



The meadow in October viewed from one of the bordering hills.

**The Friends of  
Arlington's Great Meadows  
First Decade Report 2002-2012**

Arlington, Massachusetts  
[www.FoAGM.org](http://www.FoAGM.org)

*FoAGM is pleased to bring you this “special” report commemorating a decade of stewardship of Arlington’s Great Meadows. We are proud of the work that has been done since 2002 to protect, preserve and enhance the natural beauty and ecology of this special open space; to make it a more attractive place for residents of Arlington, Lexington and elsewhere to walk through, cycle by, learn from, find sanctuary and tranquility in, and otherwise enjoy; to raise public awareness of its existence; and to plan for its long-term preservation in its natural state.*

*The pages that follow will give an overview of FoAGM’s many and varied accomplishments in its first decade. None of this could have been achieved without the enthusiastic efforts of numerous volunteers, the support of Arlington and Lexington town officials, and the generous contributions of our donors, for which we are deeply grateful.*

*On the Cover*

The picture on the cover was taken by a visitor from the Netherlands, Wilma Kooijman, who was traveling to the U.S. and contacted us about a possible volunteer project at AGM. As far as we know she is the person who has traveled furthest to help out. However we did have twenty high school seniors from Oklahoma work on the upland meadow project in 2010, so maybe that is the greatest combined travel distance for an AGM project.

First Printing, 12/4/13

## History of the Friends of Arlington's Great Meadows

**Arlington's Great Meadows** (AGM) is a 183-acre parcel of land located in East Lexington. It is the largest piece of undeveloped land in the Arlington/Lexington area. Once a glacial lake, AGM is now a wetland surrounded by uplands that were created by glacial outwash. The land was acquired by Arlington in 1871 to serve as a supplementary water storage area, but was only briefly used for that purpose. Part of the Mystic River watershed, AGM remains a valuable buffer against downstream flooding along Mill Brook in Arlington.

In the late 1990's, the Arlington Conservation Commission engaged botanist and naturalist Frances Clark to perform a detailed ecological study of AGM. Ms. Clark submitted a report in 2001 which included inventories of AGM's plant and animal species and made recommendations for the area's protection and enhancement. The Clark report is available on the FoAGM website:

[http://www.foagm.org/AGM\\_Inventory/concomGM1001.htm](http://www.foagm.org/AGM_Inventory/concomGM1001.htm).

AGM has long served as public open space, and it has now become a popular recreational spot, particularly since the opening of the Minuteman Bikeway on its southern border. It also provides a rich habitat for local wildlife. To date, 56 species of birds have been found nesting in Great Meadows, 12 species of amphibians and reptiles live there, and 251 species of plants grow in the wetlands and uplands. An ecological survey of the area conducted during Biodiversity Days in 2005 recorded nearly 400 species of plants and animals.

**The Friends of Arlington's Great Meadows** ("FoAGM" or "the Friends") is a group of citizens of Arlington, Lexington, and beyond who are committed to the protection and stewardship of AGM. The Clark report and subsequent publicity increased interest in AGM and led to the establishment of the Friends in 2002.

Under the leadership of the FoAGM Steering Committee, and with the assistance of many volunteers, the Friends work with officials of the Towns of Arlington and Lexington, and with citizens everywhere who share their interest. The Friends carry out their activities with the approval and encouragement of Arlington's Board of Selectmen which, as the governmental body responsible for AGM, has encouraged FoAGM's stewardship of this area.

## Major accomplishments from 2002 through 2012 include:

- Construction of two boardwalks, totaling 700 feet in length, allowing north/south passage across the wetlands.
- Construction of a footbridge across Munroe Brook, allowing access to AGM from Orchard Lane.
- Maintenance of trails, two informational kiosks, and signage.
- Removal of trash, construction debris, rusting car engines, and other eyesores.
- Organization and leadership of a wide variety of educational programs to teach children and adults about nature and to introduce them to the beauty and wonder of Arlington's Great Meadows.
- Ongoing control of invasive plants, especially Japanese knotweed, in priority locations.
- Restoration of an upland meadow area that was changing into a woodland.
- Building awareness of AGM through newspaper articles, event notices, group emails, the *FoAGM.org* web site, fliers, booths at town events, and more.



