

# Agenda

- Welcome
- Brief (!) Business Meeting
  - Adoption of Minutes
  - Adoption of Treasurer's Report
  - Election of Directors & Officers
- The Main Event: David Dargie, 'Andover Wildlife After Dark'
- Updates on the Pond and the Dam
- Looking Ahead to 2016
- New Business



Welcome to the Annual Meeting of the Foster's Pond Corporation.

I'm Steve Cotton, President of the Corporation.

Whether you are a long-time member or a newcomer to the Foster's Pond Community, I am delighted to welcome you this evening.

I hope you got a chance to view the introductory slideshow that was looping through the projector before we started. I just want to stress that we depend on our volunteers, and on your financial support, to protect Foster's Pond and maintain our historic dam. If you have not filled out or taken a donation form, please do so, or go on-line to make your tax-deductible contribution at our new web address, [www.fosterspond.org](http://www.fosterspond.org). And if you're not on our e-mail list, please give us your e-mail address so that we can send you periodic updates on what's happening around the Pond. Your e-mail address will not be used for any other purpose.

We do have some organizational obligations to fulfill, but this will be a very short business meeting so that we can get right to our speaker tonight.

After the presentation, I'll bring you up to date on the dam and the Pond. And we'll also have our usual open forum for new businesses.

# A Little FPC Business



## Approval of Minutes

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- March 16, 2015 (Annual Meeting)
- August 8, 2015 (Summer Meeting)



We posted minutes of our last annual meeting and our summer picnic meeting on-line and so that they would not have to be read. May I have motion to approve these minutes?

# Treasurer's Report



**Foster's Pond Corporation**  
www.fosterspond.org  
% David Brown, Treasurer  
31 Glenwood Road  
Andover, Ma 01810-6250

## TREASURER'S REPORT

For Fiscal Year ended December 31, 2015

<b>Assets</b>		
Checking Account balance 12/31/2015	\$2,111.35	
Money Market Account balance 12/31/2015	41,382.84	
Accounts receivable: NFG contributions	0.00	
Undeposited Funds	0.00	
Total Assets 12/31/2015		\$43,494.19
Total Assets 12/31/2014	\$69,099.91	
Net change in Assets for year ending 12/31/2015		(\$25,605.72)
<b>Liabilities</b>		
Prepaid dues & contributions for 2016	\$0.00	
Accounts Payable: Aquatic Control Technology	0.00	
Net income for year ending 12/31/2015		(\$23,230.72)
<b>Income</b>		
Dues Income	\$3,065.00	
5 Individual memberships		
31 Family memberships		
17 Sustaining memberships		
Contributions		
54 Individuals & families	\$11,810.00	
Grants		
Boston Foundation (for dam & pond maintenance)	10,000.00	
Interest Income	112.54	
Total Income		\$24,987.54
<b>Expenses</b>		
Dam Maintenance	\$4,206.10	
Pond Maintenance	43,192.45	
General Administration	819.71	
Total Expenses		\$48,218.26
Net Income		(\$23,230.72)

Respectfully Submitted,

David Brown  
Treasurer  
Report revised March 8, 2016



This report was posted on-line, and, as promised, our Treasurer is not going to read it. But I will ask David whether you have an update on this year's contributions. I am going to ask for a motion to accept the treasurer's report for 2015.

# Election of Directors

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- Nominated for re-election for two-year terms ending December 31, 2017:
  - Amy Janovsky
  - Martha Russell



Under the by-laws, there are five directors in addition to the four officers. The directors are elected for staggered terms of two years.

I want to thank all of our directors. These include three people whose terms are not expiring:

David Adilman  
Steve Ellis  
Dorothy Tyler

Nominated for re-election for two-year terms ending December 31, 2017 are

Amy Janovsky  
Martha Russell

Are there any other nominations? May I have a motion to re-elect these directors?

# Election of Officers

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- Nominated for re-election for 2016:
  - ▶ President: Steve Cotton
  - ▶ Vice-President: Marty Rabinowitz
  - ▶ Treasurer: Dave Brown
  - ▶ Secretary: Janet Kenney



Under the by-laws, officers are elected for a term of one year.

The following officers have been nominated for re-election :

President: Steve Cotton  
Vice-President: Marty Rabinowitz  
Treasurer: Dave Brown  
Secretary: Janet Kenney

Again, I want to thank my fellow officers for the work they do, without which the FPC could not function.

Are there any other nominations? If not, may I have a motion to re-elect these officers?



I am really pleased that I could tempt David Dargie to turn some of his handiwork into tonight's presentation.

