INLAND WETLANDS COMMISSION MINUTES Special Meeting of March 10, 2020 at 2:00 p.m.

Zoom Meeting

Website link: https://zoom.us/j/91428392360 Call-in Number: 1 (646) 558-8656 Meeting ID: 914 2839 2360

These Minutes are subject to Approval by the Inland Wetland Commission

Present: Sharon Salling, Mike McCabe, Kendall Horch, Kristen Hammar, Craig Ferris

Staff Present: Steve Maguire, Senior Land Use Enforcement Officer, Steve Hnatuk, Land Use Officer, Dawn Fried, Clerk

Ms. Salling opened the meeting at 2:00 p.m.

APPROVAL OF MINUTES for the Regular Meeting of December 9, 2020

The Commission found no substantive errors. Mr. Ferris moved to accept the minutes from December 9, 2020. Ms. Horch seconded. The minutes from December 9, 2020 were approved.

ACCEPTANCE OF APPLICATIONS

IW #21-05, 68 Dodgingtown Road, Michael Jehle & Sara Mattson-Fishman for pond dredging was accepted and will be heard at the Regular meeting of March 24, 2021

IW #21-06, 1 Elm Drive, Town of Newtown for pond dredging was accepted and will be heard at the Regular meeting of March 24, 2021. The Commission had a lengthy discussion as to whether or not this application should be set as a public hearing.

Mr. Maguire pointed out that this property, known as Ram's Pasture, is a highly visible public area but raised the question whether the content of the application is of public interest. Mr. Maguire stated there is no significant impact because it's a restoration project. Mr. Maguire stated there has been no public interest expressed except at the Pootatuck Water Association (PWA) meeting from some of the members.

Mr. Hnatuk stated the project will need grant funding which they do not have at this time. The applicant is requesting the wetland permit ahead of the funding.

Ms. Salling asked the Commission to state their opinions. Ms. Salling stated that to the best of her knowledge, this project does not rise to the level of a public hearing due to no other public interest.

Mr. Ferris agreed with Ms. Salling and stated the project does not have a significant impact but rather has beneficial environmental impacts. Ms. Hammar and Ms. Kendall agreed with Mr. Ferris. Mr. McCabe suggested waiting until the next meeting to make a decision based on possible public interest that might arise. Ms. Salling stated a decision should be made at this meeting and stated since nothing contentious has come up a public hearing is not warranted. The Commission unanimously accepted the application and agreed it will be heard at the regularly scheduled meeting on March 24, 2021.

OTHER BUSINESS

Ms. Salling discussed the election of officers and asked the Commission if they were interested in self-nomination or nominating another Commissioner. The election of officers will be added to the next IWC agenda and the slate will be voted on.

ADJOURNMENT

With no additional business, Mr. McCabe moved to adjourn. Mr. Ferris seconded. All in favor. The meeting of March 10, 2021 was adjourned at 2:18 pm.

Respectfully Submitted, Dawn Fried

INLAND WETLANDS AND WATERCOURSE REGULATIONS of the Town and Borough of Newtown, Connecticut



APPENDIX D

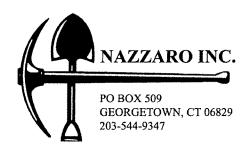
Permit / Permit Modification Application Form

(Please note: Failure to provide all of the information requested may result in your application being considered incomplete and rejected without prejudice by the commission.)

⊐X	Permit, or $IW = 21 - 05$
	Permit Modification (existing permit application #) or
	Request for Extension (existing permit application #)
1.	Name of Applicant: Michael Jehle and Sarah Mattson-Fishman
	Address: 68 Dodgingtown Road, Newtown, CT 06470
	Phone: (Home) (203) 383-9841 (Business)
2.	Owner's Name: Michael Jehle and Sarah Mattson-Fishman
	Address: 68 Dodgingtown Road, Newtown, CT 06470
	Phone: (Home) (203) 383-9841 (Business)
	: If applicant is not the property owner, the owner's written consent to the application must be attached to application form.
3.	Project Location: 68 Dodgingtown Road, Newtown, CT 06470
	Map: 7 Block: 3 Lot: 1 Newtown Tax Account # 00854800
	a. Is project located in the Aquifer Protection District? Yes No X
	If yes then the applicant must notify CTDPH as defined in P.A. 06-53
	b. Is the project located within a Public Water Supply Watershed? Yes No_X_
	If yes then the applicant must notify CTDPH as defined in P.A. 06-53
	c. Is the project located within 500 ft of the border with an adjoining municipality? Yes No_X
	d. List the current zoned use for which the proposed activity is to occur and present use:
	Zoned R2, present use is multi-structure residential
	INLAND WETLANDS COMMISSION ORIGINAL DOCUMENT
	Received Date: $3-5-21$
	29
	Received By:

INLAND WETLANDS AND WATERCOURSE REGULATIONS of the Town and Borough of Newtown, Connecticut

4.	Quantitative Information:
	a. Wetland Soil Type(s): Organic pond sediment and sand mixture
	b. Upland Soil Type(s): topsoil and glacial till
	c. Amount of wetlands proposed for alteration: N/A
	d. Amount in linear feet of stream proposed for alteration: 90' of stream bank armoring
	e. Amount of total area proposed for alteration: pond approx 5,200 sf
	f. Amount of material to be removed or deposited in wetlands or watercourse:none
	g. Amount of total material to be removed or deposited: _approx. 250 cu yards
5.	Describe the proposed activity and estimated time for completion of the project: 10 days to complete: 1) Install approx. 90' of boulder and rock to protect and stabilize inlet flow along eroded
	stream bank. 2) remove sediment from pond inlet sediment trap. 3) remove sediment from
	existing pond and restore to original depth and shape.
4.	Describe the purpose of the proposed activity:1) Protect stream banks from erosion2) Remove built up sediment from inlet trap and prevent further sediment from getting into
	pond. 3) remove built up sediment from pond to improve water quality, limit weed growth
	and provide improved habitat.
order	ASE NOTE: The Commission may require additional data, information, or reports as it deems necessary in to adequately evaluate the application. Signature of the applicant is a release for access to the parcel for errors necessary to the determination of said application.
accur	e personally examined the information submitted in this document and certify that the information is true, rate, and complete to the best of my knowledge. I understand that providing false information MAY BE ISHABLE AS A CRIMINAL OFFENSE in accordance with Section 22a-6 of the Connecticut General tes.
Submi	itted By: Michael Jehle Signature 3/5/21 Printed SHRAH M FISHMAN 3/5/21
	e use only at 410.00 Date: 3-5-21 Receiving Individual: Ω 7



February 3, 2021

Town of Newtown **Inland Wetlands Commission** Newtown, Ct.

Newtown Inland Wetlands Commission,

Please let this letter serve as authorization for Nazzaro Inc. to act as my agent. The purpose of this authorization is for regulated activity permit at 68 Dodgingtown Road Newtown, Ct.

