

AGENDA
Mansfield Conservation Commission
Wednesday, July 16, 2014
Audrey P. Beck Building
CONFERENCE ROOM B
7:30 p.m.

1. **Call to Order**
2. **Roll Call**
3. **Opportunity for Public Comment**
4. **Minutes**
 - a. June 18, 2014
5. **New Business**
 - a. IWA Referrals: W1531 – Markus – 59 Hillyndale Rd – Addition
 W1532 – Jones – 49 Farrell Rd – Two Car Garage
 - a. Other
6. **Continuing Business**
 - a. Review of Town-Owned Easements
 - b. Mansfield Tomorrow | Our Plan ▶ Our Future
 - c. Swan Lake Discharge Mirror Lake Dredging and other UConn Drainage Issues
 - d. UConn Agronomy Farm Irrigation Project
 - e. Eagleville Brook Impervious Surface TMDL Project
 - f. UConn Hazardous Waste Transfer Station
 - g. Ponde Place Student Housing Project
 - h. CL&P "Interstate Reliability Project"
 - i. Protecting Dark Skies in the Last Green Valley
 - j. Water Issues
 - k. Other
7. **Communications**
 - a. Minutes
 - Open Space: 6/17/14
 - PZC: 7/7/14
 - IWA: 7/7/14
 - b. Wetlands Agent Month Business Report
 - c. March/April 2014 CT Wildlife
 - d. Other
8. **Other**
9. **Future Agendas**
10. **Adjournment**

Town of Mansfield
CONSERVATION COMMISSION
Special Meeting of 18 June 2014
Conference B, Audrey P. Beck Building
(draft) MINUTES

Members present: Joan Buck (Alt.), Robert Dahn, Neil Facchinetti, Quentin Kessel, Scott Lehmann, Michael Soares. *Members absent:* Aline Booth (Alt.), Peter Drzewiecki, John Silander.

1. The meeting was called to order at 7:30p by Chair Quentin Kessel. Alternate Buck was designated a voting member for this meeting.

2. The draft minutes of the 21 May 2014 meeting were approved as written.

3. **IWA referral, W1530 (Rodriguez, 353 Warrenville Rd).** The applicant proposes a 20x34 ft addition and 18x24 ft patio, allegedly 55 ft and 65 ft from wetlands at their closest points. (These are items 1) and 4) under "Part C – Project Description" on "Application amendments," dated 28 May 2014.) The map provided does not delineate wetlands, so the Commission could not verify these distances. If it is to scale, the SW corners of the proposed addition and patio (resp.) would be about 50 ft and 59 ft (resp.) from the "swale."

The Commission was more concerned about project items 2), 3) and 4) of the amended application. Items 2) and 3) (resp.) ask for retroactive approval of work done in 2009 and 2010 (resp.) for which IWA approval was required but not sought. The 2009 project involved channelizing and filling wetlands to speed run-off from north to south across the property. A short section of concrete pipe was also placed in the channel, presumably to permit easier access to lawn area beyond. The 2010 project was construction of a shed within 50 ft of wetlands. Item 4) requests permission to extend the piped section of the channel south to the property line, covering the pipe with fill, and seeding this area with grass to enlarge the lawn area. After some discussion, the Commission unanimously agreed (motion: Lehmann, Buck) to make the following points in commenting to the IWA:

a. The drawing provided by the applicant is incomplete and potentially misleading. Wetlands boundaries are not delineated. The fact that "Revised through May 20, 2014" appears below the seal of Szeszowicki, a registered land surveyor, may suggest that he did the drawing, which is unlikely.

b. Project description items 1) & 2) of the application, as amended on 24 May 2014: Assuming that standard erosion controls are employed during construction, the proposed addition and patio of the amended application) appear not to involve a significant impact on wetlands.

c. Project description item 3): The shed constructed in 2009 would probably have been permitted by the IWA, and the Commission recommends retroactive approval of its location.

d. Project description items 2) and 4): The applicant does not appear to understand the value and function of wetlands in slowing run-off and increasing infiltration in place: he characterizes the alterations he made in 2009, which have the opposite effect, as "improvements." Converting more of the wetland into an impervious drain-pipe, as the applicant now proposes, would further impair its functionality. The Commission is also concerned that approving items 2) and 4) could make the applicant and the Town liable for any negative downstream effects.

The applicant could be required to restore the wetland – and fined up to \$1K per day until the job is complete. Instead, the Commission recommends that he be required to mitigate the damage he has caused to wetlands by establishing rain gardens to either side of the existing

section of concrete pipe, the lower one serving as overflow for the upper one. Environmental engineers or specialists at the University of Connecticut may be consulted about constructing rain gardens.

4. Proposed zoning change, PZC 1326. The proposed changes are designed to permit the PZC to reaffirm its decision on the proposed expansion of Michael's at East Brook Mall in light of a state court decision in case involving the Town of Monroe (which, in effect, removed the legal basis for the discretion the PZC used in the Michael's decision). No Commission action appears to be necessary.

5. Representation on Mansfield/CWC Water Planning/Advisory Council. The Commission has been asked to name a representative to this group, which will provide input and transparency for the water importation project. Buck agreed to do this, with Soares as Alternate.

6. Committee membership. The individuals Soares approached about replacing Drzewiecki on the Commission have decided they are too busy now. Kessel was encouraged to ask others he mentioned.

7. Adjourned at 8:23p. Next meeting: 7:30p, Wednesday, 16 July.

Scott Lehmann, Secretary, 19 June 2014.



Department of Planning and Development

Date: June 24, 2014
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Receipt of New Application for Wetlands License
59 Hillyndale Road (IWA File #W1531)
Owner/Applicant: Etan Markus
Description of work: bedroom, bathroom, and sunroom addition
Map Date: 6/11/2014

Project Description

The applicant proposes to replace an existing parking space with an addition that will expand an existing bedroom and add a bathroom. This will be placed on a slab. A sunroom on pillars will replace an existing deck. The proposed work is approximately 40 feet from a watercourse. The applicant proposes to remove approximately 14 cubic yards of fill to install the concrete slab and distribute it at the southern portion of the property away from the watercourse.

- The project includes work in wetlands.
- The project includes work in the 150 foot upland review area.
- The project is located in a Public Water Supply Watershed.

Application Fees and Notifications

- The applicant has paid the required application fee.
- The applicant has submitted copies of the notice mailed to neighbors and a list of abutters to be notified. Certified mail receipts must be submitted prior to action on the application.
- Natural Diversity Database has been checked and no state listed species or significant natural communities exist on the property.

Receipt Motion

_____ MOVES, _____ seconds to receive the application submitted by Etan Markus (IWA File #W1531) under the Wetlands and Watercourses Regulations of the Town of Mansfield for a bedroom, bathroom, and sunroom addition on property located at 59 Hillyndale Road as shown on a map dated 6/11/2014 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments.

PAGE
BREAK

APPLICATION FOR PERMIT
MANSFIELD INLAND WETLANDS AGENCY
4 SOUTH EAGLEVILLE ROAD, STORRS, CT 06268
TEL: 860-429-3334 OR 429-3330
FAX: 860-429-6863

FOR OFFICE USE ONLY

File #
W W1531
Fee Paid \$185-
Official Date of Receipt 12-13-14

Applicants are referred to the Mansfield Inland Wetlands and Watercourses Regulations for complete requirements, and are obligated to follow them. For assistance, please contact Grant Meitzler, Inland Wetlands Agent at the telephone numbers above.

Please print or type or use similar format for computer; attach additional pages as necessary.

Part A - Applicant

Name Etan Markus

Mailing Address 59 Hillyndale Rd, Mansfield CT

Zip 06268

Telephone-Home 860-236-3602 Telephone-Business 860-486-4588

Title and Brief Description of Project

Addition: expanding existing bedroom and dining room (into sunroom) and adding bathroom)

Location of Project 59 Hillyndale Rd, Mansfield CT

Intended Start Date Summer 2014

Part B - Property Owner (if applicant is the owner, just write "same")

Name same

Mailing Address _____

Zip _____

Telephone-Home _____ Telephone-Business _____

Owner's written consent to the filing of this application, if owner is not the applicant:

Signature _____ date _____

Applicant's interest in the land: (if other than owner) _____

Part C - Project Description (attach extra pages, if necessary)

- 1) Describe in detail the proposed activity here or on an attached page. (See guidelines at end of application – page 6.)

Please include a description of all activity or construction or disturbance:

- a) in the wetland/watercourse
b) in the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

We will be replacing the existing parking space and back deck with a sunroom (expanding the dining room), expansion of existing bedroom and addition of a bathroom. There will be minimal excavation because the parking area is already at ground level and the sunroom section will be on pillars (see attached building plans).

The work is being done on the south side of the house (facing the back yard) and away from the creek. At the closest the creek is about 40' from where we will replace the deck with the sunroom. No work will be done within the creek (wetland).

Total amount of fill to be removed is 14 cubic yards, it will be distributed within the southern part of our plot on a wooded section away from the creek.

- 2) Describe the amount or area of disturbance (in square feet or cubic yards or acres):

- a) in the wetland/watercourse
b) in the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

No disturbance within the wetlands.

Amount of fill to be removed adjacent to the wetlands is 14 cubic yards

- 3) Describe the type of materials you are using for the project: _____

Wood and cement

- a) include **type** of material used as fill or to be excavated on-site fill
b) include **volume** of material to be filled or excavated 14 cubic yards
-

- 4) Describe measures to be taken to minimize or avoid any adverse impacts on the wetlands and regulated areas (silt fence, staked hay bales or other Erosion and Sedimentation control measures).

The work will take place on the side of the house away from the creek, a silt fence or staked hay bales will be placed between the work area and the creek during construction and will be removed after the site is stabilized (see map).

Part D - Site Description

Describe the general character of the land. (Hilly? Flat? Wooded? Well drained? etc.)

A gentle slope away from the house towards the south

Part E - Alternatives

Have you considered any alternatives to your proposal that would meet your needs and might have less impact on the wetland/watercourse? Please list these alternatives.

No alternatives available, the location of the addition was partly chosen to minimize the impact on the creek.

Part F - Map/Site Plan (all applications)

1) Attach to the application a map or site plan showing **existing conditions** and the **proposed project** in relation to wetland/ watercourses. Scale of map or site plan should be 1" = 40'; if this is not possible, please indicate the scale that you are using. A sketch map may be sufficient for small, minor projects. (See guidelines at end of application – page 6.)

2) Applicant's map date and date of last revision 11 June 2014

3) Zone Classification RAR90

4) Is your property in a flood zone? Yes No Don't Know

Part G - Major Applications Requiring Full Review and a Public Hearing

See Section 6 of the Mansfield Regulations for additional requirements.

Part H - Notice to Abutting Property Owners

1) List the names and addresses of abutting property owners: Name Address

attached

2) **Written Notice to Abutters** . You must notify abutting property owners by certified mail, return receipt requested, stating that a wetland application is in progress, and that abutters may contact the Mansfield Inland Wetlands Agent for more information. Include a brief description of your project. **Postal receipts of your notice to abutters must accompany your application.** (This is not needed for exemptions).

attached

Part I - Additional Notices, if necessary

1) Notice to Windham Water Works is attached. If this application is in the public watershed for the Windham Water Works (WWW), you must notify the WWW of your project within 7 days of sending the application to Mansfield--sending it by certified mail, return receipt requested. Contact the Mansfield Inland Wetlands Agent to find out if you are in this watershed.

2) Notice to Adjoining Town. If your property is within 500 feet of an adjoining town, you must also send a copy of the application, on the same day you sent one to Mansfield, to the Inland Wetlands Agency of the adjoining town, by certified mail, return receipt requested.

3) The Statewide Reporting Form (attached) shall be part of the application and specified parts must be completed and returned with this application.

Part J - Other Impacts To Adjoining Towns, if applicable

- 1) Will a significant portion of the traffic to the completed project on the site use streets within the adjoining municipality to enter or exit the site? ___ Yes ___ x ___ No ___ Don't Know
- 2) Will sewer or water drainage from the project site flow through and impact the sewage or drainage system within the adjoining municipality? ___ Yes ___ x ___ No ___ Don't Know
- 3) Will water run-off from the improved site impact streets or other municipal or private property within the adjoining municipality? ___ Yes ___ x ___ No ___ Don't Know

Part K - Additional Information from the Applicant

Set forth (or attach) any other information which would assist the Agency in evaluating your application. *(Please provide extra copies of any lengthy documents or reports, and extra copies of maps larger than 8.5" x 11", which are not easily copied.)*

Part L - Filing Fee

Submit the appropriate filing fee. (Consult Wetlands Agent for the fee schedule available in the Mansfield Inland Wetlands and Watercourses Regulations.)

___ \$1,000. ___ \$750. ___ \$500. ___ \$250. ___ \$125. ___ \$100. ___ \$50. ___ \$25.

___ \$30 State DEP Fee

Note: The Agency may require you to provide additional information about the regulated area which is the subject of the application, or about wetlands or watercourses affected by the regulated activity. If the Agency, upon review of your application, finds the activity proposed may involve a "significant activity" as defined in the Regulations, additional information and/or a public hearing may be required.

The undersigned applicant hereby consents to necessary and proper inspections of the above mentioned property by members and agents of the Inland Wetlands Agency, at reasonable times, both before and after the permit in question has been granted by the Agency.

Applicant's Signature

Date

13 June 2014



Town of Mansfield, Connecticut

Web GIS Maps and Online Property Information

Markus - 57 Hillyndale Rd, Mansfield
Prepared 11 June 2014

Search Address Owner Parcel ID
Street _____ Address _____ Search

GIS Map

Properties

Systems

MainStreetGIS



Select a Property

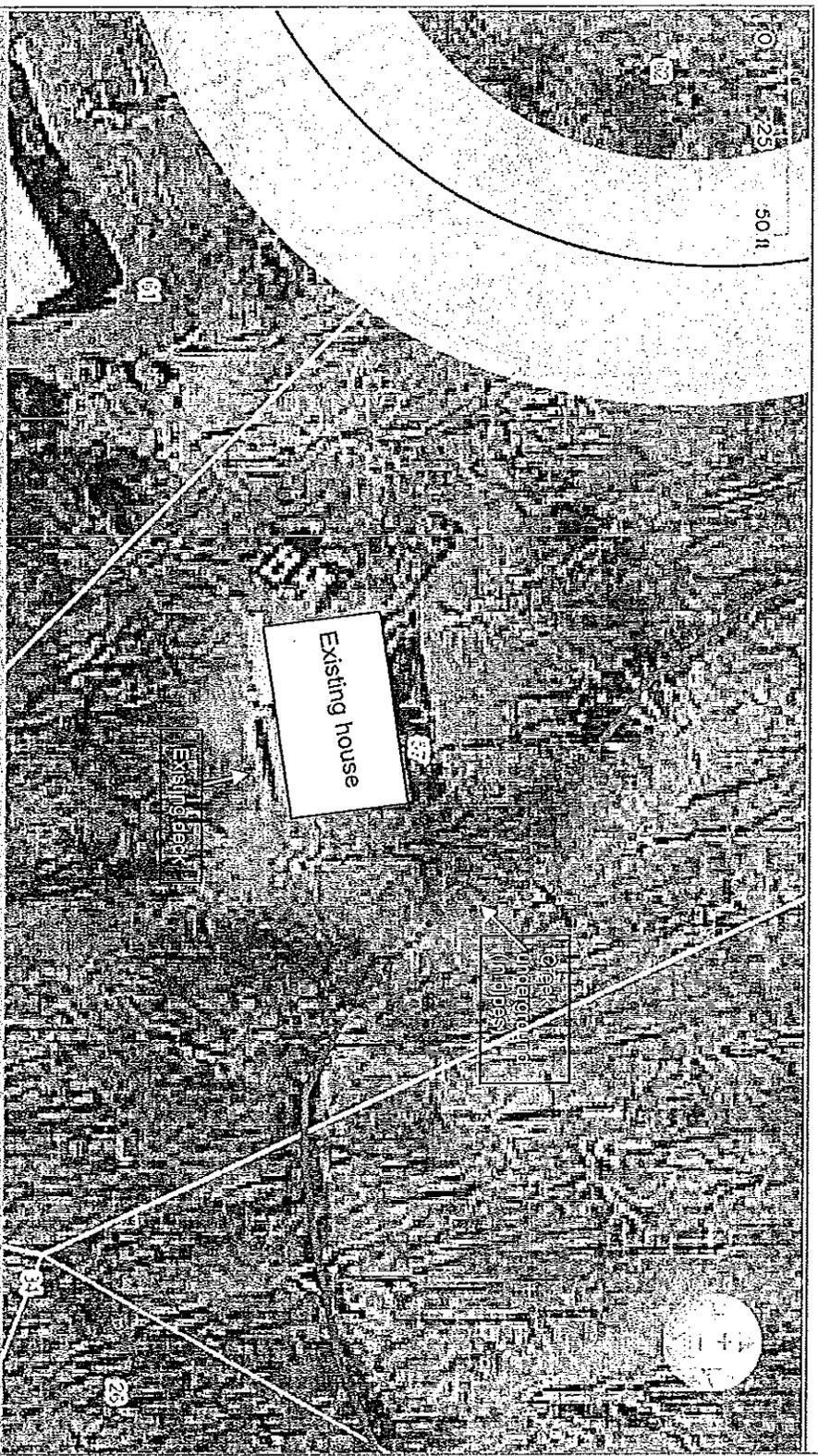


1 in = 42.56'



Layers

Selection



- Map Grid
- Open Space
- Zoning
- Road Planes
- Address Ranges
- Parcel ID Tool
- Parcel Area Tool
- Parcel Dimensions Tool
- Utility Corridor
- Trails
- Railroad
- Footcuffs
- Buildings (0.6 m)
- Parcels
- Streets
- Water
- Wetlands
- Footways
- USGS Topo Quads
- Aerial Photo 2012
- Aerial Photo 2011
- Aerial Photo 2005



Town of Mansfield, Connecticut

Web GIS Maps and Online Property Information

Town Website Feedback User Guide

Markus - 57 Hillyndale Rd, Mansfield
Prepared 11 June 2014

Search: Address Owner Parcel ID

Street

Address:



Search



GIS Map



Property/Details



TaxMaps



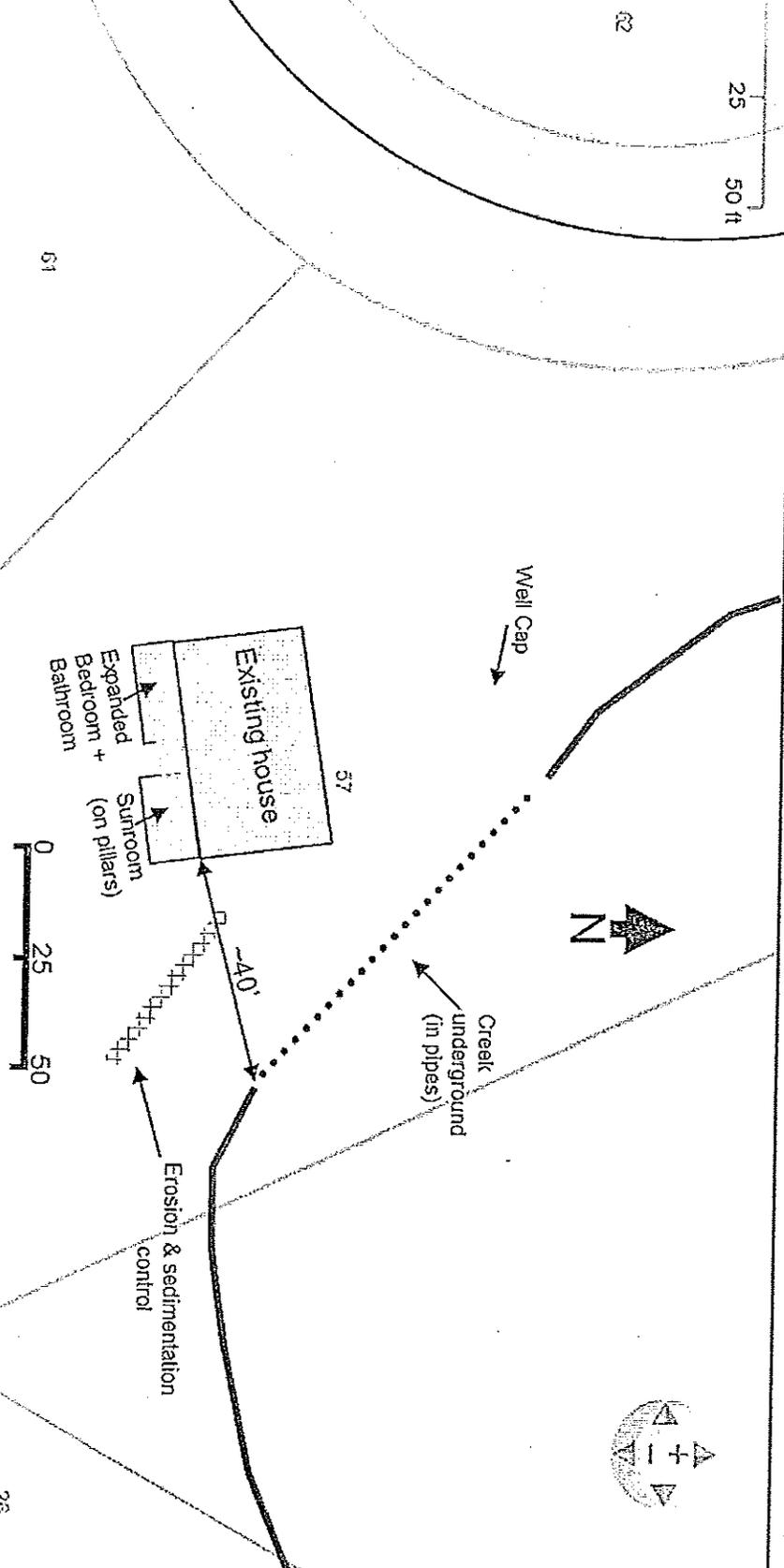
MainStreetGIS



Layers

Selection

- Map Grid
- Open Space
- Zoning
- Road Names
- Address Numbers
- Parcel ID Text
- Parcel Area Text
- Parcel Dimension Text
- Utility Corridor
- Trills
- Railroad
- Roads
- Buildings (UConn)
- Parcels
- Streams
- Wetlands
- Wellands
- Roadway
- USGS Topo Quads
- Aerial Photo 2012
- Aerial Photo 2011
- Aerial Photo 2005



