One Hundred Years of Blueberry Cultivation at Whitesbog
(thanks to White, Coville, and Sooy)

by Richard Prickett

This year we are celebrating the contributions of Elizabeth C. White, Frederick V. Coville, and Ezekiel Sooy in the "improvement" of the big delicious blueberry we all enjoy eating today. One hundred years ago White's bog produced the first commercial crop of blueberries from bushes whose parents were selected by Frederick Coville for their ability to produce big, blue tasty fruit. The first bush Coville selected was found on a farm in New Hampshire which he named the Brooks after the owner of the property. According to Coville it took him "three summers of cursory observation" and "three weeks of diligent search in the summer of 1908" to find this plant. At the Department of Agriculture in Washington D.C., where he worked, Coville was able to grow, experiment, and determine the needs of the highbush blueberry plant, the summary of which, in 1910, he published in a booklet he titled 'Experiments in Blueberry Culture'. This publication revealed that highbush blueberry (Vaccinium corymbosum) cultivation required moist, peaty, aerated, acid soil and a cold dormancy period to be successful. The common practice at that time, of sweetening the soil with lime or using manure was found to be harmful to blueberry bushes.

Elizabeth C. White read the booklet and reminisced with her father J.J. White, the owner of White's bog, discussions they had on growing blueberry bushes that would produce big uniform berries that would complement the cranberries they grew. Cranberries grow in wetlands and the vast surrounding areas were considered wastelands because there was not a crop at the time that would grow there. They agreed that Elizabeth would write a letter to the Department of Agriculture offering the use of White's bog to further the investigation into the cultivation of the highbush blueberry. In 1910, Elizabeth C. White lived with her family at Fenwick Manor in New Lisbon, New Jersey. Today Fenwick Manor is the home of the New Jersey Pinelands Commission where the public can visit and walk the grounds of this historic site.

On February 4th 1911, Frederick V. Coville came to White's bog to evaluate the White's offer. That summer Zeke Sooy, a berry picker who lived in Browns Mills, N.J. took Coville to his favorite blueberry bush that produced berries even bigger than those Coville was seeking. Coville wanted to come back in the Fall to collect a part of the bush, but Sooy ripped a sucker from the ground and said you can't kill a swamp blueberry. Wrapped in damp newspaper, Coville took the plant back to Washington, D.C. where he grew the plant and cross-pollinated the 'Sooy' bush with the 'Brooks'. The seeds contained in the blueberries that were produced from the cross-pollinated flowers were germinated and grown in Department of Agriculture greenhouses for a year and then transplanted in the Triangle and Washington fields at White's bog. The thousands of plants were most likely transported by train from Washington, D.C. to Hanover Station and then carried by (continued on page 2)
horse and wagon to White’s bog, located just a few miles away.

Four years later, in 1916, the first commercial cultivated crop of blueberries was harvested. That year Coville wrote in a National Geographic article that “Blueberries are as different as individuals”. With that thought in mind Frederick Coville and Elizabeth White carefully evaluated the fruit produced on all the bushes planted at White’s bog that were produced from the ‘Soo’ and ‘Brooks’. They found two bushes that produced fruit that they concluded would be improved blueberry varieties, meaning they grew in clusters that would be more profitable to pick and were bigger, bluer, and tastier, making them more desirable for the consumer. These special bushes were named the ‘Pioneer’ and the ‘Katharine’; the latter named after Coville’s daughter who cross-pollinated blueberry bushes for her father during one summer. The next step was to propagate or clone those bushes and plant fields full of these new varieties.

