

Board Update – June 24, 2010

This is a periodic update to let everyone know about recent activities. Items are in no particular order.

1. Spring Meeting and Leaf for Jim Hill – The Chapter’s May 1 Spring Meeting was interesting and productive. The weather was perfect, and the picnic lunch honoring Maryland Patrons, the speakers, and Board members was very enjoyable – thanks to John Cordts and those who helped. I started the meeting with a summary of the chapter’s accomplishments and pollination plans. I then invited anyone to speak about their memories of Jim Hill. Ron Clements brought the handsome leaf that he has carved in memory of Jim that will hang on the Fox Haven Orchard gate. Dottie Hill, Jim’s wife, was there, and Ron presented her with a small replica leaf. Dr. Patrick Angel gave a fascinating history of mine land reclamation and described how the Appalachian Regional Reforestation Initiative (ARRI) was begun and is working in 7 states. This program plants hardwoods in strip mined land, and the chestnuts seem to be thriving. Next, Keith Gilland, a graduate student of Ohio’s chapter president, Dr. Brian McCarthy, spoke about the growth of chestnuts planted on mine lands in Ohio. Finally, Marlene Haggblade gave a brief presentation of her chestnut experiment with “cruddy” bark trees in Maryland with which Bill MacDonald, Mark Double and I had helped her. After the meeting Sara and Ron went to the Dickey orchard to examine the trees. Some of the trees are already large enough to be inoculated. However, all agreed that inoculation should be postponed until all of the lines of trees can be tested at the same time.

2. Chestnut Jamboree – On May 9, Brad Yohe and the Carroll County Public schools held a chestnut jamboree at their outdoor school, Hashawha, where we have a backcross orchard. Bryan Burhans came and spoke briefly and was awarded \$8,000 dollars from a grant Brad received for planting chestnuts at the eleven new school orchards this spring. This money will go toward the salary of our Regional Science Coordinator, who will be hired this summer (see below). I also spoke and presented gifts (carved gifts!) to Dr. Nancy Grasmick, held of the Maryland Board of Education, and also the Carroll County Supervisor who is retiring. Students were there to demonstrate their chestnut curriculum and laboratory skills. Science supervisors from other counties were there and several, such as Garrett County, expressed an interest in using some of the materials Brad has developed. Brad gave me a CD with the chestnut curriculum, which I will post on our Web site.

3. Meeting with Washington County Schools – Tom Scrivener has been tireless in his efforts to get chestnuts going in Washington County, where he lives. Last year, he gave his 6th generation nuts to Tim Abe, head of their outdoor school, to plant. At his urging, the science supervisor, Sandy Graff, set up a meeting in late March in Williamsport. Tom, Ron, Essie and I went to meet with teacher representatives from the Washington County schools to discuss how they might include both growing and learning about chestnuts in their middle school and high school programs. There was a lot of enthusiasm, and two of the teachers have already gotten chestnut plants from me to plant. Brad Yohe was also at the meeting and gave them the CD of the chestnut curriculum and

offered to help them get started. Several weeks later, I gave presentations on the physics profession and on American chestnut trees to two elementary school groups in a STEM workshop.

4. TACF Spring Board and Cabinet Meetings – The national TACF Board and Cabinet meetings were held April 16-17 at Meadowview, and the main topic discussed was restoration. Rex Mann and others circulated a draft restoration plan, but there is still a lot of discussion about how each chapter will begin their restoration efforts, whether to use 6th generation nuts from Meadowview before the state-bred nuts are ready, and how to balance restoration with the breeding activities that now occupy most chapter volunteers. Since we have completed our assigned twenty lines of Clapper backcrosses, I discussed with Fred Hebard the possibility of us making backcrosses with another Chinese source. Fred and I agreed that we should continue to expand the Musick-Chinese lines, which were started at ThorpeWood. I presented our request for Musick pollen to the Science Cabinet, and it was approved. We did get the pollen, from a Musick-Chinese B2 at Meadowview and used it to pollinate the Curtis tree. Bryan announced that the fall Board and Cabinet meetings followed by the TACF Annual Meeting will be held in Shepherdstown, WV on October 14-17 at the National Conservation Training Center. Please put those dates on your calendar and plan to attend, if only for one day.

5. Orchard Status and Signage – Spring planting went very well thanks to the planning and efforts of Ron Kuipers and others. Three new orchards were established: Black Hills Regional Park in Montgomery County, the MD State Highway Administration site in Carroll County, and at Ft. Detrick in Frederick. (Our managers for these orchards are, in order, Stephen Peck, Marisa Slade, and Ron Clements.) In addition, backcross and intercross nuts were planted at the 4-H orchard in western Maryland, and nuts were given to Brad Yohe for planting in the 11 new school orchards in Carroll County. The new orchard plantings reflect the concept of demonstration orchards where the presence of different kinds of seedlings increases the educational opportunities and arouses public interest. For example, rows of different kinds of chestnut – American, Chinese, Chinquipin -- are planted along with different hybrids -- F1s and different backcross generations – to let people see the differences and understand the breeding process more easily. These demonstration orchards will have explanatory signage and perhaps even handouts so that the public can take a self-guided tour of the seedlings growing in each row. I and Essie drafted the text for these signs and, after a few comments from Sara, gave it to the organizations owning the orchards. Ft. Detrick is already planning to make its own signs. Ron Kuipers will investigate getting signs made for the other sites.

