## An Arrangement for Use of a Small Area of the Fitzgerald Tract

The Woodbridge Land Trust, Inc. (the Trust) desires to obtain the use of a small area of the Fitzgerald Tract. The objective will be to plant chestnuts to start a chestnut nursery in furtherance of a scientific effort the goal of which is the development and propagation of a truly American Chestnut that is blight resistant. In time, if we enjoy a measure of success, we may have an orchard. This local effort by the Trust, assisted by *The American Chestnut Foundation* and other interested parties, will be a part of a program widely recognized as having long range ecological, conservational and educational significance for the entire region of the thirteen original Colonies and Appalachia. The program is more particularly described in the germplasm agreement attached hereto as Schedule B.

In support of these objectives, The Town of Woodbridge (the Town) agrees to allow the Trust and interested associates to use that area (the Area) of the Fitzgerald Tract described in detail in Schedule A subject to the following conditions:

- 1) The Town may terminate this arrangement at any time upon six (6) months notice in which event the Trust agrees to comply with the provisions of the germplasm agreement regarding termination.
- The Trust shall be responsible for complying with all terms of the germplasm agreement and bearing all costs associated therewith. The Trust shall reimburse the Town for any and all costs, including attorneys' fees and court costs, incurred as a result of a) the Trust's noncompliance with the germplasm agreement, alleged or otherwise; or b) the Trust's noncompliance with any of the terms therein.
- 3) So long as the Trust is not in default under this arrangement or the germplasm agreement, and the Town has not elected to terminate this arrangement, the Town shall not attempt to sell, distribute or destroy any material or product covered by the germplasm agreement. In the event of the Trust's default, the Town agrees that it shall not attempt to sell, distribute or destroy any material or product covered by the germplasm except in accordance with the germplasm agreement.
- 4) The Trust shall confine its chestnut activities on Fitzgerald to the Area.
- The Trust shall carry liability insurance covering claims for negligence on the part of the Trust and/or its agents and officers in the Area and with an insurance company experienced in insuring land trust properties and the activities contemplated herein in an amount satisfactory to the Town Finance Director. The Trust shall indemnify and hold harmless the Town against and from any and all claims, damages, costs and expenses arising from the foregoing. The insurance policy must contain a provision providing the Town with 30 days prior notice of termination, non-renewal, or restriction of coverage. The Trust will provide the Town with a copy of the insurance policy as evidence that these requirements have been met.
- 6) The Trust shall comply with all applicable federal, state and local laws, rules, regulations, and ordinances.

- 7) The Town requires and the Trust agrees to clean up the Area and maintain it in a reasonably neat and safe condition satisfactory to the Town. To this end, the Town grants the Trust permission to fence in the designated Area, provided, however, the design and placement of any such fence shall be subject to the prior approval of the Town and the removal of any such fence (and the cost thereof) at the termination of this arrangement shall be the sole responsibility of the Trust. The Trust shall maintain the Area using good ecological and conservational practices consistent with the stated objective. Parties interested in helping to reach these objectives shall do so under the direction of the Trust.
- 8) The Trust shall use no herbicide other than Rounge (glyphosate) without first getting permission from the Town.
- 9) The Town agrees to post the Area restricting access to those who have specific permission from the Trust.
- 10) The Town, as holder of the fee simple for the Fitzgerald Tract, retains all rights and responsibilities for the Area except for the responsibilities assumed by the Trust and rights granted to the Trust under this arrangement. The Trust may not assign or transfer its rights under this arrangement to any party without the Town's written consent.
- 11) The Town may require the Trust to submit a report or appear for a review before the Board of Selectmen at reasonable intervals.
- 12) There being small pockets or low spots in the Area that may collect water to the detriment of chestnut seedlings, the Town shall permit the Trust to install agricultural drainage satisfactory to the Town.
- 13) It may become desirable to provide some water for the Area and the Town shall permit the Trust to install a pump with housing at the pond west of the Area in the woods and a non-rusting storage tank located either in the woods or beside the big tree at the high spot in the Area.
- 14) In the event *The American Chestnut Foundation* proposes to amend the germplasm agreement in any respect whatsoever, the Trust shall provide the Town with at least 30 days' prior written notice of any such proposed change. The Trust shall not accept or propose any change in the germplasm agreement without first obtaining the consent of the Town to the change. In the event the Trust accepts any change in the germplasm agreement without having obtained the consent of the Town, the Town shall have the option to terminate this arrangement immediately whereupon the Trust shall comply with the provisions of the germplasm agreement regarding termination. Any amended germplasm agreement to which the Town has consented shall become the operative germplasm agreement in the terms of this Arrangement.

