### TACF MA/RI SPRING ORCHARD/INOCULATION MEETING

River Bend Farm, Uxbridge MA, April 9, 2011

#### ATTENDEES:

Yvonne Federowicz, President; Lois Breault-Melican, VP; Mike Novack, Treasurer; Kathy Desjardins, Secretary; Kendra Gurney, Science Coordinator; Val Stegemoen, DCR Park Supervisor; Rufin Van Bossuyt; Brad Smith; John Meiklejohn; Emily Horne, Hampshire College; Jean Hixon, USACE; Roy Najecki; Brad Smith; Charlotte Zampini;

Jamie Donald; John Mirick; Brian Clark; Denis Melican; Guy Shepherd; David Jaydow; Elizabeth Hammond

Meeting was called to order at 10:13 a.m.

110.4	
US Army Corps of Engineers (USACE)	Oxford and Uxbridge USACE sites have:  1. Higher land available for long time commitment 2. Land is suitable and available 3. Have mowing equipment and both sites are already mowed 4. Volunteer staff available 5. No restrictions on RoundUp 6. Water available 7. Easy to manage 8. Seasonal stream  Board would like to examine this site before the trees leaf out and pursue this partnership. National already has MOU signed with the Army Corps.  There's USACE property on the Cape Cod Canal where a MA Chapter founding member is working, Rufin suggested planting some nuts there now to see how
MEMORANDUMS -	they do.  It's often difficult to understand memorandums with various organizations re
GERMPLASM AGREEMENTS	cooperation Yvonne suggested getting copies of these; Kendra noted that TACF chapters have worked with NRCS in CT and RI; Rufin brought many copies of form today so that anyone who plants these nuts will have them. Yvonne will handle all the RI germplasm agreements. NEFF had not signed yet, but there should be no problem with that.  Elizabeth Hammond said she could find out more about the NEFF germplasm agreement.
BC3F3 PLANTINGS	We have about 37 seedlings that Rufin has raised and 24 nuts. These are the 1 <sup>st</sup> "test products" or "B3F3s" for short. Yvonne explained briefly about genetic resistance, our breeding methods, research pollen and other work being done by the Foundation. Kathy also has a list of members who have donated their nuts  List of sites for planting this year include:
	<ol> <li>Tower Hill Botanic Garden – Brad – 5 – could use more</li> <li>OSV – Rich – done and would like more and we already have a signed germplasm agreement with them.</li> <li>Moore SP – Denis &amp; Lois – 3</li> <li>Mass Fish &amp; Wildlife – Rufin – 5 – they will plant them later in the Spring when they have leaves, behind the Headquarters Building</li> <li>Arnold Arboretum – Kendra – 5 nuts (assuming they'll sign the GPA)</li> <li>Walden Woods – John Emery – they will need a germplasm agreement</li> </ol>

- 7. Gilbert Stewart- Yvonne -3
- 8. River Bend Farm Val 3 Val spoke about an area right on Hartford Avenue with good visibility, that's not somewhere we would later use for something larger. It's just under ½ mile from River Bend Farm and there is a parking lot with a monitoring station and a new kiosk.
- 9. Sudbury Valley Trustees John Emery
- 10. Urban Forestry \_3
- 11. East Farm Rudi 3 5
- 12. Roger Williams Park Yvonne -5,
- 13. Neutaconkanut Park Yvonne 3 –very hilly with lots of hickory, maybe there's different soil types as well.
- 14. Chestnut Hill 3 Stacy contacted someone from that town who wanted more information; they indicated that they would be doing something with the local schools; Kathy said they have been asking for chestnuts for awhile and they would be amenable to anything we suggest for them; Charlotte said this is a city site, and the Garden Club is taking this on as part of their anniversary. C. asked if they had a particular site selected and that possibly a TACF member could look at it. They can do a ceremonial planting if they care for them in pots, or maybe do this next year. Jamie said find out what their intentions are, who owns the land, what's the parameters of the site, is there room for 3 5 trees, they will need signature on the germplasm agreement and Charlotte will check out the site.
- 15. Hampshire College Emily 5 nuts Emily is studying chestnuts as part of her senior project. There is also an interested Sustainable Landscaping class. They are starting a nursery to provide trees and shrubs for perennial agriculture and food forests. She would like to highlight chestnuts at Hampshire College with this program. Jamie said to be sure they know that these trees will have to be there for 30 years or more is the school clear about this? Yvonne explained that these may be highly resistant, but there are no guarantees or blight resistance with any of this material.
- 16. Jim Cole NEFF Rufin 5
- 17. Bruce Spencer has forest property available.
- 18. Urban Forestry Guy 3 5 he talked about coming up with an Arbor Day program and is meeting with them in Worcester to discuss a Worcester site. There is lots of interest in the Worcester area. It was note that chestnut is not a street tree, but could be a park tree. Rufin asked about the germplasm agreement signed by the City Guy will handle this.

