Lands Monitoring Program

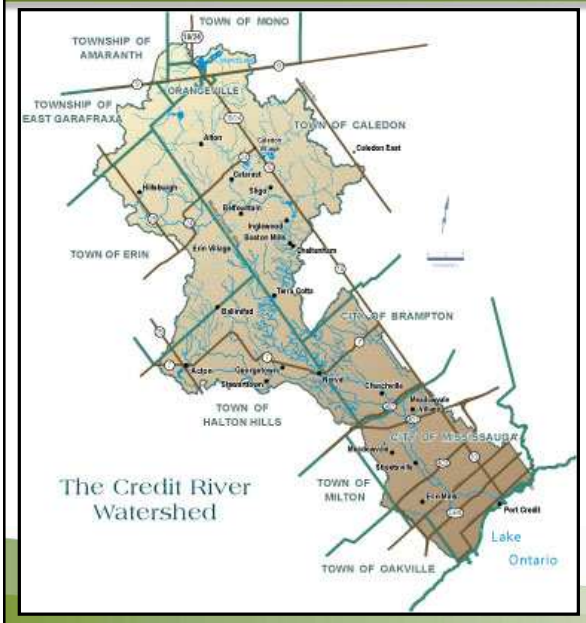
Automated Counting Equipment

HCIA – Trails Working Group Meeting
November 23, 2011

Presentation Outline

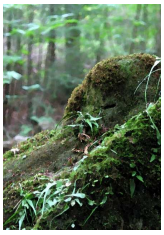
- **Credit Valley Conservation**
  - Conservation Areas System
  - Lands Monitoring Program
  - Importance of Visitor Information
- **Automated Counter Program**
  - Equipment
  - Installation
  - Data
- **Results**
  - Findings
  - Calibration
  - Testing

Credit Valley Conservation



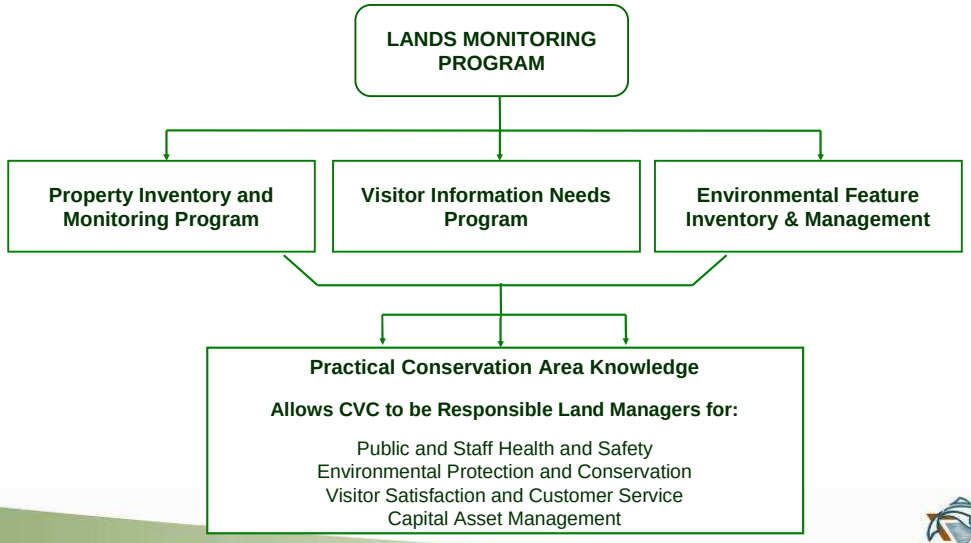
- 60 Conservation Areas across Watershed
- Manage lands under a Systems Approach
- 10 Core Properties for Visitor Experience
- Conservation Areas Strategy Guides Lands Management Policies, Programs and Procedures
- Lands Monitoring Program Developed as Tool for Adaptive Land Management

What is the Lands Monitoring Program?



