Ort Tree Pollinating Successful

Dr. Hebard Calls for Much Wider Breeding Program

"... testing of the Burnham Hypothesis (backcrossing) is complete enough that we are warranted in beginning to prepare for reintroduction of blight-mistant trees into the forest...we are warranted in beginning a range-wide implementation of our breeding program, so that we can have a sufficient genetic base for the range-wide reintroduction of chestnut."

F. V. Hebard
ACF Annual Meeting
October 18, 1995

Dr. Hebard points the direction this chapter is going, and the future is now. The time has come for a "range-wide implementation of our breeding program." The purpose of this is to build "a sufficient genetic base," and after this widespread work is underway, the next phase will be the partial reintroduction of chestnut trees into the forest. This, perhaps, will be over a few hundred thousand acres of land.

According to Dr. Hebard, the reintroduction should begin in about 10 years. And then, "Until the reintroduced trees have been grown for a full rotation, for 35 to 60 years, (Continued on page 6)
As I write on Thanksgiving eve, I am feeling quite negligent about the long and ever lengthening list of unwritten thank you notes. The year has been filled with learning and accomplishment for the PA Chapter. The response of people in Pennsylvania has been exciting and heartening. There is no way I can name all who contributed to the great year. . . . those who searched for, located, called in and sent in tree samples, tree locations, leaves, nuts, and burs; those who turned out for the planting, fertilizing, weeding, pollinating and harvest activities; those who made presentations, wrote articles for newspapers, and newsletters who spread the word of our cause and made our meetings interesting and informative; those who shared memories, stories, suggestions; those who contributed cash, equipment, supplies, food, and ideas — I THANK YOU . . .

To the ACF staff: for instructions, breeding materials, information, changes in membership reporting, and encouragement; to those board members and state coordinators who gave their encouragement and support, I express my gratitude.

And a special thanks to the Executive Committee and to our sponsors, Barney and Charlotte Barhart and the News Printing Co. for their work, financial support, our lovely meeting place, their generosity as hosts, their dedication to the American Chestnut Tree and their friendship.

Each and every person advanced our cause.

The new year brings with it a new phase in the ACF restoration efforts. We now have the scientific evidence that blight resistance in the Chinese chestnut can be transferred into the American chestnut by the backcross method of breeding. Thus it should be a relatively straight forward process to breed blight resistant trees. The new phase of the breeding program involves developing sufficient lines, i.e. a sufficient genetic base, for the reintroduction of chestnut throughout the natural range, and preparation for that reintroduction.

Our first attempt at breeding trees adapted to Pennsylvania began with the “Or” tree. It was a very successful effort. But never count your chickens before they hatch. The 273 seeds must remain viable until planting time. They are being carefully stored. March is a long way off. Our facilities are not state of the art controlled cold storage. The 273 nuts provide one new line. Pennsylvania could easily aim for 20 new lines.

What’s involved?
— Locating areas of forests where the canopy has been opened up by clear cutting, fire, gypsy moth, or other disturbances about 5 to 10 years ago, and where the chestnut sprouts have started their rapid growth that occurs when sunlight becomes available. Monitor these trees closely for male and female bloom. Released trees generally bloom about six years after release and when they are about 4” in diameter and about 30 ft. tall. Removing competing vegetation, prolongs flowering and increases yield of nuts.

— Training teams of people to monitor and do controlled pollinations on that block of trees within six miles of one another at about the same elevation. Using a source of advanced pollen from Meadowview on the block of trees for 100 or 40 pollinations would constitute a new line for that locale. We need 100 nuts to start the line.

— An alternate way to achieve the same results is to plant local American chestnut seeds, grow them up to flowering and pollinate in same manner. The disadvantage is waiting about five years for them to bloom. The advantage is they are easily accessible.

The breeding program is a challenging and absolutely necessary phase. It involves the planting and breeding of hundreds, thousands of trees in the state. The chapter has several avenues of possible action. We can attempt to do it as volunteers led by professionals; or we can attempt to finance the entire program; or various combinations thereof. I leave you to ponder.

