Going Virtual:
IT Tools to Enhance Water Quality Education with Farmers

Dr. Heather Darby

www.uvm.edu/extension/cropsoil/
Welcome

NW CROPS & SOILS PROGRAM

The mission of the UVM Extension Northwest Crops and Soils Team is to provide the best and relevant cropping information, both research-based and experiential, delivered in the most practical and understandable ways to Vermont farmers.

OUT CROPPINGS: Important crop news from the field!

Northern Corn Leaf Blight Once again, we have seen increased Northern Corn Leaf Blight (NLB) pressure in our area. Northern leaf blight is a fungal disease found in humid climates wherever corn is grown. Click here to download entire article.

Cereal Grain Testing comes to the Green Mountains! UVM Extension Northwest Crops and Soils Team Grain Quality Laboratory is up and running! Our lab is currently accepting samples and will continue to do so until December 1, 2010. Click here to download a Cereal Grain Test Submission Form.

Northeast Hop Alliance Presents Hops 101 and 201 Courses, Saturday-Sunday, October 9 and 10, 2010 Fenimore Art Museum Cooperstown, NY 13326. Click here to download a pdf flyer of this event.
Websites

• Effective if they can be found

• People need to know they exist

• Googlicious

• Extension web information is often difficult to locate
Websites

- People want new information
- Need to be easy to update
  - Wordpress
- Needs to be updated
  - Extra time
Content Types

• Articles
• Narrated powerpoints
• Video
• Webinars
• Moodle Courses

Good example of what is possible eXtension.org
Webinar

- Live & archived presentations
- Can have multiple audiences
  - Researchers, extensions
  - Farmers
- Many services
  - Elluminate, Adobe Connect,
  - Go to Webinars
- Archived and can be viewed and used over and over again.
• Present research projects & results
• How-To videos
• Success stories
• Immediate Info to clients
New Articles/Bulletins

Instructional video clips on equipment use/production methods
Whole farm case study videos

Archived webinars

Narrated PowerPoint Presentations

Asynchronous Moodle Courses

Good example of what is possible eXtension.org
Top Tweets

**LiterallyJamie** To be fair, that's a great move for Andy Carroll. Liverpool's the only city in Europe where his hairstyle is still fashionable.

*about 1 hour ago*

**karlentk** West Ham were offered Andy Carroll for £1 million in the summer of 2009, but Steve Clarke didn't rate him (from dead cert source).

*about 1 hour ago*

**RyanSeacrest** "If opportunity doesn't knock, build a door." - Milton Berle...Let's hustle this week! Who's with me???

*about 1 hour ago*
Inform producers, certified crop advisors, community members and legislators about what’s going on in the field and around the state.

Can send as a text to any cell phone.
Facebook- Share photos and experiences from workshops and conferences.

Drive traffic to websites, other content
Nutrient Management

• Five week course

• Over 100 farms have completed the program

• 95% completion rate
Nutrient Management

- 100% understood their plan
- Implemented 50 – 75% of plan
- 30% of course participants keeping adequate records
Bridging the Gap
Web Application to Connect with Iphone Application
Total farms: 2
Clover Farm
My Test Farm
CLOVER FARM: A2312 FIELD

A2312

Tomato Hill

Add new field

FIELD INFORMATION

ABOUT

Field Name: A2312
Acres: 20.0
FSA Tract and Field Number: 250-16
Elevation Zone (ft): < 600
County: Chittenden
Ownership Type: Owned

RISK FACTORS

Distance To Stream (ft): 25
Soil Type: TeE
Vegetated: 25
Limiting Soil Type: TeD
CORN SILAGE 10/24 : A2312

**CROP INFORMATION**

<table>
<thead>
<tr>
<th>CROP TYPE</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Type: Corn Silage</td>
<td>Nutrients per Unit: N150.0 - P20.0 - K160.0 - Zn5.0</td>
</tr>
<tr>
<td>Yield Goal / Acre: 20.0</td>
<td>Lime (tons/acre): 1.0</td>
</tr>
<tr>
<td>Yield Unit: Ton</td>
<td></td>
</tr>
<tr>
<td>Legume Percentage: 0-20% legume</td>
<td></td>
</tr>
<tr>
<td>Surface Cover %: 0 - 20 %</td>
<td></td>
</tr>
<tr>
<td>Planting Date: Oct 24 2011</td>
<td></td>
</tr>
</tbody>
</table>

Update Crop  Cancel
**CORN SILAGE 10/24 : A2312**

**CROP RECORDS**

**PLANTING**
- Planting Date: Oct 24, 2011
- Seed Depth: 3 inches
- Seed Rate: 5 lbs/acre
- Variety: F2F297

**TILLAGE**
- Primary Tillage: Moldboard Plow
- Secondary Tillage: Field Cultivator

**Update Crop**
iCrop

- Farm Information
- My Fields
- Farm Summary
- Load Counter
- Settings
**General Information**
- Demo Farm
- 400 Acres Owned
- 100 Acres Leased

