



# MASSACHUSETTS ENVIROTHON

Thursday, May 18, 2017

Mass Audubon's Drumlin Farm Wildlife Sanctuary, Lincoln, Mass.

## Welcome!

Today we celebrate 30 years of Massachusetts Envirothon teams!

Teamwork is at the heart of the Envirothon experience. You work hard with your teammates, depend on their knowledge and skills, listen to their ideas, and draw on their connections.

In the real world, too, success comes from working together. As chair of the Massachusetts Envirothon Steering committee, I am acutely aware of the importance of teamwork. Working with dedicated Envirothon volunteers is one of the things I have enjoyed most about this role.

Today we are especially grateful that Mass Audubon, especially the staff of Drumlin Farm Wildlife Sanctuary, is on the Envirothon team. What a perfect site for this event!

While teams are competing with each other today, in a larger sense we are all on the same team. When it comes to protecting and conserving natural resources, we are all working together. We have some star players, but no player succeeds alone.

The Envirothon is a place where the next generation is introduced to the joys and challenges of environmental stewardship. Speaking for the Envirothon and the whole environmental community of Massachusetts, I'd like to say:

Welcome to the team!

*Will Snyder*

Will Snyder, Chair  
Mass. Envirothon Steering Committee



*The drumlin at Mass Audubon's Drumlin Farm Wildlife Sanctuary*

### This Year's Registered Teams

- Acton-Boxborough Regional High School
- Andover High School
- Ashland High School
- Bristol County Agricultural High School
- Brockton High School/Wildland Trust
- David Prouty High School
- Deerfield Academy
- Dighton Rehoboth Regional High School
- Doherty Memorial High School
- Essex Technical High School, NRM
- Greater New Bedford Voc-Tech High School
- Greenfield High School
- Holyoke High School
- Innovation Academy Charter School
- Leicester High School
- Lexington High School
- Mashpee Wampanoag Tribe
- Middleborough High School
- Millbury Jr./Sr. High School
- Monson Environmental Action Team (MEAT)
- Newton North High School
- Newton South High School
- Norfolk County Agricultural High School
- Oliver Ames High School
- Pioneer Valley Regional School
- Plymouth South High School
- Reading Memorial High School
- Rockland High School
- Seekonk High School
- Shepherd Hill Regional High School
- South Hadley High School
- Springfield Central High School
- Worcester Technical High School



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## Schedule

7:30 - 8:30	Registration for teams, volunteers and judges  Teams confirm their stations and presentation time  Team pictures
8:00	Orientation for volunteers and judges
8:30 - 8:45	WELCOME and announcements <ul style="list-style-type: none"> <li>Commissioner Leo Roy, Mass. Dept. of Conservation &amp; Recreation</li> <li>Gary Clayton, President, Mass Audubon</li> </ul>

### 9:00 - 10:05 First period

9:00 - 9:30	Current Issue 1.1
9:35 - 10:05	Current Issue 1.2

### 10:15 - 11:20 Second period

10:15 - 10:45	Current Issue 2.1
10:50 - 11:20	Current Issue 2.2

### 11:30 - 12:35 Third period

11:30 - 12:00	Current Issue 3.1
12:05 - 12:35	Current Issue 3.2

### 12:35 - 1:45 EnviroTrek Lunch

12:45 - 1:45	Informal team displays and conversations. Visit exhibits and info tables on ecostation tests, Student Conservation Association and Mass. Envirothon Council.
1:45	Group photo, evaluation surveys
2:00	Announcement of Community Awards



## Mass. Envirothon Steering Committee

Will Snyder, *MESC Chair*  
 Kelley Freda, *MESC Vice Chair*  
 Justin Gonsor, *MESC Secretary*  
 Dan Giza  
 Joe Perry  
 Lisa Trotto  
 George Zoto

UMass Extension, Center for Agriculture, Food & the Environment  
 Mass. Dept. of Conservation & Recreation, Water Supply Protection  
 Mass. Dept. of Conservation & Recreation  
 ASA Analysis & Communications  
 Mass. Dept. of Conservation & Recreation  
 Worcester County Conservation District  
 Mass. Dept. of Environmental Protection