Boardwalk Construction 2005

## Arlington's Great Meadows, What is it Worth?

“The greatest gains and values are farthest from being appreciated. We easily come to doubt if they exist. We soon forget them. They are the highest reality...” Henry David Thoreau, *Walden*

How does one assess the value of Arlington's Great Meadows? A complete picture requires consideration of several dimensions: the natural resources and habitat it provides, its niche in the surrounding ecosystem, and its distinctive place in the annals of geological and human history. All of these aspects are thoroughly covered in Frances Clark's 2001 report. The highlights of the Clark Report can be summarized as follows.

**Natural Resources and Habitat.** Although owned by the town of Arlington, AGM lies totally within the boundaries of Lexington, just about one-half mile from Arlington's western border. As one of the largest natural spaces in this heavily populated area, and in view of its close proximity to several other conservation lands (Lower Vine Brook, the Arlington Reservoir, Whipple Hill, and Dunback Meadow), AGM is part of a crucial wildlife corridor. Its value to wildlife is further enhanced by the Minuteman Bikeway on AGM's southern border, which links AGM with conservation lands in the north end of Lexington, particularly Tophet Swamp and Parker Meadow. Although bustling with human traffic during the day, the Bikeway is used by animals at night to move from one undeveloped space to another. By providing this critical link, AGM represents a key piece in the larger puzzle of fragmented natural space in northwest Boston.

**Role in the Local Ecosystem.** Unlike most of Lexington, which drains to the Charles River and Shawsheen River Watersheds, AGM is part of the Mystic River Watershed. Hydrologically, it is tenuously connected to Monroe Brook, which borders the northeast side of the Meadows, and flows on to the Arlington Reservoir. The bulk of AGM drains to Sickle Brook, which curves down from Follen Hill through the meadow and also feeds the Arlington Reservoir. From the Arlington Reservoir, the waters of Sickle and Monroe Brook flow into Mill Brook in Arlington and from there into Lower Mystic Lake. The Mystic River ultimately drains this water into Boston Harbor. Consequently, the large marshy areas of AGM serve as an important catch basin to mitigate flooding in Arlington, along Mill Brook, and in the Mystic River basin. The section surrounding Sickle Brook is also important for groundwater recharge.

**Geology and Role in Human History.** Eskers, vernal pools, and glacial erratics in AGM provide evidence of substantial glacial influence. After the glaciers receded, the growth and death of marsh plants over thousands of years in the former glacial lake bottom resulted in substantial accumulations of peat.

In pre-colonial times, the land that is now AGM was used as seasonal hunting ground by local Native American tribes. When the colonists arrived, they started using oak, pine, and maple from the upland portions of the land to supply shipyards in Medford. In early colonial days, AGM was known as Alewife Meadows, named after the small herring, or "alewife," which made their way up the Mystic River to spawn in the Meadows. The property was mainly used for grazing as the soft peat would not support the weight of buildings.

In the 1860's, the Winship family operated a small dairy farm that occupied much of the meadows, and there was a mill on Monroe Brook near what is now Fottler Avenue. Milk and

hay, as well as peat mined from the meadows, were carried over the oxcart roads that can still be seen throughout the area.

In 1871, through an act of the state legislature, the Town of Arlington acquired the land for use as a reservoir. To create the reservoir, the marsh was dammed and flooded, and a central pumping station and 25 wells were built alongside the railroad bed that is now the Minuteman Bikeway. William Brewster, the highly regarded local naturalist, recorded shorebirds and ducks that he saw in AGM in the late 19<sup>th</sup> Century. The reservoir did not last long as the current Quabbin Reservoir was built at the turn of the century and Arlington joined the regional water supply. AGM was drained in 1902 and the area reverted to marshland. Subsequently, ditches were dug to provide further drainage for the sake of mosquito control. Frances Clark observes that although the area has been disturbed multiple times, the natural topography, soils, and hydrology, have remained essentially the same.