Markus - 57 Hillyndale Rd, Mansfield
 Prepared 11 June 2014



Town of Mansfield, Connecticut
 WebGIS Maps and Online Property Information
 Town Website Feedback Home/Title

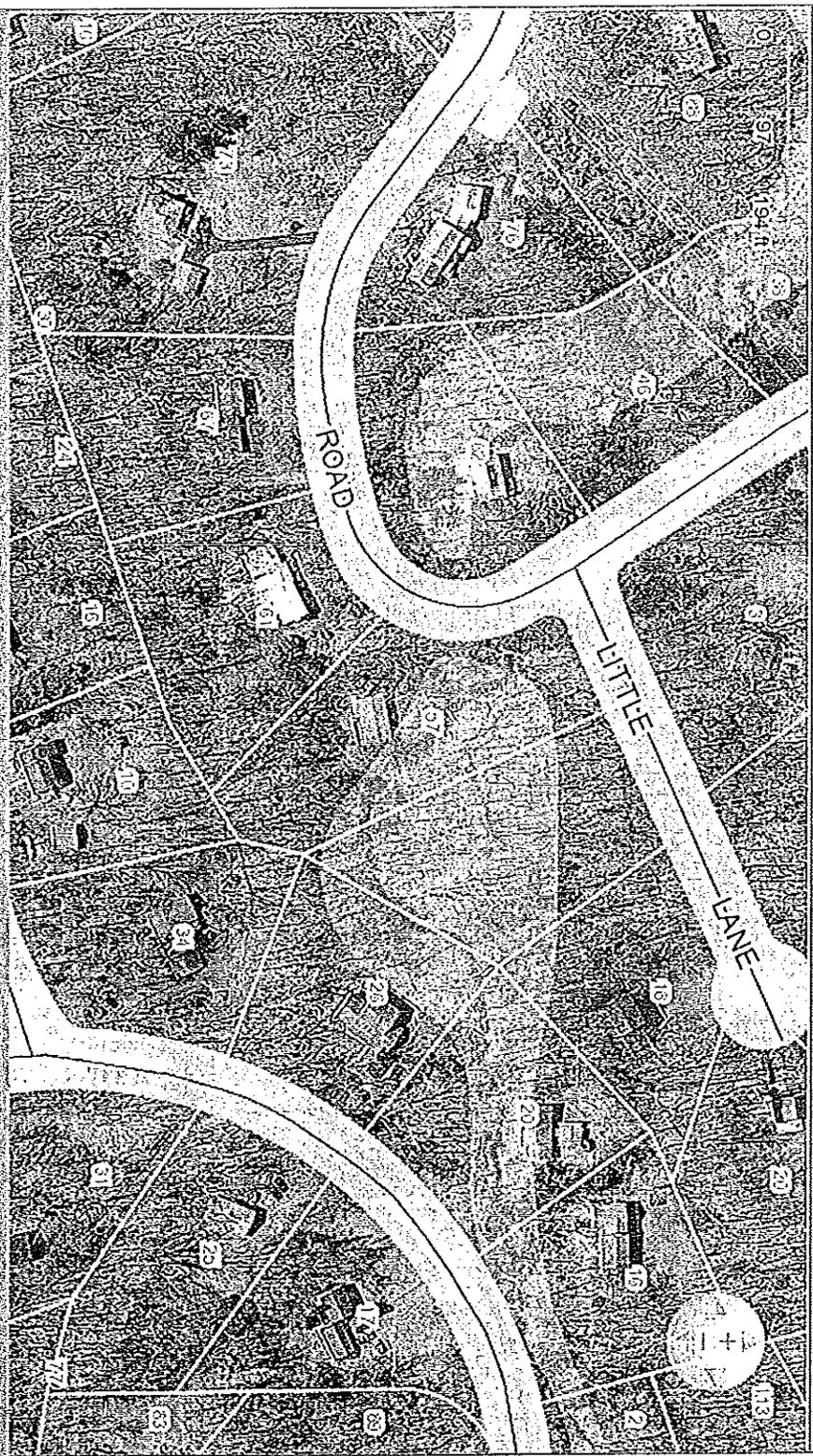
Sheet: _____ Address: _____ Search

GIS Map Program/Details Test Maps

MainStreetGIS

Select a Property 1 in = 170.25 ft

Layers Selection



- Map tool
- Open Space
- Zoning
- Road Names
- Address Numbers
- Parcel ID Tool
- Parcel Area Tool
- Parcel Dimension Tool
- N Utility number
- Trails
- Railroad
- Roads
- Buildings (all sum)
- Parcels
- Structures
- Water
- Wetlands
- Roadway
- USGS Topo Guide
- Aerial Photo 2012
- Aerial Photo 2011
- Aerial Photo 2005



Town of Mansfield, Connecticut

Web GIS Maps and Online Property Information

Town Website Feedback User Guide

Markus - 57 Hillyndale Rd, Mansfield
Prepared 11 June 2014

Search: Address: Owner: Parcel ID: Address: Search

Street: Address: Search

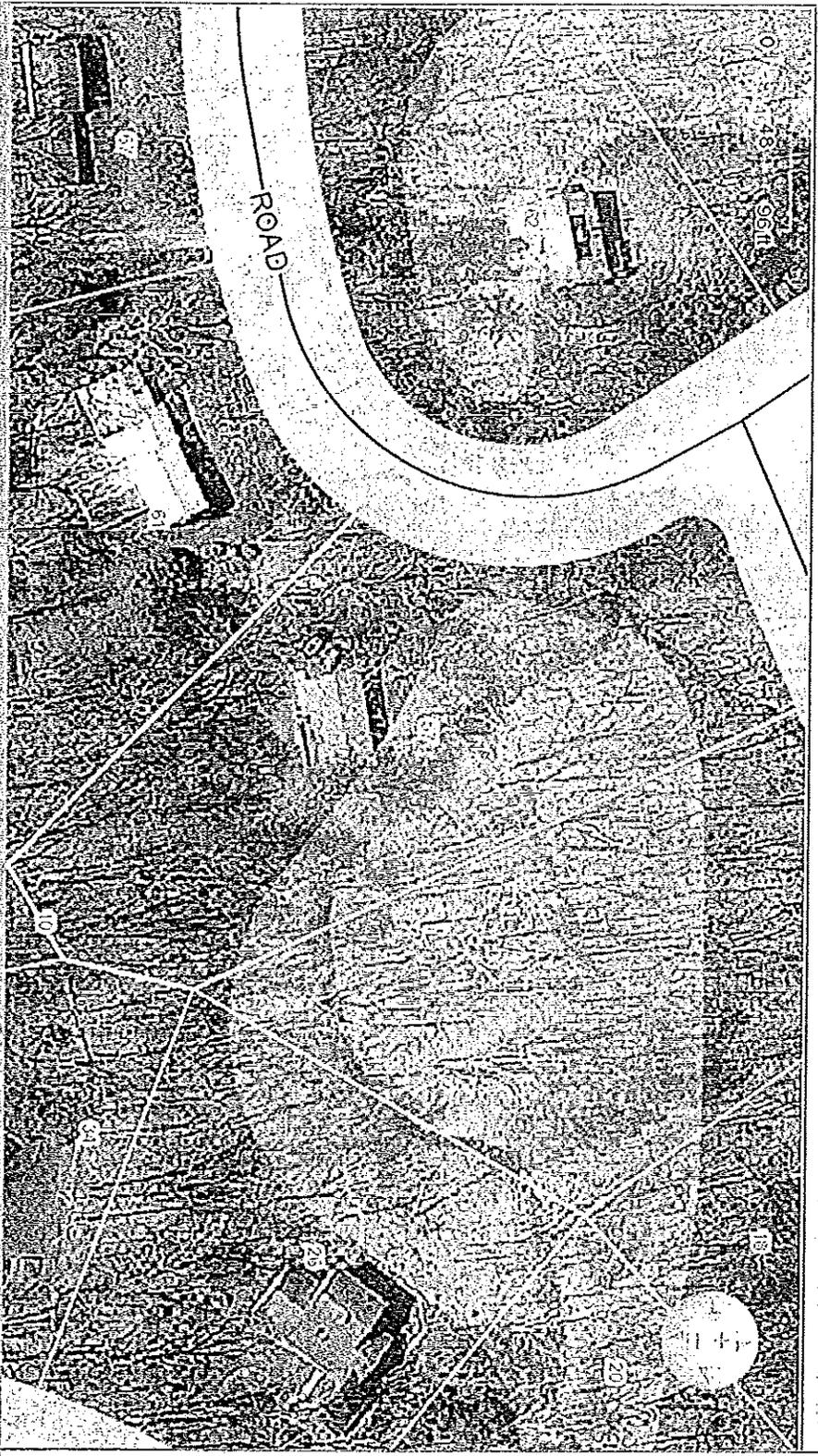
GIS Map

Property Details

Tax Maps

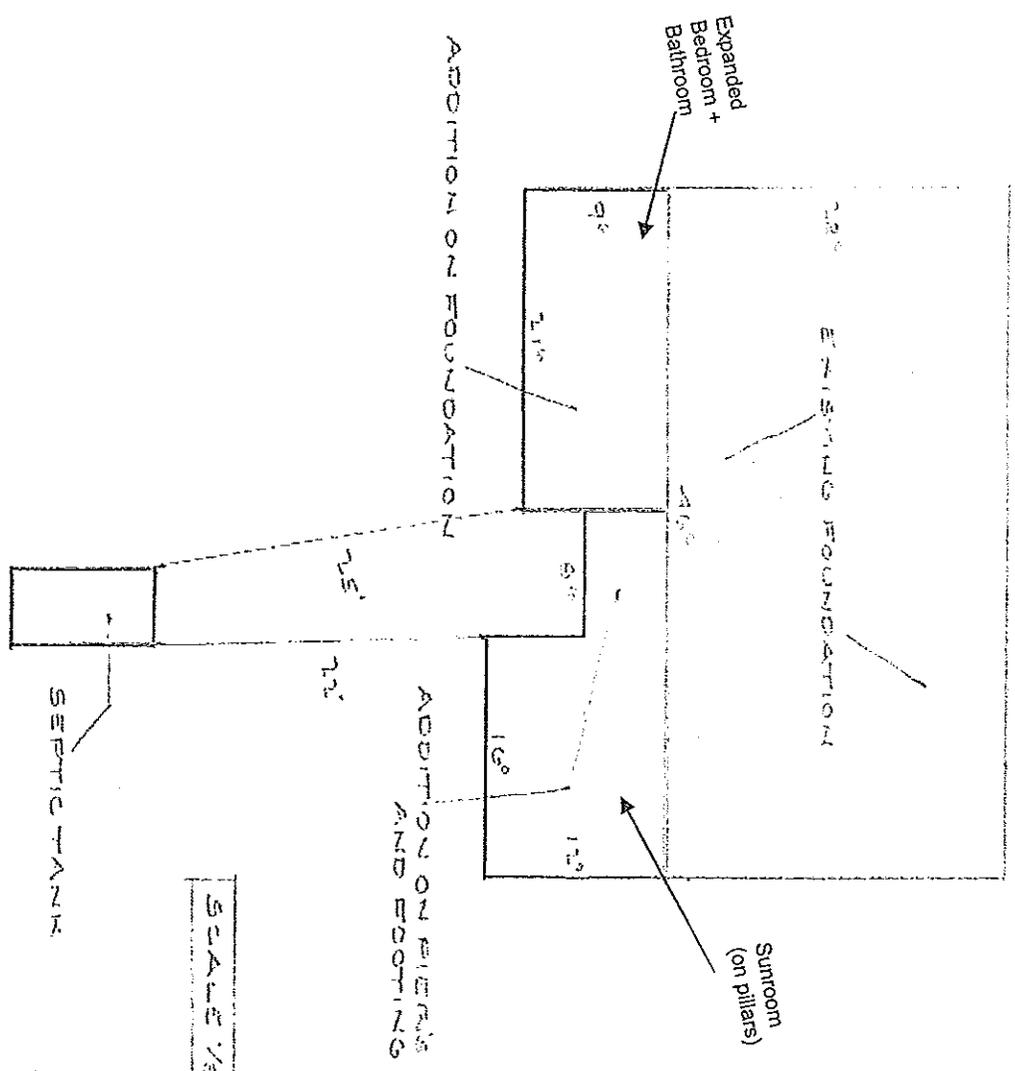


- Layers
- Selection

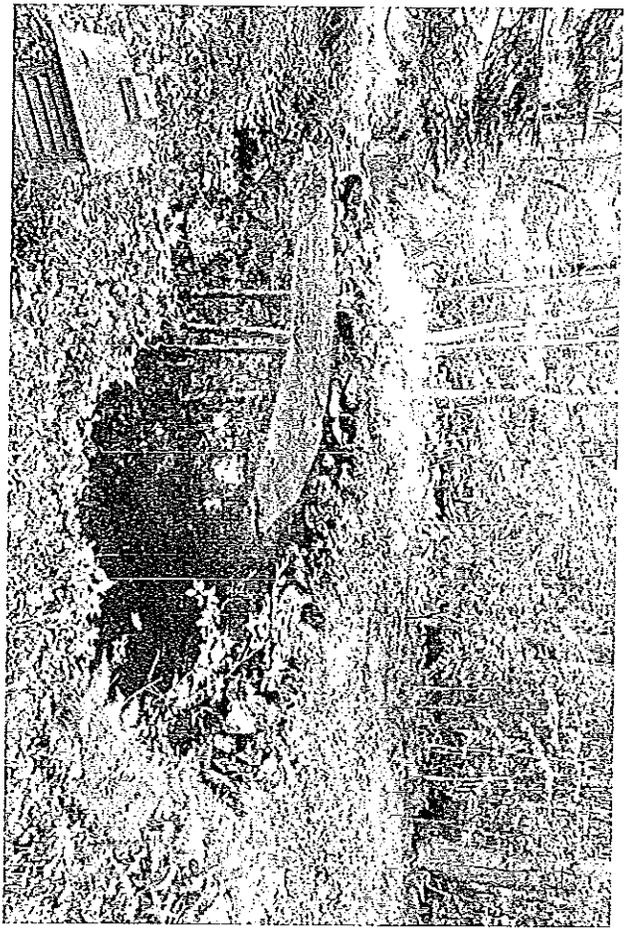


- Map Grid
- Open Space
- Zoning
- Road Names
- Address Numbers
- Parcel ID 2004
- Parcel ID 2005
- Parcel Elevation
- Utility Lines
- Trails
- Railroads
- Forest
- Buildings 2000
- Parcels
- Sidewalks
- Water
- Wetlands
- Roadway
- USGS Topo 2000s
- Aerial Photo 2011
- Aerial Photo 2005

Markus - 57 Hillyndale Rd, Mansfield
Prepared 11 June 2014



Markus – 57 Hillyndale Rd, Mansfield
Prepared 11 June 2014



Creek exit from pipe



Creek entry to pipe



Department of Planning and Development

Date: June 24, 2014
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Receipt of New Application for Wetlands License
49 Farrell Road (IWA File #1532)
Owner/Applicant: Janet Jones
Description of work: an attached two-car garage
Map Date: 6/1/2014

Project Description

The applicant proposes to add a two car garage to the northern side of the existing house. The work is proposed within 100 feet of the wetland boundary. The applicant estimates that the area of disturbance to be 900 square feet. The garage will be on a concrete slab with minimal excavation. The applicant proposes to distribute the excavated material on site.

- The project includes work in wetlands.
- The project includes work in the 150 foot upland review area.
- The project is located in a Public Water Supply Watershed.

Application Fees and Notifications

- The applicant has paid the required application fee
- The applicant has submitted copies of the notice mailed to neighbors and a list of abutters to be notified. Certified mail receipts must be submitted prior to action on the application.
- The applicant has submitted copies of notices provided to the CT Department of Public Health and Windham Water Works. Certified mail receipts must be submitted for Windham Waterworks and email confirmation must be submitted for CT Department of Public Health prior to action on the application.
- Natural Diversity Database has been checked and no state listed species or significant natural communities exist on the property.

Receipt Motion

_____ MOVES, _____ seconds to receive the application submitted by Janet Jones (IWA File #1532) under the Wetlands and Watercourses Regulations of the Town of Mansfield for an attached two-car garage on property located at 49 Farrell Road as shown on a map dated 6/1/2014 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments.

PAGE
BREAK

APPLICATION FOR PERMIT
MANSFIELD INLAND WETLANDS AGENCY
4 SOUTH EAGLEVILLE ROAD, STORRS, CT 06268
TEL: 860-429-3334 OR 860-429-3330
FAX: 860-429-6863

FOR OFFICE USE ONLY
File # W1532
Fee Paid \$185-
Date Received 6-23-14

Applicants are referred to the Mansfield Inland Wetlands and Watercourses Regulations for complete requirements, and are obligated to follow them. For assistance, please contact Grant Meitzler, Inland Wetlands Agent at the telephone numbers above.

Please print or type or use similar format for computer; attach additional pages as necessary.

Part A - Applicant

Name JANET JONES (OWNER)

Mailing Address 221 WORMWOOD HILL RD
MANSFIELD CENTER CT Zip 06250

Telephone-Home (860) 429-5664 Telephone-Business _____

Title and Brief Description of Project

ADDITION OF TWO CAR ATTACHED GARAGE

Location of Project 49 FARRELL RD, STORRS, CT.

Intended Start Date JUNE 2015

Part B - Property Owner (if applicant is the owner, just write "same")

Name SA ME

Mailing Address _____

Zip _____

Telephone-Home _____ Telephone-Business _____

Owner's written consent to the filing of this application, if owner is not the applicant:

Signature _____ date _____

Applicant's interest in the land: (if other than owner) _____

Part C - Project Description (attach extra pages, if necessary)

1) Describe in detail the proposed activity here or on an attached page. (See guidelines at end of application – page 6.)

Please include a description of all activity or construction or disturbance:

- a) in the wetland/watercourse
- b) in the area *adjacent* to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is *off* your property

S33 SHEET 1 ATTACHED FOR ANSWERS TO PART C 1) THROUGH 4)

2) Describe the amount or area of disturbance (in square feet or cubic yards or acres):

- a) in the wetland/watercourse
- b) in the area *adjacent* to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is *off* your property

3) Describe the type of materials you are using for the project: _____

- a) include *type* of material used as fill or to be excavated _____
- b) include *volume* of material to be filled or excavated _____

4) Describe measures to be taken to minimize or avoid any adverse impacts on the wetlands and regulated areas (silt fence, staked hay bales or other Erosion and Sedimentation control measures).

Part D - Site Description

Describe the general character of the land. (Hilly? Flat? Wooded? Well drained? etc.)

FLAT - WELL DRAINED

Part E - Alternatives

Have you considered any alternatives to your proposal that would meet your needs and might have less impact on the wetland/watercourse? Please list these alternatives.

S22 SH32T ①

Part F - Map/Site Plan (all applications)

1) Attach to the application a map or site plan showing existing conditions and the proposed project in relation to wetland/ watercourses. Scale of map or site plan should be 1" = 40'; if this is not possible, please indicate the scale that you are using. A sketch map may be sufficient for small, minor projects. (See guidelines at end of application – page 6.)

2) Applicant's map date and date of last revision 6-1-2014
3) Zone Classification RESIDENTIAL
4) Is your property in a flood zone? Yes No Don't Know

Part G - Major Applications Requiring Full Review and a Public Hearing

See Section 6 of the Mansfield Regulations for additional requirements.

Part H - Notice to Abutting Property Owners

1) List the names and addresses of abutting property owners

Name	Address
<u>Richard Charles Robertson</u>	<u>314 Farnell Road</u>
<u>Richard Kathryn Retzoff</u>	<u>60 Bending Lane</u>
<u>James & Deborah Burdick</u>	<u>45 Farnell Road</u>
<u>Therese Ann & Eric Ford</u>	<u>14 Britton Drive</u>
<u>Deborah A. Jones</u>	<u>51 Farnell Road</u>
<u>Alia & Howard Rappoldson</u>	<u>119 Timber Drive</u>

2) **Written Notice to Abutters.** You must notify abutting property owners by certified mail, return receipt requested, stating that a wetland application is in progress, and that abutters may contact the Mansfield Inland Wetlands Agent for more information. Include a brief description of your project. Postal receipts of your notice to abutters must accompany your application. (This is not needed for exemptions).

Part I - Additional Notices, if necessary

- 1) Notice to Windham Water Works is attached. If this application is in the public watershed for the Windham Water Works (WWW), you must notify the WWW of your project within 7 days of sending the application to Mansfield--sending it by certified mail, return receipt requested. Contact the Mansfield Inland Wetlands Agent to find out if you are in this watershed.
- 2) Notice to Adjoining Town. If your property is within 500 feet of an adjoining town, you must also send a copy of the application, on the same day you sent one to Mansfield, to the Inland Wetlands Agency of the adjoining town, by certified mail, return receipt requested.
- 3) The Statewide Reporting Form (attached) shall be part of the application and specified parts must be completed and returned with this application.

