

REPORT OF 1998 SCIENTIFIC ACTIVITIES

The team of scientists at the College of Environmental Science and Forestry (CESF) have had several successes this year in their genetic engineering research for developing a blight-resistant chestnut. In the lab of Dr. Charles Maynard, treelets were grown from embryo tissue – not nuts – acclimatized, and are now growing in the real world at the CESF Experimental Station in Syracuse. Dr. Zizhuo Xing of this team is the first to establish the protocol for the full successful process.

Gene constructs continue to be developed in Dr. William Powell's lab, and three of them along with a marker have been used to transform embryonic trees in the lab. They have been growing for over a year, and contain the marker gene which indicates successful transformation, but many tests have still to be performed.

A workshop given by Dr. Maynard, Dr. Xing, and Technician Sharon Bickel developed a more precise calendar for the sequence of bagging, pollinating and gathering of embryos for the research program. Ideas from experienced baggers at the workshop helped design this calendar. Also addressed was identifying proper timing of the collection of juvenile embryos for the CESF research, including hands-on training for evaluating embryos in the field. Miss Bickel gave details through a video showing embryos under magnification.

Provenance testing is continuing in several locations and study on restoration plans is progressing.

The database of chestnut plantings since 1991 has been completed during 1998 under the direction of Stan Wirsig with the assistance of Tree Recorder Tom Deacon, and high school computer helpers Beth MacAlister and Tim Lockhart. This was a big job and will be of great value. The 1998 Harvest Exchange had 3125 nuts given to planters.

PRESIDENT'S MESSAGE

While we wait for Charlie Chestnut's dream of having a blight-free tree to come true, we must set our sights on explaining TACFNY's education program to the third through fifth grade science teachers all across New York State. The next four years are extremely important to make the plans for reforestation and develop the interest of these people to volunteer to get the job done when the blight-free seedlings arrive.

As the children grow up they will be knowledgeable about the program and willing to plant the seedlings. They will be the Girl Scouts, Boy Scouts, 4-H Club members, NYSDEC camp program, etc. who can recruit the large numbers of planters to get the reforestation done.

TACFNY's Board of Directors is presently working on getting the funding to finish the recruiting of the NYS science teachers and making the 2000 plus kits necessary for the whole State program. Kits will be available for adoption by anyone who cares to sponsor a teacher who cannot afford to buy a kit. Thirty dollars (\$30.00) per kit covers everything necessary and the kits can be reused each year by just buying the seeds to grow. The pilot program was very successful. Let's help Charlie see if a dream can come true.

LONG LIVE THE AMERICAN CHESTNUT!

Planning is being done to accomplish mapping by the Global Positioning System (GPS) and a future evaluation by a professional to evaluate all plantings in New York. This will establish a current germplasm library which will be of use both for research and breeding.

The back-crossing program at the Meadowview, VA Research Farms is progressing well, and you will learn more about this program through *The BARK*, the national newsletter.

This is an exciting time, and we all are looking forward to the future. Heartfelt thanks to our workers, our supporting members, the CESF team, and the national American Chestnut Foundation for all the assistance they have given us.

A SPECIAL THANK YOU

Members and supporters, and especially the field workers, can all be proud of this year's work. There were 40 people involved in the embryo field work for the CESF research, tramping the woods, climbing trees, bagging, pollinating and gathering – and more doing harvesting and planting.

The dedication, hard work, and enthusiasm of these workers – and their spouses – each of the 9 District Directors, Taxonomist Dr. Richard Zander, Tree Recorder Tom Deacon, and the Executive Committee members are invaluable to the progress of our work. Here's to a blight-resistant chestnut and
A BIG THANK YOU TO YOU ALL!