**Plant and Animal Life.** There is rich diversity in the plant communities in these Great Meadows. The upland communities include grasslands, successional mixed deciduous forest, oak forest, and a mosaic of black oak, pitch pine, and scrub oak. The wetland is comprised of a shallow emergent marsh in the center of the land and red maple swamp. Two vernal pools, one of which is certified, can be found on the north side. In these communities, 251 species of plants have been identified, including some that are uncommon.

The size of AGM, in conjunction with its diversity of plant communities and geologic features, also lead to a good diversity of animal life considering its proximity to a large urban center. Some of the most notable animal species found in AGM are coyote, red and grey fox, fisher, porcupine, mink and weasel. Deer as well have been observed on occasion although they are not abundant. In addition, 12 species of reptiles and amphibians and 56 species of breeding birds have been identified. Many butterflies and other insects thrive here as well.

**Public and Educational Use.** Over the past 10 years, in part as a result of the efforts of FoAGM to maintain trails and raise public awareness of this previously neglected resource, there has been increased recreational and educational use of AGM. Hikers, bikers, bird watchers, cross country runners and skiers, snowshoers, and dog walkers all enjoy the trails and boardwalks. The two neighboring schools, several preschool groups, and scout troops also use the area. FoAGM has sponsored regular nature walks, birding walks and, when conditions are favorable, animal tracking walks. Several natural science studies and projects have taken place, including firefly observations and counts, honeybee cultivation, invasive plant control experiments, and a study of the effects of invasive plants on the feeding habits of birds.

The beautiful vistas and network of winding trails that distinguish AGM are clearly appreciated more than ever before. The area was once preserved by benign neglect, but as human activity has increased, it now needs conscious management. Those of us who have been active in doing this have found that the very act of stewardship has made the space dear to us. We have observed it throughout the seasons and over the years. Some have watched a generation of children grow up on the land. "We have met over it and sweat over it." Antoine de Saint Exupery observed that: "You become responsible forever for what you have tamed." Arlington's Great Meadows has the potential to evoke this response in generations to come.

## The American Woodcock

The American Woodcock is a signature species of AGM. For many years people have been coming here in March to observe the dramatic mating displays. As the meadow succeeded into woodland, crucial habitat for this bird was disappearing. Maintaining its habitat was a key consideration in the meadow restoration project.



The woodcock is a plump, ground-dwelling bird with handsome markings of earth tones and what seems like an impossibly long beak. Typical of prey species, its eyes are located at the sides of its head so that it can see 360 degrees around even when its bill is deep in the mud. Its appearance alone makes it an endearing and charismatic creature, but particularly marvelous is its courting ritual. At dusk and again at dawn beginning in March, the male spirals up 200 feet above the ground, his wings creating a twittering sound on the ascent. He then zig-zags back down to the breeding ground making a “peent” sound. All is quiet for a few minutes until he flies again, repeating the whole dance, sometimes for half an hour or more.

After mating, the female will build a nest, a mere scrape in the dirt with some grasses and twigs around it, a few hundred yards from the mating ground. She will typically lay 4 buff-colored eggs with brown splotches and incubate them alone for 3 weeks before they hatch. If alarmed by a predator, she is likely to fly off with her legs hanging down as if she were injured to draw the intruder away from her nest. However, if the disturbance is too substantial, she might abandon her nest or young completely. This is why we are asking dog owners to keep their dogs away from the woodcock display area especially from spring to mid-summer. Woodcock need open fields for their display grounds. With fewer small farms in New England, woodcock habitat is decreasing. The newly created entry meadow should help to keep AGM a favored nesting spot for this remarkable bird.