Ron was diligent in setting out traps and spraying for the Asian Ambrosia beetles this spring. However, there was unexpected significant damage at the WMREC orchard. Ron led a workday to remove the damaged trees and stack them for burning and to spray again for the beetles. Most all of the damaged trees have resprouted so this is a time delay and not really a loss.

6. Asian Pollen for Sara – When Sara came to our spring meeting, she was hoping to collect pollen from *Castanea henryi* and *Castanea seguinii* trees at the National

Arboretum, but it was too soon and the pollen was not ready. These two chestnut species, in addition to *Castanea mollissima*, were observed on her trip to China, and she wants to experiment with them by pollinating American trees. I volunteered to collect pollen for her, and I had an interesting afternoon at the Arboretum, trying to find them and then to collect leaves and pollen. I was successful and have sent the leaves and pollen to Sara.

7. Signing Ceremony at Ft. Detrick – On April 30, Ron Clements, Essie and I went to Ft. Detrick to meet with Col. Robinson, the garrison commander, and her staff to formally sign the Memorandum of Agreement between Ft. Detrick and TACF. She was very gracious and had visited the orchard the day before to see the first seedlings. There was a photographer, and she and I signed the papers with ceremonial pens, which she gave to each of us when it was over. She loved the carved chestnut vase and the copy of *Mighty Giants* I gave her and was very interested in our programs. Upon hearing about our student programs and the Carroll County chestnut curriculum, she called in her education staffer to make sure contacts were made. Apparently, they offer weekly intern programs for budding scientists in the summer, and they were interested in adapting chestnut projects for this purpose. She is a very enthusiastic partner. Ron Clements built the orchard fence with some helpers and it looks terrific. I have high hopes for this orchard.

8. Two Thousand American Seeds to State Nursery – When all the orchard allocations had been made, we still had 2,000 American chestnut nuts left (from WMREC and Sugarloaf). I sent them to a Maryland state nursery on the Eastern shore to grow into seedlings. This is the third year that we have sent nuts there. In the spring, the seedlings are distributed to the Maryland State Forestry Boards in each county to be given to high school students to plant in reforestation areas. This has been very successful in spreading the chestnut story and engaging students in restoration projects.

9. Pollination – There seemed to be an unusually wide variation in the time of maturing of the flowers and pollen among the chestnut trees this year. Ron bagged flowers on the Haines tree (because it is pollinated by a nearby Chinese tree). Two of the other trees that we pollinated, the Prowell and Curtis trees, have no pollinator nearby and do not make nuts. Therefore, it was not necessary to bag them prior to pollination. We pollinated these trees with pollen from other surviving Americans. The goal is to create new mother trees from the nuts produced by these crosses. We were loaned a bucket truck from Bartlett Tree Company for the Curtis tree. Ron, Jim Curtis and I spent a morning pollinating the tree. While I used MusickChinese B2 pollen from Fred on the upper parts of the tree, Ron and Jim used pollen from other surviving American trees (Prowell, Jackson, Peters) to pollinate the lower branches with the 15-foot orchard ladder. Most of the flowers on the mid and upper branches were not ready. They were not even open! And, they were huge. A day earlier, Ron and I met with Sam Castleman at ThorpeWood regarding maintenance of the orchard and plans for the future. The MusickChinese trees there were already too mature for pollination.

E-mail from Ron Kuipers: “As the final pollination event this year, Barbara Knapp, Bill Askins and I exploded three pollen-filled balloons over Barbara's champion tree and over

the nearby Burton tree. As far as we could tell, all went well--the balloons were above catkin-covered branches and none of the pollen stuck to the broken balloons. Sara, thanks for the advice. The experience taught us that wind must be calm, use a 22 cal. rifle with birdshot, fully blown up rubber (not mylar, of course) balloons, a small funnel, as much pollen as possible, a fishing pole with light line and at least two people--one to guide the balloon and one to shoot it at the right moment. Gary, for the record, we used Haines pollen on Barbara's tree and Jackson pollen on Burton.”

10. Regional Science Coordinator Position – Bryan Burhans is planning to fill the position of TACF Regional Science Coordinator for Maryland, Virginia, and West Virginia starting July 1. Essie and I reviewed and edited the position description and Bryan published it and is receiving and reviewing resumes. He passes the promising ones to me for my opinion. So far, I reviewed two applications, but neither I nor Cathy Mayes, VATACF president, were thrilled with either candidate. Nevertheless, we are hopeful that we will get this full-time position filled in time to do some good for our orchards this summer. I will keep you informed.

11. Nominating Committee and Slate of Officers – I will be appointing a nominating committee to put forward names for board members and officers for our chapter to be voted on at our Annual Meeting in September or October. It is important to bring new people onto our Board so they can participate in the leadership of the chapter. Involved members become inspired to run for officer positions and to volunteer to chair committees. I hope some of you reading this are interested in being on the Nominating Committee or will consider becoming an officer of the chapter or a committee chair. If so, please let me know as soon as possible.

12. Miscellaneous – Tom Scrivener and I are still experimenting with using Bitrex and capsaicin to soak nuts before planting in an effort to deter rodents from digging them up. So far, uncertain results. We will try again next spring. Tom and I are also experimenting with different methods in the hope that we can find a way to root American chestnut sprouts. This would enable us to capture large trees that do not bloom for our breeding program. I am working with Jim Curtis to add a photo gallery to our Web site. Also, we will be making the front page of the site friendlier.