John Meiklejohn said he may have 2 seeds to donate, if he can't find a place in Granville to plant them.

Rufin had an email from the NE Forestry Foundation that they would be willing to plant 24 nuts on their property. Kendra said they had also contacted her about planting nuts (Hylton Haynes, Forest Director – Kendra asked him to find a time to talk on the phone back in Feb; no response and will follow-up). Rufin said they have a newsletter and indicated that they would be good partners as their forests are donated and must be kept in forestry forever, unlike some other properties that could go to other uses.

As this lists gets finalized, we can find new places if necessary. Rufin stressed the

germplasm agreement for legal continuity. The Arnold Arboretum is interested in placing seed in seedling nursery, and had some questions about the GPA as they have a research agreement for their holdings and wonder how the GPA would affect the agreement and how the use the material; the nuts there would have high visibility. Mike N. said other places have a scientific research agreement and the time period is important, a 30 year agreement is probably OK, what about germplasm or trademarks? It was agreed that there may always begermplasm issues. Yvonne suggested that for now we need to get an idea of how many people are interested and who is willing to sign existing paperwork.

Roy N asked about the number of trees per site and spacing and it was suggested that 5 nuts in a 20 x 20 setting is OK however we should also be looking at micro-climates at each site.

Yvonne suggested 2 seeds at Gilbert Stewart in RI to start, and see how they grow. The area is low, with skunk cabbage there. Kendra wondered about pure Americans there first as a test? Y has a good feeling about the spot, but thought BC3F3'would be better.

## OTHER PLANTING SITES

Rufin & Charlotte met Mike Labossierre at the Fall River WatupaReservation site and the germplasm agreement was signed with the Fall River Water Department. C & R left a couple of hundred "mutt nuts" that they will plant in a de\_forested section

URI is highly visible and Master Gardeners work there, also, there is a large volunteer base.

? Mansion folks have been in touch with Meghan – this a very well known place in RI with beautiful gardens tended by volunteers. We should give them a minimum of 3-5 seeds. As years go on, we will have more trees to plant.

Guy said that if we need more places for nuts, the ones planted at Tattersall Farm in Haverhill are in a high visibility planting along with good press.

Elizabeth Hammond talked about a spot at Wachusett Mountain State Reservation and suggested that Peter Church, as part of the new Forestry Visioning process may want to be involved in this project. She could not offer to mow it, but said it had been mowed when she saw it. Elizabeth said that Tom Lynch, the retired DCR Central Region Director, told her that the ten acre field was set aside for research. Yvonne said we have plenty of land available now, however we have no people to manage all of these orchards, and in the cases where we lost orchard managers or for places that did not have an active manager the orchards have not done well. A priority at this point is committed people.

Brian Clark has 3 seeds and is working with the town to get school, etc involved in planting these.

#### NUTS FOR FUTURE PLANTINGS

Do we want to plant nuts out now for seedlings next year? Charlotte said that seedlings had a better success rate if using hardware cloth.

Kendra suggested that Bristol Aggie may be a good place for some nuts to be grown into seedlings. She also indicated the risks of placing mutt nuts with B3F3s because of the possibility of mixing these up.

We should plant most of the nuts this year, except for those who simply want nuts

Jamie said we should get these to people with existing germplasm agreements.

Kendra said as production is up in seed orchard we will probably get more nuts in future years.

# MEMBERSHIP AND PRESS

Jamie and Roy asked if they knew if membership was up, especially after the recent newspaper articles. Kendra said there has been interest in trying to track this type of info and have a new membership database that might make this easier. Jamie said that he usually get lots of phone calls about trees after a news story. Kathy said it would be nice to see if there is a tangible effect; we have about 35 members more than last year – so membership is not declining. Bryan was contacted by someone who read about TACF in the newspaper. A \$50,000 grant for NE came in as a result of at least one of the articles that were written.

