

Hedgerows

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Support Local Land Conservation

Help Washington Township “Go Native”

The Washington Township Land Trust is creating a program to reintroduce native trees to the local environment. To get this started, we will need your help.

If we do this now, there will come a day when we can walk among American Chestnut trees, Persimmon Trees, and even meander through a Pawpaw patch. The choice of plant material to reintroduce is endless, but we plan to start with these few trees. This year we will be planting the Pawpaw, next year the Persimmon, and the following year the Chestnut. Our first planting site will be the Mill Pond Park which is situated along the South Branch of the Raritan River in Long Valley; this 28 acre park is along Patriots Path and is easily accessible behind the old Welsh Farms property.

If you would like to be part of “going native” we ask that you sponsor a tree or trees. Sponsors will be listed on our website and also in our LaTourette Grist Mill in downtown Long Valley. To sponsor a tree, we request a donation of \$35.00. The trees will be planted in appropriate locations throughout the park.

The Pawpaw is highly deer resistant and we expect great success with this planting.

Please help us go native and consider sponsoring a Pawpaw.



Photo by Mark Krautmann

The earliest documentation of Pawpaws is in the 1541 report of the de Soto expedition, who found Native Americans cultivating it east of the Mississippi River. The Lewis and Clark Expedition depended and sometimes subsisted on Pawpaws during their travels. Chilled Pawpaw fruit was a favorite dessert of George Washington, and Thomas Jefferson was certainly familiar with it as he planted it at Monticello. The Ohio Pawpaw Growers' Association lobbied for the Pawpaw to be the Ohio state native fruit in 2006; this was made official in 2009.

source:
<http://en.wikipedia.org/wiki/Pawpaw>



Pawpaw tree (top), flower (top right), fruit (lower right and foliage (below).



Photo by Kirk Pomper

Pawpaw Facts

- The American Indian is credited with spreading the pawpaw across the eastern U.S.
- The Pawpaw is the largest edible fruit native to America
- Bees show no interest in Pawpaw flowers
- The task of pollination is left to flies and beetles
- The Pawpaw is the **only** larval host of the Zebra Swallowtail Butterfly
- A powerful anti-cancer drug has been isolated from the Pawpaw and is currently being tested.

Pawpaw photos courtesy Neil Peterson of www.petersonpawpaws.com

Find more news and information at www.wtl.org

Mission Statement

The Washington Township Land Trust was organized to protect and preserve the ecological, cultural, and historical integrity of the areas that contribute to and enhance the rural character of Washington Township and its environs. The Trust also promotes public interest in conserving land for open space uses in harmony with the natural environment and acquires interests in land by purchase or donation. It also manages land and property easements for the benefit of the public and educates the public to be stewards of the land.

2009 OFFICERS

PRESIDENT

Keith Hayes
908.876.4603

VICE PRESIDENT

Karen Richards
908.832.7005

TREASURER

Chris Steffan
908.832.9603

SECRETARY

Caryl Brackenridge
908.876.4478

NEWSLETTER

Paul Krylowski
908.832.6936

MILL OFFICE

12 East Mill Rd.
Long Valley, NJ 07853
908.876.5986

Pickin' up paw-paws, put 'em in your pockets, Way down yonder in the paw-paw patch.



It is just a line from a children's song, and I guarantee that it does not make any sense to the children of Washington Township; but if we had a paw-paw patch, then maybe it could. So, why don't we have a patch?

Pawpaw (*Asimina triloba*)

The Pawpaw is native to the woodlands of the eastern U.S. It is found as far north as New York, as west as Nebraska and Texas and as south as Florida. In January of 2009, the Pawpaw was named as the native state fruit of Ohio. John James Audubon even painted the yellow-billed cuckoo on the branches of a Pawpaw tree. All this, and most New Jerseyans only have a vague knowledge of this tree from the traditional children's song "Way down yonder in the Pawpaw Patch". Even then, most people would stare in bewilderment at the fruit if it were right in front of them.

Found most commonly near creek banks and river bottoms in the understory of broadleaf forests of the eastern United States, the Pawpaw is a small deciduous tree whose large, droopy leaves and slender branches give it a tropical appearance; the leaves are often up to 12 inches in length. It is a deciduous, often narrowly conical tree growing from about 12 feet to 20 feet tall. The trees are prone to producing root suckers extending outwards from the trunk. With these suckers, the Pawpaw patch comes into being.

