

Stewardship Leaves

Forests for the Future

Newsletter for the New Jersey Forest Stewardship Program

Winter 2013-2014

The Hudson Farm Club: 2012 NJ Tree Farm of the Year

The Hudson Farm Club is located between Andover and Lake Hopatcong in Sussex County, NJ. The farm is about 3980 acres with 2700 forested acres in the Tree Farm Program. In 1904, railroad magnate John P. McRoy had a twenty-room estate house built here and a dairy farm with a herd of 50 Holstein cows.

In 1920, the property was donated to The Hudson Guild, a charitable organization, which ran a camp here. In 1921, creation of the Appalachian Trail was conceived in the estate house.

Today, the Hudson Farm Club operates the property as a private year-round experience for its members with an attractive shooting layout. Their foundation carries on the charitable tradition and has donated over \$7 million dollars to local charities since 2004.

For the Nestico NJ Forest Steward of the Year story see pages 5 & 6.



Forest Stewards Receive Awards at Tree Farm Day Outstanding Tree Farm of the Year



The New Jersey Outstanding Tree Farm of the Year award for Hudson Farm Club was accepted by Farm Manager Steve Polanish 3rd from left at the 2013 NJ Tree Farm Day. Others are Steve Kallessner, Greg Daly of the NJ Tree Farm Program and Heather Gracie-Petty. Kallessner and Gracie-Petty are Consulting Foresters with Gracie-Harrigan Consultants who developed the forest management plan for the farm.



Outstanding Forest Steward



Brian Cowden, manager of the Nestico Forest accepted the 2012 Outstanding Forest Steward of the Year Award for owner Michael Nestico, from State Forester Lynn E. Fleming at the 2013 Tree Farm Day.



Hay Road Fuelbreak

by Greg McLaughlin, State Forestry Services, Forest Fire Service

State Forestry Services converted Hay Road, a three-mile stretch of unimproved sand road between Warren Grove and Manahawkin in Ocean County, into an efficient fuel break.

The new fuelbreak lies in the Stafford Forge Wildlife Management Area (WMA). The 2,200-acre WMA is in a heavily forested portion of the Pinelands that has a long history of forest fires. Fuelbreaks can help prevent a forest fire from becoming a major tragedy.

Through this plan, State Forestry Services strategically assessed and reduced fuels in this area which closely borders communities. Hay Road meanders to the southwest of residential neighborhoods in Stafford, Barnegat, Eagleswood, and Ocean Townships.

The Hay Road fuelbreak is a protection plan case study. A private Approved Consulting Forester was hired to develop a multi-level forest stewardship and fuels management plan for the WMA. Through the Hay Road plan, State Forestry Services seeks to reduce fuels and protect rare plant and animal populations. The common silvicultural techniques used in this project include mechanical thinning, whole tree harvesting, and mowing in combination with prescribed burning. This combination helped to achieve multiple resource goals.

In May 2007, just as the plan was being completed, a fire in Warren Grove engulfed 17,270 forested acres. The fire destroyed five homes and damaged 13 others. In 2008, the plan was revised to reflect the impact of the fire. In 2009, forest activities began which developed the strategic fuelbreak incorporating Hay Road.

To date, State Forestry Services has thinned 500 acres of forest using whole tree harvesting and chipping. These activities reduce the possibility of fire reaching tree crowns and creating a raging inferno. Periodic prescribed burning of the fuelbreak reduces ladder fuels which could enable fire to climb into tree crowns. This 10-year ongoing project is the first on state lands to be carried out under a New Jersey state approved Forest Stewardship plan.



Before treatment



After treatment



Hay Road fuelbreak - right side treated

Grant for Landowners

If you haven't already applied for grant money to control southern pine beetle, there's still time. State Forestry Services and the NJ Forestry Association still have \$55,000 in grant money available. To qualify, your property must be south of Route 70 through Camden, Burlington and Ocean Counties and Route 530 in Ocean County. The previous round of grant money covered suppression activities but State Forestry Services has proposed that US Forest Service include pre-suppression (thinning), salvage and restoration to the activities qualifying for cost-share. In other words, if you don't have the beetle yet but want to prepare for it, you may still apply for the grant.