IN WITNESS WHEREOF, I have here	eunto set my hand and seal this 1844
day of July, 2005.	
GRANTOR	
Signed, sealed and delivered in the presence of:	
Jan Park	For the Town of Woodbridge, Amey Marrella, First Selectman
20 Juscet	
State of Connecticut ) ss Woodbridge County of New Haven )	
On this the/8 day of, the undersigned officer, personally appeared a County of New Haven and Town of Woodbrid be the person described in the foregoing instruction the same in the capacity therein stated and for the capacity therein stated and stated are stated and	ge, known to me (or satisfactorily proven) to ument, and acknowledged that she executed
In witness whereof I hereunto set my ha	nd.
	Sma P Calies Superior Court Stary Public
M	y commission expires:
	My Commission Expires May 31, 2006

## GRANTEE

THE WOODBRIDGE LAND TRUST, INC.
Accepted by: James P. Bilotta
Its duly authorized: President
Signed, sealed and delivered in the presence of:
For The Woodbridge Land Trust, Inc.  James P. Bilotta
State of Connecticut ) ) ss.: County of New Haven )
On this the 18th day of JUN, 2005, before me, LINON PLANT, the undersigned officer, personally appeared James P. B. John, who acknowledged himself to be the President of the Woodbridge Land Trust, Inc., a non-profit corporation, and that he, as such President, being authorized so to do, executed the forgoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Woodbridge Land Trust Jac
In witness whereof I hereunto set my hand.
Email Pales  Commissioner of the Superior Court  Notary Public

My commission expires:

My Commission Expires May 31, 2006

### Schedule A

The Town of Woodbridge owns 131 acres of land shown on the assessor's map as 100 Center Road which land is commonly called the Fitzgerald Tract. It is fully described in Volume 101 pp 54-57 of the land records of the Town of Woodbridge.

In the southwest corner of the cornfields on the Fitzgerald Tract there is established a point A at a GPS reading of being about 700 feet west of Beecher Road and 900 feet south of Center Road and about 20 feet in each direction from a stone-dust walking path that makes a right angled turn in that corner. Point A is 30 feet north of point A-1 marked by an iron peg and 40 feet east of point A-2 marked by an iron peg, points A-1 and A-2 being 50 feet apart.

A base line is established by proceeding from point A at a bearing of N 20° E for 375 feet to point B. This base line is roughly parallel to a stone wall just to the west and to Beecher Road to the east. From point B, proceed 355 feet at a bearing of S 80° E for 355 feet to point C. From point C, proceed 375 feet at a bearing of S 20° W in a line parallel to the base line to point D. From point D proceed 355 feet to the starting point A.

The base area A-B-C-D is almost exactly three (3) acres

Several feet from the north side of this base area is an irregular stone wall with accompanying brush and scrub trees that partially separates the two cornfields. From point B proceed at a bearing of N 60° E to the point E at the stone wall. From E proceed to point F that is the northerly extension of line C-D to the stone wall.

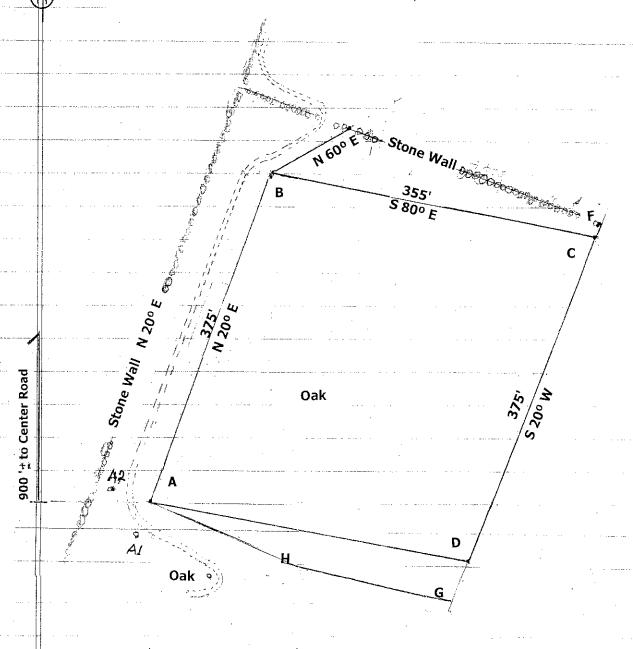
A few feet to the south of the line D-A is an irregular brushy edge of the cornfield. From point A proceed at a bearing of S 70° E to the brush line at point H and then easterly to point G. G is a point established by the southerly extension of line C-D to the edge of the cornfield.

