

# Field Institute Meeting

August – November 2012

Presented by the  
**McDowell Sonoran Field Institute**

*a program of the...*



People Preserving Nature

# Overview

- Field Institute Update
- The upcoming season
- Wildland-Urban Interface project
- Citizen Science Program



# Goals of the Field Institute

- Collect data on flora, fauna, geology, human impacts, and human history of the McDowell Sonoran Preserve
- Use data to build a Resource Management Plan to guide future management of the Preserve
- Engage volunteers in Science!





## Field Institute Update

### Flora

- Found 322 species out of 350 expected.
- Seed bank study started
- 3 confirmed Maricopa County firsts
- Biotic communities 75% complete



*Ipomoea hederacea* Photo by Elizabeth Makings



Above: *Lycium andersonii* var. *deserticola*, Left: *Allionia choisyi*.  
Photos by Steve Jones.



## Field Institute Update

### Fauna

- Mammals – 23 of 43
  - “Mystery” pocket mouse
  - Mountain lion photo!
- Herps – 23 of 42
  - Unusual orange phase tiger rattlesnake



Mountain lion photo captured by trail camera at Dixie Mine, October 2012



“Mystery mouse” trapped at sunrise trailhead, October 2012





## Field Institute Update

### Fauna

- Birds – 114 of 150 expected
- Ducks and Killdeer found on the Preserve!
- Acorn Woodpecker
- Common Poorwill
- Lawrence's Goldfinch



Lawrence's Goldfinches. Photo by John Weser



Mallards at 128<sup>th</sup> Street tank. Photo by Marianne Jensen.



## Field Institute Update

### Fauna

- Flying insects –50 taxa
  - 19+ butterflies
  - A lot of American snouts this year
- Ground arthropods
  - 2,600 specimens processed!
  - Microscope workshop



American Snout. Photo by Marianne Jensen.



# Past Finders

## Human History

- Stoneman Road Compendium
- Sydney Blout – “The man who measured the McDowells”
- Conducted a field survey to and mapped the Stoneman Road within the Preserve
- Currently looking for someone to lead the group



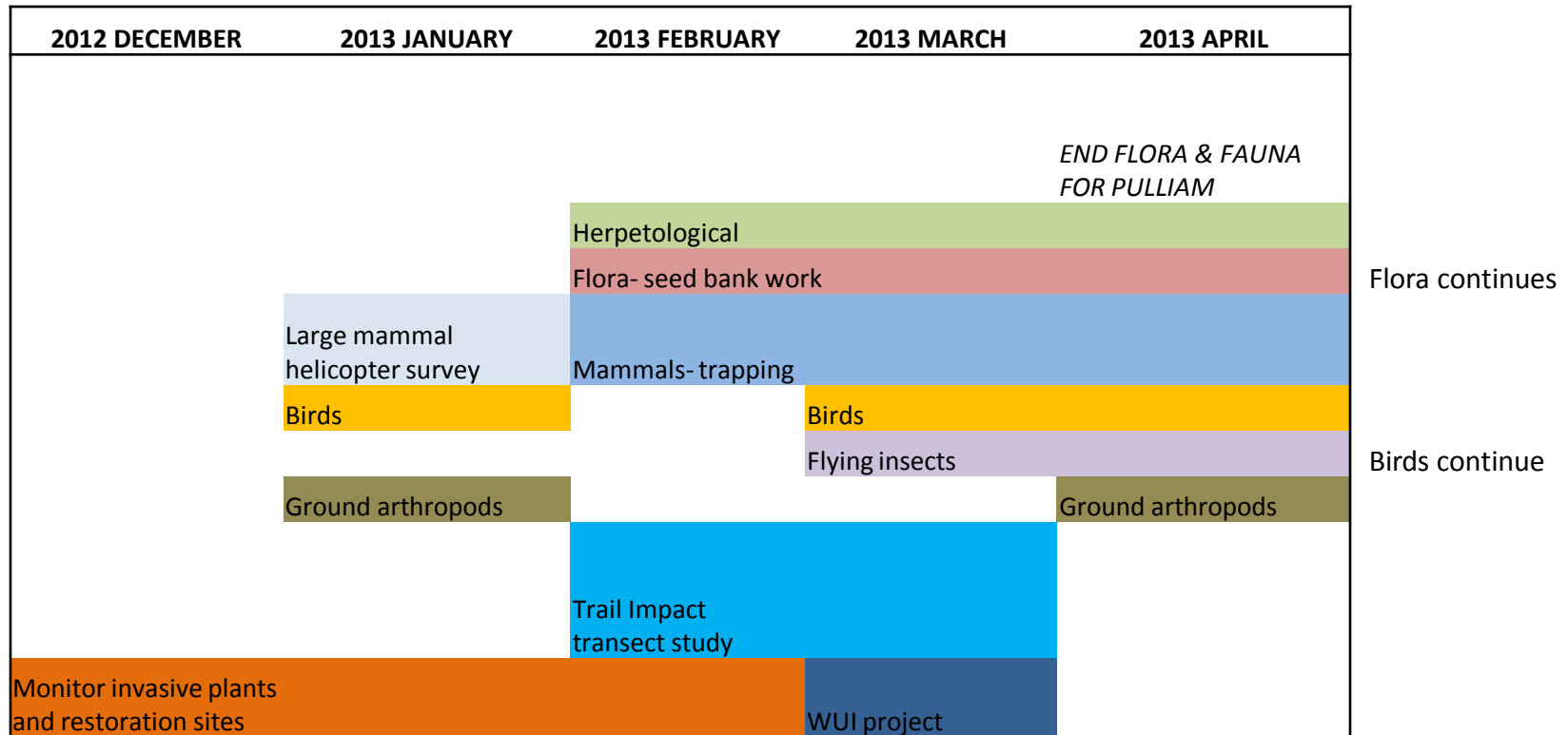


# In Other News

- Submitted an abstract to the International Trails Symposium for a 3 hour presentation.
- Working with the city on an application for the southern State Trust Land parcel.
- Thank you to Susan Aufheimer for making our newsletter beautiful and professional!



# Upcoming season



Upcoming season

## Field Institute Lecture Series

- Palomino Library, every Wednesday from March 6 – April 3 at 6:30 p.m.

## Past Finder gatherings

- January: *The Stoneman Road -- History & Findings from the Pastfinder explorations of 2012.*
- February: *How Archaeologists Study a Site & How Scottsdale Safeguards Sites in the McDowell Sonoran Preserve.*
- March: *Researching and Searching Air Disasters.*





# Citizen Science Training Discussion

## 1. Introduction to basic ecological field methods

- Random sampling – why it is important
- Replication
- Using transects
- The use of percentages in ecological studies

## 2. Collecting data

- Using the GPS
- Note taking
- Troubleshooting in the field
- Basic knowledge of desert safety, possibly limited first aid
- When is the data collection “good enough”

## 3. Leading volunteers

- How to partition tasks
- Communicating the process

## 4. Putting it all together: data entry and analysis

Spreadsheet basics

Reiterate the importance of random sampling and replication