#### \$50,000 GRANT AND OTHER GRANT MONEYS

This will help with support for Kendra's office, including an intern that she hopes will help with field work and data management.

The NE chapters will each get \$1,000 for planting supplies, and MA/RI will also get \$5,000 for site prep and deer fencing and \$2,500 for seed orchard prep. The funds from this grant must be spent this year.

This money will stay at National and we have to submit receipts, so we must make sure we communicate with Kendra/Dennis Kimball/Lisa Sousa on all purchases, and this should also go before the committee. TACF has to report on this money by 2/1/12so MA/RI should plan to spend it during the 2011 field season. If we can find any match for this funding we may be able to do this again.

Charlotte asked about purchasing a really good orchard ladder for \$400. Kendra said this would be OK – for orchard/planting support.

Mike Novack said we have no cash flow problem. There is also the calculation of the value of the seedling, and Bryan gave Kendra some ballpark numbers to use. You can use the value of the seedling as a match

There's also a private grant and the 2011 US Forest Service grant application for orchard support, including pollination support; there is \$20,000 available to the TACF chapters – how much is allotted depends on how many people apply. John M. asked if it could be used for stump removal.

C if there's extra money it can go to Master Gardeners Y will have to ask when they need the match if it's not this year, we cannot use this year's grant money.

Jamie said that there will be a certain amount of money and because we need many seed orchards, would it be easier for us to have someone to write grants? Kendra said TACF's grant person (Lisa Sousa) is available to work with us on this – that it's a lot of work to apply for grants, and it's not really "free money" if you consider the amount of time it takes just to complete the application.

	Yvonne thinks RI is OK for money, however they may need some for fending?
APPALACIAN TRAIL	Rufin sent another email to Kathy Marmet about a mega-transect of people
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PLANTINGS (AT)	locating chestnuts along the AT.
SEED ORCHARDS	Jamie asked about money voted for the seed orchard and asked if John Meiklejohn found any other grants. John said there is no additional money available.
	John said that he guesses it will be about \$1,000 to complete the prep for the seed orchard. The access road is already there, he needs deer fencing, and this field is actually bordered with a stone wall and mature trees, so we may not have to add lots of poles if wecan use trees. The open side has younger trees, and we may need posts there. Mike N said don't use trees, put posts there anyway.
	John thought it would cost about \$1,000 -\$1,100 to clear the stumps from his site, and asked to make a motion to have the board approve this money today so that we don't have to do this later.
	Mike Nowak has land available and his son is moving back from CA, if he comes back he can make 5 – 10 acres available
DEER FENCING	Fencing prices depend on the type of fence. Mike N. said it depends on whether you can use an electric fence. A solar powered fence is pretty cheap to put up but it needs to be in a more isolated place. Kendra said most of the mesh is about 8 feet, woven poly wire is quite cheap, but it needs to be maintained. It also depends on the kind of animals you are dealing with. Penn State has a great deer site devoted to deer management and it includes lots of other information.
	John M said he is unsure what deer fencing will cost, and needs someone to contact who can help him work up an accurate cost. John Mirick said we are not looking for something that lasts 20 years, a few years is fine for this, and Rufin said that Greg Weaver has put up deer fencing and has written about this.
	Rufin said he and charlotte saw a deer fence in RI that looked easy to do and worked very well 3 – 4 feet of mesh with strands above it, with a solar panel.
NATURAL RESOURCES CONSERVATION SERVICE NRCS GRANT	There was a meeting in Massachusetts with John Meiklejohn, Brian Clark and Kendra at their office. They met with Christine Clark and John Kick. Christine said for NRCS this sounds like a win/win if they can find a way to support us and you are doing what NE wide forestry initiative. They are concerned about declining species like oak and John said they would be interested in chestnuts. There is a potential for a good fit with this organization. They each were to follow up on this.
	John M. is on a timeline to get the seed orchard underway, and asked about the timeline for a matching grant. John Kick said talk to Vince Snyder, who gave them an application. He they needed a Forest Stewardship Plan (which he is doing) and that if John applied as the land owner, any grant money would have to be declared as personal income on his tax return. Also to apply for NRCS grant he would have to be registered as the landowner or as the Mass Chapter to be certified to receive a federal grant. Jamie Newland said there are several procedures to be qualified. They would need to see a copy of a signature authority, show we are a 5013C, a tax number, and even if we were just applying for the Granville site, we would have to show them all the lands that we have in use now. Kendra asked if they know that we do not own any of this land? This turns out to be a fairly involved bureaucratic process involving a large amount of