Velvety, dark brown flower buds develop in the axils of the previous years' leaves. They produce maroon, hanging flowers up to 2 inches across. They bloom from March to May depending on the variety and the environment. The blossom consists of 2 whorls of 3 petals each, and the calyx has 3 sepals. Each flower contains several ovaries, which is why a single flower can produce multiple fruits. The tree is not pollinated

by bees, but is visited by blowflies and carrion beetles. These are attracted to the flowers because of the slight rotting flesh smell that they give off. Serious growers of Pawpaws have been known to hang raw pieces of meat near the trees to attract the flies. This is not necessary but could result in a higher success rate with the pollination.

The Pawpaw is the largest edible fruit native to America; individual fruits weigh 5 to 16 ounces and are 3 to 6 inches in length. The fruit usually has 10 to 14 seeds in two rows; the brownish to blackish seeds resemble dark colored lima beans. The fruit is best eaten when it becomes soft and even starts to develop black spots; it is ripe when it looks like it should be discarded. Pawpaw fruit ripens in the late summer or very early in the fall. When ripe, it is soft. The skin of the

Recipes

Pawpaw Pie

1 c. sugar
1 c. milk
1 egg
¼ tsp. salt
1½ c. Pawpaw pulp (peeled and seeded)
Place all ingredients into a sauce pan and stir together. Cook over medium heat until thickened. Pour into an unbaked pie shell and bake until the crust is done.

Pawpaw Cookies

1½ c. Pawpaw pulp
¾ c. shortening
1⅓ c. sugar
1 egg
3 c. sifted flour
1 Tbsp. baking soda
1 tsp. salt
¼ tsp. ginger
¼ tsp. allspice
1 tsp. nutmeg
1 tsp. cinnamon

Cream the shortening and sugar thoroughly. Add beaten egg and Pawpaw. Stir in the dry ingredients, which have been sifted together, and mix well. Form into small balls and place on cookie sheet. Press into round flat shape with the bottom of a glass that has been lightly greased. Bake in a moderate oven about 15 minutes.

The Zebra Swallowtail Butterfly *Eurytides Marcellus*

The Zebra Swallowtail is a beautiful, distinctive butterfly found throughout the Eastern United States. Its larva feed exclusively on the leaves of the Pawpaw and therefore can only be found where the trees are present. The swallowtail has a wingspan of about 3" to 4"; they tend to be largest at the end of the season. The wings are a distinctively black and white striped, resembling the stripes of a Zebra, with a prominent splash of red at the base; below this is a subtle hint of sky blue. The butterfly will feed on the nectar of various flowers.



The Zebra Swallowtail undergoes complete metamorphosis, this includes 4 stages; Egg, larva (caterpillar), pupa, and adult.



The eggs are small and pale green, they will hatch into a green caterpillar with one black stripe and many yellow stripes. Most swallowtail larva have a gland that gives off a strong odor when they are disturbed. The Zebra Swallowtail has this gland on its neck; it is used to repel predatory flies and wasps that will try to parasitize the caterpillars with their young. The caterpillars will feed on the young leaves of the Pawpaw until they turn into a pupa which is the transformational resting stage before emerging as a butterfly. The pupa is attached to a twig by a silken thread. Upon maturity, the pupa will crack open and out will emerge the distinctive butterfly. From egg to butterfly takes about one month.

Bringing the Pawpaw and the Zebra Swallowtail back to our area would be a great benefit to the native diversity of our town.



Pawpaw tree photo courtesy Neil Peterson of www.petersonpawpaws.com

green fruit lightens in color as it ripens and often develops blackish splotches, which will not affect the flavor or edibility. The yellow flesh is custard like and highly nutritious. At present, Pawpaws are a local treat wherever they are found, shipping them any distance is nearly impossible since they are very soft and will only keep for a few days.

Amazingly, the tree is avoided by deer, which find the leaves and twigs extremely distasteful; they will only eat fruit that has fallen to the ground. This deer resistance allows the planting of Pawpaws in unfenced yards and open tracts of land. Unfortunately, collecting the fruit, when ripe, will be a battle with the opossums and raccoons that may beat us to the fruit. However, with luck, there will be enough for everyone.

A desirable and unique insect that does feed on the Pawpaw is the Zebra Swallowtail butterfly. This is a black and white swallowtail with a touch of red and blue at the base of the wings. The caterpillars of this butterfly feed exclusively on the Pawpaw; they should be encouraged since they do only minor damage to the foliage. The Zebra Swallowtail would be a welcome addition to the local environment.

The local habitat is ideal for the reestablishment of the Pawpaw. The WTLT has the perfect location with the Mill Pond Park, along the South Branch of the Raritan River, behind the old Welsh Farms property. With a serious tree planting effort, we can all be Pickin' up paw-paws, and putting them in our pockets, Way down yonder in the Mill Pond Park paw-paw patch.

The Blowfly

The relationship between pollinating flies and flowers is an ancient one, dating back over 100 million years. Fossil evidence reveals that flies and beetles were the primary pollinators of the earliest flowers, instead of today's honey bee. Bees had not evolved into this role until much more recent times.