It is grand to have an opportunity to set right an unintentional problem of man’s own making . . . to restore the magnificently created American Chestnut Tree to its former glory for generations to come.

Board to be Expanded
A chapter board meeting will be held this winter to plan for the annual meeting April 20. The chapter has five officers and three board members. The board will be expanded to six members.

Anyone sincerely interested in developing the chapter’s work is invited to attend. Express an interest to President Leffel and you will be notified of the meeting.

Calendar
Jan. 1 Newsletter Renewals Due
Jan. 6-11 PA Farm Show Exhibit, Harrisburg
Feb. 3 (Weather Permitting) Executive Committee Meeting at Roaring Spring
Feb. (Date to be announced) Philadelphia area meeting for Berks, Bucks, Chester, Montgomery, Philadelphia and Delaware Counties.
March 10 Newsletter dead line
March 29 Newsletter mailing
April 20 Annual Meeting in Roaring Spring
An Encounter with 50-acre Stand of American Chestnuts

by Ann Leffel

(Eight PA Chapter members attended the annual meeting in West Salem, WI where there is a stand of native American Chestnut Trees.)

As far as from California, from Ontario, from Georgia we came, by plane, by car, and camping we came. From farms, from universities, from businesses and from work, we came. Assembled at the farm of Ron and Sue Bockenhauer and Dolores Rhyme, (Sue’s sister) we learned of the history, of the ecology, and of hypovirulence research.

Then came the moment of departure. Some hiked, some rode the tractor drawn hay wagons through cold, rain, light snow and mud. All came to marvel at the sight of the 50-acre stand of woodlands dominated by the American Chestnut Trees in their golden glory.

Once in the stand of oak, birch, hickory, and Chestnut Trees, the ability of the chestnut to compete, to proliferate from a fence row planting into a dominant forest stand became beautifully apparent. All around us were signs of its success. The floor of the forest was carpeted with the golden and brown chestnut leaves. The burs were scattered generously about. Chestnuts nestled partially hidden in the leaves beckoning the seekers to find them. We did!

Seedling trees, saplings, juvenile trees, logging trees, and eight of the original nine founder trees were present. We hiked among them, hugged them, reveled in their splendor. We looked up and up the tall straight trunks to the golden canopy, all the more precious against the leaden gray sky.

Chilled, damp, pockets filled with treasures of nuts, leaves, and burs, spirits warmed, and dreams of future healthy chestnut forests heightened, we returned to the barn. We were welcomed by the aroma of hot chocolate and coffee, and the promise of warmth as we refueled on the generous lunch, including chestnuts, provided by our hosts.

The excitement of a hayride, an Easter egg hunt, and the anticipation of Christmas future all wrapped up in one day’s outing.

In the words of William Raoul, an 85 year old ACF charter member from Chattanooga, TN, who was unable to come, “If you dedicate yourself to something that extends beyond your own lifetime, you’re creating immortality.”

We rededicated ourselves anew in our determination to restore the American Chestnut Tree.

Director Bob Leffel in ACF Science Cabinet

Chapter Director Bob Leffel was named to the science cabinet at the ACF annual meeting. His contribution will be in agronomy and plant breeding.

It was announced that with the acquisition of a second research farm, the ACF will recruit a research scientist to serve with Fred Hebard at Meadowview Farm. The position calls for a MS or PhD in plant breeding. It was named to the science cabinet at the ACF annual meeting. His contribution will be in agronomy and plant breeding.

Chapter T-Shirts

PA Chapter T-shirts will be available at the Farm Show and future chapter gatherings. The price is $12, and they come in all sizes. Forty-four were sold at the October meeting, netting $220 for the chapter treasury.

Chestnuts Collected

Chapter members collected over 300 American Chestnuts for ACF seed kits and sent the nuts to Fred Hebard at Meadowview.

Notes

Officers and Board

Members Needed

Elections will be held at the April annual meeting for officers and three new board members. The board meets twice a year, July and January. Requirements:

1) a willingness to devote time and energy to the development of the chapter — including such things as making presentations to advance membership and educational goals;
2) a desire to develop meeting programs and chapter activities; and
3) an ability to seek funding for activities.