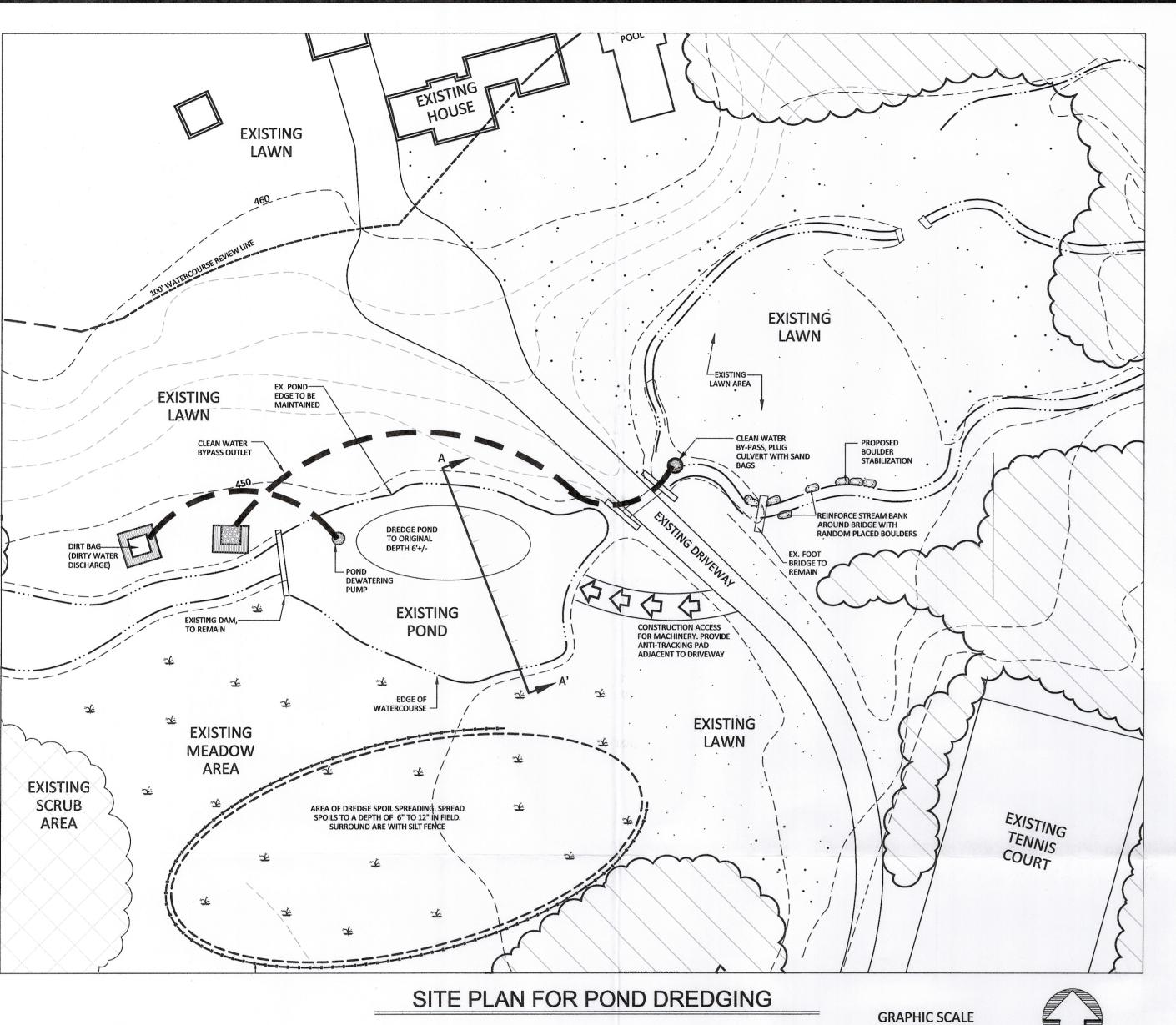
Michael Jehle Owner

Sarah Mattson-Fishman Owner

INLAND WETLANDS COMMISSION ORIGINAL DOCUMENT

Received Date: 3 - 5 - 2

Received By: _



STORAGE CHAMBER

DEWATERING PUMP

NOT TO SCALE

GEOTEXTILE SILT FENCE SHALL LINE THE **NEW HAY BALES** INTERIOR SIDE OF HAYBALE BARRIER. **BUTTED TIGHTLY** SET FENCE FABRIC BOTTOM INTO TOGETHER (TWO GRADE TO PREVENT BREAK OUTS. STAKES PER BALE) **SET HAY BALE 4" INTO** RIP RAP/CRUSHED STONE SPILLWAY WEIR IF NEEDED

NOTE: DIMENSIONS VARY ACCORDING TO PUMPING RATES. MINIUM REQURIED STORAGE IS CALUATED FROM THE CREST OF THE WEIR.

DEWATERING DIRTBAG SCALE: NOT TO SCALE

(1/2" TO 1' DIA.) 1. STORAGE CHAMBER MAY BE LARGE DIAMETER PIPE OR A CLEAN STORAGE DRUM. CHAMBER SHALL BE PERFORATED TO ALLOW WATER TO PASS. 2. SILT FENCE MAY BE USED IN PLACE OF GRAVEL DEWATERING CHAMBER NOT TO SCALE 6" HT. OVERFLOW WEIR ND HAYBALES 4" INTO GROUND CENTER HAYBALE 10"± INTO GROUND **BACK UP HAYBALES WITH GRAVEL OR** SILT FENCE TO PREVENT BREAK OUTS DEWATERING DISCHARGE POINT FOR CLEAN WATER BY PASS

- DISCHARGE PIPE

CLEARN GRAVEL

EROSION CONTROL NOTES:

1. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RESTABILIZATION OF DISTURBED

2. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS SEDIMENT CONTROL", DEP BULLETIN 34, 2002.

3. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED DURING THE CONSTRUCTION PERIOD AS NEEDED. THE TOWN WETLAND DEPARTMENT STAFF AND THE PROJECT LANDSCAPE ARCHITECT SHALL HAVE THE AUTHORITY IN DETERMINING THE NEED FOR ADDITIONAL CONTROLS. ADDITIONAL EROSION CONTROLS SHALL BE PROVIDED AND

4. DISTURBED AREAS TO BE LEFT EXPOSED FOR MORE THAN 21 DAYS SHALL BE SEEDED WITH RYEGRASS AT THE RATE OF 1 IBS. PER 1000 SQUARE FEET WITHIN SEVEN DAYS OF THE OCCURRENCE OF THE DISTURBANCE. APPLY SOIL AMENDMENTS AND MULCH AS NEEDED TO ESTABLISH A DENSE, UNIFORM AND HEALTHY VEGETATION STAND OVER SEEDED AREAS.

5. THE SITE CONTRACTOR SHALL UTILIZE METHODS AND MATERIALS FOR THE PREVENTING OF DUST (SOIL) BLOWING ONTO OFFSITE AREAS.

6. THE SITE CONTRACTOR SHALL MAINTAIN AN EXTRA SUPPLY OF SILT FENCE (50' MIN.)

7. EROSION CONTROL MEASURES SHALL BE INSPECTED AND REPAIRED IF NEEDED WEEKLY AND AFTER EACH RAINFALL.

8. EROSION CONTROLS SHALL BE MAINTAINED IN WORKING ORDER DURING THE

9. IF CONSTRUCTION OPERATIONS ARE DELAYED FOR ANY REASON ONCE SITE WORK HAS COMMENCED, THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER ROUTINE

> SUPPORT POST 6' O.C. OR AS SPECIFIED BY MANUFACTURER

EXCAVATE, INSTALL SILT FENCE

SIDE VIEW

SILTATION FENCE FABRIC

AND BACKFILL

COMPACTED SUBGRADE

1. POSITION POSTS TO OVERLAP AS SHOWN ABOVE, MAKING

BY TYING OFF WITH CORD OR WIRE TO PREVENT

FLOW-THROUGH OF BUILT-UP SEDIMENT AT JOINT.