### Steering Committee Advisory Members

Al Averill  
 Wendell Cerne  
 Meg Colclough  
 Bill Dunham  
 Amie Humphrey Facendola  
 Pam Landry  
 Rick LeBlanc  
 Julie A. Martin  
 Elizabeth McGuire  
 Matthew Nash  
 Dominique Pahlavan  
 Diane Baedeker Petit  
 Clif Read  
 Judy Reilly  
 Kris Scopinich  
 Brita Dempsey

USDA Natural Resources Conservation Service  
 Mass. Science Education Leadership Association  
 Executive Office of Energy & Environmental Affairs  
 Belmont Enterprises  
 Alden Research Laboratory, Inc.  
 Mass. Division of Fisheries & Wildlife  
 Mass. Dept. of Agricultural Resources  
 Mass. Dept. of Conservation & Recreation  
 Middlesex Conservation District  
 Mass. Dept. of Conservation & Recreation  
 Executive Office of Energy & Environmental Affairs  
 USDA Natural Resources Conservation Service  
 Mass. Dept. of Conservation & Recreation  
 Bristol-Myer Squibb  
 Mass Audubon  
 Mass. Envirothon Coordinator

## Station Coordinators/Curriculum Specialists

Al Averill  
 Kelley Freda  
 Pam Landry  
 Dominique Pahlavan  
 Joe Perry  
 Will Snyder

USDA Natural Resources Conservation Service  
 Mass. Dept. of Conservation & Recreation, Water Supply Protection  
 Mass. Division of Fisheries & Wildlife  
 Executive Office of Energy & Environmental Affairs  
 Mass. Dept. of Conservation & Recreation  
 UMass Extension, Center for Agriculture, Food & the Environment

## Massachusetts Envirothon Council

Joe Smith, *MEC Chair*  
 Matthew Beaton  
 Mary Bell  
 George Buckley  
 Stuart A. Cain  
 Deborah Cary  
 Warren Chamberlain  
 Meg Colclough  
 Michelle Fineblum  
 Matthew Goode  
 Steve Goodwin  
 Jeff LaFleur  
 Marion Larson  
 Nathan Nesbitt  
 Jennifer Norwood  
 Eric Seaborn  
 Will Snyder

President, Mass. Association of Conservation Districts  
 Secretary of Energy & Environmental Affairs  
 College of Natural Sciences, UMass Amherst  
 Harvard Extension School  
 President, Alden Research Laboratory, Inc.  
 Mass Audubon  
 Mass. State Grange  
 Executive Office of Energy & Environmental Affairs  
 Mass. Envirothon parent  
 Suffolk County Conservation District  
 Dean, College of Natural Sciences, UMass Amherst  
 Mass. Association of Conservation Districts  
 Mass. Division of Fisheries & Wildlife  
 Mass. Envirothon alumnus  
 Executive Office of Energy & Environmental Affairs  
 National Grid  
 UMass Extension, Center for Agriculture, Food & the Environment



[www.facebook.com/maenvirothon](http://www.facebook.com/maenvirothon)





## Come to the EnviroTrek Lunch!

When the testing is over, everyone is invited to eat lunch, unwind, make new friends from across the state and share connections at the EnviroTrek Lunch. Here's how it works:

All through the year, teams work hard, play hard, meet new people, find new places, try new experiences, get wet, dirty and tired, design a t-shirt, stay up late to prepare and generally have a good time through the year as they get ready for the May Envirothon. This is their EnviroTrek!

During the EnviroTrek Lunch, each team has a home table. At each table, at any given time, two or three "home team" members share their team's experiences with "visitors" from other teams.

The place buzzes with stories, ideas, opinions and concerns as each home team shows and tells about their experiences. Visitors, who move from table to table, offer questions and views. Team members take turns sitting at the home table and visiting other tables.

EVERYONE at the Envirothon – teams, judges, coaches, volunteers, sponsors – is welcome to join in!

