

**AGENDA**  
Mansfield Conservation Commission  
Regular Meeting  
Wednesday, April 18, 2012  
Audrey P. Beck Building  
CONFERENCE ROOM B  
7:30 PM

1. **Call to Order**
2. **Roll Call**
3. **Opportunity for Public Comment**
4. **Minutes**
  - a. March 21, 2012
5. **New Business**
  - a. IWA Referral:
    - o W1493 - Sabatelli - Stearns Rd - shed in buffer
  - b. PZC Referral:
    - o Subdivision Design Process Submittal, Beacon Hill Estates Section 2, Mansfield City Rd.
    - o Subdivision Design Process Submittal, Bovino Estates, 149R Conantville Rd.
  - c. Other
6. **Continuing Business**
  - a. Zoning Regulation Revisions to PVRA & PVCA Zones
  - b. Protecting Dark Skies in the Last Green Valley
  - c. Water Source Study for the Four Corners Area/Environmental Impact Evaluation (EIE)
  - d. Swan Lake Discharge Mirror Lake Dredging and other UConn Drainage Issues
  - e. UConn Agronomy Farm Irrigation Project
  - f. Eagleville Brook Impervious Surface TMDL Project
  - g. UConn Hazardous Waste Transfer Station
  - h. Ponde Place Student Housing Project
  - i. CL&P "Interstate Reliability Project"
  - j. Other
7. **Communications**
  - a. Minutes
    - Open Space (3/20/12)  PZC (4/2/12)  IWA (4/2/12)
  - b. Inland Wetlands Agent Monthly Activity Report
  - c. March/April 2012 CT Wildlife
  - d. Other
8. **Other**
9. **Future Agendas**
10. **Adjournment**

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Town of Mansfield  
**CONSERVATION COMMISSION**  
Meeting of 21 March 2012  
Conference B, Audrey P. Beck Building  
(draft) MINUTES

*Members present:* Aline Booth (Alt.), Joan Buck (Alt.), Peter Drzewiecki (from 8:15p), Neil Facchinetti, Quentin Kessel, Scott Lehmann, John Silander. *Members absent:* Robert Dahn, Frank Trainor. *Others present:* Al Cyr (Agriculture Committee), Grant Meitzler (Wetlands Agent).

1. The meeting was called to order at 7:35p by Chair Quentin Kessel. Aline Booth and Joan Buck were designated voting members for this meeting. The Commission agreed to re-order the New Business part of the agenda to take up 5c (Right to Farm Ordinance) first, followed by 5d (Other: revisiting the Healey application).

2. The draft minutes of the 18 January meeting were approved with the insertion of “behind and” before “below” in the first sentence of the Commission’s comment on W1492 in item 3.

3. **Proposed Right-to-Farm Ordinance.** The Agriculture Committee has proposed that Mansfield adopt a Right-to-Farm ordinance. Sections 5 and 6 reproduce language in the Connecticut General Statutes blocking nuisance suits against “generally accepted agricultural practices,” save in cases of “willful or reckless misconduct.” The ordinance would add no regulations to those already in effect; its purpose is to rather put the Town on record in support of agriculture in Mansfield.

Buck asked how “willful or reckless misconduct” is to be determined. Mr. Cyr replied that complaints alleging such misconduct would go to the Commissioner of Agriculture for investigation. Lehmann questioned whether the Town should endorse (5) of Section 5, which excuses “water pollution from livestock or crop production activities, except the pollution of public or private drinking water supplies, provided such activities conform to acceptable management practices for pollution control approved by the Commissioner of Energy and Environmental Protection.” He observed that “generally accepted agricultural practices” in the Midwest have created a large ‘dead zone’ in the Gulf of Mexico from fertilizer run-off. Facchinetti had similar misgivings about (4) of Section 5, which excuses “use of chemicals, provided such chemicals and the method of their application conform to practices approved by the Connecticut Commissioner of Energy and Environmental Protection or, where applicable, the Commissioner of Public Health.” He indicated that he did not have a great deal of confidence in state regulation of agricultural chemicals, based on attempts to get UConn to assess the impact of chemical applications at the Agronomy Farm on local wells. In response, Mr. Cyr suggested that whatever pollution results from agricultural use of fertilizer and chemicals is likely to be worse if farms are converted to housing developments with acres of lawn.

A motion (Kessel, Silander) that the Conservation Commission approves the proposed Town Right-to-Farm Ordinance failed (for: Kessel, Silander; against: Buck, Facchinetti; abstaining: Booth, Lehmann). A subsequent motion (Lehmann, Silander) was adopted (all present in favor save Buck, opposed):

The Conservation Commission supports the goals of the proposed Right-to-Farm ordinance, as announced in Section 3, but has reservations about the Town’s endorsing (4) and (5) of Section 5 (notwithstanding their inclusion in the state statutes).

Mr. Cyr left the meeting, and Drzewiecki arrived shortly thereafter at 8:15p.

**4. W1492 (Healey, 476 Storrs Rd).** Kessel observed that, when the Commission considered this application at its February meeting, it failed to notice that the applicant proposed to utilize some of the Town open space off Bassetts Bridge Road for overflow lawn parking. After some discussion, the Commission agreed unanimously (**motion: Silander, Lehmann**) to supplement its comment on this application with the following recommendation:

If use of Town land off Bassetts Bridge Rd. for overflow lawn parking damages the meadow, the applicant should be responsible for restoring it without use of fertilizers.

**5. IWA referrals.** {Lehmann's report on the 03/13 IWA Field Trip to these sites is attached.}

**a. W1494 (Moskowitz, 117 Stone Mill Rd.)** The applicant proposes regrading to tidy up a slope at the end of a fieldstone retaining wall off Stone Mill Rd. near the Fenton River and filling a small depression at the bottom to make the surface level with that below the wall. After some discussion, the Commission unanimously agreed to the following **motion** (Booth, Buck):

The Commission foresees no significant wetlands impact from the landscaping project proposed in W1494 (as shown on the map dated "2.28.2012"), provided erosion and sedimentation controls remain in place until the area is stabilized.

**b. W1495 (Sabatelli, 306 Stearns Rd.)** The applicant proposes to add to her house a second garage bay. Its back half would be under an existing deck, the front half protruding into the existing driveway area. At its closest point, it would be about 42 ft from a pond (a few feet closer than the existing structure). The new bay would be constructed on a concrete slab. After some discussion, the Commission unanimously agreed to the following **motion** (Booth, Buck):

The Commission foresees no significant wetlands impact from the addition proposed in W1495 (as shown on the map dated "March 1, 2012"), provided erosion and sedimentation controls remain in place until the area is stabilized.

**6. Agronomy Farm.** Facchinetti reported on the 2/14 response of the Dean of the College of Agriculture and Natural Resources to concerns about pesticide storage, use, and monitoring at the Agronomy Farm raised by Storrs Heights residents in a 1/19 meeting with UConn officials. The Dean's position is that the University is now doing what is necessary to manage risk from chemicals used on the farm and that additional measures (testing wells for more chemicals, storing them off-site, etc.) are unlikely to produce additional benefits, at least at acceptable cost. Facchinetti's report is attached.

**7. Adjourned at 8:54p.**

Scott Lehmann, Secretary, 22 March 2012.

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**Attachment 1: Lehmann's report on the 03/13/12 IWA Field Trip**

W1494 (Moskowitz, 117 Stone Mill Rd). This is easier to see on a map than it is to describe. The applicant proposes to tidy-up an area just off Stone Mill Rd (to the north) near the Fenton River. A field-stone retaining wall runs east-west parallel to the road, giving way near the river to a somewhat bedraggled slope. This slope would be smoothed out and the small area below it

filled so that it is level with the slope of the land below the retaining wall. The area to be filled is depressed and collects water from runoff. What is proposed seems to me a minor alteration of the landscape, with no significant wetlands impact as long as silt fences are in place to keep dirt and fill from washing into the river until the area is stabilized.

W1495 (Sabatelli, 306 Stearns Rd). The applicant proposes to add a second garage bay, in part under an existing deck and but extending out about 10 feet into the existing level driveway area. The outer wall of the new bay would be co-planer with the north wall of the house, from which the deck extends out toward a pond; I believe that no foundation work, other than pouring a concrete slab, is involved. The northwest corner of the addition would be about 42 feet from the pond, which lies slightly below the level of the driveway. It seems to me that the project, if undertaken with standard erosion controls, would not materially add to whatever impact the existing structure has on wetlands.

#### **Attachment 2: Facchinetti's 3/21/12 report on the UConn Research Farm**

On January 19, 2012, representatives from the Storrs Heights neighborhood met with UConn officials and discussed pesticide use, monitoring and storage at the research farm next to Storrs Heights. On February 14th the Dean of Agriculture and Natural Resources responded to our requests.

Dean Weidemann wrote that this year he would provide a summary of the amounts and locations of pesticides used at the farm. Because of limited staff and an uncertain budget, he could not promise to provide this summary in the future, though neighbors would have access to these public records to compile summaries on their own. Neighbors asked for annual beginning and ending inventories of the approximately 150 pesticide products stored at the farm, but this was not addressed in the Dean's response. The Dean does not believe that suggested upgrades to the storage facility for these pesticides is warranted, even though neighbors believe that spill containment and fireproofing systems are inadequate and that, without these upgrades, pesticides should be stored in a safe location off the farm away from residential communities, and away from the Fenton River watershed. (A topographical map, attached, shows the proximity and elevation of the research farm in relation to the Fenton River.)

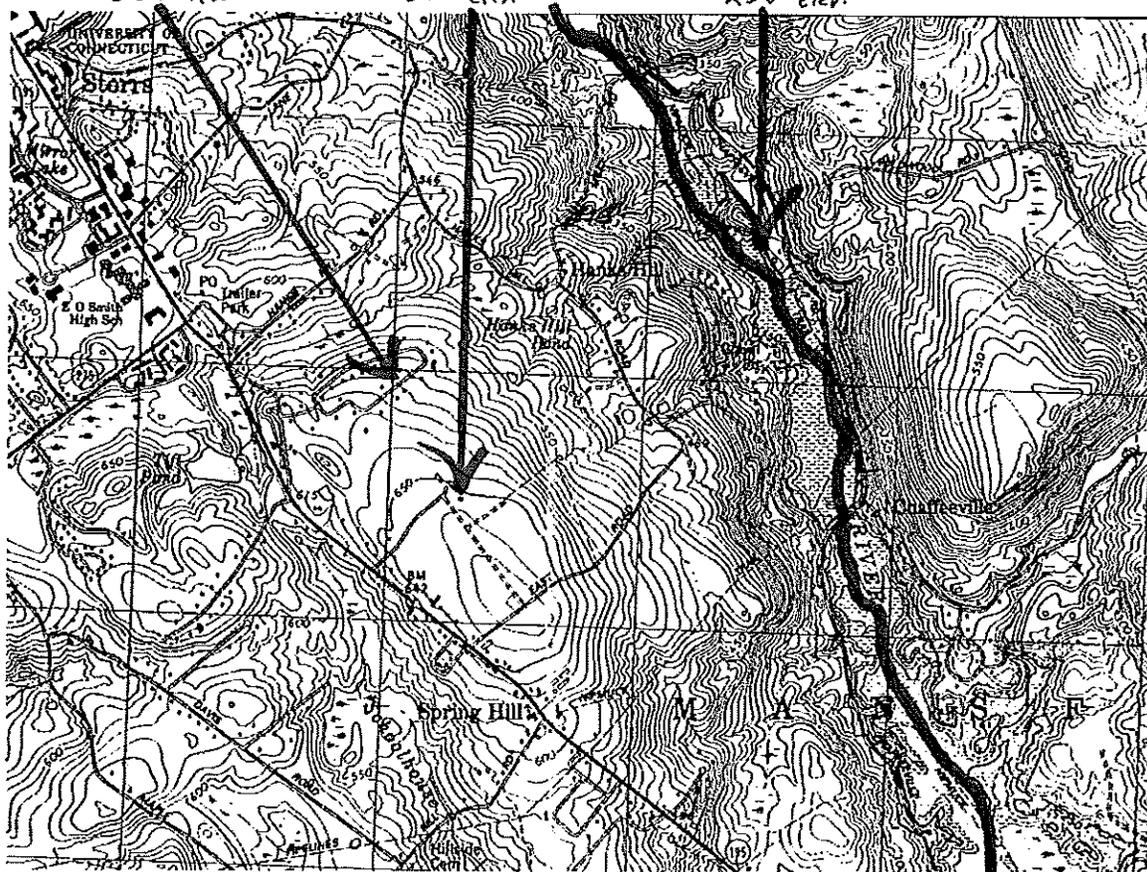
The Dean does not believe that more extensive and more frequent testing of pesticides is necessary. Neighbors believe that wells should be tested more than once a year and that older private wells downgraded from treated fields should be tested frequently. Neighbors have noted that tests for some of the pesticides used at the farm have been deemed by UConn as too expensive and thereby impractical. Other pesticide tests are not conducted by UConn because they are not readily available. Based on information from a consultant in environmental sciences, neighbors informed UConn representatives that some tests for pesticides may not be sensitive enough to detect risky levels of contamination. Neighbors therefore have taken the position that when pesticides are not tested adequately in groundwater samples for one reason or another, the use of these pesticides should be discontinued. The Dean takes the opposite position that adequate safeguards are in place to prevent and detect the migration of pesticides and that such migration is unlikely to occur. Neighbors have been advised by their technical consultant that surface water from the farm pond and other neighboring ponds should be analyzed for pesticide contamination. The Dean believes pond water tests would not provide any useful additional information.

Storrs Heights neighbors plan to continue their efforts to improve the use, testing and storage of pesticides in order to minimize the risk of contamination in private wells and the Fenton River Watershed.

Storrs  
Heights  
Neighborhood  
~ 600' elev.

Uconn  
Research  
Farm  
~ 650' elev.

Fenton  
River  
~ 250' elev.



Memorandum:

March 29, 2012

To: Inland Wetland Agency  
From: Grant Meitzler, Inland Wetland Agent  
Re: New Business for April 2, 2012 meeting

W1493 - Sabatelli - 306 Stearns Rd - shed in buffer

	yes	no
	-----	-----
fee paid .....	x	
certified receipts .....		to come in
map dated .....		3.28.2012

This a separate application from the applicant on the same property as application W1495. This application is for an 8'x 12' shed within the 150' regulated area next to wetlands.

Receipt and referral to the Conservation Commission is appropriate.

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 # W1493  
W  
Fee Paid 185  
Official Date of Receipt 4-07-12

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 Linda K. Sabatelli and Paul Brody

Mailing Address 306 Stearns Road

Mansfield Ctr., CT. Zip 06250

Telephone-Home 860-423-1721 Telephone-Business 860-456-5700

Ext-4043

Title and Brief Description of Project 8' x 12' storage shed -

for garden tools, bikes, lawn chairs

Location of Project 306 Stearns Road, Mansfield Ctr.

Intended Start Date in place

**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 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.

Only flat area - land slopes away  
further from pond

**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 9.23.2012
- 3) Zone Classification BAR-9D
- 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
Chuanrong + Li Weidong Zhang	5 Candide Lane
Ring + Wei Wei Wang	11 Candide Lane

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

**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

3/4" crushed stone Area 9'x13'  
Set ready-made shed on stone  
Shed 8'x12'

No soil removed or added

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

9'x13' crushed stone

3) Describe the type of materials you are using for the project: 3/4" crushed stone

- a) include **type** of material used as fill or to be excavated no fill or
- b) include **volume** of material to be filled or excavated excavation

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).

no removal or addition  
of soil

**Part D - Site Description**

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

Flat, well drained

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.

\$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.**

Linda K. Salvatella  
Applicant's Signature

3/28/12  
Date





216 West Road (Route 83)  
 Ellington, CT 06029  
 860-871-1048 (Fax) 860-871-1117  
 www.kloterfarms.com

PO #:  
 Order Date:  
 Due Date:

**Order Number: 134073**

Page: Page 1 of 1

Customer P.O. Number:

Order Date: 11/5/11

Scheduled Delivery Date: 12/13/11

Est. Customer Pickup Date:

Customer Pickup Status: NA

Doors On: Driver Side

Salesperson: LISA L.

Mailing Address: (If Different)

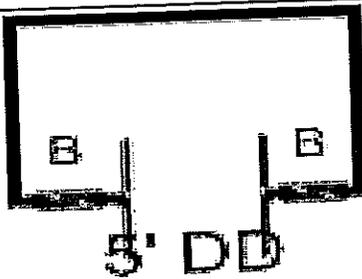
Deliver To: Linda Sabatelli  
 306 Stearns Rd  
 Mansfield Center, CT 06250

Phone: (860) 423-1721 Ext. 0000

Phone: (860) 465-7631 Ext. 0000

Phone: 0 - Ext.

Qty	Description	Unit Price	Discount	Extended Price
1	8' x 12' T-111 (1/2" Duratemp) Garden Special Cape Stock #9324	\$2,920.00	\$625.00	\$2,295.00
1	6" Overhangs			
1	Classic Red DuraTemp T-111 Siding (850300)			
1	Red Trim			
1	Red Doors			
1	No Shutters			
96	Charcoal Gray 30 Year Architectural Shingles			
2	'B' Window (Brown) 18"Wx27"H Aluminum			
2	'T' Aluminum Transom Window(s) (Brown) In double doors			
1	Standard 5' Double Door Standard Location			
1	6" Black Hinges			
2	Basic End Vents			
1	"Freedom of Choice " (10/24/11-11/5/11)			
1	4' P.T. Ramp	\$495.00		\$495.00
1	3/4" Crushed Stone Pad (includes up to 6" of leveling)			
		<b>TOTALS:</b>	<b>\$625.00</b>	<b>\$2,790.00</b>



NOTES: PLEASE GET SITE PREP DONE AS SOON AS POSSIBLE. WE WILL BE DELIVERING THE SHED AS SOON AS I GET A CANCELLATION ON THE SCHEDULE

Customer agrees with this order as written and assumes full responsibility for their property during delivery. NO CHANGES CAN BE MADE TO THIS ORDER ONCE A DELIVERY DATE IS SET. (initial: \_\_\_\_\_)

**CUSTOMER APPROVAL**

Stock - \$250 deposit will hold stock unit for 4 days after which a nonrefundable 1/3 deposit is due or the product will be returned to stock. Orders - \$250 deposit will lock in sale price for 30 days, after which 1/3 deposit is due to hold price for up to 6 months. Construction will not begin until 1/3 deposit is received & delivery date has been set. Kloter Farms will issue a credit slip on any canceled order less a re-stocking fee.

\*LINE ITEMS MARKED TBD (To Be Determined) MUST BE ADDRESSED BEFORE A DELIVERY DATE CAN BE SET.

**Family Owned & Operated**  
**SATISFACTION GUARANTEED**  
**SINCE 1980**

**We Appreciate**  
**Your Business!**

Delivery Charge	\$0.0
Subtotal	\$2,790.0
Sales Tax-CT	\$177.1
Customer Letter	\$0.0
Wide Load Permits	\$0.0
<b>TOTAL</b>	<b>\$2,967.1</b>
Deposit 11/5/2011 AMEX-YARD	\$-980.0
Balance Due	\$1,987.1
Deposit	
Balance Due	
Deposit	
Balance Due	
Deposit	
Balance Due	
Deposit	
Balance Due	
Deposit	
Balance Due	

Payment Info: POD

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**TOWN OF MANSFIELD**  
**DEPARTMENT OF PLANNING AND DEVELOPMENT**

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LINDA M. PAINTER, AICP, DIRECTOR

**Memo to:** Conservation Commission  
Open Space Preservation Committee  
John Jackman, Fire Marshal  
Grant Meitzler, Assistant Town Engineer  
Geoffrey Havens, Eastern Highlands Health District

**From:** Linda M. Painter, AICP, Director of Planning and Development *LMP*

**Date:** April 12, 2012

**Subject:** Beacon Hill Estates Section 2  
Eagleville Development Group LLC  
Subdivision Design Process Submission

In March 2011, the PZC adopted a new design process that is mandatory for proposed subdivisions that include 4 or more lots or a street. In accordance with the requirements of Section 5.2 of the Subdivision Regulations, Eagleville Development Group LLC has submitted an Off-Site and Neighborhood Influences Inventory Plan and Site Analysis Plan for review.

Pursuant to Section 5.2.a.2, these plans are to be reviewed by town staff and referred to the Conservation Commission and Open Space Preservation Committee for review and comment. The PZC is required to be notified in writing and provided with an opportunity to review and comment.

