

## President's message THE NEXT STEP

As our genetic program rolls along, it is most urgent to locate new seed sources of American chestnut in each of the nine districts. We want to have as many variations as possible in each district. This year's program produced 1,800 nuts State wide and a net gain of mature trees even though our larger bearers continue to die off.

We know there are more out there and it is most important that they are located and people assigned to pollinate them if necessary and collect the nuts before the critters get them

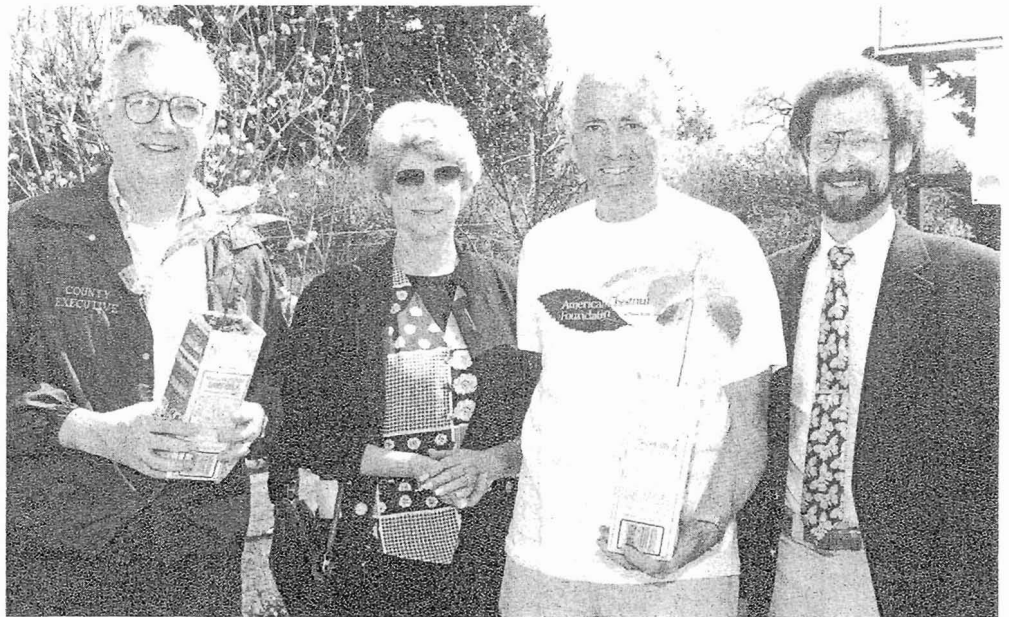
Time is of the essence, as each year we come closer to a genetic solution, we will need trees of bearing age to cross pollinate with our new trees.

Talk to people, it is still very surprising how few people know we exist. And it is also surprising how many people know where bearing trees are.

We continue to make good progress and a little extra effort in this direction will really help speed up our American chestnut tree regeneration program in the future.

Herbert F. Darling Jr.

President ACFNY



*On Arbor Day 1993, the first American chestnut seedlings were planted in Westchester County's Lasdon Park and Arboretum. Officiating at the planting ceremony were (l to r) Andrew O'Rourke, County Executive; Joan Gilbert, Texaco; Herbert F. Darling Jr, ACFNY*

*President; and Barry Samuel PRC Commissioner Frank Munzer, District 3 Director, said the County has made three and a half acres available for an American chestnut plantation for future cross pollination with the research-developed, blight-resistant tree.*

## Genetic Research and Genetically Diverse Seed Orchards ....

both must be developed together for timely and successful restoration.

The Chapter's work moves on parallel tracks: research and field program. ACFNY helps to support genetic research at the College Of Environmental Science And Forestry. In the lab our two principal scientists are testing steps for building blight-resistant trees by genetic engineering. At the moment they are comparing genes from three different organisms, such as a frog, which successfully repel fungal attacks. They have confirmed one gene's activity in vitro and are readying others. They are trying out gene insertion techniques and making progress in this area, too.

In the field program, our members are planting

seed orchards. They are pure American now, but when resistant pollen is available, when the lab trees first bloom, they will accept that pollen and be big enough to produce large numbers of nuts at once for the restoration.

Right now, to get the seed to start these orchards, members follow the seasons. They locate trees in the woods and identify them.

They go out in June to pollinate and in September to harvest; they stratify (chill) and plant the nuts from bearing trees from all over New York State.

We also get nuts contributed from Pennsylvania, Ontario and

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## ACFNY 1994 GOALS AND PROGRAMS

### 1. Increase Membership

Obtain 10 new members in each of the 9 districts by next annual meeting on October 15, 1994.

### 2. Establish two or more seed orchards in each district to continue development of reforestation plans.

ACFNY focuses on a long range plan important to NY forests to preserve the local American chestnut gene pool (wild native stock). This will contribute variability and adaptation. (It will also provide northern sites to test for hardiness from all areas.) It will prevent a genetic bottle neck, and provide wide-spread planned sites for re-introduction of the blight resistant tree when it becomes available.

### 3. Continue volunteer program of locating, identifying, recording, harvesting, American chestnut trees thought NY state through local activities and publicity

### 4. Establish an ongoing permanent tree record program in each district with a permanent tree location topographic map maintained.

