DEDICATED TO RESTORING THE AMERICAN

Chestnut Tree

The Indiana Chapter of
The American Chestnut Foundation

Volume 1 Number 1 **January, 2010**

Welcome to the newly revamped Indiana Chapter newsletter. It is our goal to print 2 a year in order to give our members a better idea of what is going on within our state's program.

One thing we really need from you - updated email addresses in order to save money on postage!! It is also an easy way to communicate quickly when we call a last minute work day.

Please email Sally Weeks at: weeksss@purdue.edu to update yours. Thanks!

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Message from the out-going President

It has been my pleasure to serve as President of the Indiana Chapter over the last 4 years, but they are not letting me off the hook! I am only switching gears a bit, and taking over the helm as Newsletter Editor.

Much progress has been made with our breeding program in just the last few years, and the excitement about blight-resistant trees is building across the Foundation. With a new CEO, Bryan Burhans, I believe this organization is only going to get better. If you can, try to make it to one of our meetings this year, and say hi to *Indiana's* newly-elected President—Bryant Marsh. He has been a member since 2003 and is *very* enthusiastic about the American chestnut tree!

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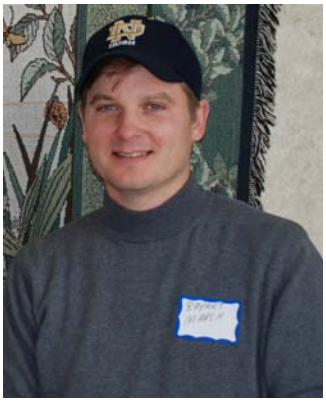


President's Corner
By Bryant Marsh

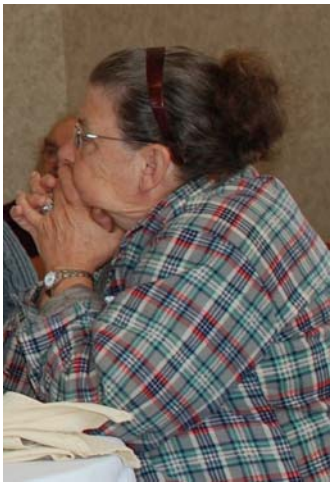
Hello,

My name is Bryant Marsh and I am the newly appointed President of the Indiana Chapter of the American Chestnut Foundation. I live in LaPorte, Indiana on a small hobby farm. I am the former Chairman of the Kankakee Valley Ducks Unlimited chapter, and an avid outdoorsman. I learned the story of the American Chestnut about 8 years ago while attending a weeklong class at the Great Smoky Mountains Institute at Tremont. I was fascinated with how the loss of one tree could have such an impact. Then I found out about the restoration project and had to get involved.

My goals are simple. Get Jim and Bruce the resources they need to get the job done. The next 10 years are going to be a very exciting time for our chapter. With our exciting progress there is going to be an increasing workload on the ground. To be successful we are going to have to grow as an organization not just in membership but volunteers as well. I think the project we are starting with pure American Chestnut out-plantings is a great way to get members involved. Please feel free to contact me anytime with questions or ideas to benefit our chapter.

Thank you,
Bryant Marsh
0062 W 700 S
LaPorte, In 46350
marshb73@yahoo.com

A BIG Thank You goes to Roberta Kick. She has been Indiana's first and only Treasurer since our Chapter began. Her diligence with our money gained us the maximum dollars in interest possible, and it is greatly appreciated!



THANK YOU ROBERTA!!

Do beavers eat American chestnut trees? They do in northern Indiana! Beavers putting together their winter stash of food found their way to my BC3F1 orchard, and cut down about 12 trees before I found the activity. We have already made our selections from that orchard, and I quickly put a cage around our best selection, which they did not get to. The trees they cut down were rejects that I was leaving for nut production for feed wildlife. Because I am considering using the chestnuts produced from these trees for a Roasting Chestnuts promotional idea, I drug some large dead trees between the marsh and the chestnut orchard hoping the beavers will not want to drag trees across trees. I enjoy the beavers in my marsh, but over the years, the score has become beavers 49, Wakeland

Jim McKenna hand-pollinating female chestnut flowers, then applying bags to prevent unwanted pollen grains from reaching them.