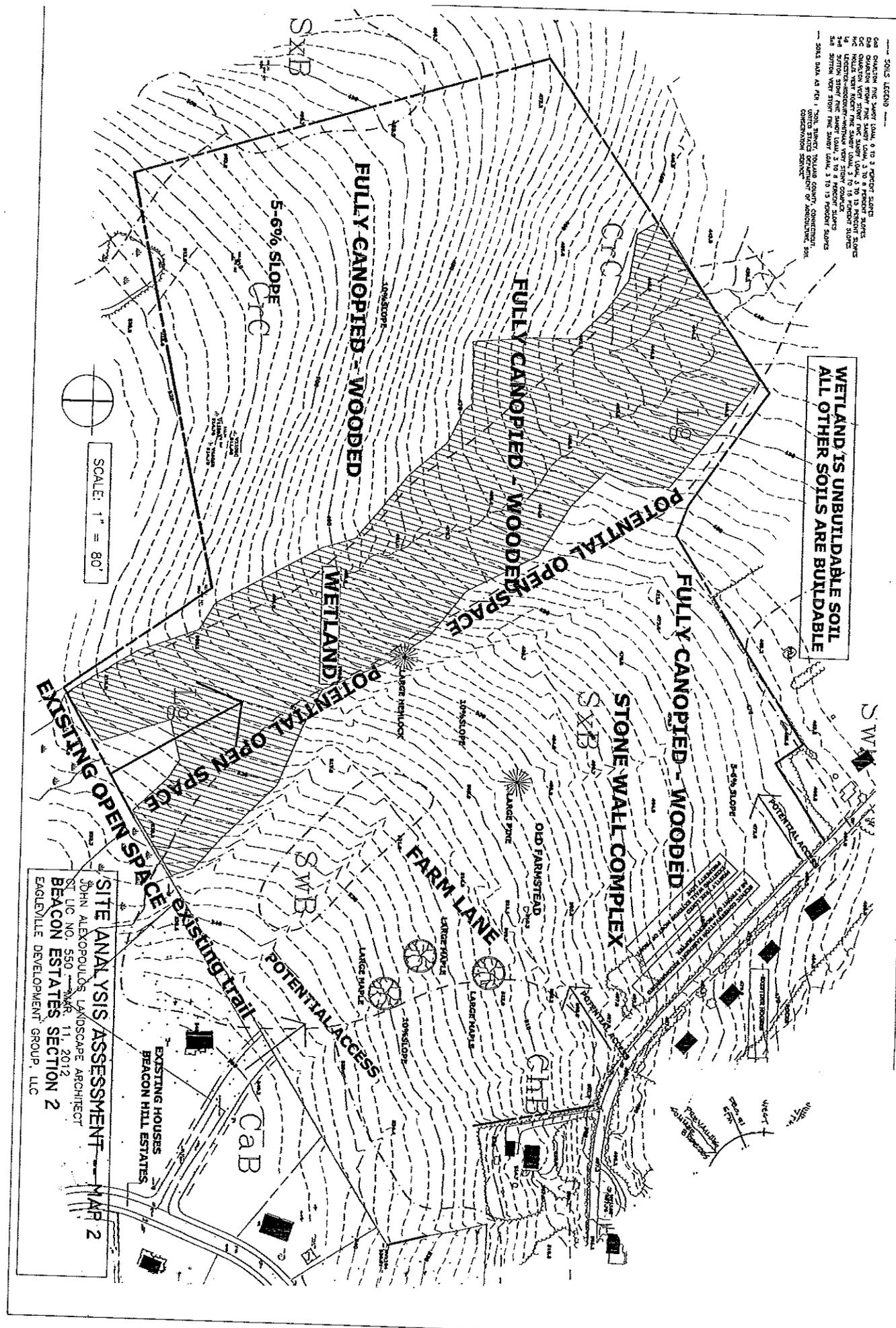
Copies of the relevant regulations are attached for your information along with the submission from Eagleville Development Group LLC. As I am required to provide comments to the applicant by April 26, 2012, I recommend that comments and feedback be provided to the Planning Office by April 23, 2012 and will be included in my response to the applicant.

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SOILS LEGEND

0 to 3 percent slopes  
 4 to 8 percent slopes  
 9 to 12 percent slopes  
 13 to 16 percent slopes  
 17 to 19 percent slopes  
 20 to 24 percent slopes  
 25 to 29 percent slopes  
 30 to 34 percent slopes  
 35 to 39 percent slopes  
 40 to 44 percent slopes  
 45 to 49 percent slopes  
 50 to 54 percent slopes  
 55 to 59 percent slopes  
 60 to 64 percent slopes  
 65 to 69 percent slopes  
 70 to 74 percent slopes  
 75 to 79 percent slopes  
 80 to 84 percent slopes  
 85 to 89 percent slopes  
 90 to 94 percent slopes  
 95 to 99 percent slopes  
 100 percent slopes

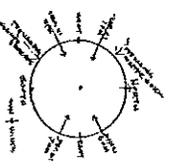
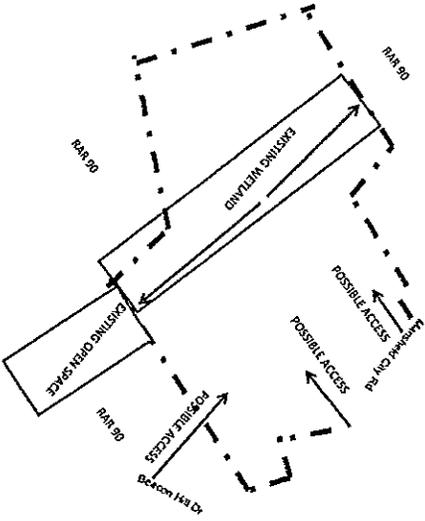
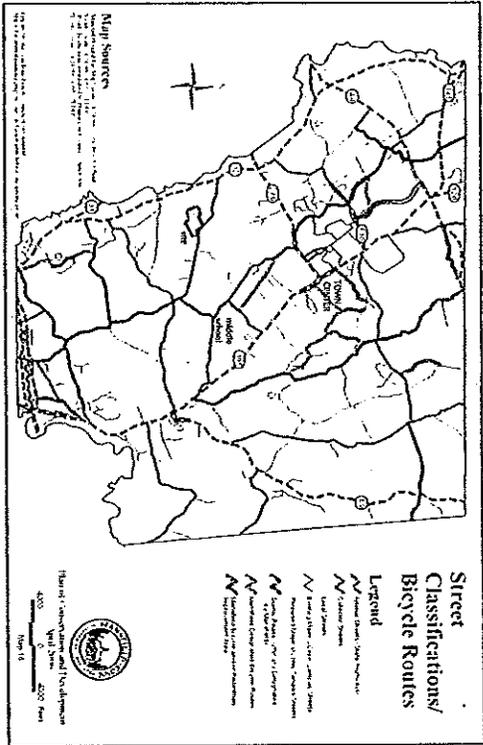
**WETLAND IS UNBUILDABLE SOIL  
 ALL OTHER SOILS ARE BUILDABLE**



SCALE: 1" = 80'

**SITE ANALYSIS/ASSESSMENT MAP 2**

JOHN ALEXOPOULOS LANDSCAPE ARCHITECT  
 ST. LIC. NO. 550  
 BEACON ESTATES SECTION 2  
 ENGLEVILLE DEVELOPMENT GROUP, LLC



**Significant Assets:**

The site has several significant features. Wetland habitat extends from off-site through the site. Outside of the wetland soils, over 60 per cent of the site has buildable soils. Fully cropped for most of the site except for the timbered property area in the rear. Complex of stone walls between Mansfield City Road and the wetland boundary. Rarely continuous stone wall along Mansfield City Road at the wetland boundary. A few old maps associated with the walls primarily in the front portion of the property. One large pine about one third distance into the property, and a large hemlock at the edge of the wetland.

**Constraints:**

Wetland extending across the site from southwest to northeast. Sight lines on Mansfield City Road. Stony soils to some extent. No issue with slopes 15 per cent or over.

**Considerations:**

Restricted sight lines for most of the length of Mansfield City Road except on or near the curve or much further north at the north corner of the property. Build the soils in the western portion approximately 20 acres, rework wetland covering Stone wall complex should be left in place as much as possible. Development of house lots can be planned in such a manner as to use the walls as boundaries.

**Topography:**

The site is essentially sloped consistently from southeast to northwest draining off the site. The wetland slopes consistently across the site and is connected to site wetlands. The highest elevation is on the Beacon Hill Estates boundary at the eastern border and the lowest elevation is where the intermittent stream crosses the northwestern boundary. The site slopes 100 feet across the site. Slopes vary from about 5 to 6 percent near Mansfield City Road and a portion of the western part of the property to up to 10 percent in the remainder of the buildable site. There are no slopes of 15 percent or greater on the property.

**Vegetation:**

The 1934 aerial photograph of the property shows the front portion of the site from Mansfield City Road to be in a farm with some walls sectioning off much of the property between the wetland and Mansfield City Road. Somewhat older wooded areas are found in the wetland and up above the wetland to the rear of the property. What was oak woods has been burned. The portion that some evergreens in the rear of the property along with mixed deciduous trees. The portion that was in pasture is second growth and is typical relatively young forest of upland. White-barked red and sugar maple and white ash. The understorey is sparse and provided by oak. While there are a few trees larger than 12 inches in diameter, most in the front portion up to the Beacon Hill Estates property lines are anywhere from four to eight inches in diameter. Where possible, the larger trees should be avoided by development. The only trees of size are notable sugar maples that were near the homestead. While these have suffered from being surrounded, they certainly should be avoided by development if possible. There are no valuable specimens along the right of way edge on Mansfield City Road. The wetland is wooded and dominated with typical wetland tree and understorey species.

**Stone Walls:**

Stone walls are significant in pattern, delineating pasture enclosures. In addition the farm lane walls are very significant and should be retained. The width is too narrow for any use as a subdivision roadway.

**Views:**

Into site: Relatively limited view since site from Mansfield City Road because of slopes and woods within site. Relatively limited. No significant off-site views. Off-site: There are no undisturbed views of site.

**Existing Open Space:**

There is adjacent town of Mansfield Open Space, mostly wetland at the boundary, adjacent the southern boundary to the rear of Beacon Hill Estates.

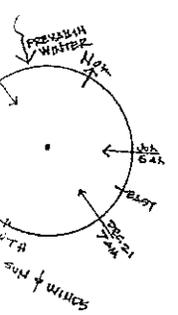
**Aquifer Recharge Areas or Flood Hazard:**

Not within an aquifer recharge or flood hazard area.

**Soils:**

Indicated from the Tolland County Soil Survey as either Leicester-Ridgebury-Whitman wetland soils complex or Chilton and Siltan upland soils association. All soils are stony.

SITE ANALYSIS ASSESSMENT - MAP 1  
 JOHN ALEPOPOULOS LANDSCAPE ARCHITECT CT LLC NO. 550  
 BEACON ESTATES SECTION 2  
 BEACONVILLE DEVELOPMENT GROUP, LLC  
 MARCH 11, 2012



applicant, the Planning and Zoning Commission or any other authority, agency or official having jurisdiction to review and act upon the subject subdivision.

a. **Off-Site and Neighborhood Influences Inventory Plan and Site Analysis Plan**

1. **Off Site and Neighborhood Influences Inventory Plan**

Regional, town-wide and neighborhood characteristics and influences shall be inventoried and considered with respect to the subject subdivision site and the Design Objectives of Section 5.1. State and regional land use plans, Mansfield's Plan of Conservation and Development, local knowledge and other sources of information should be considered in conducting this inventory of off-site influences.

While all prospective applicants are encouraged to submit and review with the Planning Staff an inventory of off-site and neighborhood influences, whenever a subdivision proposal includes new streets or four (4) or more lots, this inventory is mandatory and shall be submitted by a Connecticut Licensed Landscape Architect in association with the Site Analysis Plan requirements of Section 5.2.b. Where required, this inventory shall be presented in the form of a plan showing the location of the project site, area factors such as roads and transportation networks, noteworthy topographical and natural resource features, proximate commercial, recreational, educational and cultural land uses and any other external site features that could influence development on the project site. This plan may be displayed as a cover sheet for the set of final subdivision plans.

2. **Site Analysis Plan**

Natural and man-made features on or adjacent to a potential subdivision site shall be inventoried and considered in association with the design objectives of Section 5.1 and other provisions of these regulations. While all prospective applicants are encouraged to submit and review with Planning Staff a Site Analysis Plan (as described below), whenever a subdivision proposal includes new streets or four (4) or more lots, the submittal of a Site Analysis Plan is mandatory. Where required, a Connecticut Licensed Landscape Architect shall prepare and submit to the Director of Planning and Development and Development five (5) copies of a Site Analysis Plan containing the information listed below as applicable to the subject site. This plan shall be submitted in association with an Off-Site and Neighborhood Influences Inventory Plan as per Section 5.2.a.1.

The submitted Off-Site and Neighborhood Influences Inventory Plan and the Site Analysis Plan shall be reviewed by Mansfield staff members and shall be referred to the Conservation Commission and the Open Space Preservation Committee. As deemed appropriate by the Director of Planning and Development and Development, the above referenced plans also may be referred to other advisory committees for review and comment. Additionally, the Planning and Zoning Commission shall be informed in writing and provided with an opportunity to receive the submitted information for review and comment. The Director of Planning and Development and Development shall within forty-five (45) days of receipt provide review comments on the submitted plans to both the applicant and the Planning and Zoning Commission and any reviewer who provided comments to the Director. No final subdivision plan involving new streets or four (4) or more lots shall be considered complete and approvable by the Commission unless the Off-Site and Neighborhood Influences Inventory Plan and the Site Analysis Plan requirements have been met.

The following information shall be included, as applicable to the subject site, on all required Site Analysis Plans:

1. North arrow, date and scale. All plans shall be drawn at a scale of one (1) inch equals forty (40) feet (1" = 40') or less. The Director of Planning and Development and Development shall have the right to permit different scales for larger parcels provided the scale used shall also be used for the final subdivision plan. Use of the same scale will facilitate a transfer of information.
2. Name of subdivider and subdivision and the name and seal of the Landscape Architect who prepared the plan.
3. Boundaries of tract to be subdivided.
4. Existing contours at two (2) foot intervals. All slopes over 20 percent and watershed divides should be indicated.
5. Existing streets, easements, fences, walkways, bikeways, trails, structures both onsite and immediately adjacent to the site.
6. Wetlands and watercourses including intermittent streams both onsite and immediately adjacent to the site.
7. One Hundred (100) year flood plains, including base flood information on any portion of the land being subdivided which is within flood hazard areas as shown on the Zoning Map and in greater detail in the flood insurance study dated July 1980, and the most current Federal Emergency Management "Floodway" and Flood Insurance Rate Maps.
8. Aquifer areas and public drinking water wells on or within 500 feet of a site.
9. Soil type classifications as per the current U.S.D.A. Natural Resource Conservation Service Soil Survey for Tolland County, CT.
10. On-site and adjacent historic features including: all structures, wells and other utility features, walls and fences regardless of their condition, existing or former walks, paths, drives, trails, etc., curbs and pavement, man-made elements inserted into the ground such as hitching posts, garden or enclosed areas, significant vegetation, remains of old foundations, rip-rapping, arbors, trellises, etc., and any other historic features observed.
11. On-site and adjacent agricultural land with existing uses identified.
12. Areas with potential State and Federally-listed endangered, threatened or special concern species as per the current State and Federal Listed Species and Natural Communities Map published by the Connecticut Geological and Natural History Survey of the Connecticut Department of Environmental Protection; and significant natural flora and fauna communities as per Mansfield's Plan of Conservation and Development mapping.
13. Other natural and man-made features, including rock ledges and rock outcropping, significant trees, tree or shrub groves or masses of groundcover and obvious wildlife habitats.
14. Desirable scenic and/or historic views and vistas into or out of the site, desirable internal vistas and views and any undesirable views and vistas both off and on-site.
15. On-site and adjacent open space and recreational land with existing uses identified.
16. Off-site nuisances to be screened.
17. Negative site conditions such as dangerous and dilapidated buildings, dead and falling trees, diseased plants, infestation of invasive species, areas of stripped top soil, deposits or junk and refuse.

18. Objectionable noises or odors and their sources both on and off site.
19. Particular micro-climatic conditions that may affect development.
20. Directions of prevailing winter winds and summer breezes.
21. Horizontal angles of the sun (azimuth) on December 21 and June 21.
22. Primary directions of off-site traffic flow and relative volumes; points of connection of site with sidewalks, bikeways and trails, if any.
23. Logical points of ingress and egress to the site; sight lines of possible driveway to road; locations of all trees over 9 inches in diameter (d.b.h.) within sight lines.
24. Tentative notations of possible preservation and conservation areas (areas where development should be discouraged).
25. Tentative identification of areas that are better suited for development.

An example of a site analysis plan is contained in Appendix A of these regulations.

In situations where the Director of Planning and Development and Development becomes aware of a planned subdivision but the mandatory submittal of an Off-Site and Neighborhood Influences Inventory Plan and a Site Analysis Plan are not required, the Director is encouraged (subject to privacy considerations or other factors) to notify other staff members, the Conservation Commission, the Open Space Preservation Committee and, as appropriate, other advisory committees that a subdivision is being considered for the subject property. This notification provision is designed to facilitate the communication of useful information to a potential applicant at an early stage of the subdivision design process.

In situations where an Off-Site and Neighborhood Influences Inventory Plan and Site Analysis Plan have not been submitted but the Director of Planning and Development and Development has notified staff and advisory committees of a potential subdivision application, the Planning and Zoning Commission shall be informed in writing and provided an opportunity to comment. Any pre-application review comments from staff members, commission or committee members shall be incorporated into a report from the Director of Planning and Development and Development, which shall be submitted to the applicant, the Planning and Zoning Commission and any reviewer who provided comments to the Director. Any comments from the Commission shall not be binding on the applicant, the Commission or any other authority, agency or official having jurisdiction to review and act upon the subject subdivision.

**b. Conceptual Yield Plan and Conceptual Layout Plan**

Following the analysis and review of off-site and neighborhood influences and site features, the next step in designing a Mansfield Subdivision shall be the preparation of a Conceptual Yield Plan and a Conceptual Layout Plan. These plans shall take into account all comments received in association with the initial step as described in Section 5.2.a.

All applicants are encouraged to submit to the Planning Office a Conceptual Yield Plan and Conceptual Layout Plan for review prior to the submittal of final plans. However, whenever a subdivision proposal includes new streets or four (4) or more lots, a Connecticut Licensed Landscape Architect shall prepare and submit to the Director of Planning and Development and Development five (5) copies of a Conceptual Yield Plan and a Conceptual Layout Plan. Several concept plans may be submitted concurrently. The submitted plans shall be reviewed by Mansfield staff members and, shall be referred to the Conservation Commission, the Open Space Preservation Committee and the Design Review Panel. As deemed appropriate by the

Director of Planning and Development and Development, the plans also may be referred to other advisory committees for review and comment. Additionally, the Planning and Zoning Commission shall be informed in writing and provided with an opportunity to receive the submitted plans for review and comment. The Director of Planning and Development and Development shall within forty-five (45) days of receipt provide review comments on the submitted plans to both the applicant and the Planning and Zoning Commission and any reviewer who provided comments to the Director. No final subdivision plan involving new streets or four (4) or more lots shall be considered complete and approvable by the Planning and Zoning Commission unless these conceptual plan requirements have been met. All review comments on conceptual plans shall not be considered as a commitment to approve final plans which are subject to independent review and approval pursuant to Section 6 and compliance with all applicable approval criteria contained in these regulations.

The Conceptual Yield Plan, which shall be drawn to a scale best suited to the site and allows appropriate review, shall identify potential streets (where applicable), potential lots and potential open space areas that could be developed with standard frontages and lot sizes pursuant to all applicable zoning and subdivision approval criteria. Mansfield's Subdivision Regulations require a yield plan to determine the maximum number of lots that could be developed on a subject site (see Section 6.10.a.6 for yield plan provisions).

The Conceptual Layout Plan, which shall be drawn to a scale best suited to the site and allows appropriate review, shall identify potential streets (where applicable), potential lots and potential open space areas that could be developed pursuant to all applicable zoning and subdivision approval criteria, including Mansfield's "Cluster Development" provisions. Section 7.4 of the Subdivision Regulations authorizes the Commission to require new subdivisions to be clustered with reduced lot sizes and larger areas of preserved open space. Section 7.6 includes provisions to reduce or waive lot frontage and setback requirements. A submitted Conceptual Layout Plan should reflect an applicant's intended final plan submission subject to soil testing and obtaining more specific site information.

**c. Testing/Preparation of Final Subdivision Plans**

Following the receipt of review comments on all submitted conceptual plans, applicants shall conduct all required testing pursuant to State Health Code requirements and permits issued by Eastern Highlands Health District. Following on-site testing and further analysis, applicants can elect to resubmit conceptual plans pursuant to Section 5.2.b. or prepare final plans pursuant to Section 6. The final plan shall take into account all information obtained through Mansfield's design process.

Final Subdivision plans shall depict proposed streets, lot lines, building and development area envelopes, house locations, well and septic system locations, open space areas, natural and manmade resources and other details required by Section 6 and other provisions of these Regulations. The final subdivision plan shall address the minimum lot size provisions of the Zoning Regulations, and the number of proposed lots shall be no greater than the number depicted on a finalized yield plan prepared pursuant to Section 6.10.a.6.

**TOWN OF MANSFIELD**  
**DEPARTMENT OF PLANNING AND DEVELOPMENT**

---

LINDA M. PAINTER, AICP, DIRECTOR

**Memo to:** Conservation Commission  
Open Space Preservation Committee  
John Jackman, Fire Marshal  
Grant Meitzler, Assistant Town Engineer  
Geoffrey Havens, Eastern Highlands Health District

**From:** Linda M. Painter, AICP, Director of Planning and Development *LMP*

**Date:** April 12, 2012

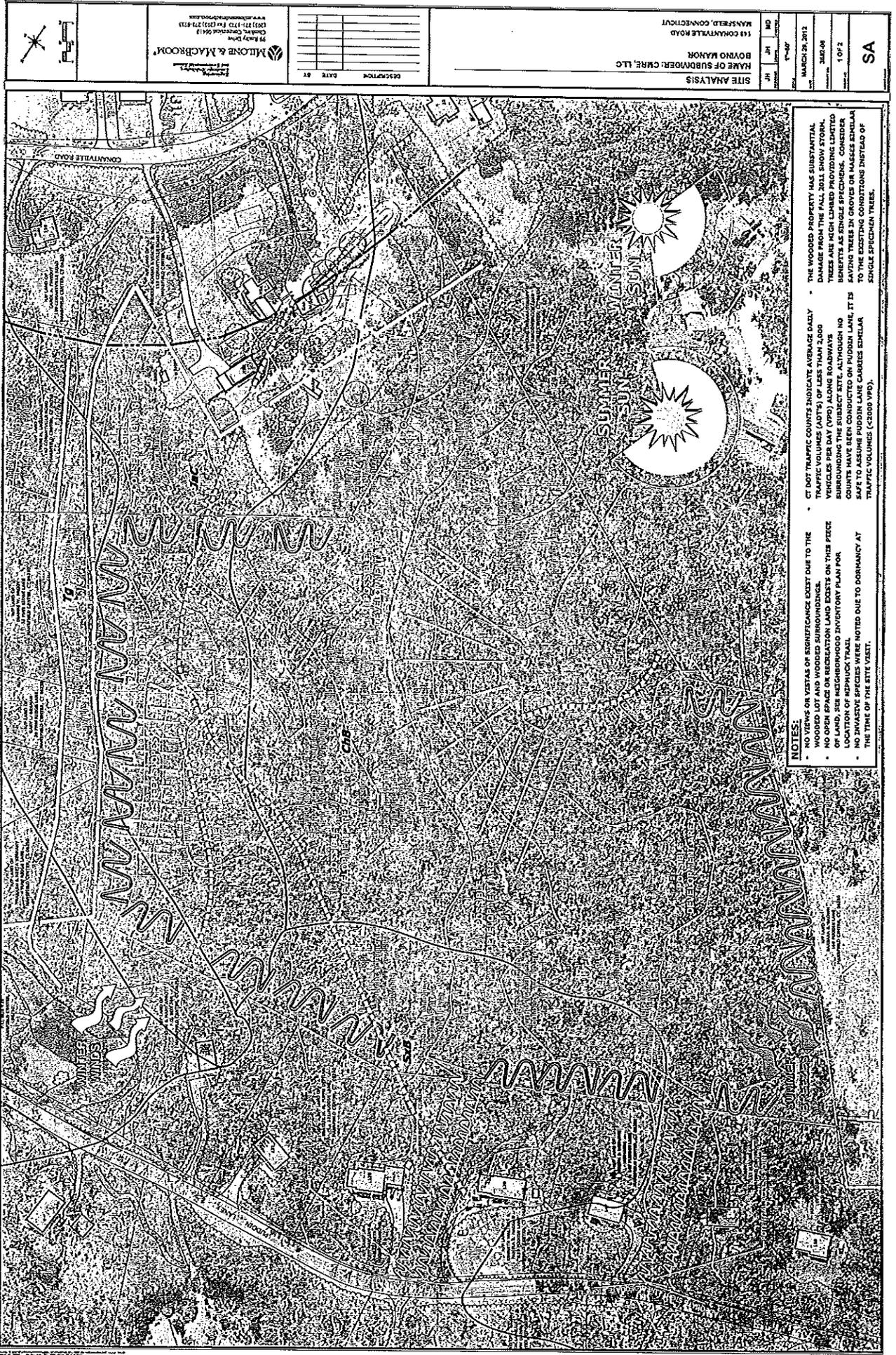
**Subject:** Bovino Manor  
CMRE, LLC  
Subdivision Design Process Submission

In March 2011, the PZC adopted a new design process that is mandatory for proposed subdivisions that include 4 or more lots or a street. In accordance with the requirements of Section 5.2 of the Subdivision Regulations, Milone & MacBroom has submitted an Off-Site and Neighborhood Influences Inventory Plan and Site Analysis Plan for review.

