

Pt. Defiance Park Bioblitz

May 20-21, 2011

NatureMapping and SQLShare Survey Results

Background: The need for biodiversity data, primarily wildlife is the main reason the *NatureMapping* Program was created. Information was and still is needed by scientists, natural resource agencies, local jurisdictions, community projects, and schools.

SQLShare was created at the UW eScience Institute for researchers to query their data along with other supporting data without having to become a programmer. The *NatureMapping* and SQLShare project has two hypotheses:

1. Citizen scientists can be productive with SQL without training (but given sufficient examples)
2. Citizens can be data editors as well as data collectors through a *mashup*-oriented model for presenting science data to a wider audience: K12 students, policy makers, and the general public.

The survey was handed out to volunteers and potential users of SQLShare at the Biolitz to assess:

- Types of questions users want answered
- What information was important to them
- Self-interest
- Willingness to find and report theirs and others' errors
- Comfort of querying data

Results:

48 people completed the survey.

Which Category do you fall into?	
Interested Citizen	48%
Adult Informal educator	38%
K-20 Student	19%
K-12 teacher or Informal educator	21%
City, county jurisdiction	19%
Natural Resource Agency University	15%
Community volunteer organization	13%

What kind of feedback would you like to receive?	
Reported by everyone	81%
Highlighting non-native, rare,	71%
Highlight those NM needs data for	48%
Predicted in your neighborhood	42%
Reported in your neighborhood	40%
Reported by you	35%

Information on Graphs	
Family groups by month or year	67%
Species seen by month or year	33%

As expected, feedback via online maps with locations ranked very high:

Maps & Reports	
Where species were seen	90%
With other informations and pics of species	52%
Design your own questions and reports? No	50%
Design your own questions and reports? Yes	38%

Possible Questions	
What species are non-native?	73%
Diversity is greater or less than another area	63%
What species are most common?	60%
How many animal species reported?	58%
For what species do we need more data?	56%
What species are predicted, but not reported?	46%
What species are migratory?	42%
How many bird species were predicted?	40%
Compare birds reported in May (2001-2011) including average temperature and rainfall	35%
What species do we see monthly?	31%
How many others have reported species I have?	27%

NatureMapping encourages users to submit an observation, even if they are unsure of the identity. Wildlife are moving because of weather, habitat changes, and range expansions. The survey asked if the user saw an observation that needed further review, would the user be willing to “tag” the record to alert *NatureMapping* and others?

Error Reporting of Others	
Willing to tag observations and report to NatureMapping? Yes	85%
No	0%

The last section provided SQLShare statements and asked “Does the process look easy enough for you to try to write your own if given enough examples?”

What species are considered at risk in Washington State?

```
SELECT * FROM [naturemapping_data.csv] WHERE [at-risk-2] = '2'
```

What mammals were reported at the Pt. Defiance Bioblitz? (Tracker 1 teams reported mammals.)

```
SELECT * FROM [pt_defiance_bioblitz.txt] WHERE [tracker] = '1'
```

SQLShare Statements	
Process of writing formulas easy enough? Yes or blank with positive comments	65%
No	19%
No answer and no comment	15%

Conclusion:

Interested citizens, as well as educators and land managers want options to view data gathered at Bioblitzes as well as general data submission around their community.

A list of SQLShare statements using questions provided in the survey should be made available to users for general queries. More sophisticated statements will need further instructions.