DISTRICT NEWS

DISTRICT 1 ... DR. JOHN POTENTE, DIRECTOR. 516-232-1566 (Counties of Nassau and Suffolk)

In 1998 several more flowering trees were identified. This year two volunteers helped with pollination of Long Island American chestnuts with the result that a record dozen nuts were gathered. Progress has been made with the first nut from Long Island brought to the Annual Meeting for the Annual Chestnut Seed Exchange.

District Director Potente has been busy informing people of TACFNY and its purposes. He has spoken to the New York State Lumber Trade Association, the Long Island Arboricultural Association, Sea Cliff Historical Society and the NY State Parks Association. Two offered donations and another offered to help in locating trees.

John accompanied Dr. Charles Maynard of CESF in a ceremonial planting of an embryonic seedling at Planting Fields Arboretum where space was offered for a plantation, the second on Long Island.

DISTRICT 2 ... MARGARET COLLINS, DIRECTOR. 718-445-6435 NYChesnut@aol.com (New York City)

By the end of October, Margaret Collins reports, there are chestnut trees planted in each of the five Boroughs. Recent plantings have been made successfully in Prospect Park by the Prospect Park Alliance after earlier problems had been overcome.

Proper identification of the American chestnuts is key to locating trees in the wild. Margaret has enlisted the help of Dr. Zander, TACFNY's botany expert, for contact with Wayne Cahilly of the New York Botanical Gardens, Chris Cushieri who has located a likely tree on Staten Island, and people from the Prospect Park Alliance.

DISTRICT 3 ... FRANK MUNZER, DIRECTOR. 914-266-5138 (Counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester)

The two large American chestnut seed orchards are doing well. The 100-tree Wethersfield Farm under caretaker Kevin Maloy has one tree planted in 1994 with burs this year. Although five trees have fungus and some have been lost to deer and mice, the other trees are doing fine. If half of the trees bear in 1999, there should be a good crop of seeds marked with parenthood as well as a supply of embryos for research. At the orchard at Lasdon Arboretum, Dr. Craig Hibben and Ted Kozlowski, county Forester, reported the 400+ tree site was thoroughly maintained and 20 new seedlings planted. 30 trees from the 1994 planting have produced staminate catkins for the first time.

DISTRICT 6 ... T. URLING WALKER, DIRECTOR. 315-782-3153 (Counties of Jefferson, Herkimer, Lewis, Oneida and St. Lawrence)

This past spring Tom Walker planted eight American chestnut trees on his property to test the number of years until bloom. Six of the trees are still alive. Tom also reported that he visited the Syracuse University Campus at Wanakena, NY to observe the growth of 70 new saplings planted last year to test their hardiness in the cruel winters of the area.

It is planned that the three remaining trees transplanted from DEC's Lowville Station to the Nature Conservancy area of Thompson Park in Watertown, will be re-transplanted to a permanent location in the Conservancy and marked with a historic plaque.

Tom has participated in a school event sponsored by the Cooperative Extension of Jefferson County showing the AV program and displaying American chestnut leaves, burs and wood. He is also scheduled for a presentation to the NY State Forest Practice Board.

DISTRICT 7 ... ROY D. HOPKE, DIRECTOR. 607-648-5512 Snowhawke@Juno.com. (Counties of Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga and Tompkins)

Roy Hopke reports that 50 more American chestnut trees were added to the plantation at Sherburne. A few trees at this location will probably begin to bear in the growing season of the year 2000.

The three private plantings (Rockwell, Hopke and Ellis/Donowick) are either beginning to bear or are about to do so. Roy said: "I did some controlled pollinating on my two trees with results that were encouraging. Interestingly, unbagged flowers were not as successful as the controlled. I guess having the pollen applied directly was more effective, what with limited male flowering being available. I used our TACF pollination sheet as a guide in this - it worked."

Ken Burdick, John Ellis and Jim Donowick continued to collect seed this year. Roy reports success was good.