Pursuant to Section 5.2.a.2, these plans are to be reviewed by town staff and referred to the Conservation Commission and Open Space Preservation Committee for review and comment. The PZC is required to be notified in writing and provided with an opportunity to review and comment.

Copies of the relevant regulations are attached for your information along with the submission from CMRE LLC. As I am required to provide comments to the applicant by May 14, 2012, I recommend that comments and feedback be provided to the Planning Office by May 1, 2012 and will be included in my response to the applicant.

PAGE  
BREAK



- NOTES:**
- NO VIEWS OR VISTAS OF SIGNIFICANCE EXIST DUE TO THE WOODED LOT AND WOODED SUBROUNDDING.
  - NO OPEN SPACE OR RECREATION LAND EXISTS ON THIS PIECE OF LAND. SEE NEIGHBORHOOD INVENTORY PLAN FOR RECREATION FACILITIES.
  - NO HISTORIC SPECIFICITY IS NOTED DUE TO DISPARANCY AT THE TIME OF THE SITE VISIT.

- CT DOT TRAFFIC COUNTS INDICATE AVERAGE DAILY TRAFFIC VOLUMES (ADTV) OF LESS THAN 2,000 VEHICLES PER DAY (VPD) ALONG ROADWAYS SURROUNDING THE SUBJECT SITE. ALTHOUGH NO COUNTS HAVE BEEN CONDUCTED ON PUDDEN LANE, IT IS SAFE TO ASSUME PUDDEN LANE CARRIES SIMILAR TRAFFIC VOLUMES (~2000 VPD).

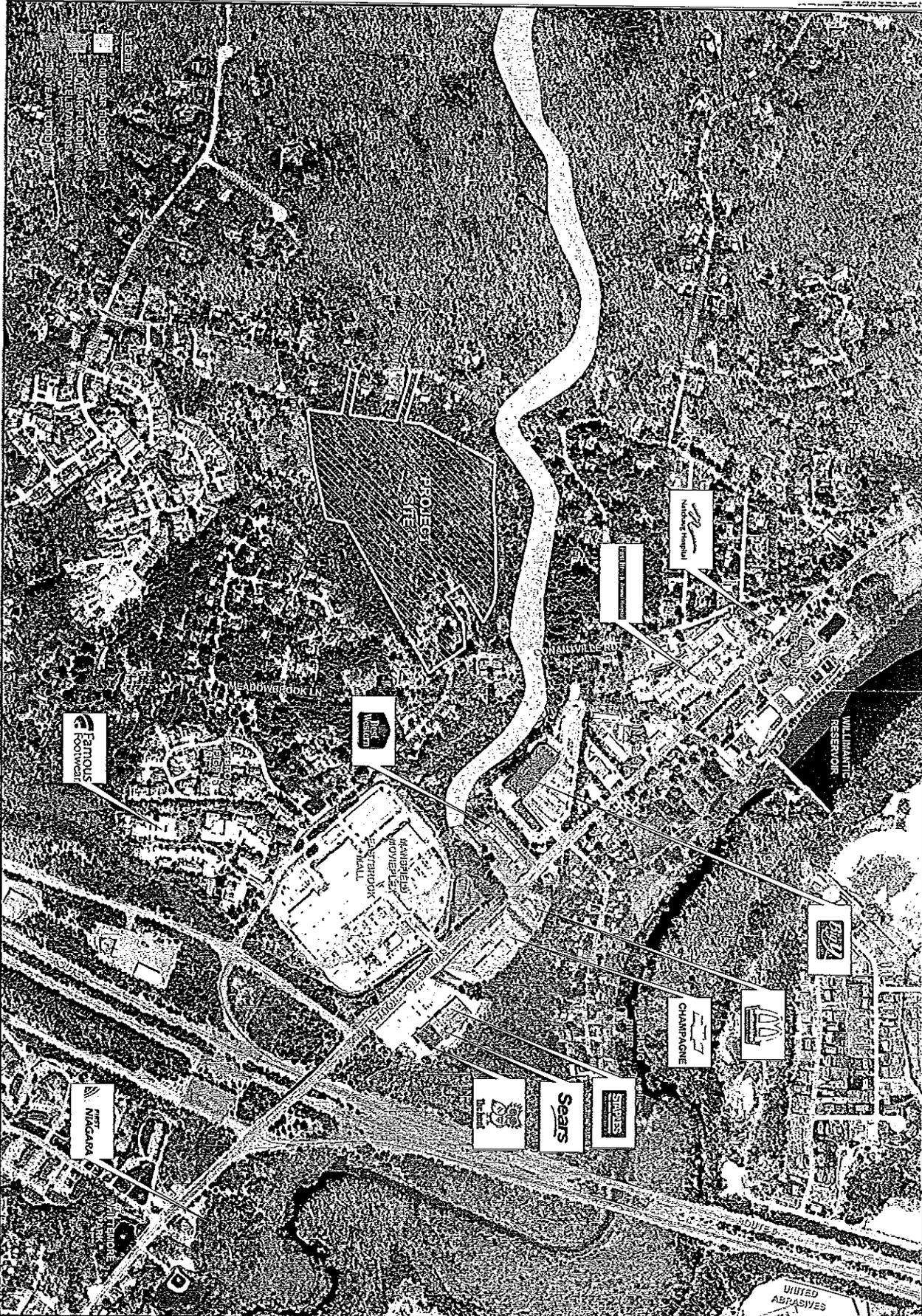
- THE WOODED PROPERTY HAS SUBSTANTIAL DAMAGE FROM THE FALL 2011 SNOW STORM. TREES ARE HIGH LEMBED PROVIDING LIMITED BENEFITS AS SINGLE SPECIMENS. CONSIDER SAVING TREES IN GROVES OR MASSES SIMILAR TO THE EXISTING CONDITIONS INSTEAD OF SINGLE SPECIMEN TREES.

**SITE ANALYSIS**

NAME OF SUBOWNER: CMRE, LLC  
 BOYD MANOR  
 118 COUNTRYVILLE ROAD  
 MANSFIELD, CONNECTICUT

MILONE & MACBROOM  
 1000 State Street  
 06103-2711  
 (860) 253-2711  
 www.miloneandmacbroom.com





<p>NP</p>	<p><b>NEIGHBORHOOD PLAN</b>                  NAME OF SUBDIVIDER: CMRE, LLC                  BOYNO MANOR                  149 CONANTVILLE ROAD                  MANSFIELD, CONNECTICUT</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">DESCRIPTION</th> <th style="font-size: small;">DATE</th> <th style="font-size: small;">BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	DESCRIPTION	DATE	BY													<p style="font-size: x-small;">Milone &amp; MacBroom                  29 Andy Drive                  Cheshire, Connecticut 06619                  (203) 271-1773 Fax (203) 272-9723                  www.milone-macbroom.com</p>	
DESCRIPTION	DATE	BY																	

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# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

### HEARING NOTICE

Pursuant to provisions of General Statutes § 16-50m and Section 16-50j-21 of the Regulations of Connecticut State Agencies, notice is hereby given that the Connecticut Siting Council (Council) will conduct the following public hearing sessions and thereafter as necessary on the application by The Connecticut Light & Power Company for a Certificate of Environmental Compatibility and Public Need for the Connecticut portion of the Interstate Reliability Project that traverses the municipalities of Lebanon, Columbia, Coventry, Mansfield, Chaplin, Hampton, Brooklyn, Pomfret, Killingly, Putnam, Thompson, and Windham, which consists of (a) new overhead 345-kV electric transmission lines and associated facilities extending between CL&P's Card Street Substation in the Town of Lebanon, Lake Road Switching Station in the Town of Killingly, and the Connecticut/Rhode Island border in the Town of Thompson; and (b) related additions at CL&P's existing Card Street Substation, Lake Road Switching Station, and Killingly Substation. The scheduled public comment hearing dates and locations are as follows:

Wednesday, April 18, 2012

Beginning at 7:00 p.m.

Lebanon Fire Safety Complex, 23 Goshen Hill Road, Lebanon 06249

Thursday, April 19, 2012

Beginning at 7:00 p.m.

Quinebaug Valley Senior Citizens Center, 69 South Main Street, Brooklyn, CT 06234

Tuesday, April 24, 2012

Beginning at 7:00 p.m.

Mansfield Middle School Auditorium  
205 Spring Hill Road, Storrs, CT 06268

The Council will conduct a public field review (bus tour) driving roads near and/or crossing portions of the proposed route prior to each public comment hearing beginning at 2:00 p.m. The bus tour on April 18, 2012 will begin at 23 Goshen Hill Road in Lebanon and continue to the Card Street Substation on Card Street in Lebanon, then traverse roadways near the proposed route, navigating through the towns of Lebanon, Columbia, Hampton, and the western portion of Brooklyn. The bus tour scheduled for April 19, 2012 will begin at 69 South Main Street in Brooklyn, and continue to the proposed route, navigating through the towns of Brooklyn, Pomfret, Killingly, Putnam, and Thompson. The final bus tour scheduled for April 24, 2012 will begin at 205 Spring Hill Road in Mansfield and continue to the proposed route, traversing nearby roadways, navigating through the towns of Coventry, Mansfield, Chaplin, and Hampton.



Please contact Lisa Fontaine of the Council staff at 860-827-2969 if you would like to attend any or all of these bus tours.

The purpose of the evening hearing sessions is for the public to make brief statements into the record.

Applicable law for this proceeding includes the Public Utility Environmental Standards Act, General Statutes § 16-50g, et seq., and Sections 16-50j-1 through 16-50v-1a of the Regulations of Connecticut State Agencies.

The Council will hold a pre-hearing conference on procedural matters on Wednesday, March 21, 2012 beginning at 11:00 a.m. at the Council's office, Hearing Room Two, 10 Franklin Square, New Britain, Connecticut.

The Council requests that all testimony and exhibits are to be pre-filed with the Council and all parties and intervenors two weeks before the commencement of evidentiary hearing sessions. Evidentiary hearing sessions have been scheduled to begin at 11:00 a.m. on Tuesday, May 1, 2012; and continue on Thursday, May 3, 2012; Tuesday, May 22, 2012; and Wednesday, May 23, 2012, and thereafter as necessary, at the Central Connecticut State University, Institute of Technology and Business Development, Room 3130000, 185 Main Street, New Britain, Connecticut. Directions and parking information can be found at <http://web.ccsu.edu/itbd/directions/default.htm>. In accordance with the State Solid Waste Management Plan, the Council requests that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators.

Individuals will be encouraged to participate through their elected officials, and other party/intervenor groupings.

Any person seeking to be named or admitted as a party or intervenor to the proceeding may file a written request to be so designated at the office of the Connecticut Siting Council, 10 Franklin Square, New Britain, Connecticut 06051, two weeks prior to the commencement of the evidentiary hearing sessions.

Parties and intervenors will be allowed to submit briefs and proposed findings of fact within 30 days after the close of the final evidentiary hearing.

Any person who is not a party or intervenor to this proceeding may file a written statement with the Council at the hearings or any time up to 30 days after the close of the evidentiary hearing sessions. Such statements will become part of the record. No written statement or any other material, evidence, or other information will be accepted from any person not a party or intervenor to the proceeding after 30 days following the close of the hearing, except as otherwise prescribed by law or the Council.

For the convenience of the public a verbatim transcript of the hearing sessions will be made and deposited with the Town Halls of the 12 municipalities: Brooklyn, Chaplin, Columbia, Coventry, Hampton, Killingly, Lebanon, Mansfield, Pomfret, Putnam, Thompson, and Windham.

Requests for information in alternative formats or for sign-language interpreter services must be submitted in writing by April 3, 2012. The applicant for the proceeding is represented by the following:

The Connecticut Light and Power Company  
(Applicant)

Anthony M. Fitzgerald, Esq.  
Carmody & Torrance LLP  
P.O. Box 1950  
New Haven, CT 06509

A copy of the application is available for review at the Council's website [www.ct.gov/csc](http://www.ct.gov/csc) or at the Council's office during office hours at 10 Franklin Square, New Britain, Connecticut, (860) 827-2935, or on Council website at <http://www.ct.gov/csc> under the link "Pending Proceedings." The Council has assigned this application docket no. 424.

For the convenience of the public, copies of the application are available in the town clerk's offices in each of the 12 municipalities.

February 27, 2012

Connecticut Siting Council

PAGE  
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## Mansfield Open Space Preservation Committee

### DRAFT Minutes of March 20, 2012 Special Meeting

Members present: Jim Morrow (chair), Quentin Kessel, Ken Feathers, Michael Soares

Also attending: Linda Painter Town Planner, Roberta Coughlin, and Michael Healey

1. Meeting was called to order at 7:32.
2. Morrow was appointed acting secretary.
3. Minutes of the Feb 28 2012 meeting were approved.
4. Opportunity for Public Comment

No comments.

#### 5. New Business

- Town Council Referral- Healey Request for License on Town-owned land  
Michael Healey explained his plans for his property near the Common Fields.  
It was moved and seconded

The proposed license will have no direct benefit to the Common Fields. Granting the license would help preserve the historic barn adjacent to the open space. This barn is a significant feature within the view shed of the open space. The town purchased the Common Fields in part to help preserve the character of the Mansfield Center historic area. Because preservation of the historic barn is consistent with this objective the committee endorses the granting of the requested license.

Passed unanimously with Kessel abstaining

- PZC Referral- Proposed Revisions to PVRA/PVCA Zoning Regulations  
Town Planner Linda Painter explained the proposed changes to the zoning regulations. The committee will continue this discussion at its April Meeting.
- Grant Opportunities  
No discussion

6. Executive Session in accordance with CGS section 1-200(6)(D)  
The committee voted to enter executive session at 8:42 which lasted until 9:10

7. Possible action on properties under consideration and possible site selection.—
  - The committee decided to hold a field trip Sat. March 31 at 2:00 pm

#### 8. Announcements

- Open Space Action Plan to go to Town Council Monday, April 9, 2012
  - Morrow & Wetherill will be planning the presentation
- Climate Impact Forum: Actions for a Cool Communities Tuesday, 3/27 6:30-9:00 pm at the Bishop's Center

9. Meeting adjourned at 9:17

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**DRAFT MINUTES**  
MANSFIELD PLANNING AND ZONING COMMISSION  
Regular Meeting  
Monday, April 2, 2012  
Council Chamber, Audrey P. Beck Municipal Building

Members present: J. Goodwin (Chairman), M. Beal, R. Hall, K. Holt, G. Lewis, P. Plante, B. Pociask,  
K. Rawn, B. Ryan  
Alternates present: B. Chandy, V. Ward, S. Westa  
Staff Present: Linda Painter, Director of Planning and Development

Chairman Goodwin called the meeting to order at 7:15 p.m., and appointed Chandy to act if a member is disqualified.

Holt MOVED, Ryan seconded, to add to the agenda under New Business, discussion regarding potential changes to the Plan of Conservation and Development and Zoning Regulations as part of the water supply Environmental Impact Evaluation. MOTION PASSED UNANIMOUSLY.

**Minutes:**

**3-19-12 Minutes-** Hall MOVED, Ryan seconded, to approve the 3/19/12 meeting minutes as written. MOTION PASSED UNANIMOUSLY. Ward and Beal noted that they listened to the recording of the meeting.

**Zoning Agents Report:** Noted.

**Old Business:**

- a. **Proposed Revisions to Zoning Subdivision Regulations Regarding Bonding**  
Linda Painter, Director of Planning and Development, updated the PZC on the seminar she attended regarding Public Act 11-79 and briefly summarized how other municipalities are addressing the requirements of the revised statute. Painter said she will be discussing options with the Mansfield Town Attorney and Attorney Mark Branse and will report back to the Regulatory Review Committee at its next meeting.
- b. **Proposed Revisions to the Pleasant Valley Residence/Agriculture (PVRA), Pleasant Valley Commercial/Agriculture (PVCA) Regulations and Research and Development/Limited Industrial Zone, (PZC File #907-37)**  
Tabled-Public Hearing Scheduled for May 7, 2012

**New Business:**

- d. **8-24 Referral Re: Healey License Request at Common Fields**  
After extensive discussion of the draft motion, the Commission agreed to table this item to the 5/7/12 meeting.
- i. **Discussion regarding potential changes to the Plan of Conservation and Development and Zoning Regulations as part of the water supply Environmental Impact Evaluation**  
David Murphy, P.E., Senior Hydrogeologist with Milone & MacBroom, Inc., discussed the Water Supply Environmental Impact Evaluation (EIE); the potential need for revisions to the Plan of Conservation and Development, Zoning and Subdivision Regulations; and the role of the Planning and Zoning Commission in these processes.
- a. **Revised Modification Request, Revision to BAE, 87 Jonathan Lane, PZC File #1113-3**  
**B. LeClair, owner/applicant**  
Holt MOVED, Hall seconded, that the Planning & Zoning Commission approve the proposed revision to

the Building Area Envelope on Lot 21 of the Wild Rose Estates Subdivision (87 Jonathan Lane), as described in the 9/16/11 request and shown on a plan dated 3/23/12, because it will not affect neighboring properties, natural or manmade features or the overall character of the subdivision. This action shall be noticed on the Land Records. MOTION PASSED with all in favor except Lewis and Goodwin who were opposed.

**b. Subdivision Design Process Submittal, Beacon Hill Estates Section 2, PZC File #1214-3 Eagleville Development Group LLC**

This item was added to the Field Trip Agenda for 4/10/12. The field trip was scheduled to begin later than usual, at 3:30 p.m., to promote maximum attendance. It was noted that another Pre-Application Subdivision was submitted for 149 Conantville Road, which was also added to the Field Trip Agenda.

**c. Request for 90-Day Filing Extension, Listro Property, Stearns/Candide Lane, PZC File #1296**

Plante MOVED, Holt seconded, that the Planning and Zoning Commission, pursuant to Section 6.5 of the Subdivision Regulations, grant a second ninety-day extension for filing final subdivision plans for the Listro Re- Subdivision (File #1296), expiring on July 12, 2012. MOTION PASSED UNANIMOUSLY.

**e. 8-24 Referral Re: FY 2013 Capital Improvement Budget**

Holt MOVED, Plante seconded, that the PZC approve, subject to the condition below, the proposed 2012-13 Capital Improvement Budget.

Several items are land use-regulated and may require PZC and/or IWA approvals before implementation. The PZC respectfully requests that the departments involved with land use projects coordinate plans with the Director of Planning and Development and Inland Wetlands Agent and that the Commission/Agency be given adequate time to thoroughly review and act upon final plans for all projects that require PZC or IWA approval. MOTION PASSED UNANIMOUSLY.

**f. 8-24 Referral Re: Storrs Center Utility Easement**

Hall MOVED, Holt seconded, that the PZC report to the Town Council that the PZC recommends that the Town Manager be authorized to grant the proposed utility easement to Connecticut Light and Power as it is consistent with Mansfield's Plan of Conservation and Development and the approved Storrs Center Master Plan. MOTION PASSED UNANIMOUSLY.

**g. FY2012-2013 PZC/IWA Operating Budget**

Holt MOVED, Hall seconded, to authorize the Chair to submit a letter of support to the Town Council for the proposed FY2012-2013 PZC/IWA Operating Budget (Account 52100). MOTION PASSED UNANIMOUSLY.

**h. Draft Workplan for HUD Community Challenge Grant**

Linda Painter, Director of Planning and Development, updated the Commission on the status of the HUD Community Challenge Grant and reviewed the key components of the draft work plan.

**Reports from Officers and Committees:**

It was noted that the next Regulatory Review Committee meeting will be on Wednesday, April 11<sup>th</sup> at 1:15 p.m. in Conference Room C, and that the Field Trip will be on April 10<sup>th</sup> at 3:30.