Check It Out

Virginia’s Explore Park, located at milepost 115 on the Blue Ridge Parkway has a trail built and maintained by the Society of American Foresters, Blue Ridge Chapter. The first stop on the trail is the American Chestnut Demonstration Plot. Check it out next time you’re down that way.

Notice

The PA Chapter ACF plans to consolidate orders for aluminum tripod orchard ladders for pollinating, as depicted in July 1995 Chestnut Tree, pg. 3. Available in lengths 6 to 14 feet, quoted as $11.25 per foot FOB Grandview, WA. Will investigate local sources. Advise Bob Leffel, if interested, P.O. Box 7, Brogue, PA 17309

Farm Show Exhibit

If you attend the State Farm Show, Jan. 6-11, be sure to visit the chapter’s chestnut exhibit.
Welcome to Jim and Evelyn Koenig, new coordinators for Cambria County. Only Jim volunteered, but Jim and Evelyn are a team. They are long-time members from South Fork near Johnstown. Jim has been collecting and growing American Chestnuts for years. Want to learn how to recognize an American Chestnut Tree in the woods? Give Jim a call (814-539-8632) this spring when the trees begin to leaf out in May. Tag along in the fall and help out with the harvest. Thanks to Jim and Evelyn for the American Chestnut seed and the delicious cakes they provided for the October meeting.

Tracey Coulter, daughter of ACF President Bud Coulter, and a new resident of Pennsylvania, was appointed to the ACF Development Cabinet at the ACF Board Meeting in October. Tracey works at computer logistics and lives in Camp Hill.

Ann Leffel was also appointed to the Development Cabinet and Bob Leffel to the Science Cabinet. With Bill Lord as an elected ACF Board member, Pennsylvania now has a good representation at the annual board meetings.

Three generational involvement: Jane Ramsey of Port Matilda, her sister, Dorothy Shearer of Altoona, and their mother Georgia Miller of Duncansville, all came to the October Chapter meeting, but Jane’s daughter who is doing a tree study at high school was unable to come because of school commitments.

Georgia Miller, a young spirited woman in her nineties, told Jane that her father, a conservative man who was not inclined to show his emotions, shed tears when he realized that the chestnut blight was unstoppable at the time of the rampage of the blight.

George Dickum served on the panel discussion of the planting and care of chestnut trees at our Oct 7 meeting. George has a nursery in Bedford, and he knows his chestnuts in particular and his trees in general.

Jim Szymanski and his family came to the October meeting in Roaring Spring all the way from Alaska. He mad about the new chapter in the Forest Stewardship Quarterly, and he called Ann Leffel from Alaska, and she told him about the chapter and its work. That’s all it took. (Jim does have Kittanning connections.)

Another distant commuter was Bill Peifer. He was in again from Fort Wayne, IN. Bill is a regular, and a very interested and valuable member. It was his third meeting. He owns a farm in Northumberland County where he plants his own trees.

Don Barnhart, Banney’s older brother, writes that he has found a large Chestnut Tree not far from his hunting camp in the Milesburg area, near the interchange of 1-80 and Rt. 220. Don says the “tree is 30-35 years old; it’s 15-18” in diameter; and it’s 60-70’ high. The trunk is very prominent, smooth and not a flaw as far as I could see.” Don sent several small branches with leaves and the tree is American. All that remains is to get our chapter experts up there to check it out. One drawback: the limbs are very high on the tree for pollinations.

The Washington Post had a nice spread Dec. 3 on organizing a Maryland Chestnut Chapter. Gordon Allen, a retired National Institute of Health geneticist and expert tree grafter, and Bob Campbell, a retired Hagerstown physician, are leaders of the chapter movement. Both are members of the ACF.

According to the Post article, "They are trying to breed the American Chestnut with the few naturally blight-resistant trees to get as pure a gene pool as possible."