CERTAIN THAT FABRIC FOLDS AROUND EACH POST ONE FULL

2. DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS

SOILS SHALL BE COMPLETED AS SOON POSSIBLE.

AND SPECIFICATIONS NOTED IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND

INSTALLED BY SITE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

ON THE SITE FOR EMERGENCY REPAIRS.

CONSTRUCTION PERIOD AND UNTIL THE SITE SOILS ARE STABILIZED AND VEGETATED.

MAINTENANCE AND INSPECTION OF THE EROSION CONTROL MEASURES DURING THIS PERIOD.

GENERAL NOTES:

1. THE EXISTING CONDITIONS INFORMATION FOR THIS PLAN WAS TAKEN FROM AVAILABLE THE TOWN GIS MAPPING. CONTOURS ARE SHOWN AT 2' INTERVALS. REFER TO XXX SURVEY FOR ADDITIONAL INFORMATION

2. WETLAND LINE WAS NOT FLAGGED FOR THIS PLAN.

2. SUPPLEMENTAL EXISTING CONDITIONS BY ELS.

CONSTRUCTION SEQUENCE

1. PREPARE MACHINE ACCESS LAWN AND EXISTING DRIVEWAY.

2. INSTALL SEDIMENTATION AND EROSION CONTROLS FOR POND DREDGING.

3. INSTALL DEWATERING PUMP, BYPASS AND DISCHARGE BASIN AS SHOWN ON PLANS.

4. LOWER WATER LEVELS IN THE POND USING DEWATERING PUMPS TO CREATE A "DRY" WORK AREA.

5. PREPARE PERIMETER OF DESIGNATED SPOILS AREA.

6. RECONSTRUCT FOREBAY AT POND ENTRANCE FOR FUTURE MAINTENANCE.

7. REPAIR/RESET STONES AND MORTAR AT INLET & OUTLET STRUCTURES TO MAINTAIN HISTORIC WATER LEVEL.

7. MAINTAIN EXISTING POND EDGE. MOVE DREDGE SPOILS TO AREA NOTED ON PLAN. ALL DREDGE SPOILS WILL REMAIN ON SITE. DREDGING WILL BE LIMITED TO THE AMOUNT OF SPOILS THAT CAN BE ACCOMMODATED ON THE SITE.

8. WHEN DREDGING IS COMPLETE DECOMMISSION BYPASS AND DEWATERING PUMPS AND ALLOW WATER TO RETURN TO POND.

9. SEED AND MULCH ALL DISTURBED AREAS TO STABILIZE AFTER DREDGING AND ALL EXPOSED SOILS WITH "NEW ENGLAND EROSION CONTROL/RESTORATION MIX (MOIST SITE) OR APPROVED EQUAL. SEED IS AVAILABLE FROM NEW ENGLAND WETLAND PLANTS, IN AMHERST, MA, (413-548-8000).

10. REMOVE EROSION CONTROLS WHEN SITE SOILS ARE STABLE AND VEGETATION IS ESTABLISHED.

11. FINAL SITE CLEANUP.

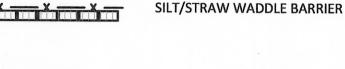
LEGEND

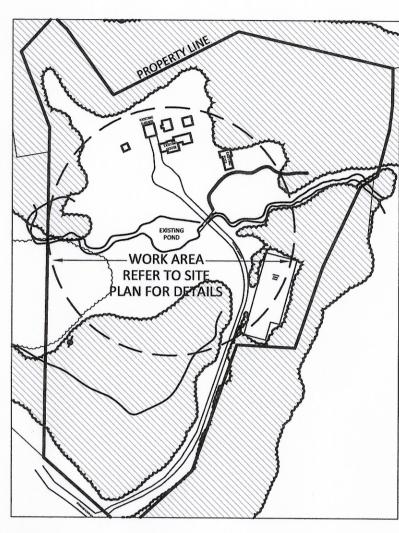
mon

PROPERTY LINE EXISTING TREELINE/VEGETATION TO REMAIN

-----WATER'S EDGE

EX. TREES TO REMAIN EDGE OF PAVEMENT





PROPERTY MAP

SCALE 1"=200'+/-

450 -APPROXIMATE WATER LEVEL EXISTING GRADE (APPROXIMATE)

1 MAX. SLOPE

\$PLANNING \$

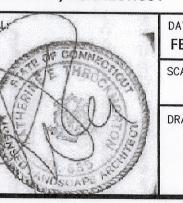
POND CROSS SECTION A-A'

SCALE 1"=10' REVISIONS: ORIGINAL DOCUMENT

Received Date:

Received By:

Tel: (203) 855-7879 Fax: (203) 855-7836 info@elsllc.net www.elsllc.net



DRAWING TITLE:

SITE PLAN - POND DREDGING MATTSON-FISHMAN & JEHL RESIDENCE 68 DODGINGTON ROAD NEWTOWN, CONNECTICUT **ENVIRONMENTAL LAND SOLUTIONS, LLC** FEB. 25, 2021 Landscape Architecture and Environmental Planning 1"=20' **8 KNIGHT STREET, SUITE 203** NORWALK, CONNECTICUT 06851 DRAWING NO .:

PROPOSED GRADE

SP.

INLAND WETLANDS COMMISSI
ARIGINAL DOCUMENT

Received By:

3 - 5 -2

DF

SEEDING NOTES:

SCALE: NOT TO SCALE

SILT FENCE DETAIL

NOTES:

PROJECT

- 1. IF FEASIBLE, SEEDING SHALL BE DONE BETWEEN SEPTEMBER 1ST AND OCTOBER 15TH OR BETWEEN APRIL 1ST AND JUNE 1ST.
- 2. SEED AREAS AT THE METHODS AND 125% THE RATE RECOMMENDED BY THE MANUFACTURER. A NURSE CROP OF PERENNIAL RYE GRASS (AT A RATE OF 50 LBS./ACRE) SHALL BE ADDED TO THE SEED MIX ON SLOPES OF EXCESS OF 10% AND AS SPECIFIED. SEED SHALL BE OBTAINED FROM AN APPROVED SUPPLIER. SEED MIX SUBSTITUTIONS SHALL BE EQUIVALENT TO THAT SPECIFIED AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER PRIOR TO USE.
- THE SEED SHALL BE SPREAD ON THE PREPARED SEEDING SOIL, RAKED LIGHTLY TO ESTABLISH GOOD SOIL CONTACT, AND MULCHED WITH A 2 INCH LOOSE LAYER OF CLEAN INLAND WETLANDS COMMISSION OAT STRAW OR COMMERCIAL WOOD FIBER PRODUCTS APPLIED BY HAND OR BY HYDROSEEDING ON SLOPES LESS THAT 10%. SEEDED SLOPES ON OR GREATER THAN 10 PERCENT SHALL BE COVERED WITH A PLASTIC-FREE EROSION CONTROL BLANKET.

