



Whitesbog Preservation Trust

NEWSLETTER

2nd Quarter

www.whitesbog.org

2017

Birthplace of the Highbush Blueberry - Historic Center for Cranberry Innovation

A FEW WORDS ABOUT THIS PICTURE

An unusual flying machine that dusted crops at Whitesbog

by Mark Ehlenfeldt, USDA-ARS



Those of a certain age might quickly recognize this flying machine. This machine (or at least one of its brethren) gained lasting fame (?) as a vehicle for W.C. Fields in the 1933 movie 'International House'. Now, when I say those of a "certain age", let me emphatically say, I was not born anywhere near 1933, but old movies such as 'International House' played regularly on Saturday afternoon television when I was a kid. I remember seeing W.C. Fields flying such a rig and being amazed.

So, what is it? This picture shows a Pitcairn PCA-2 autogyro (or gyrocopter) in a photo that came from a collection possessed by Rutgers University Professor Paul Eck. I originally thought that this picture may not have been typical of anything at Whitesbog, but Tom Darlington himself, grandson of J.J. White and former President of J.J. White Corp. assured me a number of years ago that an autogyro flew at Whitesbog, and was used for crop dusting ... and Tom's word was good enough for me. I don't remember if he provided any details of duration or ownership, but the mere fact that Tom vouched for it was sufficient.

When Tom originally saw this picture, he wasn't sure if it was Whitesbog or not. And there the matter rested for a

number of years. However, a recent extended inspection I made of the photo made me begin to wonder. In the photo, two clues appear. One, a tall (and very poorly focused) structure that might be the Whitesbog water tower. The second, a series of uniformly spaced light-colored patches along the horizon reminiscent of the roofs of the Florence workers village. So maybe it really is Whitesbog after all. A second photo from the collection definitively shows the autogyro crop dusting on blueberries in an area that certainly looks very much like Whitesbog.

How does an autogyro work? The concept, in brief, is that the rotor is not powered. Rather, it is driven by air rushing underneath it due to the forward motion of the fuselage. At the same time, this rotation of the rotor provides a modest amount of lift. The need for forward motion means that take-offs of autogyros are not much shorter than that of normal planes, but that landings, once the rotor is active, can be very short due the combination of rotor lift and slow airspeed. It is reported that autogyro landings can even have zero forward roll under some conditions. Autogyros were steered by a joystick that allowed the rotor to be tilted forward-to-rear, and left-to-right for pitch and roll control. Yaw (in

(continued on page 2)



A Pitcairn PCA-2 crop dusting on blueberries. Probably taken at Whitesbog, New Jersey.

essence turning) was controlled by the tail rudder. Notice in the photo, the vertical proportion of the tail rudder had to be reduced to avoid being hit by the rotor blades at slow or inactive speeds. At low speeds and at rest, the rotors were supplementally supported by cables from the rotor axle.

What was good about the autogyro? Firstly, they were **very** safe. The whole concept of the auto-gyro was to provide a non-powered rotor to generate lift that allowed the plane to fly at slow speeds without stalling (losing lift), additionally the autogyro could land without a motor in emergency situations. Juan de la Cierva, the Spanish engineer who built the first autogyro in 1923 indeed had just this in mind when originally designing his autogyro. In light of the fact that Tom's older brother, Joe, died in a plane crash at Whitesbog, the possibility that the family evaluated the

autogyro seems more than a remote possibility.

Tom said the additional value of an autogyro for crop dusting, was that the rotation of the rotor provided additional turbulence that helped distribute the applied dusts. I can't vouch for this, but this is what Tom told me, and I have no reason to doubt its truth.

Something further interesting among this set of photos is a detailed image of the dust dispersal mechanism on a somewhat different Pitcairn model. In preparing these notes, I scoured the internet, looking for similar images, to try to understand this better, and I can assure

you, there are no other photos like these to be found. But,

simply put, the dust distribution mechanism appears to have followed the lead of the main rotor itself. A passively driven propeller turned a shaft near a dust feed tube, and attached to the shaft was a disc-shaped housing with an impeller inside that propelled the dust to the open edges of the housing. Within this photo, but just barely included (at the top) is a dark nozzle from the engine exhaust manifold (recognizable



The dust dispersal mechanism mounted on the plane pictured on page 3.

from other photos of Pitcairn PCA-2s), which certainly would have further aided in dispersal of the dust.

A second photo corroborates this crop dusting mechanism as part of a Pitcairn autogyro rig. Although the specifics of this second photo are unknown, it shows a ground view of an autogyro with this mechanism beneath. The hilly, rolling background suggests Pennsylvania as a locale. None of the other photos showing autogyros performing crop dusting show such a mechanism, and it appears that a different, less visible, mechanism was used for dust dispersal in the locally pictured models.