### 5. Formalize and put into operation a public education/membership program using the slide show and conduct two or more presentations in each district by January 1, 1995. During 1993 ACFNY received a grant to develop a slide show for use by lay people for lay people to tell the chestnut story.

### 6. Complete education project for grade schools.

We are developing a teacher's module for 5th and 6th grades (other grades later), with the cooperation and help of educational specialists from the Extension Services of Cornell University.

### 7. Continue planting programs in all districts.

### 8. Continue support of research to develop a blight-resistant American chestnut tree (*Castanea dentata*) and pursue funding for this purpose.

At the base of our work, we consider the genetic research very important and feel it supplements the excellent back-crossing efforts being conducted, and which we also support. The genetic program is a possible short cut to our goal and can contribute to all research efforts. It also attracts a great deal of interest and response from the general public since they feel, as one person commented, "... this is on the cutting edge ...". We consider it essential to our program what we continue encouraging this research.

### 9. During 1994 develop and publish a roster of members with area of interest and/or expertise to facilitate interchange of ideas and help. Districts will include in their program a project to obtain this information.

## 96 YEAR OLD STILL PLANTS

Allan G. Newhall of Ithaca reported by letter to Herb Darling, ACFNY President: "It may interest you that I have just received a good sized batch of seed from Virginia where the chestnut breeding work is being done. These seeds are sprouting and today will be planted in pots in the Plant Path green house." Mr. Newhall who is 96 years of age is the author of several articles on plant pathology.

He also sent the accompanying photo of Dr. John Kelley of the Dept. of Natural Resources at Cornell University standing with an American chestnut John had found. Unfortunately it has been reported that

over the past two years the tree has been failing. Dr. Kelley is one of the founders of ACFNY and serves on its Board and Executive Committee.



*Dr. John Kelley standing alongside an American chestnut tree located near Ithaca, NY.*

## MANY HANDS MAKE LIGHT WORK

As we move forward to achieve our 1994 Goals (see article in this issue), the need for wider volunteer involvement within each District is apparent. As a minimum each District will need people to chair and work on committees to further develop programs for:

- (1) Location of remaining American chestnut trees.
- (2) Planting of new seedling and coordination for pollination and seed collection.
- (3) Record Keeping of remnant tree locations and new planting.
- (4) Public Relations including media relations and programming audio-visual showings etc.

Please contact your District Director ... see the District Map enclosed ... let him know you can lend a hand.

## ACFNY ANNUAL MEETING WAS WELL ATTENDED

Chestnut enthusiasts from all points of the state attended the third annual ACFNY meeting in Syracuse on October 9. It was held at the College of Environmental Science and Forestry (CESF) and highlighted by laboratory visits to observe the genetic engineering research being done toward obtaining a blight-resistant American chestnut tree.

Dr. William Powell, CESF researcher, gave a slide presentation reporting confirmation of one resistant gene and interesting work with frogs and snails, noted for their anti-fungal characteristics, seeking a second gene. Dr. Charles Maynard, another principal researcher, used informative slides in discussing his research on insertion techniques for the resistant genes when they are developed. The Chapter provides seed money to assist their research.

The Science Committee report from Chair Stanley Wirsig covered the parallel steps needing to be done to be ready when the resistant lab tree is ready for the forest.

Membership Chair John Spagnoli reported an increase in members to 326 and called for a goal of 10 new members in each District in 1994. Reports were given by Chairs John Mansfield, Public Relations, who is developing a program for use of the slide show in the Districts as well as continuing media coverage; John Gordon on this year's Community Planting Day with another 200 trees in Zoar Valley and attended by 84 people; Glen Gelinas, Education, who reported the near completion of a slide show designed to be used for lay audiences by lay people, and work continuing on a teaching module being developed for grade schools.

District Directors reported many interesting activities and accomplishments. And elections were held.

Featured speaker John Spagnoli, Director of Region XI, NY State Department of Environmental Conservation, emphasized how the loss of the American chestnut from our forest ecosystem has

had a variety of impacts including economic, social and environmental. "The active pursuit of management and research activities by ACFNY will have an impact on the reestablishment of the species to the Northeast forests," he said.

Hands-On Workshops were presented by Doug Campbell, Identification; John Gordon, Planting/Pollination; Carol Siegel, Mudpacking and enthusiastically attended.

A luncheon sparked with chestnut touches was followed by the lab tours until 4:00 PM when a very interesting, informative day was concluded.

## ELECTION RESULTS

At the Annual Meeting, October 9th, all Directors were re-elected with the addition of Adrien Gaudreau in District 5. (Lewis Decker has agreed to act as interim Director for District 4 until a new Director is appointed.)

Also at the Annual Meeting, the following officers were elected:

Herbert F. Darling Jr., President

Stanley Wirsig, Vice President

Arlene Wirsig, Secretary and Treasurer

## 600 SEEDLINGS GROWING AT ZOAR PLANTATION



District 9 completed its third annual Chestnut Planting Day at the Zoar Valley Multiple Use Area on Saturday, April 24, 1993.

