Pesticide Sensitive Crops and Habitats Registry

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Office of Indiana State Chemist

www.driftwatch.org
Can we reduce off-target impacts of pesticides?

- 75% increase in specialty crop acres
- High cash value crops
- Introduction of 2,4 –D and dicamba resistant soybeans (2014)
- Pesticide drift complaints significant part of State Lead Agency workload
Objective: Foster communication (between) stewards of at-risk habitat, producers of pesticide sensitive crops and pesticide applicators
Types of sites in registry?

Locations of pesticide sensitive crops
  Beehives, grapes, certified organic, fruits, tomatoes, vegetables, nursery crops, melons, xmas trees, etc...

Drinking Water Watersheds
  Source water for community drinking water supplies

Endangered species habitat
How Driftwatch Works

Applicators ➔ Data Stewards ➔ Producers ➔ Public

Data Base
How Driftwatch Works (Producers)

Google Map™ registry website
- Grower:
  1. registers personal contact information
  2. sketches a polygon around his field
  3. identifies sensitive crop type
  4. saves image and contact information

- Data Steward (OISC):
  1. automatically receives saved grower information
  2. performs quality control review (not intended for home gardens)
  3. adds grower data to website
How Driftwatch Works *(Applicators)*

**Applicator:**

1. registers personal contact information
2. identifies parts of state *(e.g., counties)* in which he is interested
3. waits for automated e-mail to alert him that a new producer entry in his area of the state has been registered
4. Drift Watch map available to public, must register to receive automated notification *(CCH credit)*.
Indiana Sensitive Crop Registry areas integrated with Google Map™
- **Crop**: Certified Organic
- **Year**: 2009
- **URL**: www.traderspointcreamery.com
- **Name**: Fritz and Jane Elder Kunz
- **Email**: jane@tporganics.com
- **Phone**: 317-919-6234
Sensitive Crop Registry participants may also purchase field signs to identify their crop areas.
2010 Completed Enhancements:

✓ Pesticide Applicator Registry
✓ Automated emails notifications to applicators/producers
✓ Field signage for registered producers
✓ Improved digitizing tools
✓ Eliminated pop-up box registration requirements
✓ Producer registration edit capabilities
✓ Data sharing capabilities
  • Aerial Applicators (prototype launched)
  • Right of Way Industry
✓ County registration workshop for non-computer producers
✓ Development of regional partnerships
✓ Michigan Driftwatch website (training and launch)
✓ Illinois, Minnesota and Wisconsin Driftwatch website (training)
2010 Indiana Website Activity

2,525 visits, 7,986 views

Driftwatch Map 557 hits
User guide 380 users, (506)
Sensitive crops 246 users, (368)

Data steward 502 logins

Internet Browser Types
  - Internet explorer (69%)

Internet Service Types 5

Visitor Segmentation
- Visitors Profile: languages, network locations, user defined
- Browser Profile: browsers, operating systems, browser and operating systems, screen colors, screen resolutions, java support, Flash
- Map Overlay: Geolocation visualization

Try Google Ad Planner.
Understand the demographics and behaviors of your website’s visitors.

Technical Profile

<table>
<thead>
<tr>
<th>Browser</th>
<th>Visits</th>
<th>% visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Explorer</td>
<td>1,738</td>
<td>68.75%</td>
</tr>
<tr>
<td>Firefox</td>
<td>514</td>
<td>20.36%</td>
</tr>
<tr>
<td>Chrome</td>
<td>174</td>
<td>6.89%</td>
</tr>
<tr>
<td>Safari</td>
<td>95</td>
<td>3.80%</td>
</tr>
<tr>
<td>BlackBerry/8530</td>
<td>2</td>
<td>0.08%</td>
</tr>
</tbody>
</table>

Connection Speed

<table>
<thead>
<tr>
<th>Speed</th>
<th>Visits</th>
<th>% visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>865</td>
<td>34.26%</td>
</tr>
<tr>
<td>T1</td>
<td>768</td>
<td>30.42%</td>
</tr>
<tr>
<td>DSL</td>
<td>441</td>
<td>17.47%</td>
</tr>
<tr>
<td>Cable</td>
<td>411</td>
<td>16.28%</td>
</tr>
<tr>
<td>Dialup</td>
<td>40</td>
<td>1.58%</td>
</tr>
</tbody>
</table>

view full report
2010 Indiana Website User Traffic Pattern

Highest Period (60%)
Early Spring (April, May)