# FoAGM Timeline

## Stewardship of





# Arlington's Great Meadow

Mass Audubon study initiated for upland meadow restoration



Upland meadow restoration

Burning Slash after upland meadow restoration



Beehives installed by Waldorf School



Major fire on April 17<sup>th</sup>



Reseeding after slash burning

## 10 YEARS OF EDUCATION

### **Science in the Meadows:**

2 yr. study of the eating habits of birds – Northeastern Graduate Student  
Citizens' Science Project on Fireflies through Museum of Science  
Inventory of Oriole Nests through Mass Audubon  
Marsh Bird Survey and Aquatic Invertebrate Sampling- Tufts  
Biodiversity Days inventory  
Harvard Botany Students Field Trips

### **Themed Nature Walks:**

Woodcock – Andrea Golden and others  
Fungi and Lichens – Donald Pfister and David Hewitt  
Butterflies – Tom Whelan  
Bird Walks – Chris Floyd and others  
Edible Plants – Russ Cohen  
Nature Walk with "Boot" Boutwell  
Pond Foray – Andrea Golden and Aliberti Lubertazzi  
Animal Tracking – Lydia Rogers, Fran Ludwig, Sandra Ruggiero  
Plant Walk – Hilary Hopkins  
Signs of Spring - Laurel Carpenter and Don Miller  
Fruits, Nuts, and Seeds – Laurel Carpenter  
Insects of AGM  
Trail Talk and Walk – Mike Tabaczynski

**3rd Sat. Nature Walks with Don Miller – 3 years**

### **Walks and Presentations for Organizations:**

Scout troops  
Arlington High School  
Lexington Garden Club  
East Village Nursing Home  
Bay State Kids Outdoors

**Revised, reprinted, and distributed trail guide to AGM**

## AND OUTREACH

**Vernal Pool Workshops**  
and fieldtrips with Brackett School classes  
5 years

**Website for FoAGM**  
9 Years

**Participated in Civic Events**  
Arlington Town Days  
Lexington Discovery Days  
East Lexington Fairs  
Presentations at Arlington Land Trust meetings  
Earth Day  
Minuteman Bikeway Celebration  
Mystic Herring Run

**5 years of offering mini-grants (up to \$250)**  
received by:  
Waldorf School for Honeybee Project  
Noami Warton for Children's Scavenger Hunt

**Sponsored public meetings and Lectures:**  
Jim Gomes  
Dave Brown  
Themes of woodcock, vernal pools, winter weeds, and  
invasive plants

**Articles in local area newspapers and the Boston Globe**

## Future Goals

**Mission:** Friends of Arlington's Great Meadows (FoAGM) is dedicated to the stewardship of Arlington's Great Meadows in East Lexington and its preservation as a natural landscape.




- Maintain the area as a natural resource habitat area
- Encourage visitors and enhance their appreciation of nature
- Establish the long-term protection of this area by working with residents and officials of both Arlington and Lexington.




**Vision:** Ten years from now: Arlington Great Meadows will be a valued community resource with legal conservation protection, dedicated stewardship, and quality education opportunities.



**Little Blue Heron in the wetlands at AGM**

## Steering Committee Members

<p><b>DAVID WHITE</b></p>  A portrait of David White, an older man with a white beard and glasses, wearing a light blue button-down shirt over a dark t-shirt.	<p>David White has provided steady leadership to FoAGM as Chair of its Steering Committee since its inception in 2002. A resident of Arlington, David has been a member of Arlington’s Conservation Commission since 2000. David was instrumental in the founding of FoAGM and has helped serve as a liaison between FoAGM, the Arlington Conservation Commission and the Arlington Board of Selectmen. David is a frequent walker at AGM with his Tibetan Terriers.</p>
<p><b>DON MILLER</b></p>  A portrait of Don Miller, a man with a white beard and glasses, wearing a blue hat, a blue shirt, and suspenders, looking down at something in his hands.	<p>Don Miller, formerly a resident of Arlington and now a resident of Carlisle, has been a member of the FoAGM Steering Committee since its creation. Near the end of his career in health planning and administration, Don pursued the Certificate in Native Plant Studies offered by the New England Wild Flower Society. He was awarded the certificate in 2006. Don has led numerous educational walks in AGM including his popular “Third Saturday” series from 2008 through 2010.</p>
<p><b>SANDRA RUGGIERO</b></p>  A portrait of Sandra Ruggiero, a woman with short grey hair, smiling, wearing a green and white plaid shirt under a dark jacket.	<p>Sandra Ruggiero, a Lexington resident, recently retired as a biology teacher at the Waldorf High School of Mass Bay in Belmont. Strongly committed to the education of students in the natural sciences, Sandra has conducted numerous nature walks in AGM, including wildlife tracking walks, and has led studies of the vernal pools in AGM and other educational projects. Sandra has been a member of the FoAGM Steering Committee since 2002.</p>