That tree planting project was well attended by Chapter members and other interested people. Over 60 people participated in the event. Preschoolers worked along with teenagers and others who would not give their ages.

The enthusiastic crew planted 168 American chestnut seedlings and sprouted nuts. Also seeds were planted at 57 locations where previously planted trees died. There are now 600 seedlings



growing at the site. All of the seedlings are protected by plastic tree shelters.

The chestnut plantation is located in Erie County on lands administered by the New York State Department of Environmental Conservation. A memorandum of understanding between the DEC and the State Chapter ensures that the plantation will continue to be used to promote the production of American chestnut trees.

The next Planting Day is planned for the end of April, 1994. We hope to see you there.

## DISTRICT NEWS

Please retain the enclosed District Map for your future reference.

Districts **1 and 2** Long Island and New York City, Directors positions unfilled.

District **3** Fifty seedlings were planted in Westchester's Lasdon Park and Arboretum during Arbor Day ceremonies arranged by Director Frank **Munzer** (see photo in this issue). 200 seeds were planted at the Cary Arboretum at **Millbrook, NY** with 99% germination success. The speaker at a District 3 meeting was Dr. Sandra L. **Anagnostakis** who is with Plant Pathology and Ecology, Connecticut Agricultural Experimental Station.

District **4** Lewis Decker (formerly Director of District 5) has agreed to sit in as interim Director until a new Director can be appointed.

District **5** Adrien Gaudreau was elected Director at the October meeting replacing the energetic Lew Decker. Mr. Decker during the year had given talks in various District 5 communities and contacted various media about their activities. The search for a secure plant site continues.

District **6** Darrel Rippiteau reported the chestnut plantation in DEC's Lowville property has suffered severe frost damage. The surviving trees were moved to DEC land at Dexter on Lake Ontario near Watertown. District 6's future planting program will utilize the

Dexter facility. At the Annual Meeting Darrel distributed a Chestnut and Chestnut Blight Bibliography which was encouraged by him and compiled by members of the Faculty of Forestry, SUNY College of Environmental Science and Forestry.

District **7** On November 6 the District carried out its first planting at DEC's Roger's Environmental Center in **Sherburne, NY**. Roy Hopke said nut collection this year was more substantial with 40-50 each from three different trees and three each from three others. After initial failure, the District's attempt to transplant stump sprouts will continue using "more material taken from the tree and more intensive care". "This is important" Roy says "because some of the tallest, finest and largest trees are solitary, there is no other way to have them represented in our plantations".

District **8** New Director Woody Clark reported confirming the identification of eight American chestnuts in his area. Woody says the "harvest season was fair with pure American seed very small". He has displayed ACFNY material at two shows ... where he overheard the exclamation of one little girl when she saw the burs on display: "Daddy, look at the porcupine eggs!"

District **9** Bill Snyder reports on the successful 3rd Annual Planting Day (see photos elsewhere in the BUR). There are 600 seedlings now growing in the DEC Zoar Valley Multiple Use Area.

### CAN YOU ARRANGE A SHOWING OF OUR NEW AUDIO VISUAL PROGRAM

A 12 minute AV program describing the American chestnut's near extinction and ACFNY's program to restore this valuable resource will be available shortly.

It can be shown in either of two formats: (1) slides synchronized with an audio cassette for audiences of from 1 to 100, or (2) a video cassette.

The program titled "**The American**

chestnut ... biological powerhouse" is intended for communication to service clubs and other groups - and as an educational tool in schools. It can be tied into membership appeals at the adult level.

Each District Director will have both formats and slide equipment. We urge all members to contact the program chair of clubs in their area for a showing.

## GENETIC RESEARCH Cont.

We also get nuts contributed from Pennsylvania, Ontario and out to Michigan, Wisconsin, and Illinois. This is our 4th year of such plantings. Five of our nine districts have plantings in secure places such as arboreta and parks, and another District is starting its program in the Spring on idle county land. We will soon be getting southern nuts too, to test for hardiness here.

At the Annual Meeting in Syracuse, the featured speaker, John Spagnoli, Director of Region 9 of the NYS Department Of Environmental Conservation, emphasized the importance of this work that the Districts do. These seed orchards will have gathered more than 99% of the regional heritage if we can get 500 or more wild parents into it. This is necessary, because the lab trees won't be numerous enough to do it.

Later, our heirs may breed champions that come from one of those little three-inch sprouts that only gave us six nuts — they will be able to because it happened to carry champion genes for extra vigor or for surviving severe winters, droughts and diseases — and we saved it. We don't want to preserve just a few specimen trees; we want to preserve the whole gene pool for later development.

### MEMBERSHIP RENEWALS COMING UP

Please be on the lookout for your annual Membership Renewal and Donation to help continue our research and planting efforts.

### APPRECIATION

ACFNY acknowledges major grants from the following:

1993 NYS Stewardship Grant

The Norcross Wildlife Foundation, Inc.

### IN MEMORIUM

David Vercolen, Rochester, NY  
First District Director, District 8

Mrs. Bertha Wilson, Buffalo, NY  
Founding Member