Back to our Agricultural Roots: Pasture Management, Visitor Engagement, and Local Partnership at the Clark

Sofia Roitman, Nigel Bates, Chris Stefanik, & Sophia Schmidt
Clark, Cows, and Community

Project Goals

- Control invasives
- Solidify partnership with Haley Farm
- Engage visitors with outdoor campus
Regional Context

- Agricultural history
  - Merino sheep (pre-1900s)
  - Dairy
  - Small-scale agriculture
Physical Site Description

34.12 total acres

Haley Farm
Site History

- Cow grazing
  - Haley Farm
  - Rich Haley and Carl Sweet
- Many invasives
- Walking/hiking trails throughout the campus
- New opportunities for outdoor education
INVASIVE MANAGEMENT
Background

- **Invasive Biology**
  - Japanese Barberry (*Berberis thunbergii*)
  - Multiflora Rose (*Rosa multiflora*)

- **Impair pasture health, impede grazing**
  - Current mowing schedule: July, September/October
  - Fails to target roots
Potential Management Strategies

- Fire
- Foliar herbicides
- Goat grazing

Eradication is probably impossible. Management is the goal.
Potential Management Strategies

- **Fire**
- Foliar herbicides
- Goat grazing

http://sar-cdn.com/sites/default/files/imagecache/superphoto/NEW01072010FIRE5.jpg
Potential Management Strategies

Fire

- Burn plan > Burn approval > Burn
- Cost dependent on many variables
- Approved plan good for ~10 yrs.

http://sar-cdn.com/sites/default/files/imagecache/superphoto/NEW01072010FIRE5.jpg
Potential Management Strategies

- Fire
- Foliar herbicides
- Goat grazing

http://pimg.tradeindia.com/00878113/b/1/Pesticide-Sprayer.jpg
Potential Management Strategies

Foliar herbicides

- Glyphosate
- Broadleaf, pre-emergent, granular herbicide
- Relatively inexpensive method

http://pimg.tradeindia.com/00878113/b/1/Pesticide-Sprayer.jpg
Potential Management Strategies

- Fire
- Foliar herbicides
- Goat grazing
Potential Management Strategies

Goat grazing

- Options:
  - Rental
  - Short-term purchase/resale
  - “Goat share” with Pine Cobble School

- Main concern: Predation
  - Fencing
  - Guard dogs

## Integrated Management Strategies

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Relative Effectiveness</th>
<th>Relative Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribed burn + Mowing</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Prescribed burn + Herbicide</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Mowing + Herbicide</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Herbicide + Herbicide</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>


Reseeding!

http://www.varmintsforfun.com/mikes%20jd%20014.jpg
HALEY FARM AND THE CLARK
Background

- 16 cows grazing on the pasture (20 total)
  - Allowed to come and go
  - Pattern of movement
  - If invasives gone, can keep more cows
- Water source: Haley Farm
Challenges

- Cows getting loose
- Grazing areas overgrown
- Water access
- Financial costs
Points to Consider

- Liability
- Compensation
- Future possibilities
VISITOR ENGAGEMENT & TEACHING STEWARDSHIP
Clark Visitor Survey

- 42 Clark visitors surveyed
- Sunday (11/15) and Tuesday (11/17) afternoons
- Attitudes, behaviors, demographics

Survey Results

Have you visited / do you plan to visit the Clark's outdoor campus today? If so, what parts?

- Pasture: 25
- Woodland Trails: 15
- Lawn: 10
- None of These: 10
Survey Results

Do you have children with you today?

Yes: 5
No: 35
Stone Hill in one word...
Case Studies

- Old Sturbridge Village
- Hancock Shaker Village
- Shelburne Farms
Landscape Additions: Pollinator Meadow

- Interpretive signage
- Bee boxes
- Honey
- Williams Beekeeping Club

https://nativebeeology.files.wordpress.com/2015/05/dsc_0026.jpg
Landscape Additions: Teaching Garden

- Accessibility
- Interpretive signage
- Hands-on learning
- Selling seeds
- Williams Sustainable Growers

Demonstration Dairy Operation

- Small scale
- Partnership with Greylock Mill?
- Sell products at Clark
- Involve visitors
  - Calf barn
  - Milking

Potential milking barn location
Potential new path
Pollinator meadow
Teaching garden
Visitor Engagement: Programming & Communications

- Media/Communications
- Interpretive signage
- Children's activities
- Partnership with WRLF

http://www.nature.org/cs/groups/webcontent/@web/@minnesota/documents/media/kids-hiking-490x250.jpg
http://3.bp.blogspot.com/-LwMgQJwUmIs/T4hh5JZkMsI/AAAAAAAAC1c/BhELNDbOlk8/s1600/P1050279.jpg
Final Proposal

Step 1: Revitalize pasture
Step 2: Strengthen farmer partnership
Step 3: Enhance visitor engagement
Thank you!

Sarah Gardner
Matt Noyes
Rich Haley
Carl Sweet
Hank Art
Drew Jones
Jay Racela
Francis Oakley
Leslie Reed-Evans
Cindy Dickinson
Morgan Hartman
Roger Bolton
Questions, Comments, Suggestions?
References

http://www.shelburnefarms.org/our-work/for-adults


http://www.nyis.info/index.php?action=invasive_detail&id=33


[http://www.williamstown.net/2213/Forest-Fire-Warden](http://www.williamstown.net/2213/Forest-Fire-Warden)