IN-TACF MEETING

Recorded by Jim McKenna for Lisa Worthen, Secretary
10/31/2009 Fort Benjamin Harrison, Indianapolis, IN

Sally Weeks presented the new IN-TACF brochure she and one anonymous donor have put together this year. The brochure explains the history of the demise of American chestnut, and what's been done to breed resistance and restore the species. Comments were made that some additional photos could make it better and that some better photos of inoculating trees in the breeding orchard.

Jim McKenna commented on the current years breeding efforts. From the 30 or so resistant BC3 trees rated last year at Purdue, the Jackson Washington State Forest, and the Goshen College, Merry Lea orchards, only 4 to 6 remain resistant enough to use as parents for BC3F2 crosses. Sara Fitzsimmons visited Purdue this summer and went out with Jim to reevaluate the trees which were inoculated last year. This type of reduction in the number of selections is not uncommon and other factors including the American chestnut look and character of the tree needs to be considered. Jim also said that 26 new pure American trees were successfully grafted last spring at Purdue. In addition, 800 pure American seedlings are available for the IN-TACF "reintroduction" plan described later.

Bruce Wakeland attended the TACF annual meeting in Pittsburgh, PA in October and reported on the meeting. TACF currently has about 5,000 members in total and is looking to expand to 30,000. Bryan Burhans, the new President and CEO of TACF, is leading this campaign with an idea he calls "branch meetings." A branch meeting is a dinner or cocktail party hosted throughout the range and promoted locally by the State Chapter where people can come and donate to the TACF while paying for dinner and receive a brief presentation by a Chapter member on what the TACF has done and the reintroduction program. Thus, some of the folks who attend may be inspired to join and help the effort. Bruce said that our Indiana Chapter has between 100 to 110 members and this level has been constant for a few years.

New Lab at Meadowview: A state-of-the-art research laboratory is being built at Meadowview, VA. The building has been budgeted at $650,000 and the air-ventilation system, designed to contain different fungal and other plant pathogens, is $250,000 itself. Bruce is going to make wainscoting for the hallway of the lab out of Indiana chestnut lumber he has.

Mike Saunders gave an update on chestnut research at Purdue. He said that Doug Jacobs has conducted an experiment this year looking at fertilization and soil pH effects on growth utilizing extra open pollinated BC3 seedlings. Doug also has a new PhD student, Kate Zellers, starting this year who will be working on this project, a chestnut competition study, and some new research involving chestnut on reclaimed coal mine sites. Mike Saunders has a MS student, Brian Bailey, working on American and BC3 chestnut regeneration research in Tippecanoe County near Purdue. Their research area is aimed towards natural regeneration following different forest management practices including: mid story removal, shelter wood, and deer and vegetation control. In this work, chestnut growth will be compared with growth of northern red oak and sugar maple. Mike Saunders also mentioned that a large multi-year National Science Foundation grant was being written to examine ecological factors of predation of seed and seedlings by wildlife under natural regeneration conditions. The project is proposed to begin in the spring of 2010 and will include test sites in Indiana, Tennessee, and Pennsylvania. Mike Saunders, as Chair of the IN-TACF Committee, provided an update on the IN-TACF reintroduction plan and discussed with the members in attendance a final plan for providing pure American chestnut seedlings to IN-TACF members this year and for the next several years before we have fully resistant BC3F3 seed. The plan calls for members to plant a mix of 4 species: Am. Chestnut; black cherry; tulip poplar; and white pine or sycamore. This mixed hardwood approach is popular with foresters in Indiana as it minimizes the risk of failure if just one species doesn't grow well. Additionally, competition of chestnut with other vigorous species can be compared. Last, if chestnut blight does infect the pure susceptible Americans later on, say ten years or more, the chestnuts can be thinned out. Conversely, if the chestnuts are thriving at 10 years, other less desirable specie scan be thinned out to make more room for the chestnuts.

We need to thank Mr. Bill Deeter of Plymouth for providing a great deal of the pure American seed. He, Bruce Wakeland, and researchers at Purdue all harvested seed again this past fall for 2011 seedlings. In cooperation with our INDR Forestry Nurseries at Vallonia and the HTIRC at Purdue, we have very nice 1-0 trees, about 4-feet tall on average, to plant this upcoming spring. Thanks to the IDNR Nursery at Medaryville, IN, in Jasper County, we will be able to create the packages of trees for members to purchase and plant. The trees will be sold in minimum packages of 100 trees, for $75 a package. We estimate that we'll have 32 packages available for 2010. If we can make this successful, the Vallonia nursery may be able to package and provide the trees for IN-TACF in the future. At present, we'll have 2 Saturdays in April scheduled to distribute the trees at Purdue. Orders will be based on first come, first served. You can request more than 1 package but if 32 members each place an order, everyone will get only 1. If there are extras available, we'll go through the list and members may be able to plant more. Bruce Wakeland made a motion to accept this plan which was seconded and approved by all members in attendance.

