the way back to the late 1700s.

This new species, variously called the Holly Azure. the Atlantic Holly Azure, the Pine Barrens Azure, or the American Holly Azure, is found in holly-rich habitats along the Atlantic Coastal Plain, from New Jersey to Georgia. They are only rarely found beyond the Fall Line, where the Coastal Plain transitions to the Piedmont region. Adult Holly Azures are on the wing precisely when the buds of inkberry and American holly are about to open. Eggs are laid singly on the unopened buds, especially of male hollies. The tiny larvae chew into the bud and poke their head inside, feeding on protein-rich pollen stores. As the caterpillars mature, they secrete a sweet honeydew which is attractive to ants, and these ants in turn help to protect the caterpillars from predators.

Apart from their foodplants, the only easily recognizable difference between the species of azures comes from the calendar. Any azure flying from late May onwards is likely the Summer Azure, so David Layne's photo taken at the end of May is most likely that species. From late April to mid-May (in New Jersey, Maryland, and Delaware at least), it is most likely the Holly Azure which is to be encountered. Earlier in the year was once thought to be the exclusive provenance of the Spring Azure, but even that assumption is now known to be incorrect. As Harry

David A. Layne



Azure butterfly, *Celastrina* sp., feeding on flowers of the common winterberry, *Ilex verticillata*, May 29, 2023, in Baltimore City, Maryland.

Pavulaan notes, there is also an early flight of Summer Azures in early spring, as the species has very recently found to be multivoltine, and its first brood overlaps with the Spring Azure.[3] As if this were not confusing enough, not all experts yet recognize all these butterflies as separate species. According to the North American Butterfly Association, "All it takes for a spirited argument are two taxonomists and one azure." [4]

Scientists are constantly discovering new species in little-explored parts of the world, like distant rainforests or deep oceans. However, Pavulaan and Wright's demonstration of a formerly unrecognized new species in the midst of such a densely-populated and well-studied ecosystem as the mid-Atlantic hints at the incredible diversity of living things yet to be discovered. Moreover, it underscores the importance of preserving habitats where these organisms can survive, perhaps to be discovered by the next generation of observant naturalists and backyard scientists. Our native hollies are a part of that habitat.

With hundreds of promising larval foodplants in my holly collection here in the Coastal Plain of Delaware, have I ever seen the Holly Azure? Yes, almost certainly, among the hundreds of little blue azures in my yard, some of which were actually ovipositing on my hollies. Can I prove that identification to anyone's satisfaction? Absolutely not.

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Institutional HSA Certified Holly Arboretums/Test Centers

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The Tyler Arboretum
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Ilex × 'Nancy'



Jim Resch

Institutional HSA Certified Holly Arboretums/ Test Centers Annual Reports

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2022 Reports Available

Link from Members Login Landing Page

ARBORETUM HIGHLIGHT

Heartwood Nursery & Environmental Preserve



Sue Hunter



Sue Hunter

Heartwood Nursery located in Felton, Pennsylvania near Maryland Line, is preserved through the Farms & Natural Lands Trust of York County, Pennsylvania. The property consists of 70 acres, with a 35 acre mature hardwoods tract and 35 acres of wholesale and retail nursery stock where a significant portion has been reforested with native species indigenous to the area.

Display gardens are incorporated throughout the immediate sales area. Stormwater management areas have been created to reduce rainwater runoff and soil erosion. Pollinator meadows have been created to increase habitat for birds, pollinating insects, bats, and wildlife. Focal points within the reforested area include a mature grove of over 225 Serviceberry (*Amelanchier canadensis*) trees, Pawpaw Orchards, and collections of large, uncommon specimen trees and shrubs, most notably hollies. Specializing in American holly (*Ilex opaca* and other *Ilex* species) production, Heartwood Nursery is proud to be an Official Holly



Sue Hunter

One gallon *Ilex opaca* 'Miss Helen'

Arboretum and Test Center registered with the Holly Society of America. Propagation is performed on site, using locally collected seed and cutting wood. Additionally, Heartwood Nursery propagates Historic and Witness Trees for the National Park Service and other well-documented trees for local parks and preservation organizations. Events at Heartwood are held throughout the year. These include the annual Serviceberry Festival held every Father's Day weekend, educational presentations to schools and garden clubs, and a Holly and Winter Solstice Festival. We are longtime participants at the Mid-Atlantic Nursery Trade Show held every January in Baltimore, the Alexandria, Virginia, Native Plant Sale, the Penn State Extension Agency Spring Native Plant Sale, the York County John Rudy Park Native Plant Sale, the York County Pawpaw Festival - Horn Farm Center, and Indian Steps Museum in Airville, Pennsylvania.