Tom Monahan, of Lakemont and a longtime ACF member, has a bucket truck lined up for Fred Hebard and the Meadowview Farm. This particular one reaches up 30 feet and really will ease the dangerous and laborious job of pollination. It is being checked out, and if the price is right, the deal will be made and Fred will get his bucket truck.

Area Coordinators Needed

This box is part of the chapter getting itself organized. Right now area coordinators are needed. Too many can’t travel to Roaring Spring for Chestnut meetings, so we’re breaking the state into counties. There is a need for contact members to handle one, two and three county areas.

These people have access to information; they can get your questions answers; and it will be much easier to make personal contact.

Rosina Cotellaro — 215-625-2482 — Phila., Delaware and Montgomery
Eugene Dougherty — 717-467-2303 — Schuylkill, Luzerne, Carbon, Monroe
Chandis Klinger — 717-837-0457 — Snyder
Pat Chamberlain — 814-756-3197 — Erie, Crawford, Warren
Dan Heacock — 717-957-2733 — Perry and Dauphin
Bill Lord — 412-793-0255 — Allegheny
Tom Pugel — 610-346-6198 — Bucks
Ann and Bob Leffel — 717-927-9557 — York and Cumberland
Hedg Gedmark — 717-774-7313 — York
Rod Clapper — 814-842-3307 — Bedford
Doris Goldman — 717-762-0755 — Franklin
Jim Koenig — 814-539-8632 — Cambria
Plantings, Pollinating, Highlight Year

It was 14 months ago that 16 Pennsylvania ACF members sat down at the Foundation’s annual meeting and talked about forming a state chapter.

The chapter was officially organized in March and the movement since then has been non-stop, with focus on education of the public and members alike along with the development of a breeding program. President Ann and Bob Leffel have met the challenge in every way.

Space does not allow detailing all of the year’s activities, but here were some of the highlights:

— Dan Heacock is heading up the committee for an exhibit at the Pennsylvania Farm Show for 1996, coming up Jan. 6 to 11. (You have time to attend.)

— The Chestnut Tree, our own publication, was started, donated by the Barnharts and News Printing co.

— Speaking of publications; the publicity has been great—almost overwhelming. It’s generally agreed the stories moved the chapter along more rapidly than anyone anticipated. Doris Goldman got a spread in the Waynesboro Record Herald; Eugene Dougherty followed with a story in the Hazelton Standard Speaker; and Tom Pugel in the Johnstown Tribune-Democrat. Then there was the Philadelphia Inquirer, Lancaster Sunday News, Pittsburgh Post Gazette and the York Daily Record.

— Other publications picked up the chapter story. They were the North American Nut Growers Assn., the Forest Stewardship Quarterly, and the Fall Lines — Great Falls Park Newsletter.

— Chandis Klinger arranged for a half hour show on WGAL-TV Lancaster by Jack Hubley, on “Call of the Outdoors.”

The Leffels chapter office (which doubles as their home) was inundated with “all possible information on chestnuts.” More than 300 letters were received and ANSWERED. And at the October meeting, when 70 people showed up, mostly newcomers, nine new members showed up and $360 in donations were received at the meeting.

— Exhibits and presentations — Doris Goldman had an exhibit and permanent demonstration planting of 26 trees at Renfrew Park in Waynesboro, and Gene Dougherty had a demonstration planting at Tuscarora State Park.

— Development of a member handbook is in progress. A library is being established, and copies of various publications are being assembled. Educational trips, such as the one to Meadowview, aided a group in learning pollinating techniques.

— There were six chapter and regional meetings held since last November.

— The backcross breeding program was the center of all activities, and the most challenging—the planting and pollination projects were very rewarding. The largest planting was at the Reineman Wildlife Sanctuary where 161 nuts were carefully and scientifically planted, with 133 being first generation backcrosses. And in September 120 of the backcrosses were surviving.

— Out in Allegheny National Park Vice President Pat Chamberlain directed a forest stand planting of 157 Fi seedling trees.

— Then there was the Ort tree pollinating project which is described in detail elsewhere in this issue (front page).

— Members collected 300 American Chestnuts for ACF seed kits. They were shipped to Fred Hebard at Meadowview.