Control of Invasive Water Chestnut in Hawley Pond, Newtown, CT

Application by Town of Newtown Land Use Agency

Date: 3/8/21

Goal

The goal of this project is to control or eradicate water chestnut (Trapa natans) from an approximately 1.5 acre pond. Water Chestnut was first found in the pond last fall 2020 and currently covers nearly the entirety of the surface of the pond. The Town of Newtown proposes to dredge the entire entire pond to remove all water chestnut and imbedded water chestnut seeds.

The proposed project water body is Hawley Pond. Hawyley Pond is an impoundment of Country Club Brook located in Ram's Pasture Park. Country Club Brook is a 1st order stream with a Class A Water Quality Designation. Ram's Pasture Park is located at 1 Elm Drive, Newtown, CT 06470. Please see Attachment A, B, C.

The property is owned by the Newtown Village Cemetery Association. Copies of the Tax map and Tax Assessor property card are included as attachment E.

Target Species

The target species is Water Chestnut (Trapa natans) which is listed in the Connecticut Invasive Plant List. The plant was first identified by Dr. Thomas Philbrick, PhD, Professor of Biology, West Connecticut State University.

Documentation of the target species as well as a letter of recommendation from Dr. Thomas Philbribink are included as Attachment C.

Water chestnut has been identified in Hawley Pond this past fall. The water chestnut covers approximately 90% of the surface area of the 1.5 acre Hawley Pond. The infestation is so new that aerial photographs have not yet captured the extent of the coverage during summertime when the plant grows extensively. However, pictures such as Attachment C clearly show the extent of coverage on the pond. Attachment H shows the estimated extent of coverage.

Purpose, Need, and Benefit:

Purpose:

The purpose of the Control of Water Chestnut (Trapa natans) in Hawley Pond is partly to restore the ecological functions of the water body after a nearly complete infestation of invasive water chestnut, and to protect ecologically and socially valuable resources downstream.

Need:

Invasive water chestnut was first observed in Hawley Pond this past summer of 2020. Due to the large quatity and significant coverage of the invasive over the large majority of the 1.5 acre water body, the infestation may have been present for multiple years before discovery, making the removal of the invasive more urgent. The plant's seed is transported by surface water and if left unchecked, has the potential to cover the entire downstream watershed.

Hawley Pond, located in Ram's Pasture Park, is located approximately one-half mile upstream of Deep Brook which flows approximately 2 miles until joining the Pootatuck River, which later joins the Housatonic River another 2 miles downstream. Of these downstream reaches, 2 miles of the Pootatuck and Deep Brook is classified as a Class 1 Wild Trout Management area. This area is ecologically sensitive Brook Trout habitat which is comprised of mostly Town, State, and private conservation land. Additionally, the Pootatuck drains into Lake Zoar, a 900 acre reservoir which has four public access boat launches, multiple state parks, and is used for boating, fishing, swimming and kayaking.

Benefits:

Anticipated benefits for control and removal of invasive water chestnut include the following:

- 1) Restoration of a functional native open water and shallow water habitat in the pond
- 2) Improvement of water quality through improved dissolved oxygen levels
- 3) Recolonization of native plants and other photosynthetic organisms, fish, amphibian, and bird species which utilize the pond. Increasing general biodiversity
- **4)** Increase Town of Newtown's public park space use and awareness of invasive plants through outreach efforts
- 5) Prevention of spread of invasive water chestnut into downstream water resources.

Pre-Control Monitoring:

Description of Controls:

Dredging will be used to control the invasive water chestnut. Hawley pond has been dredged multiple times in the past to control sedimentation which occurs in the pond. It has been recommended by multiple local experts that mechanical harvesting has the greatest chance for success of the project. The proposed project will consist of dredging the entire 1.5 acres of Hawley Pond to remove all water chestnut plants and the unique large seeds of the plant which will be the pond-bottom sediment. This will cause more disturbance to the pond, but is necessary due to the near complete coverage of the pond with invasive water chestnut. It is estimated that approximately 6,000 cubic yards of material will need to be removed from the pond. There are no plans to utilize chemicals or pesticides to treat Water Chestnut in order to reduce indirect impacts to other desirable aquatic plants as well as those downstream of the outlet of the pond. This will also reduce likelihood of any plant decay which could release excess nutrients and lead to algal blooms downstream. Please see **Attachment G** for the Site Plan and Methods of Control.

The water level in the pond will be drawn down prior to dredging in order to prevent excessive sedimentation downstream as well as to maximize of the effectiveness of the invasive removal. Dredging to remove the seeds from sediment is an important aspect of the project since the plants seeds can lay dormant and germinant up to 12 years after deposition. The project is proposed to begin as soon as possible, however the project may be contingent upon obtaining funding from DEEP.

Best Management Practices for dredging will be utilized. Erosion controls will be installed before any work on site is conducted in accordance with the states Stormwater Control Manual. This will include controls around multiple dredge spoil stockpile areas, around the outlet of the dam on the pond, and around the edge of the water. The pond is an oblong shape which makes shoreline dredging via excavator feasible for most of the pond. If necessary, machinery can enter over the ponds bank from the central-western side of the pond to dredge any areas that cannot be reached. Sediment and invasive plant excavated from the pond will be left to dry in designated spoils areas before being loaded onto trucks for off-site removal. Erosion control matting will also be utilized in the post-construction phase in order to minimize bank and upland erosion.

<u>Protection of State-listed Species or Significant Natural Communities:</u>

There are no State and Federal Listed Species identified on the parcel nor are there any State Natural Diversity Database Areas identified.

Rehabilitation and Restoration of Hawley Pond Site:

A shoreline and pond re-planting plan is included in this application as **Attachment I**. This plan is intended to re-establish native vegetation in the pond but also as a side benefit, re-plant the direct shoreline and adjacent upland while other work is being conducted on-site to minimize disturbance later on.

Please see the **Attachment J**, Schedule of completion.

There are significant seasonal constraints to the project. Since there will be more seasonal growth of both the invasive water chestnut and naturally occurring native vegetation during the spring and summer as well as increased habitat functionality of the pond in general during the warm seasons it is a priority to complete this project during this winter. Beginning the project in late winter will also allow the pond sediment to be firmer and for lower water flow in Country Club Brook, creating lower potential for sedimentation downstream and allowing the project to be completed faster.

Additional Attached Documents include the following:

-Attachment L, Newtown Village Cemetery Association Authorization for application

Attachment A

Parcel Map – Hawley Pond – Ram's Pasture Park -- 1 Elm Drive Newtown, CT



Attachment B

Hawley Pond – Pre-Invasive Infestation



Google Earth Imagery 4/22/2018.

Attachment C

Invasive Water Chestnut - - Hawley Pond – Rams' Pasture Park, Newtown, CT



Photos by Dr. Charles Philbrink



Confirmation Ventown CONNECTICUT

Confirmation of Invasive Species and Recommendation of Action Stephen Hnatuk <stephen.hnatuk@newtown-ct.gov>

RE: Newtown Water Chestnut

1 message

Thomas Philbrick <philbrickt@wcsu.edu>

Tue, Jan 19, 2021 at 11:37 AM

To: Stephen Hnatuk <stephen.hnatuk@newtown-ct.gov>

Cc: Thomas Philbrick <philbrickt@wcsu.edu>

Steve:

This e-mail is to confirm that Hawley Pond (Ram Pasture) in Newtown, CT is invested with water chestnut (*Trapa natans*). The attached photographs were taken in August, 2020 and show the extent to which water chestnut covers the surface of the pond. This plant is an annual and will grow back from seeds come spring. When I took the pictures I noticed high fruit production on the plants that I examined. Lots of fruits equates to lots of seeds to re-establish plants during the growing season in 2021.