Two more pieces of pertinent and interesting information: the autogyro had a relatively local connection. The patent holding company with exclusive rights to the autogyro was the Autogyro Company of America, of Philadelphia, Pennsylvania. (Yes, that's the way THEY spelled it - autogyro). Pitcairn Aircraft Company, the parent company of Autogyro Company of America, was located in Willow Grove, Pennsylvania, and this is where their autogyros were manufactured. It is reported that PCA-2s cost the princely sum of \$15,000 in early 1930's dollars (about \$275 K in today's dollars), and as a result, only 25 were ever produced.

Why don't we use autogyros today, you may ask? My guess is that based on their expense they were not economically viable in the long-run. Modern day crop duster/spray planes are often either low wing monoplanes such as Air Tractor Company models or Cessna AGwagons, or biplanes, such as the Grumman Ag Cat. Autogyros are still to be found, but are largely the province of hobbyists and recreational flyers ■

**Saturday Aug. 5,
8 p.m. to 12 a.m.**

Moth Night

*Visit different screening sites at Historic Whitesbog Village, as we get a close up look at the many moth species that call Whitesbog home. Enjoy light refreshments and the company of fellow moth enthusiasts.
FREE.*



**Sept. 2, Sept. 9, Sept. 16,
Sept. 23 & Sept. 30 at 6 p.m.**

Fiddlin' In The Forest Concert Series

Join us in the picnic grove, bring your dinner and enjoy the music stylings of local musical groups. Picnic tables available, but you can also bring your own chairs to sit back and relax under the trees for some summer music fun.

Age 12 & up, \$5 per person, children under 12 are FREE.



A Pitcairn PCA-2 possessing the dust dispersal mechanism pictured on previous page. The hilly, rolling landscapes suggests this picture was not taken in southern New Jersey.

Outstanding Women of Burlington County Awards

Every year the Burlington County Woman's Advisory Council presents awards for Outstanding Women of the County to honor women who have made a significant contribution as well as demonstrated their support for the women of our community. Award winners include mentors, role models, volunteers and advocates for other women. In addition, outstanding student scholarship awards are given that include the Celeste Arties award, the Elizabeth Coleman White STEM award, and the Alice Paul Champion award.



Alya Ahmad

The Celeste Arties Award recipient must show excellence in scholastics and leadership while serving as a positive role model for other young women through her interest in women's issues. The Elizabeth Coleman White STEM Award must also show excellence in scholastics and leadership as well as have an extensive interest in Science Technology Engineering and Math studies and hope to pursue STEM in her future educational endeavors. The Alice Paul Champion Award recipient, in addition to excelling academically, must take an active role in the identification and advocacy of key issues concerning women. The Alice Paul Champion Award is open to female high school seniors as well as to females who are returning to high education after a break or who are pursuing a bachelor's degree after completing an associate's degree at Rowan College at Burlington County.

This year's winners were honored at a banquet on March 30 in Cinnaminson, and included: **Mentorship:** Lucienne "Lucy" Beard of the Alice Paul Institute; **Volunteerism:** Dorothy Collins from the Delaware Valley Baptist Church; **Law:** Angie Gambone, a lawyer at Flaster/Greenberg PC; **Education:** Elisabeth White McCartney, a CTE Health Occupations teacher for Pemberton Twp. H.S.; **Community Service:** Reverend Dr. Patricia A. Phillips, a pastor and founder of Nothing but the Word Deliverance Church; **Celeste Arties Outstanding Student Award & Scholarship Recipient:** Olayemi Abiona, a student at Florence Twp. H.S.; **Elizabeth Coleman White STEM Award & Scholarship Recipient:** Alya Ahmad, a student at Lenape Regional H.S.; **Alice Paul Champion Student Award & Scholarship**

Recipient: Megha Bharadwaj, a student at Lenape Regional H.S.