Part J - Other Impacts To Adjoining Towns, if applicable

- 1) Will a significant portion of the traffic to the completed project on the site use streets within the adjoining municipality to enter or exit the site? ___ Yes ___ No ___ Don't Know
- 2) Will sewer or water drainage from the project site flow through and impact the sewage or drainage system within the adjoining municipality? ___ Yes ___ No ___ Don't Know
- 3) Will water run-off from the improved site impact streets or other municipal or private property within the adjoining municipality? ___ Yes ___ No ___ Don't Know

Part K - Additional Information from the Applicant

Set forth (or attach) any other information which would assist the Agency in evaluating your application. *(Please provide extra copies of any lengthy documents or reports, and extra copies of maps larger than 8.5" x 11", which are not easily copied.)*

Part L - Filing Fee

Submit the appropriate filing fee. (Consult Wetlands Agent for the fee schedule available in the Mansfield Inland Wetlands and Watercourses Regulations.)

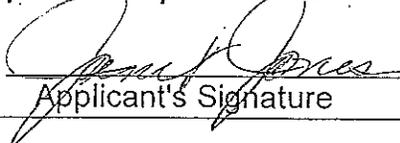
___ \$1,000. ___ \$750. ___ \$500. ___ \$250. ___ \$125. ___ \$100. ___ \$50. ___ \$25.

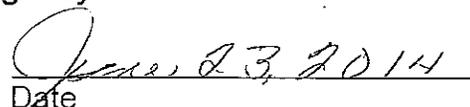
___ \$185 *per Mo. Area.*

___ \$60 State DEP Fee

Note: The Agency may require you to provide additional information about the regulated area which is the subject of the application, or about wetlands or watercourses affected by the regulated activity. If the Agency, upon review of your application, finds the activity proposed may involve a "significant activity" as defined in the Regulations, additional information and/or a public hearing may be required.

The undersigned applicant hereby consents to necessary and proper inspections of the above mentioned property by members and agents of the Inland Wetlands Agency, at reasonable times, both before and after the permit-in question has been granted by the Agency.


Applicant's Signature


Date

Application for Wetlands Permit
Mansfield, Connecticut
Attachment 1

Part C:

1. The work to be performed under this permit is the construction of a two-car garage that will be attached to the northern end of the existing house at 49 Farrell Road, Storrs, Connecticut. The work will be done within 100 feet of the wetland boundary. No work will be performed within the wetland area.
2. The area to be disturbed is about 900 square feet and will fall within 30 feet to the north of the northern end of the existing house and within 30 feet east to west in the same location. The excavation necessary for a poured concrete slab will produce a relatively low amount of excavated earth, the excess of which will stay on site.
3. Concrete slab followed by the erection of a two-car attached garage constructed of conventional studded wood and siding. The work is expected to be done during July, 2015.
4. This site does drain very gradually toward the wetlands and a silt fence will be erected during construction to prevent disturbance of the wetlands.

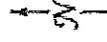
Part E:

1. Alternative siting of the garage was considered but rejected due to the greater impact it would have on the wetlands.

Town of Mansfield, CT - 49 Farrell Rd.



- Zoning
- Conservation Easement
 - Railroad
 - Trails
 - Parcels
 - Streams
 - water
 - wetlands



1 in = 71.92 ft

Printed:
6/10/2014



Location: 49 FARRELL RD ID: 16.41.1

MainStreetGIS, LLC - www.mainstreetgis.com / info@mainstreetgis.com

Disclaimer: This map is for assessment purposes only. It is not valid for use as a survey or for conveyance

BOUNDARY LINE
OF WETLANDS

NORTH

434'

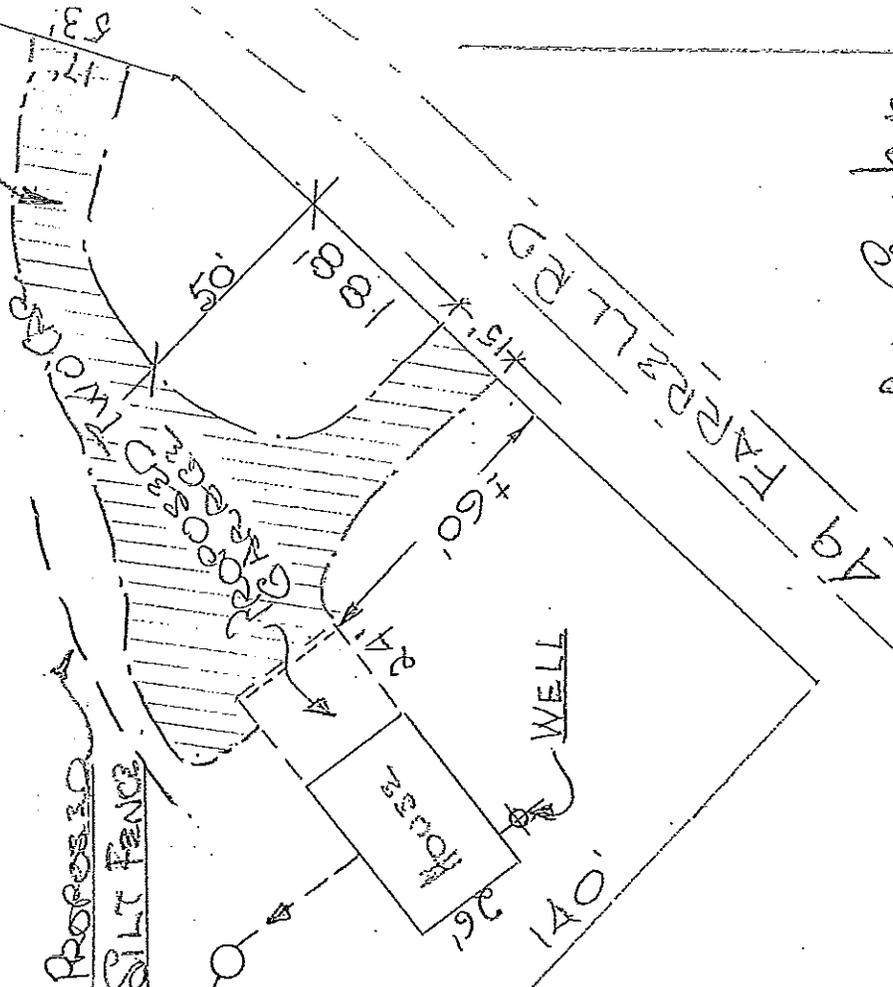
EXISTING DRIVEWAY

LEACH FIELD

PROPOSED SILT FENCE

SEPTIC SYSTEM

1.13 ACRES



PLAN FOR PROPOSED GARAGE

SCALE: 1 IN = 40 FT

By: Geo. Jones
Date: 6-1-2014



STEINMEYER

$N 87^{\circ} 25' E \sim 434'$

1.13 ACRES

$N 65^{\circ} 14' \sim 212'$

BARNETT AND WARD

IF

$N 46^{\circ} 30' W \sim 403'$



$S 34^{\circ} 10' W \sim 187'$

BARRETT ROAD

$S 55^{\circ} 40' E \sim 515'$

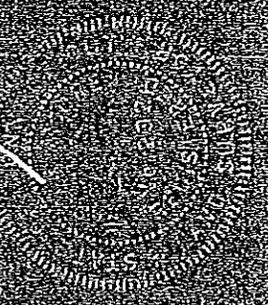
LAND

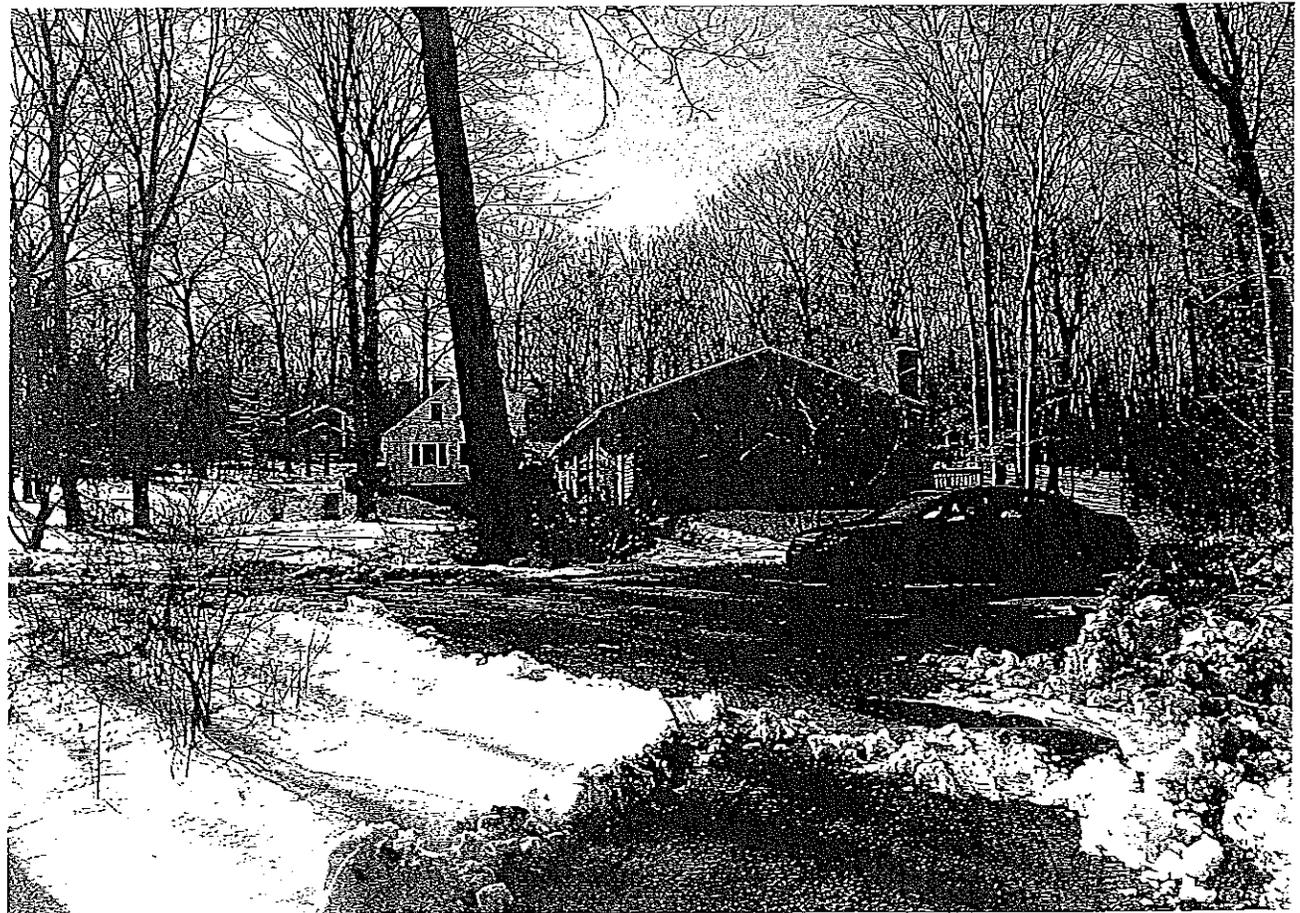
PLAN OF LAND

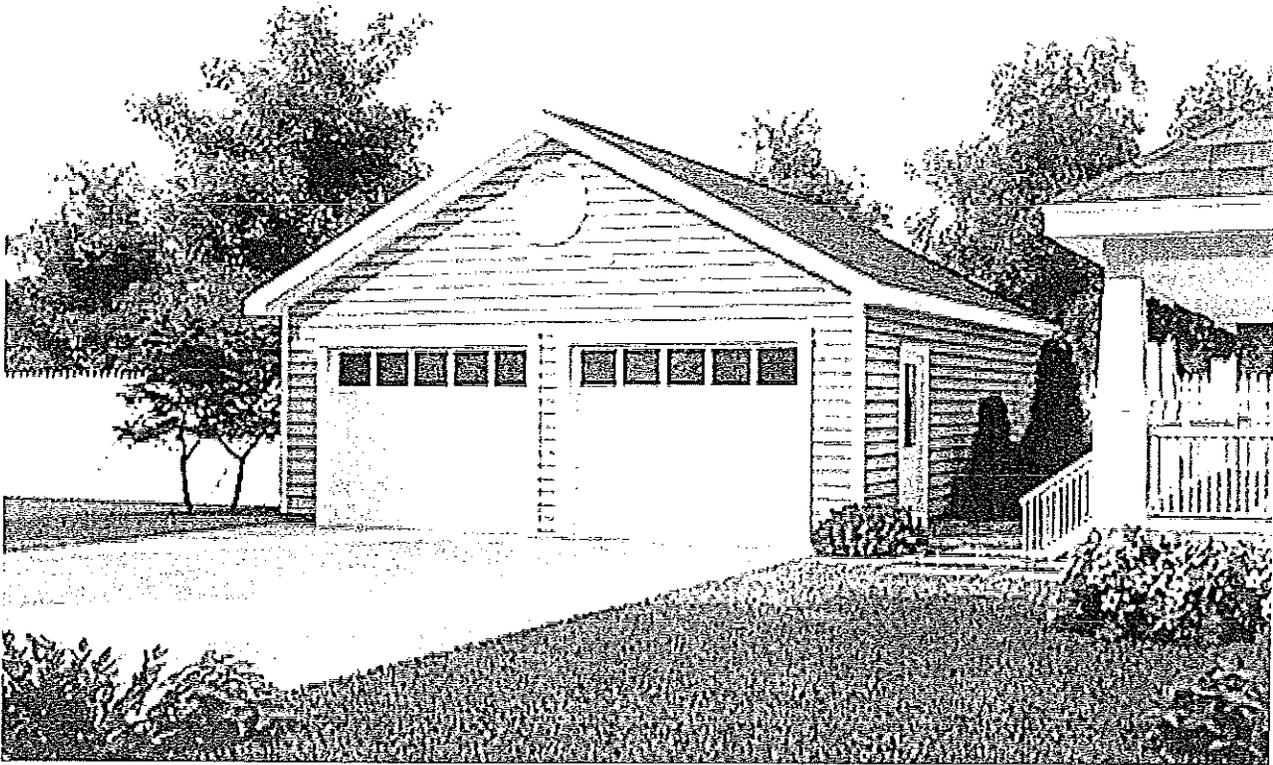
R. G. BARRETT - ATTORNEY

STORRS CONY APR 1956

SCALE 1" = 500'







THIS VIEW IS FOR REFERENCE ONLY TO SHOW
THE TYPE OF CONSTRUCTION PROPOSED

The Connecticut Water Company
25 North Road
P.O. Box 857
East Windsor, CT 06088-0857
Office: 860.623.3355
Fax: 860.654.1903
Customer Service: 800.236.5700



July 1, 2014

Town of Mansfield
Planning and Zoning Commission
4 South Eagleville Road
Mansfield CT 0626-2599
Attn: Joann Goodwin, Chair

Re: UConn/Mansfield Water Main Connection

Dear Ms. Goodwin,

The Connecticut Water Company (CWC) has received your June 25, 2014 letter regarding the UConn/Mansfield Water Connection project. Thank you for the Agency's timely review of the project plans. Our response to your comments follows.

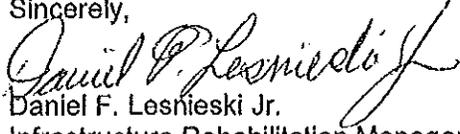
We understand the Agency's desire to maintain as great a buffer as possible between the work area and any wetlands or watercourses. In designing the project, we have worked to avoid direct wetlands impacts and sought to minimize encroachment into regulated areas. Where possible and as site conditions allow, we will work to maximize this buffer during the construction phase.

CWC implements best practices to minimize the impacts of our construction work and routinely incorporates erosion and sediment control (E&S) provisions as part of our project contracts. A general E&S plan containing the following elements will be made part of the UConn/Mansfield Water Connection pipeline contract.

- Equipment refueling or service is to be performed only with personnel trained in the proper response to a spill, and not within 50' of a drainage or wetland area.
- Spill control equipment for routine contractor activities should be available on site; any spills are to be promptly reported to the proper authorities.
- Stockpile sites are to be created only with the appropriate erosion and sediment control measures in place, and not within 50' of a drainage or wetland area.
- Temporary stockpiles without erosion and sediment control measures in place must be adequately covered or removed if the site is left unattended.
- To the extent possible, work adjacent to wetlands or drainage should be timed to be completed in a single day, with disturbed area restored and E&S measures in place.
- Erosion control blanket (if used) to have biodegradable (synthetic-free) netting.
- Site to be monitored in accordance with the applicable Storm water for Construction Activities general permit (or E&S plan where storm water permit is not applicable).

We will forward you a copy of the final Plan that reflects this if your committee would like it for reference. Please feel free to call me at 800-428-3985 extension 2834 if you have any questions.

Sincerely,

A handwritten signature in black ink, reading "Daniel F. Leshieski Jr.", written in a cursive style.

Daniel F. Leshieski Jr.
Infrastructure Rehabilitation Manager

xc: Linda Painter



**Notice of Tentative Determination to Approve Applications for
401 Water Quality Certification, and
Inland Wetlands and Watercourses Permit
And Intent to Waive Public Hearing**

Applicant(s): Connecticut Department of Transportation

Application Nos.: IW-201400616, WQC-201400618

City/Town: Franklin, Mansfield, Marlborough

The Commissioner of the Department of Energy and Environmental Protection (“DEEP”) hereby gives notice that a tentative determination has been reached to approve the following applications. The Commissioner also gives notice of intent to waive the requirement for public hearing provided that a hearing may be held if the Commissioner determines that the public interest will best be served thereby, or shall hold a hearing upon receipt of a petition as more thoroughly described below.

Application Numbers: IW-201400616, WQC-201400618

Applicant’s Name and Address: Connecticut Department of Transportation
2800 Berlin Turnpike, Newington, CT 06131-7546

Contact Name and Phone No.: Mark W. Alexander, 860-594-2931

Type of Permits: Inland Wetlands and Watercourses and
401 Water Quality Certification

Relevant statute(s)/Regulation: Section 22a-39 of the Connecticut General Statutes,
Section 401(a)(1) of the Federal Clean Water Act

Project Description: Rehabilitation of Four (4) Corrugated Metal Culverts

Project Location: Connecticut Route 2, 207 & 430, Franklin, Mansfield, &
Marlborough

Water(s): Bellow’s Brook, Beaver Brook, Eagleville Brook,
Tributary to Lyman Brook

COMMISSIONER’S FINDINGS/REGULATORY CONDITIONS

The proposed activities will affect 0.36 acres of wetlands and watercourses.

Pursuant to CGS Section 22a-39, the Department has determined that the regulated activities are not likely to have a significant impact on the wetlands or watercourses and hereby publishes its intent to waive the requirement for an Inland Wetlands and Watercourses public hearing.

Application number WQC-201400618 has been evaluated for compliance with the applicable provisions of Sections 301, 302, 303, 306 and 307 of the Act and the Water Quality Standards and Criteria of the State of Connecticut adopted pursuant to CGS Section 22a-426.

INFORMATION REQUESTS/PUBLIC COMMENT

This application has been assigned Nos. IW-201400616 and WQC-201400618; please use these numbers when corresponding with DEEP regarding this application. Interested persons may obtain a copy of the application from the applicant's contact noted above. The applications and supporting documentation are available for inspection at the DEEP, Bureau of Water Protection & Land Reuse, 79 Elm Street, Hartford, CT from 8:30am to 4:30pm, Monday through Friday. Questions may be directed to Colin Clark of the Inland Water Resources Division at (860) 424-3214 or colin.clark@ct.gov.

Before making a final decision on this application, the Commissioner shall consider written comments on the application from interested persons. Written comments on the application should be directed to Colin Clark, Bureau of Water Protection & Land Reuse, Inland Water Resources Division, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127, or may be submitted via electronic mail to: colin.clark@ct.gov, no later than thirty (30) days from the publication date of this notice.

PETITIONS FOR PUBLIC HEARING

Petitions shall be signed by at least 25 persons, include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be *mailed or delivered* to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation.

May 23, 2014

Publication Date



Cheryl A. Chase, Director
Inland Water Resources Division
Bureau of Water Protection and Land Reuse

ADA PUBLICATION STATEMENT

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Mansfield Open Space Preservation Committee
DRAFT Minutes of June 17, 2014 meeting

Members present: Jim Morrow (chair), Quentin Kessel, Ken Feathers, Vicky Wetherell. Jennifer Kaufman (staff).

1. Meeting was called to order at 7:38.
2. Vicky was appointed acting secretary.
3. Minutes of the May 20, 2014 meeting were approved.

Old Business

3. *Mansfield Tomorrow* The committee reviewed proposed goals, strategies and actions for Chapter Four of the Plan (Open Space, Parks and Agricultural Lands). They recommended revisions that will be forwarded to Town staff.

Executive Session

4. The committee voted to go into Executive Session at 8:00 and to come out of Executive Session at 8:50. Recommendations will be forwarded to Town staff.

4. Meeting adjourned at 8:55.

PAGE
BREAK



Town of Mansfield

Department of Planning and Development

Date: June 25, 2014

To: Mansfield Inland Wetlands Agency

From: Jennifer Kaufman, Inland Wetlands Agent

Subject: Monthly Business Report

Mansfield Auto Parts - Route 32

On May 20, 2014, Grant Meitzler and I inspected the site and noticed that there were numerous car doors within 25 feet of the wetlands. The owner agreed to remove the doors and store them at least 25 feet away from the wetland. The doors had not been moved as of June 6, 2014. I returned to the site on June 20, 2014 and noted that the staff was in the process of moving the items and will return in two weeks to confirm that this has been completed.

Agent Approvals- None.

PAGE
BREAK

Connecticut Wildlife

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
BUREAU OF NATURAL RESOURCES
DIVISIONS OF WILDLIFE, INLAND & MARINE FISHERIES, AND FORESTRY





From the Commissioner's Desk

Rob Klee, Commissioner, CT Department of Energy and Environmental Protection

As someone drawn to the outdoors, I have always enjoyed hiking Connecticut's trails, kayaking our waterways, and observing the diversity of our wildlife. Now, as the new Commissioner of the Department of Energy and Environmental Protection (DEEP), I head a state agency with a wide range of responsibilities, including protection of our open spaces, natural resources, and wildlife. This is something that DEEP takes very seriously.