**Equipment**
- Primary Tillage: Moldboard
- Secondary Tillage: Disk
- 2 Spreaders

**Livestock**
- Holstein
- 253705632 Rolling Average

**Notes and Rotation**

**Add / Edit**
- Name: By the river
- FSA Tract Field Number: 123-1
- County: Franklin
- Acres: 20
- Elevation: 0
- Distance To Stream: 25
- Vegetated Buffer Width: 25
- Manure Spread Setback: 25
- Sediment Trap Structure: None
- Ownership Type: Owned
- Drainage Class: Moderately Well

**Save**
Applications

Fertilizer Application
Starter Fertilizer on 2011-05-30

Add a new Application

Nutrients Required

N: 150
P: 80
K: 60

Past Years

Last Year
Corn Silage 6000.0

Two Years ago
Corn Silage 6000.0

Planned Manure

Fall
Total Applied: 60000 | Incorporation Method...
Field

Crops

Corn Silage
Primary Tillage

Add a new Crop

Planting

2011-05-30 00:00:00 UTC
Seed Depth: 4 inches

Soil Test

2010
PH: 6.2

Nutrients

6 - Phosphorus - P
Subtitle
iCrop

- Farm Information
- My Fields
- Farm Summary
- Load Counter
- Settings
Demo Farm
278 South Main St
Suite 2
St. Albans, Vermont
05478

Land
400 acres owned
100 acres leased
Watershed: St. Albans Bay

Livestock
Holstein | Herd

<table>
<thead>
<tr>
<th>Animal Type</th>
<th>Dairy - Calves (&lt; 6 months)</th>
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<tbody>
<tr>
<td>Number</td>
<td>25</td>
</tr>
<tr>
<td>Weight</td>
<td>250</td>
</tr>
<tr>
<td>Always Confined</td>
<td>Yes</td>
</tr>
<tr>
<td>Grazing Type</td>
<td>Continuous</td>
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<tr>
<td>Stocking Rate</td>
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</tbody>
</table>

Manure

<table>
<thead>
<tr>
<th>Stack</th>
<th>Solid/Semi-Solid</th>
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</thead>
<tbody>
<tr>
<td>Behind The Barn</td>
<td>Liquid</td>
</tr>
</tbody>
</table>

Fertilizer

<table>
<thead>
<tr>
<th>Urea</th>
<th>Dry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitan</td>
<td>Liquid</td>
</tr>
</tbody>
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Add / Edit
Save
Cancel
Demo Farm
278 South Main St
Suite 2
St. Albans, Vermont
05478

Land
400 acres owned
100 acres leased
Watershed: St. Albans Bay

Livestock

Equipment

Add / Edit

Name: Behind The Barn
Animal Type: Dairy - Lactating Cow
Manure Type: Liquid
DM Percentage: 8
Total Manure Produced: 300000
Total Manure Applied: 0

New Spreader

New Manure Storage

New Fertilizer
Field: By the river

By the river
20 Acres
Owner
Model

Nutrient

<table>
<thead>
<tr>
<th>Manure</th>
<th>40</th>
<th>32</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>P</td>
<td>K</td>
<td></td>
</tr>
<tr>
<td>Fertilizer</td>
<td>50</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

Application Type: Starter Fertilizer

Date: 2011-05-30 00:00:00 UTC
Rate/Acre: 0

Harvest

Pests
### Field: By the river

**By the river**
- 20 Acres
- Owned
- Moderately Well drained

**Nutrients**

<table>
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<td>K</td>
<td>80</td>
<td>0</td>
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**Applications**

- **Manure Application**
  - 8 Loads on 2011-10-25

- **Fertilizer Application**
  - Starter Fertilizer on 2011-05-30

**Harvest**

Total Yield: 11000 Tons

**Pests**

- **Weeds**
  - Quack Grass on 2011-06-30
Delivery/Evaluation
Winter of 2011/2012

Training and transition

For sale on iTunes - $50 to $99 yearly updates

Evaluation winter 2013
Funding
National CIG grant awarded in 2010 - $45,000
Additional funds from UVM Extension
Total Cost - $98,000
Proceeds from sales of iCrop
Next Steps

• Finish Application & Beta Test
• Launch on iTunes
• Develop nationwide applicability
• Develop GIS enabled application
• Develop application for other growers
  – Vegetable
  – Organic
Apps for
The Great Outdoors

iPhone is always up for adventure. Load it with outdoorsy apps and start exploring the world around you. Then use it to help you find your way home.

Discover apps for the great outdoors

Apps featured in this article:

- **iBird Explorer Backyard**
  Identify all the fine feathered friends outside your house.

- **Knot Guide**
  Keep everything tied down with knots of every kind.

- **MyNature Animal Tracks**
  Spot some tracks and identify which animal left its mark.

- **Surf Report**
  Check out surf conditions before riding the waves.
Apps for Agriculture

iPhone is always up for adventure. Load it with outdoorsy apps and start exploring the world around you. Then use it to help you find your way home.

Discover apps for the great outdoors →