<p><b>MIKE TABACZYNSKI</b></p> 	<p>Mike Tabaczynski, a software engineer who resides in Lexington, is FoAGM’s go-to person for the design, engineering, and construction of trails, bridges and boardwalks in AGM. Also active in Citizens for Lexington Conservation, the Lexington Conservation Stewards and the Lexington Bicycle Advisory Committee, Mike was honored by Town Meeting in 2006 as a Master Trail Builder. Mike has been a member of the Steering Committee and treasurer of FoAGM since 2002.</p>
<p><b>JOHN BARTENSTEIN</b></p> 	<p>John Bartenstein, an attorney who lives and practices in Lexington, has been a member of the FoAGM Steering Committee since 2003. John, who also serves as a Lexington Town Meeting Member and Vice Chair of Lexington’s Appropriation Committee, helps provide a liaison to Lexington’s town government and advises on legal issues. A lover of the outdoors, John has contributed considerable effort to trail and meadow maintenance and invasive plant control projects.</p>
<p><b>SANDY VORCE</b></p> 	<p>Sandy Vorce, an Arlington resident and the newest member of the Steering Committee, joined FoAGM in 2009. As the Property Manager at Mass Audubon’s Habitat Education and Wildlife Center in Belmont in her “everyday life,” Sandy brings invaluable skills, knowledge and judgment to FoAGM’s Steering Committee with her extensive experience in the management of conservation land and related educational programs.</p>

We also wish to acknowledge previous members of the steering committee:

- Laurel Carpenter      2005-2010
- Andrea Golden        2003-2006
- Scott Kirschner       2003-2006

## Financial Summary

### Financial Report

As in most prior years, income to FoAGM from personal donations, corporate matching, and grants exceeded expenses, leaving a solid cash balance to fund future benefits to AGM and its visitors. The successful financial partnership between the Arlington Land Trust (ALT) and FoAGM continues into its eleventh year.

### Summary of FoAGM Financial Activities

	2011		2012	
<b>Income</b>	\$1,130.00	In 37 donations	\$937.50	In 18 donations
	\$1,000.00	Foundation grants	\$500.00	Foundation grants
	\$25.00	Corporate matching	\$20.00	Corporate matching
	<hr/>		<hr/>	
	\$2,155.00	Total Income	\$1,457.50	Total Income
<b>Expenses</b>	\$300.00	Meadow seed mix	\$350.00	New map design
	\$88.94	Printing	\$125.95	Printing
			\$5.00	Bank charge
	<hr/>		<hr/>	
	\$388.94	Total Expense	\$480.95	Total Expense
<b>Fund Balance</b>	\$11,042.44	At end of 2011	\$12,018.99	At end of 2012

### Income and Expense History

Year	Donations	Grants	Expenses
2003	\$ 135.00		\$ 75.00
2004	\$ 3,447.81		\$ 196.56
2005	\$ 1,353.00	\$ 11,858.00	\$ 10,533.00
2006	\$ 1,660.00	\$ 1,363.44	\$ 2,121.65
2007	\$ 2,035.00		\$ 729.26
2008	\$ 2,112.50		\$ 558.12
2009	\$ 1,760.00		\$ 3,222.76
2010	\$ 1,296.00		\$ 307.83
2011	\$ 1,155.00	\$ 1,000.00	\$ 388.94
2012	\$ 957.50	\$ 500.00	\$ 480.95
<b>2013-2012</b>	<b>\$15,911.81</b>	<b>\$14,721.44</b>	<b>\$18,614.07</b>

**2002-2012: Total Income \$30,633.25 Total expenses \$18,614.07**

Donations to support the work of FoAGM can be sent to the Arlington Land Trust, P.O. Box 492, Arlington, MA 02476.