David is a board member of the Avis Village Improvement Society, the coordinator of the AVIS wardens for all AVIS reservations, and the warden of the Goldsmith Woodlands.

For several years, he's been setting up a night-cam in Goldsmith, and some of the other near-by conservation land in the vicinity of Foter's Pond. Tonight, he's going to share with us some of what he has captured on film.

This is not only a world premier, it is David's debut as a film-maker.

Without further ado, here's David.







## March, 2010: Why Maintaining the Dam Matters



I included these pictures to remind everyone why maintaining the dam is so important, and just how much stress it can come under. The last significant flooding event was in 2010. That year, we had no snow cover, just like this year. But torrential rains raised the water level a couple of feet in just 24 hours. Those are a pair of 30-inch culverts under Rattlesnake Hill Road, and they were barely able to handle the outflow

This year, of course, we've so far been spared. But, torrential rains can still do harm to the dam, as we found out in the Mother's Day flood of 2006.



April 20 & May 3, 2015



We've had a recurrent, small leak in the westerly side of the dam, resulting in sinkholes which have opened up early each spring over a number of years now. In 2015, it happened again, and this time we used a special clay - which expands when wet to form an impermeable barrier - to seal the channel. Here are volunteers at work making the repairs.

It seems to have helped, but we still had a small sinkhole open up again this spring.

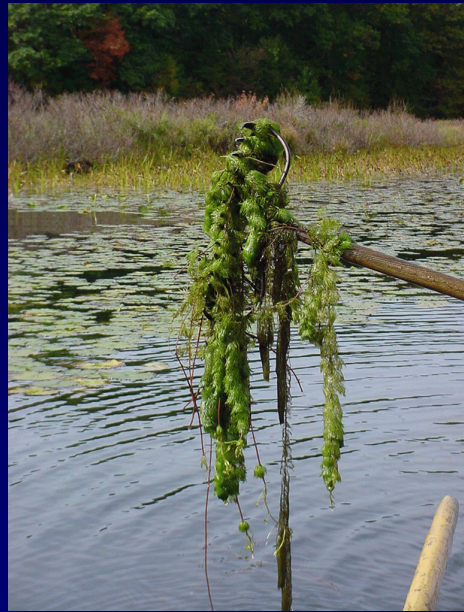
This fall, the dam will undergo a state-mandated safety inspection. We are required to engage a civil engineer every five years to conduct a rigorous inspection. The last one, in 2011, gave the dam a satisfactory rating. Hopefully, the dam will once again get a passing mark.





**2015:**

## **Whole-Lake Treatment to Control Fanwort**

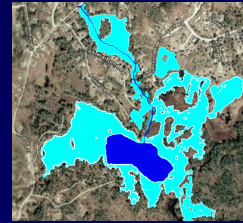
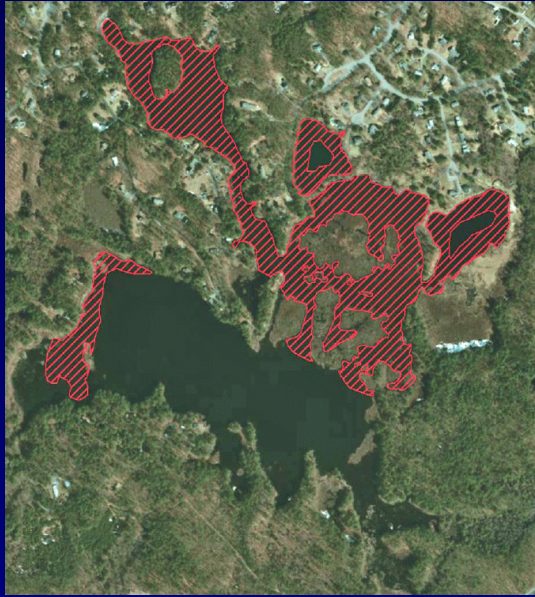


**Prior treatments in 2005  
and 2011 kept this  
invader from killing the  
Pond.**



Last year, for the first time since 2011, we treated the entire Pond, including Dug Pond, for invasive weeds - specifically, fanwort. Before we started managing the Pond, fanwort had become the dominant plant, covering more than half the open water.

## 2014: Fanwort Distribution



Fanwort covered 11% of the Pond in 2014 vs. 50% in 2004 (before our first treatment) and 6% (before our 2011 treatment)



The areas in red are where fanwort was observed in the previous summer's survey. Fanwort grows most robustly in the shallow areas that were flooded when the dam was built in the 1850s. That slide on the right, which you saw in the introduction before the meeting, shows the approximate location of the original 50-acre Pond, in dark blue, and the 120-acre water body we have today. The nutrients in the sediments of the expanded pond provide a fertile base for an invader like fanwort. Those sediments also provide nutrients for the growth of algae.