## What happens at an Ecostation?



At the Massachusetts Envirothon, teams rotate through four ecostations, in addition to giving their Current Issue presentation. Each ecostation has a different emphasis: forestry, soil, water and wildlife.

When students arrive at each ecostation, the examiners instruct them to get into their distinct teams. Teams listen to examiners for a brief time to become familiar with that station, its questions and any other special instructions.

It's then up to the team to determine their strategy in taking the exam. They can break up and use individual strengths (for example, one or two people focus on species ID, while the others do the written section), or go through the exam as a team.

The ecostations generally incorporate questions that are:

- **Written** – multiple choice, true or false or fill-in-the-blank.
- **Practical** – This may include species identification, questions that relate to the soils or habitat surrounding the station and hands-on activities.

## Community Awards for Research & Action

**Why Community Awards?** Teams work hard to prepare for their Envirothon Current Issue presentation. They deserve recognition for this work! And if their research results in a service or action project that benefits their community, this also should be recognized. The Massachusetts Envirothon Community Awards provide important recognition for teams, plus visibility for schools and their communities.

Teams who work to qualify for the awards tell us that they have a better Envirothon experience overall. Everybody wins! These awards are optional and non-competitive. They can be earned by any team that meets the requirements for the awards. Teams can earn one or both of these awards:

The **Community Research Award** is presented to teams who have done thorough and wide-ranging community investigation in preparation for their Current Issue presentations. To meet the standard for the

award, they must show that they have been resourceful in using a range of research strategies – exploring community places, talking to a variety of people, using maps, researching at the library and town offices, and using the web.

The **Community Action Award** is presented to teams who take what they learn in their Current Issue research and use that knowledge to benefit their community.



All kinds of action projects are possible: community education, advocating for change, collecting data, or hands-on conservation projects in the field. They might plug into an existing community effort, or develop a project of their own.

On the day of the Envirothon competition teams meet with an Envirothon volunteer who will interview them about their experiences preparing for the award(s).

The Community Awards are a great opportunity to spread the word about the good work that Envirothon teams do!

Teams who earn the awards receive recognition and a certificate at the May competition. A letter of congratulations is sent to each team's principal, with copies to their coaches, superintendent, community partners, state legislators, local news media contacts and the state Secretary of Energy & Environmental Affairs. 💧

# Agricultural Soil and Water Conservation

Local agriculture is booming in Massachusetts, from urban community gardens to rural orchards and pastures, from row crops to working forests. Local garden, farm, and forest production can strengthen local economies – providing not only food and fiber, but also fostering community.

More local agriculture also means more intensive use of local land and water resources, with the potential for resource depletion, pollution and increased pressure on local ecosystems and biodiversity. In addition, climate change is shifting the basic conditions for growing – bringing long term warming, short term weather volatility and increased intensity in the water cycle that affect soil chemistry, water availability and ecology in fundamental ways.

Healthy soil and water resources provide essential ecosystem services for forest and farm production. And well managed farms and forests can contribute in a variety of ways to preventing and reducing the effects of accelerating climate change.

How can we keep these essential resources healthy as we use them? Can we build healthy soils that ensure a supply of high quality food and fiber and at the same time protect our water resources and ecosystem future?

This year's Envirothon Current Issue problem focuses on the essential, fundamental ecosystem services that soil and water provide, and on decisions and actions for the management and protection of this ecological foundation.

Science is an essential tool, helping us to understand both the workings of the natural systems we depend upon and the effects of our practices within those systems. Understanding the science of soil and water was an important part of preparing to respond to this year's Current Issue problem.

Teams were asked to research the potential for producing local food, fiber, and/or wood



products here, given the soil, water, and people resources in our community. They were asked to make recommendations about what can be done to maximize this potential while remediating, protecting and enhancing local soil and water resources for the long run.

In order to formulate sound recommendations, and present them with authority, teams needed to develop two kinds of expertise at two scales:

On the large scale, they developed a good grasp of the land and water resources across your community, how they contribute to the economy and human welfare, and what the problems and opportunities are. Maps and field study were essential, as was getting to know natural resource managers, local officials, and environmental advocates involved in stewardship efforts – and understanding the knowledge, skills and values they bring to these questions.

