# UFORHIC – Urban Forest Health Information Center – Taking the Next Step to Success

Eileen Luke and Scott Maco November 5, 2013







# Background

- Threat from invasive forest insects and diseases
- Gap in knowledge
- New pest introductions undetected
- Local inventories often not reviewed across communities

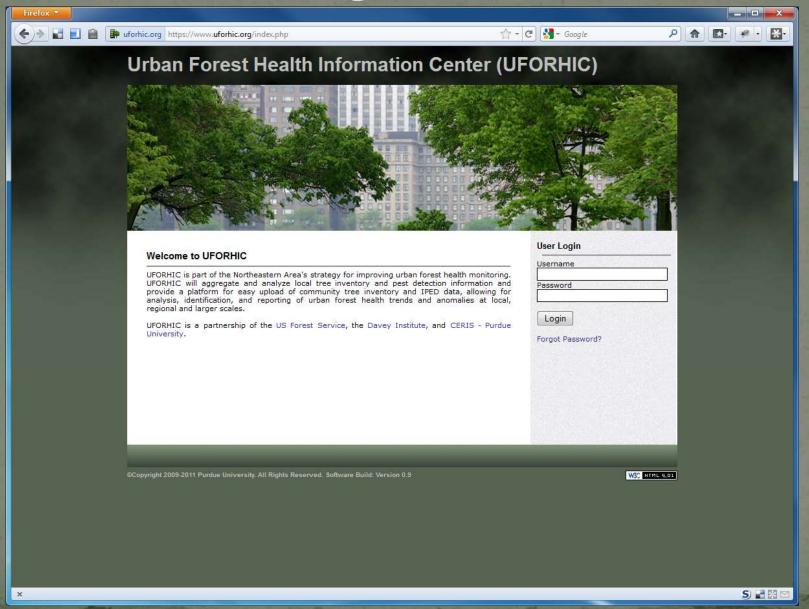
# Background – cont.

- While many communities routinely conduct tree inventories for their local needs,
  - There is currently no way to aggregate information across communities to assess forest conditions.

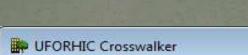
### As a result

UFORHIC was implemented.

### Login Screen



#### Crosswalker





#### **UFORHIC**

#### Urban Forest Health Information Center



The Urban Forest Health Information Center (UFORHIC) is part of the Northeastern Area's strategy for improving urban forest health monitoring.

UFORHIC's mission is to aggregate and analyze local tree inventory and pest detection information as well as to provide a platform for easy upload, analysis, identification, and reporting of urban forest health trends and anomalies at local and regional scales.

UFORHIC is a partnership between:

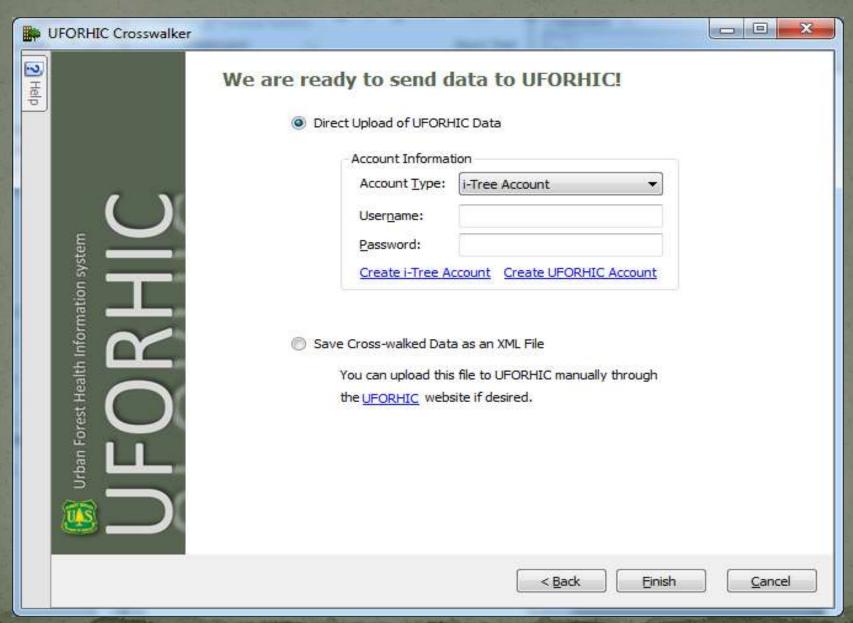
- The US Forest Service,
- The Davey Tree Expert Company,
- CERIS Purdue University.