I have background in the biology and diversity of aquatic plants as I teach a graduate course focused on aquatic plants at Western Connecticut State University. I do not, however, have experience in removing aquatic invasives.

My understanding is that there are two basic methods to deal with Water Chestnut: herbicide, mechanical removal. Both will have broader impacts on the ecology of Hawley Pond. Herbicides will disrupt the Water Chestnut, but also negatively impact other desirable aquatic plants in the pond and perhaps those that occur along the stream that serves as the outflow from the pond. Herbicide treatment will also release nutrients as plants decay, which could lead to algal blooms. Dredging (mechanical) is designed to remove fruits/seeds of the invasive plant of concern (Water Chestnut), which it will do, at least to a degree. But dredging will also disrupt the ecology of beneficial aquatic plants in the pond, as well as other biota (e.g., fish, invertebrates).

Will one application of either treatment lead to the complete extirpation of Water Chestnut in Hawley Pond? Probably not, but it will knock the species back considerably. Follow up work will be necessary to insure that Water Chestnut does not come back to undesirable levels.

My recommendations.

- 1. Use mechanical harvesting.
- 2. Monitor the pond for several years after mechanical harvesting and remove young plants/fruits of Water Chestnut that are found.
- 3. Integrate this monitoring into school environmental curricula, e.g., high school environmental science classes.

7/2021 Town Trubing Martine We wtown Water Chestnut
Let me know if you need more information. I am willing to serve as an unpaid (volunteer) consultant on the project if applicable.
Be well.
Best regards,
Tom
C. Thomas Philbrick, PhD
Professor of Biology
Connecticut State University Distinguished Professor
Department of Biological & Environmental Sciences
190 White Street
Danbury, CT 06810
203-837-8773

From: Stephen Hnatuk <stephen.hnatuk@newtown-ct.gov>

Sent: Tuesday, January 19, 2021 9:25 AM

To: Thomas Philbrick <philbrickt@wcsu.edu>

Subject: Re: Newtown Water Chestnut

Please be cautious

philbrickt@wcsu.edu

This email was sent from outside of your organization

Hi Tom thanks,

Just a couple things...We are applying for a DEEP Invasive aquatic species grant to gain funding to support a project to remove the water chestnut in Hawley Pond. We are working with a local

Attachment D

Section 9. Public Access and Use



Google Earth, 2021

Attachment E

Section 10. Waterbody Ownership

Tax Map - Hawley Pond, 1 Elm Drive Newtown, CT



Town of Newtown



Town of Newtown, CT

Property Listing Report

Map Block Lot

29-9-1

Account

00265100

Property Inform

Property Location	1 ELM DRIV	E		
Owner	NEWTOWN	VILLAGE	CEME	TARY ASSN
Co-Owner	T. BRAUN	**************************************		
Mailing Address	P.O. BOX 11	7		
Maining Address	NEWTOWN		СТ	06470
Land Use	9062	CEMETE	ERY	•
Land Class	E			
Zoning Code	R-1			
Census Tract				
Sub Lot				
Neighborhood	090			
Acreage	10.3			***************************************
Utilities	Well,Septi	C		
Lot Setting/Desc				
Survey Map				
TC Survey Number	s			

Photo
LHOIO

No Photo Available

Sketch

Primary Construction Details

Year Built	
Stories	
Building Style	
Building Use	
Building Condition	
Floors	
Total Rooms	

Bedrooms	
Full Bathrooms	
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	
Roof Cover	

Exterior Walls	
Interior Walls	
Heating Type	
Heating Fuel	
АС Туре	
Gross Bldg Area	
Total Living Area	

Town of Newtown



Town of Newtown, CT

(زو					
3	Property Listing Report	Map Block Lot	29-9-1	Account	00265100

Item	Appraised	Assessed	Туре	Description
ildings			And the second s	
ctras				
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otal				
				
Sub Areas			<u> </u>	
Subarea Type	Gross Area (sq ft)	Living Area (sq ft)		
			_	
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			_	
otal Area			_	
3 A	i	0		