The actual award amount provided to each landowner will be on a needs or case by case basis and shall not exceed \$7,500.00. Private woodland owners who have an existing forest stewardship, prepared amendment(s) or develop a plan that specifically addresses southern pine beetle may be eligible to receive cost-share of up to 75 percent of the activities prescribed. Please contact the NJ Forest Service or your consulting forester for additional information and for an update on the status of qualifying activities.

After the NJFS reviews, visits the site and approves the application, which might also require a Pinelands Commission review, funds for the activities will be allocated. State Forestry Services will inspect the property after the activities are completed and give the okay to the Forestry Association to release obligated funds to the applicant landowner. The actual amount may be less than those obligated but not greater.

Emergency Forest Restoration Program

Due to the severity of Superstorm Sandy, Farm Services Agency (FSA) EFRP allocated cost-share funding to assist nonindustrial private forest landowners with salvage and restoration prescriptions in impacted areas. Eligible participants will be reimbursed up to 75 percent of the cost to implement the approved emergency practices. Landowner must live in one of the participating counties: Atlantic, Bergen, Burlington, Camden, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren. Salvage work is ongoing as long as needed.

FSA allocated approximately \$2,000,000 to the Garden State. Foresters reviewed the cost-share applications and have nearly completed on-site inspections to verify the site conditions of the property. Following site inspection, the application and needs determination is agreed upon or revised accordingly by the inspecting forester. The consulting forester prepares a practice plan to facilitate salvage and restoration that meets or exceeds state and federal requirements, where needed, and a plan for salvage of woody debris within the footprint of disturbance.

Landowners have two years to complete the prescriptions of salvage and restoration. Following completion, district foresters inspect the work for the release of funding. Many stewards have already commenced salvage and restoration operations.



Stewardship Plan Cost-share

Over 1,600 landowners now participate in the NJ Forest Stewardship Program (FSP), covering over 130,000 areas of nonindustrial private forest lands. Thank you and your consultant foresters for the continued growth of the program. Due to the overwhelming success of cost-share assistance in developing a forest stewardship plans, there is a backlog of stewards waiting for reimbursement. In order to 'catch-up' on the reimbursements, NJ State Forestry Services is doubling the amount of funding to the NJ Forestry Association to expedite your payment. We anticipate catching-up to those stewards waiting by fall of 2014. Furthermore, depending on funding from the US Forest Service, we plan on increasing the amount of funding to reduce the reimbursement time-frame. Thank you for your stewardship efforts and "Keeping Working Forests Working"!

Ash yellows

Ash yellows is a disease that is caused by MLOs (Mycoplasma-like organisms), that are believed to be transmitted by leafhoppers or similar insects. In 2013, the New Jersey Forest Service sampled seven ash trees across the northern half of the state, and tested them for ash yellows. Four samples came back positive for the MLO that causes ash yellows, and three came back negative. Trees that were selected had visual signs characteristic of ash yellows; dieback, witches broom, tufted foliage at the tips of branches, short internode growth, or shoots with simple leaves (not the typical compound leaf). This may be the first official record of the presence of ash yellows in NJ.



Symptoms of ash yellows are very similar to the signs of Emerald ash borer (EAB). Any ash showing signs of dieback or decline should be investigated further to rule out EAB before it is assumed the damage is caused by ash yellows. EAB has not yet been detected in NJ but is found in 21 states, including our closest neighbors, PA and NY.

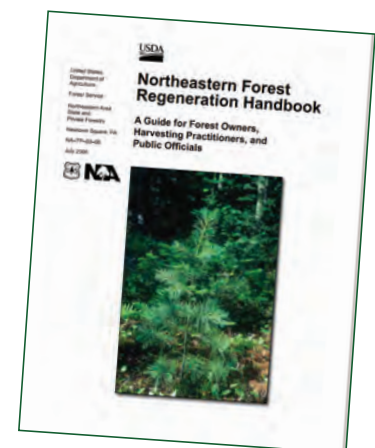
Forest Regeneration Handbook

Be sure to take a good look at the Northeastern Forest Regeneration Handbook: A Guide for Forest Owners, Harvesting Practitioners, and Public Officials. It reviews northeastern forests regeneration concepts, including the importance of disturbance.