Mention was made by Sally Weeks and Mike Saunders that Duke Energy was trying to provide a grant to the HTIRC at Purdue to support and expand breeding and research with American chestnut in Indiana. The last item of business was elections. (*next page*)

Chapter 2009-2010 Wishlist Donations Welcome

- Digital camera
- Mounted turkey or squirrel for displays
- Printer cartridges
- AA batteries
- Mailing Labels, Address Labels
- Binoculars
- Fiberglass, telescoping measuring pole
- Laptop for presentations
- Office Laminator
- Towing supplies for the Chapter truck
- A Chapter truck :)

Election Results:

President:	Bryant Marsh
Treasurer:	Bruce Wakeland
Newsletter Editor:	Sally Weeks
Secretary:	Lisa Worthen

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"Chestnut wood was awful bad too. Made a racket in the fireplace. An old feller said if he died he wanted his coffin made out of chestnut so he could go through he_ _ a poppin'."

-Chris Boatwright, 99
Holly Creek Road,
Murray County, Georgia

Chestnut Ridge by Bruce Wakeland

Chestnut ridge is a long narrow area of high ground that runs between Seymour and Brownstown Indiana. It is also the name given to an old interurban train station several miles south of Seymour and just east of chestnut ridge. Paul Snyder was a young boy who lived between the train station and the ridge during the 1930's. For a couple of years he would ride the train every day into Seymour to go to school. Early in the mornings before going to school, when chestnuts were falling in late September, he would ride his horse to the base of the ridge, and collect a bag of chestnuts from 6 large old trees. After school he would take his bag of chestnuts to one of two stores, and trade them for a free meal served to him in the back room while he waited on the train ride home. The stores had no trouble selling all the chestnuts he could bring in.

One morning he rode his horse back to get chestnuts and the horse came to a sudden stop, and threw him to the ground. He landed face and hands down in a pile of chestnut burrs that he had made the week before. The burrs cushioned his fall, but badly prickled his hands and face. As he told me this story 70 years later, he still cringed at the pain, and indicated that it took several weeks for the swelling in his face and hand to subside. Charles Deam, Indiana's

Looking for an interesting way to use extra chestnuts? Here is a recipe from the *Smokehouse Ham, Spoon Bread, & Scuppernong Wine Cookbook; The Folklore and Art of Southern Appalachian Cooking* by Joseph E. Dabney. The latest edition is from 1998.

Cherokee Chestnut Bread

1 quart hulled chestnuts
2 cups water
1 cup sugar
1 quart cornmeal
1/2 tsp. salt
1/2 tsp baking soda
large hickory leaves

- Boil nuts 3 minutes and then peel. Boil peeled nuts 15 minutes in 2 cups water along with the sugar. Drain. Pound or grind chestnuts. Mix chestnut mixture with meal, salt, and baking soda. Add just enough water to make a very stiff dough. Knead well. Place walnut-sized balls of dough in the center of each hickory leaf. Wrap up and tie with a string. Drop in boiling water and simmer 1 hour or until done.
- This recipe produces a dumpling-style food and is eaten in that manner.
- The origin of this recipe is the Cherokee Indians of the Cades Cove, Tennessee-Hazel Creek, North Carolina region of the Appalachian Mtns.
- Enjoy! And let me know if you make it. I will try it if I can harvest my chestnuts before the squirrels!

Sally

Check out our website! Although it is in its infancy, we will post work days, meeting dates, and any other pertinent information there. FIND A COLOR COPY OF THIS NEWSLETTER THERE!
http://www.agriculture.purdue.edu/fnr/intacf/

Reviving American chestnuts may mitigate climate change

WEST LAFAYETTE, Ind. -

Douglass Jacobs inspecting a young chestnut

A Purdue University study shows that introducing a new hybrid of the American chestnut tree would not only bring back the all-but-extinct species, but also put a dent in the amount of carbon in the Earth's atmosphere.