In 1922, a crop of ‘Pioneer’ blueberries was harvested. These berries were much more uniform than those collected in the wild, and superior to their siblings (that were harvested and marketed in 1916) that also came from the cross-pollination of the ‘Soo’ and ‘Brooks’. All of the plants from this cross were destroyed, except the two selected by Coville and White which they called the ‘Pioneer’ and ‘Katharine’. In 1916, and updated in 1921, Coville published ‘Directions for Blueberry Culture’ which contained instructions for people throughout the country on how to grow and “improve” blueberry bushes from their vicinity. Coville provided “improved” blueberry bushes to try out to Agriculture Stations throughout the country, even as far away as Alaska. J. J. White Inc. the owner of White’s bog used Coville’s directions to propagate the improved blueberry bushes Elizabeth C. White and Frederick V. Coville identified, as well as those outstanding varieties found in the wild such as the ‘Rubel’ and ‘Harding’ to sell to the public. Many of the people living in the Pine Barrens had limited incomes due to the closing of iron furnaces and the seasonal nature of cranberry picking. Coville wrote in 1921 that blueberry culture “not only promises to add to the general welfare through the utilization of land almost valueless otherwise, but it offers a profitable industry to individual landowners”. The many small and large fields of blueberries still found throughout South Jersey are evidence that the promise of blueberry culture came to fruition.

The nursery business was much more profitable than selling blueberries as indicated by the size of the propagation complex at White’s bog and the variety and volume of beautiful brochures that were sent out. The first, small four section propagation structure was framed, braced and covered with white muslin material that shaded the blueberry bush clones from the sun. It is thought that plants for the first field of ‘Pioneer’ improved blueberry bushes were propagated in this structure through tubering. It was located behind the Darlington House and is illustrated in Coville’s ‘Directions for Blueberry Culture’.

The new White’s bog General Store was built in 1924 to accommodate the needs of a thriving blueberry and cranberry plantation, and also handled all of the blueberry bush brochures sent out and orders received. As a result, the Postmaster General authorized a new post office to be housed in the store and to cancel the mail with a new Whitesbog Rural Station postal stamp. From then on the facility was called the Whitesbog General Store. The Whitesbog General Store is still open to the public on the weekends from 10:00 a.m. to 4:00 p.m., February through December.
In 1925, Coville published a report on the effect of aluminum sulfate on acid-loving plants. He determined that applying aluminum sulfate to the soil maintained the acidity needed by blueberries and other Pine Barrens plants by removing calcium carbonate from the soil. With this knowledge, Elizabeth White was able to add more acid-loving plants including trailing arbutus, climbing fern, pine barrens gentian, holly, and franklinia to the commercial Conservation Nursery based at Whitesbog.

In 1927, Elizabeth C. White was one of the founders of the Tru-Blu Blueberry Cooperative based in New Lisbon, N.J. This organization helped local farmers grow, market, and sell their crops of blueberries. By 1931, there were more than 30 farmers that were members of Tru-Blu. Frederick Coville’s son, Stanley Coville, was the manager of the cooperative for many years and his office and home can still be seen in New Lisbon.

Coville and White frequently spoke on radio shows, at garden clubs and in front of large audiences. They were interviewed by reporters and wrote many articles promoting the highbush blueberry. Much of their robust record on the “improvement” of the highbush blueberry is available today on the internet. Coville's last publication ‘Improving The Wild Blueberry’ appeared in the Yearbook of Agriculture in 1937, the year he died. Coville spent the first half of his career working to restore the vast sweet (alkaline) grasslands in the West, damaged by sheep and the last half of his career developing the highbush blueberry in the vast sour (acid) wastelands in the East.

In 1951, Elizabeth White, at the age of 80, was the founder and President of Holly Haven Inc., a nursery located near Whitesbog and Hanover Station (which at that time was called Upton Station). The nursery sold specially selected varieties of wild holly and other acid-loving plants to the public. The company's office was located at Suningive, which was Miss White’s home at Whitesbog, built in 1923.

Many of the varieties of holly found at the nursery can be seen today while visiting Whitesbog Village. Elizabeth C. White died at Suningive in 1954, and was known as the Blueberry Queen.

Miss White’s property with her home and garden as well as the restored Village of Whitesbog can be visited from dawn till dusk every day. There, the public can trace the steps of White and Coville as they worked to bring the “improved” blueberry to the public’s diet, beginning with the sale of the first commercial crop of blueberries harvested hundred years ago. ■

The Whitesbog Preservation Trust hosts activities in and around the historic structures familiar to White and Coville throughout the year.

The Annual Whitesbog Blueberry Festival is being held on June 25th and 26th this year, and we invite you to join us in the celebration of the Centennial of the Cultivation of the Highbush Blueberry.