	work - and John does not see this happening this year. He recommends for the
	Granville seed orchard we consider a combination of chapter money and other
ODCHADD MEEDO	money available for the seed orchard this year.
ORCHARD NEEDS	Rufin said other orchard expenses will be rogueing out. We may get a chipper
FOR THIS YEAR	donated, but may have to pay someone for this. Also we are supposed to be
	burning this material, not chipping. If a stump is cut flush to the ground and can
	be mowed, the tree will eventually die off, this way we can avoid using an herbicide
GRANVILLE WORK	
DAY	John M suggested Saturday April 30 with Sunday, May 1 rain date _6 people could come on that date; Lois and Yvonne are doing presentations that day. John
DAT	will send out emails and see who can come on both days, then select a day. This
	would be from about 9 – 5, or whenever people can get there, his wife Sarah will
	provide lunch.
	provide idition.
	Guy asked what is John looking for in the way of tools? Brian C. can bring the
	bobcat, we will need some chainsaws, and also Technu soap, most of the trees
	arenot infested with poison ivy, but a few are.
	Kendra said she can do post cards for this work party, if desired. More info will go
	out online about this volunteer work party.
PLANNING	We have a bunch of selections in existing orchards and have to get these crosses
CROSSES FOR	going and Charlotte said John wanted to do hand pollinating this year.
NEXT SPRING	
	Crosses are mostly Clapper with some Graves, the Clapper orchards were fairly
	slow in getting started. In her orchard the Graves Sterling and Grafton are graves.
	Jamie do we know how we are doing this pollination? You want to track possible
	parents – Wrentham we have not finished roguing out.
	It will be a mix of both. We need a clear path for pollinating for this Summer, we want to make sure that everything gets done. Y suggested that Jamie and other
	members of the seed orchard committee,
SELECTIONS	Sterling will be rogued out, Charlotte hasn't done the final assessment yet and
GEEEGTION	does not want take out too much yet. You can pick out the worst, but not too
	many _50 – 75% cankers were similar.
	Which other orchards Grafton, Medway, Wrentham need to be done this year?
	We have to do this before flowering.
	Rufin talked about the possibility of having to burn the chips at a biomass plant.
	Guy said getting the chips there could be a problem. Could National Grid will chip
	the stuff then get it there?
	Drobably we could burn on site if we can get a narmit for the site. We should be a
	Probably we could burn on site if we can get a permit for the site. We should burn because the fungue stays alive for a couple of years, even on chips
	because the fungus stays alive for a couple of years, even on chips.
	Charlotte and Kendra are going to work on this.
ROGUING OUT	Normally roguing takes place in mid to late of June. We are now waiting for
	permits before we can do this in 2011. Charlotte said we have enough to rogue
	out this year
INOCULATIONS	We need permits in place first. We are not allowed to use the inoculum without a
	permit.

### AFTERNOON MEETING

Saturday, April 9, 2011 1 p.m. River Bend Farm Uxbridge

All of the TACF Board Members minus Guy Shepherd, USACE people, Emily from Hampshire College,