DISTRICT 8 ... CHIP LEAVY, DIRECTOR. 716-293-2540 CCNURS@EZNET.NET. (Counties of Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne and Yates)

The dedicated seed orchard sites in District 8 have been expanded from five to seven this year. By the end of this planting season, new or additional seedlings will be planted in orchards of Phil Warner in Italy Valley, Jerry Hazlit's Winery, Hector, NY, C&C Nursery in Churchville, Dick Dell in Livonia, Chestnut Ridge School, in Chili and the Girl Scout Troop in Holcomb.

Chip displayed TACFNY material at several District area shows including 4-Day Gardenscape, Grizly Fest, Naples Grapefest and Hilton Applefest. The combined attendance at these events exceeded 275,000 people.

The C&C Nursery seedling propagation program couldn't meet demand this year because of high losses over the wet winter. Nevertheless, about 674 seedlings were distributed.

DISTRICT 9 ... BILL SNYDER, DIRECTOR. 716-839-5455 (Counties of Allegany, Cattaraugus, Chautauqua, Erie, Niagara and Wyoming)

The eighth annual Planting Day on April 25 was a success with over 60 people attending. The site is at the chestnut plantation on Zoar Valley Multiple Use Area in Erie County. 150 trees were planted to replace seedlings that died. This year's effort was to do maintenance in the existing plantation. It is an excellent opportunity for members and others to learn planting techniques from professionals and then put them into practice by actually planting trees.

Bill reports that plans have already been made for exhibits in 1999 at the Erie County Fair and the Horticultural Fair of the Cooperative Extension in East Aurora.

Planning will also start soon for the Zoar Planting Day May 1, 1999.

NEW YORK'S 1998 ANNUAL MEETING

An enthusiastic group of 95 members, interested new friends, and distinguished guests thronged the TACFNY 1998 Annual Meeting. It was held at the College of Environmental Science and Forestry (CESF) in Syracuse, NY on October 24.

Beginning with roasting chestnuts and apples while browsing the exhibits, the meeting included reports from the Treasurer, Chairmen of Science, Public Relations, Education, Membership, Nominating, and interesting highlights of district work from the 9 District Directors.

A survey of the current CESF research was given by Dr. Charles Maynard, Dr. William Powell and Dr. Zizhuo Xing.

A workshop followed given by Dr. Maynard, Dr. Xing and Technician Sharon Bickel covering hands-on training for work with embryos and the pollinating program. A Round Table Workshop covering planting problems and the Education Program was coordinated by John Gordon, Doug Campbell and Glen Gelinas.

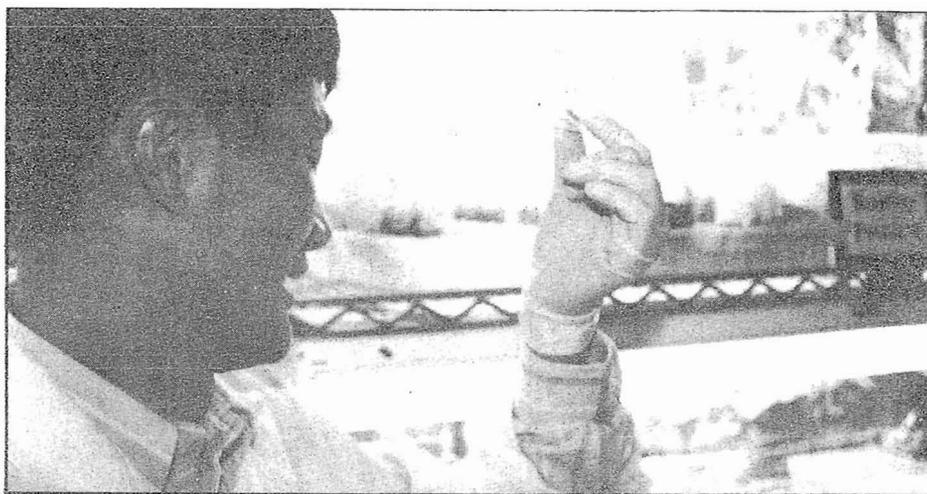
The Chestnut Luncheon was highlighted by a talk entitled "Chestnuts and the Cheshire Cat" given by CESF President Dr. Ross Whaley. Dr. Whaley projected ideas about future environmental trends, and a challenge to emulate the Cheshire Cat and consider carefully the path to be taken to preserve the environment. Dr. Whaley applauded the efforts of the TACF and the work of the NY Chapter toward developing a blight-resistant form of a very valuable part of our ecology.