It is full of useful information including the best silvicultural methods to use for regeneration of these species: Oak (*Quercus spp.*), Maple (*Acer spp.*), Eastern White Pine (*Pinus strobus*), Birch (*Betula spp.*), American Beech (*Fagus grandifolia*), Spruce (*Picea spp.*)

Request a hard copy of NA-TP-03-06 from:
USDA Forest Service
Northeastern Area State and Private Forestry
11 Campus Boulevard, Suite 200
Newtown Square, PA 19073

or download from www.nrs.fs.fed.us/pubs/8875



Forest Health



Michigan State University

Emerald ash borer

In 2013, USDA APHIS, NJDA and NJSFS deployed 250 purple prism traps statewide to monitor for emerald ash borer (EAB.) To date, no EAB have been detected in NJ. However, the NJSFS has an agreement with the Land Use Regulation Program for EAB suppression activities in wetlands, transition areas and/or flood hazard areas so long as an approved forest management plan for the property specifically addresses EAB, salvage, STS, suppression, and restoration with corresponding BMPs if and when EAB is detected in NJ.



National Forest Centre

Beech bark disease

Working with USDA Forest Service, State Forestry Services established eight beech plots across the state to monitor beech bark disease (BBD.) Four plots in northern NJ, three plots in central NJ, and one plot in the southern NJ. To date, BBD and scale have been detected in northern counties, only trace amounts of scale has been detected in central counties, and neither scale nor BBD have been detected in southern counties.



USDA Forest Service

Southern pine beetle

In 2013, southern pine beetle (SPB) impacted over 6,000 acres mainly in the southern half of the state. State Forestry Services continues to implement suppression methods to minimize and/or prevent the further spread of SPB north. In 2013, over 290 acres have been suppressed.



PA Dept of Conservation

Gypsy moth

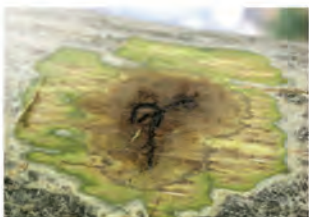
Although gypsy moth populations remain relatively low, they are on the rise. In 2013, over 2,800 acres were defoliated, which is more than double last year's defoliation acreage. No aerial spray program is planned for 2014 because of the low numbers of gypsy moth egg mass counts.



USDA Forest Service

Asian longhorned beetle

As of 2013, the Asian longhorned beetle has been officially declared eradicated from Middlesex and Union Counties. And in 2008 the Hudson County find was declared eradicated, so NJ is now free of this tree-killing beetle.



Colorado State University

Thousand cankers disease

In an effort to detect the walnut twig beetle, the carrier of thousand cankers disease, the NJ Department of Agriculture deployed eight Lindgren funnel traps in Mercer (4), Hunterdon (3), and Burlington (1) counties. To date, neither thousands cankers disease nor walnut twig beetle have been found.



USDA Forest Service

Hemlock woolly adelgid

In 2013, NJFS treated 69 hemlock trees on state DEP lands using either Imidacloprid or Dinotefuran. Treatments will continue next year in an attempt to reduce hemlock mortality from HWA. The NJDA has also been releasing the predatory beetle, *Laricobius nigrinus*, which has successfully overwintered in NJ and have begun spreading to new sites on their own.

Birds & Deer: Good Together in the Nestico Steward of the Year Forest

Michael Nestico, 2012 New Jersey Forest Steward of the Year, owns 117 acres with 92 forested acres on Sparta Mountain in Sussex County. Michael earned the award with the leadership of his forest manager Brian Cowden, a friend since they were in elementary school.



Consultant Doug Tavella with white spruce seedling. Wildlife brush pile in background.



Black birch stump of a tree with canker disease



Black birch retained as a wildlife den tree.



