

TACF BOARD OF DIRECTOR MEETING
DATE: MONDAY, AUGUST 17, 2020
ZOOM MEETING (RECORDED)

BOARD OF DIRECTORS PRESENT

Brian McCarthy, Chair, Steve Barilovits, Hill Craddock, William Jay Cude, Deborah Delmer, Michael Doochin, Lewis Lobdell, Greg Miller, Allen Nichols, Cartter Patten, Jeanne Romero-Severson, Jim Searing, Brad Stanback, Kim Steiner, Barbara Tormoehlen, Bruce Wakeland, John Wenderoth, Don Willeke, Esq.

BOARD OF DIRECTORS ABSENT

Carolyn Howes-Keiffer, Dennis Liu

BOARD OF DIRECTORS EMERITUS PRESENT

Gary Carver

STAFF PRESENT

Kendra Collins, Sara Fitzsimmons, Betsy Gamber, Eric Jenkins, Cherin Marmon-Saxe, Dan Mckinnon, Tom Saielli, Jules Smith, Lisa Thomson, CEO, Jared Westbrook, Paul Wingenfeld, Brandon Yanez-Breeding, Shana Zimnoch

GUESTS IN ATTENDANCE

Mary Ayers, Jason Cowan, Jamie Donalds, Mark Double, Laurence Grossman, Tom Klak, Glenn Kotnik, Douglas McLane, Kathy Patrick, William Stoakes

CALLED TO ORDER AT 2:00 PM

APPROVAL OF PREVIOUS MINUTES:

Motions – to accept Minutes:

- Hill Craddock - move
- Brad Stanback – second

CHAIRMAN’S REPORT (BRIAN MCCARTHY)

Brian expressed extreme gratitude to the Executive Committee who has so graciously given their support, time and wisdom over the past months.

The monthly science leadership meetings continue to be extremely useful for discussing our science direction and planning initiatives for the organization. They also give us a chance, as a working group to stay engaged with Jared and the RSC’s and provide real time feedback on what they are doing, what they are thinking and what their plans are for moving forward.

The 60-day public comment period for the deregulation of SUNY-ESF’s “Darling 58” transgenic tree has begun through October 19th. Expect and look for emails from the TACF staff with useful information, links to tools and the federal register to leave a comment. There will be reminders throughout the 60-day period.

ACTION ITEMS

I. GOVERNANCE (LEWIS LOBDELL)

Approval of 2 new Board Members

- Betty Allison, Lewisville, NC
 - BS in Zoology from UNC-CH,
 - Chemist and System Engineer for IBM
 - Active Volunteerism
 - Board Chair Ronald McDonald House, Eastern NC
 - Board Chair Greenfield Academy, Wilson, NC
 - NC Girl Scouts councils and committees
- Mandy Cromwell, Groton, MA
 - Director of preclinical at Vertex Cell and Genetic Therapies, Boston, MA
 - Working to develop cure for diabetes
 - undergraduate degree in biology from Stetson University and a PhD in Biomedical Sciences from the University of Massachusetts Medical School
 - 25 year of experience working in R and D in the biotech and pharmaceutical industries
 - Active Volunteerism
 - Nashua River Watershed Association
 - Friends of the Nashua River Rail Trail

➤ **Motions to Approve New Board Members**

- Chair: Brian McCarthy move
- Debby Delmer second

Lewis reported that Allen Nichols, Cartter Patten, Greg Miller and John Wenderoth will be completing their second term on the Board in October 2020. We hope they will continue to be active on various committees. This does highlight our need to continue to search and recruit new board members. The Governance committee would appreciate recommendations. Consider ways to recruit younger talent. We will review our current list of committee volunteers.

Other Business

- We are reviewing standardization of committee chair term limits
 - Proposal to BOD forthcoming
- Restoration Committee Charter
 - Time to update the charter for consistency with the foundation's long term goals
 - Suggested that the charter be reviewed prior to next Board meeting
- Updating Chapter Charters
 - Important to make sure each chapter is consistent in branding and messaging which TACF projects nationally and we share common goals to accomplish our mission. This includes reviews of insurance coverage, reporting requirements for transparency and branding images such as logo consistency.
 - Most significant undertaking for the Governance committee is to revise current incorporated chapter agreements. Unincorporated agreements were completed and approved in 2018.