On a smaller scale, teams looked at two or more pieces of land in their community that in are significant for the question of local food and fiber production. Using field science and laboratory research skills, they got to know the soil and water resource problems and opportunities that these fields and/or forests represent. They talked with people who work with these specific pieces of land to learn more about the practices they employ, the values they hold and the policies that affect them.

At both town-wide and smaller scales, teams became familiar with the array of best practices for soil health and water conservation that might be appropriate. ♦

## How does the Current Issue work?

In this component of the Envirothon program, teams research a current environmental issue as it occurs in their own community, then prepare a presentation on their findings and proposed solutions.

The Massachusetts Envirothon Committee works to ensure that the topic is relevant to ALL Massachusetts communities.



Wide-ranging community research is encouraged, including field study; interviews of scientists, advocates, local officials and residents; internet and library searches; map reading; and visits to Town Hall.

At the competition, teams present their Current Issue findings and recommendations to a panel of expert judges who score them and provide feedback on their knowledge, proposed solutions and presentation skill.

A highlight of the experience is the interaction between the teams and the judges when the scoring is completed. After the morning competition, teams have a chance to share their projects informally at a lunchtime "EnviroTrek" session.

Many teams take what they learn in their Current Issue research and apply it in a community action project. Any team that demonstrates high research standards in their Current Issue work, or applies their Envirothon learning in a service project, is eligible for an Envirothon Community Award. ♦





# Current Issue Presentation Judges

Judges as of May 16, 2017

- **Thomas Akin**, USDA Natural Resources Conservation Service
- **Peter Alden**, Peter Alden Wildlife
- **Tracy Allen**, UMass Extension
- **Russell Anderson**, Mass. Agriculture in the Classroom
- **Paul Barten**, UMass Dept. of Environmental Conservation
- **Mary Bell**, UMass College of Natural Sciences
- **Kim Bent**, Catch The Science Bug
- **Maggi Brown**, Mass. Dept. of Conservation and Recreation - Boston Region
- **George Buckley**, Harvard University, Sustainability and Environmental Management Programs DCE
- **Jennifer Carlino**, Town of Norton
- **Ben Carver**, Mount Grace Land Conservation Trust
- **Deborah Cary**, Mass Audubon
- **Warren Chamberlain**, State Commission for Conservation of Soil, Water, and Related Resources
- **Madeleine Charney**, W.E.B. Du Bois Library
- **Calvin Chase**, Mass. State Grange
- **Peter Church**, Mass. Dept. of Conservation & Recreation
- **Julie Coop**, Mass. Dept. of Conservation & Recreation
- **Susan Cox**, USDA Forest Service
- **Scott Davis**, Mass. State Grange
- **Kathleen Davis**, UMass School of Education



- **MaryAnn DiPinto**, Mass. Dept. of Environmental Protection, Wetlands Protection
- **Nancy Eyster-Smith**, Bentley University, Dept. of Natural & Applied Sciences
- **Jennifer Fish**, Mass. Dept. of Conservation & Recreation
- **Priscilla Geigis**, Mass. Dept. of Conservation & Recreation
- **Joel Ginn**, UMass Psychological & Brain Science
- **Karen Grey**, Wildlands Trust
- **Mary Griffin**, Mass Audubon
- **Colleen Harper**, Harper Farm
- **Stephen Harper**, Harper Farm
- **Masoud Hashemi**, UMass Stockbridge School of Agriculture
- **Christine Hatch**, UMass Dept. of Geosciences
- **John Hayes**, Salem State University
- **Doug Hjorth**, Louis Berger Group, Inc.
- **Nancy Kaplan**, Eversource Energy
- **Enku Kebede-Francis**, Mass. Sierra Club
- **Isaac Larsen**, UMass Dept. of Geosciences
- **Marion Larson**, Mass Div. of Fisheries & Wildlife
- **John Lee**, Allandale Farm
- **Brian Lickel**, UMass Psychological & Brain Science
- **Jameson Long**, USDA Animal & Plant Health Inspection Service, ALB Eradication Program
- **Antony Massop**, USDA Animal & Plant Health Inspection Service, ALB Eradication Program
- **Ann McGovern**, Mass. Dept. of Environmental Protection
- **Carl Melberg**, U.S. Fish and Wildlife Service, Eastern Mass. NWR Complex
- **Sue Moore**, Mass Audubon
- **Jane Obbagy**, Mass. Association of Conservation Districts
- **Kevin O'Brien**, Mass. Sierra Club
- **Robert O'Connor**, Exec. Office of Energy & Environmental Affairs