Douglass Jacobs, an associate professor of forestry and natural resources, found that American chestnuts grow much faster and larger than other hardwood species, allowing them to sequester more carbon than other trees over the same period. And since American chestnut trees are more often used for high-quality hardwood products such as furniture, they hold the carbon longer than wood used for paper or other low-grade materials.

"Maintaining or increasing forest cover has been identified as an important way to slow climate change," said Jacobs, whose paper was published in the June issue of the journal *Forest Ecology and Management*. "The American chestnut is an incredibly fast-growing tree. Generally the faster a tree grows, the more carbon it is able to sequester. And when these trees are harvested and processed, the carbon can be stored in the hardwood products for decades, maybe longer."

At the beginning of the last century, the chestnut blight, caused by a fungus, rapidly spread throughout the American chestnut's natural range, which extended from southern New England and New York southwest to Alabama. About 50 years ago, the species was nearly gone.

New efforts to hybridize remaining American chestnuts with blight-resistant Chinese chestnuts have resulted in a species that is about 94 percent American chestnut with the protection found in the Chinese species. Jacobs said those new trees could be ready to plant in the next decade, either in existing forests or former agricultural fields that are being returned to forested land.

"We're really quite close to having a blight-resistant hybrid that can be reintroduced into eastern forests," Jacobs said. "But because American chestnut has been absent from our forests for so long now, we really don't know much about the species at all."

Jacobs studied four sites in southwestern Wisconsin that were unaffected by the blight because they are so far from the tree's natural range. He compared the American chestnut directly against black walnut and northern red oak at several different ages, and also cross-referenced his results to other studies using quaking aspen, red pine and white pine in the same region.

In each case the American chestnut grew faster, having as much as three times more aboveground biomass than other species at the same point of development. American chestnut also sequestered more carbon than all the others. The only exception was black walnut on one site, but the American chestnut absorbed more carbon on the other study sites.
"Each tree has about the same percentage of its biomass made up of carbon, but the fact that the American chestnut grows faster and larger means it stores more carbon in a shorter amount of time," Jacobs said.
Jacobs said trees absorb about one-sixth of the carbon emitted globally each year. Increasing the amount that can be absorbed annually could make a considerable difference in slowing climate change, he said.

"This is not the only answer," Jacobs said. "We need to rely less on fossil fuels and develop alternate forms of energy, but increasing the number of American chestnuts, which store more carbon, can help slow the release of carbon into the atmosphere."

Carbon dioxide is considered a major greenhouse gas, responsible for rising global temperatures.
Jacobs said that since this study looked at aboveground carbon sequestration, future studies would seek to understand more about how forests that contain American chestnuts store carbon below the ground. The Stry Foundation, Electric Power Research Institute, and Hardwood Tree Improvement and Regeneration Center funded the research.

Writer: Brian Wallheimer, 765-496-2050, bwallhei@purdue.edu

Source: Douglass Jacobs, 765-494-3608, djacobs@purdue.edu

Chestnut Reintroduction Committee Report
Mike Saunders, Chair

At the Annual Meeting in December 2008, the Indiana chapter formed the Chestnut Reintroduction Committee consisting of several interested members that attended the event. This committee is charged with developing dissemination and reintroduction strategies in advance of the planned release of Indiana BC_3F_3 families in approximately 2020.

In October 2009, largely due to delays from National in releasing a nationwide reintroduction plan, we held our first meeting to brainstorm possible scenarios. Obviously, the committee felt that the release will need to take a multi-pronged approach through afforestation plantations and reintroductions into native stands, but the details will still need to be worked out on how to spatial array the plantings around the state.

In terms of dissemination of seed through the membership, we did agree upon a general approach. This fall there are approximately 800 pure American Chestnut seedlings that will not be used for research and are thus available to the membership. We are packaging these seedlings in mixed species lots with black cherry, tulip poplar, and either sycamore or white pine, depending on availability. This mixture was chosen because these species all have similar growth patterns and, as a mixture, should be more resistant to diseases, pests or site conditions that would otherwise destroy a single-species planting. In other words, if tulip poplar gets eaten by bugs or does not grow well in your field, there will be at least 3 other species in the mix that might. Each lot will have 100 seedlings (25/species) and cost $75. Members may order as many as they like, but we will limit distribution to 1 lot each until we have satisfied all interested members; we then move sequentially back through the list giving everyone their second, third, and so on seedling lots. A total of 32 lots will be available this spring; there may be over 300 available in Spring 2011. You should have approximately ¼ acre (8' x 8' spacing) available for each lot that you request.