Footnotes
The Saga of the White Cranberry Sorter

Avid readers of the Newsletter may remember several mentions of the White Cranberry Sorter [1, 2], the most critical point about which was that the last known White Cranberry Sorters were used at the Thompson Family Farm, ‘The Birches’, around the 1960s. Dating back to 2008, Tom Darlington and I intended to visit Mary Ann Thompson, and see about whether any parts were still extant. Tom was far more of an expert on these machines than anyone else, and at one time had several fragments (sorter channels) from these machines. But I think even he had not seen an intact, functioning unit. Tom died rather untimely from a heart attack in mid-2008, and the project was left in limbo.

In about 2010, your intrepid editor inquired with Mary Ann as to whether I might come and look for the aforementioned sorter parts, and after a bit of scheduling, I showed up and was given free rein to explore her sorting house. The upper level of the Thompson barn was almost a museum in itself with all manner of cranberry sorters, cranberry cleaners, Darlington dry harvesters, and cranberry crates. The Thompson sorting house is a building dating back to, I would guess about 1900, and had copious amounts of dust and mouse droppings probably dating back equally far. But explore I did and armed with patent drawings of the White cranberry sorter I was able to locate pieces of the machine. Locating these pieces was a bit like Dorothy finding the Scarecrow in the Wizard of Oz. Pieces were everywhere. Some of the more technical and finely mechanical pieces were in a rather precarious loft accessed only by stepladder. Others were stacked up on overhead shelves hung from the roof rafters. Some of the gears were hung on spikes nailed into the rafters. There were iron rods with wooden disks spiked with dowels; long spiral screw drives of various sorts, beveled gears, large geared wheels, and thousands of what I came to call “sorter amulets”, little, vaguely cross shaped units made of copper and steel that acted as tappers in the “channels”. One real treasure I found was the endplate of a hopper with the patent date and the manufacturer, The Trenton Pattern Works, listed. As I worked my way through, I marked anything that I was convinced was a sorter part with orange flagging tape. All told, parts were distributed over five or six localized sites, both high and low, in a hundred foot long area. Having flagged these pieces, I reported back to Mary Ann and told of my discoveries. I asked about getting the parts for the Trust. Mary Ann was not however willing to part with these pieces easily. Over the next year or so, I asked her several times about getting the parts, by donation or otherwise, and she always voiced indecision about doing so. She loved her old machines, and I think she always had in mind that she herself would do something with them. But they were nonetheless, just unassembled, scattered pieces and not complete machines; a jigsaw puzzle at best. Several calamities intervened in my quest to acquire these pieces; in a storm, the loft holding many of the parts collapsed, and most of the parts originally residing in the loft were put outside. Shortly thereafter, my technician and I spent a grueling, sweaty summer afternoon sorting through all the items from the loft, and identifying sorter parts, and after doing so, Mary Ann said she would have her guys return them to the building. It was only months later that I realized that such was not the case. The parts were covered by a leaky tarp, and were left outdoors for a year or more.

Mary Ann Thompson had an unexpected stroke during a meeting of the Cranberry Marketing Committee in Massachusetts in September of 2015. She was airlifted to a hospital in Boston and died three days later.

After several weeks I drove to the Thompson farm to see if anyone was around. I found Bill Silcox, a fellow who had worked for Mary Ann for a number of years, and

Manufacturer’s plate attached to a hopper end-panel.
explained to him my interest in the sorter parts. He told me I was free to look around, but that any decision about the parts would be up to Fred Wright, her cousin, who was handling the farm-related aspects of the disposition of the estate. My biggest fear was that no one would recognize these parts as anything more than junk, and they would simply be loaded into a dumpster, as was already being done with much of the farm “trash”. I recounted the cranberry house for the parts. It was only then that I found the pile behind the shed covered with the tarp. Wooden pieces had not fared too well, and were weathered, but still mostly intact. Iron pieces were rusty, but most of these were such hefty pieces that the rust amounted to mostly surface defect. Nonetheless, it was apparent that some parts I had noted previously were gone, never to be re-found. Most parts from other original locations were where I had found and tagged them previously. In searching, I found a new trove of pristine sorter channels stashed in a space between the office below and the steel roof above it, in area not more than about three feet high. The parts seemed to have been put there many years ago and a partial fiberboard “wall” prevented access to many of them (a wall that I would ultimately have to punch holes through to access and recover the parts). Ultimately, Fred said I could take the parts I wanted, since they were going to a non-profit, historic preservation organization.