Our state is small and heavily populated in many places. Yet, few other states can match us for scenic beauty, open spaces, and opportunities for first-rate outdoor experiences, such as hiking, boating, observing birds and other wildlife, fishing, and hunting. We have 107 state parks, 106 wildlife management areas, and 32 state forests, as well as thousands of acres of land protected by municipalities and local land trusts. This means "the great outdoors" is just a short and convenient drive away from anywhere.

One of the biggest challenges facing our agency is how to protect all that we have – not just for us but for future generations as well. To accomplish this we aim to reach into the future and engage young people in the world of nature to foster the development of the next generation of environmental stewards.

To meet this challenge, DEEP has innovative programs to lure families back outside - and away from all of today's electronic gear. As the father of two young boys ages six and four, I know just how hard that can be – and how difficult it is to break through the busy schedule many families keep.

Here is a look at just two of the programs we have for families. We hope you will make it a point to participate and get your children outside – and please be sure to take some of their friends along with you when you do:

● *The Great Park Pursuit is part of our nationally recognized No Child Left Inside® initiative. The Great Park Pursuit kicks-off on Saturday, May 10, at Chatfield Hollow State Park, Killingworth, and will end with a day of activities and a family campout on June 21 at the University of Connecticut in Storrs. There also will be activities at a different state park on the five Saturdays in between. More details and registration information is available at www.NoChildLeftInside.org.*

● *The "Youth Fishing Passport" program introduces young people to a lifetime of excellent fishing opportunities across Connecticut. The "Youth Fishing Passport" is available free-of-charge and is a ticket for youngsters to access fishing information and fishing related activities, as well as promoting a sense of environmental stewardship at an early age. Information about the benefits of the Passport program can be found at www.ct.gov/deep/YFP.*

In addition, don't forget that Connecticut has a network of "greenways" that provide an attractive place in virtually every city and town for families to get out for a stroll, hike, or bike ride. DEEP also has some fun and educational nature centers, such as the ones at Hammonasset Beach State Park (Madison), Sherwood Island (Westport), and Sessions Woods (Burlington).

As an avid reader of Connecticut Wildlife, I know that you value the outdoors. Please do all you can to pass that on to young people in your life.

Cover:

The American woodcock is known for its aerial courtship displays in spring and loud, nasal "peent" calls. Connecticut's population has been declining. Look for a quick update on woodcock research and habitat management on page 22.

Photo courtesy of Paul J. Fusco

Connecticut Wildlife

Published bimonthly by

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Commissioner

Robert F. Klee

Deputy Commissioner

Susan Whalen

Chief, Bureau of Natural Resources

William Hyatt

Director, Wildlife Division

Rick Jacobson

Magazine Staff

Managing Editor Kathy Herz

Production Editor Paul Fusco

Contributing Editors: Mike Beauchene (Inland Fisheries)

Penny Howell (Marine Fisheries)

Christopher Martin (Forestry)

Circulation Trish Cernik

Wildlife Division

79 Elm Street, Hartford, CT 06106-5127 (860-424-3011)
Office of the Director, Recreation Management, Technical Assistance,
Natural History Survey

Sessions Woods Wildlife Management Area
P.O. Box 1550, Burlington, CT 06013 (860-675-8130)
Wildlife Diversity, Birds, Furbearers, Outreach and Education, Habitat
Management, Conservation Education/Firearms Safety, Connecticut
Wildlife magazine

Franklin Wildlife Management Area
391 Route 32, N. Franklin, CT 06254 (860-642-7239)
Migratory Birds, Deer/Moose, Wild Turkey, Small Game, Wetlands
Habitat and Mosquito Management, Conservation Education/Firearms
Safety

Eastern District Area Headquarters
209 Hebron Road, Marlborough, CT 06447 (860-295-9523)
State Land and Private Land Habitat Management

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www.ct.gov/deep/wildlife www.facebook.com/CTFishandWildlife
E-mail: deep.ctwildlife@ct.gov Phone: 860-675-8130



The Federal Aid in Wildlife Restoration Program was initiated by sportsmen and conservationists to provide states with funding for wildlife management and research programs, habitat acquisition, wildlife management area development, and hunter education programs. Connecticut Wildlife contains articles reporting on Wildlife Division projects funded entirely or in part with federal aid monies.



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Printed on recycled paper

Meet DEEP Commissioner Rob Klee

On March 12, 2014, Rob Klee officially became Commissioner of the Connecticut Department of Energy and Environmental Protection (DEEP). Commissioner Klee previously served as Chief of Staff for former Commissioner Dan Esty, who, after almost three years at the helm of DEEP, resumed his tenured position at Yale Law School in New Haven in early 2014.

As Chief of Staff, Commissioner Klee was involved in the inner workings of the department – from Human Resources, budgeting, and

technology, to setting policy and direction for environmental regulation and the operation of our state parks and forests. He was also directly involved in the integration of the energy and environmental sides of the department and the buildout of a new cheaper, cleaner, and more reliable energy agenda when Governor Malloy and this General Assembly took action to create the new Department of Energy and Environmental Protection or “DEEP”

During his position as Chief of Staff, Commissioner Klee developed a real understanding of the department, and an appreciation for the importance of work being conducted by the DEEP staff. He has welcomed the chance to work with a staff that he believes is a collection of smart, motivated, and passionate people who care about the mission of DEEP.

Commissioner Klee had said that being Chief of Staff was the best job he had ever had. Now, the opportunity to serve as DEEP Commissioner is a dream come true for this Connecticut native who grew up with a real appreciation for the world

of nature – Connecticut’s forests, parks, beaches, and marshes along Long Island Sound have always been special to him.

Commissioner Klee carried that passion through his education. He has an undergraduate degree in geology and environmental science from Princeton, and he studied both science and law at Yale. In 1997, he enrolled as a graduate student at the School of Forestry, and, after receiving a master’s degree in environmental studies, went on to pursue a graduate degree, concentrating in industrial ecology. While enrolled as a doctoral student, Klee decided to pursue a law degree. He took a few years off from his Ph.D. program to enroll in the Yale Law School. His PhD research explored how our human industrial systems can better interact with natural systems. He chose an unusual place to study these interactions – Antarctica – where he analyzed how materials, energy, and waste are handled by the various international research stations on that continent. In fact, one news report picked up on the rather academic title of his thesis, “Materials

Flow Analysis of the Industrial Systems in Antarctica.” As a result, some have dubbed him “Dr. Trash.” This nickname may be appropriate because Commissioner Klee believes that transforming Connecticut’s waste management system in order to capture more of the economic value of materials in our waste stream is a major challenge facing our state, but also a great opportunity for improvement, innovation, and leadership.

Working together, Commissioner Klee feels confident that Connecticut can build on the successes enjoyed so far by putting the state’s environmental, conservation, and energy agendas under one roof – an approach that has made Connecticut a national model.

A Connecticut native, who was raised in Fairfield, Commissioner Klee now lives in New Haven with his wife, Anne, and two young sons, Alex and Jacob. They make it a point to visit many of Connecticut’s state parks and natural spaces, partaking in ice fishing, camping, hiking, canoeing, and swimming.



DEEP Commissioner Rob Klee (left) and students from Helen Street School and Ridge Hill School in Hamden stock trout at one of our designated Community Fishing Waters – Lake Wintergreen in Hamden.

M. BEAUCHENE, DEEP INLAND FISHERIES DIVISION

The opportunity to serve as DEEP Commissioner is a dream come true for Connecticut native Rob Klee who grew up with an appreciation for the world of nature.

Keeping a Salamander-friendly Yard

Written by William Conway, Skidmore College Student Intern for the DEEP Wildlife Division

During this Year of the Salamander, make an effort to create a welcoming habitat for salamanders right in your yard.

Salamanders have been disappearing at alarming rates in recent years. The decline of these amphibians can be attributed to a number of human activities, including habitat destruction and increased chemical pollution. Homeowners and landowners can take several measures to ensure that salamanders find hospitable conditions in yards or nearby wetlands.

If you are tired of the pressures of keeping a perfectly manicured yard, fostering salamander habitat can serve as your environmentally friendly excuse to not rake leaves and also have a lawn that is not “putting green” pristine. Salamanders, along with other amphibians and reptiles, rely on leaf litter for cover and moisture. Simply allowing fallen leaves

Studies have shown that broad spectrum herbicides containing glyphosate are highly toxic to salamanders.

to run their natural course of decomposition can create nutrient rich leaf litter in your yard. This leaf litter will provide the ideal habitat for a plethora of insects and earthworms, supplying salamanders with an important food source. Along with providing food and shelter, leaf litter can increase the soil’s water retention abilities by up to 50%, creating the damp environment salamanders thrive in. Leaf litter also will function as an important salamander-friendly replacement for synthetic lawn fertilizers.

Salamanders are direct recipients of toxic runoff from widely-used lawn care chemicals. The combination of having permeable skin and living in low-lying wetlands makes salamanders highly vulnerable to the threats of pollution. Synthetic lawn fertilizers and herbicides used by households contribute to nonpoint source pollution that enters waterways and destroys salamander habitat. Studies have shown that broad spectrum herbicides containing glyphosate are highly toxic to salamanders at levels below the Environmental Protection Agency’s standards

for safe drinking water. When homeowners use these herbicides or other popular lawn care chemicals, salamander habitat is immediately compromised. Compost and leaf matter are organic alternatives for supplying lawns with necessary nutrients. To reduce run-off from entering low-lying salamander habitat, the installation of impervious surfaces, such as concrete walkways, should be avoided. Lastly, if you happen to live near a stream or river, native vegetation planted along stream and riverbanks can absorb runoff before it enters the waterway. Increased streamside vegetation also provides the shade necessary to protect salamander eggs from ultraviolet rays.

Leaving a lawn unkempt and strewn with leaves, logs, and branches will attract salamanders, but homeowners can be even more proactive in their approach to creating salamander habitat by building a brush shelter. Brush shelters are intentional ecosystems erected to attract a variety of local wildlife. To construct a brush shelter, start by stacking and criss-crossing logs for a base. The log foundation will provide the necessary moisture, coverage, and insects for salamander habitat. On top of the logs, weave branches, sticks, and twigs together, creating a dome like structure. The frame of the brush shelter is then covered with leaf litter, and some-

times conifer branches for extra warmth in winter. The resulting mass is a protective, thriving environment with a variety of interesting features to attract everything from salamanders to rabbits and birds.

In spring, many salamanders will migrate to temporary pools formed by the accumulation of rainfall and snowmelt in low-lying areas to breed (also known as vernal pools). What may look like an unattractive, muddy stain on spring’s vibrancy is, in reality, a key ecological phenomenon in the reproduction of salamanders. If a vernal pool occurs in your yard, allow the pool to live out its temporary existence and welcome a new generation of salamanders into your new, salamander-friendly yard.



Leaf litter and fallen logs are important components of salamander habitat.



Temporary pools, also known as vernal pools, are the life-blood for most salamanders in Connecticut.

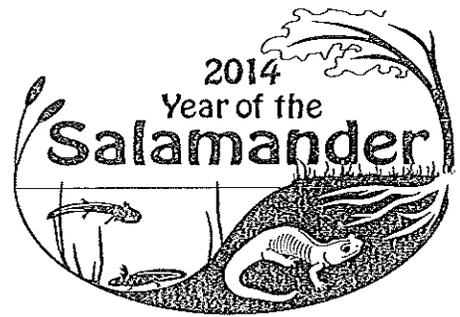
P. J. FUSCO (2)

Salamander Art Contest for Kids!

As part of the Year of the Salamander, the DEEP Wildlife Division and the Friends of Sessions Woods are sponsoring a salamander art contest for children in kindergarten through fifth grade (open to Connecticut residents only). Children interested in entering the contest are asked to draw, paint, or sketch a salamander species native to Connecticut. Entries will be judged in three age groups: K-1st grade, 2nd-3rd grade, and 4th-5th grade. First, second, third, and "most creative prizes" will be awarded in each age group. The Connecticut Science Center has graciously donated a Family Pass package for each first place winner. The Friends of Sessions Woods Paul Petersen Memorial Fund and Connecticut's Beardsley Zoo also have donated prizes. First place winners will have their artwork

published in *Connecticut Wildlife*.

All of the artwork entered in the contest will be on display at the Sessions Woods Conservation Education Center, in Burlington, at a special "Salamander Day," scheduled for Sunday, July 20, from 1:00-4:00 PM. Educational programs on salamanders, live salamanders, and kid's crafts are all planned for Salamander Day. An entry form, art contest guidelines, and the list of native salamanders (with photographs) that can be illustrated are available on DEEP's Year of the Salamander webpage at www.ct.gov/deep/salamanders. This information also can be obtained by contacting the DEEP Wildlife Division's Sessions Woods office at 860-675-8130 (Mon-Fri, 8:30 AM-4:30 PM). All entries must be postmarked by May 30, 2014.



Celebrate Salamanders!
Learn all about Connecticut's salamanders and find out about upcoming salamander events on the DEEP website at www.ct.gov/deep/salamanders.

Tweet to Unite Wildlife Enthusiasts for Wildlife Conservation

Many species that we traditionally think of as common are declining across Connecticut. When was the last time you saw bats flying in the sky or found a box turtle while walking through the woods? These once common species are now rare sights. Our wildlife is a defining feature of Connecticut – we all have an enormous role to play in keeping these species common for generations to come. You can assist by reporting the wildlife that you see.

Students in UCONN's Wildlife and Fisheries Conservation Center are creating new social media content focused on Connecticut's wildlife. These students, in partnership with the DEEP Wildlife Division, have created a new Twitter page, https://twitter.com/CT_SWAP, to celebrate Connecticut's wildlife and encourage public participation in helping to update Connecticut's State Wildlife Action Plan (CT SWAP). The focus of this page is to inspire nature lovers to be on the lookout for species of greatest conservation need (SGCN). Followers will receive

up-to-date information on local wildlife species and information about the revision of Connecticut's Wildlife Action Plan.

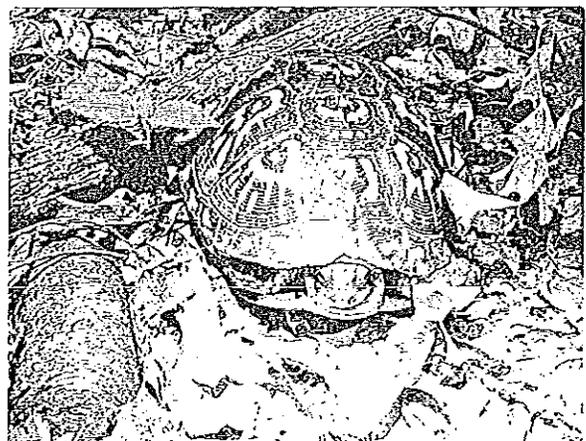
Twitter users will be able to post wildlife-related questions, and can directly contribute to wildlife conservation by posting photos of their sightings of SGCN species in the state. Photos can be tweeted @CT_SWAP with #CTSGCN. See a new species in your yard, tweet it with #CTSGCN. Find a rare species when hiking in a state park, tweet it with #CTSGCN. Sightings that are paired with time and location data will inform conservation planning for SGCNs.

If you are not already following the Wildlife Division on Facebook, "like" the page today (www.facebook.com/CTFishandWildlife). UCONN students will be publishing content on the CT Fish and Wildlife Facebook page throughout the next

year that will include regularly updated descriptions and pictures of SGCN species and information on how you can get involved with local wildlife conservation.

The ultimate goal is to keep common species common! Learn about SGCN species, keep an eye out for SGCN species while enjoying the outdoors, and start tweeting your wildlife observations today!

To learn more about the UCONN class project, visit <http://wfcc.uconn.edu/ConnecticutStateWildlifeActionPlan.php>.



Kelly O'Connor
@kmoconnor8

Follow

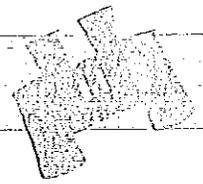
CT_SWAP Eastern Box Turtle sighted at West Rock Ridge State Park in August 2013 #CTSGCN #turtles

5:30 PM - 13 Mar 2014

34 Retweets

What Is SGCN?

A species of greatest conservation need (SGCN) is identified based on a variety of criteria. It may already be listed as threatened or endangered at either the state or federal level, or it may be vulnerable to population decline. The species may occur in small, localized populations that are endemic to the region, or it may be a "responsibility species," whose center of distribution falls within the state. DEEP consults with a wide variety of experts during the SGCN selection process. Learn more about SGCN by visiting <http://1.usa.gov/NbJhaQ>.



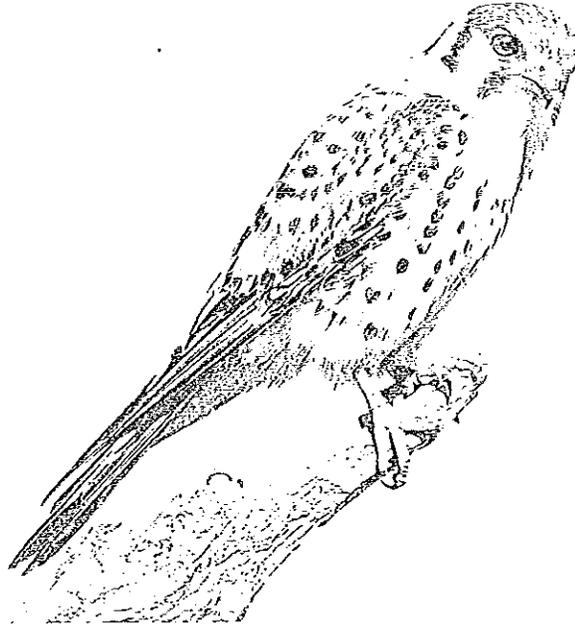
Topsmead State Forest

Topsmead State Forest, nestled in the Litchfield Hills, is the perfect location for viewing grassland birds. This 634-acre state forest contains mixed hardwoods, large agricultural fields, two small ponds, and old, unmanaged Christmas tree plantings. Grassland birds, in general, require large fields for nesting and raising their young. The large hayfields at Topsmead are actively hayed by two local farmers under the Wildlife Division's Agricultural Agreement Program. Farmers leasing land under this program are required to follow a land use plan that specifies what may be planted, when hay can be cut, and the requirements for maintaining old fields.

A viewing blind, which looks like a small barn, is located in an isolated corner of a large hayfield to provide visitors the opportunity to observe grassland birds. Birds one can expect to see from the viewing blind are bobolinks, meadowlarks, field sparrows, kestrels, bluebirds, and red-tailed hawks. At dawn or dusk, there also is a good chance to see a fox or coyote hunting for small mammals in the field or deer grazing along the edge. Visitors also may observe indigo buntings, song sparrows, common yellowthroats, and catbirds.

Topsmead State Forest is the former summer estate of Miss Edith Morton Chase, daughter of Henry Sabin Chase and Alice Morton Chase. Henry Sabin Chase was the first President of Chase Brass and Copper Company in Waterbury. In 1917, Miss Chase received approximately 16 acres on Jefferson Hill in Litchfield from her father. Here she built a rustic cabin, which was replaced with a more substantial summer home – an English Tudor style house which was completed in 1925.

Miss Chase built up her financial inheritance and subsequently her real estate holdings. One of her most significant acquisitions was the 1927 purchase



American kestrels can be seen hunting over the fields at Topsmead State Forest.

of the Buell Farm, which was renamed Topsmead Farm to reflect its location at the "top of the meadow." The farm produced food used on the estate. In addition to vegetable and flower gardens, there were beef cattle, poultry, sheep, pigs, and, at one time, draft horses.

Upon her death in 1972, Edith Chase left her beloved country estate to the people of Connecticut and wanted it to be known as Topsmead State Forest. In her will, Miss Chase requested that Topsmead "be kept in a state of natural beauty." Therefore, Miss Chase left an endowment to be used toward maintaining and operating the buildings and grounds as they were upon her death.

The house is open for free guided tours from June through October on the second and fourth weekends of each month. Reservations are not required. Visitors may picnic informally on the grounds, residence lawns included. Open fires or grills are not allowed.

Numerous trails and unpaved lanes are available for easy walking. In addition, the Edith M. Chase Ecology Trail offers a 7/10-mile walk with interpretive signs.

Approximately 200 acres are open to hunting during the following seasons: small game, waterfowl, spring turkey, fall archery, fall firearms turkey, muzzleloader deer, and no-lottery deer A and B seasons. More specific details on season dates are available in the current Connecticut Hunting and Trapping Guide, which can be obtained from DEEP offices, outdoor equipment vendors, and on the DEEP website at www.ct.gov/deep/hunting.

Directions:

From Route 8: Take exit 42. Go west on Route 118 for 2.0 miles. Turn left onto Clark Road to the stop sign. Take a right at the stop sign, then the first left onto Buell Road. The first right off Buell Rd. is the entrance to Topsmead.

From Litchfield Center: Take Route 118 east for 1.5 miles. Take a right onto East Litchfield Road. Take the first right onto Buell Road. Topsmead will be the first road on the right.

There are no parking fees at Topsmead State Forest. Gates open at 8:00 AM and close at sunset all year round.

Record Number of Eagles Counted During Midwinter Survey

Written by Kate Moran, DEEP Wildlife Division

During winter when rivers and lakes in more northern latitudes freeze over, bald eagles migrate to points south where they can find open water and fish to feed upon. The lower Connecticut, Thames, and Housatonic Rivers provide just such winter feeding grounds for these fish-eating raptors, as well as an exciting watchable wildlife opportunity for residents in our state. Winter also is a perfect time to take inventory of these birds because they are concentrated around open water, making it easier to count them.