The area A-B-E-F-C-D-G-H-A is the total area of this Arrangement.

The points will be marked with iron pegs after the area is graded and worked.

## Chestnut Area on the Fitzgerald Tract

## Map Not to Scale Outside the Base Area A-B-C-D



700' to Beecher Road

Scale 1 cm = 40 feet

1 in = 101.6 ft

R.A.GREGG MARCH 10,2005

40 80 120

### Schedule B



#### THE AMERICAN CHESTNUT FOUNDATION GERMPLASM AGREEMENT Regional Adaptability Breeding Program

This Agreement, dated and effective \_\_\_\_\_\_\_, 20\_\_\_\_, is between The American Chestnut Foundation, a Virginia nonprofit corporation with its principal facility in the State of Virginia (hereinafter referred to as "TACF"), and the entity executing this Agreement at the foot hereof (hereinafter referred to as the 'Recipient"),

The Reasons for this Agreement: TACF is in the process of breeding hybrid chestmut trees for eventual release into the public domain closely resembling pure American chestmut trees but without susceptibility to the disease known as chestmut blight and with resistance to insect pests and other major pathogens of chestmuts. The method of plant breeding being used by TACF is commonly referred to as the "backcross method" wherein lines of American chestnut stock are outcrossed once to other species of chestmut carrying genetic resistance to chestmut blight, and successive generations of such outcrosses are then repeatedly backcrossed to American chestnut to recover the desirable characteristics of the American chestnut tree while incorporating blight resistance. It is in the interests of TACF and of the Recipient to be able to test and observe the characteristics of hybrids which are in the earlier stages of such backcrossing (i.e., the original outcross and first through third backcrosses [and intercrosses between individual trees of the same generation of backcrossing] since selected offspring of third backcross trees are considered to be genetically primarily an American chestnut type of tree). But the Recipient and TACF do not want the Recipient or others to use genetic material from such early stages for propagation purposes because: (1) the Recipient and TACF wish to preserve TACF's rights to such genetic material; and (2) the Recipient and TACF most emphatically do not want any person to take such material and market it, or to market any progeny from it; the material may not have the characteristics that are not consistent with the goal of TACF, namely "the Restoration of the American Chestnut", and not a Chinese or other type of tree; and (3) the Recipient and TACF do not want to be identified with the distribution, increase or marketing of material that has the potential of diluting the resident American chestnut population in the Appalachian mountains.

The Terms of this Agreement: This Agreement applies to all varieties of chestnut germplasm, and includes but is not limited to: pollen, nuts, scion wood, sprouted seeds, small chestnut plants, rooted cuttings, and all progeny thereof, all of which are owned by TACF and hereinafter referred to as the "germplasm."

TACF agrees to supply samples of germplasm to the Recipient. In consideration of this action by TACF, the Recipient agrees to abide by the following terms and conditions as to said germplasm and any other germplasm which has heretofore been received or will hereinafter be received from TACF which is not otherwise covered by a subsequent agreement, UNLESS AND UNTIL TACF SPECIFICALLY RELEASES ANY CONDITION IMPOSED BY THIS AGREEMENT ON THE CUSTODY AND USE OF ANY OF SAID GERMPLASM. This agreement supercedes any and all previously signed germplasm agreements between TACF and this recipient.

and this recipient.

1. The Recipient understands and agrees that this Agreement conveys only a right to carry out research, evaluations and/or field testing on the germplasm on behalf of and in consultation with TACF. None of the germplasm (or any material resulting in any manner from the germplasm) may be sold, offered for sale, given (by gift or otherwise), or in any other manner transferred or distributed to any third party (that is, someone who has not signed a TACF Germplasm Agreement) whatsoever (except as provided in paragraph 7 below) without first being covered by a specific written consent from TACF describing the material sold or otherwise transferred, the conditions of the transfer, and other conditions acceptable to TACF in its sole discretion. TACF reserves the right to refuse transfer for any reason whatsoever. It is expressly understood that under this Agreement no implied or express license is granted by TACF to the Recipient for any transfer of the germplasm to a third party.

reason whatsoever. It is expressly understood that under this Agreement no implied or express license is granted by TACF to the Recipient for any transfer of the germplasm to a third party.