At Heartwood Nursery, the majority of the plants you find are native to this region. We strive to teach and educate on the importance of planting native plants, as this is a stepping stone in preserving and restoring the ecosystem native to this area. Native plants provide environmental benefits that many of the non-native or genetically modified varieties cannot fulfill. Many varieties that are not the native or straight species, have been modified to be more pleasing to the human eye. While this benefits you and your garden, often times they lose their

role in the environment and do not produce the same environmental benefits. This could mean producing less nutrient-rich berries for birds, or developing an invasive growing habit that competes with other plant species in the area. Making the switch to native gardening offers a great learning opportunity for you while also taking part in helping to protect and preserve this ecosystem. Native plants sold at Heartwood are "straight species". This means they have not been genetically manipulated to change their appearance or benefit to pollinators and birds. Names in quotes after plants and American hollies in particular are selections from naturally occurring wild populations. Selections are the straight species, the selection name refers to a characteristic or other noteworthy information about that particular plant.

Hollies are one of the most unique, diverse groups of plants in nature. From a single focal point specimen to a formal hedge row or an informal mass planting, there are hollies for every garden or landscape. While most species are evergreen and retain their leaves year round, there are deciduous hollies that lose their leaves in the fall, leaving brightly colored drupes (berries) on bare stems for us to enjoy during the holidays. All hollies provide food and shelter for dozens of species of birds, particularly our native hollies, *Ilex glabra*, *Ilex opaca* and *Ilex verticillata*. There are many outstanding selections of native hollies. Selections are not cultivars which are varieties genetically modified by horticulturists. Selections are the "straight species", therefore their progeny from seed are the straight species.

Pollinator meadow



Sue Hunter

Heartwood Nursery has registered and introduced the following selections: *Ilex verticillata* 'Mary Jo', *Ilex opaca* 'Liberty Belle', *Ilex opaca* 'Uncle Sam', *Ilex opaca* 'Sundown', *Ilex opaca* 'Forest Totem', and *Ilex opaca* 'Hunter', in this issue. See page 19.

Sue Hunter
Owner ~ Heartwood Nursery & Environmental Preserve
President ~ Holly Society of America
Plant Propagation and Production Adjunct Professor ~
Community College of Baltimore
Plant species Identification Specialist ~ York County Pennsylvania
Farms & Natural Lands Trust

Display garden and upper Holly Orchard



All Photos: Sue Hunter

Upper Holly Orchard



Wreath making



Springtime at Heartwood



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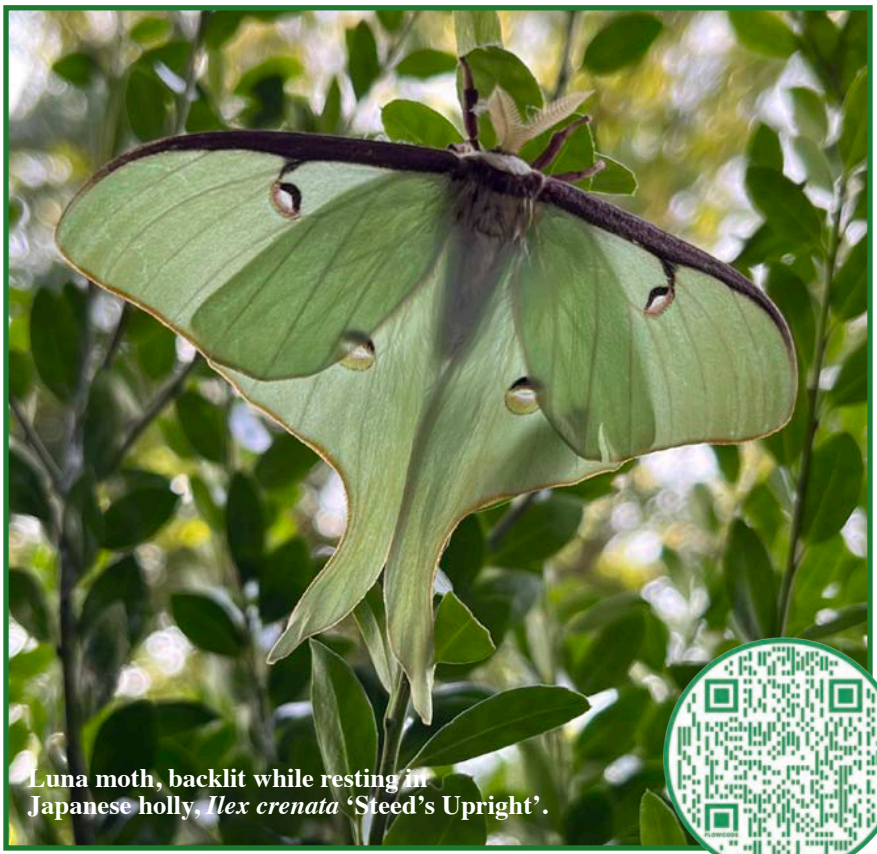
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Membership is open to all interested individuals. Membership in the Holly Society of America is a great way to meet other gardening and horticultural enthusiasts. The purpose of the Holly Society of America, Inc., is to stimulate interest, promote research, and collect and disseminate information about the genus *Ilex*. You will enjoy two *Journals* each year and access to the Members Only web pages. Commercial/ Institutional Memberships have additional benefits.

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Jim Resch

Luna moth, backlit while resting in Japanese holly, *Ilex crenata* 'Steed's Upright'.