**Communications and Bills:** Noted. Reminder: April 16<sup>th</sup> Regular Meeting has been cancelled.

**Adjournment:** The meeting was adjourned at 9:10 p.m. by the chairman.

Respectfully submitted,

Katherine Holt, Secretary

**DRAFT MINUTES**  
MANSFIELD INLAND WETLANDS AGENCY  
Monday, April 2, 2012  
Council Chambers, Audrey P. Beck Municipal Building

Members present: J. Goodwin (Chairman), M. Beal, R. Hall, K. Holt, G. Lewis (7:12 p.m.), P. Plante, B. Pociask, K. Rawn, B. Ryan  
Alternates present: B. Chandy, V. Ward, S. Westa  
Staff present: Grant Meitzler (Wetlands Agent)

Chairman Goodwin called the meeting to order at 7:00 p.m., and appointed Ward to act in Lewis' absence until his arrival.

**Minutes:**

3-5-2012 - Regular Meeting- Plante MOVED, Ryan seconded, to approve the 3-5-12 minutes as written. MOTION PASSED UNANIMOUSLY.

3-13-2012 - Field Trip Meeting- Holt MOVED, Ward seconded, to approve the 3-13-12 field trip minutes as corrected. MOTION PASSED with Goodwin, Holt, and Ward in favor and all others disqualified.

**Communications:**

The 3-28-12 Wetlands Agent's Monthly Business report and the draft minutes of the 3-21-12 Conservation Commission were noted.

**Old Business:**

W1492 - Common Fields - 474 Storrs Rd - barn conversion & site work in buffer

Holt MOVED, Ryan seconded, to approve an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Michael and Mary Healey (file # W1492), for barn renovations, additions and appurtenant site improvements to an existing barn, located at 476 Storrs Road, as shown on a site plan dated January 17, 2012 and revised to March 5, 2012, for portions of work located within the 150 foot regulated areas, and as described in application submissions and presentations made to the Inlands Wetlands Agency at meetings held on February 2, 2012, March 5, 2012 and April 2, 2012.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned upon the following provisions being met:

1. Erosion and sedimentation controls shall be in place (as shown on the plans) prior to construction, maintained during construction, and removed when disturbed areas are completely stabilized.
2. The use of chemicals and fertilizers is to be based on soil testing to avoid over use that will change the chemistry of the bog.
3. The cattail removal operation is to be coordinated with the Inland Wetlands Agent.

This approval is valid until April 2, 2017, at which time a renewal of the permit is required if work has not been completed. The applicant shall notify the Wetlands Agent before any work begins, and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment. MOTION PASSED UNANIMOUSLY.

W1494 - Moskowitz - landscaping work within 150'

Holt MOVED, Ryan seconded, to grant an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Robert Moskowitz (file # W1494), for landscaping work next to the Stonemill Bridge project on property owned by the applicant, located at 117 Stonemill Road, as shown on an undated sketch map by the owners and a February 28, 2012 sketch map by the Wetlands Agent, and as described in other application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned upon the following provisions being met:

1. Erosion and sedimentation controls shall be in place (as shown on the plans) prior to construction, maintained during construction, and removed when disturbed areas are completely stabilized.
2. Tree removal shall be limited to small saplings. The large trees edging the proposed fill area shall be used as limits of the area to be filled.
3. Silt fence shall be placed along the east end of the fill area approximately 25 feet from the edge of the river.
4. The steep embankment along the north side of the work area shall be seeded for stabilization and to prevent run-off.
5. The use of chemicals and fertilizer is to be based on soil testing to avoid over use that will change the chemistry of the river.

This approval is valid until April 2, 2017, at which time a renewal of the permit is required if work has not been completed. The applicant shall notify the Wetlands Agent before any work begins, and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment. MOTION PASSED with all in favor except Plante who was opposed.

W1495 - Sabatelli - Stearns Rd - addition in buffer

Holt MOVED, Ryan seconded, to grant an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Chris Niarhakos (file # W1495), for a one-car garage addition (12'x24') on property owned by Linda Sabatelli, located at 306 Stearns Road, as shown on a map dated March 1, 2012, and as described in other application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned upon the following provisions being met:

1. Erosion and sedimentation controls shall be in place (as shown on the plans) prior to construction, maintained during construction, and removed when disturbed areas are completely stabilized.
2. All excavated material shall either be removed from the property or be graded into existing yard areas, away from wetlands. Suitable locations are at the sides or in the front of the house, but not at the back side that faces the wetland.

This approval is valid until April 2, 2017, at which time a renewal of the permit is required if work has not been completed. The applicant shall notify the Wetlands Agent before any work begins, and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment. MOTION PASSED UNANIMOUSLY.

**New Business:**

W1493 - Sabatelli - Shed

Ryan MOVED, Holt seconded, to receive the application submitted by Linda Sabatelli. (File #W1493) under the Wetlands and Watercourses Regulations of the Town of Mansfield, for an 8'x12'shed in the buffer, on property located at 306 Stearns Road, as shown on a map dated March 28, 2012, and as described in application submissions, and to refer said application to staff and Conservation Committee, for review and comments. MOTION PASSED UNANIMOUSLY.

A field trip was set for 4/10/12.

**Communications:** Noted.

**Adjournment:** The Chairman declared the meeting adjourned at 7:13 p.m.

Respectfully submitted,

Katherine Holt, Secretary

Memorandum:

March 28, 2012

To: Inland Wetland Agency  
From: Grant Meitzler, Inland Wetland Agent  
Re: Monthly Business

**W1419 - Chernushek - hearing on Order**

- 3.10.09: The hearing on the Order remains open and should continue until the permit application under consideration is acted upon.  
(The Order was dropped on approval of the application required in the Order.)
- 4.30.09: Former rye grass seeding is beginning to show green. I spoke with Mr. Chernushek this afternoon who indicated health problems that delayed his starting but indicated he will be working this weekend. I will update on this Monday evening.
- 5.26.09: A light cover of grass growth has come in. Mr. Chernushek indicates health problems and two related deaths have delayed his start of work since the permit approval was granted. It appears that some light work has started. He has further indicated that he will start a vacation on June 22, 2009 to finish the work.
- 6.13.09: Work is underway.
- 6.21.09: Bulldozer work has been completed - finish work remains. The additional silt fencing has been placed along the northerly wetlands crossing, and the additional pipe under the southerly crossing has been installed. Remaining work includes finish grading along edges, spreading stockpiled topsoil, and establishing grass growth.
- 7.01.09: I spoke with Mr. Chernushek who indicated he expects work to be completed by September 1, 2009. (Site photo attached).
- 9.03.09: Mr. Chernushek has been working on levelling and grading. The formerly seeded areas have become fairly thick growth surrounding the central wet areas. He has further indicated that with the combination of weather and the slower moving of earth with the payloader compared to the earlier rented bulldozer has led him to contact contractors for earth moving estimates which have not yet been received. The site is not yet finished but has remained quite stable.
- 9.12.09: I met with Mr. Chernushek today and discussed again what his plans are for stabilizing this work site.
- 10.01.09: Mr. Chernushek indicated he has not heard back from the contractor he had spoken with about removing material, and is in progress of contacting others. In discussion is removal of material from the site either within the 100 cubic yard limit or obtaining a permit for such removal.
- 10.28.09: Mr. Chernushek has indicated he has made arrangements with DeSiato Sand & Gravel to remove 750 cubic yards of material. Staff is in the process of clarifying permit requirements.

**W1445 - Chernushek - application for gravel removal from site**

- 11.30.09: Packet of information representing submissions by Mr. Chernushek, Mr. DeSiato and myself is in this agenda packet as Mr. Chernushek's request for modification.
- 12.29.09: Preparation of required information for PZC special permit application is in progress. Tabling any action until the February 1, 2010 meeting is recommended.
- 1.12.10: 65 day extension of time received.
- 2.18.10: No new information has been received.

- 2.25.10: This application has been withdrawn.
- 6.30.10: As viewed from the adjacent property, the upstream and downstream areas have grown to a decent protected surface. I did not see indication of sediment movement.
- 10.26.10: A sale of the East portion of the Chernushek property has been in negotiation.
- 12.27.10: The property exchange has been completed. The owner is now the neighboring property owner Bernie Brodin. He has indicated his intention to stabilize the area as weather permits.
- 4.25.11: Mr. Brodin indicates he is starting with grading and spreading hay and seed to stabilize disturbed areas.

**Mansfield Auto Parts - Route 32**

- 4.25.11: Inspection - no vehicles are within 25' of wetlands.
- 5.17.11: Inspection - no vehicles are within 25' of wetlands. Mr. Bednarczyk's estimate is that approximately 100 tires per month are being removed from the site.
- 6.14.11: Inspection - no vehicles are within 25' of wetlands.
- 7.12.11: Inspection - no vehicles are within 25' of wetlands.
- 8.04.11: Inspection - no vehicles are within 25' of wetlands.
- 9.13.11: Inspection - no vehicles are within 25' of wetlands.
- 11.03.11: Inspection - two vehicles are within 25' of wetlands. Vehicle doors and a camper or trailer are stored in the extreme rear lot not approved by zoning for use.
- 11.30.11: Inspection - two vehicles are within 25' of wetlands. Employees indicate cars will be moved soon. Payloader repair parts are to be there later today and cars will be moved as soon as parts are installed. Owner indicated in earlier discussion that the doors would be moved. Rate of tire removal has increased with a company in Massachusetts removing them by truckload. At time of this discussion (about a week ago) nearly 2,000 tires had been removed from the lot by the railroad tracks.
- 12.07.11: Inspection - two vehicles are within 25' of wetlands. Payloader repairs not yet completed. Weekly inspections will be made until the two vehicles and doors are moved.
- 12.27.11: Inspection - 1 vehicle within 25' of wetlands - owner indicates it will be moved this week. Payloader is back in operation. Owner indicates doors in "rear" lot will be moved this week. Large number of tires have been moved from lot by RR tracks - approximately 65% of tires have been removed.
- 2.01.12: Inspection - employee indicates payloader repair has had problems and the one car within 25' has not yet been moved. Tire removal has continued and about 90 percent of the tires have been removed. A truck from the company removing the tires arrived while I was at the site.
- 3.01.12: Inspection - owner indicates payloader is repaired. Owner indicates the one car within 25' will be moved. Tire removal is nearing completion.
- 3.28.12: On the way to see the car moved I found the payloader blocking the entrance drive to the rear area, with the mechanic under the hood. He indicated the new engine had stopped running on the way to move the remaining car. Inspection today showed the payloader in the same location.

March/April 2012

# Connecticut Wildlife

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



# From the Director's Desk



## Guest Column by Inland Fisheries Division Director Peter Aarrestad

While we navigate our way into the future, it is wise to do so with an eye toward the past. As stewards, supporters, and managers of our state's natural resources, we are fortunate to be ably guided by many visionary forebears, including those instrumental in creating the Federal Aid in Wildlife Restoration Act (1937) and Sport Fish Restoration Act (1950) that you read about in the previous edition of Connecticut Wildlife. Collectively, these noteworthy and successful pieces of federal legislation have enabled our state and others to establish relevant and effective natural resource management programs for the conservation and human enjoyment of our fish and wildlife resources. I encourage you to learn in this edition about our diverse freshwater fisheries management programs (angling is now a year-round activity in our state), reconnecting migratory fish runs with historic habitat, state wildlife management areas, and the deer management program, all of which rely to some degree upon these important federal funding sources.

The North American Model of Wildlife Management, which is founded upon these federal acts, has been incredibly successful and it will continue to support our natural resource management initiatives and programs well into the future. But with declining participation in hunting and fishing occurring both nationally and in our state in recent years, it is more important than ever to find new ways to engage our citizenry in the outdoors. Our youth in particular are becoming increasingly disconnected from nature and from directly experiencing the wonderful sights, smells, and sounds of our outdoor world.

As today's youth represent our future conservationists and environmental stewards, we must ensure that we instill in them the same passion for and knowledge of the outdoor world that our parents, grandparents, guardians, and mentors instilled in us. I'm confident that you, as a reader of Connecticut Wildlife, are all great admirers of, and advocates for, our natural world. I would ask that you take the time to deliberately instill in others your knowledge and deep rooted passion for the outdoors. The future of our outdoor heritage depends on it. Be a great environmental steward but be an even better mentor! Take a kid fishing, hunting, canoeing, hiking, or outdoors to simply observe wildlife (the articles on vernal ponds and little blue herons in this issue provide some great inspiration for nature observation and exploration). In short, kindle the spark for whatever fuels your own "outdoor fire" by sharing your knowledge and passion with others. We owe it to future generations and to the natural world we so cherish. Please feel free to send me your ideas or suggestions to [peter.aarrestad@ct.gov](mailto:peter.aarrestad@ct.gov) or call me at 860-424-FISH.

Peter Aarrestad, DEEP Inland Fisheries Division Director

## Cover:

Many consider the arrival of red-winged blackbirds to Connecticut marshes and other wetlands and the sound of their song as harbingers of spring.

Photo courtesy of Paul J. Fusco

# Connecticut Wildlife

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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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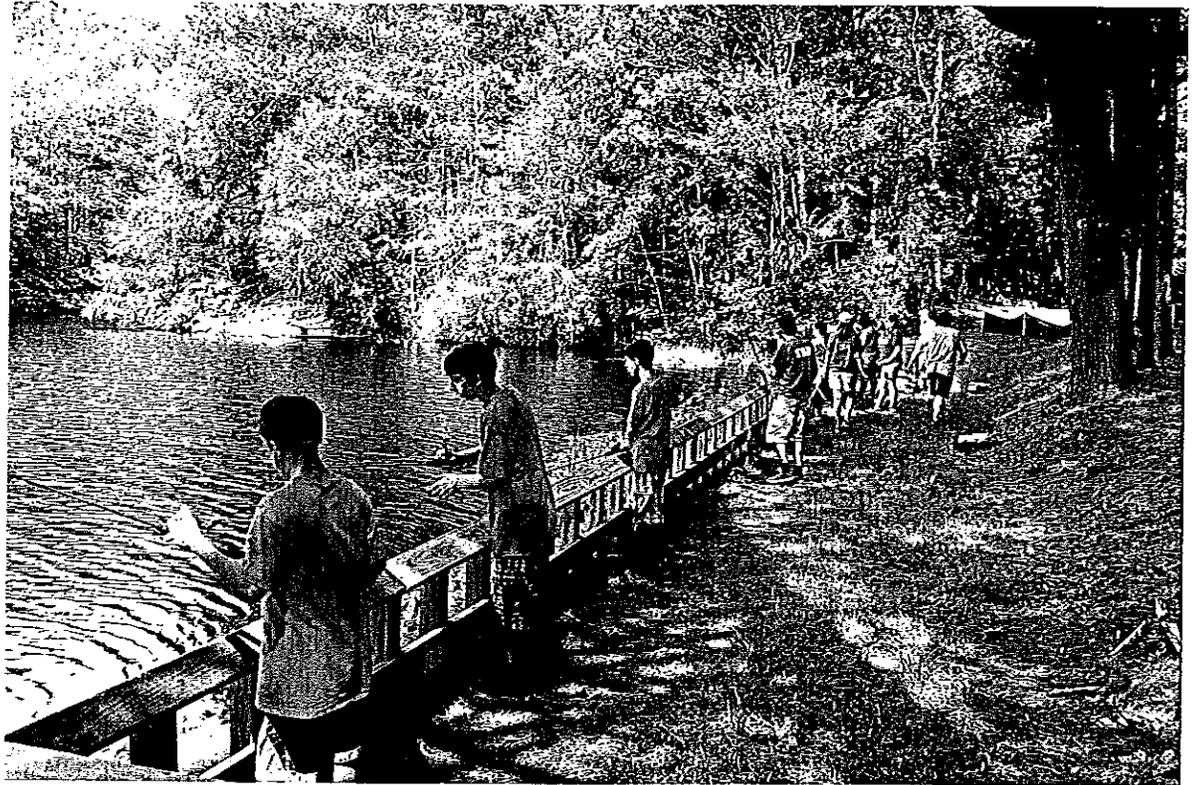
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## Freshwater Angling in CT and the Role of the Federal Sport Fish Restoration Program

Written by Tim Barry, DEEP Inland Fisheries Division; photography provided by DEEP Inland Fisheries Division

Opening Day of Trout Fishing on Saturday, April 21, 2012 is right around the corner and this is the time of year when many anglers start to “gear-up” in anticipation of the coming fishing season. Each year, the DEEP Inland Fisheries Division stocks approximately 730,000 trout in over 300 locations statewide. Trout are Connecticut’s most popular, sought-after species with approximately 2.1 million “angler trips” of activity each year. But, did you know that the Inland Fisheries Division also spends considerable time and effort stocking and/or managing several other important freshwater fish species for recreational anglers, such as northern pike,



Community Fishing Lakes bring recreational fishing opportunities closer to those less able to travel.



Smallmouth bass are revered for their fighting ability and especially their acrobatic leaps when caught by hook and line.

walleye, catfish, and largemouth and smallmouth bass?

Fishing is better than ever in Connecticut, and a major financial contributor to that success has been the sportsmen-supported Federal Sport Fish Restoration Program (SFRP). The \$3 million that Connecticut receives annually from the Sport Fish Restoration Fund is primarily used to support research and management of recreational fisheries. However, these funds also support other important fisheries programs.

The Sport Fish Restoration Program, which began in 1950, receives its funding from the Federal Aid in Sport Fish Restoration Act (commonly referred to as the Dingell-Johnson Act) and the subsequent Wallop-Breaux amendment to the Act enacted in 1984. Federal excise taxes on fishing equipment and motorboat fuels are collected and deposited into the Sport Fish Restoration Trust Fund. This money is then apportioned back to the states through a formula based on land and water area and number of license holders. The program, modeled after the successful Wildlife Restoration Program (Pittman-Robertson Act of 1937), supports sport fish restoration and management programs at the state level. Throughout its tenure, this “user pay-user benefit” pro-

gram has been immensely successful in providing funding and support to improve freshwater angling throughout Connecticut and the other 49 states.

Following is a brief synopsis of several on-going Inland Fisheries Division research and management programs and projects that are currently funded with Federal Sport Fish Restoration dollars and providing diverse and successful recreational angling opportunities for Connecticut anglers.

### *Northern Pike Management Project*

Angler surveys consistently show that northern pike are a favorite target species for ice fishermen due to aggressive feeding behavior, even under the ice, and their ability to grow to a large size. Northern pike were first introduced in Bantam Lake in 1971 from yearling pike imported from Minnesota. These fish were originally introduced to control an overabundant white perch population. Beginning in the early 1980s, the Inland Fisheries Division began to supplement pike populations in the lower Connecticut River and Bantam Lake by raising pike fingerlings in managed spawning marshes. This aspect of the project has increased over the years and pike fingerlings are currently raised in seven managed spawning marshes totaling 55 acres. Managed spawning marshes currently produce an annual average of approximately 18,000 pike fingerlings that support the stocking of six locations statewide.

### *Walleye Management Project*

Beginning in 1993 with three lakes and expanding to a total of 11 lakes by 2001, walleye fingerlings obtained from out-of-state commercial suppliers have improved angling opportunities throughout Connecticut. Many anglers consider walleye to be the best fish for eating due to their white, flaky fillets and mild taste. Surveys show that anglers are in favor of the walleye introductions.

### *Catfish Management Project*

Channel catfish are one of the most popular warm water gamefish in the United States and have the potential to provide attractive and productive fisheries in Connecticut lakes and ponds. Eleven lakes/ponds were stocked annually during 2007-2010 with commercially raised catfish. Initial assessments indicate that some portion of the stocked fish survived and have begun to generate angler interest and participation. Continued stocking and monitoring is planned to assess the status of this developing fishery.

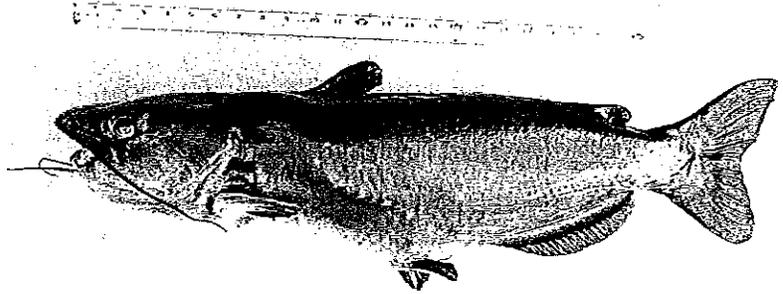
### *Community Fishing Lakes Project*

Beginning in 2005, the Inland Fisheries Division, in cooperation with municipal agencies and civic groups, began a program to enhance fishing opportunities in several of Connecticut's major population centers. Six ponds, located in town or state parks, were selected and are currently managed as Community Fishing Lakes. Adult size trout (10-12 inches) are obtained from state trout hatcheries and stocked several times each spring. Additionally, to enhance fishing into summer, adult channel catfish (14-18 inches) are obtained from a commercial supplier and stocked each June. This program has proven to be highly successful in attracting a formerly underserved clientele

to participate in and enjoy the angling experience.

### *Bass Management Project*

Information collected during a Statewide Lake and Pond Electrofishing Survey (1988-95) indicated that angler harvest and/or stockpiling (too many small fish) of bass had reduced bass fishing quality in many Connecticut lakes under the standard statewide 12-inch minimum length regulation. Initial experiments with alternative length limits (15-inch minimum and 12-15 inch slot) were successful in improving bass size structure and catch rates in two Connecticut lakes. Based upon this favorable finding, two categories of alternative regulations were implemented in 29 "Bass Management Lakes" (BMLs) in 2002. This project assesses these special regulations by monitoring warmwater fish populations, obtaining catch data from bass tournaments, and performing angler surveys. Most recently, the project has begun, in a collaborative research effort with fisheries scientists at the University of Connecticut, to assess genetic differences among populations of bass that may have the potential to improve bass fishing in the future.



Channel catfish, which can grow to a large size like this 19-pounder, do not require sophisticated tackle to pursue.

### *Stream Monitoring Project*

Water quality and physical habitat of many Connecticut streams have been improved through efforts to upgrade sewage treatment plants, initiatives to reduce harmful industrial discharges, and requirements for adequate stream flow. Information is needed to assess the potential for these upgraded streams to support fish and recreational fisheries. Conversely, other streams have experienced degradations in water quality and physical habitat, as well as increasing water temperatures and alterations to flow regimes. The effects from these alterations need to be monitored so that impacts can be quantified and understood. In addition, water temperatures can greatly influence wild trout populations. Sources of thermal loading need to be monitored and understood. The purpose of this project is to identify new fishing opportunities in waters where water quality or aquatic habitat have been improved, and to provide the Inland Fisheries Division with information necessary to conserve and manage stream fish populations.