2. The sample of germplasm provided hereunder may be used for basic research, evaluation and/or field testing on behalf of TACF. However, no transformation techniques are permitted with the germplasm. No mutagenesis, tissue culture, or cellular techniques are permitted with any seeds, plants, or plant parts of the germplasm, or of any plant material resulting from the germplasm, including pollen. Selection may be conducted with the germplasm when done as a part of a cooperative agreement (or "Selection Agreement") between TACF and the recipient, with title and distribution rights to such selections being retained by TACF.

3. Seed stock increases for evaluation are permitted. However no seed, plants, plant parts, seed parts, callous tissue or DNA of or resulting from the germplasm may be transferred or distributed to any third party, except as otherwise provided herein.

4. The Recipient understands that the germplasm is being supplied to the Recipient solely to enable the Recipient to assist TACF in evaluating the germplasm and in furthering the breeding program of TACF. The Recipient agrees to take reasonable care of the germplasm, to make a commitment to the maintenance of the germplasm appropriate to the purposes for which the germplasm has been supplied (and insofar as the Recipient is reasonably able to do so), to cooperate with the State TACF Chapter and TACF so that they may carry out their responsibilities regarding the Regional Adaptability Breeding Program, and to do such other things as are reasonably necessary (and reasonably within the capabilities of the Recipient) to further TACF research projects by means of the germplasm being supplied to the Recipient. Recipient.

The Recipient will permit scientists or other personnel of TACF to view and take samples of germplasm growing at such locations at reasonable

5. The Recipient will permit scientists or other personnel of TACF to view and take samples of germplasm growing at such locations at reasonable times and after reasonable prior notice to the Recipient.

6. The germplasm is provided "as is." TACF MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER WHATSOEVER RELATED TO THE GERMPLASM INCLUDING WITHOUT LIMITATION THE CONDITION OF THE SAMPLE, ITS MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTIES REGARDING INFRINGEMENT OF THIRD PARTY RIGHTS.

7. TACF retains ownership of all germplasm transferred to the Recipient and of all germplasm created therefrom, unless the parties negotiate a separate, joint-ownership agreement. The Recipient retains ownership of all real property on which germplasm is planted. Nothing in this Agreement shall restrict or impair the free transferability of the Recipient's real property, including that real property on which any trees produced from germplasm are located. In the case of a transfer of property interest by inheritance, the heirs of the Recipient shall be bound by the terms and conditions of this Agreement unless terminated by them as provided below. If the transferee of the real property interest has entered into its own agreement with TACF governing such trees, the Recipient will be under no further obligation. In all other instances of sale or other transfer and Recipient's interest in real property on which trees produced from germplasm are located, this Agreement shall automatically terminate upon such transfer and Recipient agrees to destroy all such trees produced from germplasm or otherwise returning germplasm to

8. The Recipient may terminate this Agreement at any time by destroying trees produced from germplasm or otherwise returning germplasm to TACF. The Recipient shall provide TACF with 60 days' written notice prior to destruction, in order to give TACF the opportunity to move the trees or otherwise

preserve the germplasm.

This Agreement is nonassignable, is governed by the laws of the State of Virginia and may be amended only with the mutual written consent of both parties.

This Agreement is effective when signed by the Recipient. Each individual signing for a corporate entity or any other entity hereby personally warrants his or her legal authority to bind that entity. If either party prevails in any litigation alleging violation of this Agreement, that party shall also be entitled to an award of attorneys' fees incurred in connection with such litigation to the extent permitted by the law of the State in which the germplasm is located.

## RECIPIENT: THE AMERICAN CHESTNUT FOUNDATION BY: TITLE: TITLE: DATE: ADDRESS: PHONE:\_\_\_ DATE:

March 9, 2005

Dr. Robert Gregg Woodbridge, CT

I am writing in response to a request you made in our telephone conversation on February 16. I enjoyed talking with you and learning about the plan to establish a chestnut tree nursery in Woodbridge. This sounds like an excellent project that will benefit people and wildlife well into the future.

From what I understand, the proposed plan involves controlling the existing vegetation in a 3-foot diameter circle at each spot a chestnut will be planted. Weed control in these circles will be accomplished by spraying the herbicide glyphosate, the active ingredient in Roundup and other equivalent products. In contrast to standard agricultural practice of spraying the entire field with herbicide, your plan of limited spot sprays will use much less chemical. Also, your plan to spread wood chips between seedlings in a row and to maintain grassy strips between rows will greatly reduce the need for glyphosate to control weeds around the trees. These practices will also minimize the potential for soil erosion.