- Adaptive Land Management Tool
- Derived from the Conservation Areas Strategy
- Implemented under CVC's Land Management Policies
- Used to Collect Baseline Property and Visitor Information

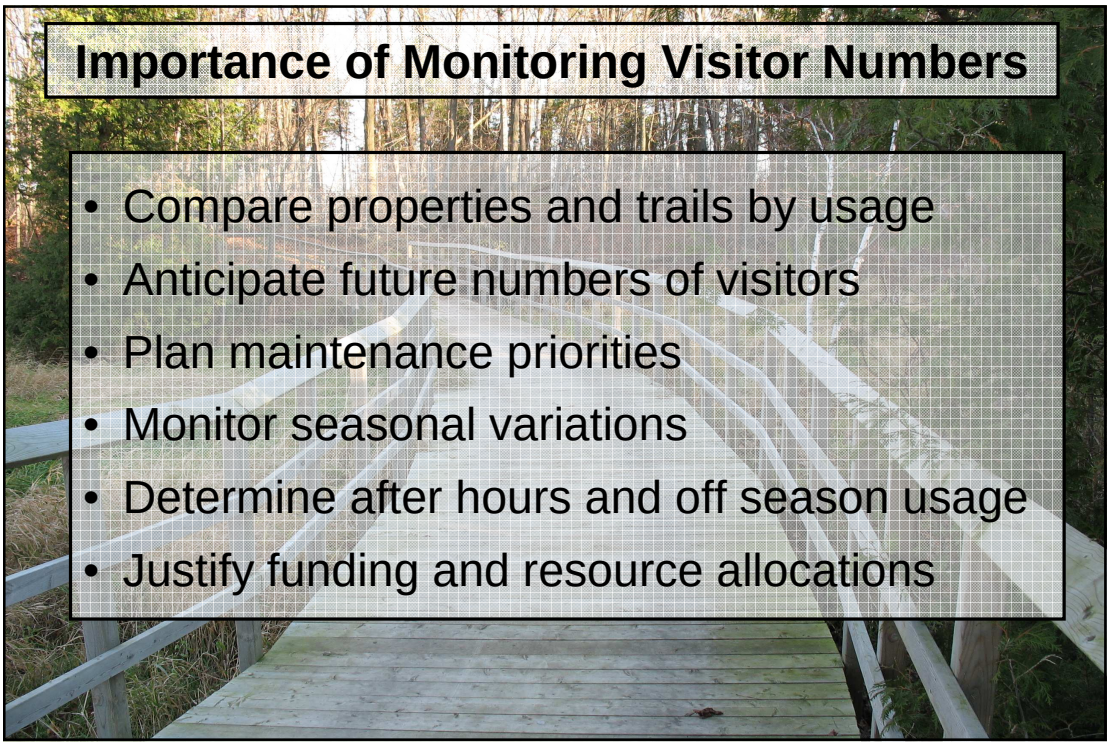
Lands Monitoring Program Framework



Importance of Collecting Visitor Data

Any phenomenon that is not measured and reported on, does not exist politically.