Highest One Day - 76 users (April 6, 2010)
Indiana Website Mobile Device Access

iPhone and iPad 35 of 47 hits (74%)

Other: Android, Blackberry

Mobile Devices

These mobile devices sent 47 visits via 4 operating systems

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Visits</th>
<th>Pages/Visit</th>
<th>Avg. Time on Site</th>
<th>% New Visits</th>
<th>Bounce Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone</td>
<td>27</td>
<td>1.19</td>
<td>00:00:08</td>
<td>88.89%</td>
<td>81.48%</td>
</tr>
<tr>
<td>iPad</td>
<td>8</td>
<td>1.62</td>
<td>00:02:14</td>
<td>87.50%</td>
<td>62.50%</td>
</tr>
<tr>
<td>Android</td>
<td>7</td>
<td>1.43</td>
<td>00:00:14</td>
<td>100.00%</td>
<td>71.43%</td>
</tr>
<tr>
<td>BlackBerry</td>
<td>5</td>
<td>1.40</td>
<td>00:00:33</td>
<td>100.00%</td>
<td>60.00%</td>
</tr>
</tbody>
</table>
# 2010 Indiana Sensitive Crop Registry

<table>
<thead>
<tr>
<th>Crop Type</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beehives (82)</td>
<td>1,626</td>
</tr>
<tr>
<td>Certified organic (24)</td>
<td>3,197</td>
</tr>
<tr>
<td>Christmas trees (5)</td>
<td>149</td>
</tr>
<tr>
<td>Floriculture (2)</td>
<td>18.5</td>
</tr>
<tr>
<td>Fruits (20)</td>
<td>421</td>
</tr>
<tr>
<td>Grapes (39)</td>
<td>454</td>
</tr>
<tr>
<td>Nursery crops (4)</td>
<td>152</td>
</tr>
<tr>
<td>Organic crops (10)</td>
<td>203</td>
</tr>
<tr>
<td>Organic livestock (2)</td>
<td>132</td>
</tr>
<tr>
<td>Other (14)</td>
<td>391</td>
</tr>
<tr>
<td>Pumpkins and melons (14)</td>
<td>896</td>
</tr>
<tr>
<td>Tomatoes (147)</td>
<td>10,110</td>
</tr>
<tr>
<td>Vegetables (35)</td>
<td>1,064</td>
</tr>
</tbody>
</table>
Indiana Driftwatch Website Summary

- Check submissions: 194 hits
- Producer register page: 591 unique
- Producer login 396 hits (Clearly some multiple field digitizing sessions)
- User guide 380 unique, 506 total hits
- Data steward: 502 logins
- Producer password change page: 112 hits; which generated 77 new password emails
- Producer profile edit 70 hits
- check submissions 50 hits
- Crop values page 50 hits –needs content!
- Applicator sensitive crop registry notifications (3, 000+)
2011 Activities

- Region 5 States Drift Watch website development/operation
- Pesticide applicator survey and results
- Crop registry annual renewal implementation
- Data Steward tool development
- Website assessment (*user interface, harden environment, version control*)
- General & crop specific stewardship bulletins (CES specialists)
- Users guides updates & videos (*Purdue Ag Communications*)
- Google™ analytics - measure website activity
- Data sharing capabilities (*real-time*)
  - Aerial Applicators
  - Right of Way Applicators (*INDOT*)
- Regional partnerships
- Sustainable business model
Pesticide Sensitive Crops and Habitats Registry
www.driftwatch.org

Purdue University Extension
Driftwatch Action Team

- Indiana Bee Keepers Association
- Indiana Department of Natural Resources
- Indiana Department of Transportation
- Syngenta Crop Protection *(applicator registry and notification)*
- Red Gold Inc
- Indiana Wine Grape Council
- Indiana Soybean Alliance
- Indiana Farm Bureau
- Agribusiness Council of Indiana
- Indiana State Beekeepers Association
- Indiana Vegetable Growers Association
- Indiana Certified Organic Growers Association
- Indiana Department of Agriculture
- Purdue University Ag and Biological Engineering
- Purdue University Cooperative Extension
- US EPA Region 5
NO DRIFT ZONE

driftwatch
Pesticide Sensitive Crops and Habitats Registry

www.driftwatch.org

Sign Up!