plus Rich Hoffman

MEETING	Minutes from winter meeting were approved
MINUTES FROM	
PREVIOUS	
MEETING TREASURER'S	There is a small but unknown amount of interest not entered into the Treasurer's
REPORT	Report; the motion was made that the Presidents Travel Expenses not to \$1,000 for
TILLI OITI	one year, this was approved; Jamie felt that it was important that the Chapter
	President represent the Board at National meetings. It was stated that the inoculation
	fund could possibly pay for an intern; the Treasurer's report was approved.
SECRETARY'S	Membership is stable at 337 members.
REPORT	Ellen Sousa from Spencer called and asked for pictures of chestnuts for a book she
	is writing; there is a possible mother tree in Worcester that is 60' tall and 10 – 12 "
	DBH, Charlotte has examined the leaves and thought it was American, but there
	weren't enough leaves in the sample to be 100% certain.
	Rutland man has property on Cape Cod and wants seeds, it was felt that a
	germplasm agreement was needed maybe he could access some of the "Mutt Nuts"
	(undocumented nuts)
	Ralph Baker from Fitchburg has tree and site; he attended Curt Laffin's presentation
	last winter at the Nashua River Greenways Assn. He's been alert for chestnuts in the
	woods for 40 years & had sent twig& leaf samples. The land is in NW Fitchburg
	adjacent to 1,700 acres of watershed land. Kendra will re-contact him Jamie will get a leaf and twig sample and check the site.
	lear and twig sample and check the site.
	Kathy mentioned a member who helped in the Granville orchard last year and is
	willing to work again.
ELIZABETH	Spoke about Restoration Branch Events and possibly another branch event in May in
HAMMOND,	Princeton with the help of Mass Audubon. Kendra suggested that Bryan Burhans be
TACF BRANCH	contacted because the Restoration Branch dinners are a big priority.
EVENTS	The group requested that OSV be queried for a Restoration Branch Event, and a
	contact was given by Kendra.
	Somast was given by Noriala.
OTUDENT	Yvonne suggested that we start an email for Chestnut Branch Events.
STUDENT	Motion was made and approved to "hire a summer intern at \$12 per hour, not to
INTERN	exceed \$2,200 including travel, working under the direction of Charlotte and other orchard managers as needed." The intern would help with inoculations, and needs to
	work 160 hours.
	HOIR 100 Hours.
	Charlotte is working with a student in a Plant Taxonomy class named Erin, who is
	very nice, independent and a real "go-getter" who has had GPS science training. She
	lives is Western Mass., has her own car, and is willing to travel.
	The detahage needs to get in changes it can get cent to Neticial and with some
	The database needs to get in shape so it can get sent to National, and with some formatting help from Kendra, the intern will be able to do this.
	Tormatting help nom Kendra, the intern will be able to do this.
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NEWS OUTLETS	Great job with newspaper stories. We received \$5,000 from a single donor in response to recent newspaper stories. The money must be used during 2011 with a report date due on Feb. 1 2012.
	We have 2 plaque presentations for Frank Howard and Jim, Kathy will contact them to see if they would like to attend our summer meeting, if not, perhaps a small delegation from the Board could visit to make these presentation.
	The Noter meeting went very well: the Vegetation Management Group attended
PROJECTS	The Nstar meeting went very well; the Vegetation Management Group attended.  The shovel ready project is John Meiklejohn's seedorchard. A motion was made to "authorize the executive to spend up to \$2,500 for the seed orchard preparation and \$2,500 for fencing." Approved unanimously
	The South Kingston orchard was discussed, and it was felt that rather than formally committing at this time, we feel them out and clarify some vagueness in our partnership; they are applying for other grants and there was a concern that the timing of the grants might not coincide. Yvonne is the contact person for the S. Kingston orchard, but she is not the Orchard Manager. The S. Kingston Land Trust owns the land.
	It was voted to authorize the executive committee to be able, if needed, to expend the grant money if it needs to be done before next summer's chapter meeting
FUTURE SEED ORCHARDS	<ul> <li>Yvonne said we have a nice selection of future orchard locations:</li> <li>1. Watuppa reservation</li> <li>2. Army Corps of Engineers land</li> <li>3. RI Land &amp; Water Conference Trustees of Reservations (TTOR) was on board about the Fall River project.</li> </ul>
	200 nuts from the Nanking line (93 & 120) The existing Ashfield/Hawley orchard is Clapper and they are far enough away and far enough apart in time they will not be a problem.
	Charlotte thought she should start these in cardboard sleeves then set them out in June.
	We will need multiple blocks of each type of seed orchard – in Granville it's just about one acre, so that will be one block.
	S Kingston is 1.6 acres, which will be one block
	Army Corps land is a great opportunity if this works out. There may be negative things happening on some of these sites in terms of security, will these orchards be near buildings?
	Mike N thinks his land can be cleared in exchange for the wood – sawmill like logs he has 7 acres.
	Also the Fitchburg site could be used for some Nankings.
	Brian is willing to do a seed orchard in Hawley at some point. Mike N said this would be good in terms of the difference in elevation between sites.