All told, it looked like there were parts for two machines, based upon some brackets I had seen many years earlier, but it was truly like a jigsaw puzzle with other non-relevant stuff mixed in. In total, I made five trips with colleagues and filled the back of a covered Ford F-150 pickup truck each time. The problem with ultimately collecting the dismantled White sorter parts was two-fold - 1) I too, had never seen an intact White sorter, and 2) every photo of the sorter showed a slightly different construction. Thus, in the end, I couldn’t be sure that I had found all of the correct pieces. It was also quite likely that I had extra pieces that didn’t belong to the sorter, but were more generic iron gears, etc. of that era, but nonetheless, I had them; the Trust had them.

The pieces currently reside at the J.J. White Company, and we have high hopes of being able to reassemble at least one (and maybe two) fully functional machine(s). It is expected to be one of the showpieces of the Agricultural Museum. I’m sorry Mary Ann won’t be there to see it.

Footnotes


For those interested in a further perspective on the White Cranberry Sorter, reporter Kevin Riordan of the Philadelphia Inquirer wrote an article that can be found in the Philadelphia Inquirer archives of December 13, 2015.
Notes from the April 2016 Semi-annual Membership Meeting

The semi-annual membership meeting was held Sunday, April 24, 2016. As a result of previous bylaw changes, no elections occurred at this meeting, thus the meeting was an opportunity to update the membership on the status and changes occurring at Whitesbog. Perhaps the biggest new development was realignment and launching of several new committees. A few of the highlights:

The ADA (Americans with Disabilities Act) Committee (Sharon Goodman) – One of the initiatives of the committee is to make the village more accessible. One of the things they are exploring is the development of both an audio and video tour of the village.

The Archives Committee (Albertine Senske) – The Trust database was hacked last year and scans of many documents were lost. Albertine reported that all of these had been restored, and better back-up procedures implemented. A future initiative is the determination of how to make documents available online. Albertine also reported on the many people that have used information from the archives in the last year.

The Education Committee (Lise Mainor) – This is a new committee that appears to be aimed primarily at interfacing with local education facilities. Their start-up project is a poster/coloring contest associated with the centennial celebration for the Blueberry Festival.

The Building Restoration and Repair Committee (John Joyce) - John discussed repairs around the village, but especially highlighted the renovation work done on Building 10 (a worker cottage). John asked for and received approval for the authorization of $5800 to complete electric and internal finishing for the cottage.

The Finance and Fundraising Committee (Allison Pierson) – Allison highlighted the many avenues being investigated for generating new income including, merchandising, gallery fees, agritourism, weddings, and farm dinners. Allison also noted the Trust received a $4000 Special Arts Grant for the Blueberry Festival.

The Events Committee (Caroline Weigle) – Another new committee. Caroline has generated an updated events calendar, and the committee is investigating numerous potential events. The most interesting news was the return of the newer and better summer music concerts on weekends in August.

The General Store Committee (MariAnne Torres) – Mari Anne reported on success in securing staffing for the General Store. There was also a brief discussion of stocking Jersey Devil merchandise in the General Store.

The Interpretive Planning Committee (Rick Prickett) – The Interpretive Planning Committee is also relatively new, as a stand alone committee. This Committee has looked into self-guided village tours and plans to interface with the ADA committee. The Committee is involved in plans for Living History events, staffing for village tours, and planning for moonlight walks.

The Landscape Committee (Mark Sutarski) – Mark reported on plans for brush hogging in several areas and solicited potential volunteers to assist in the constructing a footbridge linking Suningive and the Triangle Field.

The Marketing and Communications Committee (Mark Ehlenfeldt) – Mark noted that most of the work of the Committee has revolved around highlighting Whitesbog for the Centennial and interfacing with the U.S. Highbush Blueberry Council. Some future events will be lectures in venues such as county libraries, activities at the Blueberry Festival, a presentation on “You Bet Your Garden” (WHYY), and an event with the Philadelphia Society for the Promotion of Agriculture.