~ Paul F. Eagles



Trail Counting Equipment

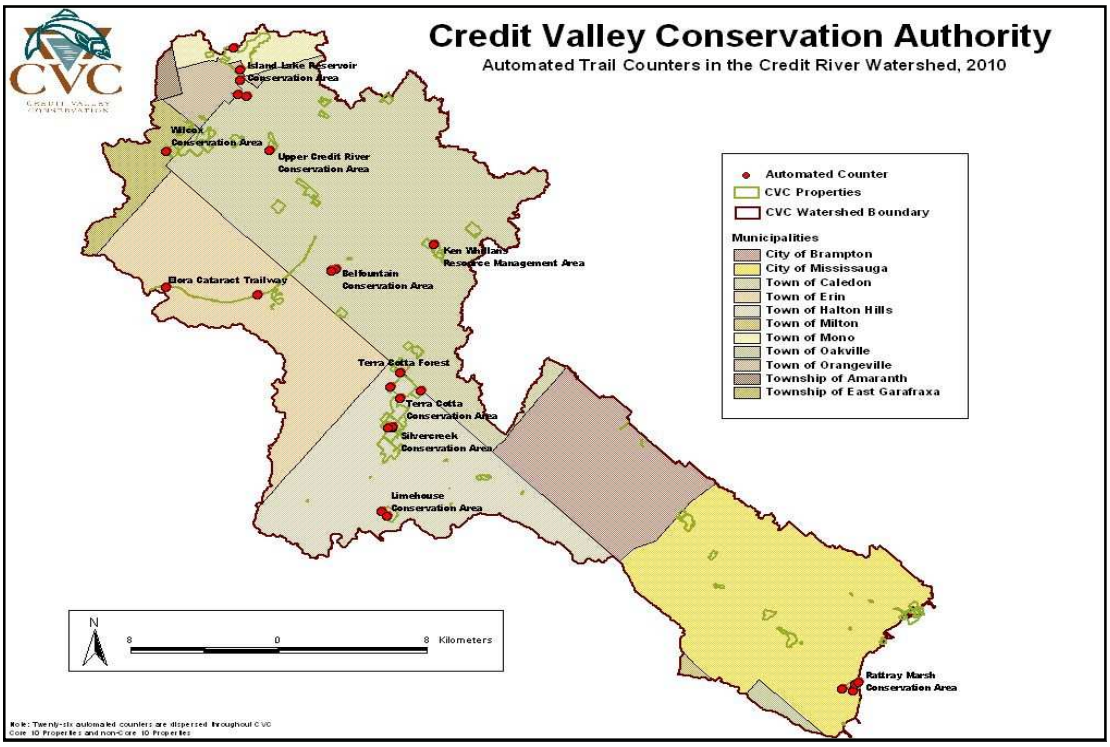
Type	Components	How it Works	Pros	Cons
Seismic	- Pressure pad buried beneath trail	- Counts every time an individual steps on the pad	- Highly accurate in ideal conditions	- Not suitable for winter use; high traffic areas; wide paths
Video Monitoring	- Video Camera and case	- Can run continuously or triggered by an event	- Records visitor behaviour	- expensive; vandalism; time consuming to analyze
Active	- Transmitter and receiver	- Transmitter emits a beam to the receiver; a count is recorded when the beam is broken	- High level of accuracy	- Expensive; problematic to install on some topographies
Passive	- Single unit	- A count is recorded every time the infrared beam is broken	- consistent; easy to install and move; inexpensive	- Slightly less accurate