- **Robin Organ**, Project Green Schools
- **Dominique Pahlavan**, Exec. Office of Energy & Environmental Affairs
- **Gerry Palano**, Mass. Dept. of Agricultural Resources
- **Juan Perez**, U.S. Environmental Protection Agency, Region 1
- **Kathleen Peterson**, Mass. State Grange
- **Diana Phethean**, Environmental Business Council of New England
- **Denise Pires**, Exec. Office of Energy & Environmental Affairs
- **Mark Protti**, Institute for Training & Development
- **Timothy Randhir**, UMass Dept. of Environmental Conservation
- **Vandana Rao**, Exec. Office of Energy & Environmental Affairs
- **Martha Reichert**, Exec. Office of Energy & Environmental Affairs
- **Heidi Ricci**, Mass Audubon
- **Kevin Scherer**, City of Worcester DPW
- **Rebecca Schmidt**, Psychology, UMass 2016
- **Myra Schwartz**, U.S. Environmental Protection Agency, Region 1
- **Joseph Shoenfeld**, UMass Center for Agriculture, Food, and the Environment
- **Dan Sieger**, Exec. Office of Energy & Environmental Affairs
- **Ezra Small**, UMass Amherst
- **Randy Stone**, Mass. Dept. of Conservation & Recreation
- **Carol Szocik**, Mass. Dept. of Agricultural Resources
- **Katie Theoharides**, Exec. Office of Energy & Environmental Affairs
- **Mary Trudeau**, wetland scientist
- **Sally Zielinski**, Mass. Association of Conservation Commissions
- **Joel Zimmerman**, Mass. Dept. of Conservation & Recreation, Div. of Water Supply Protection

## Community Awards Interviewers

- **Alison Bates**, UMass Dept. of Environmental Conservation
- **Linda Horn**, UMass Extension
- **Shari Melto**, Climate Cafe
- **Nathan Nesbitt**, Boston College Physics Dept.

## Participating State Officials

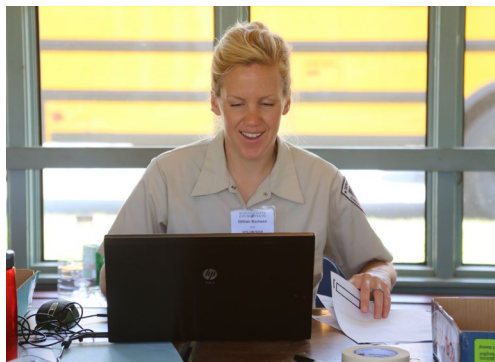
- **Matthew Beaton**, Secretary of Energy & Environmental Affairs
- **John Lebeaux**, Commissioner of Agricultural Resources
- **Leo Roy**, Commissioner of Conservation & Recreation
- **Rep. Solomon Goldstein-Rose**, Mass. House of Representatives

## Presentation Hosts

- **Jane Heinze-Fry**, Museum Institute for Teaching Science
- **Lauren Mattison**, UMass Clean Energy Extension
- **William Miller**, UMass Center for Agriculture, Food, & the Environment
- **Jennifer Norwood**, Executive Office of Energy & Environmental Affairs
- **Kris Scopinich**, Mass Audubon
- **Sandra Thomas**, UMass Center for Agriculture, Food, & the Environment