The Membership Committee (Roni Detrick and Lise Mainor) – The committee is updating membership lists and has begun using “Constant Comment” to get regular notices out to members.

In Presidential Comments, John Joyce recognized J.J. White Inc. for their maintenance efforts around the village, and noted that many good things are happening with social media and photography exhibits since the arrival of our new Executive Director, Allison Pierson. He sees the Trust being reinvigorated and believes it is headed for exciting times.
May
14 Plein Air Competition Deadline
14 NJ State History Fair 10 a.m. - 4 p.m. On the Road Event
Visit Whitesbog at this year’s history making event at Monmouth Battlefield State Park, Manalapan. FREE. Suggested parking donation, $10 per vehicle.
21 Spring Celebration: Hiking, Birding, Photography & Botany! 10 a.m. - 1 p.m.
Join us at Whitesbog for a tour of Suningive Gardens, a walk throughout the village on a bird count and more.
21 Moonlight Walk 7 p.m.
Flower Moon. Listen to the night sounds of the Pines, learn about Whitesbog and experience the seasonal changes of the Pinelands. Walks are 3-5 mi. long, and led by experienced leaders. $5 donation/person, reservations requested.
21 Plein Air Competition Gallery Opening

June
4 WPT Volunteer Workday 10 a.m. - 3 p.m.
Have fun with friends, getting the Village ready for the Blueberry Festival, working in the gardens, repairing trails, and restocking the General Store. Lunch provided.
4 Whitesbog Village Tour 1 p.m.
Stroll the Historic Village, learn about Whitesbog’s history, and visit Suningive, Elizabeth White’s historic home, the worker’s cottages and other buildings of Whitesbog’s heritage. $5 donation per person, reservations required.$5 donation/person.
4 National Trails Day! 10 a.m.
a family fun day with a family friendly hike through the Nature Trail with an experienced leader from Hike It Baby and a family fun scavenger hunt. We will also have a 3-5 mile bog hike led by Pinelands Pathways and a Geocaching miniworkshop led by Pemberton Township Recreation. More details will be coming soon!!
12 Children’s Paint-along Blueberries! 1 p.m.
A fun canvas painting experience with local children’s librarian, Miss Theresa. $5 per participant, advance reservations required 609-893-4646.
18 Moonlight Walk 7 p.m.
Strawberry Moon. $5 donation per person, reservations requested. (See May 21 listing for details).

25 Everything Blueberry Gallery Opening
The winners of the Everything Blueberry Art Contest are exhibited in The Gallery at Whitesbog during the 33rd Annual Blueberry Festival, FREE.

July
2 WPT Volunteer Workday 10 a.m. - 3 p.m. (See June 4).
2 Whitesbog Village Tour 1 p.m.
$5 donation/person. (See June 4).
9 Summer Bird Count 10 a.m.
Hike with an experienced leader and count all the many types of birds that call Whitesbog home. Meet in front of the General Store at 10 a.m., no reservation required.
10 Blueberry Tasting Event Noon
Come for a tasting of multiple varieties of blueberries and explore the blueberry bushes in Elizabeth’s garden, Call for more information.
10 Members-only Blueberry Social 3:30 p.m.
Enjoy tea and blueberry treats in Elizabeth White’s historic Suningive Cottage. Members are welcome to bring a friend.
16 Moonlight Walk 7 p.m.
Buck Moon. $5 donation per person, reservations requested. (See May 21 listing for details).
17 Blueberry Living History Event 1 - 3 p.m.
Call or see the WPT website for more details!
19- 24 - Burl Co. Farm Fair – On the Road Event
Help us spread the word to the visitors to the Burlington County Farm Fair with our interactive display within the history tent during the fair.

► National Moth Week - July 23 - 30
There are thousands of moth species, as beautiful as their colorful butterfly cousins- and just as important to the ecosystem. Join the count - Free.
Whitesbog is administered by the State of New Jersey, Department of Environmental Protection, Division of Parks and Forestry as part of the Brendan T. Byrne State Forest.

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