I will attempt to address the most common concerns about glyphosate as well as its usefulness for controlling weeds. Consider that I tend to address typical agricultural practices and that your herbicide use and exposure will be significantly less. All chemicals pose some degree of risk, whether to humans or the environment. The old adage "the dose makes the poison" applies. One should consider the risks associated with the quantity of herbicide being used and ways in which risks can be minimized (following instructions on the product label, wearing protective clothing, avoiding spray drift, etc.). Then, of course, "benefit-risk analysis" comes into play. Do the benefits provided by the herbicide outweigh the risks associated with its use?

First, what are the benefits of using glyphosate for this project?

- 1) Greatly reduce the time, effort and costs involved in controlling existing vegetation on the site prior to planting chestnuts. This vegetation may include woody brush and other perennial weeds that are very difficult to remove or prevent from re-sprouting. If applied when weeds are actively growing, glyphosate will kill the vast majority of these weeds. Compared to other vegetation control options, an application of glyphosate is highly efficient in terms of labor and money.
- 2) Provide effective and convenient control of weeds that emerge after planting. Adequate vegetation control is crucial to minimize competition for the essentials of plant growth: water, nutrients and light. In particular, young tree seedlings do not compete well with weeds. So, it is important to minimize weed growth in the planting rows, especially for the first few years after planting.
  - Glyphosate kills existing weeds, but does not prevent subsequent weed emergence. Thus, if no pre-emergence herbicide ("weed preventer") is used, glyphosate will need to be applied periodically to control weeds in the tree rows. Sprays must be carefully directed to avoid contacting the trees, especially when their leaves are present. Dead vegetation resulting from glyphosate treatments will provide some mulch effect to reduce soil erosion, and nutrients will return to the soil as weeds decompose. The few weeds that escape glyphosate treatments can be removed easily by hand or hoe. Vegetation between tree rows can be managed by occasional mowing.

Glyphosate "works" (is herbicidal) when absorbed into the leaves and/or stems of plants. Upon contact with soils, glyphosate is adsorbed or bound so tightly to clay particles and soil organic matter that it is not available for uptake by plant roots (i.e. it is inactive in soil). Thus, glyphosate in the soil will not affect chestnuts (or other seeds / plants) subsequently planted in that soil. Taking advantage of this fact, a common weed control strategy in crop fields is to prepare the soil for planting (plow, till, rake, etc.) 2 or 3 weeks before the planned planting date, allow weeds to emerge, then plant crop seeds into the weedy soil. After seeds are planted but before crop seedlings begin to emerge (usually 3 to 7 days after planting, depending on the crop, planting depth, soil temperature and moisture), glyphosate is sprayed to kill the weeds without harming the soon-to-emerge crop seedlings. In this way, the crop will get a head start before the next weed seedlings start to emerge. A similar practice could be employed when planting tree nuts, as in the proposed chestnut project.

Now, let me address concerns about harmful effects of Roundup or other glyphosate-based herbicides to humans, wildlife, or the environment in general.

- 1) Relative to other herbicides, glyphosate is considered by the U.S. Environmental Protection Agency (EPA) to have low oral and dermal acute toxicity to several test animals, and low to moderate toxicity to aquatic organisms. The EPA classifies glyphosate as a Group E oncogen a chemical that has shown no evidence of carcinogenicity in chronic exposure studies with rats, mice and dogs. Also, reproductive toxicity studies have concluded glyphosate does not cause mutations. These toxicity tests are conducted with quantities of glyphosate far exceeding those encountered under normal situations.
- 2) Glyphosate is the most widely used herbicide in the world. Millions of pounds of glyphosate have been applied to millions of acres of land worldwide for more than 25 years. A tremendous amount of research has been conducted on glyphosate regarding its herbicidal activity, toxicity to non-target organisms, environmental fate and impact, etc. Glyphosate's primary mode of action is to inhibit an enzyme (EPSP synthase) that is a key component in biosynthesis of three amino acids (phenylalanine, tyrosine and tryptophan) in plants. These amino acids are essential components of plant proteins. Without them, plants will slowly die. Some fungi also contain EPSP synthase, but animals do not. A few studies have found glyphosate to have temporary impacts on soil microorganisms. However, there is no evidence of detrimental effects on microbial populations from glyphosate usage over time.
- 3) As mentioned before, glyphosate has a very strong affinity for clay and organic matter surfaces, thus it binds tightly to soil particles. So, although glyphosate is highly soluble in water, it has very low potential for off-site movement such as contaminating groundwater or surface waters. Transport of glyphosate can occur though, if soil particles move via erosion. Strong adsorption of glyphosate also prevents its volatilization (vapor losses to air).
- 4) Glyphosate is a simple organic compound that is readily metabolized / degraded by soil microorganisms. Several types of soil bacteria decompose the glyphosate molecule, releasing carbon dioxide, nitrogen and phosphorus in the process. Some bacteria can even thrive in laboratory conditions in which glyphosate is their sole source of nitrogen. Strong adsorption of glyphosate may slow the rate of biodegradation because it is less accessible to microorganisms. As a result, the half-life of glyphosate may be quite lengthy in some soils. However, bound glyphosate is practically immobile and inactive, so even if it takes longer to decompose, there should not be any detrimental ecological impacts.
- 5) The Nature Conservancy (TNC) has had a major shift in policy regarding herbicides over the past 10 or 15 years. Non-native invasive plants are one of the greatest problems TNC land managers face because of the negative impacts on native plants and wildlife. They realize