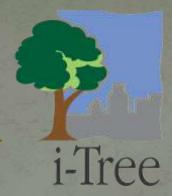
### Crosswalker





Distributed Tree Inventory & Pest Detection Data

#### **UFORHIC/Pest Detection**





**Local Use** 



-1-	44 (100	100	77.66
	Tube Sy.	70	124000
		_	150
Ti-	COS at	777	1.25
- 11	(Company)	14.	01909
11	Conception:	184	17960









## UFORHIC Home Page

#### **Urban Forest Health Information Center (UFORHIC)**



#### Welcome Eileen Luke

Listed below is a summary of the total of the number of inventories, total number of trees, and the total number of states that are in the UFORHIC system. If you are in the Northeastern region, please help us expand this site by uploading your tree inventory data.

Summary of UFORHIC Data						
Inventories	Trees	States				
323	787147	18				

If you experience any problems using this site please contact the site administrator at admin@uforhic.org.

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# Total Inventories by State

State	Total
Alabama	2
Arizona	1
California	2
District of Columbia	1
Delaware	6
Iowa	182
Illinois	13
Indiana	15
Massachusetts	16
Maine	2
Michigan	31
Minnesota	9
Missouri	12
New York	21
Pennsylvania	1
Rhode Island	1
Washington	1
Wisconsin	7

## Where is the data?

**UFORHIC Map** 

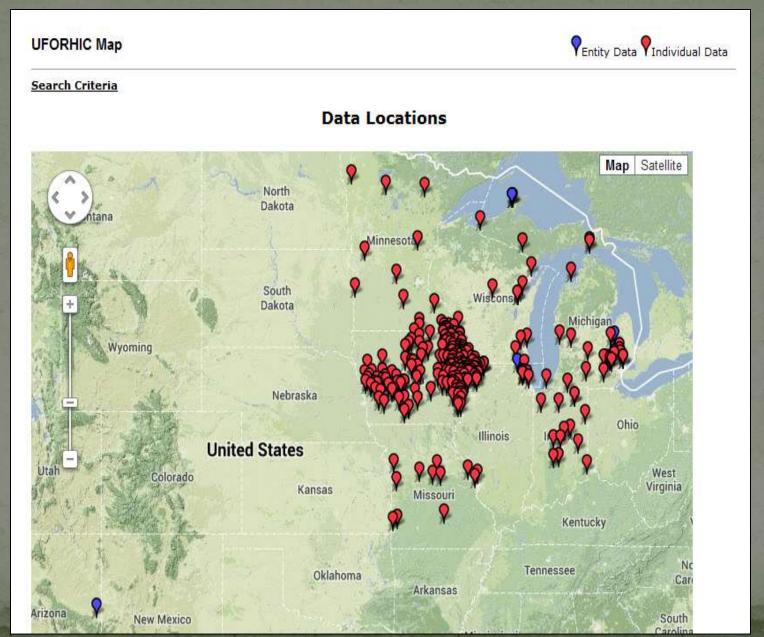
PEntity Data VIndividual Data

Search Criteria

#### **Data Locations**



### You can zoom in



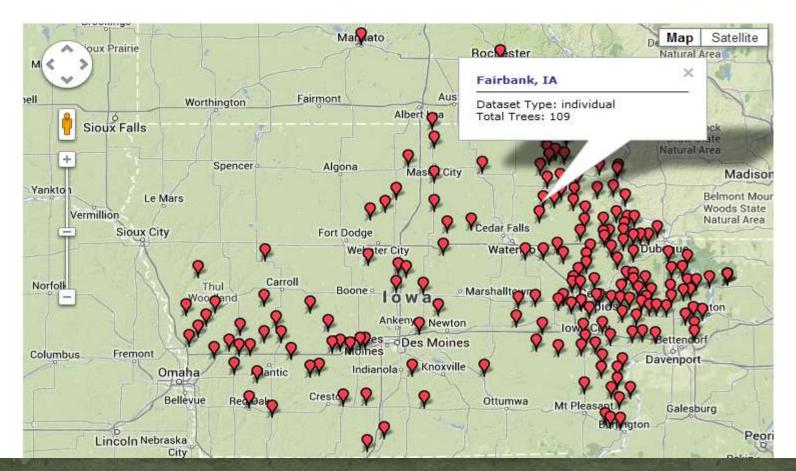
### Map feature

**UFORHIC Map** 

PEntity Data Individual Data

Search Criteria

#### **Data Locations**



# Report by clicking Fairbank, IA

#### **UFORHIC Raw Data Report**

Search Results

Inventory ID: Fairbank, IA

Inventory Data								
Inventory ID Survey Dates		Total Trees Total Land Inventory Type		Tree Type	Tree Location	Collector		
Fairbank, IA	10/01/2010-10/01/2010	109	1.00(miles)	complete	public	other	government	

Internal System Data							
System Date	System Time	User ID	Dataset Type				
2013-09-16	14:11:01	100 (mahill)	individual				

