

MA/RI-TACF 4/28/2019 Spring 2019 Quarterly Meeting

Norfolk County Agricultural High School
400 Main St, Walpole, MA 02081

Present: Jamie Donalds, Kathy Desjardin, Grey Curtis, Karen Johnes, Michael Novack, Rufin Van Bossuyt, John Meiklejohn, Brian Clark, Mike Grames, Yvonne Federowicz, John Emery, Paul Wetzel,

Dave Lent, Mark Meehl, Kendra Collins, Lisa Collins, Bill Goodwin

MA/RI-TACF Chapter Board Policy on 3 BUR Program

“The MA/RI Chapter of TACF acknowledges that the TACF National Science Oversight Committee on November 11, 2016 approved the 3 BUR Proposal for Integrated Research. We further state that while being supportive of TACF’s mission to explore all options to restore the American chestnut tree, we remain committed to the backcross method of breeding that we have been working with since the founding of the chapter. The transgenic tree developed by SUNY College of Environmental Science and Forestry (ESF) researchers is in early testing status and under very strict Federal quarantine until an extensive deregulation process is completed and is therefore currently unavailable to our chapter. We will monitor the results of the most recent scientific developments and testing before making any determination of our level of involvement with transgenic breeding.”

Kendra: Chapter members can refer media members to Jules at TACF.
We don't have to cover all questions if not comfortable.

Jamie – our Chapter is an independent 5013C.

Motion to approve statement:
Approved Unanimously.

This policy is our chapter’s current policy.
If we do presentations, we will have this Chapter Policy available.

National is working to create a standard presentation, that includes 3BUR.
We could add our statement.

NPR will be doing a segment tomorrow. Will be nationwide.
The Christian Science Monitor article has gotten a lot of press.

Kathy is our main contact person.

Vice President of Communications Report Yvonne Federowicz

Brief review of our MA (-RI) -TACF Articles of Incorporation Article II.

Including: "The Mission of this Chapter shall be to assist in the work of The American Chestnut Foundation". This is on our website.

Per the MA Bar Assoc.: Directors have a Duty of Care and a Duty of Loyalty.

Pluralism as a goal expressed by numerous TACF members at the spring TACF meeting in Abingdon, VA

Yvonne mentioned the WordPress education forum to Lisa Collins, will create an account for her

Election of Interim President: John Meiklejohn

Temporary acting president: was Brian Clark

Michael needed acting president to sign Att.General form; Brian signed it

Nominations for interim President of MA/RI-TACF, term to start at 12 noon 4/28/2019: Jamie Donalds

MOTION to elect Jamie Donalds passed unanimously.

Jamie Donalds elected unanimously as Interim MA/RI-TACF President

Treasurer Report Michael Novack

Tax filings in process: MA Attorney General Website

Threshold for 990 has not been upped in a long time

Forms PC (state) and 990 (fed) critical to do

People who contributed toward Pittsfield Mower will finance more such if needed

Manton ok

T-shirts probably still with Melicans

-- need to rectify inventory

-- seedling equipment mostly depreciated

Motion to Accept Treasurer Report accepted unanimously

Secretary's Report: Kathy Desjardin

Chapter Members 280

This year's insurance policy came in, given to Michael

**Summer MA/RI-TACF meeting: Broad Meadow Brook, 414 Massasoit Rd, Worcester, MA
Saturday July 20th 10-3**

Bill Davis reserved for us

Outreach will be done later -- Melicans are involved with numerous outreach projects.

Kathy has the projector and screen.

Note on decision-making for Chapter:

If all directors agree that email is acceptable, it can be used for voting, between meetings, that normally would require a majority vote in a regular meeting with a quorum.

Minutes from last meeting:

Donker Farm date should be June 15th. Yvonne to modify.

Motion to accept amended minutes

Passed unanimously

Science Coordinator Report:

Major result: there are more than 3 genes controlling blight resistance

Major result: phenotypic selection of best trees is noisier than expected

Homozygosity in BC3F2s low

Best data are for Clapper

Regions on chromosomes for resistance vary by source

Some of Fred's selections were pure American; he chose best for each

Jared found at least 9 regions on Clapper that connect to blight resistance

Phenotypic selection not very effective; we have improved trees but have not reached intended goals. Our selected BC3/BC4 trees are getting genotyped by VA Tech right now.

There is still a lot in the pipeline scientifically.

Michael N.: Chinese has a lot of variability. Is Nanking really very different?

Kendra: Mahogany and Nanking are being genotyped by Hudson Alpha

Kendra: we don't want to throw away lines yet. Do not want to create new lines yet?

