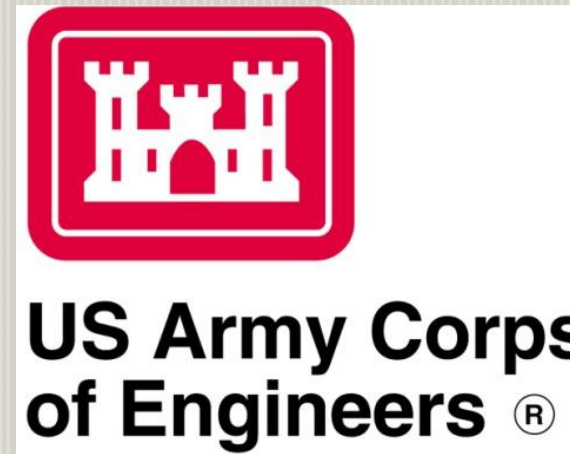
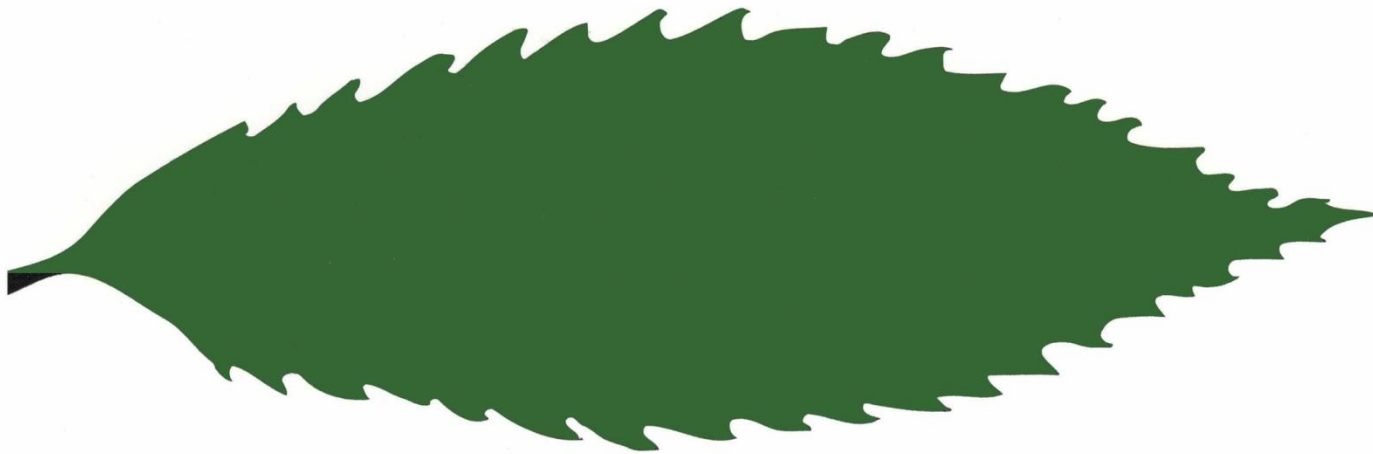


From MOU to on the Ground Restoration.

Partnership Between the Corps and TACF.



Bryan Burhans, President and CEO, TACF
Jeffrey Krause, Wildlife Biologist, Corps of
Engineers



THE

AMERICAN

CHESTNUT

FOUNDATION®

Our Mission...

To restore the American chestnut tree to its native range within the woodlands of the eastern United States

One tree.....one mission



History of the Chestnut

- An essential component of the entire US ecosystem
- A source of great value for its timber and nuts
- 1904, the chestnut blight first appeared at the Bronx Zoo in NYC
- In a few short decades, the “King of Forest” was virtually gone from the landscape







