Best Practices for Data Collection & Management

Benefits to Proper Data Collection & Management

- Ensures data are accurate, complete, and reliable
- Minimizes the risk of data loss
- Facilitates data sharing & collaboration
- Increases the impact and visibility of work as other can build off it

So What Should I Record?

- What is the end **objective(s)** of your project?
- What **analyses** or what do you need to assess to reach your objective?
- Ask yourself, "Would a colleague make sense of the data without talking to me?"

So What Should I Record?

Always record:

- Surveyors' names
- Date & time
- Site name
- Location: town, state, lat./long., GPS location
- Weather: sky, wind, temp., humidity, lunar cycle, etc.

Site name_____ Plant descriptions (larval host plants, available nectar and types)_____

Date_____ Time_____ Personnel names and contact info_____

Weather: %cloud cover_____ wind_____ humidity_____ temp_____ Other notes:_____

Species	ID#	Sex	Location description	Time	GPS	Photos?	Collector	Notes

So What Should I Record?

Other data to consider:

- Measurements or info specific to study focus
- Natural environmental variables:
  - Elevation
  - Vegetation
  - Geography
  - Physical habitat characteristics
  - Land cover type/habitat type
- Anthropogenic-produced variables:
  - Land use
  - Fragmentation
  - Pollution: chemical, debris, light, noise

Data often have a longer lifespan than the project they were created for.

Importance of Metadata

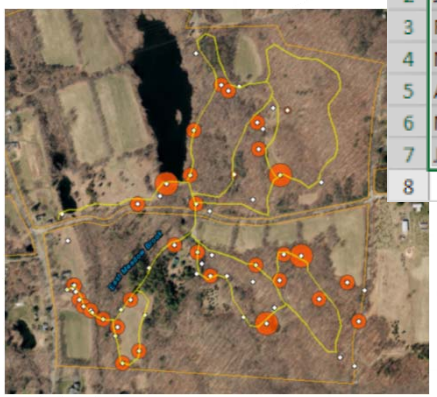
- Ask yourself, "Would a colleague make sense of the data without talking to me?"
- Metadata: a set of data that describes and gives information about other data.
  - Personnel involved with contact info
  - Details on site locations
  - Data collection methods, such as instrumentation, collection instructions
  - Description of environmental conditions during collection
  - Description of variables and units
  - Definitions of acronyms or site names
  - Reasons for missing values

Okay, I Know What Data to Record… What Now?

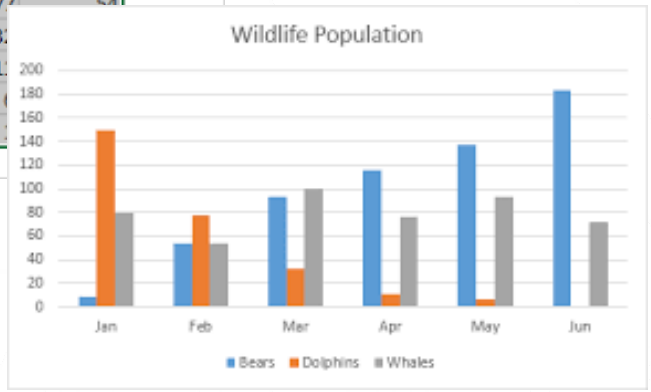
- Collect a
- Creating a templ essential

I've Collected My Data… Now What?

- **Analyses**
  - Graphs
  - Maps



	A	B	C	D	E
1	Month	Bears	Dolphins	Whales	
2	Jan	8	150	80	
3	Feb	54	77		
4	Mar	93	3		
5	Apr	116	1		
6	May	137			
7	Jun	184			
8					



- **Storage for future use**
  - Recommended store data in 3 different ways: original, local digital copy, remote digital copy

- **Sharing**

EpiCollect


EpiCollect+
What is the name of the school?
Grange Hill
Select Project
schools1
Click for Help


ODK Collect v1.1.4
Enter New Data (1)
Review Saved Data (0)
Send Completed Data (0)
Manage Files
Sample has been selected for entry.
Enter your name.
Enter your age.
Confirm today's date.
Aug
25
2010
Capture GPS Location
Capture Location
Take a photo
Capture Image
Sample entry has ended.
Save as Incomplete
Save as Complete