— Twelve area coordinators now serve in the hope of strengthening the district concept. Key people are still needed in each of the districts.

— In January of this year Pennsylvania memberships were at 175. They are now 230. The goal of doubling membership the first year has not yet been reached.

— Finances: In the treasury now is $2,486.22 from new memberships and donations. No income has been spent to finance the chapter this year. The Barnharts and News Printing, our generous sponsors, have paid for layout, printing and mailings all year, and the expenses of tree planting and maintaining the chapter office has been paid by executive committee members.

Chapter Exhibits At Farm Show

This newsletter should be in hand to remind members of the chapter exhibit at the PA State Farm Show from Jan. 6 to 11.

Dan Heacock is the coordinator, and he still needs volunteers to man the booth the six days from 8:00 a.m. to 7:00 p.m. Volunteers will answer questions on chestnuts and hand out literature on the restoration of the chestnut tree. If you can help, call Dan at 717-957-2733 or 717-232-5300. He’s offering volunteers a place to stay, only 15 minutes from the Farm Show.

A chapter sign, designed and carved by Matt Breitz and Pam Lambert, of Johnstown, will feature chestnut wood. Barney and Charlotte Bamhart will provide informational literature to be passed out at the show.

Volunteers Needed

It isn’t too late to volunteer to help out at the chapter’s exhibit at the PA State Farm Show Jan. 6 to 11. Phone Dan Heacock 717-957-2733.
PA Chapter is Building Penn State Relationship

The chapter is moving to establish a relationship with Penn State.

Officers of the state chapter and the ACF met with the head of PSU's School of Forest Resources and representatives of the PA Department of Conservation and National Resources. The purpose of the meeting, arranged by Ann and Bob Leffel, was to assess the common ground between the state's Division of Parks and Forestry (DCNR), Penn State, and the newly-organized chapter.

It was generally agreed that there would be no immediate financing available for Chestnut restoration projects. However, Penn State agreed to be named as a cooperator in exploring grant possibilities. It was also suggested that the Bureau of Forestry could be approached to invest forthcoming regeneration money into a chestnut restoration project.

One positive result of the meeting was from Prof. Kim C. Steiner, a geneticist in forest biology. At the suggestion of Dr Hebard, he offered to "propagate a few of the B1-F1 hybrid nuts. He would also be willing to put out about 100 of the B1-F2 vegetatively propagated selections, assuming that the micro-propagation is successful and that the plants are ready to go into the field." This would be an experiment station project, he said, and would be done at no cost to the chapter or ACF.

The DCNR position was one of support of the backcross breeding method. It also offered to enlist "interested foresters to help locate, identify and report accessible flowering American Chestnut Trees to PA Chapter-ACF for use in breeding programs."

Dr. Jan Dudt, Pittsburgh ecologist, also proposed an ecological study to determine "the effect of gypsy moth defoliation and other canopy disturbances of PA forests on release of American Chestnut sprouts."

Chapter Sends Twigs to Auburn U. for Research

The chapter supports chestnut restoration in different ways.

Hongwen Huang, PhD, at Auburn University needed help with a research project "evaluating genetic diversity of the American Chestnut by molecular markers."

Chapter members collected 313 twig samples from each of 60 trees throughout the state and sent them to Dr. Huang. In a letter Dr. Huang expressed his appreciation and promised to share his findings with the chapter.

Chapter Receives Exxon Research $1,000 Grant

PA Chapter's ACF was awarded a $1,000 grant by the Community Action Volunteers Service Fund of Exxon Research and Engineering.

Thomas M. Pugel, of Riegelsville, chapter coordinator for Bucks County and Exxon chemist, applied for the grant in July.

The grant is earmarked to advance educational efforts. Specifically, the project for which funding was requested included a slide projector and preparation of a portable traveling educational exhibit, reproduction of literature for handouts, and helping to set up a permanent chapter office. The timely grant will help in financing an exhibit at the PA Farm Show, an exhibit which can be transported to other locations in the state. The chapter also has three sets of slides for anyone who wishes to make presentations at schools, club meetings, etc. It's an invitation to members to be part of the chapter's educational program.