Special guests welcomed to the meeting were NY Sen. Mary Lou Rath, Sen. John A. DeFrancisco and Mr. Francis Pordum who spearheaded the NYS bill providing research money for CESF for chestnut research. Also included were Judge Edward Rath; Mr. Marshall Case; TACF Ex. Director, Dr. Paul Sisco; TACF Geneticist, Mrs. Lucy Popkess; CESF Asst. to the President, Dr. Bill Lord; TACF Board Member from Pittsburgh, Mr. Bernard Moynihan; California TACF Coordinator, Susan and Gerard Cornier; from Massachusetts TACF, Dr. Neil Ringler; CESF Dean and Carol Bradford, Syracuse Journal Editor.

Tours of the Molecular Biology Lab and the Forest Genetic Lab were given after the
(continued on next page)



Dr. Ross Whaley, President of CESF, addressed the Annual Meeting during the luncheon. His subject entitled "The Chestnut und the Cheshire Cat" addressed the problem of selecting the right path to preserve our environment.



Dr. Zizhuo Xing shows the beginning stage of developing a complete American chestnut tree from a single cell in the Tissue Culture Laboratory. This cell has received a gene transfer as research continues to develop a fungus-resistant tree.



During the tour of Dr. Powell's Molecular Biology Laboratory, Bernadette Conners, a student, discussed the preparation of American chestnut DNA samples shown in the vial above.

(continued from page 3)

luncheon, followed by a bus trip to the Syracuse Experimental Station to see embryogenic trees (grown from tissue - not nuts) growing in the real world without protection.

The Harvest Nut Exchange and an open board meeting followed the trip. The 1998 Annual Meeting was adjourned at 6:00 PM.

Evaluations were divided between liking a one-day annual meeting and those who preferred a more leisurely two day week-end. They felt that this one-day meeting, although exciting and very worthwhile, was very concentrated, and wished for more time to talk and perhaps have a social event as has been planned in the past.

Anyone wishing to comment, please write the chapter with your recommendations for the 1999 meeting.

IN APPRECIATION

Many thanks go to the many people who helped make the annual meeting a success:

John and Janet Barra for donating the hand-carved chestnut duck for the raffle, and for making the chestnut wood leaf keyrings at each place at the luncheon.

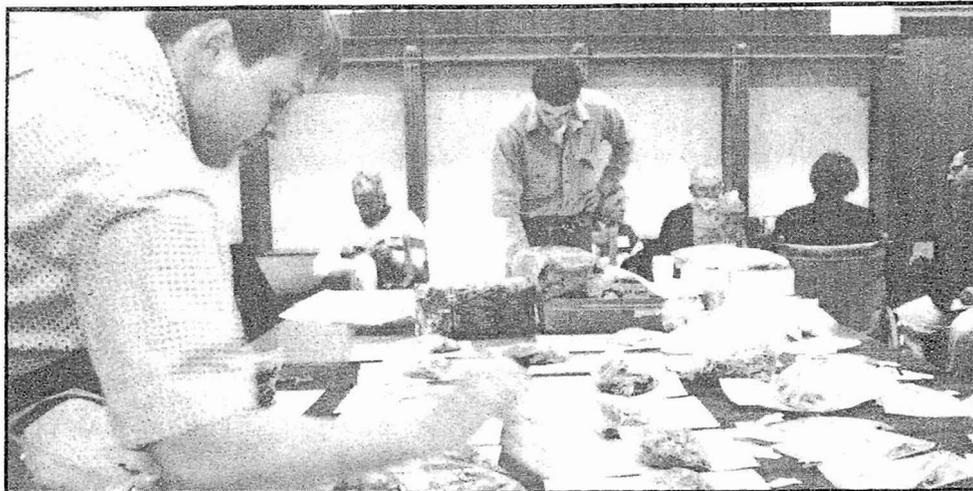
Crystale and Chip Leavy of C&C Nursery for the donation of two chestnut seedlings for the drawings.