Cowden

Early successional coppice and other growth provide food, nesting, cover, and bedding for wildlife in small clearcuts.

This all began when Michael purchased the land and Brian was invited to hunt there. However, Brian found that, contrary to his expectations, the forest did not have many deer, bears, turkeys, game birds or even song birds. Michael knew that Brian was discouraged about the lack of hunting success. He also knew that Brian had years of outdoors experience and many natural resource contacts through Brian's work with Trout Unlimited, as coordinator of the Musconetcong Home Rivers Initiative. Nestico said, "Brian, why don't you do something about it?"

As a result, Brian contacted consulting forester Doug Tavella. With Tavella's guidance, they developed a Forest Stewardship Plan. Nestico also enrolled in the Farmland Assessment Program. Brian, Director of a hunt club, enlisted help from the club members, who are also longtime friends of Brian and Michael, for planting and light maintenance. With the help of the club, a logging contractor, a firewood cutter, natural resource colleagues, and Tavella, the Nestico forest has seen many positive annual changes since their Stewardship Plan was implemented 6 years ago.

Major goals of the plan include:

- create a more diverse wildlife habitat openings in the 70 to 85 year-old oak-hickory forest stands
- regenerate even-aged and uneven-aged forest stands
- restore evergreen habitat in areas lost to the hemlock wooly adelgid
- perform silvicultural improvement throughout the forest except in a small wetlands below a 14 acre lake on the property.

Brian Cowden said, "The thing I am most proud of is being able to create early successional forest habitat for birds and deer." He pointed out that there is a general lack of biological diversity in the forests of New Jersey. The forests are maturing after years of over-cutting. On the Nestico property clearcuts, he has already noticed the return of indigo buntings and other birds requiring openings in the forest for nesting, cover, and their fall food sources.

Nestico Steward of the Year Forest

So far, these steps have been accomplished:

Clearcuts

Three small clearcuts on a total of 10 acres designed to provide nesting, brood rearing, and a variety of food sources for golden-winged warblers, woodcock, and ruffed grouse; browse, bedding, and travel corridors for deer; and berry sources for bears.

Firewood

A total 200 cords of firewood and 15,000 bf of logs harvested from the clearcuts, and from seven acres of individual tree selection; 30 cords of firewood from forest stand improvement thinnings, and from follow-up salvage of firewood from tree tops and branches. The remaining slash was piled as wildlife habitat and protection of seedlings.

Seedlings

One-hundred to 200 white spruce or eastern white pine seedlings have been planted each year. Natural regeneration is nurtured. Abundant coppice reproduction of shrubs and trees is growing in the clearcut areas. Even thickets of shade tolerant maple-leaf viburnum, a favored shrub of songbirds, game birds, bears, and deer are thriving in an open clearcut area.

Trail system

An extended trail system has been opened and maintained. Wildlife travel corridors and access roads have been opened by harvesting. Nesting and den trees have been identified and protected.

Orchard

A small apple and peach orchard has been established and fenced for use by the owners and eventually by larger wildlife.

Invasive Plant Control

Invasive plants including ailanthus and barberry have been controlled. Garlic mustard is not much of a problem but Japanese stilt grass is the real challenge and is proving difficult to control.

Deer Control

Hunting club members work to provide control for the deer populations without having to build fences to exclude deer. The members also plant tree seedlings as required by the Stewardship Plan.

Acorns

White oak is a “do not cut species” on the property. These are favored for their acorns cherished by deer, bears, turkeys, squirrels and other birds and mammals. Brian does crown release thinning when surrounding species encroach on the white oaks. The black birch trees are usually infested with cankers so they are either harvested for firewood or kept as wildlife trees. Shagbark hickories are also “do not cut species” because they provide much needed habitat for bats.

Interpretation

Tours for organizations like the New Jersey Audubon Society and other environmental groups are conducted on the clearcut areas.

The Forest Stewardship Plan has led to positive changes in the Nestico forest. Brian’s trail cameras capture photos of bears and deer feeding on the property. These photo opportunities were missing some six years ago in the Nestico forest. Michael Nestico is indeed fortunate to have lifelong friends like Brian and the hunt club to devote their time, knowledge, and energy to improve the forest health and biological diversity of Nestico’s property.