Tom is commended for his efforts and the Service Fund thanked for its generosity toward the restoration of the American Chestnut Tree. Tom is one of the more dedicated members, and he is a main provider of chestnut seed to both the chapter and the ACF.

Ort Tree Pollinating

As the result of backcrosses, the Ort nuts are 94% American, which means they are still only partially resistant. The next step is to intercross these BC3s to obtain the recombination of the necessary genes for total resistance.

Plans are being made for the planting of these fourth generation seeds this spring. They will be the state's first BC3 nuts to be planted.
Educational Restoration Emphasized at 3 Meetings

Three well-attended chapter meetings in different areas in September and October were informative and highly educational. The meetings were all designed to advance the chapter’s breeding program and prepare the membership for the work ahead in the restoration of the chestnut tree.

New Cumberland, embracing Dauphin, York and Cumberland Counties, was coordinated by Herb Gedmark. The program included a history of the American Chestnut by Ann Leffel; backcrossing for blight resistance and identification of chestnut species by Dan Heacock.

Coordinator Eugene Dougherty planned the August meeting at Jim Schnetrumpi’s farm in Schuylkill county. Lunch was provided by the Little Schuylkill Conservation Club. Members toured Bear’s Head Mountain and identified native chestnuts.

Special guest and speaker was John Peters, president of PA Forestry Association. He spoke on the status of state forests — past and present, pointing out that 60% of PA is forest land with 79% of that being privately owned. Mr. Peters also spoke on current regeneration problems with some species of oak that result in shifts to less desirable species for lumber. Forester Richard Widmann accompanied Mr. Peters.

The chapter met again at the News Printing Co. farm in Roaring Spring in October with 70 attending.

Legal Advice Needed

The PA Chapter of ACF needs the help of a lawyer in conducting its business as a 501(c)(3) non-profit organization and with ACF, public agencies, and private industry regarding proprietary rights to its developed blight-resistant American Chestnut germ plasm. If you can help, please advise President Ann Leffel (ASAP) 717-917-9557.

Chapter Seeking Gifts and Grants

Members are reminded that membership dues are not sufficient to finance the state’s backcross breeding program.

All must be on the lookout for gifts and grants. The PA Chapter is now preparing a grant proposal in cooperation with Penn State and possibly the Dept. of Conservation and Natural Resources, Division of Parks and Forestry.

Be Brief, Please

Because of limited space, this newsletter cannot include all of the material it receives for publication, especially longer pieces. Just the news, please — information, facts, events, notices, etc.

A highlight was a panel discussion led by guest George Dickum of the North American Nut Growers Assn. On the panel were Pat Chamberlain, Bob Leffel, Jim Koenig, Chandis Klinger and Tom Fugel.

The day-long meeting was general in nature and included the president’s and committee reports. At least half of those attending were introduced to the chestnut movement for the first time. Nine new members were signed up, and more than $300 in donations were received.
Chapter's Expanding Breeding Program Needs Volunteers

The call will be going out for more volunteers to support the chapter's expanding breeding program. Chandis Klinger is a good example of the kind of worker who is needed.

Every year for the last four Chandis has made the eight-hour trip from his home in Middleburg to the Meadowview farm to help with the pollinating. He stays three or four days each year. At home he has his own trees and his own program. As a member of the executive committee, he's engaged in planning and policy making, and he volunteers in the training of others.

To advance the chapter's breeding program, others like Chandis Klinger will be needed. The PA Chapter provided five volunteer trainees to assist in pollinating at Meadowview this year, and many more will be needed next June. Reasonably priced and pleasant facilities are available at a nearby College.

The ACF has assigned Elizabeth Szczesniak, chapter relations staff person at the Vermont office, to set up food and lodging with Emory and Berry College for three weeks of pollinating in June.

Pennsylvania Society for the American Chestnut Foundation
P.O. Box 7
Brogue, PA 17309

Dedicated to restoring the American Chestnut

Lumber Tree

Ecological Link

Abundant Food for Wildlife

Forest in good health & balance