"Pseudo-F1s"? Selected as BC3F2s but Dad was Chinese.

We would not have any genomic models without our large numbers of trees and testing resistance for training the models.

Do we want to keep the “Pseudo-F1s”? Resistance might be good but are they “American” enough to survive in our forests?

Second webinar May 7th at noon on Science

We want our partners to watch this one; what does it mean for the future

These results do not mean that our work will not be used

Later this summer: will try for another organization-wide science meeting
might be in Charlotte or Atlanta

Next steps? What can we accept?

John Emery -- doesn't backcross program keep our germplasm better than a GCO orchard?

Kendra -- could keep more of our BC3/4 trees in separate orchards

Might want to cross with other Chinese lineages

Hypovirus superdonor: is a GMO, permitted; useful in orchards but not forest. GCO orchard?

Large surviving Americans -- scion wood sent in for grafting

Lots of natural blight around but more in some areas than others.

We don't actually know how “much American” we need for trees to compete

Backcross orchards: if some lines of pollen were all-American, maybe we don't keep those lines?

John Emery: let's create an inventory of our best backcross trees

Kendra: Jared thought maybe best x best could be better

John M. -- intercrossing resistance types?

Kendra -- planning for that in future -- we might want a “superblock”

New backcross lines -- might not need a lot right now

Issue of speed of tech change versus momentum of current tree population

Not going to have 20 graves lines?

Brian has lots of seeds to plant -- Kendra will try to get critical info to Brian

Alison Oakes presented at Maine: Bill Powell's presentation but detailed; just identified genes turned on in genes in Chinese trees under attack by blight

In China Sara et al. got Chinese tissue from cankers under attack

OxO cankers look different from Chinese cankers

9 regions on chromosome but not necessarily equal in contribution for blight resistance

All our selections (BC3 or BC4) up to 2018 are being genotyped
Might need to wait until dormant again before genotyping others

Rufin asked: do we still need to burn rogued trees?
-- Kendra -- anything inoculated: burn or bury

Multiple Chinese trees are being sequenced so range of genes
Can be "major" genes, "complexes" of genes...

Landscape genomics -- leaf samples from across range have been gathered. Unfortunately we didn't get young enough leaves from some trees so need to re-sample. Trying to get wild trees from trees growing in different regions.

Kendra will be contacting people. Doug R.

We can overall make some intelligent tweaks now to breeding program

VP of Orchard Development Report Brian Clark

Plantings:

Norfolk Aggie: seedlings from 5 Graves so far

Bristol Aggie potted seedlings -- disappointing survival 3 lines -- we have enough to fill out plots at Norfolk though

Possible 8 lines?

Lisa Collins: would like to spread out timeline of planting?

Get more years of students involved

However some old BC3 orchards have dying trees; Brian wants to plant at least 5 lines, incl. Seeds and seedlings

Lisa says students really liked helping with harvest

All 3 & 6-foot fence lines are up; students cut all wires for gates. All that is left is to electrify

Pittsfield: new hoop house having trouble. Very exposed site. Wind pulled zippers apart.
Mower being moved around.

5 new plots last year; best one had 90% survival.

Westboro: 3 plots replanted last spring but germination not good. All in the runoff area from parking lot; F&W going to divert runoff

6 new plots last year, reasonably good survival.

Nuts for 3 new lines

Weston: 2 open spots, some need replanting.

Putting a PT-resistant Graves in there might be good

Combining resistance sources -- options discussed

Stacked resistance planting in Hawley seems to be doing well
Going to fill in holes with SSA results

Granville: two new plots from Weston going in
Geometry under discussion

Brian potted 5 lines of Graves for another SSA in larger pots but they look good

GCOs: plans for Williamstown on slopes of old ski mountain
GCO in Lincoln? Water available

Michael Novack finding 1600 ft American chestnuts bringing to GCO -- Upper Goose Pond Cabin
CT has Mt Riga chestnuts that Kendra sampled about 1700 ft

Tantasqua : nuts from Brian, Mark -- to try to finish out breeding orchard

SKLT : needs "CN" planted?

Tubes cut off needed

Kendra to rate the ones she did last year

2 possible dates on calendar for Western MA, Smith, Granville

Inoculate 5-6 more at Smith

How many more at SKLT?

Should we do SG only at Westerly and the Nanking at SKLT?

Westboro:

Bill Davis has been working on wind breaks at Westboro. Ticks bad.

Bill Goodwin also offering to help there

Westerly RI: Mike G. and Yvonne to inventory

Bristol Aggie -- planting yf -- people will have extras (Jamie, Brian)

The Public meeting adjourned and MA/RI-TACF went into executive session for the remainder of the meeting.