## 2015 'Sonar' Treatment

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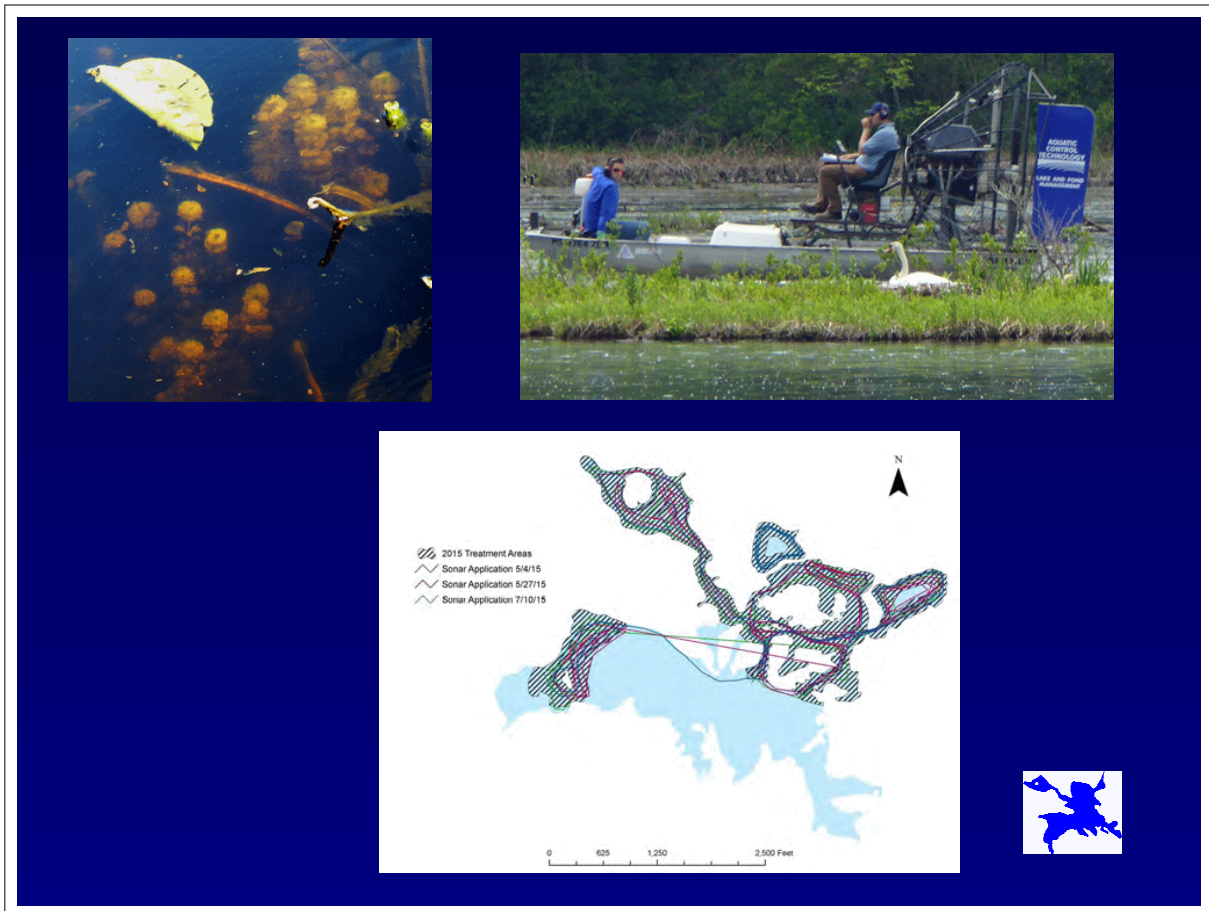
Approved Program

- Treatment plan prepared by our lake management consultant and approved by Andover Conservation Commission
- Complies with Order of Conditions, State GEIR, and State licensing requirements
- Whole-lake Sonar treatment (liquid and slow-release pellets) at drinking water-safe concentration (<20 ppb)
- Treatment cost: \$41,765 (less than 2005 and 2011)



Our fanwort treatment program is familiar to most of you. It of course meets all the regulatory requirements, and has proved safe and effective.

Treating the Pond occasionally for invasive weeds is the most expensive undertaking we perform. But if we didn't do this, the Pond would be a stinking mess, with fish die-offs and a monoculture of fanwort or some other non-native species.