Bethany and Bill White, Jane and Herb Darling, Sonja and Jack Mansfield, Tom and Virginia Deacon, Rose and Ken Burdick, Dr. Richard Zander, John Gordon, Doug Campbell, Glen Gelinias, Mabel Walker and Eleanor Hibben, Don Cobb, Norm VanDeusen, Bruce Graham, John Ellis, James Donowick for helping make the many parts of the meeting happen.

And especially the CESF folks: Dr. Maynard, Dr. Powell, Dr. Xing, Sharon Bickel, Lucy Popkess, Horace Shaw and the student guides for all the work above and beyond the call of duty.

A group of chess enthusiasts had checked into a hotel, and were standing in the lobby discussing their recent tournament victories. After about an hour, the manager came out of the office and asked them to disperse.

"But why?" they asked, as they moved off. "Because," he said, "I can't stand chess nuts boasting in an open foyer."



Tree Recorder and TACFNY Director Tom Deacon (standing far end of table) supervises the Annual Harvest Exchange process allocating over 3000 seeds gathered from all corners of the State to other areas for planting to protect the known gene pool. He is helped by Glen Gelinias, foreground left.



At ~ h CESF Experimental Station, Dr. Charles Maynard compared American chestnuts grown from tissue cultured plantlets with those grown from seed. After the second summer, the seed-started trees were about a year ahead in growth. Nevertheless, CESF has achieved the most difficult job of acclimatizing "test tube" plantlets.

TEACHER'S STUDENTS AND THEIR FAMILIES NEED NEW LOCAL PLANTING SITES FOR 1999

Next year more American chestnut seedlings will be grown in classrooms than ever before. And next year more teachers and their students will be concerned about planting and the survival of their seedlings which they have carefully nurtured at home and in their classrooms.

They need our assistance to help achieve the mission that they have excitedly accepted, to make a meaningful contribution toward restoring the American chestnut. Not only have these children learned about local trees, disease, and endangered species, but they have accepted a personal responsibility to help restore American chestnuts.

Teachers and their students need our help to get their seedlings planted outdoors. Many new sites must be identified for children to plant their trees and to complete the contribution that they want to make in restoring their local environment.

Please help us: help these children. Use your imagination, contact your friends and recommend areas that you think would benefit from a planting of American chestnut seedlings. The children are willing to do the work: they just need help locating suitable sites.

This winter, please take a few minutes to make a short list of specific locations that you think are appropriate for planting. These could be parks, naturecenters, arboretums, public or private properties, even corporate park grounds. Your imagination is the limit, we will make the contacts and explore the appropriateness of each site. If you know of a contact person for any of these potential sites please include their name and phone number if available. A list of approved sites will then be provided to teachers in our education program.

If you are in Broome, Chenango, Delaware, Greene, Otsego, Schoharie, Sullivan, or Ulster County your recommendations for planting sites will be most valuable in 1999. The A. Lindsay & Olive B. O'Connor Foundation, Inc. is supporting implementation of American chestnut educational programming in those counties, and demand for new planting sites will be great in this region. Send your lists of potential sites to us as soon as possible:

TACFNY - Planting Sites
C/O Buffalo Museum of Science
1020 Humboldt Parkway
Buffalo, NY 14211

Charlie Chestnut, the symbol of hope for restoring the American chestnut is a key personality in TACFNY's education program in elementary schools. He stands at the base of his sick "Grandmother" tree with Ginny Gene at left and mean, old Buster Blight to right.