that glyphosate and some other herbicides are important tools in preserving their properties from these invaders. TNC maintains an excellent website (http://tncweeds.ucdavis.edu/) devoted to invasive plant management. A primary feature of this website is the Weed Control Methods Handbook (WCMH): Tools and Techniques for Use in Natural Areas, a very thorough and well referenced guide to management options for invasives. The handbook contains sections on "Regulation of Herbicides" and "Guidelines for Herbicide Use." Also included are detailed chapters on glyphosate and several other herbicides. The glyphosate chapter includes information on the following: "Use against natural area weeds", "Mode of action", "Dissipation mechanisms" (adsorption, volatilization, photodegradation, microbial degradation, chemical decomposition), "Behavior in the environment" (vegetation, soils, water), "Environmental toxicity" (birds & mammals, aquatic species, other non-target organisms), "Application considerations", "Safety measures", and "References (literature cited)". The WCMH was completed in April 2001, but several sections/chapters have been updated more recently. I consider it an excellent, balanced guide prepared by an organization that has an established record of environmental stewardship. I recommend the WCMH highly for anyone interested in learning more about invasive plant management options, herbicides in general, or glyphosate in particular.

Considering all this information, I suggest that proper use of glyphosate will provide benefits for this project that far outweigh the relatively minimal risks to people, animals or the environment.

Some other important points:

- Always read and follow the directions on the herbicide label! Abide by the safety and environmental precautions. Wear personal protective clothing as explained on the label. Do not exceed the recommended application doses. Avoid spray drift.
- Formulated products (Roundup, etc.) have either CAUTION or WARNING signal words on the product labels. [from lowest to highest risk: Caution, Warning, Danger, Danger-Poison]. The WARNING on the label of some glyphosate products is mainly due to damage that the inert ingredients (surfactants, etc.) can cause to eyes and skin. When mixing or applying the herbicide, wear eye protection and chemical-resistant gloves and boots.

Check these websites for more information about glyphosate and other herbicides:

The Nature Conservancy - Wildland Invasive Species Program http://tncweeds.ucdavis.edu/handbook.html

U.S. Environmental Protection Agency - Pesticide Programs: http://www.epa.gov/pesticides/

Cornell University - Pesticide Management Education Program: http://pmep.cce.cornell.edu/

Please contact me for comments or questions. Best wishes for your chestnut project.

Sincerely,

Todd L. Mervosh, Ph.D. Weed Scientist The Connecticut Agricultural Experiment Station Selectmen's authority to lease property is limited to one year. Mrs. Marrella said that by noticing each year that property was available for lease the Town is returning to a former practice where farmers were billed for the use of the land. She said that this past year when the Fitzgerald land lay fallow several people approached the Selectmen's Office and asked to use the land and it became evident that a more formal process should be followed, and the Selectmen will adopt guidelines for the lease of the farm land and review the agreement with the Community Gardeners.

## **CHESTNUT TREES**

The Board reviewed the materials regarding the proposed Chestnut Tree grove. In answer to a question from Mrs. Marrella, Mr. Gregg explained that due to the contour of the property, a drainage pipe will be installed to drain the excess water away from the planting towards the pond located in the woods.

Mr. David Schneider, 25 Cassway Road and his wife Virginia expressed concern over paragraph #8 of the proposed agreement that would allow the Land Trust to use of the herbicide Round-up. They distributed several documents that cautioned about the use of Round-up, or any herbicide. Mrs. Schneider said that she was now especially concerned if water from the area is going to drain into the pond that the Community Gardeners use for water.

Mrs. Marrella also expressed concern over the use of herbicide as the Fitzgerald property is located in the public water supply watershed.