The annual Midwinter Bald Eagle Survey was completed in Connecticut

during January 2014. This survey is part of an annual nationwide effort initiated in 1979 by the National Wildlife Federation. The survey is currently coordinated by the U.S. Army Corps of Engineers in partnership with the Biological Resources Division of the U.S. Geological Survey. Data collected over the years has contributed to establishing a nationwide population index, species distribution, and long-term population trends throughout the contiguous 48 states. Connecticut has participated in the program since its inception, when 20 eagles were documented in the state. Since that time, there has been a steady

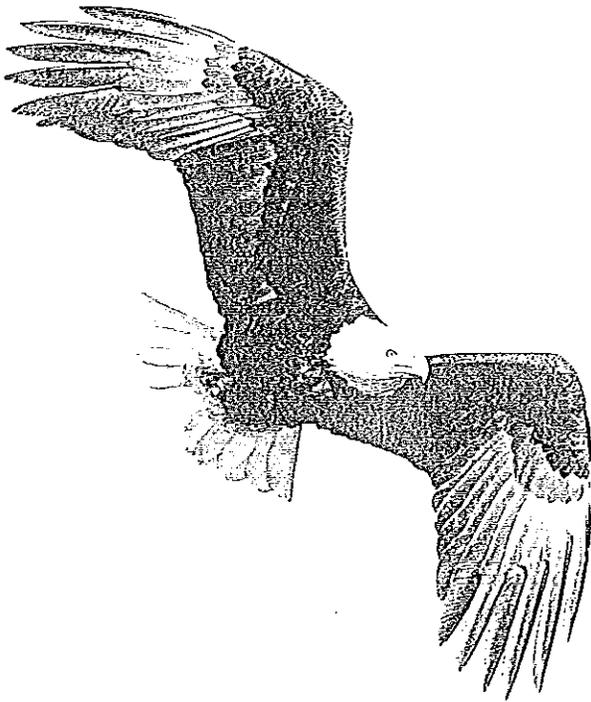
2014 Midwinter Eagle Survey Results

Watershed	Bald Eagles
Connecticut	83
Housatonic	30
South Central Coast	5
Thames	25
Total Statewide	143

increase in Connecticut's wintering eagle population. Midwinter Eagle Survey data and information from surveys conducted in past years and in other states are available at <http://ocid.nacse.org/nbi/eagles/>.

CT's Survey Results

This year, despite dense fog and a mix of rain and snow that fell across the state on the day of the survey, a hearty band of 228 volunteers counted a record high of 143 bald eagles (104 adults and 39 juveniles). The last record high was set in 1996 when 128 eagles were counted. The Wildlife Division would like to thank all who participated in the survey, particularly members of the Bald Eagle Study Group and the volunteers coordinated by Ranger Bill Reid of The Last Green Valley National Heritage Corridor.



Chimney Swift Conservation Night, May 19

Willibrew is for the birds! Join us for the second annual Chimney Swift Conservation Night on Monday, May 19, 2014, at the Willimantic Brewing Company (Main St. Café), at 967 Main Street, in Willimantic. This year, the event is happening at the height of the spring arrival of chimney swifts. In past years, close to 1,000 birds have been observed descending into the nearby Nathan Hale roost. Join swift researchers from DEEP and UCONN for a wonderful meal, specialty brews, including "Flying Cigar Ale," and the amazing spectacle of hundreds, perhaps thousands, of chimney swifts "tornadoing" into two of the state's largest summer roosts. Come see the Windham Town Hall roost and the Nathan Hale roost spectacles and learn why Willimantic is so important to chimney swifts. In addition to learning all about swifts and enjoying a great dining experience, master brewer David Wollner will again be tapping the now famous "Flying Cigar

Ale." A portion of the proceeds from each one sold will again be generously donated to the chimney swift conservation effort. So, come and enjoy a lovely night at the Willimantic Brewing Co. and help raise money for a great cause.

DEEP and UCONN researchers will be at the Brewing Co. starting at 5:30 PM. "Showtime" for the swifts is typically 20 minutes before sundown to 30 minutes after sundown (approximately 8:00 PM). Make sure you leave enough time to enjoy a truly fabulous menu before the spectacle. Guided tours to the Nathan Hale roost and the adjacent Town Hall roost will occur around 7:40 PM. For those who want to eat a meal before observing the swifts, reservations are recommended (call 860-423-6777). Remember, the swifts will be there all summer, so once you see them initially, you will certainly want to come back and see them again!

Connecticut State Parks – The Roaring 20s

Written by Alan Levere, State Parks Division

From the beginning, the 1920s held the promise of tremendous growth. The opening of Hammonasset Beach State Park marked a change in park practice from simply buying land to availing it to public use. It was a philosophical change that took the Park Commission five years to embrace, but one that has been with us

ever since. Hammonasset and its public amenities set a new standard for parks, and while it was being nurtured, many other locations were blooming as well.

Waramaug: A Lake in the Woods

One of the prize locations in north-west Connecticut was Lake Waramaug.

This multi-town, 641-acre scenic beauty posed a challenge because much of its nine-mile shore was too steep for park purposes. By good fortune, in June 1920, the Commission was able to acquire 75 predominantly level acres along the lake's north-western arm. Especially enticing was the 3,200 feet of shoreline and, even though a road ran between the

property and the lake shore, the offer was too good to pass up.

Within months of its acquisition, public recognition swelled and Lake Waramaug became a popular camping destination. The cabin on the premises was available for rental and regularly booked at \$15 per week. Soon, the parking area had to be enlarged as parked cars spilled out onto local roads. The unexpected success at Lake Waramaug was welcome and served to highlight the new decade's hunger for scenic, well-run locations.

Wharton Brook: Motorists Haven

It seems odd to think so today, but at the beginning of the 1920s, the Commissioners were trying to figure out if individual automobile use would continue to grow, stabilize, or diminish. As it became clear that personal transportation would flourish, the Commission accommodated "automobilists" with wayside parks. The 70-acre Wharton Brook State Park in North Haven was the first of these. Its free amenities included a night of camping, picnic groves, and a lunch pavilion. Snacks, ice cream, soda, and a public telephone were available for a fee. The courteous attendants allowed no tipping and the park was an immediate success. Wharton Brook's remarkable popularity is seen in 1920s park attendance figures – only Hammonasset Beach had more visitors in the decade.

Mount Carmel: A Special Place

Mount Carmel in Hamden is the official name for Connecticut's only east-west running trap rock ridge. Viewed from the south it looks like a person laying down, hence the local name of "Sleeping Giant." A landmark in the community, the area was once the place of carriage roads, summer homes, and diverse hiking trails.

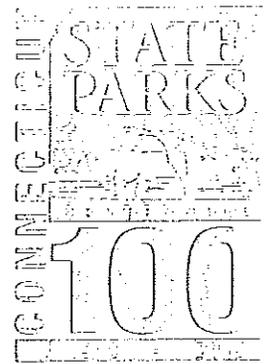
The preservation story began in 1912 when one landowner, seeking income from his hilltop holdings, leased the Giant's head to a quarry company. In early 1924, neighboring landowners, troubled that the whole Giant could be lost and incensed by the continued



Mr. Harley F. Roberts, President of the Black Rock Forest, Inc., was the enthusiastic person to whom the State is primarily indebted for this fine addition to its park system. A stone monument to his memory and honor still stands today.



The popular Sleeping Giant State Park was the only new park added in 1924. It was important because it had been on the Park Commission's mind since the first meeting in September 1913. The white mark on the Giant's head indicates the location of the historic quarry.



destruction of the Giant's head, formed and incorporated the Sleeping Giant Park Association (SGPA). They raised funds and purchased property so quickly that within six months they donated 204 acres to the Park Commission, the first of their many land gifts for this cause.

The quarry at the Giant's head, however, stayed successful until its demise in 1933 during the Great Depression. When the last of the rock dust settled and the land records were finalized in late 1935, this generous gift from SGPA secured the now complete Sleeping Giant for generations to come.

Black Rock: A Generous Gift

In the mid-1920s, the 3,000-acre Peoples State Forest in Barkhamsted – paid for by donations from individuals, school children, and organizations – was presented to the State of Connecticut as a gift. Not to be outdone, residents of Watertown who had attended the presentation liked the idea and began the process that would lead to their own gift two years later.

The State Park Commission summarized the story of Black Rock in the pages of their biennial reports to the Governor:

"The citizens of Watertown ... organized Black Rock Forest, Inc., and with funds raised entirely by subscription have been able to purchase and convey to the State more than a thousand acres of land, an area of 254 acres of which should be developed as a State Park."

In September 1926, Black Rock Forest, Inc., officially donated their first land gift, which became Black Rock State Park. Within a few years, the public valued the location so highly that by the end of the decade it had become the fourth most popular park in the system.

A Culture Clash

One minor social issue came to a head in the state parks at the end of the 1920s. Nearly all the 1920s beach photographs depict the norm for beachwear – the body was covered up except for the extremities. The idea of an exposed midriff, or even the back below the neck, was just too cutting edge. Then, as now, visitors were willing to push the limits and, thus, the daring issue of having your back exposed via open, or "sun back," bathing attire was brought to the forefront.

The Commissioners realized there would be inevitable change in beach

fashion over time. But, a venture beyond the accepted norm brought raised eyebrows and complaining mothers. So, with the introduction of "Sun Back" bathing suits in 1929, this new, risqué style brought complaints from the public. One person protested if Connecticut 'was going to allow that, then my friends and their families were not coming to this beach anymore; they would be ashamed to be seen there.'

To remedy the situation, park managers posted a sign which stated such beachwear was not allowed in State Parks. Though there was no rule cited and no signature of authority, those pressing the issue knew they had reached the limit. The rest of the summer passed without incident, the norms gradually changed over time, and the issue never arose again.

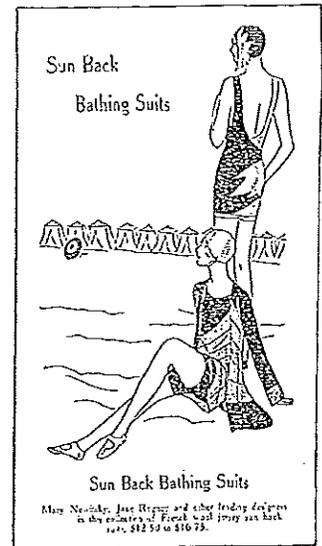
A Decade in Review

Before the decade ended, other signature park properties were added to the system: Kent Falls was donated by A.C. White of Litchfield; 140 acres at Squantz Pond in New Fairfield were acquired; and the Housatonic River valley, which 10 years prior had no state thruway, boasted parks at Housatonic Meadows (Sharon) and Indian Well (Shelton).

Historic property preservation got underway as well. The addition of the Nathaniel Lyon home in Eastford, Wolf Den in Pomfret, and



Baring your back on the beach in 1929 was a bit much for some; but styles and attitudes change and, by the 1930s, new fashions were accepted without complaint. And, there were plenty of watchers to monitor progress. Statewide park attendance of 104,000 visitors in 1920 had burgeoned to 1.2 million by the end of 1929.



Fort Shantok in Montville demonstrated the Commissioners' early stated commitment to "preserve sites of historic interest."

By the conclusion of the 1920s, the Commissioners had learned much about park growth, selection, management, and budgets. They created a signature park in Madison and, in so doing, changed from preservationists to providers of recreation. However, all of the lessons learned in those 10 years could not prepare them for the social and economic tumult that they would face in the coming decade.

Follow the Connecticut State Park Centennial on the DEEP website at www.ct.gov/deep/Stateparks100.



Seven years after Lake Waramaug was acquired, the Park Commission took a cue from Hammonasset and opened a new, tree shaded pavilion along the shore. The collective improvements at the Lake helped make it the fifth most visited park of the decade.

Keeping Track of Connecticut's Endangered Sturgeon

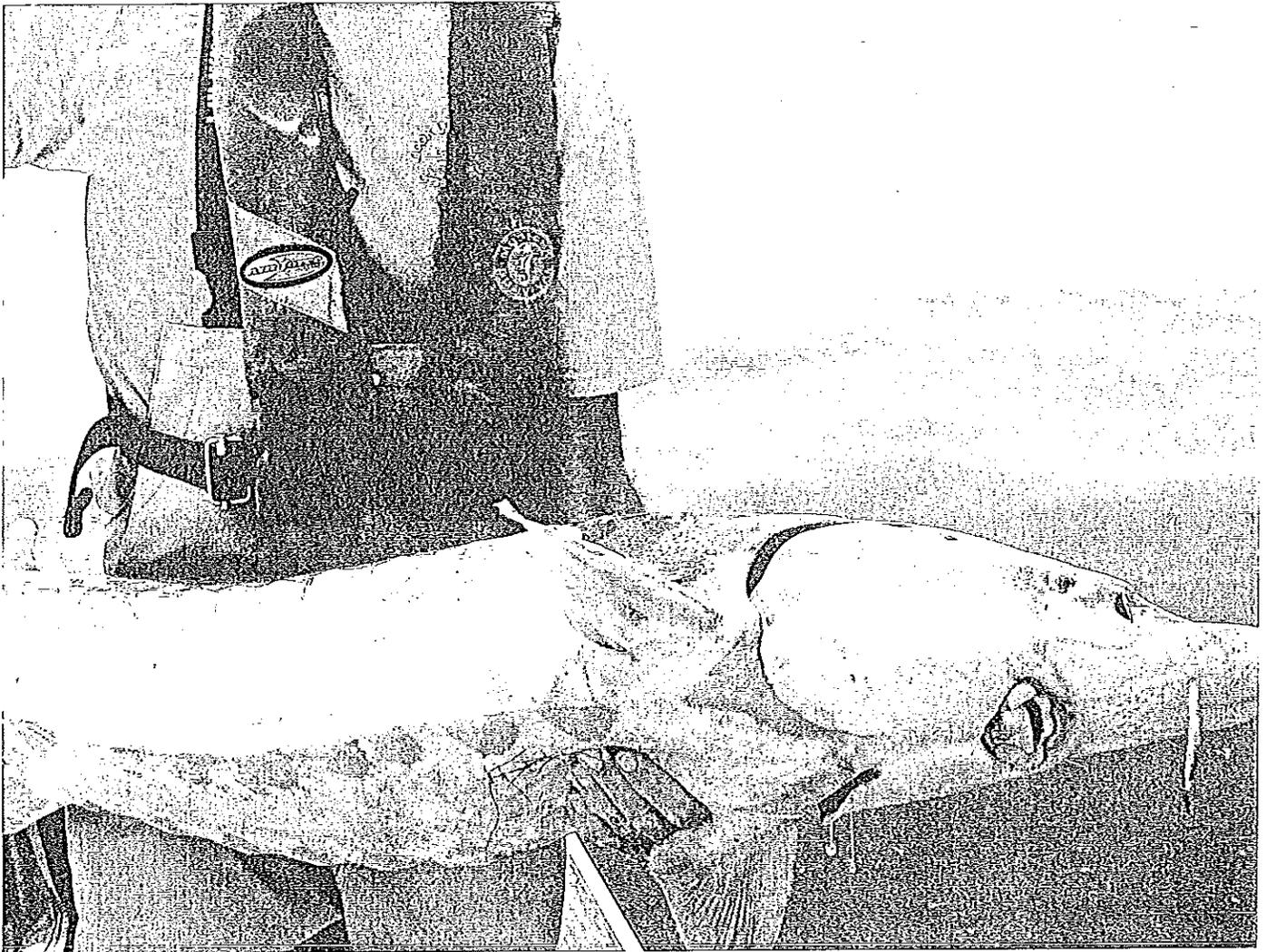
Written by Tom Savoy, DEEP Marine Fisheries Division, photos provided by DEEP Marine Fisheries Division

Keeping track of scarce endangered species is difficult, especially when they travel long distances under water, as is the case for Atlantic and shortnose sturgeon. In recent years, researchers have attempted to solve this problem by surgically implanting acoustic transmitters into both of these endangered species. Acoustic receivers then detect a fish's unique ultrasonic signal as it swims by, and the accumulated movement information helps identify the fish's habitat needs as well as seasonal concentration zones critical to successful growth and survival. Because sturgeon are both relatively large and long-lived, the DEEP Marine Fisheries Division uses transmitters that last several years so that we can examine changes in movement patterns

over time. Beginning in 2006, acoustic receivers were deployed throughout Connecticut waters that are known or suspected to be important habitats used by sturgeon, adding to numerous other acoustic arrays along the U.S. East Coast. Some Connecticut receivers were put in Long Island Sound and others were deployed in the Connecticut River. Receivers in the Sound were hung on U.S. Coast Guard Navigation Aids (with a signed Memorandum of Agreement). Others were deployed with 50-pound anchors and surface buoys. The number of receivers in the annual acoustic array has varied over the years as we acquired additional equipment and, unfortunately, as losses of receivers increase (see sidebar).

Analysis of the newest telemetry data

for shortnose sturgeon confirmed results from earlier studies that documented annual movement of this species down the Connecticut River to its mouth in spring and summer, residence in the estuary at the mouth for 30 to 90 days, and then a return upriver to known freshwater concentration areas. New telemetry information indicated that some shortnose also make a fall movement back to the estuary region. More importantly, movements of some shortnose sturgeon out of the Connecticut River into Long Island Sound were observed, including one fish that left the Sound. Information collected by researchers at State University of New York at Stony Brook and Delaware State University and forwarded to the DEEP Marine Fisheries Division indicated that



One of the larger Atlantic sturgeon that has been surgically implanted with an ultrasonic transmitter by the DEEP Marine Fisheries Division. Note the sutured incision near the researchers fingers.



This Atlantic sturgeon is the typical size of ones surgically implanted with an ultrasonic transmitter. Each fish is gently supported in the water after surgery until it fully recovers and swims off on its own.

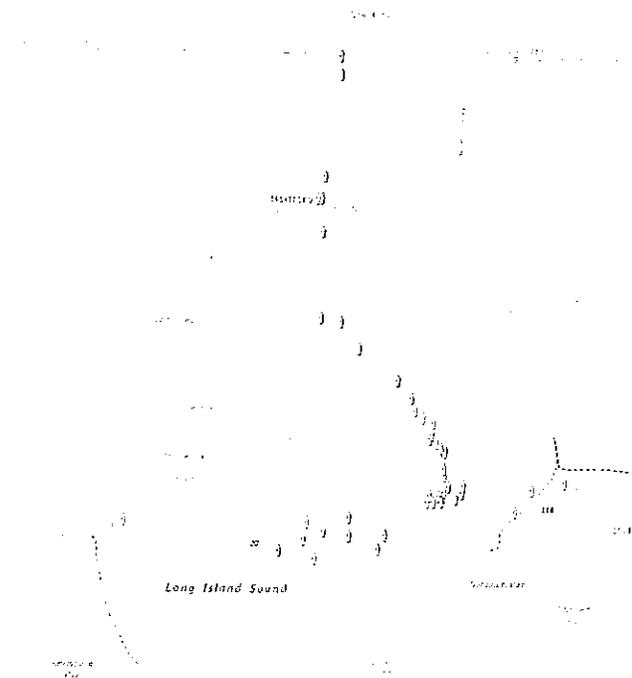
this particular shortnose traveled along the south shore of Long Island and into the Hudson River where it has remained since 2011.

Movements of Atlantic sturgeon surgically implanted with acoustic transmitters confirmed a seasonal presence in Connecticut waters with fall/winter migration to warmer waters off the southern

United States. One sturgeon captured in Connecticut waters was tracked as far south as Cape Canaveral, Florida, a new southernmost range extension. New data from Atlantic sturgeon with transmitters also documented an extension of the seasonal presence of Atlantic sturgeon in Connecticut waters from the formerly described period of "May through

October" to some fish arriving as early as March and staying until December. Some individuals have returned for three consecutive years. Atlantic sturgeon have been documented moving up the Connecticut River, well beyond the salt wedge to Hartford and further north, in some cases. Telemetry efforts have documented the first known year-round presence of Atlantic sturgeon in Connecticut waters. Two tagged Atlantic sturgeon overwintered in the state, one in the estuary region of the Connecticut River and another at a known shortnose sturgeon concentration area upriver.

Published life history information indicates that once young Atlantic sturgeon leave their natal river at ages two through six, they remain in coastal waters until they are sexually mature at ages 12 to 20. When sexually mature, the sturgeon then return to their birth river and swim upstream to spawn. Lack of direct evidence had led us to speculate that the Connecticut River spawning population of Atlantic sturgeon was extinct. This new telemetry information raises some interesting questions: why do these juvenile fish move so far upstream; why do some overwinter here; and are these fish the last few members of the Connecticut River stock of Atlantic sturgeon?

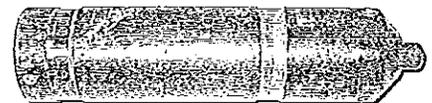


This map depicts a typical annual acoustic array indicating approximate positions of acoustic receivers in Long Island Sound and the Connecticut River.

Have You Seen This?

Many Vemco VR2W Acoustic Receivers have gone missing over the last three years. They are expensive, and the data they store are even more valuable to this long-running program to restore endangered sturgeon species. Because the receivers and buoys can become heavily fouled with encrusting organisms or vegetation, possibly obscuring the DEEP research labeling, they may be hard to identify. Should you come across a receiver no longer attached to its mooring, please pick it up and contact us. You can leave an email message at deep.marine.fisheries@ct.gov, a phone message at 860-434-6043, or return the receiver in person to Marine Headquarters at 333 Ferry Road in Old Lyme. We would greatly appreciate getting any receivers back in whatever way is most convenient.

It is easy to report a lost receiver, but it also must be picked up. A person found a receiver washed up on the beach after Superstorm Sandy and went to great effort to notify the manufacturer after obtaining the phone number off the Internet. Vemco notified us about the receiver and provided contact information. Unfortunately, the individual did not pick up the receiver from the beach, so it had vanished again by the time we arrived two days later to pick it up.



Vemco VR2W acoustic receiver and long-lived ultrasonic transmitter.