EDUCATIONAL MATERIALS AVAILABLE FOR TEACHER USE DURING 1999 & 2000

If you are a teacher interested in using our self-contained education curriculum kit for grades 3-5 including videos, specimens, teacher's manual and photocopy-ready student materials, please fill out and return the application attached. For those members who are not teachers, please pass along this application to teachers who express interest.

Teacher Application

The Charlie Chestnut Education Program

Name _____

Home Address _____

Home Phone _____

School Address _____

School Phone _____

Grades and Subjects Taught _____

Please return to:

The Charlie Chestnut Education Program
TACFNY, c/o Herbert F. Darling Jr.
131 California Drive
Williamsville, NY 14221

TACFNY 1999 GOALS

COAL I: MEMBERSHIP

- A. Increase membership by 10 in each of the 9 Districts by October 1999.
- B. Develop increased affiliation with local foresters, Forest Practice Boards, and promote public relations involvement with service clubs, fairs and local exhibitions. Report a minimum of one event per district during 1999 at the October Annual Meeting.
- C. Develop a Corporate Membership Plan by June, 1999.
- D. Explore possibility of exhibiting at the 1999 NY State Fair in Syracuse as part of the CESF Booth.

GOAL II: PLANTWGS MAPPING

- A. Map all New York planting sites and wild tree locations by October 1999 and record them on topographic maps. Display maps at Annual Meeting.
- B. Each District recruit a Mapping Team to maintain local mapping.
- C. Study local use of a Global Positioning System instrument in each district.

GOAL III: FUND RAISING

- A. Pursue grants to promote the education program throughout NY State with a target of one new region by October 1999.
- B. Pursue grant to provide Global Positioning Systems for districts to use in mapping NYS chestnut trees (approx. \$1000 - \$1500) by October 1999.
- C. Pursue grant to contract for a professional to visit all NY plantings to evaluate and record present condition and quality for future breeding selection. Develop Request for Quotation for Spring-Summer 2000 by October 1999.



OFFICERS AND TWO CLASSES OF DIRECTORS ELECTED AT TACFNY ANNUAL MEETING

DIRECTORS

Class of 1999, one-year term

- Thomas Deacon
- Lewis Decker
- Jim Donowick
- John Ellis
- Adrien Gaudreau
- Craig Hibben
- Ted Kozlowski
- Dr. John Potente
- T. Urling Walker
- Bill White

Class of 1999 and 2000, two-year term

- Margaret Collins
- Wayne Cooper
- Roy Hopke
- Chip Leavy
- Frank Munzer
- Dr. Eric Randall
- William Snyder
- Dr. Richard Zander