The application method uses computer controlled equipment mounted on an airboat, that delivers the appropriate dosage based on the speed and location of the boat, as determined by a GPS link. Our consultant performed a total of three applications between early May and July. The map shows the airboar tracks on each of the applications.

The herbicide, Sonar, is a very slow-acting agent which causes the plant to bleach out over a relatively long time, so there's not a sudden oxygen drain which could adversely affect fish.

# 2015 'Sonar' Treatment

## Treatment Plan Considerations

- Foster's Pond has responded well to Sonar treatment
  - ▶ Most ponds need whole-lake treatments every 2-3 years to control fanwort; we've treated whole Pond in 2005 and 2011, 18 acres in 2007
  - ▶ We've had no adverse effects to fish or wildlife, and native plant diversity has increased
- Sonar remains the only practical control
- Sonar is approved for use in public water supplies



We've had very favorable results with Sonar, which is good since there really is no alternative.

The results have been confirmed by our thorough vegetation surveys, which we conduct every year or two. Our biologist rakes up samples at 50 different locations around the Pond, recording species and densities. These data points were established in our first survey in 2004, and are logged in a GPS system, so we have a lot of comparative data over the last decade. We will do another comprehensive survey this summer, as we continue to monitor the health of the Pond.

We have been fortunate in keeping the fanwort at bay even though we treat less frequently than other ponds that have this infestation. And we had good results using lower concentrations than regulations allow.

## Algae



Before the 2015 algae treatment, 50,000 cells/ml in the Main Pond.

>70,000 cells/ml is considered unhealthy.



This summer we will once again monitor for algae. Like a lot of other ponds in Massachusetts, we've been made aware of the problem of blue-green algae only in recent years. That ugly picture on the left is a bloom I photographed from my dock in the Main Pond in 2011. That's what can happen when we don't treat for algae. That's the worst I've seen in 42 years on the Pond.

Blue-green algae doesn't just look disgusting. It can cause gastro-intestinal problems in kids, and can be fatal to pets.

After 2012, when the Pond was closed for a couple of weeks because of algae, we added algae treatments to the list of authorized activities allowed under our Order of Conditions from the Andover Conservation Commission. Since then, volunteers have made systematic water clarity observations, and we've been sending samples out for laboratory analysis. We found high algae counts in 2013 and last year, and we treated the Pond both of those years - with almost instantaneously spectacular results.

We are in the process of getting permission to treat this year if there are high algae counts, and we hope to have volunteers back out to monitor the Pond. As to whether we'll need to treat, that's anyone's guess.

State regulations have gotten stricter, so catching the algae at just the right time is going to be trickier this year. You can't pretreat a pond. You have to wait until the algae start to grow before the treatment does any good. And if the concentrations stay low - as happened in 2014 - there's no need to treat. On the other hand, if the concentrations soar - and that can happen overnight - it's too late. Starting this year, the State won't allow treatment if the concentration is above 70,000 cells/ml, and wants written notification if the concentration is above 50,000 cells/ml. I'm working with our consultant to come up with a procedure so we can go from sampling to treatment quicker than we have done in the past.





## Please Volunteer

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- Water quality observations
- Help with the 12th Annual Summer Picnic
  - Host the event
  - Assist with set-up

If you are in a position to volunteer with water quality observations, please make sure we have your name and e-mail address. A successful algae treatment depends on timing - seeing if the Pond is getting murkier and dispatching water samples to the lab for examination before a bloom gets out of hand. We rely on volunteers to canoe or kayak to specific locations, every week or so, as the weather warms. So let me know if you can do this.

We also have a pond-wide picnic each year, to which the public is invited. Each one of the last 11 picnics we've held has been at a different location around the pond, and it's a great chance to experience the Pond from a new perspective. We don't have a location for this year's picnic, so if you'd like to offer your property, please let me know. You'll get to pick a date that works for you. And if you are not hosting, please let me know if you can volunteer to help.

## **Hydro-raking**

- **Depends on sufficient # of participants**
- **Performed in the Fall to minimize algae**
- **Each shoreline owner pays**
- **Advance sign-up required**



Finally, I just wanted to mention hydro-raking, which is another component of managing the Pond.

There's information up on the web site but bear in mind that whether we do it depends on the level of interest in any given year. If you haven't done it before, you need to take hard look at your shoreline to figure out whether it's a sensible undertaking for you, because once the spoils are on your beach, you need to take the next step and get the material out of there.

I will send around an e-mail in the summer to gauge interest.



# New Business

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The Floor Is Open



The floor is open.