The Board **VOTED UNANIMOUSLY** (Calistro – Sabshin) to authorize the Land Trust to plant a chestnut grove on the Fitzgerald Property as detailed on the map presented. Further the proposed Agreement is accepted with the amendment to Paragraph #8 which shall now read "The Trust shall use no herbicide without first getting permission from the Town".

## **USE OF TOWN OWNED FARM LAND**

The Board VOTED to adopt the 'GUIDELINES FOR LEASING TOWN OWNED FARMLAND" with the following amendment to #7 so that it now reads "The lessee will plant a winter cover crop following harvest and leave the property in at least as good condition as at the commencement of the lease and shall remove all personal property and equipment"

VOTE: Aye – Calistro, Marrella, Sabshin, Schwartz, Sheehy Abstained – Mr. Sorensen abstained from voting as he is a farmer in Town.

For the record, the approved guidelines appear below:

Sheehy thanked Mr. Alexiades and with no further comments from the public, the Board returned to the regular agenda.

# REQUEST TO MODIFY "AN ARRANGEMENT FOR USE OF A SMALL AREA OF THE FITZGERALD TRACT"

<u>Dr. Phil Arnold</u> was present and began by asking Bob Gregg, who prepared the outline submitted to the Board, to speak first.

Robert Gregg, 11 Old Quarry Road, addressed the Board, saying you have before you the one page letter I wrote which indicated when we were coming to the arrangement that there was an objection to using herbicides on Fitzgerald and to expedite the matter we simply crossed the phrase out in order to get on with the real business with the American Chestnut Foundation. We signed an agreement with the American Chestnut Foundation and we've made a lot of progress. At the time, there was no activity in Connecticut; we have served as the model for other people to get into this. At this point, there is one other chestnut nursery since we got the ball rolling and there is another one proposed. We've taken the lead on this and we are making proposals on how these nurseries should be established and run. We are at the point where we need to make further progress and part of that would involve the use of a relatively benign herbicide called "Roundup". You have in front of you, all of the information we've gotten from Dr. Todd Mervosh, the weed and herbicide expert for the State of Connecticut, stationed in Windsor at the Connecticut Agricultural Experimental Station. His conclusion was that the only real down side to Roundup is if you happen to spray your chestnut trees. Believe me, we will be very careful not to do that. All of you have seen the area over there that's fenced in. We get many comments about how nice it looks; that's just not happenstance. Phil Arnold is spending many hours a week taking care of that place; he mows it regularly – at least once a week; it takes a lot of time. I was in there Sunday counting plants and I would see where he had been down on his hands and knees pulling up weeds from all these little tubes that have the chestnut trees. Well, you can't do that for 150 or 160 tubes that are in there now, it's impossible to do it. What we're faced with are invasive plants that there is no way to control really, except for the use of herbicides. Mr. Gregg proceeded to display samples of the various weeds they are dealing with (hogweed, mugwort, quackgrass, yellow nutsedge) and he described in detail the impact they have and how difficult it is to eliminate them. He said that the plants are endemic over there. It looks like a nicely moved field, but you go through it walking and Phil can tell you, it is a mass of weeds and most of them are mugwort. We've also got quackgrass; there's no way you can kill it.

Dr. Arnold said when I started out, because of the restrictions on herbicides, I was grub axing around each of the trees and I did that for about the first month. Then the quackgrass started to get ahead of me and I was only able to pull out the mugwort because it's got a nice taproot and you can get it out when it's small if it's not too long. If it is too long, then you break the root off and it comes back anyway. But now, if you go look at the trees, where I had about a two foot area around each tree, it has shrunk down and in some places it was so bad I had to try to hand weed it out. When you pull it up, the root system comes up, but you don't get it all, it breaks off and so that I'll go back in another week and it will all be back again so the little trees are struggling to compete for water, nutrients, and so forth with these weeds. Dr. Arnold was asked if a license was needed to spray and he replied no, not for Roundup. He was also asked if the fenced-in area was kept locked. Dr. Arnold replied "no". He was further asked if he were to spray Roundup in that area is there a way to secure that. Dr. Arnold said there is, but biologically, it attaches to the plant and it attaches to the ground; it's not toxic to human beings.