Location Data							
State	County	Municipality					
Iowa	Buchanan	Fairbank					

	DBH by Top Species											
	Tree Species	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	42+	Total	
1	Silver maple	0	0	1	6	7	6	1	0	0	21	
2	Black walnut	0	1	0	5	7	5	0	0	0	18	
3	Norway maple	0	0	1	3	9	1	0	0	0	14	
4	Green ash	0	0	1	5	5	1	0	0	0	12	
5	White ash	1	0	0	0	2	6	0	0	0	9	
6	catalpa spp	0	0	0	0	1	1	0	2	0	4	
7	Ohio buckeye	0	1	0	2	1	0	0	0	0	4	
8	Birch Spp	0	2	1	0	0	0	0	0	0	3	
9	Sugar maple	0	0	0	2	1	0	0	0	0	3	
10	Honeylocust	0	0	0	0	3	0	0	0	0	3	
11	Blue spruce	0	0	2	1	0	0	0	0	0	3	
12	Lilac Spp	1	1	0	0	0	0	0	0	0	2	
13	Pin oak	1	0	0	1	0	0	0	0	0	2	
14	Apple Spp	0	1	0	1	0	0	0	0	0	2	
15	Red maple	0	0	1	1	0	0	0	0	0	2	
16	Mulberry Spp	0	0	0	1	0	0	0	0	0	1	
17	Spruce Spp	0	0	0	1	0	0	0	0	0	1	
18	Southern magnolia	0	0	1	0	0	0	0	0	0	1	
19	American sycamore	0	0	0	0	1	0	0	0	0	1	
20	Cottonwood Spp	0	0	0	0	0	0	1	0	0	1	
21	American basswood	0	0	0	0	0	1	0	0	0	1	
22	Siberian elm	0	0	0	0	0	1	0	0	0	1	
DB	H Total	3	6	8	29	37	22	2	2	0	109	