### *Special Management Areas in Rivers and Streams*

Thirteen Natural Wild Trout Management Areas (WTMAs) are monitored and managed with catch-and-release regulations

to preserve strong populations of naturally reproducing trout in high quality streams. Twenty-three Enhanced WTMA's are managed by stocking fry in high quality streams that lack sufficient spawning habitat for significant natural reproduction to occur. Trout in Enhanced WTMA's are protected by a nine or 12-inch size limit. WTMA's were developed because wild trout are an important, renewable resource that add quality and diversity to Connecticut's trout streams. They also have high intrinsic value because anglers recognize that wild trout are natural products of healthy stream ecosystems.

Six Trophy Trout Areas (TTAs) were developed to improve the opportunity for anglers to pursue and harvest large trout in Connecticut's rivers and streams by stocking a high percentage of large fish; however, protective regulations allow anglers to harvest only two trout per day. TTAs accommodate a segment of the angling public that has shown an interest in catching and harvesting a few large trout rather than keeping up to five smaller trout, as would be allowed in a standard put-and-take stream.

Connecticut currently has 15 Trout Management Areas (TMAs). Catch-and-release regulations have been applied to improve the quality of trout fishing in each of these areas. TMAs are managed in one of two ways – as either Year-round TMAs, with catch and release regulations in effect all year, or as Seasonal TMAs, which have catch-and-release fishing from September until the start of the trout fishing season (third Saturday in April) and a reduced two-fish per day creel limit during the remainder of the year. All of Connecticut's TMAs are located on streams with good trout habitat. Year-round TMAs are located on streams where trout are expected to survive through the summer; whereas, summer water conditions are generally marginal for trout survival in Seasonal TMAs. Seasonal TMAs expand the recreational fishing opportunities available to anglers in early spring and during the fall. This management method allows harvest of fish that would otherwise have died due to warm summer water temperatures. TMAs are extremely cost-effective, in which the percent return-to-the-angler (number of trout caught divided by the number stocked) averages over 200% among all areas and exceeds 600% in the larger areas (by comparison, returns average 80% in put-and-take streams).

### *Special Management Areas in Lakes and Ponds*

Trout Management Lakes (TMLs) were established to manage trophy brown trout fisheries in the state's best trout lakes. The presence of holdover brown trout in selected lakes can create exciting trophy fishing opportunities. This project seeks to improve fishing opportunities for holdover brown trout in lakes with suitable habitat and forage. TMLs receive special stockings of brown trout, are managed by specific regulations, and are assessed by annual fish sampling and occasional angler surveys. Additionally, the project evaluates the effectiveness of the regulations and stocking practices to produce measurable increases in large, holdover brown trout.

Trout Parks (TPs) were established and evaluated in 11 easily accessible and safe park locations as areas where novice anglers, or those with reduced mobility, have a higher probability of catching trout. Studies have shown that many families are



Large brown trout provide exciting fishing opportunities in several of Connecticut's best coldwater lakes.

seeking healthy, outdoor recreational activities, such as fishing. Amenities such as restrooms, safe parking, and easy access to shoreline fishing are often cited as desirable attributes for families with young children and also for many elderly angling participants. Low fishing success, especially among novice anglers, is problematic. Initial success is an important part of the process that motivates novices to become lifelong anglers.

Kokanee salmon are a land-locked form of the Pacific sockeye salmon that have historically provided unique and very popular fisheries in several Connecticut lakes. Sometime in the late 1990s, the kokanee fisheries of East Twin Lake (Salisbury) and Wononskopomuc Lake (Salisbury) collapsed due to the illegal introduction of landlocked alewives. The alewives outcompeted the kokanee for the zooplankton on which they both feed. The kokanee salmon fishery has been maintained in West Hill Pond (New Hartford, Barkhamsted) and mature kokanee are collected as broodstock each fall. Eggs are taken from mature broodstock and incubated at the Burlington State Fish Hatchery. Fry are stocked by boat the next spring into West Hill Pond and, depending upon hatchery availability, also into East Twin and Wononskopomuc Lakes. Due to these stockings and other changes that have occurred in East Twin Lake, the kokanee salmon population has experienced a resurgence.

### *A Cost-reimbursement Program*

The Sport Fish Restoration Program is a cost-reimbursement program, where the State covers the full amount of an approved project and then applies for reimbursement through Federal Aid for up to 75% of the project expenses. The State must provide at least 25% of the project costs from a non-federal source. There are many more projects than the ones detailed here that are supported by Connecticut sportsmen's dollars. Marine fisheries recreational surveys, diadromous fish restoration, aquatic resource education, and habitat conservation and enhancement are other important activities that receive financial support from Sport Fish Restoration Program dollars. For additional information on these or other federally funded activities, go to the DEEP Inland Fisheries Division web site at [www.ct.gov/deep/fishing](http://www.ct.gov/deep/fishing).

## State Wildlife Management Areas a Benefit of Federal Aid

Written by Paul Rothbart, DEEP Wildlife Division

The mission of the DEEP Wildlife Division is to maintain stable, healthy, and diverse wildlife populations on all suitable habitats across Connecticut in numbers compatible with habitat carrying capacity and existing land use practices. Acquiring and managing wildlife management areas (WMAs) are mechanisms for accomplishing this goal. WMAs are areas of land and water having unique or outstanding wildlife qualities that are managed primarily for the conservation and enhancement of fish and wildlife and to provide opportunities for fish and wildlife-based recreation.

The Wildlife Division is responsible for managing 105 WMAs, totaling over 32,000 acres. These areas range in size from one acre to 2,017 acres and include a variety of habitats, such as grasslands, old fields, forests, coastal salt marshes, freshwater marshes, and riparian zones.

WMAs provide habitat for 439 vertebrate species and thousands of invertebrate species, while providing public recreation for hiking, wildlife viewing, photography, fishing, hunting, and trapping. Motorized vehicles are prohibited; however, handicapped hunters may obtain a special permit from the DEEP to use an ATV while hunting. Handicapped accessible hunting trails are available at Roraback, Sessions Woods, Kollar, Babcock Pond, and Bear Hill WMAs. Camping is also prohibited, except at the group camping area at Sessions Woods WMA in Burlington. Groups that use the Sessions Woods camping area must obtain a special permit and be using the site for approved educational purposes. Sessions Woods also is the only WMA with a Conservation Education Center and Exhibit Area.

The statewide system of wildlife

management areas is largely the result of the Federal Aid in Wildlife Restoration Act of 1937, commonly referred to as the Pittman-Robertson (P-R) Act for its sponsors – Nevada Senator Key Pittman and Virginia Congressman A. Willis Robertson. Prior to this historic act, many wildlife species were driven to or near extinction by unregulated market shooting and habitat degradation. Due to forward-minded conservation leadership, the P-R Act resulted in the remarkable recovery of America's wildlife and allowed state agencies to purchase and secure wildlife lands for future generations. Federal aid funds have been instrumental in the purchase of approximately one-third of the 105 wildlife management areas that are managed by the DEEP Wildlife Division.

The Connecticut Board of Fisheries and Game was established in 1895 to



The Wildlife Division is responsible for managing 105 WMAs, totaling over 32,000 acres. These areas range in size from one acre to 2,017 acres and include a variety of habitats, such as grasslands, old fields, forests, coastal salt marshes, freshwater marshes (above), and riparian zones.

oversee land acquisition and management of fish and wildlife resources. The first state-funded acquisition was the purchase of land for the Windsor Locks Hatchery in 1899. The first parcel acquired specifically for wildlife was Shade Swamp in 1926, a valuable wetland area in Farmington which now covers 738 acres. Shade Swamp Sanctuary serves as a waterfowl refuge/sanctuary where ducks, geese, and other wetland dependent species can nest, feed, and rest.

Early wildlife management area acquisitions funded through the federal P-R Program included Barn Island (Stonington, 1945) Assekonk Swamp (North Stonington, 1945), and Charter Marsh (Tolland, 1948). The Wildlife Division was created in 1971 as part of the Department of Environmental Protection, and biologists continued to review and support acquisitions over the decades.

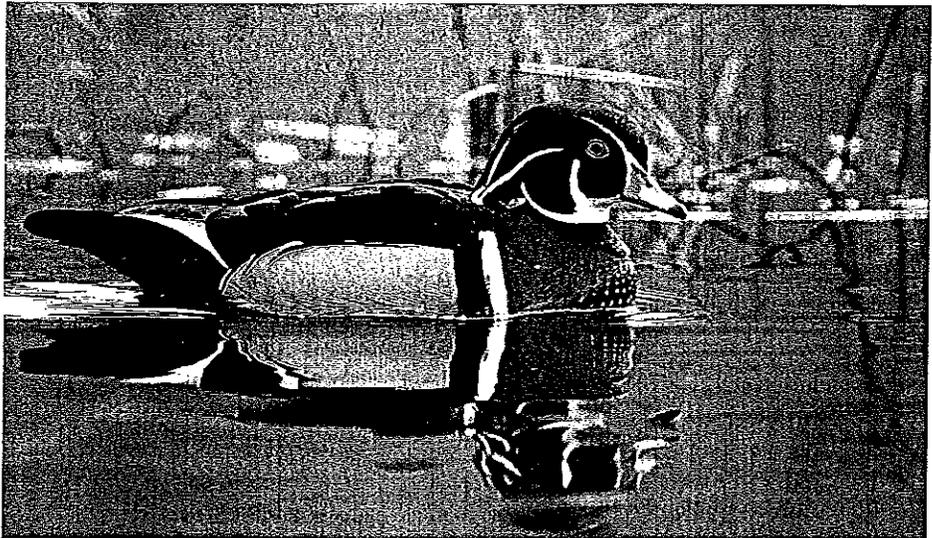
The Wildlife Division's Habitat Management Program is responsible for developing management plans that identify the natural resource values of WMAs and maintaining or enhancing those values and associated compatible outdoor recreational activities. The Connecticut landscape is currently dominated by mature hardwood forests, with a diminishing component of early successional stage habitats (old fields, grasslands, agricultural habitats) which are rapidly declining due to forest succession, loss of farmland, intensified

### Connecticut's WMAs

The DEEP maintains 105 wildlife management areas throughout the state. Detailed information about most of the areas, maps, and directions can be found on the DEEP Web site at [www.ct.gov/deep/wildlife](http://www.ct.gov/deep/wildlife) (select "Maps & Access Information" on the left navigation menu).

Some of the more popular wildlife management areas include:

- Babcock Pond WMA, Colchester
- Barn Island WMA, Stonington
- Bear Hill WMA, Bozrah
- Charles E. Wheeler WMA, Milford
- Goshen WMA, Goshen
- Quinebaug River WMA, Plainfield, Canterbury
- Robbins Swamp WMA, Canaan
- Roger Tory Peterson Wildlife Area, Old Lyme
- Roraback WMA, Harwinton
- Sessions Woods WMA, Burlington
- Spignesi WMA, Scotland



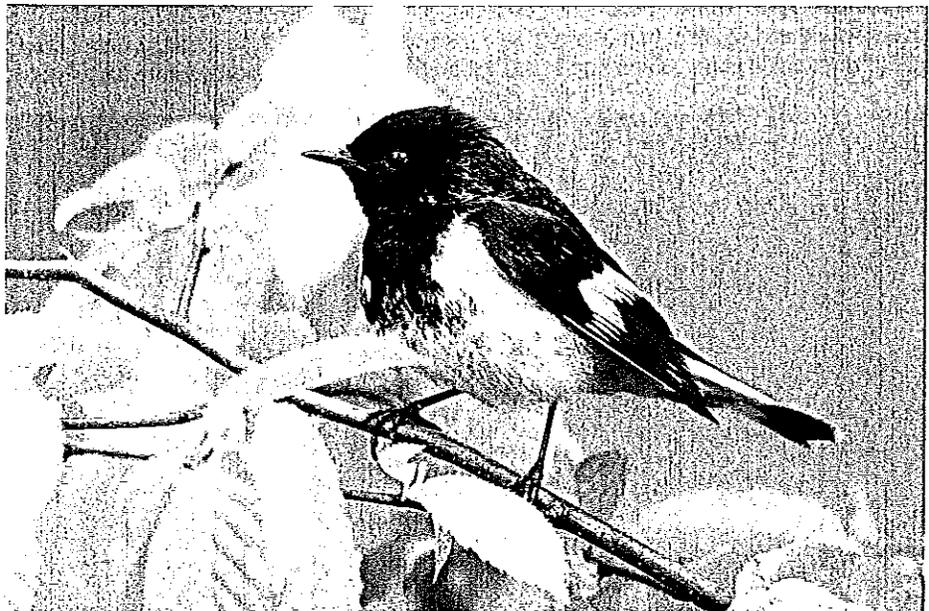
P. J. FUSCO (2)

Wood duck nest boxes are installed, monitored, and maintained at WMAs with freshwater marshes. The wood duck is one of many wildlife species that has benefitted greatly from Federal Aid in Wildlife Restoration Program funds.

farming practices, residential and commercial development, and the absence of fire in the landscape. Associated with the disappearance of these habitats is a decline in once common wildlife, such as bobolinks, meadowlarks, blue-winged warblers, eastern towhees, chestnut-side warblers, New England cottontails, and American woodcock.

Several techniques are used to restore or enhance early successional habitats on WMAs, including tractor/brush mowing, use of large mowing/mulching equipment, logging operations, prescribed burns, herbicides, grassland plant-

ings, and administration of agricultural license agreements. Wetland habitats also are enhanced on WMAs through the maintenance of water control structures, invasive plant control, pothole creation in marshes, and the installation of wood duck nest boxes. Routine maintenance responsibilities on WMAs include boundary and sign posting and the repair and maintenance of parking lots, gates, interior road systems, and wildlife viewing areas. All of these management activities are made possible because of the funding received through the Federal Aid in Wildlife Restoration Program.



Habitat management projects at state wildlife management areas that focus on creating or maintaining early successional stage habitats benefit a variety of bird species, including the American redstart.

# An Ecological Spring Awakening in Our Vernal Ponds

Written by Jonathan Richardson – Yale School of Forestry & Environmental Studies and Hank Gruner – Connecticut Science Center ; photos by Jonathan Richardson

*“How suddenly they awake! Yesterday, as it were, asleep and dormant, today as lively as ever they are. The awakening of the leafy woodland pools.”*

This observation from the March 15, 1860 journal entry of Henry David Thoreau, the revered New England author and naturalist, highlights the activity and excitement surrounding vernal ponds as they usher in the spring season. Vernal ponds (also called vernal pools or temporary woodland ponds) are unique habitats on the landscape, and serve as excellent sinks of resources when they are holding water. Decaying leaves and other organic material serve as the foundation of a surprisingly complex food web, which ranges from bacteria to

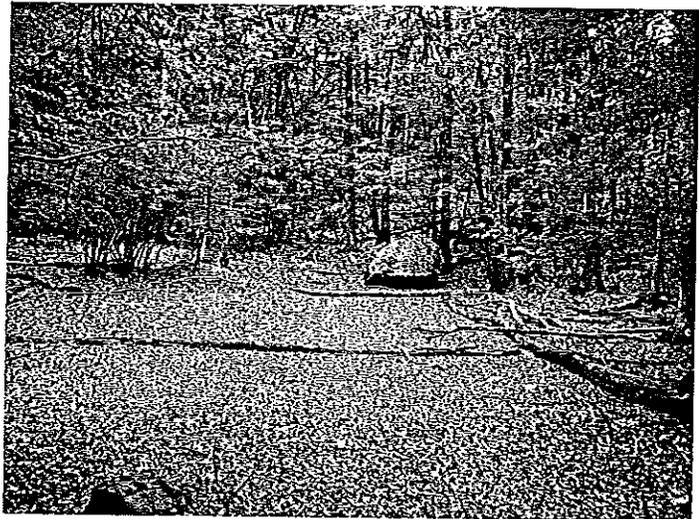
large aquatic insects. Several land-dwelling species also take advantage of the vernal bounty – snakes and raccoons are often seen loitering around vernal ponds late in the season, looking to nab a tasty tadpole or newly metamorphosed frog.

However, a vernal pond is a temporary habitat with ephemeral resources. True “vernal” pools fill with water in the spring from snowmelt and rainfall. In this region, we have what are technically “autumnal” pools – filling up in the autumn.



A spotted salamander adult arrives at a pond in southern Connecticut to breed in March.

Filling occurs once leaves have fallen from deciduous trees and the roots are no longer drawing water from the pond basin for the leaves (a process called transpiration). So these pools often fill in late fall, remain frozen during winter, and usher in the spring breeding season as soon as they thaw. If encountered regularly, you may notice that vernal ponds will not lose much water until around mid-May, coinciding with the formation of leaves on trees, which essentially act as straws sucking water out of the pond.



Two images from the same vernal pond in central Connecticut. The first photo was taken in early April when the pond was teeming with activity below the water's surface. The second photo shows the same pond basin in late July of the same year.

## Life Abounds

At its peak, a vernal pond is teeming with submerged activity. Fairy shrimp amble rhythmically through the water. Caddisfly larvae rummage around for materials to build their protective cases. Dragonfly larvae sit and wait for an unsuspecting victim and then – in one quick strike – they capture and consume. Several turtle species travel through the pond to munch on amphibian eggs. Microscopic zooplankton stutter through the water in quick bursts. Mosquito larvae wriggle to evade capture by salamander larvae. Snails and fingernail clams saunter slowly along the bottom. Leeches look nothing like their blood-sucking form as they glide by with ribbon-like grace. Diving beetle larvae and giant water bugs lurk beneath the surface, capturing prey many times their size, injecting digestive enzymes, and then siphoning the liquefied remains. Many species of algae also inhabit vernal ponds, including *Oophila amblystomatis*, a symbiotic species that colonizes amphibian eggs and uses the carbon dioxide generated by developing embryos to produce oxygen for the eggs via photosynthesis.

Amphibians are recognized as the quintessential vernal pond inhabitants, serving as endearing ambassadors to the public. Blue-spotted and Jefferson salamanders are the first to arrive at the ponds, often before the ice melts entirely (early to mid-March in southern New England). Moving during the first warm rain after a mild stretch of weather, wood frogs only trail them by a week or so. Male wood frogs form loud choruses – a cacophony of “quacking” intended to attract the females trickling into the pond. This little frog will lay an egg mass smaller than a golf ball yet containing, on average, 800 eggs. Within hours, the mass (attached to vegetation near the surface) will absorb water and swell to the size of a softball. Most female wood frogs will deposit their egg masses communally in the same location, which provides warmer temperatures for the eggs than if they were laid separately.

Male spotted salamanders enter the pond around the same time as wood frogs, depositing packets of sperm on the pond bottom. Once the eggs are fertilized, female spotted salamanders will lay their egg masses on submerged vegetation. In some ponds, the developing eggs of spring breeding amphibians are not always the first to arrive. If winter has not been too harsh (and the water did not freeze to the bottom), larval marbled salamanders have been biding their time since being laid as eggs in the dry pond the previous autumn. When the eggs of the spring-breeding species begin to hatch, marbled salamander larvae could be lurking and gorging on the hatchlings.

## Survival of the Fittest

Once deciduous leaves emerge and the water level of the pond begins to drop, the race is on. All of the amphibian species present in the pond as larvae share one critical goal – to get out of the pond before it dries. This depends on the pond holding water long enough for the amphibians to develop from egg to larvae and through metamorphosis – the amazing transformation of the body from a swimming aquatic form to one better suited for a terrestrial life on the forest floor. This includes the loss of gills and development of four limbs. Except in wet years, most vernal ponds will dry entirely by late summer. While this is a challenging environment, regular drying of the pond prevents many predatory species, especially fish, from living there.

Even in years with average precipitation there is evidence that the typical vernal pond in this region does not hold water



Mating adult wood frogs depositing eggs near the water surface. The smaller male (on top) clasps the female and fertilizes the eggs as they exit her body. The egg mass is deposited at a communal egg mass site – often the warmest area of the pond.

long enough to allow metamorphosis. This leads to boom-bust cycles in reproductive output – more years of very low survival interspersed by years with huge numbers of larvae making it to the terrestrial adult stage. Too many consecutive bust years and the local population within that pond will go extinct. Fortunately, one productive boom year can produce enough adults that many will leave that pond in search of an area with less competition for resources – thereby recolonizing ponds left unoccupied by earlier local extinctions.

## Conservation of Vernal Ponds – Connections Matter

These extinction/recolonization events are mismatched among ponds and across years, and this asynchrony means that some populations will do very well while others will decline. For this reason, thinking about vernal ponds as single, isolated entities is of limited utility. The only way to ensure the long-term persistence of vernal pond communities is to think of them as networks of ponds interconnected by animals dispersing between them. Ideally, this means taking a comprehensive look at landscape management to ensure that both vernal ponds and upland forest habitats are protected as a unit, rather than regulating individual wetlands in isolation. This landscape approach need not preclude development either. In neighboring states, land development companies and landscape architects are collaborating to test whether residential developments can be successfully integrated into areas with vernal ponds so that amphibian populations persist within the new landscape.

An amazing diversity of life arrives to take advantage of the temporary flood of nutrients contained within these habitats. Generally, vernal pond species are doing well within intact, forested landscapes across southern New England. So, as the warming weather of spring entices you out of hibernation and into the woods, keep an ear open for the “quacking” of wood frogs. Detour off the trail and follow the chorus to one of Connecticut’s most fascinating habitats – and plan to revisit several times during the year to fully appreciate their evanescent charm.