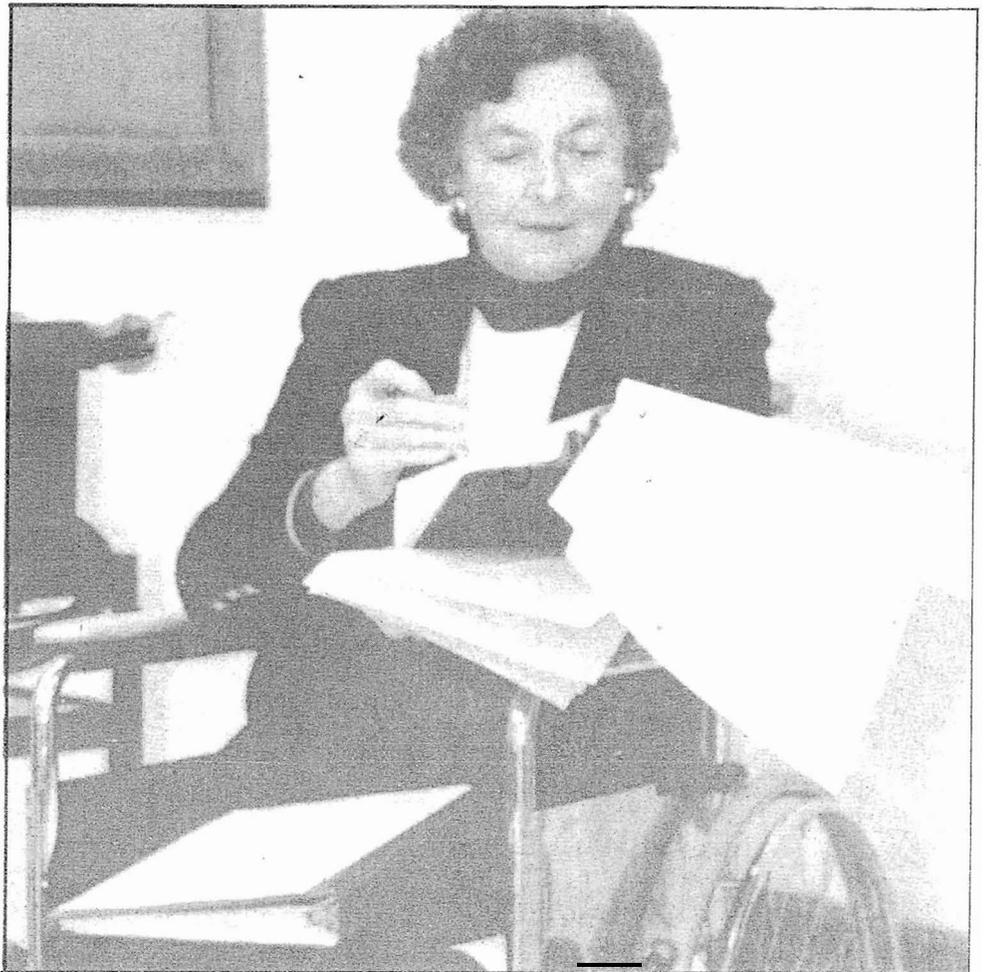
OFFICERS

- Herbert F. Darling Jr., President
- Stanley Wirsig, Vice President
- Arlene Wirsig, Treasurer and Secretary

CARRY-OVER DIRECTORS

Class of 1998, 1999 and 2000

- Douglas Campbell
- Herbert F. Darling Jr.
- John Gordon
- Jack Mansfield
- Arlene Wirsig
- Stanley Wirsig
- John Spagnoli



Mrs. Arlene Wirsig still wields a dynamic hand over her duties despite being "wheel-chaired" with a broken leg. Not only does she masterfully handle the jobs of Secretary and Treasurer for TACFNY, but she also organizes the Annual Meeting down to the most exacting detail.

SEEDLINGS AVAILABLE FOR SPECIAL PROJECTS

Wayne Cooper, member of the TACFNY Board of Directors and a Regional Forester for DEC has spearheaded a program to have NY State's Saratoga Tree Nursery grow seedlings for TACFNY. In 1998, 150 were planted in the Zoar plantation and planters were highly complimentary about the quality.

There may be as many as a 1000 available for planting this year and will be available for transplanting just prior to their third growing season. Wayne has said that since they are being grown in the State Nursery he would like to see them planted on state lands. However, if state lands cannot support all of them the remainder could go to any TACFNY sponsored projects.

Wayne would like each District Director to supply him with a list of projects with seedlings needed by February 1, 1999. He will then let them know how many trees will be allocated to their projects.

Send your project request to Wayne Cooper, Regional Forester, NY State Department of Environmental Conservation, 128 South Street, Olean, New York 14760-3632. Phone: (716) 372-2113

ORDER SEEDLINGS NOW - PLANTING TIME SOON

TACFNY members will receive a discount when ordering seedling packages this year from C&C Nursery of Churchville, New York. The planting package includes American chestnut seedlings, a minimum of 12" tall with 3-foot tall tree shelters and stakes. (As with all American chestnuts they are subject to the fungus disease, but may not necessarily get the blight.)