These plantings with pure American Chestnut serve three purposes. First, they will give everyone an opportunity to get "practice" growing chestnut. Some of us have tree planting experience and tending experience and some us do not. Second, these plantation will help us with determining what sites are best suited for our reintroduction efforts. We assume that members will plant these on a broad variety of sites. Therefore, we will keep track of the locations of these plantings and hope to use them for a retrospective study on chestnut growth down the road. Third, these plantations will serve as a test run for the BC_3F_3 stock in that we can interplant the blight-resistant material when it comes out. This will allow for a natural cross, a BC_4, which in 30 years or so can be used for further chestnut breeding efforts.

If you are interested in growing and maintaining an American Chestnut plantation, fill out the order below. Payment to Indiana Chapter of The American Chestnut Foundation is required at time of order. Seedling lots and planting guides will need to be picked up in person at Purdue University in West Lafayette sometime in April (details will follow). Please email me at msaunder@purdue.edu with any questions. **THE DEADLINE FOR ORDERS IS MARCH 1!!**

2010 Chestnut Seedling Order Form

Name: _____

Address: _____

City, State, Zip Code:_____

Phone:_____

Email: _____

Lots will consist of 25 American Chestnut, 25 black cherry, 25 tulip poplar and 25 sycamore or white pine.

Number of seedling lots requested: _____
X $75/lot
Total: _____

Please make checks payable to Indiana Chapter of The American Chestnut Foundation (IN-TACF). Mail order form and payment to: Mike Saunders, 715 W. State Street, Purdue University, West Lafayette, IN 47907.

IN-TACF Gets Ready for a 2nd Round of Breeding

by Jim McKenna

In February of 2009, we sent out a request to foresters and landowners in Indiana who knew of surviving American chestnuts that we had not pollinated. The following article summarizes that request and the purpose of collecting more material.

The Indiana chapter of the American Chestnut Foundation (IN-TACF) has completed the first phase of a back-cross breeding program to develop blight resistant American chestnut for Indiana. That work took 14 years and developed 24 unique lines of seedling families that will be screened for resistance by inoculation with the chestnut blight fungus, and then those with resistance will be inter-pollinated to develop 10 unique and fully resistant family lines for seed production for the Indiana DNR to grow and provide landowners in about 10 to 12 years.

The HTIRC and the Department of Forestry & Natural Resources at Purdue have offered to assist the IN-TACF to develop a 2nd line of resistant chestnut. Over the last few years, we at the HTIRC, and other colleagues in neighboring states, have found that we can graft American chestnut and the back-crossed selections we have made. The virtue of grafting is that we can move trees from their original location, combine the various selections into one orchard, and the mature graft wood will allow the trees, while small, to begin fruiting in as little as 3 to 5 years. Thus this approach will offer much more efficiency than pollinating individual trees all over the state.

The National TACF group in Meadowview, Virginia, has identified a new and possibly better source of resistance to incorporate into pure American trees. Creating a new breeding population through grafting and utilizing this new source of resistance could mean that in as little as 6 or 7 years, we could have a second line completed. The resulting fully resistant trees from this 2nd line would be valuable to incorporate into future seed orchards to broaden both the genetic basis of American chestnut, and chestnut blight resistance, for Indiana reforestation in the future.

We formerly were unable to utilize trees that were inaccessible to pollinate with either ladders or lift trucks. By collecting dormant branches for grafting, we can utilize almost any tree, anywhere. Most of our pure American trees in our first line were found in Northern Indiana, and most were planted. Our southern most tree is from Martinsville, IN. We are interested in trying to acquire a few good trees from Ohio as well, as the IN-TACF has already shared some material with the OH-TACF.

A great deal of credit is owed to Mr. Brian Beheler, the HTIRC Forester who collected most of the material in February and March. Brian also grafted most of the trees. We utilized rootstock provided from the ACC (American Chestnut Cooperative) orchards maintained by Mr. Bill Deeter, Plymouth, IN, and grown at the IN-DNR Forestry Nursery in Vallonia, IN. Rootstocks were potted up in March and the grafting was done April-May at Purdue.