# Fishways: Providing Fish Access to Critical Habitat

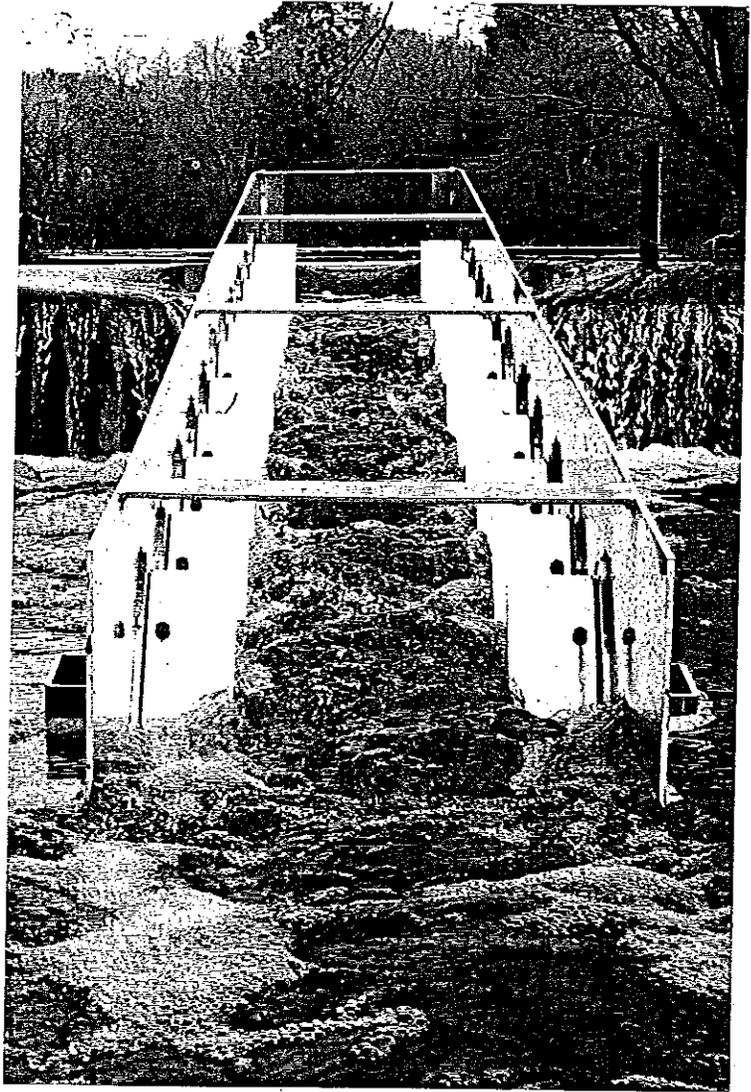
Article and photography by Steve Gephard, DEEP Inland Fisheries Division

The migratory fish runs in Connecticut rivers and streams that flow to Long Island Sound observed by the first Europeans are legendary. The historic record is clear: the runs of salmon, shad, river herring, sturgeon, striped bass, lamprey, smelt, and eels were abundant. Today, these runs are diminished and many are gone. While the causes are numerous, the main culprit has been dams. From the early gristmills of the 1600s, to the textile mills of the 1700s and 1800s, and the water supply reservoirs and hydroelectric dams of the 1900s, practically every one of our streams has been blocked by dams. Dams block the migration of fish, preventing them from reaching crucial spawning habitat upstream. In some cases, spawning habitat downstream of the first dam exist and the run could persist, even if at smaller numbers. The shad run on the Connecticut River is a good example of this scenario. In other cases, such as the Atlantic salmon run on the Farmington River, dams blocked migratory species from reaching any spawning habitat and those runs died out completely.

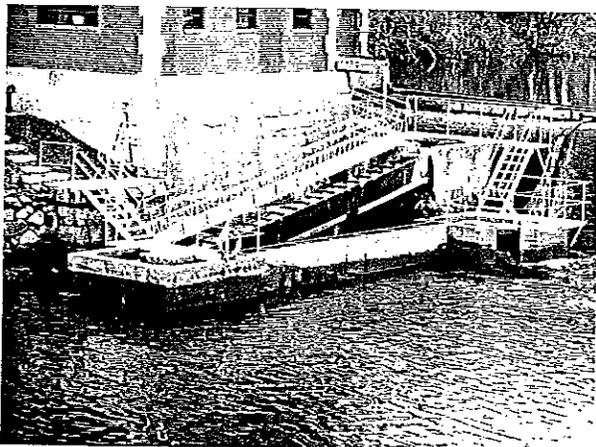
## Restoring Runs of Migratory Fishes

The DEEP's Inland Fisheries Division seeks to restore runs of migratory fishes and that means reconnecting these species to their spawning habitat and solving the problem of barrier dams. The best solution is to remove dams. That is often not possible so the next best option is to build fishways. Fishways are structures

specifically designed to allow fish to get around dams, either in an upstream or downstream manner. Fishways come in a variety of sizes and styles. A fishway must be custom designed to take into account the biology and swimming ability of the targeted species; the height, configuration, and purpose of the dam; and how water flows around it. The planning and design of fishways involve a collaboration of hydraulic and civil engineers and fish biologists knowledgeable in the behavior of fish. In Connecticut, this means the



The Vargas Pond Fishway on Stony Brook in Stonington is a town-owned Denil fishway that allows alewives to spawn in an old ice pond.



The Mianus Pond Fishway on the Mianus River in Greenwich is a steep pass fishway with two resting pools. It has annually passed 90,000 herring in recent years.

involvement of the Inland Fisheries Division Diadromous Fisheries Program staff, engineers with the U.S. Fish and Wildlife Service (Region 5), and trained engineers with private consulting firms that are hired to complete the design. Much of the planning for these fishways is supported through the monies received from the federal Sport Fish Restoration Program.

Currently, there are about 55 fishways in Connecticut, which range in size and can facilitate fish

movement over dams from 18 inches to 58 feet high. Most are located on coastal streams and major river systems like the Naugatuck, Farmington, and Shetucket, and these are operated to support the spawning runs of anadromous fishes, such as salmon, shad, and river herring. There are a few fishways in tributary streams, like Furnace Brook (Cornwall) and Bissell Brook (Granby), that enable trout and other resident species to move around former obstacles.

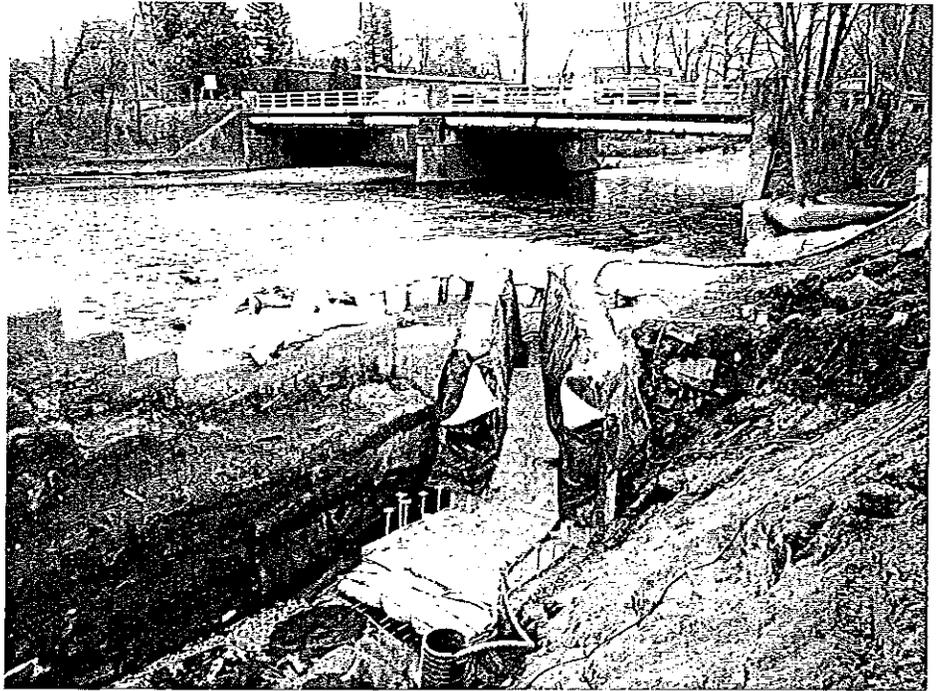
There are a variety of designs, such as pool-and-weir fishways, in which water spills six inches between a series of stair-step pools; steep pass fishways, which are prefabricated aluminum troughs with internal vanes that slow down the rush of

water; Denil fishways, which are generally larger concrete fishways with wooden angled baffles; and 'hybrid fishways' that have one section of one style and sections of other styles. Other fishways are built to appear more natural-looking. Some resemble natural streams that gradually wind around a dam. One is a rocky ramp fishway, where rocks are piled in a steep stretch of stream to create a natural-looking ramp. In the case of American eels, which are not strong swimmers, there are even specialized devices called eel passes to help them get over dams. Additionally, at some of the larger dams, there are fishlifts, which crowd fish into a tub or hopper that is then lifted in elevator-like fashion above the dam and dumped into an exit flume.

### *More Fishways on the Way!*

In fall 2011, construction began on the Wallace Dam Fishway on the Quinnipiac River in Wallingford. The fishway should be operational by April 2012 when the fish runs begin. A stone pool-and-weir fishway should be completed at the Wequetequock Dam on Anguilla Brook in Stonington during 2012, along with a new steeppass fishway at the Hallville Dam on Poquetanuck Brook in Preston. Work will begin in 2012 on a long-awaited (staff has been working on this project for over 20 years!) Denil fishway at the StanChem Dam on the Mattabesset River in East Berlin.

Some of these fishways are owned by the DEEP or a town and can be visited by the public. Others are privately-owned and are not open to the public. However, even privately-owned fishways benefit



The Wallace Dam Fishway on the Quinnipiac River in Wallingford is currently under construction. The dam is to the left of the photo.

the public by allowing fish to proceed upstream to spawn.

Several fishways are equipped with electronic fish counters or windows with cameras that allow the Inland Fisheries Division to count the number of fish that ascend. Data collected from these facilities are used to evaluate the fishway and monitor the progress of the restoration program on that stream.

### *How Do Fishways Get Built?*

Sometimes the DEEP can request that a fishway be a condition of a federal hydroelectric license or mandate a

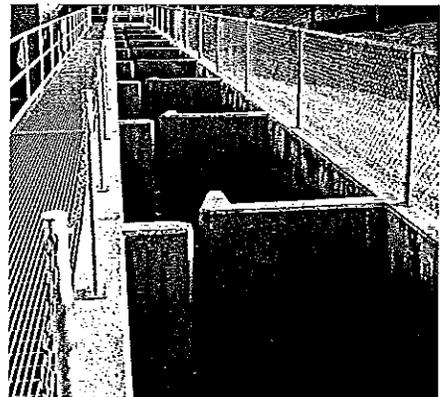
fishway as a condition to a State dam repair permit. More often, however, the project is voluntary, in which the Inland Fisheries Division cooperates with a town or conservation group to plan, raise funds through grants, apply for permits, and build the fishway. Often, these projects take five years to complete. If you own a dam that you suspect is blocking fish runs, you are encouraged to contact the Inland Fisheries Division ([steve.gephard@ct.gov](mailto:steve.gephard@ct.gov)) to discuss the possibility of acquiring grants and other potential funds to either remove the dam or build a fishway.

## *Visit the State's Largest Fishway at Rainbow Dam on June 2*

The DEEP owns and operates the largest fishway in Connecticut — in fact, one of the largest on the East Coast! The Rainbow Dam is a hydroelectric project owned by the Farmington River Power Company. It is located eight miles up the Farmington River from where it enters the Connecticut River. The dam is the first barrier to anadromous fish migrating up the Connecticut and Farmington Rivers to spawn. The 58-foot tall vertical slot fishway was built in 1976 by the DEEP and is operated annually to pass American shad, alewife, blueback herring, sea-run trout, sea lamprey, American eel, and many other species. It also is a primary trapping facility for returning adult Atlantic salmon.

The DEEP Inland Fisheries Division is hosting the annual Open House at Rainbow Dam Fishway on June 2, 2012, from 10:00 AM until 3:30 PM. The inner gates will be opened and the public will be allowed to enter areas normally off-limits. Visitors can go downstairs and watch fish swim past the observation window, visit the sampling tank for the downstream passage facility, tour the hydroelectric powerhouse, and watch biologists raise the trap and even trap salmon, if any happen to ascend the fishway that day.

To get to the fishway, take I-91 to exit 40 (Rt. 20) and proceed as if going to Bradley Airport. Take the Rt. 20 exit labeled Hamilton Road South, turn left at the end of the ramp, and then turn right at the first stop sign at Rainbow Road. Drive about ¼ mile and look for signs on the left side of the road.



The Rainbow Fishway on the Farmington River is the only vertical slot fishway in the state.

# A Splash of Blue - the Little Blue Heron in Connecticut

Article and photography by Paul Fusco, DEEP Wildlife Division

Of the many species of herons and egrets found in Connecticut, the little blue heron stands out as a low profile species in both appearance and behavior. The heron's inconspicuous look, coupled with its uncommon occurrence in the state, make the bird hard to find and easy to miss.

Little blues are about half the size of the familiar great blue heron. Adults have all dark slaty-blue plumage that blends into a dark maroon on the neck and head. Their legs are greenish, and the bill is pale blue and tipped in black. First year immature herons are quite different in that their plumage is all white,

with the exception of small dark spots on the wing tips. Young little blue herons can be distinguished from the similar-looking snowy egret by their pale greenish legs and pale blue bill with black tip. Second year birds are distinctively sprinkled with patches of blue as their plumage is in the intermediate stage of transition from the white of immatures to the dark blue of adults. It takes two years for a little blue to attain its full adult plumage.

## Habitat

In Connecticut, little blues are primarily coastal wetland birds. Seldom found far from the shoreline, they can be seen foraging in salt marshes, river estuaries, small ponds, and other waterbodies where they catch small fish, amphibians, and aquatic invertebrates, including crayfish. In other parts of their range, little blue herons are primarily freshwater birds, more likely to be found in shallow pond and lakeshore marshland habitats.

The stronghold of this heron's range in the United States encompasses the southeastern states from Florida to Texas, and up to Missouri. On the Atlantic coast, they range from Florida north to Virginia, with lesser concentrations extending to southern New England. Post breeding wanderers may travel further north and west. Connecticut is within the northernmost extension of the breeding

range. Little blues are also found south into Mexico, Central America, and the northern half of South America.

## Behavior

Most of the time, the little blue heron is a less active hunter than the other medium-sized herons and egrets with which it frequently associates (tricolored heron and snowy egret). It is usually seen cautiously stalking prey in a stiff-necked posture, with bill pointing down, ready to strike. There are times when the little blue will abandon its slow, methodical hunting routine in favor of a fast-moving running and stabbing technique, which can be entertaining for an observer.

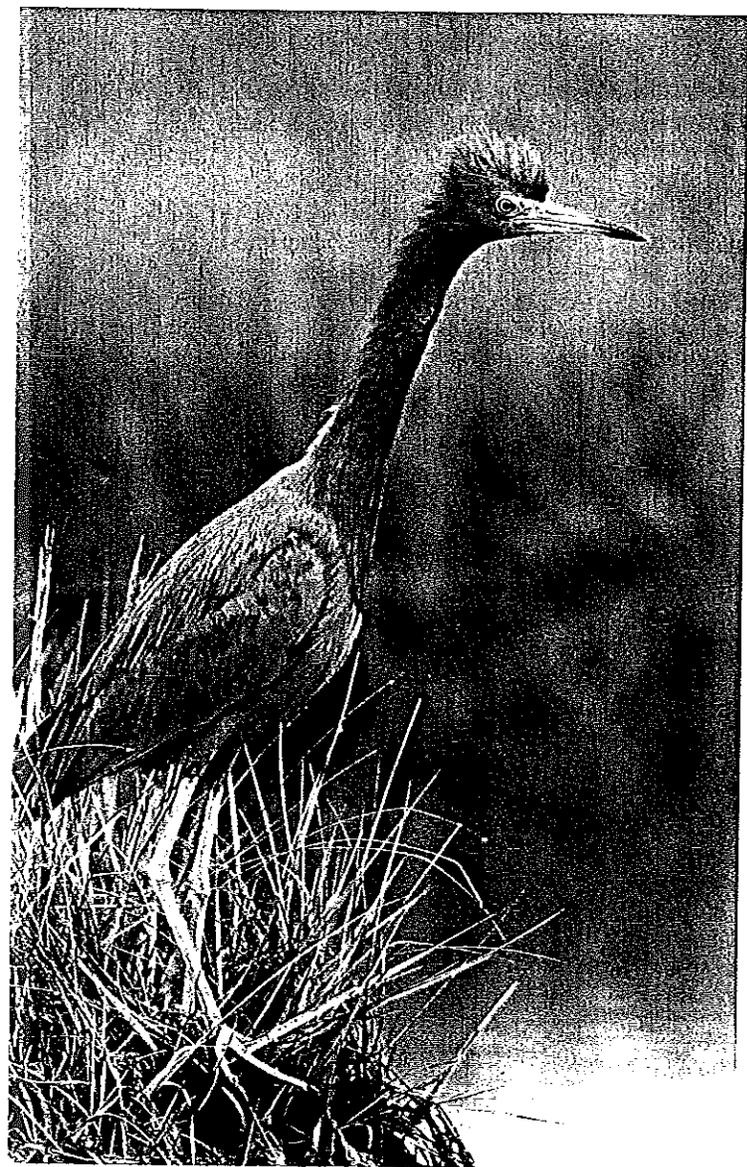
## Conservation

Little blue herons do not grow long breeding plumes, and thus did not experience the serious population declines that befell most of the other herons and egrets during the time of plume hunting for the millinery trade. At that time, large numbers of herons and egrets were slaughtered indiscriminately for their showy breeding feathers, which were used to adorn women's hats and fashion accessories.

Because of its limited breeding distribution within the state, the little blue heron is listed as a Species of Special Concern under Connecticut's Endangered Species Act. Like many wetland birds, little blue herons are negatively impacted by wetland loss and degradation associated with urbanization and development.

Connecticut has a number of wooded offshore islands that provide nesting habitat for little blue herons, as well for other herons and egrets. Little blues build a frail platform stick nest, typically in small trees or shrubs. They nest within a rookery that may also include snowy egrets, great egrets, glossy ibis, and black-crowned night herons. Their clutch is typically four or five pale blue-green eggs. Young in the nest are vulnerable to predators, including raccoons, herring gulls, and black-backed gulls. The young fledge after approximately 30 days.

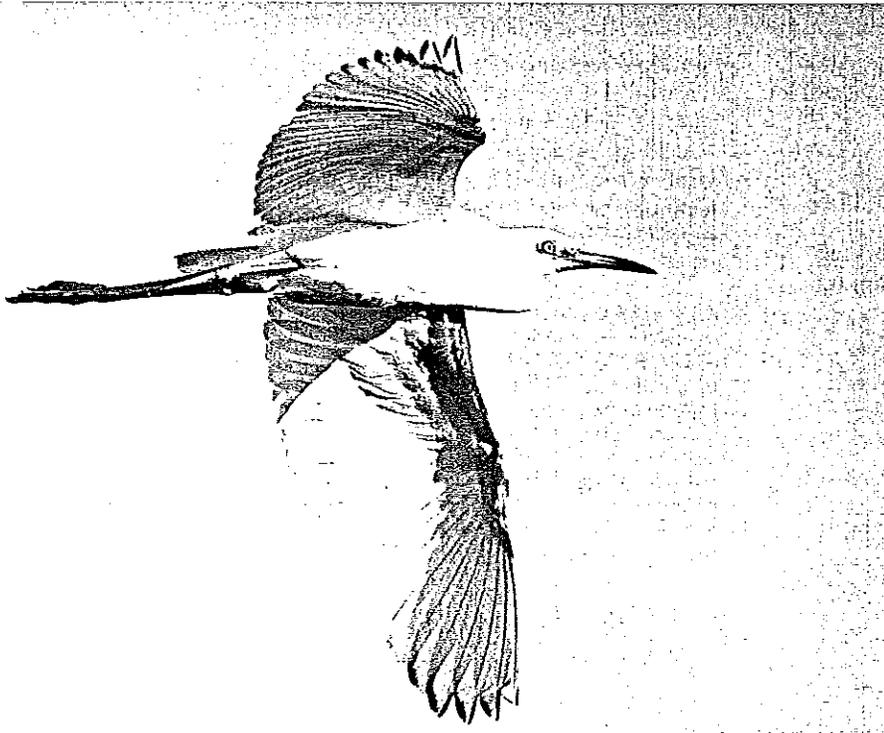
Two factors that are potential threats to island rookeries are human disturbance and predation. The DEEP and U.S. Fish and Wildlife Service encour-



medium sized heron, the little blue can be found at some coastal marshes in Connecticut.



Little blue herons often use a slow, methodical stalking technique in which their neck is held out stiffly and the bill is pointed downward, ready to strike.



The plumage of juvenile birds is a stark difference from the dark blue plumage of the adults. Note the small dark blue spots on the wing tips.

age people to help reduce these threats by staying away from fenced off nesting areas and not leaving behind any litter or garbage scraps. Litter and food scraps attract predators, such as raccoons and crows, which can have devastating

impacts on heron rookeries. If nest depredation becomes severe, the birds will abandon their rookery and may not return in succeeding years. Raccoons have caused herons and egrets to abandon their rookeries at some of Connecticut's

islands.

Human disturbance at Connecticut nesting sites has led to rookery abandonment in the past. Examples of disturbance include illegal camp-outs, free-running dogs, bonfires, and fireworks. All of these activities will cause birds to leave their nests, subjecting eggs and young to death. Young birds that are agitated may fall out of the nest and will not be fed by the adults, resulting in death from exposure, starvation, or predation. It is vital for people to take it upon themselves to be responsible when visiting shoreline areas and avoid disturbing nesting birds.

It is important to protect potential island rookery habitat, as well as those habitats in use. If one island becomes unsuitable for nesting, there should be an alternate site where the birds can move to ensure that herons and egrets remain a part of Connecticut's avian diversity. Offshore islands that are suitable breeding areas for egrets and herons are few in Connecticut and must be protected on a continuing basis to maintain healthy populations of these birds. Wetland protection and habitat restoration projects are helping to provide herons and egrets with the productive foraging areas they need to raise their young.

# 2011 Deer Season: Fourth Highest Harvest Ever Reported

Written by Howard Kilpatrick, DEEP Wildlife Division

Hunters harvested almost 13,000 deer during Connecticut's 2011 deer hunting season. This represents the fourth highest deer harvest ever reported in the state. The archery deer season experienced the greatest increase in harvest (11.6%) compared to 2010. Forty percent of the total deer harvest (5,211 deer) was attributed to bowhunters. Bowhunters are important in the management of deer, especially in the more developed parts of the state where firearms hunting is limited due to the density of houses.