Member pricing is as follows:

Quantity	Each	Total
2	\$7.50	\$15.00
10	\$6.00	\$60.00
25	\$5.00	\$125.00
100	\$4.75	\$475.00

Prices do not include delivery or applicable sales tax. Please write, phone or e-mail C&C Nursery:
457 Palmer Road, Churchville, NY 14428.
Phone: (716) 293-2540
E-mail: CCNURS@EZET.NET

NATIONAL TACF ANNUAL MEETING

An award for the New York State Chapter of the American Chestnut Foundation was presented by Bud Coulter, TACF President, to Star! and Arlene Wirsig representing New York Chapter at the national annual meeting on October 17, 1998 in Westchester, PA.

It read "OUTSTANDING SERVICE AWARD PRESENTED TO THE NEW YORK CHAPTER FOR EXTRAORDINARY AND DEDICATED WORK IN THE CAUSE OF THE RESTORATION OF THE AMERICAN CHESTNUT AND THE GREAT APPALACHIAN FORESTS."

The meeting included interesting workshops, a gala luncheon at the well-known Longwood Gardens, a tour of the beautiful grounds, and a reception at the Brandywine Museum featuring Wyeth paintings.

A business meeting on Sunday morning plus member sharing and a presentation by the Pennsylvania Chapter concluded the meeting. The Pennsylvania Chapter were hosts and provided many thoughtful services, even including wheelchair tours of the gardens!

Please see the national newsletter, the BARK, for details of this meeting.



NY Senator Mary Lou Rath receives the "President's Award" from Herbert F. Darling Jr. for her sponsorship of legislation to fund American chestnut research. Tire other sponsors who also received the "Award" were: Senator Carl Marcellino, Senator John DeFrancisco and Assemblyman Michael Bragman. Former Assemblyman Fran Pordum received the "Award" in recognition of his earlier efforts to secure State funding.

The Bur
New York State Chapter
American Chestnut Foundation, Inc.
c/o Buffalo Museum of Science
1020 Humboldt Parkway
Buffalo, NY 14221

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YOUR IDEAS NEEDED



The national TACF has asked all its state chapters to develop a Strategic Plan which in turn will be incorporated into a comprehensive national plan. For that purpose there will be a meeting of all New York State members and interested persons in Buffalo on February 20, 1999. The strategic plan will cover research, planting, education, membership growth, and other activities to meet our goal of reforestation of the American chestnut tree. The meeting will be held at the Buffalo Museum of Science and will be attended by TACF Executive Director, Marshal Case. Please contact president Herb Darling's office about your attendance and for directions to the museum. His office phone number is (716) 632-1125 or write c/o: 131 California Drive, Williamsville, NY 14221

FOR NEW MEMBERS: If you know someone who would be interested in a TACF membership, please pass along this application.

Enclosed is my membership support of:

- Gold Leaf, \$1,000 or more; Silver Leaf, \$500; Bronze Leaf, \$250;
 Green Leaf, \$100; Regular, \$40; Student, \$15; \$ _____ Other

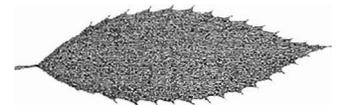
Please make check payable to: **The American Chestnut Foundation**

Telephone _____

Name _____

Address _____

City _____ State _____ Zip _____



**THE
AMERICAN
CHESTNUT
FOUNDATION**
NEW YORK STATE CHAPTER

Membership includes subscription to *The Bur*, *The Bark* and *The Journal*. The ACF-NY is a 501(c)(3) non-profit organization. Contributions are tax-deductible to the full extent of the law.
New York State Chapter of The American Chestnut Foundation c/o Buffalo Museum of Science, 1020 Humboldt Parkway, Buffalo, NY 14221