

Lamium galeobdolon Management  
Project at South Seattle Community  
College Arboretum

or,  
Out, Damn Weasel-Snout, Out!

Started in August, 2008 with two ideas and a  
meeting.



Except where noted, all photos by Claire Hendrickson.

Ellen Wanless, Horticulturist & Co-owner of *brooke/wanless gardens, llc*

- August of 2008
  - Volunteered to help remove the Lamium galeobdolon
- Researched for information about plant growth habits
  - Wendy DesCamps, plant habits & removal methods
  - Tracy Osborn, Rhododendron care
  - Culled through notes from lectures by:
    - Dr. Linda Chalker-Scott
    - Dr. Sarah Reichardt
    - Arthur Lee Jacobson
- Met with Van Bobbitt and Claire to formulate a plan

Claire Hendrickson, Volunteer Coordinator for  
the Arboretum at SSCC

- Responsibilities
  - Recruiting Volunteers
  - Purchase Tools
  - Gather & Prep Cardboard
  - Order & pickup lunches
  - Track volunteer hours
  - Send out thank you emails
  - Host annual volunteer recognition party

By the summer of 2008 there were 4 large patches of  
and 3 smaller areas of L. galeobdolon



**Large** = roughly 600 - 800 square feet

**Small** = roughly under 100 square feet

Affected Areas

1. Large swath under & adjacent to Rhody Grove near rose garden.
2. Large swath under the Myrica californica.
3. Large area on the hillside with the Fuchsias.
4. Large area along the stream & up into adjacent bed.
5. Small patch on hillside next to Kiwi trellis.
6. Small bit in sunny bed near Gazebo.
7. Small patch in bed along walkway to Chinese Garden.

Photos Showing Typical Density of Coverage of All Areas



- Areas adjacent to Helen Sutton Rose Garden.

### How This Plant Grows

- L. galeobdolon is invasive through vegetative propagation
  - Above ground stems grow very long in one growing season.
  - Each leaf node touching the ground develops roots, generating new stems & leaves in one growing season.
  - Bits of stems with leaf nodes can develop into new plants.
  - Bits of roots can also develop into new plants.

### Lamiaeum galeobdolon leaves & flowers

- Each leaf node can create a new plant. Spread by seed is not a concern.



Photos from King County Noxious Weed Web Site

### Lamiaeum galeobdolon Roots



- Observe the long, fine roots.



### Chemical Methods of Removal

- Eradication with herbicides is ineffective
  - Round-up can be hand-painted onto the plant.
  - After 5 years of hand-painting, the plant still needed this work.
  - Thus, labor & time required was no different than mechanical methods.
  - Concerns:
    - unintentional damage to neighboring plants.
    - currently unknown toxicities to humans, water tables, and all life in the soils.

### Mechanical Methods of Removal


- We chose
  - Shear the plant back close to the ground.
  - Cover the area with overlapping pieces of cardboard.
  - Add 4-6" of arborist chips on top.



### Mechanical Methods Concerns

- Minimize damage to other plants
  - hand shear versus weed-whacking
- Avoid unintentional spread of plant during removal
  - Carefully rake all sheared foliage & stems
  - Debris disposal using tarps & wheelbarrows Monitor disposal area for any volunteer plants.

### Tools



- Hand shears
- Hori-hori knives & Widger
- Hand rakes
- Iron claw
- 5-gallon buckets for tools & debris
- Small tarps
- Wheelbarrows
- Electric carving knife for prepping cardboard
- **Not pictured**
  - Brooms, Fan Rakes, Pitchforks, Razors

### Claire's Favorite Tool For Cardboard Sizing



### Cardboard

- How to find it
  - Must have little or no ink because these inks may not be soy-based.
- Where to store it
  - Cutting it into manageable sizes.
- Getting it prepped for our work party
  - Need to remove all non-biodegradable stuff: tape, labels, etc.

### Cardboard with labels

- Some labels were removed back at the tool shed, others will be removed at the work area.



### Work begins

- Our first volunteer work party was on the Second Saturday of November 2008
- There were 3 volunteers
- We now have between 4-6 volunteers each month!