It is with particular pleasure we salute Alya Ahmad, a senior from Lenape High School, who received the Elizabeth Coleman White STEM award and scholarship! On behalf of Whitesbog Preservation Trust, the members and volunteers we extend our hearty congratulations! Alya will be attending Princeton in September with a focus on bio-physics. ■



Photo credit Pam Smith

Whitesbog Celebrates Makers Day

Children from across the area enjoyed hands-on crafts, building and engineering projects at Whitesbog's first NJ Makers Day on March 25th. Part of a state-wide program to get students active in STEM (Science, Technology, Engineering and Math) learning, Whitesbog's program focused on farm engineering including the innovations and inventions of the cranberry and blueberry industry. The Pinelands Antique Engine Association showed off tractors and mechanical devices in their museum and The Cranberry and Blueberry Museum was open for families to tour. The Barrel Factory hosted a selection of work stations including a demonstration cranberry bounce machine with a crank kids could turn and watch cranberries bounce, a Rome village model-building station, a vintage tools station, kit building blocks, and a Native American rattle craft led by the P.I.N.E.S. program staff. Visiting businesses *Wheelies Bicycles* and *Benji and the Bandit Welding* had engaging activities for kids to learn more. Our parking lot stayed full all day with families taking advantage of the trails and stopping in the General Store. ■

Landscape Work Progresses at Whitesbog

by Terry Schmidt

In 2014, the Whitesbog Preservation Trust Landscape Committee under the guidance of Committee Chair Mark Szutarski received a grant from the New Jersey Department of Environmental Protection in the amount of \$17,419 to begin restoring the trails in and around Elizabeth White's home, Suningive. The initial plan included the restoration and rebuilding of the bridge linking Suningive to the 'Triangle Field', the rejuvenation of the overgrown trails behind Suningive, and connection of those trails throughout the area with bench seating and interpretation stations. Each of these ideas along with other thoughts about the area had been taking shape as the small, but dedicated group of volunteers began to cut back, clean, and formulate their plans for the site.

Volunteer work was required as a match for the grant monies, and there was money allotted for the purchase of much needed equipment that would assist with the tasks required to achieve our goals in the garden trails area. The most valuable purchase was the Billy Goat, a type of small brush hog that enables a trained staff member to maneuver through thick brush and vegetation instead of manually removing it as we had often done in the past. Other purchases included a weed whacker, shovels, rakes, pruners, and loping tools. We also purchased a new motor for the chipper-shredder. The chipper-shredder was purchased with a previous grant some years ago and continues to receive a workout providing mulch for the trails!

Work began (and continued!) in earnest. A small bridge network was constructed/installed by hearty volunteers, while others began the arduous task of removing the years of overgrown vegetation and the rejuvenation of shrubs that were planted by Elizabeth White so many decades ago. Footpaths were slowly re-established throughout the gardens and linked together by the new bridges. Trails were again connected. The cut vegetation was chipped and utilized as a base for the paths. Saplings and felled trees became the edging for trails. Every bit of material was put to re-use. In the meantime, the committee began

to choose benches to place along the trails and tools to assist with the work. In 2016, a native pollinator garden was established along the trail, dying trees/shrubs were removed, and shrubs were transplanted. Native seedlings were harvested and added to our plant sale at the Whitesbog Blueberry Festival.

With the grateful assistance of Joe Darlington and his staff, an area behind Suningive was cleared of weedy vegetation to provide us with an area for our mulch pile, trimmings, and vegetative waste and to provide a "picnic grove" for our lunch breaks and end of the day. Joe's crew provided us with cranberry chaff and cedar remnants from blowdowns. This material was put to use in constructing our bridges and as base on the trails. Two 30' tall Atlantic white cedars that fell in storms during the year were salvaged by our volunteers during 2016. They were limbed up and laid on the side road by Suningive until our crew was ready to move them into place for the building of the big bridge on the Blueberry Trail. The weekend of the big bridge installation was the crowning achievement of the year for our crew, complete with an official ribbon cutting ceremony!

Over the course of the last few years, the trails and gardens at Suningive have become a regular gathering place, not only on Volunteer Saturdays, but on other days as well. There is a personal sense of pride and guardianship that makes this area a place of refuge & social gathering for all who work there. It's not unusual to find volunteers, friends, or visitors spending quiet time on a trail bench, enjoying lunch in the picnic grove, or hiking along the trails for enjoyment. ■



Mark Szutarski, Daniel McBride, Allison Pierson, Terry Schmidt, Gianna Rivera, Tom Besselman, and Bernie Knaupp at the dedication of the new Blueberry Trail bridge.

WHITESBOG EVENT SCHEDULE

For more information call (609) 893-4646,
e-mail us at WhitesbogPreservationTrust@gmail.com
or visit us on the web at www.whitesbog.org.

July

23 'Photography of Elizabeth White' Opening at the Whitesbog Gallery 12 p.m.

23 Blueberry Living History Day, 1 p.m. - 4 p.m.
Visit all of the village's interpreted museums and historic landscapes, pick vintage blueberries, take a wagon ride and more. The Village will come alive with workers and residents from the 1920's. Call for details and to reserve. \$8 for ages 12 & up, \$5 ages 4-11, children 3 & under free.