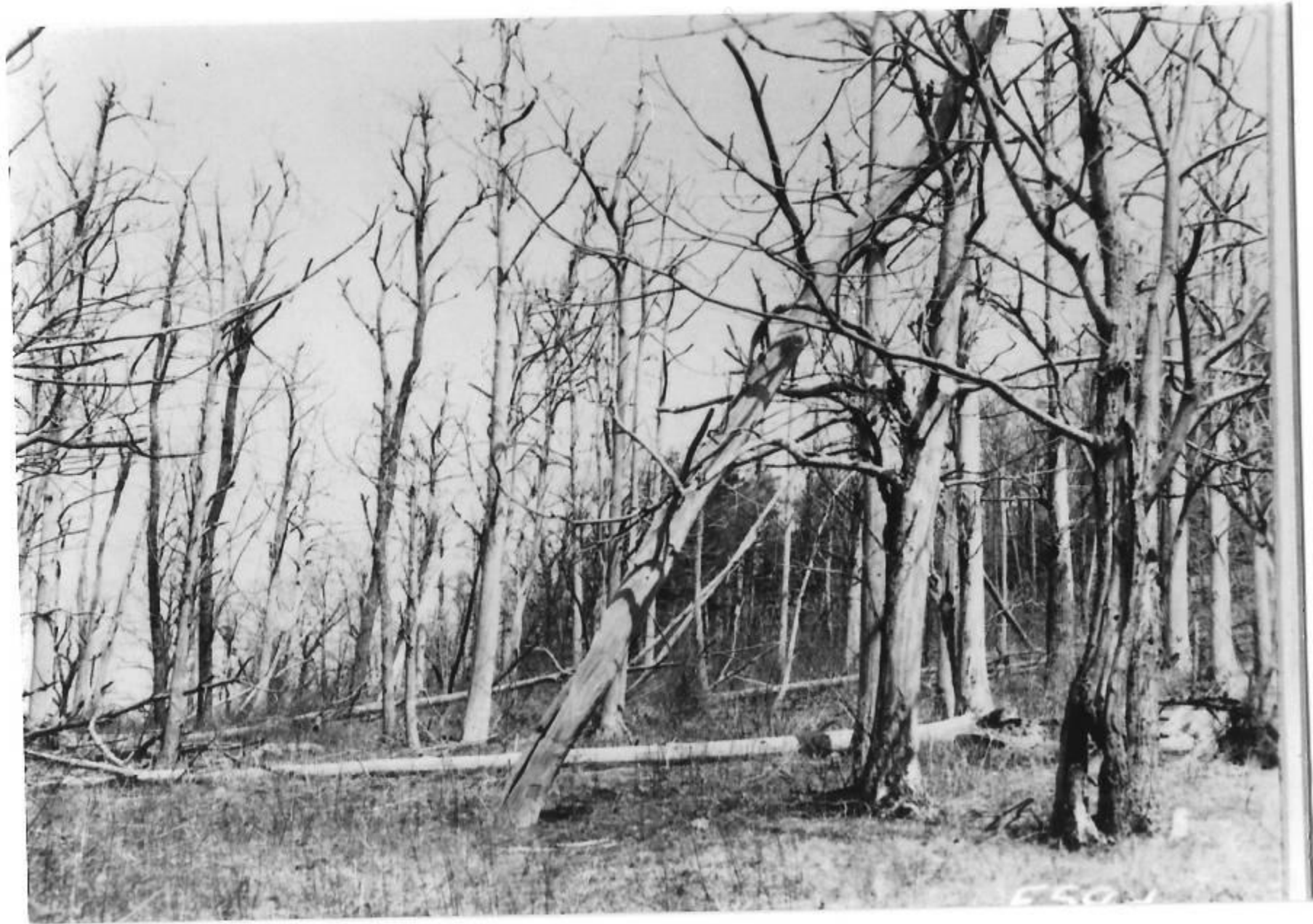
Catharine Street

The blight is caused by a fungus, *Cryphonectria parasitica*, introduced from Asia.



Blight enters the tree through the cracks typical of chestnut bark and through wounds. It forms a canker and quickly girdles the tree.



