WSU Whatcom County

Recent, Current, and Contemplated Programs
October 9, 2002
## Whatcom Statistics

<table>
<thead>
<tr>
<th>County Population</th>
<th>160,310 (1999 census data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Production</td>
<td>$241 Million (1997 Ag Census data)</td>
</tr>
<tr>
<td>State Ag Ranking</td>
<td>6 / 39 Counties</td>
</tr>
<tr>
<td></td>
<td>1 / 17 Western Washington</td>
</tr>
<tr>
<td>National Ag Ranking</td>
<td>95 / 3,076 US Farm Counties (3%)</td>
</tr>
<tr>
<td>Dairy</td>
<td>1 / 39 State</td>
</tr>
<tr>
<td></td>
<td>12 / 2,563 US Dairy Counties (0.5%)</td>
</tr>
<tr>
<td>Faculty</td>
<td>4 (1 vacant)</td>
</tr>
<tr>
<td>Staff</td>
<td>4 FT, 3 PT</td>
</tr>
</tbody>
</table>
Program Areas

- **Ag & Natural Resources**
  - Production Ag
  - Master Gardener
  - IPM
  - Waste/ nutrient mgmt
  - Water resource mgmt

- **4-H**
  - Clubs
  - Challenge
  - Computer Wizards

- **Families**
  - Parenting
  - Food Safety
Significant Program Nexus

Agriculture

Environment

Cooperative Extension Programs
Dairy - Nutrient Management

• **Issue:**
  - ~80,000 Dairy Cows
  - NO₃ in groundwater
  - bacteria in surfacewater

• Need to export **excess** nutrients

• **Approaches**
  - Compost
  - Biogas
Biogas

• Created Whatcom Biogas Team
  – Port, PUD, Ag Preservation Com., Conservation District, CENEX

• Workshops, tours, etc.

• Discussions with utilities
  – Puget, Seattle City Light

• Collaboration with EPRI

• Market analysis
Dairy Compost Research

Spinach Fresh Weight & Dry weight (grams/plant)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>FW</th>
<th>DW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0X</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0.1X</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>1X</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2X</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Dry Weight (g) vs. FW

Images of composting and plants.
Compost Utilization In Greenhouse Container Production

The use of Digested, Separated, Composted Dairy Solids in Soilless Potting Medias

![Graph showing chlorophyll and plant length across different treatments](image)

6 Research Trials 2002
Whatcom County
Environmental Programs

Whatcom County
Watershed Education

Whatcom County
Nutrient Management
Lake Whatcom
Lake-Friendly Gardening

- Lake Whatcom is the drinking water source for 86,000 people
- Garden pesticides and excess nutrients found in rain water runoff in watershed
- To protect water resources, Whatcom County IPM Program developed to facilitate behavioral change
The kit had useful information.

- The kit was easy to understand.
Garden Kit Impacts
Survey Results

- My attitude toward pest management changed.
- Because of what I learned, I now manage pests differently.
Lake Whatcom does more than grace the landscape with its beauty—it’s the source of drinking water for over 85,700 people, including you. If you live in the watershed, you and your neighbors—about 10,000 people in all—have not only the privilege of living in one of Whatcom county’s loveliest spots, but also the opportunity to be good stewards of a resource that directly affects the health of your family and community.

Water pollution isn’t just about industrial or agricultural waste. It can happen even when you don’t put anything directly into a lake or stream. When it rains—not an uncommon event here in western Washington—whatever is on the ground, including fertilizer, pesticides, engine oil, or pet waste, can get carried off with the stormwater into a creek or a storm drain that feeds into the lake, if not directly into the lake itself.


If you have any questions or would like more information, please contact WSU Cooperative Extension at (360) 675-6736. Thank you for being a good steward!
Crane Fly IPM

• $13 Million spent on crane fly pesticides purchased by Puget Sound homeowners in 1999
• Crane Fly pesticides found in watershed
• Education
  – Master Gardeners
  – Workshops, training
  – Public outreach
  – Press releases
  – Brochures, Web pages & Displays
• Research
  – Crane fly survey
MG Crane Fly Survey

• 2001: 45 Lawns
  - 65% = 0 crane fly larvae
  - 30% = 1-10 crane fly larvae
  - 0% = 10-20 crane fly larvae
  - 5% = 20-25 crane fly larvae
  - 0% = >25 crane fly larvae

• 2002: 78 Lawns
  - 90% = 0 crane fly larvae
  - 9% = 1-5 crane fly larvae
  - 1% = 6-10 crane fly larvae
  - 0% = >11 crane fly larvae

No lawns needed treatment
Crane Fly Web Site
http://whatcom.wsu.edu/cranefly

• Provide people with reliable information
• Connect homeowners with experts
• Network researchers to develop management tools
• All through partnerships
• 2200 Visits last week!
Crane Fly IPM: Impacts

• “I came across the cranefly site. I have subscribed to the forum but would also like to open communications for potential collaborative work.”
  Rod Blackshaw, Ph.D.
  Head of Research
  University of Plymouth

• “The cranefly website and contacts in the northwest have been invaluable for me and for anyone back here trying to deal with these species - keep up the good work.”
  Jon K. Gelhaus, Ph.D.
  The Academy of Natural Sciences
Western Raspberry Fruitworm: Developing IPM Tools for Raspberry Growers

- Test WRFW monitoring tools on the farm to time and apply management tactics.

- Collaborators:
  - Growers
  - Scottish Crop Research Institute
  - WSU Dept. of Entomology
  - B.C. Ministries of AG
Internet delivery of programs & information

- Strong commitment to web delivery of programs
- Integrate web support of live programs
- Aggressively market web efforts
- Provide web hosting to community issues
- Co-market web sites
- Utilize Webtrends to measure effects
WEB Promotion to Evaluation

To: "Salmon and Watershed Issues" <nwsalmon-water@lyris.cahe.wsu.edu>

If you missed the field day and your chance to observe the Reed Canary Grass Control plots, but are still interested in the results, check out this web site.

http://whatcom.wsu.edu/environ/rcg2002/

Craig
WSU Whatcom WEB Usage Trend

Page Views/Month

Date

Mar-01 May-01 Jul-01 Sep-01 Nov-01 Jan-02 Mar-02 May-02
WSU Whatcom WEB Family

http://whatcom.wsu.edu
http://whatcomshellfish.wsu.edu/
http://wria1project.wsu.edu/
http://lakewhatcom.wsu.edu/
http://whatcom-mrc.wsu.edu/