Mr. Gregg continued saying, if you look at the end of Dr. Mervosh's dissertation, there are three references and there's a goldmine of information in those references on toxicity. There have been millions of pounds of that used throughout the world for twenty-five years and there's no record at this point of deleterious affects on man or beast after all this use, so it is a fairly benign thing. There's another thing we have over there – it is called yellow nutsedge. Mr. Gregg proceeded to display a sample of that plant which was 9 days old and said that yellow nutsedge is a pernicious plant and there's no real way to control it. The gardens out there are full of it and we've got it in the fields. Ms. Scalettar asked who is it that we have an agreement with not to use any herbicides and what is the original agreement that you want to amend; who are the parties to the agreement? Mr. Gregg replied the Board of Selectmen and the Woodbridge Land Trust; that is for the agreement to use Fitzgerald. Ms. Scalettar asked who asked to have Roundup deleted as an exception for use. Mr. Gregg responded that there were a couple of townspeople at the meeting who objected to using any herbicide.

Dr. Arnold said he is an organic gardener and he said he does not use any pesticides or herbicides on his property, except on his terrace where the grass gets down between the bricks and he uses Roundup. Dr. Arnold said his wells are right there, as well, and the Roundup doesn't go anywhere; it fixes to the proteins in the soil and doesn't go anywhere and it degrades very quickly and is very safe. He said he checked with the people at the American Chestnut Foundation in their laboratories in Virginia and Penn State where they have their orchard manager and they use it pretty much all over the place to try to control weeds. He said I'm coming back to you now because things like mulch, plastic mulch or wood chips and so forth, shouldn't be used to treat it because the rodents get in.

Dr. Sabshin said, there were objections not from just two people, we had objections from people in the Community Gardens and there was a big discussion and a compromise that allowed us to move forward. Ms. Scalettar said she would like to go back to the language and also the point made in the letter, because it did specifically say that the trust shall use no herbicides other than Roundup and that specific exception was taken out. So there had to be some concern about Roundup itself. Dr. Arnold said that if you take anything out of physiologic principals and you overdose on the stuff you're going to have problems with it, that's true of anything. But when you use it in small amounts for very specific purposes, in very small areas; one, there's no run-off, two, it biodegrades very quickly. We're talking about Roundup now, not any other herbicides, and again, in terms of the orchard, as it now stands, for me to continue to really be able to control it and control the weeds. Dr. Sabshin asked how often it would need to be applied. Dr. Arnold said that it takes five to seven days for the plant to die after application, but once it is in there it would be another 4 to 6 weeks before you would have to reapply it. He said in that area the seeds and the runners are ubiquitous and unless you do the whole field, which we don't want to do, we just want to keep the areas of about a foot to a foot and a half area around each tree, that's all. Mr. Gregg said they would be using about one-tenth as much as a farmer would use on an entire field and it is used all over the country. Dr. Arnold said that last year when the corn was in that front field, he has pictures indicating that herbicide was used to control the weeds on that field and nobody had any objection to that - on the entire field and all the corn survived and everything else died. We're not doing that, it's very specific about the trees. Mr. Sheehy said, so your proposal is just to spray around the trees? Dr. Arnold said to spray around the trees, along the fence and I will continue to weed-whack the stone wall in the center instead of spraying it with the herbicide. Weed-whacking around the trees does not get rid of the root system that is strangling my trees.

Mr. Sheehy said, the proposal seeks to reinsert the words "other than Roundup" in paragraph 8 of the agreement, with the understanding they will keep a record of when the Roundup is sprayed and where it is sprayed.

Motion: Dr. Sabshin Moved and Mr. Dickerson Seconded a motion to approve the recommendation.

**VOTE:** To approve the recommendation to reinsert the words "other than Roundup" in paragraph 8 of the agreement.

Aye – Sabshin, Sorensen, Stein, Dickerson Abstained – Scalettar

The motion passed.

## August 17, 2006

Dr. Philip Arnold 131 Beecher Road Woodbridge, CT 06525

Re:

Use of "Roundup" on Fitzgerald Property

Dear Dr. Arnold:

At a Regular Meeting of the Board of Selectmen held on August 9, 2006, the Board approved the use of the herbicide glyphosphate (commercially known as "Roundup") for the control of weeds in the Chestnut Nursery planted on the Fitzgerald Property. An amendment detailing this use will be executed by the First Selectman and the appropriate Officer of the Woodbridge Land Trust and attached to the original agreement with the Woodbridge Land Trust entitled "An Arrangement for Use of a Small Area of the Fitzgerald Tract".

Pursuant to this approval, a monthly log detailing the use of the herbicide "Roundup" will be maintained by you or your designee and filed with the Selectmen's Office.

Sincerely,

Geraldine S. Shaw, Clerk Board of Selectmen

cc:

James P. Bilotta, President Woodbridge Land Trust