# Volunteers

Volunteers as of May 16, 2017



- **Tom Ashton**, Mass. Dept. of Conservation & Recreation
- **Gillian Badwan**, Mass. Dept. of Conservation & Recreation
- **Barbara Baedeker**, USDA Natural Resources Conservation Service, Earth Team
- **Moria Perry Barrows**, Town of Granby, MA
- **Daniel Beard**, USDA Animal & Plant Health Inspection Service
- **Rachael Beikmohamadi**, Mass Audubon, Drumlin Farm
- **Phillipp Bolt**, Harvard Extension School
- **Becky Bottomley**, retired coach
- **Wendell Cerne**, Mass. Science Education Leadership Assoc.
- **Chris Chisholm**, Mass. Dept. of Agricultural Resources
- **Fletcher Clark**, Mass. Dept. of Conservation & Recreation
- **Patrick Cunningham**, Mass. Dept. of Conservation & Recreation Water Supply Protection
- **Paula Davison**, Mass. Dept. of Conservation & Recreation
- **Irene Del-Bono**, Irene Del-Bono Attorney at Law
- **Eric Deleo**, USDA Animal & Plant Health Inspection Service
- **Patrick DeSantis**, Retired Elementary Teacher
- **Joan DeSantis**, Retired Art Teacher
- **Keith Dinardo**
- **Onyksa Domenech**, USDA Animal & Plant Health Inspection Service
- **Laura Dooley**, Mass. Dept. of Conservation & Recreation
- **Mike Downey**, Mass. Dept. of Conservation & Recreation
- **Andrew Drawec**, Smithfield Foods
- **Kim Flanzer**, Mass Audubon, Drumlin Farm
- **Alynda Foreman**, Louis Berger
- **Norma Forgione**, Mass. Dept. of Conservation & Recreation
- **Michele Girard**, Mass. Assoc. of Conservation Commissions

- **Adam Green**, USDA Animal & Plant Health Inspection Service
- **Paul Gregory**, Mass. Dept. of Conservation & Recreation
- **Lindsay Hansen**, Student Conservation Assoc.
- **Bowen He**, Envirothon Alumni: Newton North
- **Jane Heinz-Fry**, Museum Institute for Teaching Science
- **Julianna Huang**, Envirothon Alumni, Newton North
- **Astrid Huseby**, Mass. Div. of Fisheries & Wildlife
- **Doug Hutcheson**, Mass. Dept. of Conservation & Recreation
- **Jack Jackson**, Town of Haverhill
- **Chris Jacobs**, South Shore Natural Science Center
- **Chelsea Jones**, USDA Animal & Plant Health Inspection Service
- **Arron Juang**, Student Conservation Assoc.
- **Cali Knox**
- **Laura Krich**, Mass Audubon, Drumlin Farm
- **Guy LaChance**, Mass. Dept. of Conservation & Recreation
- **Jim Lafley**, Mass. Dept. of Conservation & Recreation
- **Jim Lagacy**, Mass. Div. of Fisheries & Wildlife
- **Pam Landry**, Mass. Div. of Fisheries & Wildlife
- **Elizabeth Laver**
- **Moe Lavoie**, Smithfield Foods
- **Kaitee Levinson**, Student Conservation Assoc.
- **Jameson Long**, USDA Animal & Plant Health Inspection Service
- **Kate Marquis**, Mass. Dept. of Conservation & Recreation
- **Austin Mason**, Consulting Forester
- **Lauren Mattison**, UMass Clean Energy Extension
- **Norah Mazar**, Mass Audubon, Drumlin Farm