Yvonne reminded us that we need 9 blocks of each, and 10 would bebetter. It depends on whether we do/want open or closed pollinations. The number of nuts that exist in BC orchards will probably ramp up – we still have a little time to augment with some Nankings. Jamie asked what Charlotte's thoughts were on whether or not we need another line for Wayland. Possibly do two others which would give us 6 lines of Nankings. Jamie wonders what's the difference between 3 and 6? Charlotte thinks we should continue on so that we have enough to can get some selections from this. This will give us "more bang for the buck". Charlotte asked what Fred's goal with the Nankings? Mike N said that having more different lines is more important than having more of one line. Charlotte would like to have a couple of orchards of Nankings. Jamie asked when do we stop, and Charlotte until it interferes with doing seed orchards. Doing different lines is enough so that we do not have to depend on one tree. Charlotte feels we should do more than we need. In terms of seed orchards there is the possibility of using existing research orchards as seed orchards. Roy has Clapper with BC3 and some mixed Americans We are probably a distance away from reusing existing orchards for seed orchard blocks, and we want to be able to collect nuts from existing trees Production seed orchards will eventually be created, we can plant additional orchards to expand the seed orchards We need to look for new mother trees Yvonne asked what else do we need to decide? OTHER **BUSINESS** Jamie says he gets Osmocote near where he works and can easily pick this up. Denis asked about fertilizing an orchard that is going to be inoculated, and Charlotte says we should still be fertilizing all orchards, especially those being inoculated. They can't fight the disease if they don't have the correct nutrients they will not be able to properly fend off the blight. All receipts for fertilizer can be submitted to Mike N. **UPDATES** Any news from Smith College or UMass? Smith is working on their orchard preparation and don't need anything from us now. They do not want mutt nuts as they want to know what they are working with. UMass applied to TACF's external grant program for funding – no decisions made yet. Charlotte will order more Agriphos Upper Goose Pond looks like it will be happening. Licensed pesticide operator is needed on federal land, if we had someone with a license along, this will be OK. Treat a sample of 20 trees, use 20 more as controls, and monitor to see how they do. If they actually flower we can find a way to pollinate these. Can we get to them? Charlotte will have access to a computer driven helicopter.

	Bristol Aggie, we were talking about giving them some of our new BC3F3s for their greenhouse. We were going to give them (?) they were also going to get mutt nuts for area with dead red pine.
	The Forestry Guild is going to have a meeting and he is going to give some of the attendees mutt nuts for forest preserve plantings.
	The CR in Granville is going along (?)walked the property and was hired to develop the forest stewardship plan by the end of June. The CR will be done and the language will be complete so we can send this to John Mirick then.
	John Mirick asked us to read the agreements and see if it needs more or if everything is enclosed
RESTORATION PLANTING MEETINGS	Kendra hosted the New England chapter's meeting at Urban Forestry in Portsmouth NH with about 40 people to start thinking about the chestnut restoration and come up with a plan. This was started a few years ago, but not everyone was happy with what was asked of the chapters. The NE meeting was one of four chapter meetings on restoration planning. The notes from these meetings will be consolidated and discussed at the spring board meeting.
	Following the chapter meetings there will also be three subject_specific meetings to help to develop a comprehensive restoration plan. Brian McCarthy has been asked to chair a restoration/ecology meeting, Kim Steiner a genetics/breeding meeting and Michael Doochin a business/development meeting. The hope is to have a draft by the fall annual meeting, even if it's an outline.
	Sara is posting the notes from these meetings on a website: <a href="http://sfr.psu.edu/public/chestnut/meetings/regional-restoration-meetings">http://sfr.psu.edu/public/chestnut/meetings/regional-restoration-meetings</a>
	They are also working on a seed orchard manual people can help if they'd like.
	There are certain answers that are not black and white and this is difficult to explain in a video. Sara has already developed a nice planting manual.
	The first deployment of the database is now up. It's very early in development but will have a planting module by fall.
MIKE NOVACKS PRESENTATION	Hand outs were provided on this theory on reusing orchards.
MEETING ADJOURNED	4:35 Summer meeting in Granville at 10:30 – 2 – 3 hour business meeting then picnic. Sunday, July 31, 2011

Copy of April 9, 2011 meeting of the MA/RI Chapter of TACF

Respectfully submitted, Lois A. Breault-Melican