August

1 National Night Out 4 - 8 p.m.
Pemberton Twp on the road event

5 Volunteer Workday 10 a.m. - 3 p.m.
Join our volunteers in outdoor or indoor projects in the village. You can choose from helping to clear trails and garden paths, lending a hand in the General Store or helping to organize our office cottage supplies for events! Everyone shares lunch in the General Store.

5 Historic Whitesbog Village Tour 1 p.m.
Stroll the Historic Village, learn about Whitesbog's role in history and visit Suningive, the worker's cottage and other museums & buildings that speak to Whitesbog's heritage. \$5 donation/person. Reservations requested by calling 609-893-4646.

5 Moonlight Walk 8 p.m.
Listen to the night sounds of the Pines, learn about Whitesbog and experience the seasonal changes of the Pinelands. All walks are 3-5 miles in length, weather permitting and led by experienced leaders. \$5/person donation, reservations requested 609-893-4646.

5 Moth Night 8 p.m. - 12 a.m.
Join us in Historic Whitesbog Village at different screening sites, enjoy light refreshments, and the company of fellow moth enthusiasts as we get a close up look at the many species that call Whitesbog home. FREE.

13 Blueberry Music Jam 11 a.m.
On the Porch of the General Store, all welcome to join in!

26 'Postcards from New Jersey', Show Opening 12:00 p.m.

Community Exhibit of Postcards from New Jersey, any age and any part of the state! Bring out your collection to share, an example to display in the Whitesbog Gallery or just come to enjoy looking at the diversity and historic value of postcards and handwritten notes. Postcard table exhibit from 12 - 2 p.m., all welcome to RSVP for table space at WhitesbogGallery@gmail.com. Exhibit runs from Aug. 26 - Sept. 23 and is optional to submit framed, matted, or sleeved postcards for hanging or table display (please include your contact information on each for pick up September 23 at 2 pm). Work can be dropped off Aug. 19

20 from 10-3 at the general Store or Aug. 26 in the Gallery from 10 - 2 p.m. FREE.

27 Blueberry Music Jam 11 a.m.

On the Porch of the General Store, all welcome to join in!

27 Bringing Nature Home Music & Craft Festival 11 a.m. - 5 p.m.
Rancocas, on the road event

September

Fiddlin' In The Forest Concert Series 6 p.m.
Sept 2, Sept 9, Sept 16, Sept 23 & Sept 30

Join us in the picnic grove, bring your dinner and enjoy the music stylings of local musical groups. Picnic tables available, but you can also bring your own chairs to sit back and relax under the trees for some summer music fun. Enjoy the tunes with your family, 12 & up \$5/person, children under 12 are FREE. For additional details visit www.facebook.com/whitesbog.preservationtrust/

9 Cranberry Harvest History 10 a.m.

Come into Historic Whitesbog Village to learn about the history of cranberry harvests from the beginning to today and then take a short walk into the experimental bog and practice a little dry harvesting! \$10/non-members, \$5 for members. Advance registration requested. Call 609-893-4646 or email WhitesbogPreservationTrust@gmail.com. Seating is limited.

9 Volunteer Workday 10 a.m. - 3 p.m.

9 Historic Whitesbog Village Tour 1 p.m.
(See August 5 for details)

9 Moonlight Walk 7 p.m.
(See August 5 for details.)

10 Arts in the Park 11 a.m. - 4 p.m.
Smithville on the road event

16 Whitesbog Open House 11 a.m. - 2 p.m.

Come check out what Whitesbog has to offer for school field trips, membership, volunteer programs and more! Stop in to see all of the new trails, restored buildings, museum exhibits, projects in progress and interactive and fun activities. Drinks and light refreshments provided. FREE.

23 Postcards of New Jersey Gallery Show 2 p.m.
Exhibitors Pick Up

23 Smithsonian Museum Day Live: Cranberry & Blueberry Museum 10 a.m. - 2 p.m.
FREE.

30 Everything Cranberry Gallery Opening 1 p.m.
Cultural, Historical, Ecological and Pictorial takes on the Cranberry by local artists and includes images from our archives. Open to Gallery members (email whitesboggallery@gmail.com to learn about joining) Show runs until Oct. 29.