The highest deer harvest ever recorded in Connecticut occurred in 1995 – a year when acorn production was poor (deer travel more to feed) and snow cover was present (deer are more visible) during much of the shotgun and muzzleloader



## Deer Harvested, Permits Issued, and Hunter Success, 1991-2011

Year	Harvest	Permits	Deer Killed per Permit
2011	12,897	54,427	0.24
2010	12,183	54,244	0.22
2009	11,774	60,387	0.19
2008	12,682	64,060	0.20
2007	11,062	60,395	0.18
2006	11,591	61,410	0.19
2005	12,663	60,433	0.21
2004	13,541	61,415	0.22
2003	12,670	60,203	0.21
2002	12,635	62,975	0.20
2001	11,950	62,870	0.19
2000	13,307	61,903	0.21
1999	11,032	60,576	0.18
1998	10,144	62,856	0.16
1997	11,893	62,614	0.19
1996	12,050	64,032	0.19
1995	13,740	60,939	0.23
1994	10,482	60,316	0.17
1993	10,360	59,714	0.17
1992	12,481	61,333	0.20
1991	11,311	56,984	0.20

hunting seasons, creating good conditions for hunting. Poor acorn crops experienced in 2004 and 2011 also resulted in an increase in the deer harvest.

Hunter success (0.24 deer harvested per permit issued) reached a record high in 2011, far exceeding any other year. Although permit issuance has dropped somewhat, hunters are still having a significant impact on Connecticut's deer population.

Connecticut's Deer Management Program focuses on stabilizing or reducing deer population growth for the best long-term interest of the deer resource, native plant and animal communities, and the public. Regulated deer hunting has proven to be an ecologically sound, socially beneficial, and fiscally responsible method of managing deer populations. Deer Program efforts have focused on increasing harvest of antlerless deer, coordinating controlled hunts for overabundant deer herds, assisting communities and large landowners with deer management issues, and research and management of urban deer populations.

## Number of Deer Harvested and Reported as Roadkills in 2010 and 2011.

Deer Season	2010	2011	% Change
Archery	4,670	5,211	11.6%
Shotgun-rifle	5,260	5,367	2.0%
Muzzleloader	1,031	1,123	8.9%
Landowner	1,222	1,196	-2.1%
<b>Total Harvest</b>	<b>12,183</b>	<b>12,897</b>	<b>5.9%</b>
Crop kill	715	804	12.4%
Road kill	1,456	1,683	15.6%

# Mild Weather Affected Results of Midwinter Waterfowl Survey

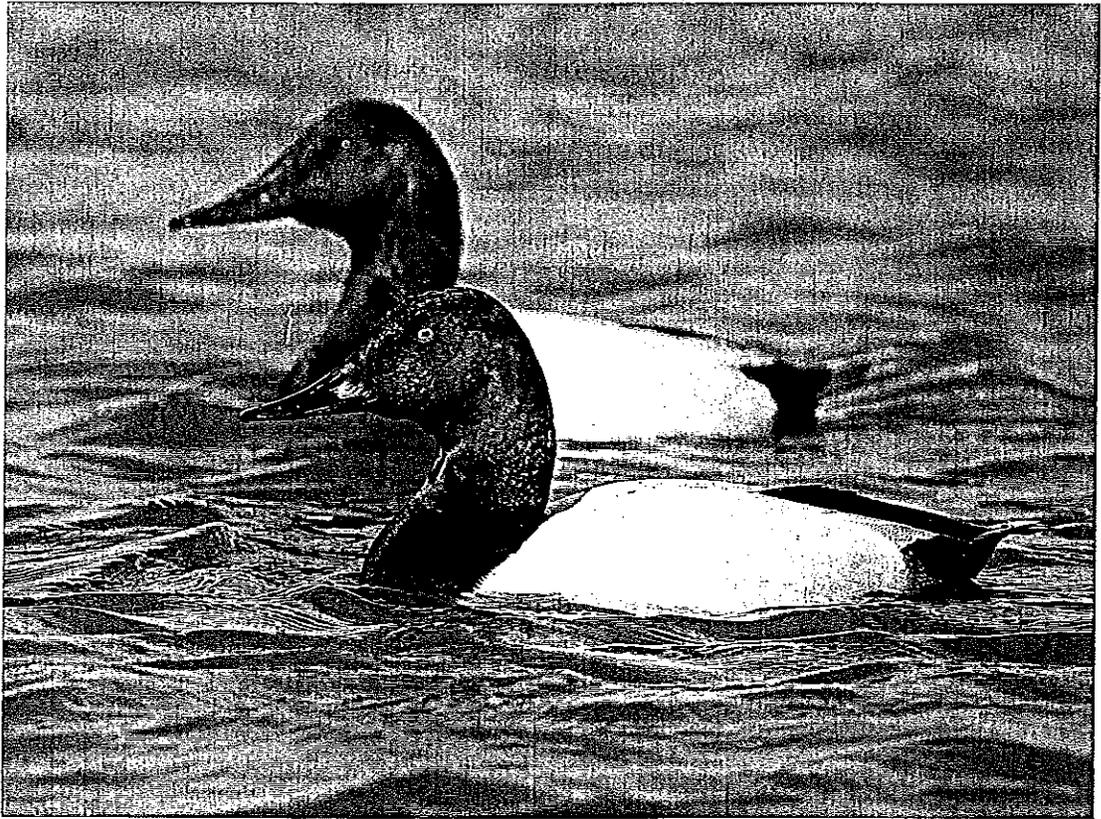
Written by Min T. Huang, DEEP Wildlife Division

Staff from the Wildlife Division conducted the annual Midwinter Waterfowl Survey in the first week of January 2012. The survey is conducted throughout the Atlantic Flyway, and is used as an index of long-term wintering waterfowl trends. The Atlantic Flyway is one of four migratory pathways in North America. The waterfowl that use each individual flyway differ in breeding origin, species composition, and abundance. The Atlantic Flyway generally follows the Atlantic Coast of North America and the Appalachian Mountains. In Connecticut, the survey is conducted from a helicopter and a census is obtained from the coast, the three major river systems, and selected inland lakes and reservoirs.

Conditions for the 2012 survey were relatively poor. The weeks preceding the survey were unusually mild, and most inland waterbodies were not frozen. The Midwinter Survey is designed to obtain an index of wintering waterfowl that have been pushed to the coast when inland waters freeze. When inland waters are unfrozen and open, waterfowl are distributed in many areas that are not part of the survey. In addition, helicopter flying conditions on the day of the survey were less than optimal with heavy, gusty winds and strong sun, making observation difficult.

The total number of ducks observed during the survey – 15,893 – was well lower than the 22,926 counted in 2011. This is in agreement with the general paucity of waterfowl on the coast that many hunters reported during the hunting season. The puddle duck (mallard, American black duck, American wigeon, and gadwall) count of 4,567 was in concert with the recent five-year average of 4,734, but well below the record 6,661 counted in 2011. Puddle ducks are typically found in fresh shallow marshes and rivers.

Following a recent trend, many pud-



P. J. FUSCO

Canvasbacks are occasionally observed during the Midwinter Waterfowl Survey; however, none were seen during the 2012 survey. This winter migrant can be found in brackish waters and marshes at the mouths of tidal rivers in Connecticut, or in large freshwater reservoirs and sheltered inlets on the coast.

dle ducks were observed in urban sanctuaries, often associated with supplemental feeding. The DEEP discourages citizens from feeding waterfowl for a number of reasons, including increased risk of disease transmission and potential for poor nutrition. A “Do Not Feed Waterfowl” brochure, which describes the potential hazards of feeding waterfowl, is available at [www.ct.gov/deep/wildlife/pdf\\_files/game/NoFeedWF.pdf](http://www.ct.gov/deep/wildlife/pdf_files/game/NoFeedWF.pdf).

The scaup count was one of the lowest in 15 years. Scaup wintering numbers in Connecticut continue to be lower than historical counts. The decline in the continental scaup population continues to be of concern for biologists nationwide. Habitat changes on the scaup’s breeding grounds in boreal

regions of North America may be a factor in the long-term population decline. Mergansers were less abundant than what was observed in 2011 and under the five-year average. Atlantic brant numbers were higher than in 2011 and above the recent average. Canada goose counts were once again high for this survey.

## Connecticut Midwinter Waterfowl Survey Results for Major Species\*

Species	2012	2011	Five-year Avg.
Atlantic Brant	1,700	1,600	1,300
Black Duck	2,100	3,500	2,700
Bufflehead	1,200	1,200	900
Canada Goose	4,100	3,800	3,500
Canvasback	0	100	100
Mallard	2,000	2,600	1,800
Merganser	900	1,100	1,400
Mute Swan	700	700	800
Long-tailed Duck	300	600	300
Common Goldeneye	800	1,000	700
Scaup	1,000	5,400	3,000

\* Rounded to nearest hundred

# A Silver Lining at Westwoods

Written by Emery Gluck, DEEP Forestry Division

The Westwoods Block of Cockaponset State Forest in Guilford is a gem of a public forest near Long Island Sound. The large extent of mixed hardwoods and conifers and the myriad of trails that run through it and the adjoining Guilford Land Trust property are treasured by the hiking public.

A severe six-acre fire in April 2008 on the edge of Lost Lake and the hemlock mortality from the hemlock woolly adelgid dramatically affected Westwoods' ecology. But the loss of many majestic hemlock (some have survived, at least for now) and oak trees has opened up a new ecological chapter. The standing dead trees provide great habitat structure for woodpeckers and other cavity-nesting birds. When the snags fall, the downed logs provide excellent cover for salamanders and insect hunting sites for numerous small mammals and snakes.

Dead wood is the basic building block of the forest-based food chain. Large quantities of standing dead and downed wood provide an important habitat structure. The hemlock mortality at Westwoods created structure that would not have occurred for another century or two, or until the next category 3 or higher hurricane. Additional structure created by the hemlock mortality includes canopy gaps (relatively small holes in the forest overstory).

The fire killed more big oak trees than a normal spring fire would because the large amount of dead hemlock increased the fire's intensity. A large patch (another old growth attribute) was created in the forest with the demise of the concentration of big oaks, paving the way for a new generation of sun-loving oaks and aspens to take seed. These new trees would not have been able to survive and grow in the shade of an intact forest. Large, new patches often host a unique suite of birds and mammals, such as blue winged warblers and New England cottontails. These animals require dense young seedling and sapling forests. These species are declining because of a deficiency in the events that create their habitat.

Insect epidemics, hurricanes, and frequent fires are among the historic disturbances that have helped sustain the biological diversity of our forest ecosystems for thousands of years. Pre-settlement fires probably burned at least 100 times as many acres annually as fires do today. Because fire and its ecological role have almost been completely extinguished from the landscape, a system of forest preserves alone will not sustain biological diversity.

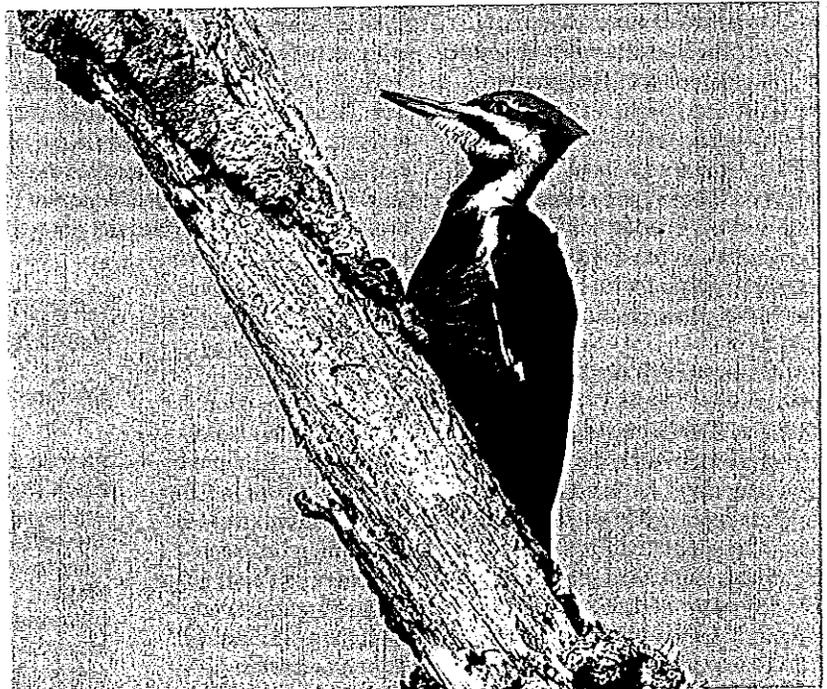
Forest management in Cockaponset State Forest often involves ecosystem restoration that emphasizes helping ecosystems that are not sustaining themselves (mainly due to the precipitous drop in the occurrence of forest fires). This is usually accomplished by designing and implementing harvests of small and large trees to mimic the effects of historic disturbances. Though a significant amount of restoration forestry is appropriate for much of



E. GLUCK - DEEP FORESTRY DIVISION

A severe wildfire in Westwoods in April 2008 resulted in a significant ecological event. It created an opportunity for a brushy patch of sun-loving oak and aspen seedlings to develop naturally into an uncommon young forest habitat after most of the older oaks were killed. The numerous dead trees provide important habitat structure for wildlife which is more common in old growth forests.

Cockaponset State Forest, no harvests will be proposed at Westwoods during the forthcoming Forest Management Plan. The ecological clock was reset by the fire and fast forwarded by the death of the hemlock without help from forest management.



P. J. FUSCO

The standing dead trees (snags) in the Westwoods Block of Cockaponset State Forest that were created by a forest fire and a die-off of hemlocks provide habitat for a variety of woodpecker species, including the pileated woodpecker.

# Common Five-lined Skink

## *Plestiodon fasciatus*

### Background and Range

The state-threatened common five-lined skink is the only lizard native to Connecticut. Skink populations are found in four widely separated areas in western Connecticut. Five-lined skinks have been documented on bluffs bordering the Housatonic River in southwestern Litchfield County; on ledges bordering the Housatonic River in northwestern New Haven County and the Naugatuck River; and along ledges in southwestern Hartford County. The five-lined skink is rare and localized in southwestern New England. The small size and fragmented nature of skink populations leaves them vulnerable to ecological catastrophes.

The range of the five-lined skink corresponds closely with the eastern deciduous forest. The species is found in southwestern New England (currently Vermont and Connecticut and historically Massachusetts), south to northern Florida, west to Wisconsin, and in eastern parts of Kansas, Oklahoma, and Texas. Disjunct populations exist in northeastern Iowa, western Wisconsin, and Minnesota. This species is at its northeastern range limit in southwestern New England; however, several populations are found in Ontario, Canada.

### Description

Five-lined skinks are smooth, shiny lizards with rows of tiny scales around the center of the body. They measure in length from 5 to 8.5 inches long, including the tail. The coloration is variable, depending on the age and sex of the skink. Young skinks have 5 white or yellowish stripes on a blackish body and a bright blue tail. As a skink grows older and larger, the pattern becomes less conspicuous; the stripes darken, the body lightens, and the tail turns gray. Females usually retain some of the striped pattern; the broad dark band along the side of the body remains prominent. Adult males usually show traces of stripes, but tend to become nearly uniform brown or olive in coloration. Males are territorial during the breeding season, and develop orange-red coloration on the head and jaws as a display of aggression.

### Habitat and Diet

The preferred habitat of the five-lined skink includes steep, rocky areas with open ledge, patchy tree and shrub cover, and an abundance of rotten logs and loose rock slabs. These habitats are usually adjacent to moist deciduous forests.

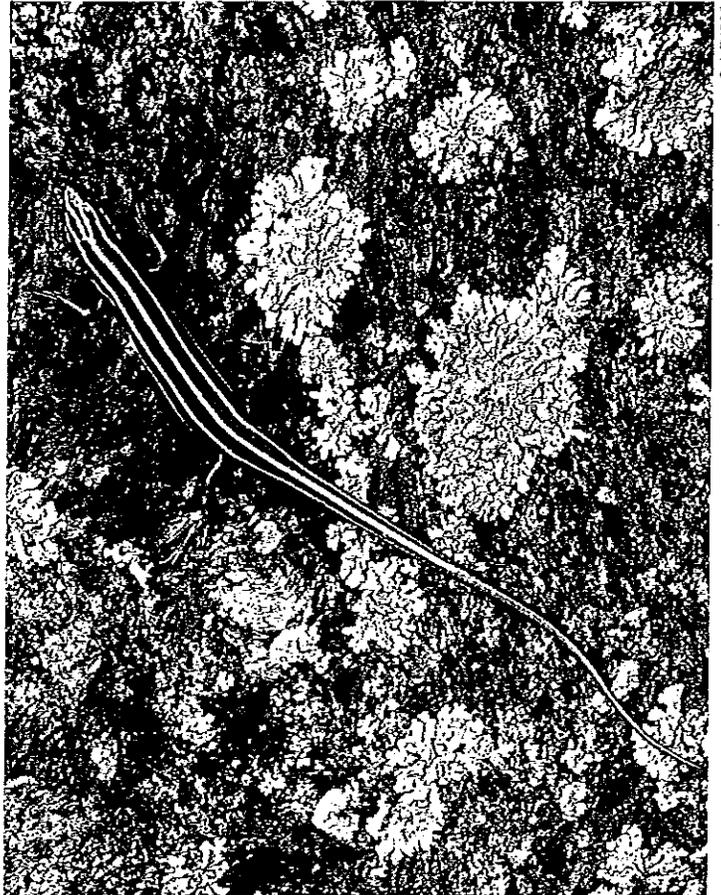
Skinks are active foragers that feed on insects (crickets, flies, grasshoppers, grubs, beetles, ants) and spiders.

### Life History

In Connecticut, courtship and mating take place during April or May. About 6 weeks later, in June or July, the female digs a small nest cavity in leaf litter, a rotting log, or loose soil and deposits between 4 to 20 eggs (typically 9 to 12). There is no covering on the nest, but the female guards the eggs during the month-long incubation period. The eggs hatch during August and September. One to 2 days after the eggs hatch, the female leaves the young on their own and does not return.

### Interesting Facts

Although five-lined skinks spend much of their time under rocks and other shelter, they will bask in sunny spots on logs or rocks. Rock climbers at several sites in Connecticut sometimes see



P. J. FUSCO

skinks running along cliffs. The lizards are primarily terrestrial, but will climb dead trees to find insects.

Skinks hibernate singly or in small groups from October through mid-March in decaying logs, under large rocks, or underground, below the frost line.

The five-lined skink is the only lizard found in New England, even though there are about 5,000 different species of lizards worldwide. Lizards are reptiles, and although at first glance they might look similar to salamanders, which are amphibians, they are different. Lizards generally have scales that cover their bodies, claws on their feet, and external ear openings. Salamanders have smooth and moist skin, no claws, and no external ear openings.

When grasped by a predator, both adult and juvenile skinks will readily lose most of their tails. There are cleavage points along the tail vertebrae that facilitate the breakage, much like perforations on a piece of paper that make tearing the paper easier. The detached tail thrashes on the ground to distract the predator, generally allowing the lizard to escape. The five-lined skink will grow a new tail that is somewhat shorter than the original and somewhat gray in coloration.

### What You Can Do

*If you ever find a skink in the wild, observe it from a distance and leave it alone. Report possible sightings to the Wildlife Division (860-675-8130). Wild skinks should NOT be kept as pets. Those sold in pet stores should NOT be released to the wild as they can introduce diseases to wild and genetically distinct populations.*

# Encounters in Red and Blue: the Five-lined Skink

Written by Hank Gruner, Vice President of Programs at the Connecticut Science Center



It was early May and each morning I had observed him sitting along the edge of a crevice formed by an overhanging rock that was lying atop a ledge outcropping. The bright reddish-orange color on the head and jaws indicated that it was a male, and I knew that this was likely his territory and he would remain in the area. Despite this, for two days in a row now he had easily escaped me, no amount of stealth or patience on my part allowed me to sneak up on, or surprise him.

So, there I sat on the ledge coloring the surface of my left index finger with a red "Sharpie" marker that I usually used to label specimen bags. With this task completed, I positioned myself above and slightly to the side of the crevice. I reached over with my left arm and extended my index finger to within a foot of the crevice opening. I then began to wiggle my finger. Several minutes went by and sure enough he slowly emerged, flicking his tongue in-and-out and twitching his head – a sure sign that he was aggravated by the presence of what he believed to be another male skink intruding on his turf.

I wish I could say that my next move was a smoothly executed grab that readily secured him, but he easily avoided my attempt at capture. To be honest, I conducted my "red finger" experiment more to satisfy my own curiosity than to perfect a new method for capturing skinks. Although I had previously captured and marked a good number of skinks at this site, all of these captures had been made by carefully flipping over loose slabs of rock and quickly securing the animals before they were able to dart away.

## So, What Is a Skink?

Skinks are a type of lizard – in fact they are among the most successful family of lizards in the World – occupying a wide range of habitats from tropical forests to deserts. Most Connecticut residents are probably more familiar with the large blue-tongued skink, a native of Australia that is popular in the reptile pet trade, than they are with the five-lined skink, the only lizard native to New England. This is not surprising given the rarity of skink populations found here among the cooler latitudes of New

England. Connecticut is home to several populations located among steep, rocky ridges in western parts of the state. Vermont is home to a single population, and a couple of historic records from Massachusetts exist, although these are questionable. If you travel to the southeastern United States, five-lined skinks are more common and occupy a wider range of habitats than here in New England. I have even observed them inside the park at Disney World in Florida.

## Salamander or Lizard?

Because of their similarity in appearance, many people mistake salamanders for lizards. In Connecticut, there are 12 species of salamanders. Salamanders, however, are "amphibians" and lizards are "reptiles," altogether entirely different beasts. Careful observation of their bodies reveals several external characteristics that help distinguish salamanders and lizards. Lizards are covered with dry scales like snakes (to whom they are distantly related) and, in the case of skinks, the scales are small, smooth, and shiny. Salamanders, on the other hand, have no scales, and they are covered with a moist, rubbery skin much like frogs. Lizards have external ear openings located on the sides of their head. Salamanders do not. Finally, lizards possess hard claws, while salamanders do not.