NEWTOWN VILLAGE CEMETARY ASSN

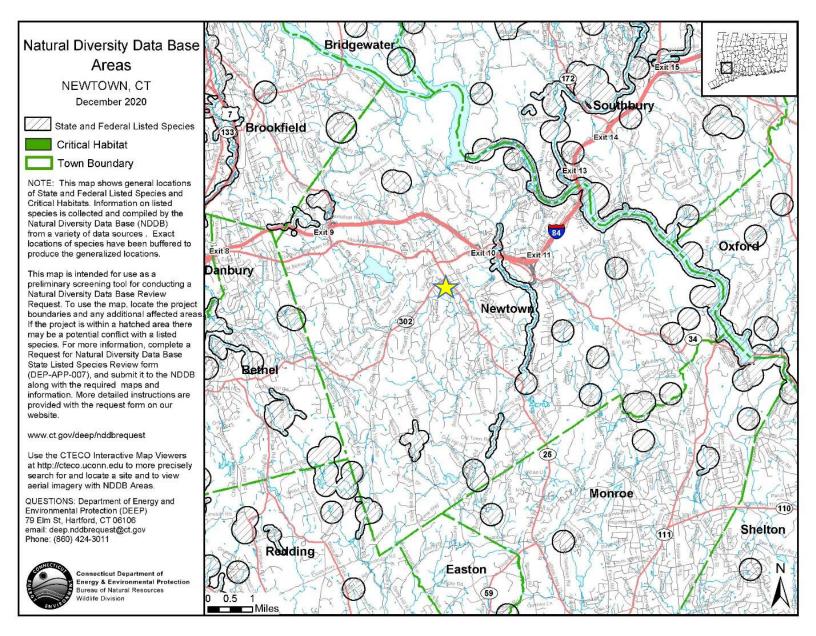
12/25/2009

Attachment F

Section 12. NDDB Map



Hawley Pond - Proposed Project site

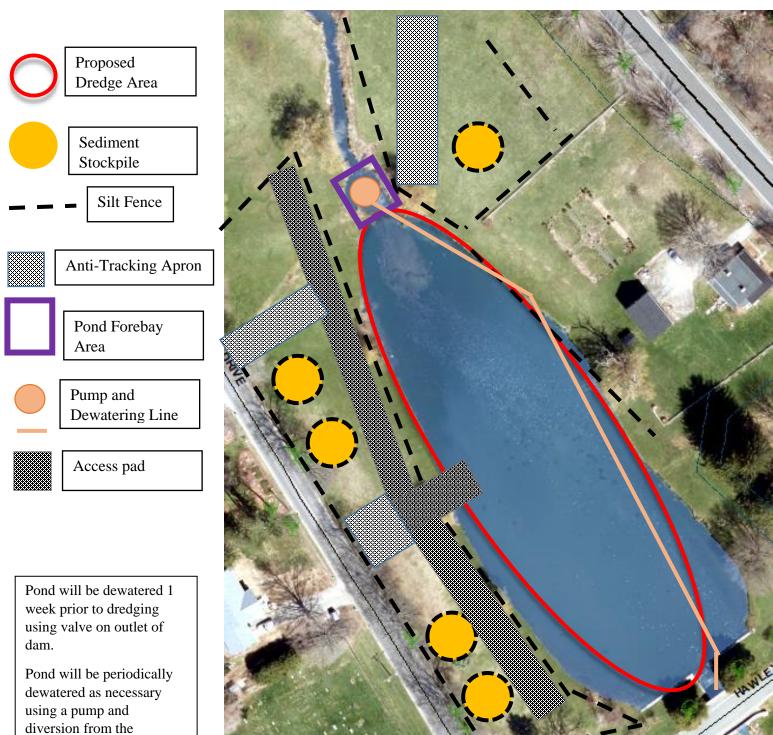


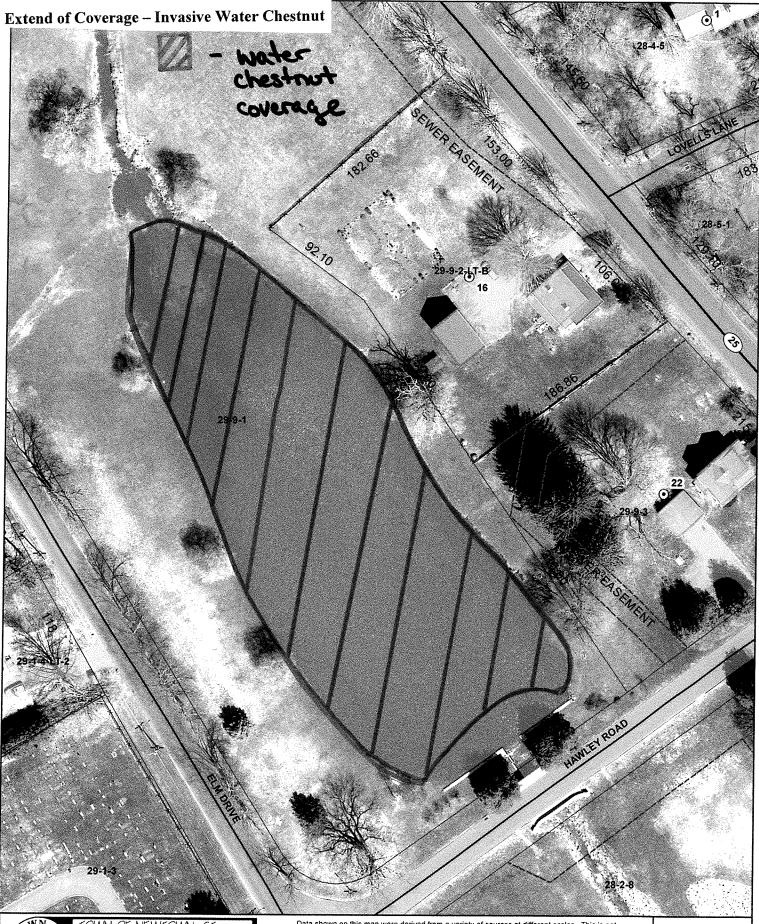
CT DEEP, Bureau of Natural Resources, Wildlife Division

Attachment G

upstream forebay area.

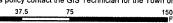
Site Plan and Control Methods – Invasive Water Chestnut







Data shown on this map were derived from a variety of sources at different scales. This is not a survey and no field verification was performed. This map shall not be used for the transfer of property. Please review the Town of Newlown access policy if you have any questions. By viewing, copying, or otherwise using this map you agree to follow the terms of use. If you feel that you cannot follow this policy contact the GIS Technician for the Town of Newtown.





Attachment I

Replanting and Ecosystem Enhancement Plan

1) Post construction Erosion Control and Seeding

The pond is shallow, edges are not steep and water flow is minimal. Revegetating with a combination of seed and starter plug installation. Clean Straw mulch should be spread on exposed soils after seed distribution and plug installation. In areas where the slopes are steeper or there is cause for concern of erosion from water flow due to a constricted focus of water (perhaps at the outlet) Then I suggest using biodegradable erosion control mats instead, staked in place. Seed is distributed prior to mat installation. Then starter plugs are installed after mat installation by slicing small opening in mat to access the soil for planting. Biodegradable straw wattles are also appropriate for these areas.

2) Create pockets of wetland shrubs along areas of pond edge to increase biodiversity

Maintaining a vegetative buffer around the entire pond will increase the health and biodiversity of the pond and its ecosystem. Native grasses and perennials can be installed as a combination of seed and starter plugs. These need only to be mowed once every two years to maintain the herbaceous edge. Some access points to pond edge can be maintained by mowing to edge at regular closer intervals. If there is concern of erosion from foot traffic at mowed edge areas, that section of the pond edge with large rock (create a "rock dock").

In the littoral zone only starter plugs need to be installed. Plant species should be installed in grouped patterns and repeated.

Lisa Turoczi

Earth Tones
Native Plant Nursery and Landscapes
212 Grassy Hill Road
Woodbury, CT 06798
www.earthtonesnatives.com

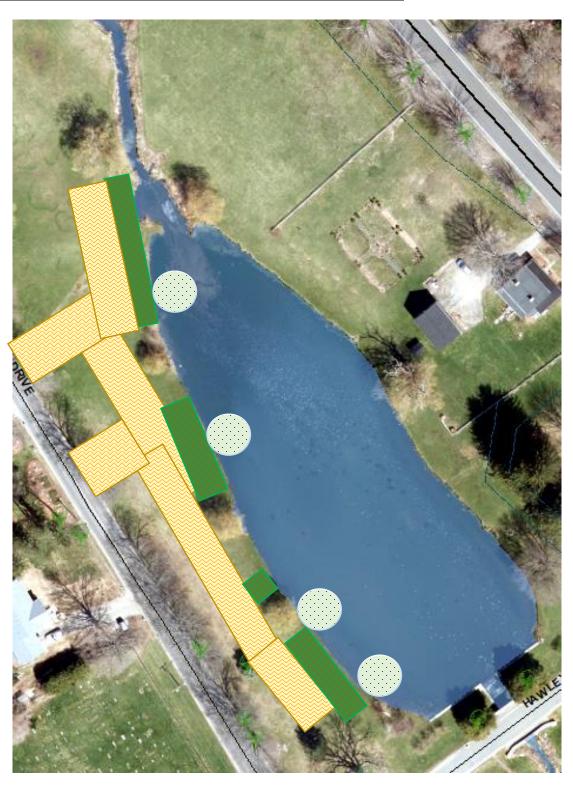
Replanting and Ecosystem Enhancement Plan



Biodegradable Erosion Control Matting, Hay and Seed Mix.

Native Grass and Perennial Seed and Plug Mix

Littoral Zone Plug Starters



Newtown Bee newspaper Article 'Invasive Plants on The Rise in Newtown'

The Newtown Bee - September 18, 2020

Check Your Ponds And Gardens—

Three Invasive Plants Spotted On The Rise In Newtown



Newtown resident Tom Philbrick holds one of the many European water chestnuts that can be found in the pond at Ram's Pasture in August 2020. The invasive plant's leaves float on the surface of the water while its stems and roots live below. —photo courtesy Tom Philbrick -photo courtesy Tom Philbrick

By Alissa Silber

Anyone with a green thumb knows it takes a lot of time

and care to cultivate the garden of your dream.

The maintenance involved is never-ending, but gardeners know the fruits of their labor make it all worthwhile and sometimes result in actual fruits! Unfortunately, even the most aesthetically pleasing plants can be inva-sives, and harmful to even the most hardy native species.