The 34th Annual Whitesbog Blueberry Festival 2017

The 34th Annual Blueberry Festival held at Whitesbog Village on June 24th and 25th, 2017. Saturday dawned with a threat of showers, but soon cleared up to be a beautiful day, and Sunday was just plain beautiful. Both days provided some exciting new activities to add to the traditional family-friendly fair celebrating the birthplace of the highbush blueberry. Square dancing at the Music Stage was led by caller Sue Dupre and visitors danced around the Jersey Devil, accompanied by the music of the Accidental Jug Band. Visitors also participated in the painting of a mural by local artist Frank McShane, depicting some of the wonderful features of Whitesbog Historic Village including blueberry pies, worker's cottages, the water tower, Pinelands trees and birds and blueberry picking in the farm fields.

Blueberries were plentiful for the popular pick-your-own wagon tours and could be found in pints, pies, cakes, fritters, breads, jams and honey as well as in soaps, candles, t-shirts, tote bags, and many other handmade crafts by local artists. For those with a green thumb, plants were on sale for those who wanted to grow their own. Over 35 crafters and artists vendors joined us along with local non-profit history and environmental groups. There were two stages of live music, and over 16 musical performers kept the audience entertained. The Pinelands Antique Engine Association members hosted their annual tractor and engine displays along Whitesbog Road, as well as in the Antique Engine Museum. These guys also drove the tractor-pulled wagon ride tours of the bogs and the blueberry fields.

Delicious foods included Brother Bear's BBQ, Rita's Water Ice, Big Daddy's Chicken and Ribs, 3 Guys Rolling Pies, Karen & The Nut snacks and a sampling of wines from DiMatteo's Winery. Authors, historians and naturalists provided presentations in the Barrel Factory while historic reenactors and volunteers gave tours of the Cranberry & Blueberry Museum, the Worker's Cottage, the Ice House, the Cranberry Research Station, and Suningive, home of Elizabeth Coleman White, The Blueberry Queen.

The sponsors who help Whitesbog Preservation Trust keep hosting the festival every year included Geoscape Solar, Renewal by Andersen, White Dotte Dairy Bar & Grill, Pine Island Cranberry Company, Fred + III Blueberry Farm, Fall Creek Farm & Nursery, Central Jersey Equipment, Luxury Bath, Beneficial Bank, Deborah Heart and Lung Center, J.W. Jenkins and Sons Drilling, Pine Barrens Native Fruits, Joe Smolarski & Sons Plumbing and Heating, New Jersey Conservation Foundation, Red Lion Diner, Aspen Hills Healthcare Center, Dimeglio Septic, Paperdoor Designs and David & Terri Chiddenton and John & Rosanne Bornholdt. Funding has also been made possible in part by the New Jersey State Council on the Arts/ Department of

State, the National Endowment for the Arts and the Burlington County Board of Chosen Freeholders, Department of Resource Conservation, Division of Parks.

This annual festival is essential in supporting the community programs that educate visitors and allow the buildings and General Store to be open for tours and events throughout the year. The public support from festival proceeds and memberships sustains the work of Whitesbog Preservation Trust, preserving this unique National Historic Site for generations to come. Thank you to all who attended!



Some of the cheerful volunteers at the blueberry baked goods tent.



Vendors along the road to the Barrel Factory and the Blueberry & Cranberry Museum.

2017 Whitesbog Board of Trustees

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Board Meetings, Mondays at 6:30 p.m.,
 General Store (GS) or Suningive (SN)
 July 17 (GS), Sept. 25 (GS), Oct. 23 (GS), Dec. 4 (SN)
 Nov. 4, Gen. Membership Mtg., 12 noon, Barrel Factory

Staff

Allison Pierson, Director
 Jennifer Rubeo, Bookkeeper/ Assistant

Newsletter

Mark Ehlenfeldt & Allison Pierson - Editors

Committees - 2017

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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.



The Whitesbog Preservation Trust has received a General Operating Support Grant for the fiscal year 2017 from the New Jersey Historical Commission, a division of the Department of State.



Funding is made possible in part by the New Jersey State Council on the Arts/Department of State, a Partner Agency of the National Endowment for the Arts through a grant to the Burlington County Board of Chosen Freeholders.



The Whitesbog Preservation Trust has received a Recreational Trail Grant from the Department of Environmental Protection and the Federal Highway Administration for Trail Restoration & Enhancement during 2015 & 2016.



The 1772 Foundation, in cooperation with the New Jersey Historic Trust, has provided Whitesbog Preservation Trust with a Capital Preservation Grant for the repair and restoration of a worker's cottage.

The Mission of the Trust is to restore, protect and enhance historic Whitesbog Village, in order to preserve the White family legacy and to inspire audiences of all ages to experience:
 - the origins and innovations of cranberry and blueberry cultivation
 - the rich culture and unique ecology of the New Jersey Pine Barrens.



Visit our website: WWW.WHITESBOG.ORG or call: 609.893.4646



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