### Some Lakeside School Volunteers



### First Stop: Large Swath Near Rhody Grove



### Rhody Patch With Cardboard

- We've found that this tight overlapping of the cardboard is critical to the initial smothering of the Lamiastrum.



### Rhody Patch - October 2010

In the spring of 2010, horsetail had grown up in this area.



### Rhody Patch - October 2010



### Rhody Patch - October 2010



### Myrica californica Area In Process





### Volunteer Emptying Weed Bucket Onto Tarp



### Bed Near Myrica With Cardboard

- Oops, some cardboard has non-biodegradable label...!



### Bed Near Myrica - October 2010



### Small patch near Kiwi:

- Spreading arborist chips on top of cardboard.



### Small patch near Kiwi

- Almost finished... almost time for lunch!



### Lunchtime!



### Small Patch Near Kiwi - October 2010

- Looks great, doesn't it?



### Close-up of Small Patch Near Kiwi - October 2010

- Just a few "peek-a-boos" that will get hand weeded out this fall.



### Early work on hillside with Fuchsia

- In order not to smother the Fuchsia, we did not sheet-mulch.



### Hillside with Fuchsia - October 2010

- We must have been a bit groggy when we made that decision...



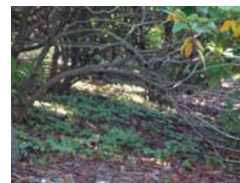
### Future work

- Fuchsia hillside
  - Take cuttings for propagation class for replanting
  - Shear & sheet mulch
- Hillside along stream near bridge
  - Explore with hand-tools to determine if hand-weeding will be time-effective.



### Future Work - Rhododendrons

- **L. galeboldon in Rhododendron roots**
  - Trials of three types of mechanical methods to determine which method causes least stress to Rhodies.
    - 1. Sheet-mulching on their roots
    - 2. 12"-15" mulch of arborist chips
    - 3. Starve out the L.g. by shearing to the ground weekly or bi-weekly.



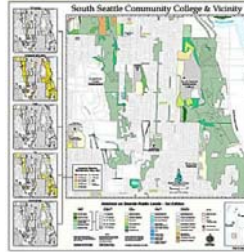
### Monitoring Previous Work

Critical to the long-term success of sheet-mulching is the ongoing monitoring and hand-weeding out of any "peek-a-boos".



### Arboretum Management Plan

- Incorporate quarterly monitoring & weeding of peek-a-boos into the long-term management plan
  - Long-term reduction of threat to natural areas
  - Requires minimal gardener time to hand-weed



Map courtesy of [www.seattlenature.org](http://www.seattlenature.org)

### Reports

Report 3-year results to King County Noxious Weed Board



### \$ Volunteer Hours \$

Access database for tracking volunteer efforts.

CoHort Noxious Weed Removal  
Hours & Dollar Value for 2010 to date  
volunteer labor: \$12/hour & \$45/hour

	Hours	Value
January	12.00	\$ 144.00
	3.00	135.00
February	15.00	180.00
	3.00	135.00
March	17.00	204.00
	3.00	135.00
April	9.50	114.00
	3.50	135.00
May	10.50	126.00
	3.00	135.00
June	9.00	108.00
	5.00	185.00
July	14.50	174.00
	3.00	135.00
August	Vaction!	
September	9.00	108.00
	3.00	135.00
October	15.00	180.00
	3.00	135.00
<b>Totals</b>	<b>141.00</b>	<b>\$ 2,603.00</b>

### Join us!

- Free lunch, free laughs, free training!



### Credits

- None of this work would have been possible without the ongoing work of our dedicated scientists, arborists, and horticulturists in this area. Whether or not we consulted with them, the work of the following people & organizations directed our efforts in this project.
  - Van Bobbitt
  - Wendy DesCamps
  - Lin Sierra
  - Tracy Osborn
  - Dr. Sarah Reichardt
  - Dr. Linda Chalker-Scott
  - Arthur Lee Jacobson
  - Elizabeth Miller Library
  - King County's Noxious Weed web site
  - Washington State's Noxious Weed web site
- We thank you all very, very much!