Shrubland Buzz - The Blue-winged Warbler

Article and photography by Paul Fusco, DEEP Wildlife Division

A light mist slowly breaks up as the sun rises above a nearby ridge. The strong sunlight of early May bathes an old field in golden light, warming the habitat and bringing it to life. Song sparrows, red-winged blackbirds, and bluebirds are joined by newly arriving neotropical songbirds that seem to be everywhere in the surrounding brushy edges and forest. Tanagers, orioles, and catbirds are all staking their claim to the best breeding territory. Among their calls is another sound, a buzzy song, that seems more akin to a grasshopper than to a bird. The sound comes from high in

a small black cherry tree at the edge of the field, where a little bright yellow bird can be seen. It has a puffy breast and its head is thrown back as it sings its buzzy song.

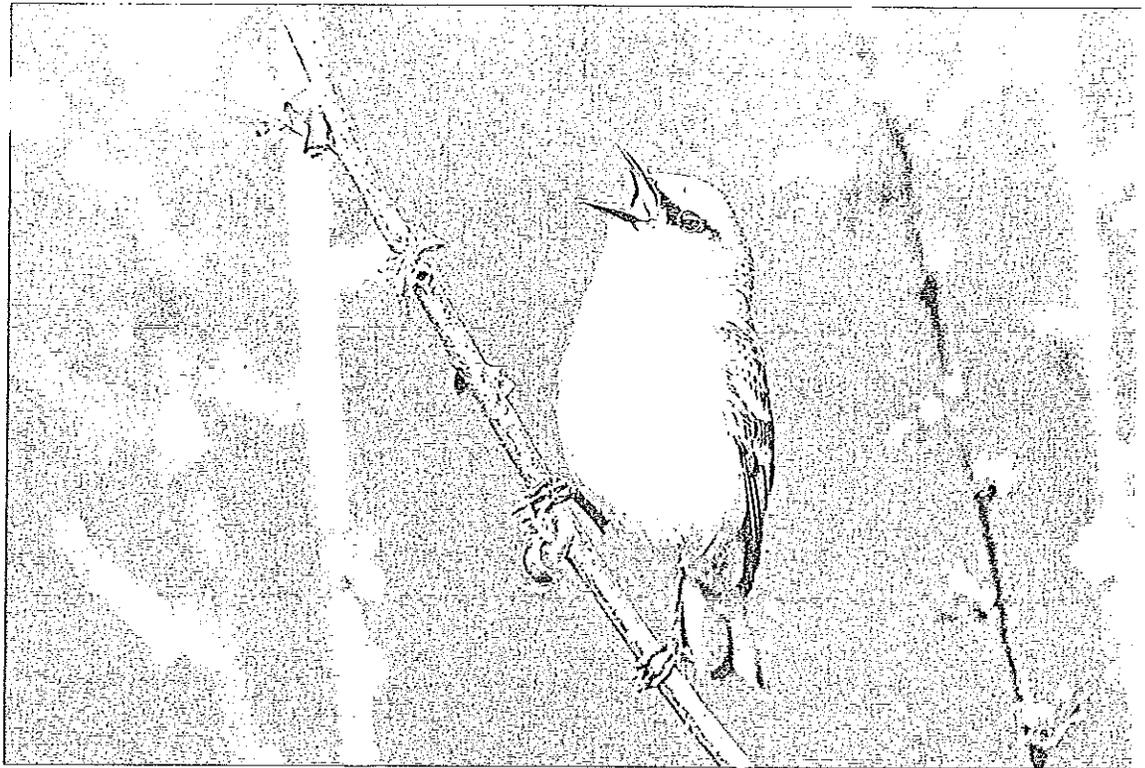
The bird is a male blue-winged warbler. Its song is a lazy *bee-buzzzzz, bee-buzzzzz*, with the first note being higher in pitch. Habitually found closer to the ground, the male often sings from a favored treetop perch, overlooking his territory.

Description

At 4.5 inches in length, the bird is small even by warbler standards. It has a bright yellow head and underparts, narrow black eye line, gray wings with two white wing bars, black bill, and dark legs. The bill is thin and sharply pointed. The sexes of the blue-winged warbler are similar but females are duller with less pronounced eye lines and wing bars. In flight, the blue-winged warbler flashes white patches in the outer tail feathers.

Habitat

Blue-winged warblers breed east of the Great Plains, from Missouri, Tennessee, and Virginia north to southern Minnesota and southern New England. While they



The buzzy song of the blue-winged warbler is a distinctive, insect-like *bee-buzzzzz, bee-buzzzzz*.

have been declining throughout most of their range, they may be expanding in parts of the Northeast. They winter in southern Mexico, Central America, and islands in the Caribbean. In Connecticut, the first blue-winged warblers typically arrive in mid- to late April. The last departures in fall happen by mid-September.

The blue-winged warbler favors shrubby second growth habitats. Habitat can be in the form of shrubland, old field, abandoned farmland, powerline rights-of-way, forest clearing, or forest edge, particularly those with a component of grasses and brushy edges.

Blue-winged warblers nest and forage close to the ground. Nests are built at the base of a clump of plant stems where the female lays from 2 to 7 eggs. The usual clutch size is 5. Young hatch after 11 or 12 days, and chicks fledge the nest after another 10 days.

Insects and spiders make up the majority of the diet. The birds generally use

a slow gleaning (collecting) style to forage for food from leaves and small branches.

Two Close Relatives

A close relative of the blue-winged warbler is the golden-winged warbler. In Connecticut, most shrubland habitat has gradually matured from seemingly favoring golden-winged warbler (younger shrubland) to seemingly favoring blue-winged warbler (general shrubland). A gradual transition has taken place where blue-winged warblers have replaced golden-winged warblers. During that time, as the golden-winged warbler population declined, hybridization between the two species also has occurred. Hybrid offspring can be recognized as Brewster's warbler

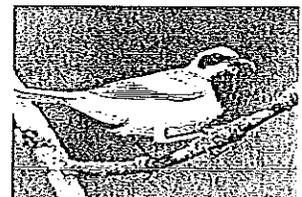
Blue-winged vs. Golden-winged by Song

Blue-winged warbler:

Song is a lazy buzz followed by a single note on a lower pitch, *beee-buzzzz, beee-bzzz*.

Golden-winged warbler:

Song is a buzzy note followed by 3 to 5 on a lower pitch, *beee-bzz-bzz-bzz*.



Golden-winged warbler

(more common) and Lawrence's warbler (less common). Due to hybridization and changes in habitat, the golden-winged warbler has been reduced to the point of possibly being extirpated from the state. It is listed as a state endangered species.

Conservation

Throughout most of its range, the blue-winged warbler is considered uncommon and declining. However, in Connecticut, it is a statewide breeder, being fairly common and widespread in appropriate habitat.

That being said, blue-winged warblers are experiencing a serious long-term population decline in our state. Habitat loss and degradation due to succession, suburban sprawl, and manicured properties have had the biggest impacts. In our state, the declines have averaged a staggering 3.3% loss per year since 1966, based on data and analysis from the Breeding Bird Survey of the National Audubon Society and U.S. Geological Survey. That factors to be a population decline of 74% in Connecticut since 1966. In the United States, data show that the blue-winged warbler population decreased an average of 0.7% per year over the same time period. The good news is that blue-winged warblers have been increasing in parts of southern Ontario, Canada, where the population has grown by 6% to 7% per year.

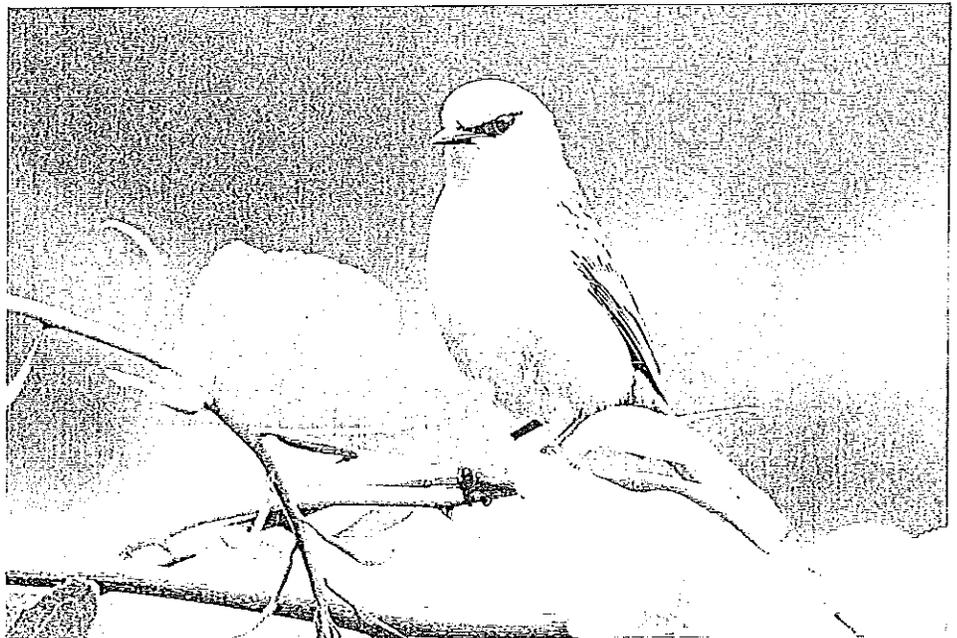
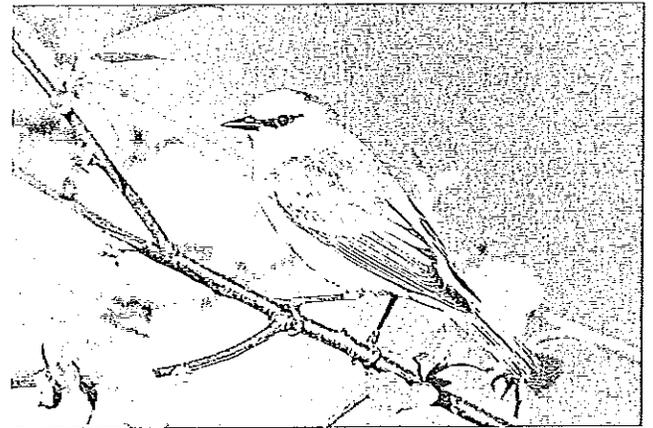
The changing landscape of habitat succession plays a large part in the fortunes of this species. Cutting back brushy habitat to maintain a manicured property negatively impacts this species, as does the inevitable natural progression of field to forest that has been happening in Connecticut throughout the last century. The takeover of old field habitat by the fast-growing, invasive exotic plant autumn olive also is a factor in the loss of otherwise suitable early successional habitat.

The DEEP Wildlife Division recognizes the perils faced by the blue-winged warbler. The loss of early successional habitat also has affected other species in a negative way, including brown thrasher, prairie warbler, golden-winged warbler, Eastern towhee, American woodcock, and New England cottontail, to name a few. The Wildlife Division, in cooperation with other partners, has initiated the Young Forest and Shrubland Initiative to maintain and/or create early successional habitat by periodically mowing, cutting, burning, and planting at a number of state-owned and privately-owned lands (www.ct.gov/deep/youngforest). These shrubland stewardship efforts have shown positive results for early successional habitat dependent species.

Concerned citizens have the opportunity to help shrubland species, including the blue-winged warbler, by making choices in their daily lives. Give support to agencies and organizations working to protect shrub habitats, purchase shade grown coffee (protects warbler wintering habitat), and maintain brushy and old field habitats on your property.



Blue-winged warblers feed by gleaning insects and spiders from leaves and small branches.



A shrubland generalist, the blue-winged warbler is in a long-term population decline, despite being found throughout Connecticut.

American Eel – Getting Here Is Only Half the Battle

Written by Brian Eltz and Tim Wildman, Inland Fisheries Division

Spring has sprung! While the debate continues over the accuracy of the groundhog's predictions, one of the most biologically unique harbingers of spring from the world of fish is well underway. Tiny American eels (*Anguilla rostrata*), also called "glass eels," begin to appear in our waters. They are almost completely transparent, only a few inches in length, and largely invisible to the untrained eye. Amazingly, during the past year, they have traveled over a thousand miles, from the Sargasso Sea through the open ocean, as transparent feather-like larvae or "leptocephali." Now residing in our coastal and inland waters, the eels (now at less than six inches) begin to obtain pigment and are called "elvers." They soon grow into "yellow eels" and will be residents of Connecticut's rivers, streams, lakes, ponds, and Long Island Sound for the next five to 30 years, before transforming into "silver eels" and returning to the Sargasso Sea to spawn.

Eels As Part of Our Native Fish Community

The American eel is a catadromous species, meaning it is hatched in saltwater, migrates into freshwater to feed and grow, and then migrates out of freshwater and back into saltwater to spawn once and die (a term called semelparity).

Eels in Danger:

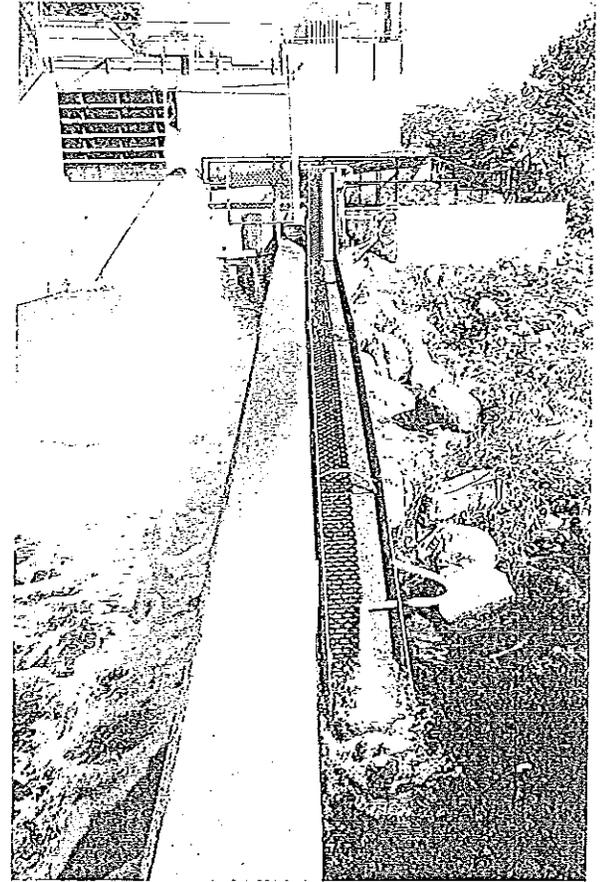
Declines in eel populations have recently been observed in North America. Potential causes are barriers to migration, habitat loss and alteration, hydroelectric turbine mortality, changes in oceanic conditions, over-fishing, parasitism, and pollution. Within the last 15 years, this overall decline has caused great concern among United States and Canadian fisheries agencies. Historically, management for American eels has been almost minimal, but in 1999 the Atlantic States Marine Fisheries Commission developed a Fishery Management Plan aimed at protecting and restoring the species in the United States. Additionally, the U.S. Fish and Wildlife Service recently reviewed the status of the American eel for listing as a federally endangered species (denied in 2007), and in 2007 Ontario put the American eel on its endangered species list. Canada declared it threatened in 2012. Elsewhere, the European eel (*Anguilla anguilla*) is now critically endangered and, in February 2013, Japan listed its own Japanese eel (*Anguilla japonica*) as endangered.

During its time as a resident of Connecticut's waters, the eel is a predator that feeds on aquatic insects, crayfish, amphibians, and small fish. The eel itself is a favorite food of larger predatory fish like black bass, striped bass, and trout, as well as various species of birds and especially humans.

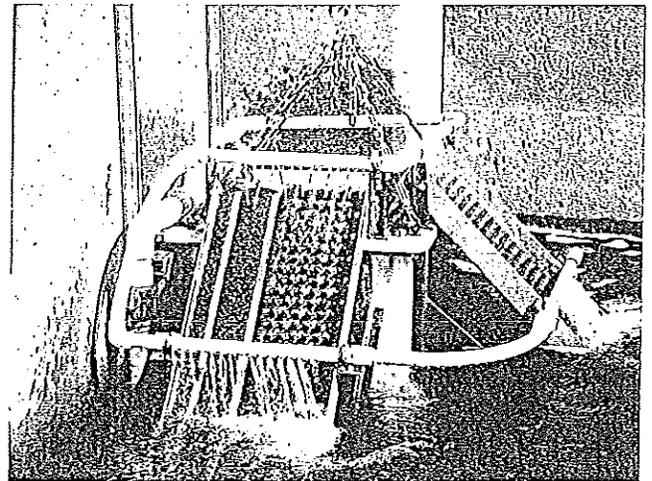
The sex of an eel is thought to be determined as the animal begins its migration into freshwater and is likely a function of how many other eels are around (density dependence). In an ideal situation, eels that are able to migrate miles and miles upstream and have relatively few other eels around them become female. Eels that remain in tidal waters or find themselves with a relatively large number of eel neighbors become males.

The average age at maturity for the American eel is from 5 to 12 years. In Connecticut, males typically reach maturity between 5 to 7 years and females between 9 to 12 years. Mature male eels are considerably smaller (11 to 15 inches) than the larger females (19 to 36 inches), and some females may even reach lengths close to 40 inches!

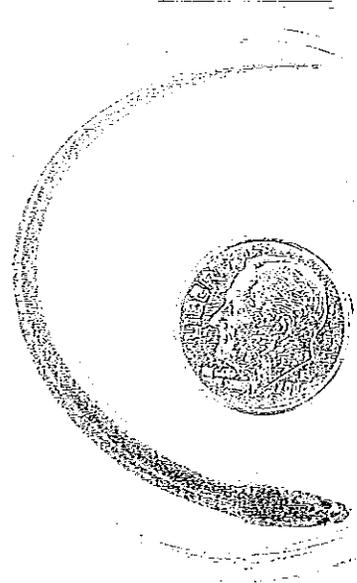
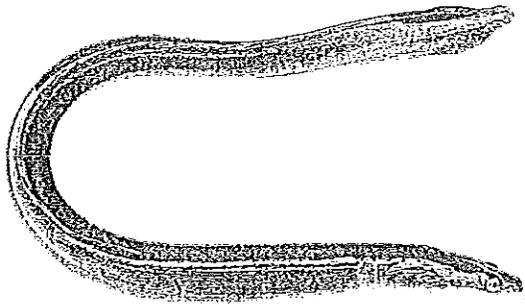
Sexually maturing American eels begin their seaward spawning migration from Connecticut waters during late summer (as early as late August) and early fall as rain induced high flow events occur and water temperatures decrease. However, before beginning their long, arduous journey to the Sargasso Sea, eels must transform from the yellow-phase (sedentary/feeding) to the silver-phase (migratory/non-feeding).



An Irish Elver Ramp in operation in Connecticut. A small amount of water flowing over a rough surface is all the eels need to climb up the pass. Eels slide into a screened trap once they reach the top of the ramp. They are removed each day and released into the river above the dam.



Believed to be the only eel lift in North America, the Greenville Dam Eel Lift is based on a lift design operating in New Zealand. While the basic concept between the two is similar, the eel lift is equipped with two short climbing ramps. It is unique because the whole apparatus is lifted upwards out of the water via an electric winch alongside a platform where staff can safely access the trap.



(Above) Typical adult yellow-phase eel from fresh water.
(right) The recently-arrived transparent glass eel is smaller and less robust in comparison to the fully pigmented elver eel. The elver eel arrived in Connecticut as a glass eel last spring.

Dammed If You Do...

As a species that is dependent on swimming upstream to feed and grow and then back downstream to reproduce, dams and hydroelectric facilities can be major impediments. Direct effects of these impediments include: 1) limiting eels during their upstream migration by preventing them from reaching critical feeding and growing habitat; 2) possibly skewing naturally occurring sex ratios of eels, which can reduce overall egg production; and 3) causing delays, injuries, and even death during the downstream migration (that is, if they were even lucky enough to pass upstream many years before).

Barriers to upstream migration are known to prevent eels from entering habitat that supports the feeding and growing stages of eels. Lack of habitat can have a direct effect on the total of numbers of eels a freshwater system can support.

In addition, dams have the potential to shift (skew) the numbers of males and females found in nature. Typically, male eels tend to be found in areas with large numbers of eels, females in areas with few eels. Obstructions can concentrate eels in a small section of stream, which may alter sex ratios, creating more males than females. Also, before the construction of large dams, our biggest rivers (Housatonic, Connecticut, Thames) allowed eels to freely migrate vast distances upstream, dispersing along the way into areas with fewer eels. The result was the production of many, mostly large and highly fecund female eels (lots of eggs!). This may no longer be the case. The few eels that are able

to ascend above these large dams still become females, but the majority of the eels that cannot ascend these dams now live in high densities and likely become males. As the number of females in the population decreases, so does overall egg production and ultimately the number of new eels. Like most other animal species, population size often is directly related to the number of females that successfully reproduce.

Finally, dams and hydroelectric facilities may cause delays or mortalities on the seaward migration. During the spawning migration, eels will encounter the same manmade physical barriers and hydroelectric facilities they passed while migrating upstream as juveniles so many years before. Unfortunately, delays can prevent eels from reaching the Sargasso Sea on time, causing some to miss the spawn altogether. Worse yet, eels may become impinged on trash racks or pass through turbines at hydroelectric facilities. Turbine mortality varies from site to site, depending on intake position, turbine type, and whether or not there is an effective alternative for the eels to get-around the turbines. Generally, mortality for American eels migrating to sea is high (6%-37%) at turbines and can be up to 100% at some facilities.