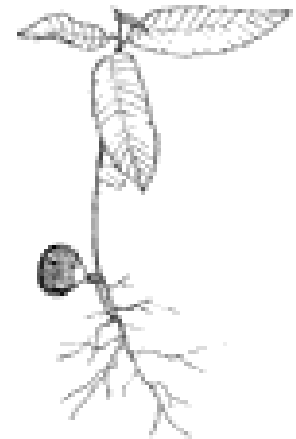


ESQ 1

Backcross Breeding

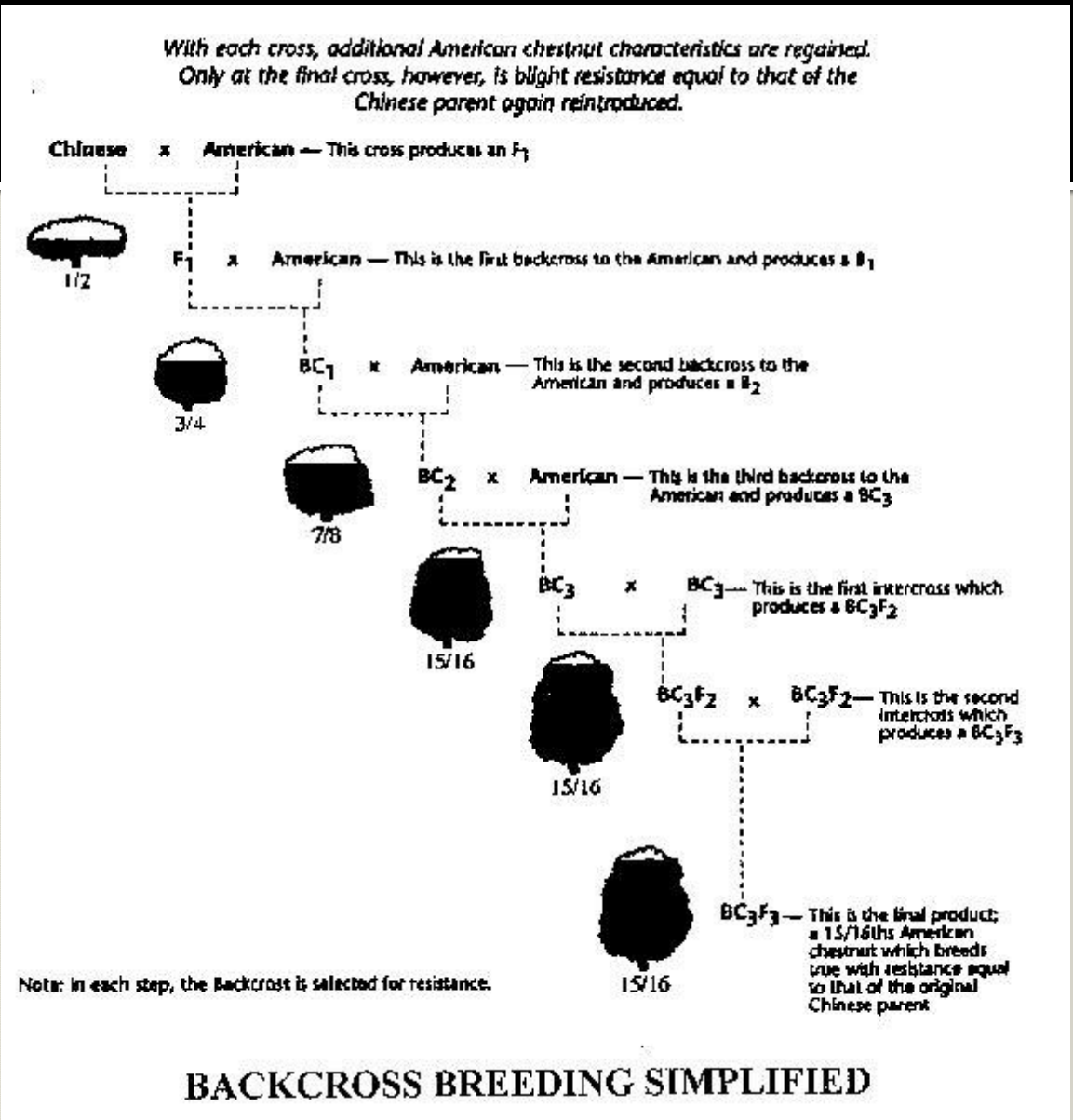
Goal of TACF:

To introduce the genetic material responsible for the blight resistance of the Chinese tree into the American species



**Sprouting
Chestnut**

- Resistance
- Regional Adaptability and Long-term Resistance
- Timetable



We are at a crossroads!

- Test and evaluate 1 million trees in the next 7 years!!!!!!
- This will strain our resources
- Must use best science
- We can't reintroduce without this testing



Partnerships

- Help further the restoration program and bring attention to the importance of the chestnut in American history.



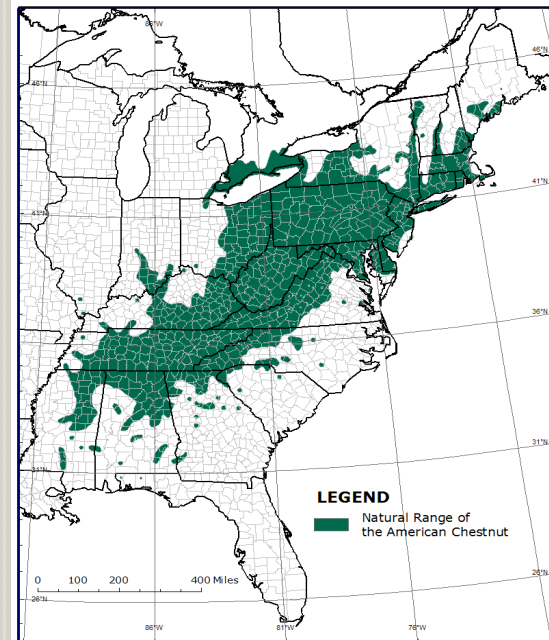
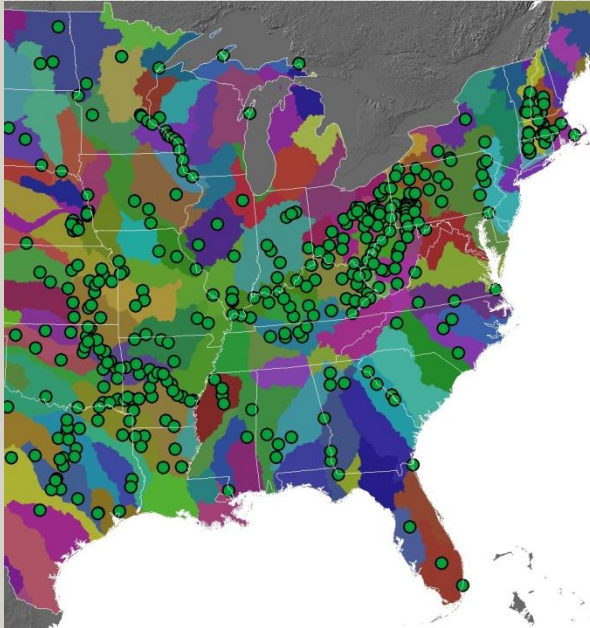
Some of our partners:

- U.S. Army Corps of Engineers
- National Forest Foundation
- Yale University School of Forestry
- The Pennsylvania State University
- USDA Forest Service
- The National Wild Turkey Federation
- The Association of Consulting Foresters
- North Carolina Department of Transportation
- Smithsonian Institution's National Museum of American History
- The Carter Center
- The North Carolina Arboretum
- George Washington's Mount Vernon Estate and Gardens
- Ruffed Grouse Society



Why the Corps

- Many projects lie within the Chestnut Range
- Existing interpretive programs.
- Excellent volunteer base.
- Distance to metropolitan areas.



National MOU with TACF

- MOU signed 28 Dec. 2009 by MG Temple.
- Coordinate respective efforts to work cooperatively to restore the American Chestnut.



MOU

- Corps will:
 - Strive to make lands available for this effort.
 - Assist in the planning and implementing of projects.
- TACF will:
 - Provide material for breeding and testing activities.
 - Provide review of projects and proposals.
 - Provide Corps with list of needed projects.

Now What?

- Prevent the MOU from being a shelf document.
- Distribute the MOU to the Field.
- Have the partner distribute to their membership.
- Provide back up information.
- Limited funds – incorporate into existing programs (volunteer, interpretive).
- Tap into the enthusiasm of the community (Restoration Branch – be active).
- Join partners together (NWTf, Arbor Day, Friends Groups, Nature Club). Important!!!!!!

Corps Field Work with Chestnuts

- New England District – Cape Cod Canal
- Wilmington District – Philpott Lake
- Pittsburgh District – Shenango River Lake
Planning Phase/Handshake grant
- Baltimore District – Raystown Lake – 13 years
of breeding orchards, education, future
silvicultural testing.

Raystown Lake Work

- Project began in 1999 by attending PA TACF spring growers meeting.
- Returned with 100 pure American trees that established the orchard.
- Started off without enough help to maintain orchard.
- Developed a few volunteers.

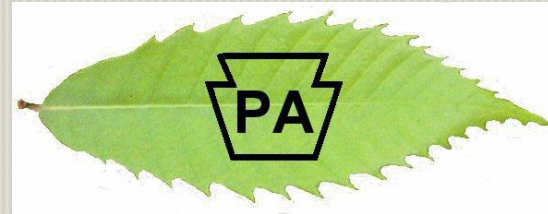


New Backcross Orchard

- Planted 400 CMS backcross seeds in 2009 and 2010.



Volunteer Work



PA-TACF Volunteer Breeding Program

Locate flowering American Chestnut trees for pollination and nuts.

Identify prospective “mother trees” for American characteristics.

Pollinate native American chestnut trees using hybrid TACF pollen.

Harvest open pollinated Americans and hand pollinated hybrids.

Seed storage and winter stratification.

Planning orchard locations and selecting prospective growers.

Spring Planting American, hybrid, and experimental orchards.

Orchard Maintenance fertilizing, weeding, watering, protecting inoculation and selecting.

Documentation “We always finish the paperwork!”

New for 2010/2011

- Received a Corps Handshake Grant
 - Add storage unit, water supply, equipment
- Additional Backcross and Test Orchards
- Restoration Branch Event



Restoration Branch Event

- August 21, 2010
 - Juniata College Field Station at Raystown Lake.
 - Light food/Drinks
 - Tour of Chestnut Orchard/JCFS facilities.
 - Guest Speakers from American Chestnut Foundation.
 - Event encourages membership and additional orchard volunteers.



Raystown Lake Work

- Existing Pure American Orchard
 - Approximately 80 trees
 - Harvest over 4,000 nuts in 2009; 3,820 nuts in 2010.
 - Log over 500 volunteer hours/year
 - Plant trees, water, spray, weed, fertilize, pollinate, harvest seeds.



Summary

- MOUs do not have to be shelf documents.
- Fit into existing programs.
- Find existing and multiple partners and work together.
- Be active and get the community involved.



Help us do the impossible

- Become a member today
- Make a special pledge
- Become involved locally

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