Photos from Cowden’s trail cam:

A bear forages at night along the edge of a small clearcut area.

Deer family at a mineral lick in a travel corridor created in Nestico’s forest.



Exploring Friendly Trails on Brownstein's Beech Haven Farm

In Hunterdon County, on the high ground of the Hunterdon Plateau above Flemington, are two miles of trails in Glenn and Mary Brownstein's Beech Haven Farm.

The Brownsteins are winners of the 2010 New Jersey Tree Farm of the Year Award. The citation for their award includes:

“ They have accomplished a wide range of activities since 2002, including maintaining and expanding property access trails, which now cover over two miles, completing 17 acres of FSI thinning, expanding the forest through deer fencing, reforesting and maintaining one and a half acres of land that formerly was a fallow field, creating brush piles for wildlife habitat, protecting natural tree regeneration with custom made tree shelters, and participating in the Forest Stewardship Program and the former Forestland Enhancement Program (FLEP). ”

Glenn laid out these constantly maintained trails and stabilized some with red shale chips. The trails make it much easier to access their 37-acre forest for fire protection activities, hunting, and forest stand improvement (FSI). The access trails also facilitated salvage logging after a snowstorm when trees were snapped off. Glenn was further challenged, just as clean-up operations were done, when Hurricane Sandy toppled over many trees from the water soaked ground, root wads and all.

Their Forest Stewardship plan was written by consulting forester Chrissy Harrigan. She also helped guide the salvage operation carried out by logging contractor Butch Stryker. The most recent salvage sale throughout the forest yielded 2854 board feet of logs; and about 15 cords of firewood came from limbs and tops.



Salvage after Super-storm Sandy



Glenn and one of his white oaks estimated at 225 years old



Glenn made 30"x48" sturdy wire tree shelters.

Exploring Friendly Trails on Brownstein's Beech Haven Farm

Glenn is a metal fabricator by trade and has a long commute to his shop in Jersey City. He said "I can get back to Mother Nature here. This is my outdoor church." Glenn made 30 stout wire cage tree shelters which measure 30-inch diameter by four feet tall. He staked the cages into place to protect native oak reproduction from deer. The deer population is controlled by a select group of hunters who Glenn and a neighbor allow to hunt on their adjacent properties.

They have been active in mentoring and educating the public about the importance of forestry through tours and campouts for Girl and Boy Scout troops and by discussions with municipal officials. One example of the use of wood products from their own property is the flooring and surrounding molding on much of the first floor of their home. It was a long process to cut the 4 black and northern red oaks and mill them into lumber. These were then dried, planed, edged and sanded into 4 and 5 inch wide, pre-finished random-width flooring. A single yellow-poplar was made into baseboard moulding. A carpenter expertly fitted the flooring and moulding into place. The result is very attractive and practical flooring in the Brownstein's forest home.

Glenn has transformed their property, neglected by the previous owners, into Beech Haven, a forest with mainly oak, yellow-poplar, hickory, red maple and beech trees, into a working, accessible, woodland with seven distinct forest management stands. These are truly havens for the Brownstein family, their guests, healthier trees, and more abundant wildlife.



Glenn built two miles of access trails at Beech Haven.



Glenn estimates the diameter of his favorite beech tree



FSI thinning where 200 red maple saplings were removed

The Pineland Learning Center Stewardship Forest

What is unusual about this 63 acre property with 43 acres of forest in Cumberland County is that the Forest Stand Improvement, wildlife habitat brush piles, clearing access trails, firewood harvesting, tree planting, and special construction projects are all done by students.

They are from the Pineland Learning Center (PLC), a private school in Vineland for students with behavioral, social, emotional and academic challenges. The safe, structured, behaviorally managed environment at PLC helps develop the K-12 students and build life-long skills.

The agricultural/ forest property is owned by Frederick Eccleston, principal of PLC. It is about 20 minutes by school bus from the PLC Vineland campus. The stewardship forest activities are led by Agriculture and Science teacher Norman Lenchitz. His students perform forest improvement activities as prescribed in the Forest Stewardship plan prepared by consulting forester Craig Kane.