II. TREASURER'S REPORT (BARBARA TORMOEHLN / PAUL WINGENFELD)

BARBARA:

- Budget FY2021 (first 30 days)
 - Income and expense very close to what was budgeted for July
 - We are not counting major gifts until they have been received
- Cash accounts are running fairly consistent with pre-COVID figures
- Chapter Accounts do not fluctuate very much
- We had a jump in income between January and April resulting from \$208,100 we received from the Federal Payroll Protection Program.
- Investments are nearly at pre COVID levels
 - Vanguard and ML – The Will Group, have been paying very close attention to our accounts
 - Investment portfolio mix:
 - No more than 5% of investment in any one holding
 - Primarily tech firms / nice mix
- Paul did a deep dive into both Vanguard and Merrill Lynch
 - Vanguard
 - Straight forward
 - Fund in – Funds Out
 - No investment fees
 - Merrill Lynch
 - Fees make up .5% annually (weighted average)
 - 70 – 25 – 5 asset allocation (stocks – bonds – cash)
- Audit
 - Will begin at the end of August and expected to be complete at the end of October
 - Same firm for the last few years – very confident in their direction
- Cartter Patten will continue as chair of the Audit sub committee
- Staff has stayed employed and fully engaged
- Financials always available online at <https://www.acf.org/about-us/financials/>

PAUL:

- Payroll Protection Program loan originator through BB&T
 - They are not yet accepting loan forgiveness applications
 - Waiting until all rules are finalized
 - 24-week period instead of 8-week period will be used for loan forgiveness
 - Expectation is that the loan will be 100% forgiven
- Cash forecasting has been within 5% monthly
- Market Investments doing well
- Happy that Samantha is back - she has Grant Actions in the works

III. WORKERS COMPENSATION UPDATE (BETSY GAMBER)

It has been determined that no BOD action is necessary at this time. Coverage for Lisa Thomson in her position as CEO has been expanded to include states in which she frequently travels.

IV. PRESIDENTS REPORT (LISA THOMSON)

One top goal has been to keep everyone employed and fully productive.

- Current hiring freeze
 - Pausing Southern Regional Science Coordinator position previously held by Ben Jarrett until October at which time we will begin advertising the position. We want to thank Tom Saielli for all his hard work to cover 2 regions.
 - Communication Assistant for Jules to ease her work load will also be delayed.

Our Executive committee has been so incredible and supportive and chapter leaders are staying active and engaged. Membership is growing due in part to Judy and Shana's customer service and outreach. Below is a quick snapshot of annual membership totals:

- Jan 2019 - ~4700+
- Jan 2020 - ~4900+
- Jul 2020 – 5000+
- NY and PA/NJ chapters each have over 800 members

Appeals

- Raised as much through Spring Appeal 2020 as Spring Appeal 2019 – so encouraging
- Fall Appeal to start mid to late September

Strong Engagement

- Science Leadership Meetings
- Chestnut Chats – averaging 100 per chat
- Esprout / Chestnut Magazine on schedule
- Strong donor communication

Public Comment Period

- An important milestone for the Darling 58
- We appreciate the patience of our chapters in sending communications until TACF sends further direction

Resilient Survivors!

- Rex Mann is making a remarkable recovery and is hard at work with son Scott to engage with the eastern band of the Cherokee Indians. Due to Rex's authentic outreach and his relationship with an elder in the tribe through his late father, the tribal leaders are enthusiastic about chestnut and our restoration efforts.

V. SCIENCE REPORT (JARED WESTBROOK)

- 3 prescribed methods of restoration of the chestnut
 - **Traditional breeding**
 - Meadowview completed selection on Duncan Farm (Clapper)
 - Chose few hundred best trees – some with Phytophthora resistance as well
 - Working on Wagner Seed Orchard selections
 - Hopeful to have full selection by end of year
 - Wide spectrum of resistance
 - Intermediate between 35% – 95%
 - Winter: Phenotyping for architectural traits