Table 1. New American Grafted Clone Production—2009

Tree Identification	No. Grafted Trees	Original Location
Becky's Best	2	Northern IN, (ACC 'McDaniels" WV source)
Becky's R5-T1	3	Northern IN, (ACC 'McDaniels" WV source)
Birchwood	2	Northern IN, South Bend, 8" DBH
Brem's	7	Northern IN, Walkerton
Burger R1-T6	3	Northern IN, (ACC 'McDaniels" WV source)
Burger R3-T5	6	Northern IN, (ACC 'McDaniels" WV source)
Byler	7	?
Dr. White	1	Northern IN, Niles, Michigan
HCSF1	3	Southern IN, Brownstown, Washington County, 10" DBH
Hoyt	7	Northern IN, Valparaiso, Porter County, IN
IB1 Burger	3	Northern IN, seed locally collected in 1980's
IB2 Burger	2	Northern IN, seed locally collected in 1980's
Johnson	7	Southern IN, Pinhook, Lawrence County, 12.2" DBH
Krider Park	6	Middlebury, Elkhart County
Lawson	6	Southern IN, Scottsburg, 12" DBH
McCoskey	3	Southern IN, Scottsburg, 12" DBH (harvested tree)
McCoskey Cross	4	Southern IN, McCoskey × Carolina tree, from Upton, KY
Nickolson JWSF	5	Southern IN Jackson County
Roselawn 1	5	Northern IN, Roselawn, Newton County
Roselawn 4	5	Northern IN, Roselawn, Newton County
Seig 2	5	Southern IN, HCSF, Harrison County, 2" DBH
Sones # 1	8	?
Sones # 2	7	?
Wagner	4	Southern IN, Fort Ritner, Lawrence County, 8" DBH
Total	**111**	

The Table above lists the initial graft take as of August 2009. For most trees, we grafted 7 trees. For some that appeared dubious, we grafted another batch of 5 soon after the initial round. American chestnut grafts very easily in terms of initial callusing and growth. However, the real problem is what is called "delayed incompatibility" where the graft union at first successfully forms and functions to grow the

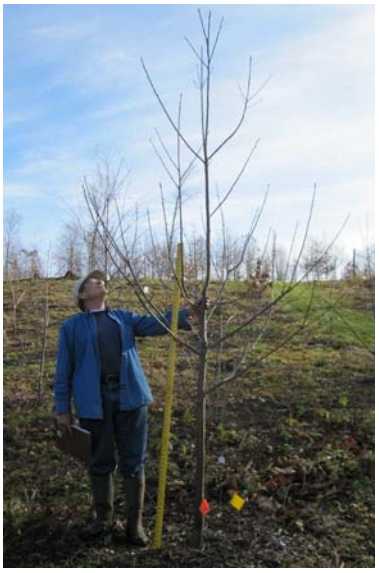


Figure 1. A 4-yr-old grafted BC3 IN-96-1-A grown by Larry Severeid in LaCrosse, WI. 11/15/09

scion, but later, over a period of months to years (even decades in some cases), the graft union fails and the scion begins to collapse. Figure 2 below shows the fate of two different resistant BC3 grafts we gave to Larry Severeid in LaCrosse, WI to grow 3 years ago. The graft on the left is the close up of the tree in Figure 1 while the tree on the right is the same grafted clone exhibiting compatibility problems. In our new American orchard, and to create additional resistant BC3 orchards to produce more BC3F2 seed for our initial seed orchards, we'll need to plant extra grafts to overcome the random failure of some that is to be expected.

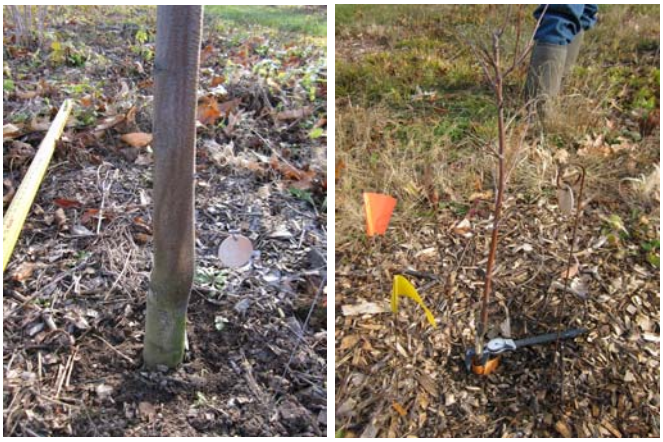


Figure 2. Close up of the graft union of BC3 clone IN-96-1-A from Figure 1 on the left, and another grafted tree of the same clone growing in LaCrosse, WI.