Trafx Trail Counter

Scope emits infrared beam

Computer records counts

Installation



Shuttle Files

June 08_2011_Priority_Counters - Notepad

File Edit Format View Help

```
p
>>>>>>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Factory:_B3.53_C2.80_F8127_EY_ME_D1
=DOCK TIME (yy-mm-dd hh:mm):11-06-03 15:03:17
Counter log start
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

System check...
*****v9.0b S/N90304 (c) 2001-2009*****
TRAFx Research Ltd. www.trafx.net
Fx:F6E0R1M3T2T_c26f26L33LN4P0AOE2_m064I2_d

Sets:N:H:001:030:E:060:000:F:Y:F:016:000:Y:000

  *Serial Number  :0903DV
  *Counter name   :KW - Caledon Trailwa
  *Mode           :Infrared (IR+)
  *Batt. voltage  :4.0
  *Stored records :00362

=TIME (yy-mm-dd hh:mm):11-06-03,15:02:12
=START(yy-mm-dd hh:mm):11-05-19,15:00
PERIOD (1/24/0=Timestamps) :001
DELAY     (see manual)     :030

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11-05-19,16:00,00002,00000
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11-05-19,18:00,00002,00000
11-05-19,19:00,00004,00000
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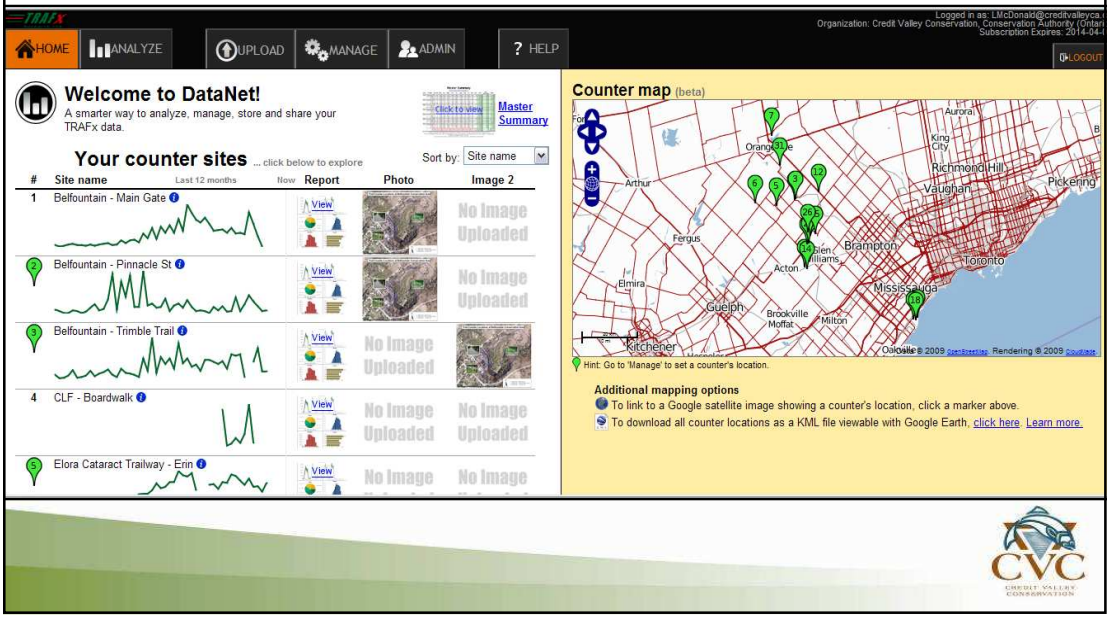
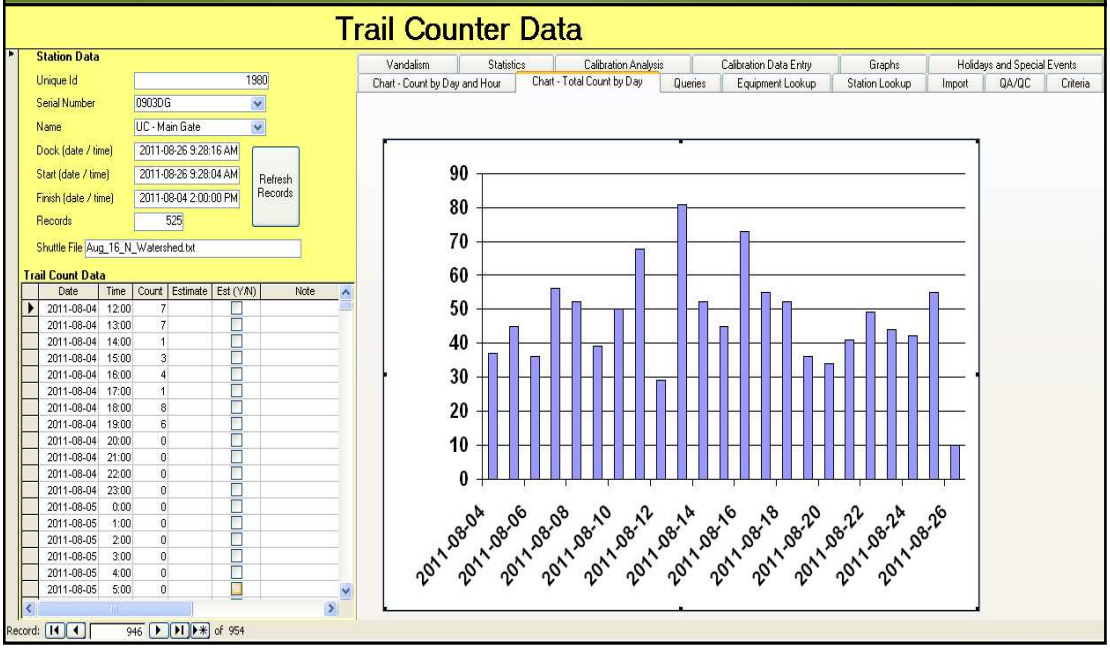
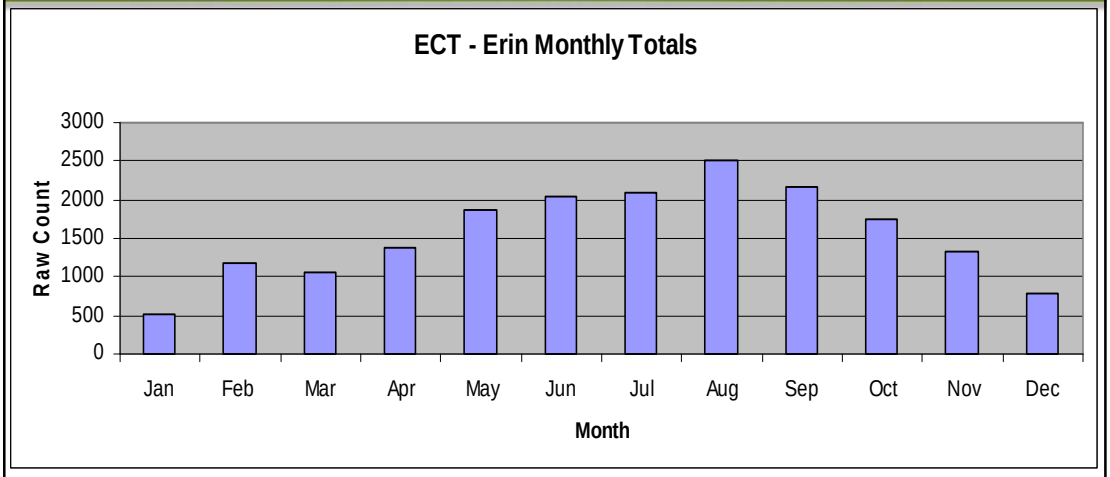
Trafx Website



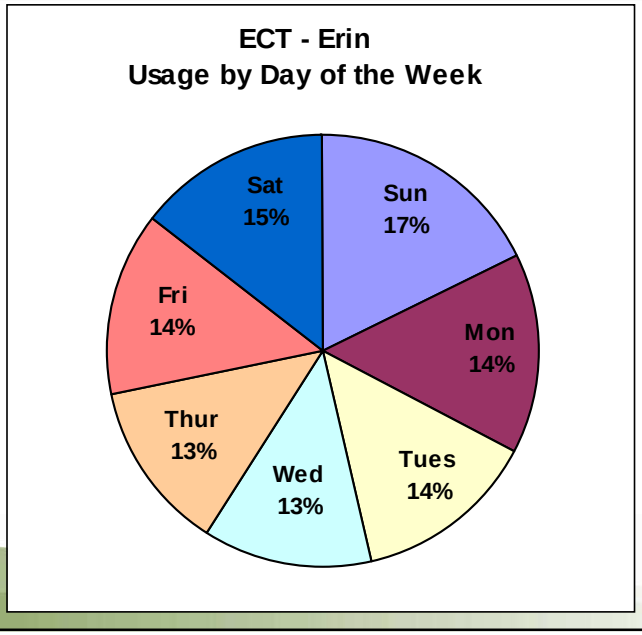
Access Database



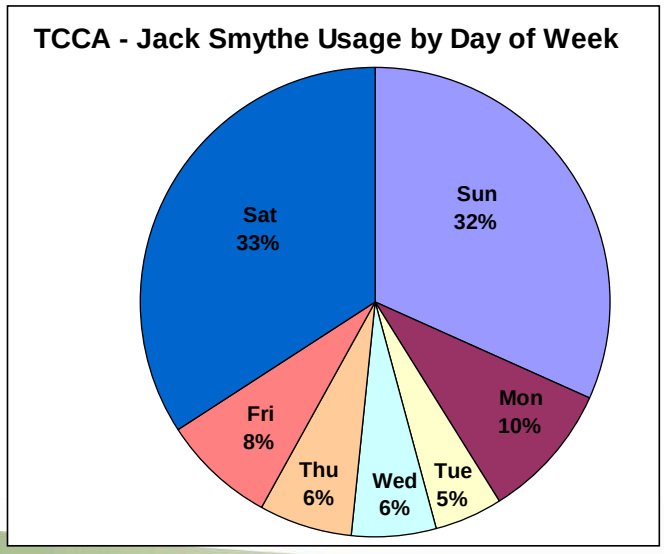
Examples of the Data



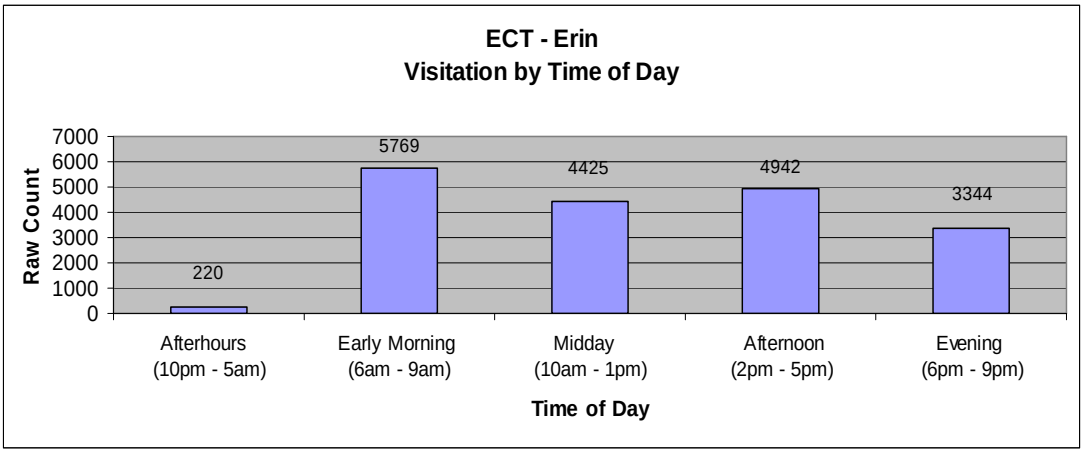
Day of the Week



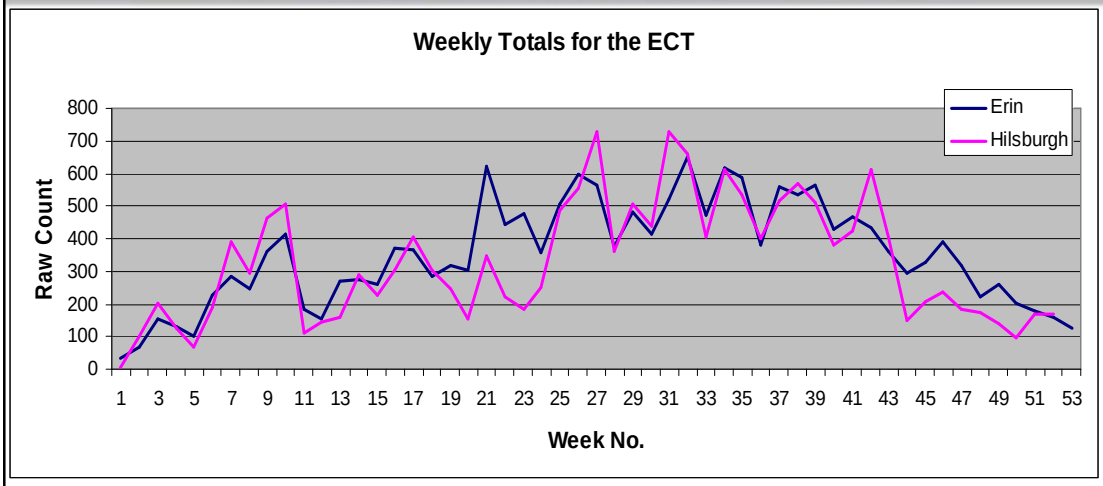
Day of the Week



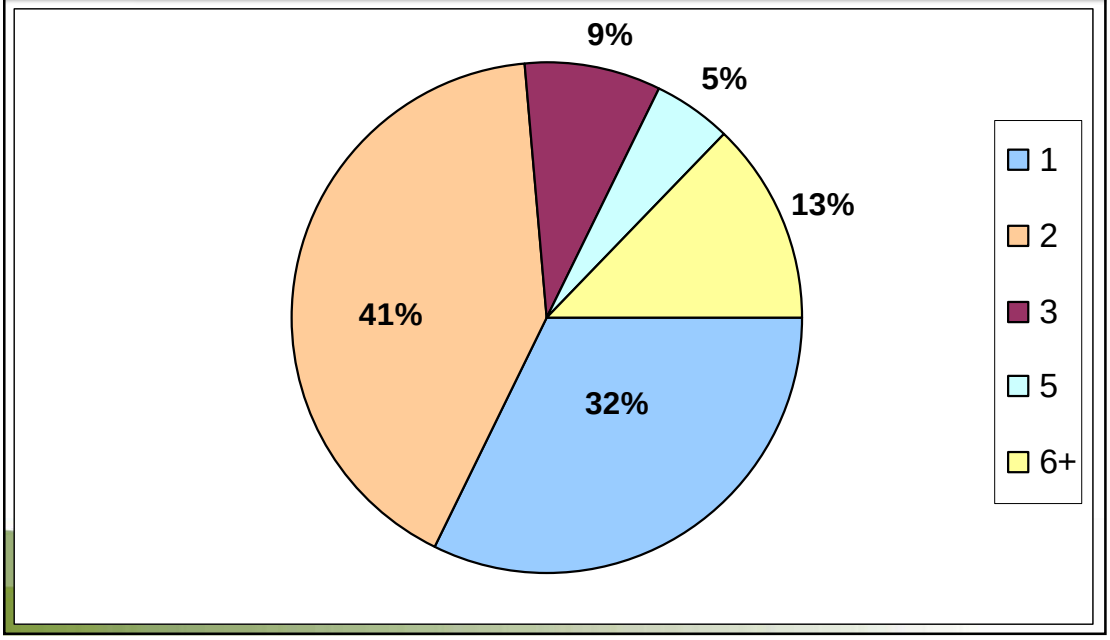
Time of Day



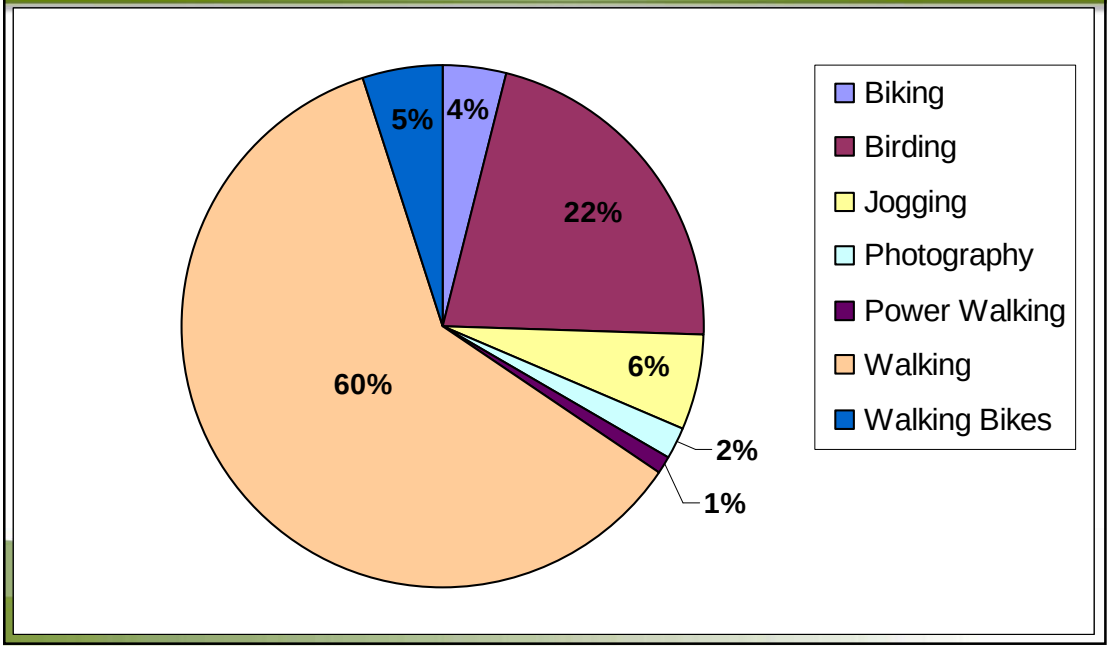
Site Comparisons



RMCA – Bexhill Rd. Group Size



RMCA – Bexhill Rd. Visitor Activities



Calibration

- 23,400 hikers per year
- 3,400 people walk or ride their bikes
- 68% of people come in groups of 2 or more (32% of people visit alone)
- Percentage of groups with dogs (19%)
- Percentage of dogs off leash (18%)

Conclusion

Trail counter data can be a valuable tool

- Can be analyzed in a multitude of ways
- Provides answers to specific research questions
- Justifies projects and dollars spent
- Plan the best time and locations to take on specific projects (visitor surveys, enforcement)

Questions?