- **Bridgett McAlice**, Mass. Div. of Fisheries & Wildlife
- **William Miller**, UMass Center for Agriculture, Food & the Environment
- **Matt Nash**, Mass. Dept. of Conservation & Recreation, North Region Coastal District
- **Geoff Nelson**, Mass Audubon, Drumlin Farm
- **Jenny Norwood**, Exec. Office of Energy & Environmental Affairs
- **Paula Packard**, Mass. Dept. of Conservation & Recreation Water Supply Protection
- **Michele Padula**, Mass. Dept. of Agricultural Resources
- **Maggie Payne**, USDA Natural Resources Conservation Service
- **Chuck Pernaa**, Town of Ashby
- **Les Perry**, Mass. Dept. of Conservation & Recreation
- **Christopher Perry**, USDA Animal & Plant Health Inspection Service
- **Tiara Perry**
- **Tia Pinney**, Mass Audubon, Drumlin Farm
- **Renata Pomponi**, Mass Audubon, Drumlin Farm
- **Denis Punch**, Smithfield Foods
- **Robert Purcell**, USDA Natural Resources Conservation Service
- **Dan Rankin**, Smithfield Foods
- **Clif Read**, Mass. Dept. of Conservation & Recreation
- **Jacqueline Richard**, USDA Animal & Plant Health Inspection Service
- **Daniel Roach**, UMass Amherst - Student
- **Garth Roeder**, Mass Audubon, Drumlin Farm
- **Glenn Rosenholm**, USDA Forest Service
- **Beth Ross**, Mass Audubon, Drumlin Farm
- **Kris Scopinich**, Mass Audubon
- **Collin Shaughnessy**
- **Kyle Shaughnessy**
- **Matt Shreiner**, USDA Animal & Plant Health Inspection Service



## Volunteers

- **Kevin Siegel**, Student Conservation Assoc.
- **John Simkins**, Student Conservation Assoc.
- **James Sims**, Student Conservation Assoc.
- **Richard Stabile**, Mass. Dept. of Conservation & Recreation
- **Robin Stuart**, Mass Audubon Drumlin Farm Staff
- **Flavio Sutti**, Mass Audubon, Drumlin Farm
- **Sandy Thomas**, UMass Center for Agriculture, Food and the Environment
- **Gini Traub**, Mass. Dept. of Conservation & Recreation
- **Catherine Ulitsky**, USDA Natural Resources Conservation Service
- **Rich Valcourt**, Town of Phillipston
- **Rich Valcourt Jr.**, Consulting Forester
- **Joelle Vautour**, Mass. Dept. of Conservation & Recreation
- **Sandy Verger**, Mass Audubon, Drumlin Farm
- **Mike Waterman**, Mass. Dept. of Conservation & Recreation
- **Erica Wiley**, USDA Animal & Plant Health Inspection Service
- **Kristina Wiley**, USDA Natural Resources Conservation Service
- **Jennifer Woodard**, Mass Audubon, Drumlin Farm
- **Alison Wright**, Mass. Dept. of Conservation & Recreation
- **Janice Wright**, Friends of Assabet River National Wildlife Refuge
- **Dave Zimmermann**, USDA Natural Resources Conservation Service



## Millbury Jr./Sr. High School Environmental Council

- |                   |                    |
|-------------------|--------------------|
| • Meg Lawson      | • Thomas Machacz   |
| • Kennedy Day     | • Nicole Rannikko  |
| • Gianna Borowski | • Diandra Lavallee |
| • Carisa Beltran  | • Maddie Lavallee  |
| • Dominic Beyer   | • Nina Romeo       |
| • Sam Stafinski   | • Alexis Roccanti  |
| • Trenton Cano    | • Aiden Bourdeau   |
| • Hannah Bishop   | • Felicity Ulfves  |
| • Meg Schonborg   | • Haley Maynard    |
| • Hunter Swanson  | • Shawn Westerlind |
| • Emily Larue     |                    |

## About Our Host Site



## Mass Audubon's Drumlin Farm Wildlife Sanctuary

Drumlin Farm has been a strong presence in the community since 1955, thanks to the ingenuity and foresight of Louise Ayer Hatheway (1876-1955), who bequeathed Drumlin Farm to Mass Audubon.

Louise Hatheway invited urban children to visit the farm and learn where their food came from. Her legacy has inspired Drumlin Farm's mission of educating families and children about the importance of community farming and environmental protection.