Invasives are plant species that are not native to North America, but which take root easily and can quickly grow to dominate a habitat.

Three invasive plants that have been found in Newtown this summer can present a challenge to even experienced gardeners, so check out some tips about these unwanted species and what you can do to remove them properly.

European Water Chestnut

Much like an iceberg, the European water chestnut only shows a glimpse of its reach above the water, with its full might concealed below the surface.

Afloat are rosettes of triangular-shaped leaves, with the



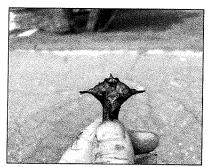
A thick patch of porcelain berry vine overtakes a tree in the backyard of a Newtown residence in -Bee Photo, Crevier

plant's stems and roots living under the water. The plant bears unusual-looking fruits called caltrops that can be collected, treated, and eaten; and it also has small, fourpetal flowers that begin blooming in July.

The aquatic plant's formal name is Trapa natans, and it

is different than the water chestnut people are familiar with in Asian meals.

The European water chestnut can invade "shallow to deep freshwater habitats in the northeastern United according to the Invasive Plant Atlas's plant



The unusual-looking fruits of the water chestnut are called caltrops, as s -photo courtesy Tom Philbrick

Newtown resident Tom Philbrick first noticed the European water chestnut in the pond at Ram's Pasture in July when he was traveling on Elm Drive.

As a professor of biology at Western Connecticut State University, he recognized "it was growing so dense that the leaves were being 'pushed' above the water. Most water lilies don't do that."

Philbrick described the plant as being a very aggressive invasive species, native to Eurasia, that can grow to cover most of the water surface, as it is doing at Ram's Pasture.

The consequence of letting it continue to grow, Phil-brick explained, is that "it will likely completely cover the pond by the end of the growing season. What such dense growth does is shade out anything in the water below it,

e.g., other perhaps native aquatic plants."

There are two options, he says, for preventing it from thriving: pull it out or treat it with herbicides.

"The former takes more work, but the latter may result in other unintended consequences in the pond," Phil-brick said. "For instance, when plants are killed by herbicides, the nutrients they contain are released into the water. Higher nutrients generally lead to algal blooms, which are ecologically detrimental of themselves."

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In August, the European water chestnut made up most of the green plants visible on the surface of the pond at Ram's Pasture.

If the European water chestnut is not removed soon, it may not be the last time it is seen in Newtown.

"The plant is an annual and comes back each year from fruits that can be picked up by waterfowl, float to other areas, or sink to the bottom and germinate the next year," Philbrick said.

People should check the ponds on their properties, especially those in open, sunny areas, to ensure the European water chestnut is not growing there.

Porcelain Berry Vine

The ampelopsis brevipedunculata, more commonly known as porcelain berry or porcelain vine, is an aggressive weed that can be found throughout the eastern Unit-

Upon first glance it resembles native grapes; however, this invasive plant invades undisturbed areas of property and wraps itself on shrubs and trees along forest edges. It can reach heights of more than 20 feet and tangle itself on overhead wires.

According to the North Carolina Extension Gardener Plant Toolbox, "The thick mats formed by this climbing vine can cover and shade out native shrubs and young trees. It spreads very quickly since birds and mammals eat the fruit and disperse the seeds.'

The plant is native to Japan and northern China, and was first brought into the United States in 1870.

Philbrick notes that it was originally introduced as an ornamental plant.

The porcelain berry vine, he explained, "is introduced intentionally into horticulture and is still sold in the horticultural trade. In fact, many of the plants that are highly invasive in Connecticut can still be bought from horticultural trade, e.g., purple loosestrife, Japanese barberry.

People commonly use the plant as a decorative climbing vine along fences, walls, and trellises, whether or not they

know it is invasive when they propagate it. iNaturalist, a joint initiative by the California Academy of Sciences and the National Geographic Society, says once the porcelain berry vine is established in an area it can be difficult to control, because of its vigorous root

The site's advice is to, "Pull young vines up by hand anytime and try to remove the rootstock. Apply systemic herbicides like glyphosate and triclopyr to cut stems or leaves to kill entire plants, including the roots."



A close up of the invasive porcelain berry vine at a property in Newtown shows clusters of berries that will turn blue in the fall.—Bee Photo, Crevier

Mile-A-Minute Vine
Newtown resident and Protect Our Pollinators Chairman Mary Gaudet-Wilson was surprised and concerned to find mile-a-minute vines on her property in July. On two separate occasions she spotted a single stem of it growing in her backyard.

The weed, called polygonum perfoliatum, is a fastgrowing invasive species that produces vines over herba-ceous and woody plants, as well as trees.

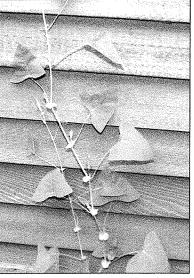
"Mile-a-minute is a vine, light green in color, with triangular leaves, each side being equal to the other," Gaudet-Wilson explained. "The leaves have no lobes or indentations. There are saucer shaped leaves called ocrea at the nodes (where the leaf stem meets the main stem). There are small barbs along the stem and berries at this time of year which ripen into a blue color.

Birds like the mile-a-minute berries, which helps the plant spread to different areas. Gaudet-Wilson believes this is how it likely came to her yard, as she lives less than a mile away from a heavily infected area.

Mile-a-minute was likely introduced to the area via ornamental plants, Philbrick says, possibly unintentionally through seed stock.

Today, Gaudet-Wilson said, "This plant is on the Connecticut List of Invasive Plants because of its ability to grow fast (up to 6 inches per day) and its ability to spread over other vegetation and trees. It can easily overgrow native species, causing ecological and economic harm.

Removing the mile-a-minute stems from her yard was quick because she caught it early and was able to pull it



The mile-a-minute vine grows up to 6 inches a day, eventually choking out other vegetation and trees. —photo courtesy UConn Extension

She advises people wear gloves and pull the vine out before its berries ripen. Removing it before the berries ripen is crucial, because mile-a-minute is an annual and any seeds dropping to the soil will help produce next year's crop.

"For disposal of pulled material, putting it in plastic bags and taking it for incineration is the best. If plants are pulled early in the year, before development of fruit, they may be left in a pile to decompose," Gaudet-Wilson said.

Although it is not a plant commonly found in yards, Gaudet-Wilson says the vine can pop up unexpectedly and should be taken seriously.

"In fact, it should be reported to the Connecticut Inva-sive Plant Working Group (CIPWG) at 860-486-6448 or to hort.uconn.edu/mam (click Report MAM)," she

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Attachment L

Newtown Village Cemetery Association Authorization for application

NEWTOWN VILLAGE CEMETERY ASSOCIATION INC.

Post Office Box 117 Newtown, CT 06470

January 12, 2021

Town of Newtown 3 Primrose Street Newtown, CT 06470

Dear Sir:

On behalf of the Board of Directors of Newtown Village Cemetery Association, Inc., this letter will authorize the Town of Newtown to assist our organization in submitting the Connecticut Department of Energy & Environmental Protection Grants for the Control of Aquatic Invasive Species Application Form with regards to property owned by us located at 1 and 23 Elm Drive, Newtown, Connecticut.

We ask that George Benson, Director of Planning, Town of Newtown, be the contact person with DEEP with regards to the application.