### Zoom feature

#### **UFORHIC Map**

₹70-100% ₹50-70% ₹25-50% ₹0-25%

Search Criteria Genus: Fraxinus

#### Frequency of Trees



# Report Examples

- Summary Reports
- Individual Data Fields Reports

# Reports – Tree Size by Health Condition

#### **UFORHIC Report**



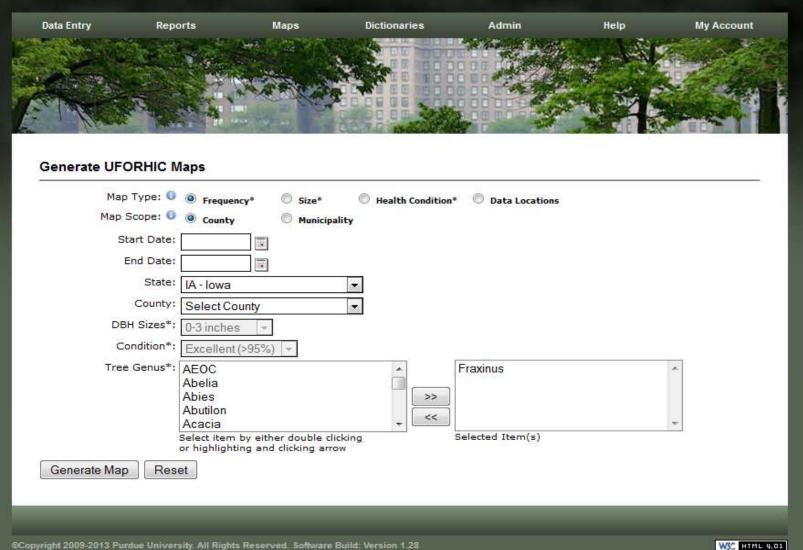




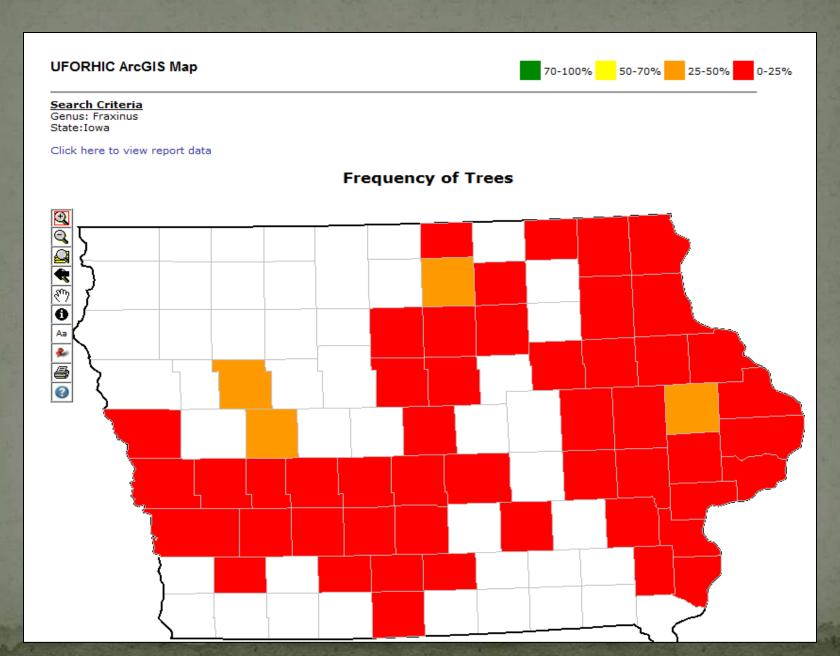
Tree Size Class by Health Condition										
Size Class	Excellent	Good	Fair	Poor	Dead	Total				
0-3 inches	9,245	25,615	40,222	6,000	1,756	82,838				
	<b>11.16%</b>	<b>30.92%</b>	<b>48.56%</b>	<b>7.24%</b>	<b>2.12%</b>	<b>100%</b>				
3-6 inches	4,403	23,145	29,485	5,284	1,372	63,689				
	<b>6.91%</b>	<b>36.34%</b>	<b>46.30%</b>	<b>8.30%</b>	<b>2.15%</b>	<b>100%</b>				
6-12 inches	3,335	25,895	56,765	13,587	2,549	102,131				
	<b>3.27%</b>	<b>25.35%</b>	<b>55.58%</b>	<b>13.30%</b>	<b>2.50%</b>	<b>100%</b>				
12-18 inches	1,792	16,928	69,739	18,629	2,212	109,300				
	<b>1.64%</b>	<b>15.49%</b>	<b>63.81%</b>	<b>17.04%</b>	<b>2.02%</b>	<b>100%</b>				
18-24 inches	1,007	10,719	53,383	14,865	1,332	81,306				
	<b>1.24%</b>	<b>13.18%</b>	<b>65.66%</b>	<b>18.28%</b>	<b>1.64%</b>	<b>100%</b>				
24-30 inches	605	5,202	30,283	9,811	753	46,654				
	<b>1.30%</b>	<b>11.15%</b>	<b>64.91%</b>	<b>21.03%</b>	<b>1.61%</b>	<b>100%</b>				
30-36 inches	205	2,178	15,344	5,898	420	24,045				
	<b>0.85%</b>	<b>9.06%</b>	<b>63.81%</b>	<b>24.53%</b>	<b>1.75%</b>	<b>100%</b>				
36-42 inches	101	916	6,798	3,043	289	11,147				
	<b>0.91%</b>	<b>8.22%</b>	<b>60.99%</b>	<b>27.30%</b>	<b>2.59%</b>	<b>100%</b>				
42+ inches	127	943	4,420	1,985	380	7,855				
	<b>1.62%</b>	<b>12.01%</b>	<b>56.27%</b>	<b>25.27%</b>	<b>4.84%</b>	<b>100%</b>				
Total	20,820 <b>3.94%</b>	111,541 <b>21.09%</b>		79,102 <b>14.95%</b>	11,063 <b>2.09%</b>	528,965 <b>100%</b>				

# Frequency of Ash in Iowa

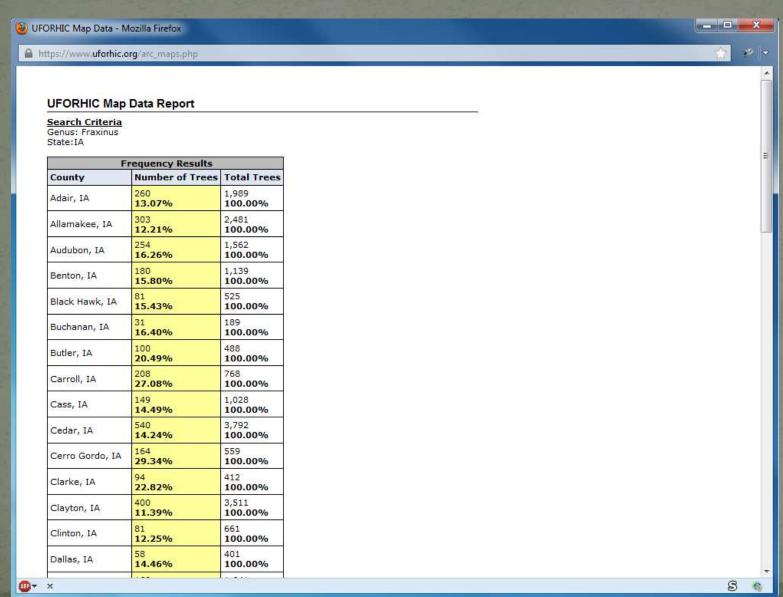
#### **Urban Forest Health Information Center (UFORHIC)**



### Results



# Map Data Report



## Questions

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- Scott Maco Scott Maco@davey.com (425)605-0383