- Kim Steiner and Sara Fitzsimmons helping lead this effort to determine how they are growing
 - Timber type; able dominance; more branchy
 - How do the characteristics correlate with the % genome inherited from the American chestnut?
 - Speeding up the selection process – early screening
 - Marty Cipollini from GA chapter developed a new method
 - Inoculate the tip of the seedling without killing the seedling
 - Cut out canker, plant out seedling
 - Stronger selection, plant fewer with stronger resistance
 - Seeing how this correlates with what has been measured with the field trials
 - Long term: Map most important regions for resistance, multiple generations of selections with cheaper genotyping method hopefully created soon
 - Infer which parts of genome more American vs Chinese
 - Select trees have more Chinese resistance and American genome
- **Outcrossing with transgenic tree**
 - 5 locations APHIS permits for crosses of OxO pollen and wild type/backcross trees
 - 1 location selection for Phytophthora as well
 - Next year resulting in both blight and Phytophthora and mapping where trees are
 - Germplasm Conservation
 - Encouraged by Trent Deason’s grafting work
 - Received pollen from trees previously suppressed in understory, in a greenhouse
 - Get seeds and plant which makes the process easier
 - Landscape Genomics
 - Virginia Tech sequencing the genomes of 500 AM chestnuts
 - Genome diversity as related to climate adaptation
 - 190 samples back and starting to do analysis
 - 40 million snips out of 700 million bases
- **CRISPR using gene modification and inserting genes from Chinese chestnut directly into American chestnut**
 - Requires really good genomes for American and Chinese
 - HudsonAlpha: American - assembled doing final step of delineating where the genes are
 - Chinese – Mahogany genome has been sequenced and being assembled
 - Map where resistance is in the genome (Clapper & Graves – Meadowview and also PA Norris 13 Chinese and Japanese parents)
 - Gene expression studies Hill Craddock – which genes turn off and on due to the blight
 - Sequencing genomes Chinese/Japanese trees that are resistant as well as European/American/Chinquapins that are susceptible for signatures of natural selection in regions known to be associated with resistance.
 - Intersecting all approaches together
 - Hopeful to find candidate gene for CRISPR modification
 - Working with APHIS to see if trees modified by inserting Chinese genes directly into tree may not need to be regulated

VI. REGIONAL UPDATE SARA FITZSIMMONS – PRESENTED BY KENDRA COLLINS

- <https://www.acf.org/wp-content/uploads/2020/09/Aug-2020-Regional-Update.pdf>
 - Phenotyping
 - Phenotyping of blight resistant chapter selections to be wrapped up by end of season
 - Genotyping samples of existing of chapter selection are complete
 - Architectural Selection
 - Branch to stem cross-sectional area ratio
 - Do metrics figure out what is American/Chinese/or combination
 - Pollination
 - OxO pollinations:
 - VT: TACF, ME: University of New England, NY: SUNY-ESF, VA: TACF (2 sites), IN – Purdue
 - American controlled crosses
 - F1 crosses
 - Immature American bur collections for Scott Merkle at University of Georgia
 - Inoculation Ratings
 - Done but scaled back due to COVID
 - Germplasm Conservation
 - GA grafted trees producing pollen
 - Stanback Intern – Jack Alcorn
 - New Southern sources of germplasm
 - 46 new contacts; 84 new sources
 - dentataBase / TreeSnap / iNaturalist comparison
 - Report forthcoming
 - Leaf Collection for Genotyping
 - Looking for more Japanese samples
 - Collections are up to date for chapter breeding programs
 - Small Stem Assays – New Method
 - Cipollini Method used (top snip with straw hat)
 - Easier, less error prone, fewer no-takes
 - Phytophthora Resistance Testing at RSC in Asheville
 - Ben Jarrett still lending his time
 - Screen over 100 new families
 - Seedlings will be planted out on PRR fields
 - dentataBase
 - Vern Coffey from ESF joined team and has contributed much work and expertise
 - Finally, have grafting support
 - Advanced search feature
 - Unique in its ability to track plantings
 - No other systems do this
 - Will start working with other groups who may be interested in this functionality
 - BRAG plantings
 - Penn State doing well
 - Mycorrhizal Traps were installed
 - Student at SUNY
 - Mesh bag with soil planted next to tree so roots can grow into it

COMMITTEE REPORTS

CHAPTERS COMMITTEE (CAROLYN KEIFFER)

- No report

RESTORATION COMMITTEE (BRUCE WAKELAND)

- A committee meeting is scheduled for September 9, 2020. We will address future restoration goals and activities.

FINANCE COMMITTEE (BARBARA TORMOEHLN)

- Previously reported

SCIENCE AND TECHNOLOGY (STEVE BARILOVITS)

- Chestnut Chats have been very helpful:
 - Crossover of topics covered at S&T meetings
 - Jeanne Romero-Severson: Metabolomics
 - Scott Merkle: Cloning Techniques
 - David Canon from Oak Ridge: Genomic-wide associations studies
- Science Leadership Meetings
 - Very effectively led by Jared and Sara
 - Joint meetings with other committees as subject matter cross

GOVERNANCE COMMITTEE (LEWIS LOBDELL)

- Previously reported

PROMOTION AND OUTREACH (JAY CUDE)

- Strategic Plan components
 - 3.1.1 – Define the Product
 - 11 versions to get to this point
 - Amazing amount of discussion
 - 60 sec elevator speech
 - Technical and process version

MEETING ADJOURNED AT 2:28 PM

Next Meeting: Monday, October 19, 2020

Join Zoom meeting

By computer: <https://us02web.zoom.us/j/2818213656>

By phone: (929) 205 6099

Meeting ID: 281 821 3656

Passcode: 1904