Deep in the PLC property stands a cabin the students built to be similar to the cabin Henry David Thoreau built in 1845 at Walden Pond in Massachusetts. The students worked together to build this simple cabin. They built it with hand tools from "found" wood for the studs and rafters, slabs from a local sawmill for siding, windows salvaged from an 1850 structure, and used recycled brick and flagstones for the flooring. Adults used new material to shingle the roof. The total cost of about \$850 in today's dollars was similar in value to the \$28 Thoreau spent.

Thoreau's reasons for living in the forest included illustrating the benefits of a simplified life style. He also planted a small garden. PLC

students regenerate the forest by planting pines, oaks, and walnut trees and tend the forest to provide space for healthy trees to grow. Thoreau's water source was Walden Pond. The PLC student drilled a 23-foot well for their drinking water.

Thoreau cut firewood for cooking and warmth. The students occasionally warm hot chocolate and heat the on-site garage/classroom with the firewood they have cut with bow saws to 18 in. long pieces from the trees they have thinned. They use invasive vines to make holiday wreaths decorated with holly, berries and cones from their forest.

A student said, "You have to earn the right to come here." Those that do, get to work several hours during the week in the outdoors environment. Here the students learn to work together in harmony, practice the safe use of basic hand tools, learn basic skills useful in employment, and to always be courteous to others.

We watched three boys as they unloaded a farm wagon of firewood and stacked the pieces in a sturdy pile for drying overwinter. They stood apart to toss pieces one at a time along their line from the wagon to the stack. One said, "We learned to work well as a team. It's fun. Mr. Lenchitz teaches us lots of things."

It is obvious that the students, the forest environment, and wildlife are all winners in this forest.



Access trails built by students



"Thoreau" cabin built by PLC students



Students prime the pump to draw water from the well they drilled.



Consulting Forester Craig Kane and PLC teacher Norman Lenchitz



Students use teamwork to haul, pass along, and stack firewood.

The Granskies: Out in the boondocks



The Granskies plan to enroll in the Farmland Preservation Program

A stately American sycamore stands guard to the right as you cross the small bridge over Huff's Brook. As you proceed up the hill past the farmhouse, you are truly in the boondocks for "Boondocks" is the name of Melissa and Buck Granskie's Forest Stewardship Farm.

Melissa's mother still lives in the farmhouse that Melissa's late father rebuilt in the 1960s after her grandmother said, "No granddaughter of mine will grow up on a dirt floor." Melissa grew up in the renovated house and frolicked in the swimming hole in Huff's Brook, rode the horses, and had the run of woods and hayfields.



Sycamore at the farm entrance



Melissa and Buck with Saurland Mountain in the distance.

Today Melissa and her husband Buck live nearby in Flemington and greatly enjoy going to the "Boondocks" and working in the forest stands. Melissa said, "It's our own little spot and we love sharing it with our friends. This is my legacy."

The farm covers 103 acres including 49 acres of forest, 53 acres of fields and a one acre homestead. Their 2003 Forest Stewardship Plan was updated this year by Les Alpaugh of ForesTree Consultants. The forest is divided into 8 stands varying from 1.3 acres to 12 acres in size. With the help of Stryker Forest Products, they have removed, severed or chemically treated many of the invasive plants and vines and made forest stand improvement thinnings in many of the eight forest stands.

The Granskies: Out in the boondocks

Examples of work done:

In Stand 1:

- Vines severed on walnuts and other crop trees.
- Basal area reduced from 120 to 90.
- Non-native trees removed or treated with herbicide to create den trees.
- Firewood cut from thinned trees. Invasives mowed or treated with herbicides.
- Species managed include, black walnut, sugar maple, a few oaks and red maples.

In Stand 8 and 8a:

- Melissa's father planted eastern white pine here 55 years ago.
- Under the previous plan, the pines were thinned.
- Then Hurricane Sandy blew down or broke off 80% of the pines.
- The Emergency Forest Restoration Program (EFRP) may help replanting.
- Some of the broken pines are left as nesting sites for pileated woodpeckers.