As a side note, Larry Severeid has been growing chestnuts and other fine hardwoods for years. Figure 3 shows Larry among 7-yr-old trees in a mixed chestnut red oak and walnut planting he direct seeded.

Figure 3. Larry Severeid stands next to a 7 year old American chestnut in a mixed planting including red oak and black walnut. The chestnuts are much more vigorous throughout the planting compared to northern red oak and black walnut.

Miracle of chestnut life to begin in Roselawn woods—by Carmen Cox July 2009

Staff Writer (from a n. IN. news release)

ROSELAWN—Bruce Wakeland isn't quite sure how the approximately 35 year old American chestnut trees got to a wooded area in Roselawn, but he's glad they're here.

And after a year of monitoring the trees, he's overwhelmed to have the opportunity to pollinate them.

A private forester and volunteer with the American Chestnut Foundation, Wakeland visited the Roselawn woods on the request of DeMotte resident Bob Hoycus who came across strange looking burrs while hunting about 9 years ago. To Wakeland's surprise, the burrs were the outer shell of a chestnut which fell off of one of 4 American chestnut trees growing hardily among maples and oaks in the fall of 2001.

Not native to northern Indiana, chestnut once populated the landscapes of southern Indiana and densely covered and estimated 2 million acres of the Appalachian mountains stretching from Maine to Virginia.

However, in 1935 most trees were killed by the blight, a disease that infects the tree's stems through the soil, making the species nearly disappear.

Referred to as the redwoods of the East because of their massive size, the largest known being 9 feet in diameter, the American chestnut grows at a fast rate and was a vital staple to wildlife. Not only did it provide the nut which is eaten by many wild animals, but it was utilized by humans as well. The nuts were an important cash crop for many Appalachian families and were shipped to New York and Philadelphia during the Christmas holiday where vendors would sell them freshly roasted. See Miracle, continued on next page

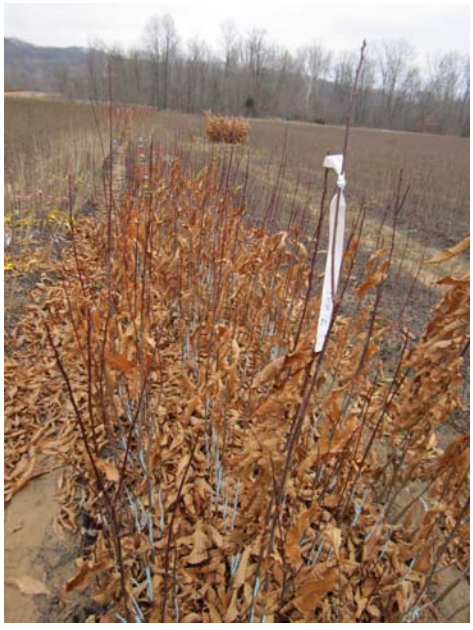
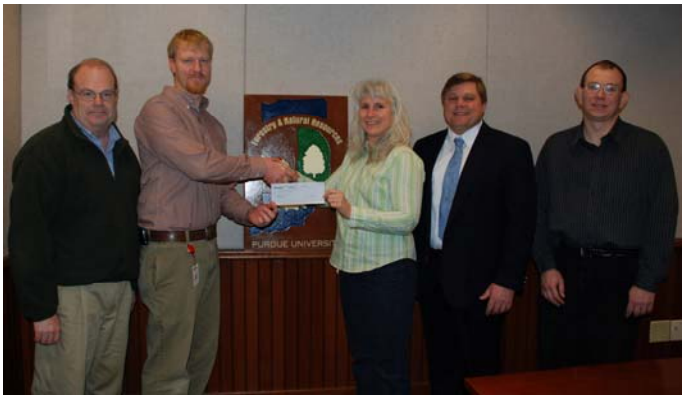


Figure 4. Over 400 BC3F2 controlled cross seedlings in the IDNR Vallonia nursery (Dec 2009) ready to lift and plant into our SIPAC orchard next spring. The stems are painted with light blue paint to indentify them from other sources.