If you should have any questions, please contact me at 203.733.4562.

Very truly yours,

Maureen Crick Owen

President

/mco

Attachment M

RTI T

Newtown Village Cemetery Association Proof of Non-Profit Status

COMMISSIONER OF INTERNAL REVENUE

ADDRESS REPLY TO COMMISSIONED OF INTERNAL REVENUE

T:R:E02

Newtown Village Cemetery Association

Newtown, Connecticut

Gentlemen:

This is in reply to your letter of March 22 and May 21, 1954, requesting a copy of our ruling relative to your status for Federal income tax purposes under the provisions of section 101 of the Internal Revenue Code.

Our records show that in ruling dated February 2, 1934, you were held to be exempt from Federal income tax under Federal income tax under section 103(5) of the Revenue Act of 1932 and corresponding provisions of prior revenue acts.

Our copies of the above-mentioned ruling have been destroyed in accordance with authority conferred by an Act of Congress. However, such ruling remains in effect unless you change the character of your organization, the purposes for which you were organized, or your method of operation.

In the event you desire a current ruling, you may execute the enclosed exemption application, Form 1023, and submit it, together with the documents outlined in item 18 of the application, for consideration.

Very truly yours,

Chief, Exempt Organizations Branch

P. Henry Needhaw

Enclosure: Form 1023



OFFICE OF THE COLLECTOR

DISTRICT OF CONNECTICUT MALEULDING, 135 HIGH STREET
MERCHYING REPER TO Income Tax Division

TREASURY DEFARTMENT

INTERNAL REVENUE SERVICE

HARTFORD, CONN.

April 27, 1942

Mr. Arthur T. Nettleton c/o Newtown Savings Bank Newtown, Connecticut

Dear Sir:

Re: Newtown Village Cemetery Association

Receipt is acknowledged of your letter dated April 23, 1942, relative to the exemption from filing Federal income tax returns of the above-named association.

The Commissioner of Internal Revenue held that the organization was exempt under Section 101(5) of the Internal Revenue Code, and as will be noted on the enclosed Form 990 all organizations exempt under Subsection five must file annually Form 990.

The return for 1941 is due in this office on or before May 15, 1942.

Thomas S. Smith Collector

JHF:MW

Section 103-5 Feh 2 1934,

mot 101-5-

28



TREASURY D. ARTMENT

WASHINGTON

COMMISSIONER OF INTERNAL REVENUE

COMMISSIONER OF INTERNAL REVENUE

IT: E: RR EBC

Newtown Village Cemetery Association.

Newtown, Connecticut.

Sirs:

Reference is made to the evidence before the Bureau for use in determining your status for Federal income tax purposes.

It appears that your association was incorporated under the laws of Connecticut in 1860 for the purpose of maintaining a burial ground, and caring for lots and driveways, etc., of the Newtown Village Cemetery. It also appears that your income is received from the sale of lots for burial purposes and charges for caring for lots, etc., and that no part of your income inures to the benefit 9f any private shareholder or individual. It is shown that you do not have capital stock; that you have never operated for profit; and that the title of the cemetery in question is in your association.

Based upon the foregoing it is held that you are entitled to exemption from Federal income tax under section 103(5) of the Revenue Act of 1932 and the corresponding sections of prior revenue acts. Accordingly you are not liable for the filing of returns of income for 1932 and prior years. Returns for subsequent years will not be required provided there is no change in your organization. your purposes or method of doing business.

Any changes in your form of organization or method of operation should be immediately reported to the collector of internal revenue for your district in order that the effect of such changes upon your present exempt status may be determined.

The exemption referred to in this letter does not apply to taxes levied under other titles or provisions of the respective revenue acts except in so far as exemption is granted expressly under those provisions to organizations enumerated in section 103 of the Revenue Act of 1932 and the corresponding provisions of prior revenue acts.

JUL 27 1944

A-175

UNITED STATES THEASURY DEPARTMENT Collector of Internal Revenue Hartford, Connecticut

TO EXE PT CORPORATIONS.

The records of this office disclose that the Commissioner of Internal Revenue in the past has granted you exemption, under section ICI of the Internal Revenue Code, from the filing of Form 1120, composation income tax return. Such exemption was based upon the nature of the business conducted by you which came clearly within the section of the code mentioned above.

Under the Revenue Act of 1943, all exempt corporations except those specifically mentioned at the bottom of the face of Form 990 will be required to file this Form 990 furnishing all of the information required by the face and reverse of enclosed Form 990.

Corporations filing on the calendar year basis or on a fiscal year basis ending in 1944, on or prior to March 31, 1944, will be required to file this return on or before august 15, 1944. Corporations with fiscal years ending april 30, 1944, or subsequently, will be required to file a such return on or before the 15th day of the 5th month is a following the close of the fiscal year.

One Form 990 with any enclosures required by the footnotes at the bottom of the reverse side of this form must be filed in this office on or before the due date mentioned above to avoid benalties for delinquency. The other copy of form 990 should be retained in your files.

Frank W. Kraemer, Collector.

Attachment N



January 26, 2021

RE: Letter in support of The Town of Newtown's application for RFP# 11202020 (Grant for the Control of Invasive Aquatic Species)

To whom it may concern,

This letter indicates the Pootatuck Watershed Associations' (PWA) support for the Town of Newtown's application for the Grant for the Control of Invasive Species. RFP#11202020.

Since the inception of The PWA in 2006, The Town of Newtown has had membership representation on our board and their involvement has been instrumental in our success in terms of outreach and with countless restoration projects. In 2020, the Town lent their assistance with the supply and delivery of large boulders and trunk abutments for a root wad stream embankment restoration along Deep Brook River. Further, the town has partnered with the PWA in lending support for our Citizens River Watch Program which allows the general public to quickly alert the town of any potential problems in or around our watercourses utilizing the Town's communication systems.

The town continues to partner with us to help assess and fund our water quality testing throughout many areas of town.

PWA, a 501(c) 3 not-for-profit organization, was founded in 2006 following two major oil spills, which negatively impacted Deep Brook and the Pootatuck River in Newtown. The Pootatuck River and aquifer provide our essential water and recreational resources in Newtown. Our mission includes:

- Protect and preserve the Pootatuck River, its drainage basin and its underlying aquifer (collectively, the "watershed"), as a recreational resource and as a source of safe, clean drinking water for the benefit of the people of Newtown, Connecticut, now and for generations to come;
- Protect, preserve and enhance the environmental health of land in the Watershed so as to safeguard the water supply and provide suitable habitat for wild flora, fauna and aquatic life;
- Educate the public, especially students, regarding the Watershed, its importance and value, its state, capacity and condition, and relevant threats, risks and opportunities.

Over the past 14 years the PWA has been involved in stream monitoring, educational programs with local schools and community organizations, habitat improvement projects, and advocating for clean waters. Watershed-based planning in the Pootatuck River watershed helps advance our mission by allowing us to focus our efforts on the most critical issues within the watershed.

We are pleased that the Town of Newtown has supported and participated so extensively in our efforts to help preserve and protect our clean water for it's residents. The town staff in their

Town of Newtown

respective departments is knowledgeable and are very enthusiastic guardians of our environment. We could not do our work without their collective efforts and we look forward to the opportunity that this grant presents. The Town of Newtown has our full support for this endeavor.

Sincerely,
Dan Holmes
Board Member-Pootatuck Watershed Association