Helping Eels

The Diadromous Fisheries Restoration and Enhancement Program of the DEEP Inland Fisheries Division is active in restoring safe and effective access for American eels to and from historical freshwater habitats. Small mill dams on small rivers, a hallmark of colonization, are generally no match for the young

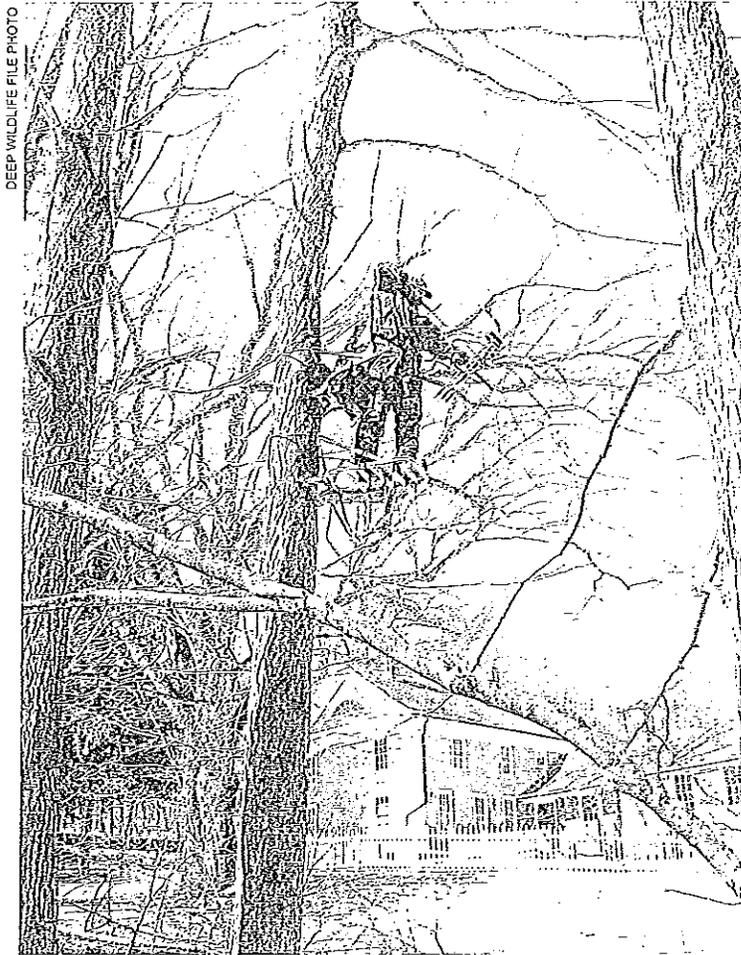
motivated eel – their small size and unique body shape allow these elvers to climb vertically. As long as there is a wetted surface that is rough enough for climbing, eels can surmount these obstacles in fairly short order. Even though many small dams are passable, some still present passage issues.

Large, main stem dams constructed during the late nineteenth and twentieth centuries for hydroelectric generation and water supplies have mainly dry and smooth surfaces. This, coupled with their physical height, put a stop to inland eel migrations in these rivers. Areas of Connecticut that once had eels prior to colonization are now devoid of them and eels have become very abundant in the areas downstream of these dams.

Throughout the state, the Inland Fisheries Division has installed specially designed upstream eel pathways or passes at dams. The Division also is working with hydroelectric generators and water supply companies to increase the numbers of eels that safely pass upstream and, years later, downstream of the dams. Some of the work conducted in Connecticut and worldwide to reduce downstream losses of eels to turbines and trashracks include deterrents, barriers, and avoidance methods. Some of these methods consist of physical barriers (e.g. screens, bar racks, louvers), light barriers, electrical barriers, induced flows, complete shutdown of plants, and trap and transport programs. It is anticipated that conservation and habitat restoration programs like those in Connecticut will stabilize and eventually improve eel populations for the long-term.

Record Deer Harvest in 2013 by Bowhunters

Written by Andy LaBonte, DEEP Wildlife Division



Historically, shotgun/rifle hunters have held their place at the top for number of permits purchased and number of deer harvested annually. Since 2009, when hunters were given the option to purchase licenses on-line at any time prior to or even during the hunting season, firearms and muzzleloader permit purchases have declined, while archery permit purchases have steadily increased.

Over the past decade, there has been a shift in favor of archers, not only in permits purchased but also in deer harvested. The 2013 archery harvest was the highest ever recorded and it exceeded the shotgun/rifle harvest for the first time. Connecticut lends itself well to archery hunting as the landscape is increasingly more fragmented by development, making it more difficult to use a firearm because of the 500-foot firearms discharge restriction from occupied dwellings. This safety restriction essentially closes 18 acres of land to firearms hunting in the vicinity of buildings. However, there is no discharge restriction for archery hunters, allowing them to hunt in closer proximity to residential development. Residential areas often provide ideal habitat for deer due to the excellent food availability and variable cover types found along the edges of residential landscapes, versus the monotype habitats that are often found in large, unbroken tracts of forest land.

Over the past decade, there has been a shift in favor of archers, not only in permits purchased but also in deer harvested. The 2013 archery harvest was the highest ever recorded and it exceeded the shotgun/rifle harvest for the first time.

Historically, archery hunting has been for the more elite hunter as it requires a greater skill set and the physical ability to hold a bow at full draw for a period of time. New allowances have been

established for the use of crossbows during the January deer season (starting in 2010) and statewide starting in 2013. These allowances have provided hunters who have less time to become proficient with compound or re-curve bows or have a physical limitation preventing them from using such bows, the opportunity to better participate in archery hunting.

In 2013, 3,178 archery permits were issued to hunters who had not previously purchased an archery permit during the previous three years. Archery hunter success has exceeded 34% for the past five years, while it has not reached even 30% for shotgun/rifle hunters in the past 10 years. It appears that the future of deer management in our state may end up relying heavily on archery hunters.

Archery hunting is the preferred method of hunting in developed areas as it has no discharge restrictions from occupied dwellings and no minimum property size requirements. However, written permission from the landowner is required.

Deer hunting permits issued and harvest reported for Connecticut archery and shotgun/rifle hunting seasons, 2004-2013.

Year	Archery Permits	Shotgun/Rifle Permits	Total Permits ^a	Archery Harvest	Shotgun/Rifle Harvest	Total Harvest ^a
2004	12,063	29,155	61,415	3,334	7,816	13,541
2005	12,008	28,349	60,433	3,006	7,626	12,663
2006	12,392	28,473	61,410	3,157	6,778	11,591
2007	12,423	27,456	60,108	2,924	6,437	11,062
2008	13,333	29,450	64,060	3,608	7,208	12,682
2009 ^b	14,046	27,290	60,387	4,718	5,082	11,774
2010	13,276	24,357	54,244	4,670	5,200	12,183
2011	13,725	23,751	54,367	5,211	5,367	12,897
2012	14,341	22,760	54,272	5,413	5,783	13,421
2013	15,800	22,568	54,013	6,046	4,340	12,549

^a = Includes archery, muzzleloader, shotgun/rifle, and landowner

^b = Year when on-line license system became active

Sightings Wanted: Be on the Look-out for Piping Plovers with Leg Bands!

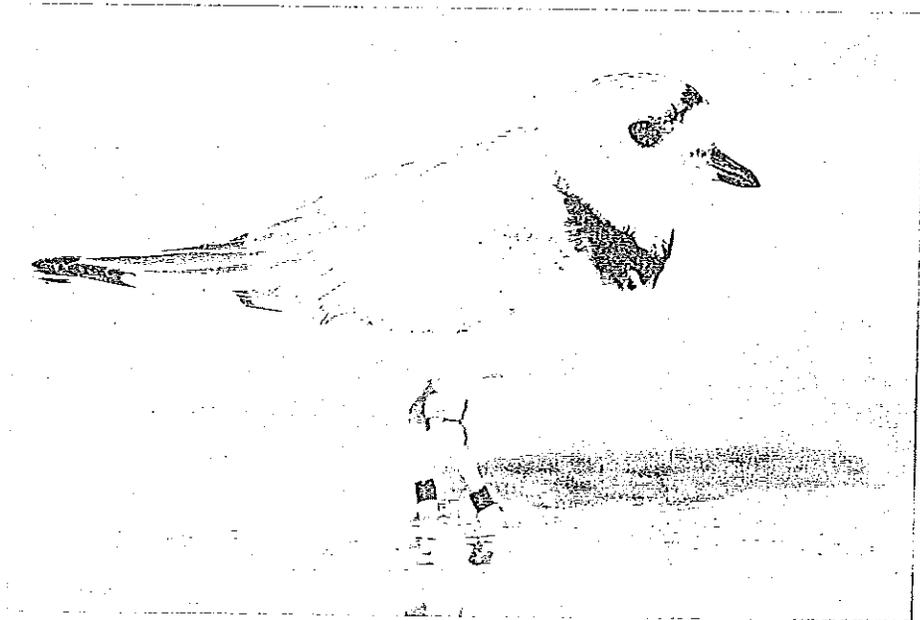
Written by Erica Clark, DEEP Wildlife Division

Is that piping plover wearing a colored leg band? Use your binoculars or spotting scope to find piping plovers with leg bands at Connecticut's beaches! These small, sand-colored birds use sandy beaches and mudflats from mid-March through September. Adult piping plovers have a dark neck band and dark bar on the forehead during the breeding season. They nest primarily on flat sandy beaches with limited vegetation. Eggs are laid on the sand in a small, self-made depression or "scrape." Newly hatched chicks begin feeding themselves within hours of hatching, eating small insects and aquatic worms alongside their parents.

Degradation and loss of habitat threatens piping plovers range wide. To best conserve a species such as the piping plover, biologists need to know where they spend their summers, where they migrate for the winter, and where they stop to rest in between. Having a better understanding of migratory pathways ensures that the bird is protected year-round.

The Atlantic Coast population of piping plovers occurs from the Maritime Provinces of eastern Canada south along the Atlantic Ocean to North Carolina. Biologists have hypothesized, but are not sure, that birds that breed in this area spend their winters in South Carolina, Florida, and along the Gulf Coast. Studies of plovers fitted with colored legs bands by researchers from Environment Canada and Virginia Tech, in conjunction with band resighting information provided by the birding community, have contributed significantly to knowledge about the life history of plovers, particularly during migration. The more leg bands that are resighted and reported, the more accurate and conclusive the data about where important stopover and winter locations exist for these shorebirds.

You can help researchers learn more about piping plovers by reporting any sightings of color-banded plovers. The bands are located on the upper (thigh) and lower legs and are color-coded to identify individual birds (see sidebar for observation and reporting tips). Research studies like this cannot succeed without your help, so be sure to bring your binoculars or spotting scope with you when you head to the beach – just make sure you stay a reasonable distance from the plovers so as not to disturb them.



P. J. FUSCO

How to Observe and Report Banded Piping Plovers

(Courtesy of U.S. Fish and Wildlife Service's South Carolina Field Office)

Be careful not to disturb the bird. A slow, quiet approach avoids harassment and allows the observer to carefully scan the band combination. Using a spotting scope facilitates accurate observations from a distance.

Please record:

1. Location where bird was seen (GPS coordinates are helpful).
2. Date when bird was seen.
3. Any observations of the bird's behavior (e.g., roosting, foraging).
4. Band combination:
 - o Band combinations should be recorded in the following sequence: upper left (UL; above the "knee"), lower left (LL; below the "knee"), upper right (UR), lower right (LR). "Right" and "left" are from the bird's perspective, not the observer's (just like a person's right and left legs).
 - o Band types include flags (band with tab sticking out), metal, and color bands.
 - o Some bands may have alpha-numeric codes printed on the band or flag (e.g., A1). The code, in addition to the color and location of the band or flag, should be documented. Both the color of the band and the code (e.g., white writing on a green band) should be noted.
 - o Some bands are split (a single band with two colors; e.g., orange/blue) or triple split (a single band with three colors; e.g., blue/orange/blue).
 - o Sometimes two bands of the same color are placed over each other, appearing like one tall band.
 - o Some piping plovers are banded on the upper legs only, and bands can be stacked (one above the other) on the upper leg.
 - o Record leg positions where bands are absent.
 - o Note if the color or type of any of the bands is uncertain or if some parts of a leg were not seen clearly.
 - o Understand that band colors can fade over time.

Color banded piping plovers can be reported to two institutions. Reporting your band sighting to one of these will result in the information being sent to the appropriate research group.

- o Virginia Tech – vt.plover@gmail.com. For information on VT banding efforts, see http://fishwild.vt.edu/vtshorebirds/banded_birds.html.
- o BandedBirds.org – <http://www.bandedbirds.org>.

Who Plants Trees in Connecticut's Cities and Towns?

Article and photo by Chris Donnelly, DEEP Division of Forestry

Tree planting leads the list of things people want to talk about when it comes to urban forestry and community tree programs. It is certainly not the only aspect of urban forestry, and urban foresters are quick to remind people that tree planting without corresponding maintenance is a recipe for disaster. However, the interest in tree planting remains. As it is said, anyone who plants a tree is investing in the future.

So, who plants trees in Connecticut? Especially, who plants trees in our public spaces, alongside streets and sidewalks, in town parks, and in front of schools – places where people see these trees, enjoy their shade, and end up feeling connected to their surroundings? Trees remind us that we live in New England. How do the trees get there? Will they continue to be planted?

First of all, cities and towns plant quite a few trees themselves. Most towns have a budget for tree management and maintenance, and apply some of this budget to tree planting. Subdivision regulations also help, as they often require the developer to commit to planting street trees as part of the approval process. However, these tree plantings are not enough to keep pace with removals and to keep our urban forests growing. What else is needed?

Municipal programs that are successful in getting trees planted mostly receive assistance from outside of municipal government. Volunteers are important, either as individuals or more likely as members of neighborhood associations, business improvement districts, or other organizations that bring people together. These volunteer groups work in close association with the tree warden who, by statute, has care and control over all trees in the public right-of-way, in whole or in part. The relationship is a good one. Many tree planters recall, with great fondness and in great detail, the specifics of the trees they have planted. This is true even for people who have planted hundreds of trees. Trees are meaningful.

The DEEP Division of Forestry plays



Knox Inc., Executive Director Ron Pitz prepares an elm tree for planting as part of Knox's 'Trees for Hartford Neighborhoods' program. Standing around Ron are volunteers from Knox and the city's Sheldon Charter Oak neighborhood. Knox partnered with Hartford in the planting of 1,000 trees this past year.

its part, as do entities such as United Illuminating Company and Connecticut Urban Forest Council, both of which have small grant programs. DEEP's contribution is primarily through its America the Beautiful grant program. Assistance of this sort is needed. When it comes to tree planting, energy and ideas are seldom in short supply. Organizing this energy and finding the resources to implement the ideas are usually more difficult. These small tree planting grants, often around \$1,000 to \$6,000, can help significantly in giving groups the backing they need while enabling the tree warden to work side-by-side with engaged community members. The number of successful projects of this sort are too numerous to list here – and there are more every year.

A quick look at information submitted by Connecticut's Tree City USA reveals some interesting findings. Tree City USA is an honor bestowed by the Arbor Day Foundation on municipalities for their commitment to tree programs. Municipalities must apply for this honor and gain the recommendation of the state forester to become a Tree City. There are 19 Tree City USAs currently in Connecticut, a number that has been slowly rising over the years.

Reports by the state's Tree Cities suggest that a typical community plants, on

average, about 200 trees annually, but these numbers vary widely. What is both interesting and exciting is that the number of trees planted in our largest communities (Bridgeport, New Haven, and Hartford) is much greater than in the smaller communities. Bridgeport reported planting 600 trees over this past year, New Haven 539, and Hartford 1,000. To put these numbers in perspective – for all of the Tree City USAs in the state, the average ratio of population to trees planted is 334 residents to one tree. In Bridgeport and New Haven, the ratio for the past year was about 240 to one, while in Hartford it was 125 to one. What are these large cities doing right?

This is an interesting question. It is clear that each of these cities has an incorporated, non-profit partner that works with the city in its planting program. These independent organizations contribute enormously. Because seeking out grants is part of the nature of independent non-profit organizations, these partners are able to bring in money as well as volunteers. They – both the non-profits and the volunteers they attract – are able to share with the city their vision and passion for a vibrant, green future. These non-profits – Groundwork Bridgeport, the Urban Resources Initiative in New Haven, and Knox Inc., in Hartford – add a social dimension to urban forestry and community tree planting that would be difficult for the cities to achieve on their own. Often, they are the bridge for connecting residents with the green component of their world. They employ youth and teach them how to plant trees; they organize neighborhood tree planting events; and they extend a city's ability to commit to tree projects beyond what it would be capable of doing on its own.

I encourage people to learn about how trees are planted in their community. Exhilaration, pride of ownership, and connectivity to nature are all part of planting a tree. The best way to have that experience is to go plant a tree!

Blue-spotted Salamander

Ambystoma laterale

Background and Range

The blue-spotted salamander is a striking member of the "mole" salamander family (Ambystomatidae). Connecticut is home to the pure diploid and hybridized complex blue-spotted salamander. The pure, naturally diploid blue-spotted salamander is an endangered species in Connecticut. It occurs in isolated areas where individuals do not have the chance to mate with the Jefferson salamander – a similar-looking member of the mole salamander family. The "complex" blue-spotted salamander is hybridized with the Jefferson salamander, resulting in an array of genetically variable individuals. It is a Connecticut species of special concern. Strict habitat management is needed to sustain both pure and complex blue-spotted salamander populations.

Blue-spotted salamanders occur in the Canadian Maritime Provinces to northern New Jersey and from southeastern Quebec to northern Illinois and Indiana. Disjunct populations have been found on Long Island, New York. In Connecticut, hybrids typically occur west of the Connecticut River due to overlapping populations with the Jefferson salamander. Pure diploid populations are isolated to a few locations near the Quinebaug Valley.

Description

This small to medium-sized salamander has a narrow head and dark black body with bright blue flecks. The long, laterally compressed tail makes up nearly half of the total body length, which ranges between 3 to 5 inches. Hybrids, however, may reach longer lengths. The blue-spotted salamander can be distinguished from the similar-looking young Jefferson salamander by its more narrow head and larger spots. At the larval stage, blue-spotted appear nearly identical to Jeffersons. Complex hybrids can have a wider range of marks, including more gray coloration, paler blue flecks, and a wider snout, which is associated more with the Jefferson salamander.

Habitat and Diet

Typical habitat consists of red maple swamps with nearby woodlands. The soil types hosting these amphibians vary from water-saturated loam to damp sand. Breeding areas include swamps and marshes with weak water flow that are often connected to other waterbodies. Temporary pools (also known as vernal pools) and floodplains with plentiful organic debris also comprise the breeding grounds for blue-spotted salamanders.

This salamander feeds on insects, slugs, worms, and other small invertebrates.



Life History

Breeding occurs in early spring. When the first warm rains arrive on a spring night, blue-spotted salamanders migrate in large numbers to temporary woodland breeding pools. Eggs are deposited singly or sometimes in clusters underneath leaves or at the base of tussocks, usually in a scattered pattern. After the eggs hatch, the larvae remain in the pool until metamorphosis occurs. Newly transformed salamanders will emerge from the wetland and disperse into the surrounding forest.

Pure diploid populations occur in an even male-female ratio. However, complex populations are female dominated.

Conservation Concerns

Blue-spotted salamanders are protected by Connecticut's Threatened and Endangered Species Act, and may not be collected or removed from the wild.

Populations are threatened by habitat loss and fragmentation, and increased urbanization. Certain populations are being impacted by a high number of roadkills during the breeding season. Change in the salinity content of breeding pools, through acid rain or runoff from road salts, can affect larvae and newly transformed salamanders.

What You Can Do

Aquatic breeding pools are crucial to many amphibians, including salamanders. Managing temporary pools, including buffer zones in the surrounding forest, is extremely important for conserving the amphibians dependent on these habitats.

Avoid the use of fertilizers, herbicides, and insecticides in your yard. If you need to use these products, purchase ones that are natural and organic.

Salamanders should never be collected from the wild. Awareness and education of these amphibians' life history and habits are invaluable tools for conservation. Additional information about salamanders is available on the DEEP website at www.ct.gov/deep/salamanders. If you locate a blue-spotted or Jefferson salamander population or the temporary breeding pools of these salamanders, contact the DEEP Wildlife Division at 860-675-8130 or deep.wildlife@ct.gov.

Jefferson Salamander

Ambystoma jeffersonianum

Background and Range

The Jefferson salamander is a large member of the "mole" salamander family (Ambystomatidae). It spends most of its life underground, but congregates in mass during breeding cycles. In Connecticut, "pure" diploid Jefferson salamanders are uncommon and have been documented as occurring only with hybrid "complex" individuals. This hybridization occurred with the similar-looking blue-spotted salamander as a result of post-ice age range overlap of both species.

This salamander ranges from eastern Illinois through Kentucky and Virginia and up to southwestern New England. Populations mostly occur in far western Connecticut in northern Fairfield and Litchfield Counties, although some exist along the trap rock ridge system of Central Connecticut. All occur west of the Connecticut River.

Description

Long toes, a long snout, and a fairly slender build help distinguish the Jefferson salamander from the other mole salamanders. It is grayish-pale blue to somewhat brown in color with varying amounts of bluish flecks along the sides. Older adults sometimes lack the blue flecks. The background color on the body, belly, and vent of the Jefferson salamander is paler than on the blue-spotted salamander, which has an almost black base coloring. The total length of the Jefferson salamander ranges from 4.5 to 7 inches; the laterally flattened tail is almost as long as the body. The larval stage resembles blue-spotted salamander larvae. Mole salamanders, like the Jefferson, have 5 toes on the rear feet but only 4 on the front.

