



In early 2005, staff from the *NatureMapping* Program (NM), Washington Department of Fish and Wildlife (WDFW), and Chewelah Peaks Learning Center (CPLC) discussed potential research questions for investigation by citizen scientists. Under proposal was the participation of public school students at CPLC in conducting on-going research to answer wildlife research and management questions needed by WDFW, with NM providing support and consulting for the research projects. A total of 8 distinct research questions were generated by WDFW, CPLC, and NM involved the CPLC site and surrounding community.

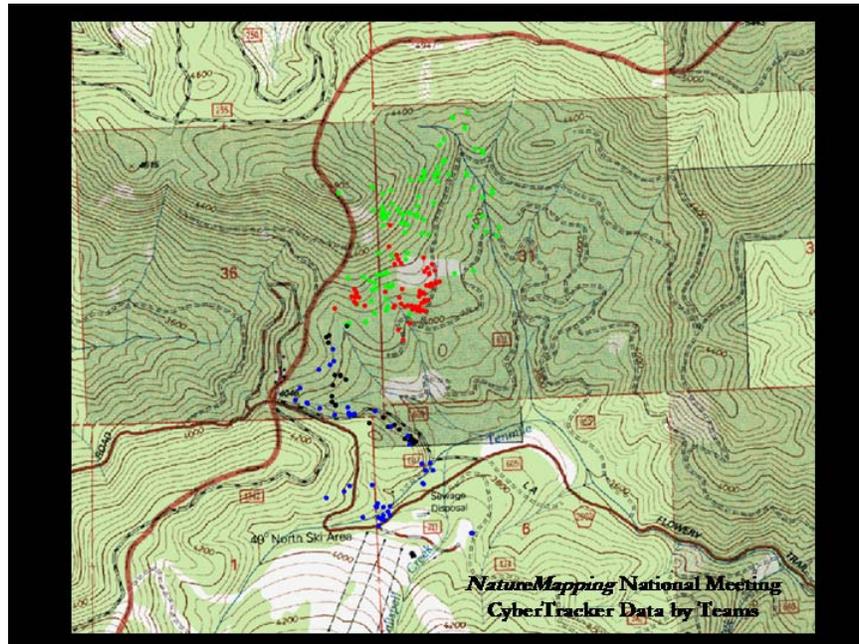
The feasibility of each project was tested on May 14, 2005 by attendees of the NM national conference. Attendees came from 6 states and had field skills ranging from beginner to expert, thus creating a wide variety of familiarity with local flora and fauna. Attendees were placed into 4 teams with 4 to 6 people per team. Teams were determined based on desire of each person for strenuous or non-strenuous hiking activity. Each team was assigned research questions for which to collect data. Research questions were assigned to groups by matching to group's desired level of exertion with the difficulty of the travel route needed to reach each question's study area.

Each team was equipped with 3 personal digital assistants (PDA) with an integrated GPS unit. Point sightings were collected on PDAs with the Washington *NatureMapping* Nature Tracker data collection software. Team members recorded field observations with the PDA. At the conclusion of field activities for the day, records were downloaded from each PDA onto a central laptop for viewing, querying, and export to GIS. Following download, data was not reviewed for accuracy of observations or for documentation of appropriate local species.

A total of 270 point sights were documented (Table 1). These consisted of 21 bird species, 15 mammal species, 1 species of amphibian, and 1 species of reptile.

Table 1. Data Collected

Team	Total Records	Bird Spp	Mammal Spp	Amphibian Spp	Reptile Spp
1	45	2	5		
2	35	3	5		1
4	73	11	5		
5	117	15	12	1	1
Total	270	21	15	1	1



Different teams documented different species and numbers of observations. This may be attributable to 1) species being present in different areas, 2) assigned research questions causing focus on particular species, and 3) varying field identification skills between groups. It is particularly difficult to discern this final factor. This can be problematic when viewing data from all teams. It is crucial to data integrity that all teams have similar capacity to collect data. In this instance, teams were selected based on anticipated level of exertion. It is possible that team members desiring more strenuous field time are also more experienced in the outdoors and, hence, have better field skills for identification. The reverse may also be reasoned. Given the increased area surveyed by all groups, viewing the data of all teams together is particularly effective for analysis. Hence, to increase the ability of all teams to collect similar data, it is recommended that future field teams consist of members whose combined field skills are approximately equal.

CyberTracker: Washington - Chewelah Ungulate

File Edit View Tools Window Help

Query

Name	Date	#
<input checked="" type="checkbox"/> Scat	Last year	21
<input type="checkbox"/> Mule De...	Last year	1
<input type="checkbox"/> Elk Scat	Last year	1
<input type="checkbox"/> Elk Scat	Last year	1
<input type="checkbox"/> White-tal...	Last year	6
<input type="checkbox"/> Moose S...	Last year	3
<input type="checkbox"/> Moose S...	Last year	6

Inspect

1 of 21

Class: None

Time: 5/14/2005 4:16:05 PM
Position: 48.30545000, -117.56087330

Item	Value
Tracker 1	
NMID#	21
Washington	
Stevens	
Habitat	
I Know the Habita...	
Habitat Code	920
Track or sign	
Mammal	
Carnivore	
Canines	
Coyote	
I am sure	
Exact number	
Total	1
Degrees	0

Table: Chewelah Scat

	Date	Tracker	Species	Observation	Sign Type
1	5/14/2005	Tracker 1	Coyote	Track or sign	Scat
2	5/14/2005	Tracker 4	Moose	See	Latrine
3	5/14/2005	Tracker 4	Moose	See	Latrine
4	5/14/2005	Tracker 4	Moose	See	Latrine
5	5/14/2005	Tracker 5	White-tailed Deer	See	Scat
6	5/14/2005	Tracker 5	White-tailed Deer	See	Scat
7	5/14/2005	Tracker 5	Moose	See	Scat
8	5/14/2005	Tracker 5	White-tailed Deer	See	Scat
9	5/14/2005	Tracker 5	Elk (Wapiti)	See	Scat
10	5/14/2005	Tracker 5	White-tailed Deer	See	Scat
11	5/14/2005	Tracker 5	Moose	See	Scat
12	5/14/2005	Tracker 2		Track or sign	Scat
13	5/14/2005	Tracker 2	Mule Deer	Track or sign	Scat
14	5/14/2005	Tracker 4	Moose	Track or sign	Scat
15	5/14/2005	Tracker 4	White-tailed Deer	Track or sign	Scat
16	5/14/2005	Tracker 4	Moose	Track or sign	Scat
17	5/14/2005	Tracker 4	Moose	Track or sign	Scat
18	5/14/2005	Tracker 4	Moose	Track or sign	Scat
19	5/14/2005	Tracker 2	Elk (Wapiti)	Track or sign	Latrine
20	5/14/2005	Tracker 4	White-tailed Deer	See	Scat
21	5/14/2005	Tracker 4	Least Chipmunk	See	Scat

Map: Chew_Aerial_SW