Blowflies are often an attractive blue or green metallic color, leading to the common names of blue bottle and green bottle flies. Larva of most species are scavengers of carrion and dung and most likely constitute the majority of the maggots found in such material. Adults have the ability to smell dead animals from almost ten miles away.



Photo by:
L. West/Bruce Coleman Inc.

The blowfly starts as a tiny whitish egg; there can be just a few or very many laid in a cluster. These are always laid upon a carcass or dung. Upon hatching, the larva, which is commonly called a maggot, will molt three times before reaching the end of the larval stage. It will then drop to the ground and burrow beneath the soil and turn into a pupa. The pupa is a dark brown or black and about 16mm long. After about one week, the pupa opens and the adult fly emerges. Depending on the climate, the development from egg to adult can be as little as 10 days or as long as 4 weeks. There may be up to 8 generations in one year.

Certain flowers are pollinated by flies and have special characteristics to attract the flies. The obvious one is smell; not all flowers smell like roses, the scent of decay is often used to attract pollinators. These flowers tend to be reddish brown in color, like meat. They also often point downward.

The blowfly is the primary pollinator of the Pawpaw. The flowers of the Pawpaw emit a lightly decaying smell, they are a brownish red color and they hang upside down on the branches. The blowfly is not as good a pollinator as a honeybee and the Pawpaw usually has a modest fruit set. Growers have been known to place rotting meat near the trees during the blooming season to increase pollination. While not very pleasant, it does make sense.

Washington Township Land Trust Presidents Report 2008

Fundraising/Public Relations

Wine Tasting: On April 12, the WTLT held its third wine tasting event. The wine venders were provided by Peapack Fine Wines and the food was provided by Valley Restaurant.

50/50 Raffle: This years raffle raised over \$1000.00 for the Land Trust. The winning ticket was purchased by Eileen Stokes and given to her son Andrew. A picture of Keith Hayes presenting the check to Andrew was in the Black River News.

Newsletters: The land trust published 3 newsletters this year.

Parks

Eagle Scout Project: For his project, Brian Dickson will be labeling trees, clearing and marking trails and he will prepare a map of Mill Pond Park.

Mill Pond Park: This summer, invasive weedy underbrush was removed by John Battista and his brush hog. John spent a week in the "Christmas Tree Farm" area doing an impressive job of removing an impenetrable tangle of tangled growth.

Boyle Property Easement: This project is moving forward and we should have this easement in 2009.

Clean up day at Crystal Springs Park: Tim Warrener, Keith Hayes, helped the Hunterdon County Park Commission build small board bridges over the beaver dams and cleared multiflora rose around the ponds.

Welsh Farms: In the summer, we posted the WTLT signs on Fairview Ave along our new acquisition.

Lillis Property: This property closed in January preserving 151 acres in total. We were asked to participate in this project by the Morris Land Conservancy. Tim Morris contributed a great deal of work to this project.

Mill

Volunteers/Labor: All work was performed by 2-3 Land Trust volunteers and 14 Community Service workers who were assigned to our project by the Morris County Probation Department and required to serve between 40 and 180 hours. Unfortunately, only 3 of them had any carpentry skills.

Tasks: The unskilled performed various maintenance tasks, depending on the season.

Outside included: planting flowers, weeding, raking leaves, washing windows, and cleaning debris out of intake arch and turbine area.

Inside included: sweeping sawdust and cobwebs, washing windows, moving and stacking piles of wood, and one of the most fun jobs...cleaning up bat droppings in the attic.

The following were the major accomplishments for the year:

- 16 floor joists installed on the 2nd floor between the 4th and 5th bents
- Additional sheathing milled and installed on the north wall
- Window sash installed in the north wall windows on the 1st floor
- Sewer vents on the 2nd floor and in the attic boxed in
- Railing added around stairwell on 2nd floor
- Attic window frames fabricated and installed in north wall
- Stone mason consulted about crack developing in the intake arch
- Tours given, including a large tour for SPOOM and T.I.M.S. (Society for the Preservation of Old Mills and The International Molinological Society)

Washington Township Land Trust Annual Membership:



Individual \$25 Family \$35 Business \$100

NAME _____

STREET _____

CITY _____

STATE _____

ZIP _____

PHONE _____

EMAIL _____

Donation (optional).

I wish to donate \$_____ for Land preservation Mill restoration work

*Make check payable to: WTLT
PO Box 4
Long Valley, NJ 07853*

*Volunteers and Professional
Services Needed. Contact any
WTLT officer for details.*



Washington Township Land Trust

PO Box 4
Long Valley, NJ 07853-0004

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