Jim McKenna, pictured here at our October meeting, won the Volunteer Award of the year from National TACF in 2009. There is no one who deserves it more! It is hard to list all of the things that Jim does for this organization. He officially works for the Forest Service, but because of a generous boss, Jim spends lots of his official work hours on chestnut related things. So he spends many hours during the spring and summer sorting and planting, building fence, pollinating, inoculating, harvesting, bagging and labeling nuts, grafting and often delivering nuts to the State's nursery in southern Indiana. Much of this work is done on the weekends, when he frequently involves his two children, Rosie and Joe. During the winter months he continues his work with data entry, planning planting strategies, and writing annual reports for National. Jim's efforts are truly above and beyond what any one member should be accomplishing, and we thank you for all that you do!

At Indiana's December 2008 annual meeting, Bryan Kalb, scientist with Duke Energy and former Purdue student, approached us about Duke's interest in chestnut restoration in our State. Since then we have been in discussion with them working on details of the best expenditure of a gift they might give. Finally, with the help of Bryan Burhans, we created a contract that was agreeable to all concerned, and Bryan Kalb delivered a check the last week of January. Thank You! We are using the money



The official presentation of the check from Duke Energy and The Duke Foundation at Purdue University in January. Pictured are from Left: Charles Michler, Director of the Hardwood Tree Improvement & Regeneration Center at Purdue (Jim McKenna's boss!), Bryan Kalb, Sally Weeks, Bryan Burhans, President and CEO of TACF and Mike Saunders, Assistant Professor and chestnut researcher at Purdue University's Department of Forestry and Natural Resources.

Bruce Wakeland at Indiana's October 31st meeting, speaking about news from the National TACF meeting that he attended, also in October.

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The American Chestnut Foundation
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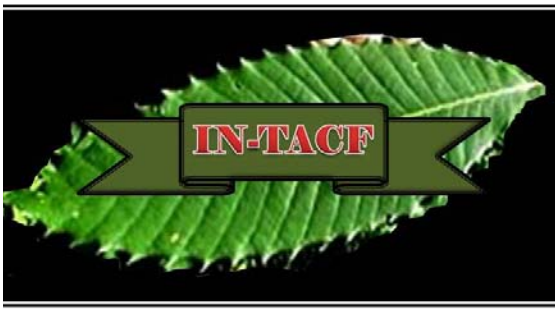

Miracle, contd.

Rot-resistant, the chestnut also provided excellent timber and was used for construction as well as furniture.

In 1983 a group of scientists formed the American Chestnut Foundation with a single goal—to restore the trees into the woods they originally inhabited.

A member of the Foundation, Wakeland is doing just that in the woods owned by Roselawn businessman John Morgin, with the help of NIPSCO, Asplundh Tree Company and Davis Tree Service.

Two weeks ago, Wakeland spotted the white flowers on the top of branches of the 60 to 75 foot tall trees and decided it was time to bag them.

With the help of NIPSCO employees, Wakeland climbed in the bucket of a boom truck and placed plastic bags over 230 flowers on the 3 biggest chestnut trees in the woods.

"I hope I timed it right," Wakeland said of the flower's maturity. "The timing is really hard to judge."

The bags prevented the trees from pollinating with another tree that might be in the general vacanity. And also allowed Wakeland to gather pollen which will be crossbred with Chinese chestnut trees which are resistant to the blight. However, because Chinese chestnut trees are entirely different from their American counterpart, and are short and bushy, scientists are aiming for a tree that is a 15/16th blend. The final product will be a tree with the form of American and the resistance of Chinese.

Wakeland said that out of 100 backcrossed trees, only 5 to 6 trees will actually pass the resistance test and be allowed to mature. Out of those, 1 or 2 of the best looking trees will be kept in the breeding program.

Chapter Calendar: 2010

Feb 1 - IN-TACF Newsletter Distribution

Mar 1st- Seedling Orders Due!

Mar 13 - Pack trees at the JP Nursery

Apr 1- Plant BC3F2's at SIPAC

Apr 10 - Distribute Trees at Purdue (1st chance)

Apr 24- Distribute Trees at Purdue (2nd chance)

Sept 11-IN-TACF Meeting - Fort Ben., Indy (the tentative date—not set in stone yet)

Annual Meeting
October 15-17
Shepherdstown, WV