## Looking for a Flash of Blue

In late August, I returned to the study site where I had encountered the "red-headed" male skink defending his territory. Only on this trip, I was searching under rocks and logs hoping for a glimpse of not red, but a different color entirely. And there it was, after an hour of flipping rocks under the hot sun of the open ledges, the flash of electric blue. The sun's rays had warmed the young lizard's body well and he was primed for flight. But, I had only been at it for an hour and wasn't too tired. As always, I anticipated a lizard under every rock, so he was quickly secured in my hand.

I had timed my visit to coincide with the emergence of young skinks. After mating in spring, female skinks select a suitable nest site, usually beneath a rotting log or slab of rock exposed to the

sun. There the females excavate a shallow depression in which they deposit as few as four to as many as 15 eggs. Unlike most reptiles, female skinks are attentive mothers. After depositing her eggs, the female skink curls her body around the clutch. She will even occasionally reposition the eggs. This brooding behavior continues until the eggs hatch, at which time she will leave the nest site.

Although the juvenile skinks are now on their own, they are not without defenses. As I re-positioned the young skink in my hand to get a secure grip, its brilliant blue tail came into view. I took great care to avoid putting any pressure on the tail as I did not want to end up with a wriggling tail and no skink. A fascinating defensive adaptation that five-lined skinks and many other lizards possess lies in the unique structure of their tails. Sections of the vertebrae that make up the tail have weak points that enable a length of tail to easily break off if grasped by a predator, much like a piece of paper easily tearing out of a notebook or pad along a perforation line. The bright blue coloration of the juvenile five-lined skink's tail serves to attract a predator's visual attention, especially as the young skink rapidly darts away, making it more likely that this is the part of the skink's body that is grasped. Once the tail breaks-off, it violently wriggles, further engaging the predator and allowing the skink to escape. The wound heals rapidly and, in fact, the skink will grow a new tail, although not completely or as brightly colored.

Interestingly, as skinks grow larger and age to adulthood, they completely lose the bright blue coloration. Tail loss for a young skink, although certainly traumatic, is not fatal and, for a rapidly growing juvenile, the tail quickly regenerates. However, tail loss for an adult is a different story. The tail is where fat is deposited, providing important energy reserves. Loss of the tail, which regenerates more slowly and less completely in adults, is a less beneficial trade-off. Thus adult skinks, although capable of tail loss, don't advertise this option as strongly as

juveniles do.

With their bright blue tails, ebony bodies, and five yellowish-white stripes that almost appear to glow, newly hatched skinks are among the most brilliantly-colored animals in nature. After focusing on taking specific measurements, I always find it hard not to take a moment

to admire their beauty before releasing them. From red to blue, the five-lined skink is a living jewel among Connecticut's rich diversity of animal species and a fascinating study in unique adaptations in the animal world.

Hank Gruner is the Vice President of Programs at the Connecticut Science

Center, located in Hartford, and a herpetologist who has conducted surveys and ecological studies of the five-lined skink in Connecticut. He has a permit from DEEP allowing him to conduct these important studies. Thanks are extended to Hank for reviewing the skink fact sheet and providing input and information.

## May Is Swiftly Approaching, Time for Spring Chimney? . . . Cleaning!

Written by Shannon Kearney-McGee, DEEP Wildlife Division

Chimney swifts have been on the decline since the 1960s and are quickly disappearing from their northern range in Canada. Although chimney swift numbers are also declining in Connecticut, they are still fairly common here. So, it is imperative to conduct research and monitoring of these birds now while there may still be time to stop their decline.

Chimney swifts often go unnoticed because they spend so much time high in the air. But, what we should notice is that they eat one-third of their body mass in insects every day! What is more likely to be noticed is that chimney swifts nest in people's homes. The birds can nest in any vertical cavity that has an internal area of at least 8 x 8 inches. Most often, they choose to nest in chimneys, hence their common name. Unlike squirrels, raccoons, or other wildlife that may frequent your chimney, swifts do no harm. Their nests are made of small sticks that fall after the birds leave. The worse offense they may cause is the noisy calling of chicks during the month of July, but at least swifts sleep at night. If chimney swifts nest in your home and you use your fireplace chimney during winter, the best time to have it swept and cleaned is mid-March before the birds return to nest. You should also remember to keep the fireplace damper closed during summer to prevent birds from flying into the house and becoming trapped or injured.

### How Many Birds Went in that Chimney?

May is the time when many bird-watchers head to the forest to catch a glimpse of rare migrants. As you return from your morning birding, I challenge you to head to the urban centers and school buildings for an evening swift watch! May is also when chimney swifts return from their wintering grounds in the

Amazon Basin. Although swifts nest one pair per chimney, they collect in fantastic numbers to roost overnight in larger chimneys at local school and old factory buildings.

If you find birds descending into a large chimney, I challenge you now to count how many! DEEP monitoring of 12 roosting chimneys last year revealed that the numbers of birds entering a chimney in one night can be quite large – over 1,000 birds – and can change depending on location.

The Wildlife Division is using citizen scientist monitoring to understand what these patterns might mean. Last year, with the help of volunteer monitors, birds were observed entering chimneys much later than expected during the mid-summer months. Birds also were observed using different patterns when entering chimneys. Sometimes they entered all at once (40-80 at a time), and sometimes they trickled in, in smaller groups (2-3 at a time). In addition, the number of birds at one roost did not always follow the same pattern as birds at another roost. These varying characteristics may indicate breeding activity and nesting failure. Division researchers do not yet understand what these count differences and timing characteristics may mean, and that is why citizen scientists are needed to help collect more data. Locations of the primary roosts being monitored are: East Windsor, Falls Village, Meriden, New Hartford, Oxford, Somers, Southington, Thomaston, West Simsbury, Willimantic, and Woodbury. Other roosts can be monitored if volunteers are willing to do so.



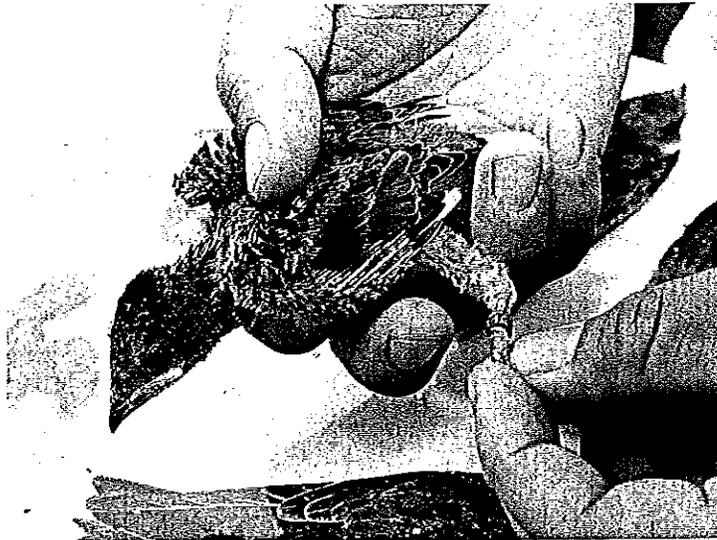
As part of chimney swift monitoring and research, the Wildlife Division is seeking the locations of additional swift nesting and roosting sites, as well as recruiting volunteers to help with monitoring. If you know of a chimney swift roosting or nesting location, or if you would like to assist with monitoring, please contact Shannon Kearney, of the Wildlife Division, with the details at [shannon.kearney@ct.gov](mailto:shannon.kearney@ct.gov). Roost monitors are asked to commit to counting chimney swifts at roosts once a week between the months of May through September. If you have planned vacation weeks, multiple observers will be assigned to a roost or Division staff can fill in during that time.



## The Great Park Pursuit Spring Sprint

### Help Locate Banded Purple Martins

The DEEP Wildlife Division initiated a statewide color banding study in summer 2011 to assess the dispersal patterns of sub-adult purple martins in Connecticut (see article in the Sept./Oct. 2011 issue of *Connecticut Wildlife*). Over 500 juvenile purple martins were banded from six colonies across the state. Each colony was assigned a different band color to determine the natal colony of birds viewed



This young purple martin was fitted with an orange leg band, which identifies it as a member of one of six martin colonies that are the subject of a current research project. Report banded purple martins to the DEEP Wildlife Division. PHOTO BY P. J. FUSCO

in the future. Understanding how these birds move about the state and colonize new sites will aid in the recovery of this state threatened species. However, for this study to be successful, these banded birds need to be seen again. The success (or failure) of the study will be heavily dependent upon the number of sighting reports received.

You can help by keeping an eye out for banded birds starting this spring. Purple martins typically begin to return to Connecticut from their wintering grounds during the first few weeks of April, continuing to arrive into May. If you see a color-banded purple martin, please report the sighting to the DEEP Wildlife Division by email ([Geoffrey.Krukar@ct.gov](mailto:Geoffrey.Krukar@ct.gov)) or phone (860-675-8130). Be sure to provide the following information: location of the bird, date, color of the band (red, blue, green, purple, orange, or yellow), and the alphanumeric code (if visible).

*Geoffrey Krukar, DEEP Wildlife Division*

### Winter Duck Banding Continues

An understanding of seasonal survival rates of waterfowl is critical for waterfowl managers. Identification of limiting factors during the life cycle informs managers how best to develop and implement conservation actions to benefit waterfowl populations. The Wildlife Division's Migratory Game Bird Program is finishing up its third winter of puddle duck banding. This effort, which is being conducted in cooperation with other states and Canadian provinces in the Atlantic and Mississippi Flyways, will provide the data needed to estimate winter and spring survival rates of black ducks and mallards, two of the most important ducks in the eastern United States.

Ducks were caught using rocket propelled nets over bait. Winter (post-season) banding creates many challenges that are not present during the traditional duck banding period of August through September (pre-season). Extreme conditions make work difficult. Temperatures in the teens with gusty winds and ice make for dangerous conditions, a far cry from being able to wear shorts and sandals while doing our pre-season banding! However, as the weather worsens, ducks become more concentrated and are a bit easier, at times, to catch. The challenges of winter banding are compounded by the difficulty in estimating the age of ducks in January and February. Accurate aging is critical for estimating survival rates.

*Min Huang, DEEP Wildlife Division*

This April, the DEEP will officially be bringing back the Great Park Pursuit in an abridged version that is being called the "Spring Sprint." Follow us

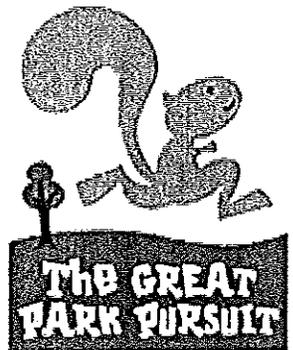
on a four-week adventure as we hike, paddle, canoe, birdwatch, and "energize" our way through Connecticut's State Parks and Forests.

The Spring Sprint will kick off on Saturday, April 28, at Goodwin State Forest, in Hampton, as we celebrate Junior Forest Ranger Day, in conjunction with the Boating Division's Paddle Smart Event. The Spring Sprint will wrap up on Saturday, May 16, at a secret location that will be revealed in future clues.

If you can meet the "challenges" at each of the four game locations, you will be eligible to win some great prizes.

Registration will open in March, so check the No Child Left Inside® Web site ([www.ct.gov/ncli](http://www.ct.gov/ncli)) for additional details.

**The Great American Backyard Campout:** Instead of ending the Spring Sprint with a Family Campout, the DEEP will be hosting the annual campout on June 23-24 in conjunction with the national Great American Backyard Campout. More details to follow.



Sarah Woodward (left), a contractor for the DEEP Wildlife Division, and Wildlife Technician Kelly Kubik banding winter-trapped ducks.

PHOTO BY M. HUANG



## 2012 Deer Lottery

A lottery is conducted to award a limited number of permits for deer hunting on certain state lands and controlled hunt areas. To hunt these areas, you must apply for a deer lottery permit. Other state areas are open to hunting with a no-lottery permit.

To reduce spending, the DEEP will no longer mail deer lottery applications to the town halls. Everyone is encouraged to apply for the deer lottery using the on-line application process at [www.ct.gov/deep/hunting](http://www.ct.gov/deep/hunting). If you have no way to apply on-line, the DEEP is offering the following two options:

1. Pick up a paper application form from one of the following DEEP Offices:  
 DEEP License and Revenue Office, Hartford, 860-424-3105  
 Franklin Wildlife, North Franklin, 860-642-7239  
 Sessions Woods, Burlington, 860-675-8130  
 Marine Headquarters, Old Lyme, 860-434-8638  
 Eastern District Headquarters, Marlborough, 860-295-9523  
 Western District Headquarters, Harwinton, 860-485-0226
2. Send a stamped, self-addressed envelope to  
 Franklin Wildlife, 391 Route 32, North Franklin, CT 06254.  
 You will be mailed an application form that you can then fill out and mail back.

**Application Deadline:** You can apply on-line until June 15. If you use a paper form, it must be postmarked (metered mail, stamps not a substitute) by June 1, 2012.

## Hand-carved DEEP Logo Plaque Donated to Sessions Woods Conservation Education Center

Guy Gagnon, long-time volunteer Conservation Education/Firearms Safety (CE/FS) instructor, recently donated a four-foot diameter, hand-carved DEEP logo for display at the Sessions Woods Conservation Education Center in Burlington. Guy has hand-carved two other large wooden plaques that he donated to the Wildlife Division -- one depicting the CE/FS logo and the other the former DEP logo. The beautiful rendition of the new DEEP logo now hangs in the large meeting room at Sessions Woods. Guy has also used his wood carving skills to design signs for local sportsmen's clubs.

The Wildlife Division would like to thank Guy for his latest donation to Sessions Woods and his ongoing volunteer efforts with the CE/FS Program. Guy has been a volunteer hunter safety instructor since 1968, even before Connecticut's CE/FS Program was officially established.

*Jim Warner, DEEP Wildlife Division*



## CT Audubon Society's Wacky Nest Quest Photo Contest

Have you ever seen a bird build a nest in the most bizarre spot that defies all reason? Do you ever wonder why that bird chose YOUR drain pipe to raise its young? Can you identify bits of your "trash" that are now key architectural elements in the nest in your yard? If you answered "YES!" to any of these questions, then YOU will want to enter Connecticut Audubon Society's (CAS) First Annual Wacky Nest Quest Photo Contest! All you have to do is take a photo of your exquisite nest and submit it to the CAS by June 1, 2012. Winners will be selected in two main categories, children (up to age 12) and adults. Winning entries will receive special prizes at a reception this summer and be featured on the CAS website.

Please email your entry to [cnoves@ctaudubon.org](mailto:cnoves@ctaudubon.org) and type WNQ in the subject line, or mail it to WNQ c/o Connecticut Audubon Society, 2325 Burr Street, Fairfield, CT 06824. All submitted photos must include your name, telephone number, address, the city and state location of the nest, and the date the photo was taken. Only one entry per person, please. A \$5 entry fee is required; payable by cash, check, or credit card. Please submit payment with mailed entries. CAS staff will call emailed entries to obtain payment.

Visit Connecticut Audubon Society's website at [www.ctaudubon.org](http://www.ctaudubon.org) for a complete listing of their spring programs, summer camps, and special events.

## Is your Yard Eco-Friendly?

The Northeast Organic Farming Association (NOFA) Organic Land Care Program has created a booklet especially for homeowners new to organic landscaping. *Introduction to Organic Lawns and Yards — Plus a Checklist for an Eco-Friendly Property* is a quick-start guide to implementing organic practices, such as promoting soil fertility, conserving water, and controlling invasives and pests without pesticides. The booklet also includes beautiful photographs, inspiring quotes, and resource lists. You can download this 54-page publication or purchase it at [www.organiclandcare.net](http://www.organiclandcare.net).



*Save the Date! The 3rd Connecticut Hunting & Fishing Appreciation Day will be held on Saturday, September 22, 2012, from 10:00 AM-4:00 PM at the Sessions Woods Wildlife Management Area in Burlington. Stay tuned to Connecticut Wildlife and the DEEP Web site ([www.ct.gov/deep/huntfishday](http://www.ct.gov/deep/huntfishday)) for updates.*

## Outdoor Safety



### Turkey Hunting Safety Tips

The 2012 spring turkey hunting season runs from April 25 to May 26. Hunters can take two bearded birds on state land and three bearded birds on private land. Two Junior Hunter Training Days are scheduled for Saturday, April 14 and Saturday, April 21. Hunting hours are one-half hour before sunrise to 12:00 noon. Hunters are encouraged to keep the following safety tips in mind while in the field:

- Positively identify your target before pulling the trigger.
- Make your position known to other hunters.
- Never stalk a turkey or turkey sound.
- Assume every noise and movement is another hunter.
- While calling, select a natural barrier, like a tree trunk, to protect your back.
- Shout "stop" to alert approaching hunters.
- Eliminate red, white, blue, and black from your clothing.
- Be 100% certain of your target and what lies beyond before pulling the trigger.

Hunting can be a safe and enjoyable activity. Thinking before you react will keep it that way. Remember, once the trigger is pulled, there is no calling back the shot.



P. J. FUSCO

Maintaining a safe spring turkey hunting season for all hunters to enjoy is a priority for the DEEP. All hunters should be aware of, and are encouraged to follow, the basic safety tips for spring turkey hunting.

# Conservation Calendar

- Late March..... Remove bird feeders from your yard to avoid attracting hungry bears that are emerging from their winter dens. Whenever a bear visits a bird feeder, take the feeder down immediately. To learn more about what to do if you encounter a black bear, visit the DEEP's Web site at [www.ct.gov/deep/wildlife](http://www.ct.gov/deep/wildlife).
- 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.
- April 22 ..... **Earth Day** — Visit the DEEP Web site for more information and a listing of Earth Day events ([www.ct.gov/deep/earthday](http://www.ct.gov/deep/earthday)).
- April 28 ..... **Great Park Pursuit Spring Sprint Kick-off**, at Goodwin State Forest in Hampton. Celebrate Junior Forest Ranger Day in conjunction with the DEEP Boating Division's Paddle Smart Event. Visit the No Child Left Inside® Web site ([www.ct.gov/ncli](http://www.ct.gov/ncli)) for directions and more specific information.
- May 12..... **International Migratory Bird Day** — 2012 marks the 20th anniversary of International Migratory Bird Day. The theme for this year's celebration — "Connecting People to Bird Conservation" — focuses on 20 ways people can help preserve birds. To learn more about this special day, visit [www.birdday.org](http://www.birdday.org).
- May 18..... **Endangered Species Day**, which was initiated by the U.S. Congress in 2006, is a celebration of the nation's rarest plant and animal species. The U.S. Fish and Wildlife Service and numerous conservation organizations will observe Endangered Species Day to recognize conservation efforts underway across the nation aimed at helping America's imperiled species.
- June 2..... **Rainbow Dam Fishway Open House** in Windsor, from 10:00 AM-3:30 PM (See page 11 for more information).

## 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.

- March 25..... **The Lifestyles of Mushrooms and Fungi: An Introduction to Fungal Ecology with Special Guest Bill Bakaitis**, from 9:30-11:30 AM. Join the Connecticut Valley Mycological Society, during their annual meeting, for this unique presentation featuring the well-noted lecturer Bill Bakaitis — writer, research associate in mycological studies, teacher, and founder of the Mid-Hudson Mycological Association. Bill will introduce participants to the various lifestyles of common mushrooms and fungi, including decomposers and parasites. These mushrooms are often seen while walking in the forest. The Mycological Society's meeting includes refreshments at 9:30 AM with the presentation from 10:00 to 11:00 AM. Questions and answers follow the program.
- April 22 ..... **The Friends of Sessions Woods Annual Meeting with a Unique Program on Porcupines by the Dynamic Gerri Griswold**, starting at 1:00 PM. The Friends of Sessions Woods Annual Meeting is open to all! Gerri Griswold, a DEEP-licensed wildlife rehabilitator, is the featured presenter. Gerri will introduce participants to a live porcupine and explore the natural history of one of Connecticut's most interesting mammals. Traditionally, the Annual Meeting also features a potluck dessert extravaganza preceding the presentation at 12:30 p.m. Please bring a dessert to share. Registration is appreciated but not required.

## Hunting and Fishing Season Dates

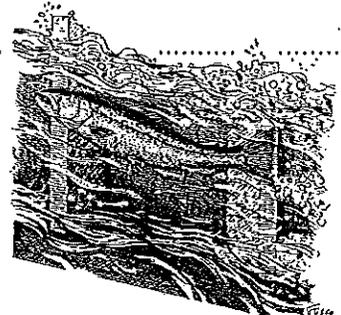
April 14 & 21 ..... Spring Turkey Junior Hunter Training Days to provide junior hunters with an opportunity to learn safe and effective hunting practices from experienced hunters. Visit the DEEP Web site ([www.ct.gov/dep/hunting](http://www.ct.gov/dep/hunting)) to learn more.

April 21 ..... Opening day of fishing season

April 25-May 26 ..... Spring Turkey Hunting Season

..... Consult the 2012 Connecticut Hunting and Trapping Guide and the 2012 Angler's Guide for specific season dates and details. The guides are available on the DEEP Web site ([www.ct.gov/dep/hunting](http://www.ct.gov/dep/hunting) or [www.ct.gov/deep/fishing](http://www.ct.gov/deep/fishing)), and also at DEEP facilities, town halls, bait and tackle shops, and outdoor equipment stores. Go to [www.ct.gov/dep/sportsmenlicensing](http://www.ct.gov/dep/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.

# Connecticut Wildlife



## Subscription Order

Please make checks payable to:  
Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013

Check one:

- 1 Year (\$8.00)     2 Years (\$15.00)     3 Years (\$20.00)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Zip: \_\_\_\_\_ Tel.: \_\_\_\_\_

Check one:

- Renewal  
 New Subscription  
 Gift Subscription

Gift card to read: \_\_\_\_\_

### Donation to the Wildlife Fund:

\$ \_\_\_\_\_

Help fund projects that benefit songbirds, threatened and endangered species, reptiles, amphibians, bats, and other wildlife species.