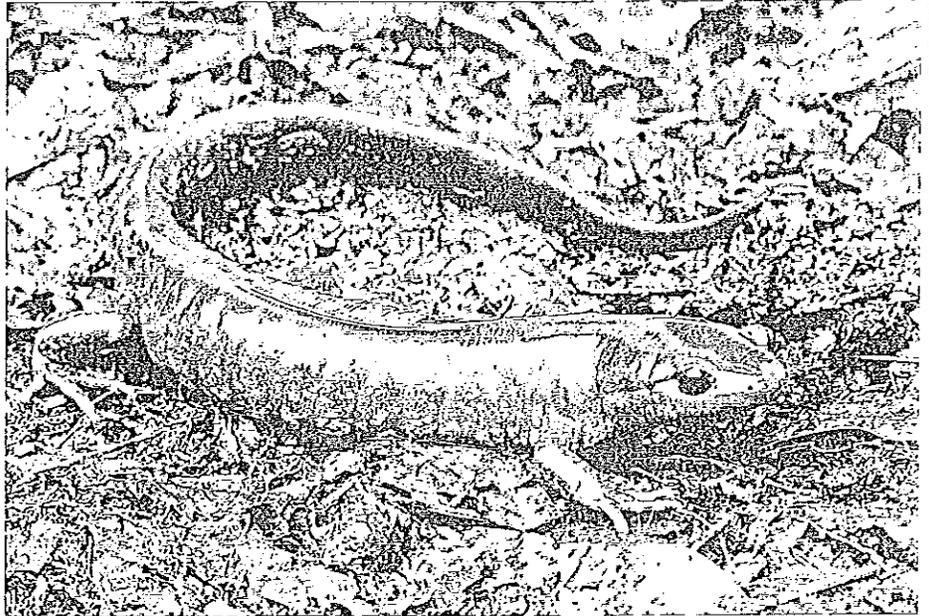
Habitat and Diet

Jefferson salamanders are predominantly found in or near deciduous forests where they prefer steep, rocky areas with cover, such as rotten logs or duff layers. They spend most of the year underground in burrows and are rarely encountered outside of the spring breeding season. Breeding sites are shallow, temporary woodland ponds (also known as vernal pools) with plenty of organic debris for attaching eggs. Most of these pools are filled by winter snowmelt or spring rains, and then dry up by late summer.

Jefferson salamanders feed on insects, slugs, worms, and other small aquatic and terrestrial invertebrates.

Life History

The Jefferson is one of the earliest amphibians to breed in spring. When the first warm rains arrive on a spring night, these salamanders migrate in large numbers to temporary woodland breeding pools. Females pick up previously deposited packages of sperm called spermatophores. Following fertilization, sausage-shaped masses of approximately 30 eggs each are attached to submerged twigs or debris. After the eggs hatch, the



P. J. FUSCO

larvae remain in the pool until metamorphosis occurs. Newly transformed salamanders will emerge from the wetland and disperse into the surrounding forest, seldom more than a mile from the breeding pool.

Conservation Concerns

Habitat protection is important for sustaining Jefferson salamander populations. This amphibian is highly sensitive to habitat disturbance, habitat fragmentation, and urbanization. Almost all remaining populations in Connecticut occur in undisturbed areas. The most vulnerable populations are those associated with the trap rock ridge system. If development continues in this salamander's habitat, local extinctions may occur. Because the Jefferson salamander requires extensive tracts of forest surrounding breeding pools, buffer zones are extremely important to the success of this species.

Certain populations are being impacted by a high number of roadkills during the breeding season.

The Jefferson salamander is undergoing a range-wide decline. It also is of conservation concern throughout its north-eastern United States range, with many states affording the species special status and/or protection. As a special concern species in Connecticut, Jefferson salamanders may not be collected and removed from the wild.

Reducing Salamander Roadkills

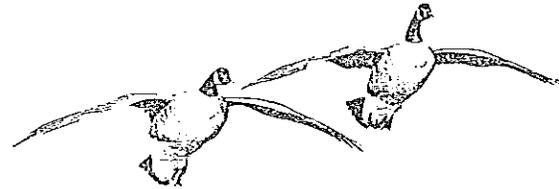
Rare populations of Jefferson and blue-spotted salamanders are impacted by a high number of roadkills during the spring breeding season when these animals migrate in large numbers to their temporary breeding pools. Where appropriate, measures to minimize roadkills should be taken, especially where new development is planned near breeding pools. Such measures may include enlarging buffer zones around breeding pools, providing tunnels or culverts for salamanders to cross under roads, and locating new roads away from salamander migration routes.

CT Waterfowl Association Launches Mentoring Program

Written by Min Huang, DEEP Wildlife Division

Waterfowl hunters thrill to the sight of ducks streaking over decoys or to the excitement of geese hovering over a blind with wings locked! Unfortunately, less and less sportsmen are witnessing these spectacular sights as participation in waterfowl hunting is on a steep decline. The number of waterfowl hunters in Connecticut has declined precipitously from 14,000 in the 1980s to less than 5,000 now – a drop of 65%!

Connecticut is not alone. Waterfowl hunter numbers have



A new mentoring program seeks to pair up experienced waterfowl hunters with novice hunters.

Connecticut Waterfowl Association

The Connecticut Waterfowl Association (CWA) was founded in 1967 by a dedicated group of sportsmen who believed that waterfowling is an important part of Connecticut's heritage and that hunters should work to improve conservation efforts for wetlands and waterfowl in the state. The non-profit, all volunteer group has about 350 members statewide. In addition to assisting the DEEP's Wildlife Division and U.S. Fish and Wildlife Service with wetland improvement projects, the CWA conducts many other activities, including:



- A wood duck nest box program
- Sponsoring the National Junior Duck Stamp competition in Connecticut
- Dog training days;
- Funding a scholarship program that provides scholarships to deserving young students who are pursuing studies in wildlife biology, wildlife management, or other environmental studies
- An annual banquet that generates revenues to fund projects and has become a traditional annual gathering of waterfowlers from around the state

Additional information about CWA or becoming a member is on the CWA website at www.ctwaterfowlers.org.

declined substantially in recent years in most of the United States and Canada. A variety of factors have influenced this decline: changing population demographics, urbanization, and a growing "disconnect" between many people and the natural world. In Connecticut, difficulty accessing places to hunt waterfowl and having an experienced waterfowl hunter to introduce new hunters to the tradition can be added to the list. All of these issues are complex and difficult, or potentially impossible to solve.

One barrier to participation that can be addressed, however, is mentoring of novice waterfowlers. Waterfowl hunting can be more difficult than other types of hunting because of the substantial amount of equipment and specialized skills that are needed. Studies have shown that waterfowl hunting takes a great deal of mentoring. An overwhelming 91% of hunters indicated that they were mentored in becoming a waterfowl hunter by a parent, relative, or close friend. Additionally, over 80% of waterfowl hunters began their hunting careers pursuing species other than waterfowl.

So, what do you do if you do not have a parent, relative, or close friend that hunts waterfowl? The Connecticut Waterfowl Association (CWA) has developed a Waterfowl Hunter Mentoring

Program to help out hunters who have no one to mentor them. This program will pair up experienced volunteer mentors with novice hunters. It is anticipated that this effort will encourage new participants in this great sport who will come to appreciate and help conserve our waterfowl resources.

For the mentors, it provides an opportunity to give back to the resource they cherish.

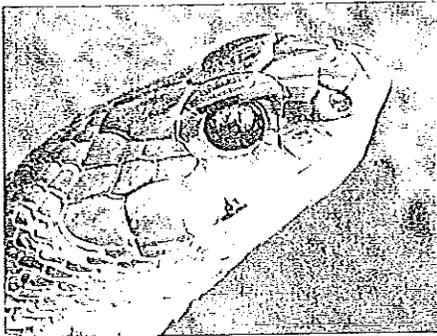
The DEEP Wildlife Division is pleased to be cooperating with the CWA on this important program. The CWA has partnered with the Wildlife Division on a variety of wetland improvement projects, providing some funding and a group of dedicated volunteers. The Waterfowl Hunter Mentoring Program should be another successful collaboration.

Those who would like additional information or are interested in participating as a mentor or mentee should visit CWA's website at www.ctwaterfowlers.org.

Information on the Waterfowl Hunter Mentoring Program is available at www.ctwaterfowlers.org.

FROM THE FIELD

D. QUINN for DEEP-WILDLIFE



Snake Fungal Disease - A Call for Public Participation

In recent years, a fungal disease causing lesions, which lead to facial deformities and sometimes death, has shown up in snake populations across the Midwest and eastern United States. Although the frequency and distribution of this fungal disease in Connecticut remains unknown, at least two species, the eastern milksnake and endangered timber rattlesnake, have been documented with fatal infections.

With the global decline of amphibians resulting from the chytrid fungus and the recent outbreak of white-nose syndrome (WNS) resulting in a regional decline in bat populations, immediate attention to snake fungal disease is paramount.

Anyone who observes snakes exhibiting any of the following clinical signs should immediately contact the DEEP Wildlife Division at 860-675-8130 (deep.wildlife@ct.gov).

- Scabs or crusty scales
- Subcutaneous nodules
- Separation of skin layers
- Abnormal molting
- Thickening or crusting of the skin
- Skin ulcers
- Swelling of the face
- Facial deformities

Snakes infected with snake fungal disease will often emerge from overwintering sites much earlier in spring than uninfected individuals. Look for more details on snake fungal disease in future issues of *Connecticut Wildlife*.

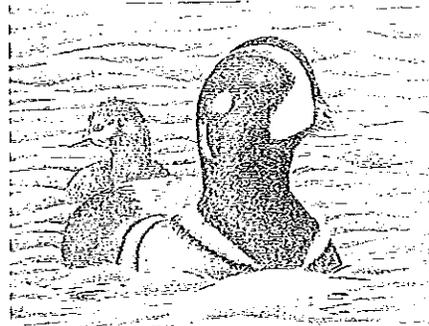
Correction:

The caption for the snake photos that accompanied the article "From Yard Work to Construction:" in the January/February 2014 issue of *Connecticut Wildlife* incorrectly identified the snakes as black ratsnakes. The top photo showed a northern black racer entangled in erosion control netting, while the bottom photo showed a milksnake.

2014 Connecticut Junior Duck Stamp Best of Show

Congratulations go to Susan Minkowski of Stratford, whose colored pencil illustration of harlequin ducks was chosen as the Best of Show in the 2014 Connecticut Junior Duck Stamp Competition. Susan is a student at the Bob Boroski School of Art in Shelton, and her conservation message was "intelligent use of our wild resources today will allow us to leave a legacy for future generations." Susan's artwork will be entered into the national Junior Duck Stamp Contest. The first place design from the national contest is used to create a Junior Duck Stamp for the following year. Junior Duck Stamps are sold by the U.S. Postal Service for \$5 each. Proceeds support conservation education and provide awards and scholarships for the students, teachers, and schools that participate in the program.

The Connecticut Junior Duck Stamp competition is sponsored by the Connecticut Waterfowl Association (ctwaterfowlers.org).

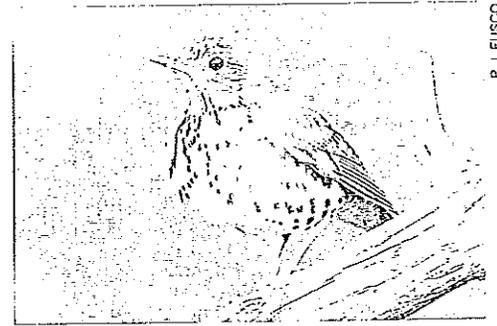


Woodcock Work Continues

American woodcock populations are indexed in Connecticut through singing-ground surveys coordinated by the U.S. Fish and Wildlife Service (USFWS). Ten additional survey routes are conducted by the DEEP Wildlife Division. Both indices continue to indicate a gradual, but steady decline in singing male woodcock. On USFWS survey routes, the average number of woodcock heard per route has declined from 1.04 in 2000 to 0.75 in 2013. On the 10 DEEP survey routes, the average number of birds heard has also declined, with 0.42 woodcock heard per route 2003 compared to 0.29 in 2013.

A Wildlife Division research project conducted in the first decade of the 2000s provided important information on woodcock habitat use and survival. This information was used at a habitat demonstration area at Roraback Wildlife Management Area (WMA) in Harwinton. The Division captured live woodcock at the demonstration area at Roraback WMA and attached radio transmitters so that biologists could assess changes in habitat use and survival of woodcock from before the habitat improvement work was conducted and again two years after the work was completed. In 2015, six years after the habitat improvements were completed, the Division plans to attach radio transmitters to woodcock to collect additional data.

The Division completed a woodcock management plan for the entire state in 2012. The overall goal of the plan is to increase American woodcock populations on state controlled lands and in woodcock focus areas. Specifically, the plan calls for a 50% increase in the number of singing males on state lands and within two woodcock focus areas.



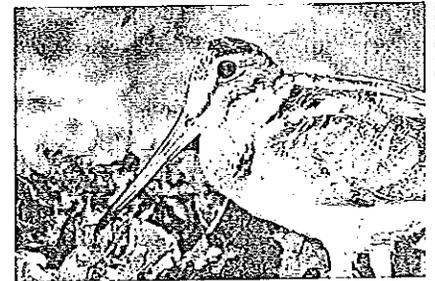
P. J. FUSCO

International Migratory Bird Day 2014

The theme for International Migratory Bird Day 2014, which will be celebrated on May 10, is "Why Birds Matter – The Benefits of Birds to Humans and Nature." Not everyone is aware of the diversity of birds around the world, the amazing migrations some take, and the phenomenal range of behaviors, plumages, and songs they exhibit. International Migratory Bird Day 2014 shares the many ways in which birds matter to the earth, to ecosystems, and of course, to us.

Some bird species provide practical solutions to problems, such as the need for insect and rodent control. Others disperse seeds, helping to revegetate disturbed areas. Others are pollinators, ensuring that we are graced with flowering plants, trees, and shrubs. Birds are inspirations for the arts and also provide enjoyment for those who spend time observing them.

Celebrate International Migratory Bird Day in 2014 by raising awareness of birds and why they matter. Learn more at www.birdday.org.



P. J. FUSCO

Conservation Calendar

- Late April-August.....Respect fenced and posted shorebird and waterbird nesting areas when visiting the Connecticut coastline. Also keep dogs and cats off shoreline beaches to avoid disturbing nesting birds.
- May 10.....**International Migratory Bird Day** – Celebrate this special day that highlights "Why Birds Matter – The Benefits of Birds to Humans and Nature." See page 20 to learn more.
- May 10.....**Free Fishing Day!** Both Connecticut residents and non-residents can fish any public waters in the state without having a fishing license. Several fishing-related activities are planned for the day. Check the DEEP website for details (www.ct.gov/deep).
- May 16.....**Endangered Species Day**, which was initiated by the U.S. Congress in 2006, is an opportunity for people of all ages to learn about the importance of protecting endangered species and the everyday actions they can take to protect our nation's disappearing wildlife and last remaining open spaces. Learn more at www.endangered.org/campaigns/endangered-species-day/.
- May 19.....**Chimney Swift Conservation Night** at the Willimantic Brewing Company (see page 7 for more details).

Programs at the Sessions Woods Conservation Education Center

Programs are a cooperative venture between the Wildlife Division and the Friends of Sessions Woods. Please pre-register by calling 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM). Programs are free unless noted. An adult must accompany children under 12 years old. No pets allowed! Sessions Woods is located at 341 Milford St. (Route 69) in Burlington.

- May 24.....Sessions Woods "Open Center Day," from 9:00 AM-3:00 PM. See below for more information.
- June 7.....**Trails Day Hike**, starting at 1:30 PM. Since 1993, the first Saturday of every June has been designated "National Trails Day. Sessions Woods will be participating this year with a hike on the beaver marsh trail to enjoy the outdoors and learn about the unique habitats at this wildlife management area. Participants will hike a mile to the marsh and can continue on for a three-mile loop or return the same way (2 miles total). Meet the hike leader at the flagpole in front of the Sessions Woods Conservation Education Center. Bring water, a snack, and wear proper walking shoes!
- June 8.....**Trails Day Hike with Wildlife Division Biologist Peter Picone**, starting at 1:30 PM. Peter will take participants on an interpretive hike along the beaver marsh trail and a portion of the Tunxis Blue Trail, and will talk about wildlife and wildlife habitat along the way. Come learn about the seasonal importance of native trees, shrubs, wildflowers, and grasses to wildlife.
- July 16.....**Butterfly Walk**, starting at 10:00 AM. Visit the flowers and fields at Sessions Woods to identify the local butterfly fauna with Wildlife Division Natural Resources Educator Laura Rogers-Castro. Participants will learn the basics to butterfly identification, including tips on distinguishing the various butterfly families. This program will begin in the classroom area located in the exhibit room of the Education Center.

Hunting Season Dates

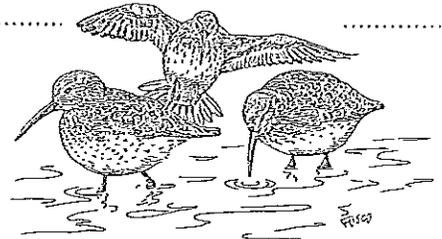
April 30-May 31 Spring Turkey Hunting Season

Consult the 2014 Connecticut Hunting & Trapping Guide and the 2014 Anglers Guide for specific season dates and details. Printed guides can be found at DEEP facilities, town halls, bait and tackle shops, and outdoor equipment stores. Guides also are available on the DEEP website (www.ct.gov/deep/hunting or www.ct.gov/deep/fishing). Go to www.ct.gov/deep/sportsmenlicensing to purchase Connecticut hunting, trapping, and fishing licenses, as well as required deer, turkey, and migratory bird permits and stamps. The system accepts payment by VISA or MasterCard.

Open Center Day at Sessions Woods

The Sessions Woods Conservation Education Center will be open Saturday, May 24, from 9:00 AM to 3:00 PM as part of the No Child Left Inside "Open Center Day." There will be a full day of activities for families and other participants. Pre-opening, there will be a bird identification walk at 8:00 AM led by Paul Fusco. At 10:00 AM, Hillary Clifton will share "Survivor Skills" on a short walk that will include map reading basics; making a mini survival kit; and packing your "pack" wisely. Local artist Judy Bird will provide a salamander art activity for children at 1:00 PM. The Conservation Education/Firearms Safety program will offer archery opportunities from 11:00 AM-1:00 PM. Master Wildlife Conservationists will help staff the exhibit area to answer wildlife questions; lead a wildlife trackmaking activity; and increase awareness about furbearing animals.

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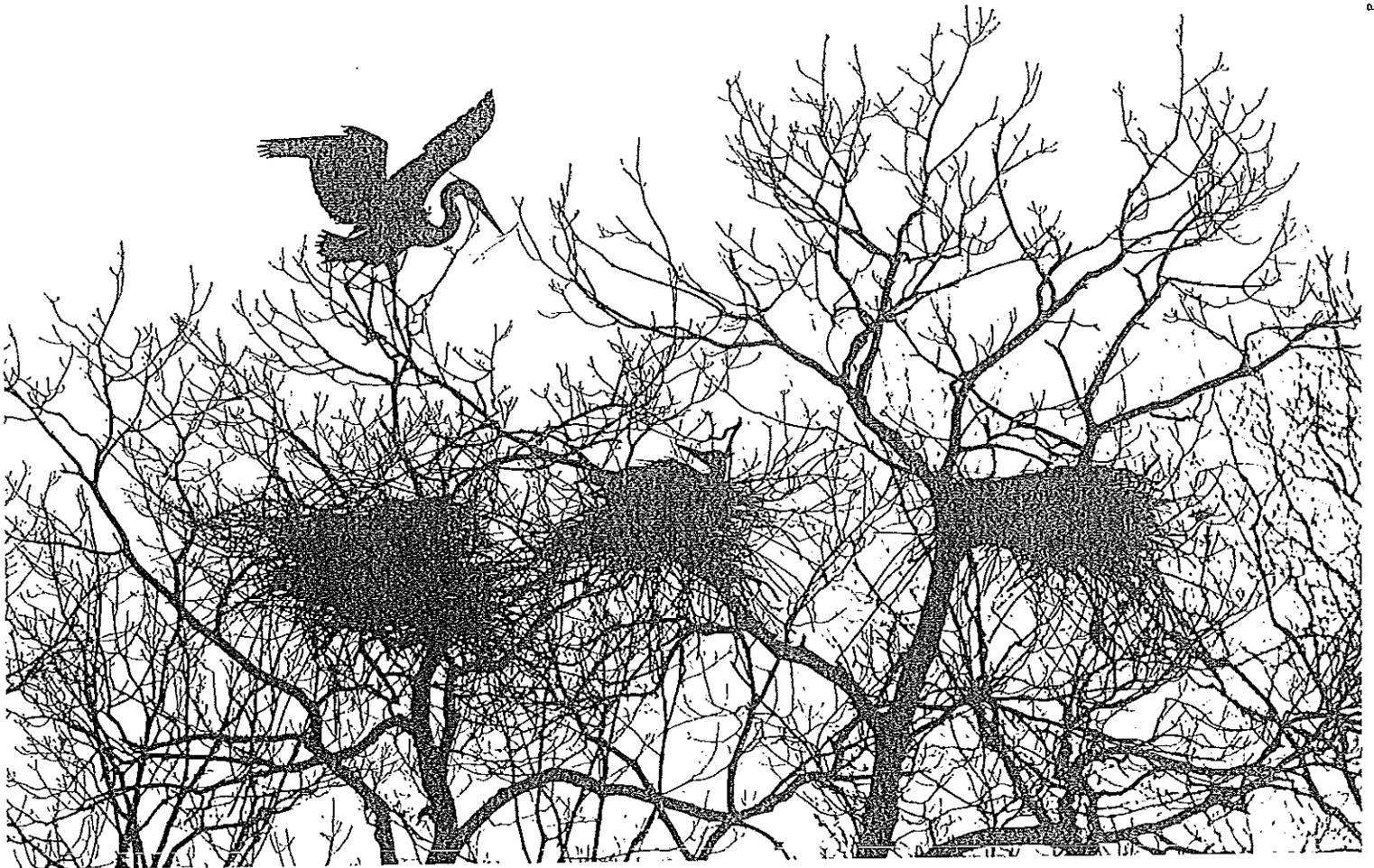
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A great blue heron arrives with a fresh stick to help build up the nest that its mate is sitting on in southern Connecticut.