Buck regularly mows many invasive plants including Japanese stiltgrass, Russian olive, Japanese barberry and multiflora rose with a large tractor. He cuts and splits 4 to 5 cords of firewood per year and keeps trails open. Buck has many skills including masonry, painting, and carpentry and has rebuilt many of the farm buildings and in September poured a concrete floor in the hillside barn.

Buck and Melissa put forth a great deal of energy to maintain their forest and farm and they both love the peace and quiet. This property means so much to them, that they are in the process of enrolling in the Farmland Preservation Program. They want to assure that the legacy that Melissa's late father began will remain as a working farm and forest in Somerset County.



Buck and Melissa walk an access trail on the Boondocks Farm



Buck just split one of many cords of firewood

Can you identify these problem insects?

Larva

Adult

Clue

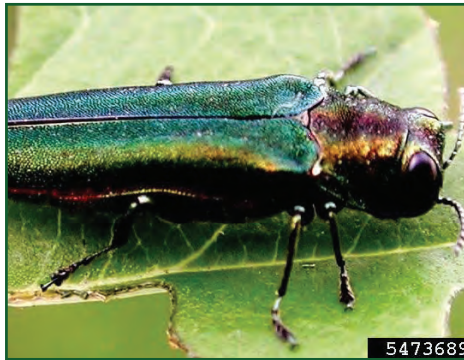
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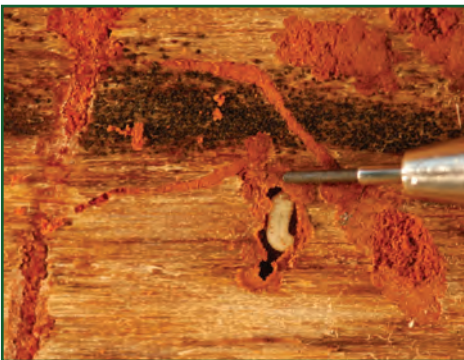
B



C



D



Insect answers

A. Sirex woodwasp B. Pine shoot moth C. Emerald ash borer D. Southern pine beetle

photos: bugwood.org

Editor's Log | Mockernut Hickory

Article and wood photo by Charles J. Newlon

Mockernut hickory, *Carya tomentosa*, has the largest buds of any hickory. Its leaflets are hairy underneath and are aromatic when crushed.

Other common names include: white hickory, bigbud hickory, bullnut, and hognut hickory.

The outer husk "mocks" the size of the fruit of other hickories that have bigger nuts and bigger kernels in their husks. The tree is scattered through northern New Jersey in mixed oak forests. It is the most common hickory in the uplands of New Jersey's inner coastal plain and sometimes in the southern reaches of the Pine Barrens. The buds are larger than any other hickory and they look like red tulips when swollen in early spring.



Value to Wildlife

Very important to wildlife. The nuts are 10 to 25% of the diet of several squirrel species. Nuts and flowers are eaten by wild turkeys and several song birds.

Squirrels, black bears, foxes,

rabbits, and raccoons eat the nuts. Its leaves are food for Luna and Giant Regal moths.

Uses by Native Americans

The Cherokees used the astringent inner bark as dressing for cuts and chewed inner bark for sore mouths. Choctaws "scattered leaves to drive away fleas." Delawares took an infusion of bark for "general debility." Early American colonists reported that Indians pressed the nutmeats into "a fine oylie."

Uses by Colonists

The tough wood was used as barrel hoops, wicker chair bottoms, and baskets; oil from the nuts was used as a fuel for lamps; and black dye was made from the bark by boiling it in vinegar.

Uses Today

Mockernut has better bending and crushing strength and stiffness of any other hickory. Main use is for tool handles, rough lumber, and as excellent firewood. Hickory chips are used extensively for barbecuing and smoking meats.



Illustration by
Barbara J. Newlon

Characteristics

Size

Medium sized tree, 40 - 80 ft. tall, 1 - 2 ft. dbh. Max. 145 ft. tall x 4 ft. dbh.