## Acknowledgement of Supporters

We would like to thank the following individuals and groups for their guidance, encouragement, physical labor, and other assistance to FoAGM, as well as countless others who helped us to complete a successful decade.

Arlington Advocate  
Arlington Board of Selectmen  
Arlington Conservation Commission  
Arlington Land Trust  
Arlington Police Department  
Beverly Healthcare East Village  
Boy Scouts of America  
Citizens for Lexington Conservation  
Cub Scout Pack 306  
Emerson Gardens Condominium Association  
Follen Community Church  
Friends Lumber  
Friends of Lexington Bikeway  
Friends of Robbins Farm  
Golden LivingCenter, Lexington  
Lexington Bicycle Advisory Committee  
Lexington Board of Selectmen  
Lexington Christian Academy  
Lexington Conservation Commission  
Lexington Department of Public Works  
Lexington Fire Department  
Lexington Garden Club  
Lexington Minuteman  
Lexington Police Department  
Lexington's Colonial Times  
Lynn Woods Reservation Park Ranger  
Massachusetts Audubon  
Menotomy Bird Club  
New England Mountain Bike Association  
Polatin Ecological Services

Students of Arlington High School  
Students of Lexington High School  
Walden Keeping Track  
Waldorf High School of Massachusetts Bay  
The Waldorf School, Lexington

Andrea Golden  
Bob Haussein  
Chris Floyd  
David Markun  
Dr. David Hewett  
Dr. Donald Pfister  
Evelyn Margot  
Fran Ludwig  
Frances Clark  
Herb Pearce  
Jay Sklar  
Jeff Collins of Massachusetts Audubon  
Jenny Ta  
Jim Gomes and Environmental League of Mass.  
Joe O'Regan of the Waldorf School  
Joe Snodgrass  
Keith Ohmart  
Lydia Rogers  
Michael Ratner  
Roland "Boot" Boutwell  
Russ Cohen  
Stew Kennedy  
Tom Whelan

The Friends of Arlington's Great Meadows is committed to continuing its stewardship and protection efforts for this exceptional treasure in our midst. We hope our work will ensure that all generations can enjoy and learn from it.

Respectfully submitted,

The Steering Committee

David White, Chair  
Don Miller

John Bartenstein  
Sandra Ruggiero

Mike Tabaczynski  
Sandy Vorce

*We encourage residents of Arlington, Lexington and neighboring communities to attend our meetings and to participate in our activities. Steering Committee meetings are generally held monthly and an Annual Meeting is usually held in the Spring. To obtain notice of these meetings, visit our web site at [www.FoAGM.org](http://www.FoAGM.org) and sign up for our email list. For those with an interest, positions are available on our Steering Committee.*



# New AGM Map

## Arlington's Great Meadows and Joyce Miller's Meadow

PO Box 492 Arlington MA, 02476 • info@foagm.org • www.foagm.org



### Getting There



### Legend

- |                         |                             |
|-------------------------|-----------------------------|
| Parking                 | Trail                       |
| Information Kiosk       | Stream                      |
| Public Access Point     | Pond                        |
| Private Access Point    | Wet Area                    |
| Woodcock Nesting Area   | Meadow Restoration Area     |
| Contour Lines (10 Feet) | Lexington Conservation Land |
| Boardwalk or Bridge     | Arlington's Great Meadows   |

Scale: 1:8,500

Elevation-Feet above Sea Level

Special Reference System: UTM Zone 19N (Feet) Datum NAD 1983.

Map Produced by Heather O'Neil for the Friends of Arlington's Great Meadows, April 2012. Data provided by the office of Geographic Information (Mass GIS). © FoAGM