

Three Apples in The Honorable John Jay's Eyes

*"The apple grows so bright and high
And ends its day in apple pie."*

Hoffenstein

By Elizabeth (Neil) Wattles

IN THE YEAR 2009, THE GARDEN CLUB OF AMERICA (GCA) CREATED A FIVE-YEAR PROJECT TO "Preserve the Past and Grow the Future." The theme was "Trees, Our Living Legacy." All clubs in GCA were to propagate trees to celebrate GCA's 100-year anniversary in 2013.

The Rusticus Garden Club decided to propagate three different cultivars of apple trees which the Honorable John Jay, first Chief Justice of the United States and one of America's principal Founding Fathers, had in his orchard at his 18th-century home in Katonah, NY. The apple cultivars are *Malus domestica* 'Esopus Spitzenburg', *M. d.* 'Yellow Newtown Pippin', and *M. d.* 'Rhode Island Greening'. The goal was to propagate enough grafted plants to install apple trees of all three varieties in an orchard restoration project at the John Jay Homestead.

Our first year, 2009, was a bust. I couldn't locate understock or scions in time to graft them. Workshops began in 2010—a much better year. Members of the Rusticus Garden Club first learned how to graft using the 'side-cleft grafting' technique, which allows the union of a living rootstock (understock) with a smaller branch (scion) of the desired cultivar. The grafting must be done during the late winter months when both understock and scion are dormant, before they push new growth.

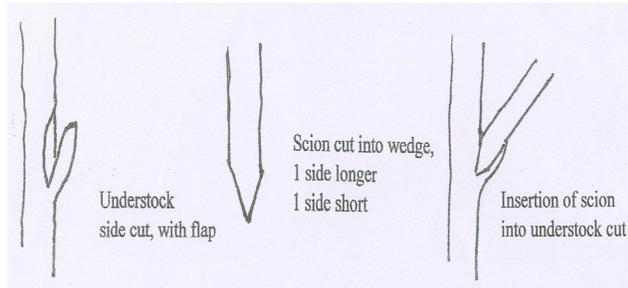


Figure 1.

Since rootstock is a living tree with roots, we first planted each understock in a tall pot. We then selected a scion (a woody piece of the desired cultivar) that, as close as possible, matched the diameter at a place on the understock. We conquered our initial fear of cutting ourselves and made a long cut about 3/4" long in the side of the understock, slicing down the bark, almost parallel to the planted understock itself. (See Figure 1.)

Then we made a wedge on the bottom part of the scion and inserted it into the cut part of the understock, the longer side against the stock, being careful not to break off the bark flap from the understock cut. The shorter side of the wedge had the flap of bark pressed close to it, the cambium layers matching up on both the understock and scion. Both sides of the wedge should fit snugly into the cut

with no white parts of the cut showing on either side.

Most of the time, the understock with its cut and the scion with its wedge stayed together. The next step was really tricky! We had to wrap a piece of grafting rubber strip around the

graft tightly to keep the parts bound together. The rubber strip will stay on the graft until it falls off naturally—in 4–6 months.

Some members grafted one tree, some did two, the more ambitious grafted three or four. After each graft was in place, the



Both scion and understock growing leaves.



Scion stock.



A grafting rubber strip must be wrapped around the graft.

participants put long plastic bags over their grafted trees and tied each bag to the understock. This kept the grafts moist. As the grafting was done in late February and March of 2010 and 2011, each person took their trees home and kept them inside until the



Author's nursery bed, Winter 2012.

danger of frost was past. When new growth appeared on the understock and scion, the bags came off.

These babies were either kept in their long pots until the end of May, then planted in their home gardens (in semi-shade) or kept longer in their pots until vigorous growth was apparent. All were fed and watered well and protected from deer browsing.

As time went on, any new growth on the understock below the graft was removed. The tops of the understock were also pruned away to stimulate growth of the scion. Unfortunately, the trees did not all survive the winter. So, in 2011 at the end of February and early March, we grafted twelve Yellow Newtown Pippins and twelve Rhode Island Greenings, since none of these varieties survived from 2010.

On September 2, 2011, I planted ten grafted apple trees in my nursery bed. August was either 90° or raining. On August 28, we had tropical storm Irene. No fun for anybody. Before that, on August 18, deer jumped into the nursery and ate every single leaf off the twelve Esopus Spitzenburgs. I used deer spray weekly thereafter. New growth appeared in September. All was fine. Our members had



Planting the final product.

successfully grafted five R.I. Greenings and nine Yellow Newtowns.

During 2012, we did not graft any more trees, as they would be too young to transplant to the John Jay orchard come 2013.

Those of us who had success with our grafted trees made sure that we removed any new growth from below the graft and pruned cross branches. The members whose trees thrived and grew for the few years were very happy with their success. The deal was that if they had more than one tree of any cultivar survive, they would contribute it to John Jay's orchard. A few had lovely contributions.

Finally, April 15, 2013—the big day came! We made rebar posts, cut lengths of 6'-high fencing stakes, and then laid in mulch and compost—all was ready!



Deer fencing around each tree.

We had located one of John Jay's original orchard sites, laid out a plan, and gotten permission from the State of New York to restore it. John Jay had several other fruit orchards at this home, including cherries, peaches, and pears.

A fabulous arborist, recommended by one of our members, came to my house with his crew to dig and transport the trees to the John Jay Homestead. Members who had trees to offer brought them, too. Many Rusticus Garden Club members came to help with the installation and all had a great time!

Thanks to everyone involved, the project was done. Fenced, fed, mulched, and watered, we could go home. Now for the maintenance, which is ongoing. We installed donut-shaped Treegator® watering bags



The new orchard resting and growing peacefully.

around each tree. As the bags are filled with water from a hose, a few small openings in the bottom of them slowly leak water into the soil, watering fairly well. They were filled at least twice a week for the summer and fall.

Over the next three years, Rusticus Garden Club members will care for them. We planted five of each cultivar, 'Esopus Spitzenburg', 'Yellow Newtown Pippin', and 'Rhode Island Greening'.

Now, as the year 2014 draws to a close, all of the trees are growing well.



Elizabeth (Neil) Wattles gardens on 10.5 acres in Waccabuc, NY, originally part of a 2000-acre dairy farm settled by the Mead family. The home was built in 1880, one of the five original Mead houses. Her principal interest is plant propagation, then growing them on for others to enjoy.

Neil taught art and science to inner city children in an after-school program in New Haven, CT, for ten years, prior to which she was a potter and taught at Skidmore College.

Neil is on the Steering Committee of the Native Plant Center at Westchester Community College, Valhalla, NY. She is a member of HPS/MAG; the North American Rock Garden Society, Hudson Valley Chapter; and the Herb Society, New York Unit. She is a member of the Rusticus Garden Club (GCA), serving as Horticulture Chair for many years. For the Garden Club of America, she has been both Horticulture and Judges Chairman for Zone IV (New York State).

Grafting trees is a relatively new happening, beginning seven years ago. Teaching members of her garden club how to do it was even more fun!

To learn more about the Rusticus Garden Club, www.rusticus.org, and the John Jay Homestead, www.johnjayhomestead.org, visit their web sites.

Ed Note: All pictures provided by the author. For a full-color version of this article, go to the HPS/MAG web site, www.hardyplant.org.