Shape

Trunk normally straight, little taper. In forest usually no branches about one-half of its length.

Leaves

Alternate, compound leaves 9 - 14 in. long, with 7 - 9 leaflets. Upper leaflets 2 - 3 times larger than leaflets below. Yellow fall color.

Buds

Large terminal bud 1/2 to 3/4 in. long.

Flowers

Male: 4 - 5 in. slender 3-clustered catkins. Female: 2 - 10 clustered on short, hairy spikes.

Fruit

Oval or ball-shaped. 1½ - 2 in. Hard, 1/4 - 3/8 in. thick husk splits nearly to base.

Bark

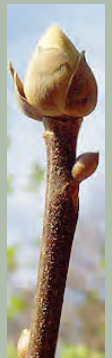
Never shaggy. Light gray, tight irregular furrows.

Wood

Strong and heavy. Heart wood, brown. Sapwood, white.

Hardiness Zones

Zone 4 - 10. Prefers fertile bottomlands. It can exist on poorer soils and rather dry sites.



photos: bugwood.org

2014 Calendar of Events

Winter Full Moon Hike

February 13, 2014 — Friday 7:00 p.m.

Evening family hike
Forest Resource Education Center,
370 East Veterans Highway, Jackson, NJ 08527
732.928.2360 or forestrycenter@gmail.com

NJ Division SAF Annual Meeting

January 29, 2014 — Wednesday

Register by Jan 24, 2014
Topics include Farmland Assessment
Rutgers Eco-Complex, Bordentown, NJ
Lori Jenssen, 908.832.2400 www.njforestry.org

NJ Forestry Association Annual Meeting

March 1, 2014 — Saturday 8:30 a.m. - 4:30 p.m.

Register by Feb. 26, 2014
Cook Campus Center, Rutgers University
New Brunswick, NJ Contact:
heather@gracieharrigan.com, 906.781.6711

Spring Stewardship Field Tour

May 31, 2014 — Saturday 8:30 a.m. - 3:30 p.m.

Register by May 20, 2014
Pineland Learning Center's Forest, a Pallet Mill, stewardship forest,
and a chainsaw artist, Vineland, NJ Lori Jenssen, 908.832.2400
www.njforestry.org

Tree Farm Day

June 6, 2014 — Friday, 8:15 a.m. to 3:30 p.m.

Meeting place to be announced
Contact: Dave Finley, njfs.south@comcast.net
or Dennis Galway 908.696.9133 for reservations



FARMLAND ASSESSMENT DEADLINE

August 1, 2014 — Friday

Contact your local tax assessor, consultant,
or regional forester for information.

Full Moon Hike

August 8, 2014 — Friday

Evening family hike
Forest Resource Education Center,
370 East Veterans Highway, Jackson, NJ 08527
732.928.2360 or forestrycenter@gmail.com

NJ Wild Outdoor Expo

Sept. 12 & 13, 2014 — Saturday & Sunday

10:00 a.m. to 5:00 p.m.
Collier's Mills Wildlife Management Area,
Michelle Smith 609.259.6961
michelle.smith@dep.state.nj.us

Fall Forestry Festival

Oct. 4, 2014 — Saturday, 10:00 a.m. to 3:00 p.m.

Forest Resource Education Center,
370 East Veterans Highway, Jackson, NJ 08527
732.928.2360 or forestrycenter@gmail.com

4th Woodland Stewards Program

Oct. 23-26, 2014 — Thurs eve. to Sun. afternoon
YMCA Camp Linwood MacDonald, Sandyston, NJ
Lori Jenssen, 908.832.2400 www.njforestry.org



New Jersey Forest Stewardship Program
NJ Department of Environmental Protection
State Forestry Services
Mail code 501-04 PO Box 420
Trenton, NJ 08625-0420

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Stewardship Leaves Forests for the Future

NJ Forest Stewardship Program Newsletter
Editor Charlie Newlon, Certified Forester
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Articles and photos by the Newlons, unless otherwise identified.

Please send questions, comments, or ideas for future articles to:
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