You'll find plenty to do on your visit, from drop-in activities to native wildlife and trails. Sheep, goats, chickens, pigs, cows and a pony greet you throughout the farmyard. Watch farmers do chores in the late afternoon. Stop by the farmyard garden and check out what's growing.

The farmstand offers a variety of products, including fresh vegetables, maple syrup, eggs, meat, goat's milk soap, yarn and fleece.

Drumlin Farm provides a long-term home for rehabilitated injured or human-habituated wildlife, who would not be able to survive in the wild on their own.

Hike to the top of the drumlin, one of the highest points in the greater Boston area. On a clear day, the view from the top offers a glimpse of both Mt. Monadnock and Mt. Wachusett.

Community-based sustainable farming signifies Mass Audubon's deep commitment

to the people, land, water and air that enable Drumlin Farm to thrive. Produce is grown using organic principles and conservation practices that build soil health and reduce water and energy consumption.

The United States Department of Agriculture's Natural Resources Conservation Service has partnered with Mass Audubon at Drumlin Farm to improve their resources for wildlife habitat and agricultural operations. Practices include improving wildlife habitat, installing fencing and improving forage for a rotational grazing system and installing infrastructure to manage surface and subsurface water flow.

In addition, more than 56 acres of Drumlin Farm are protected forever as farmland under the Massachusetts Department of Agricultural Resources' Agricultural Preservation Restriction (APR) program. 💧







The Massachusetts Envirothon is a program of the Massachusetts State Commission for Conservation of Soil, Water & Related Resources. Our work would not be possible without contributions of time, resources and funding from these sponsors and partners.

### Mass Audubon's Drumlin Farm Wildlife Sanctuary

Renata Pomponi, *Director*  
Geoff Nelson, *Property Manager*  
Robin Stuart, *School & Groups Program Coord.*

## Partners

- ★ Alden Research Laboratory, Inc.
- ★ Berkshire Conservation District
- ★ Cape Cod Conservation District
- ★ Mass Audubon
- ★ Mass. Assoc. of Conservation Districts
- ★ Mass. Dept. of Agricultural Resources
- ★ Mass. Dept. of Conservation & Recreation
- ★ Mass. Dept. of Environmental Protection
- ★ Mass. Div. of Fisheries & Wildlife (MassWildlife)
- ★ Mass. Executive Office of Energy & Environmental Affairs
- ★ Middlesex Conservation District
- ★ UMass Amherst, College of Natural Sciences
- ★ UMass Amherst, Center for Agriculture, Food & the Environment/UMass Extension
- ★ UMass Amherst, Dept. of Environmental Conservation
- ★ USDA Natural Resources Conservation Service
- ★ Worcester County Conservation District
- ★ Worcester Technical High School

## Sponsors

### Leadership Circle (\$10,000 & up)

- ★ Massachusetts Executive Office of Energy & Environmental Affairs

### EnviroTrek (\$5,000 & up)

- ★ U.S. Forest Service through Mass. Dept. of Conservation & Recreation
- ★ Massachusetts State Grange

### Quabbin Level (\$1,000 & up)

- ★ George Buckley
- ★ Environmental Business Council of New England
- ★ National Grid

### Peregrine Falcon Level (\$500 & up)

- ★ Green Newton
- ★ Smithfield Foods
- ★ Society of Soil Scientists of Southern New England

### Paxton Sandy Loam Level (\$100 & up)

- ★ Melinda Broderick
- ★ Bruce Brumburg & Karen Axelrod
- ★ Deborah Cary
- ★ Michelle Fineblum
- ★ Quan Lu & Jing Yuan
- ★ The Merck Foundation
- ★ Michelle & Joe Millstone
- ★ Nathan Nesbitt
- ★ Joe Smith
- ★ Will Snyder
- ★ Dr. George Zoto

### 30th Anniversary Friends of Envirothon (\$30 & up)

- ★ Mary E. Bell
- ★ Bill Dunham
- ★ Amie & Nick Facendola
- ★ Carol M. Fineblum
- ★ Justin M. Gonsor
- ★ Elizabeth McGuire
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