



## Happy New Year!

We hope everyone had a fun and safe holiday season! Here's what's happening at the McDowell Sonoran Field Institute.



## Flora and Fauna Updates

It's been a quiet month at the Field Institute. Most desert plants are dormant this time of year, and animal activity has slowed down. As a result we've had a brief hiatus from our flora and fauna surveys.

However, our seedbank study is producing spectacular results, which shows what the desert is capable of producing with optimal water, light, and temperatures! MSFI Intern Chelsey Hull has been updating our seedbank blog to share the progress with everyone. If you've ever been curious about what cactus seedlings look like or what a seedbank study is, visit

<http://mscseedbank.blogspot.com/> to find out!

Trays full of soil and emerging plants from the McDowell Sonoran Preserve, housed in the greenhouse at Scottsdale Community College. This photo was taken only four weeks after the study started.

## 128th Street Tank Watch

In the last issue of *The Insider* we reported that a number of water birds were added to our list due to a fortuitous discovery that the cattle tank on 128th Street is still holding water. Since then, Marianne Jensen, Conservancy steward and photographer, has been monitoring the tank nearly every day looking for more water birds and anything else she can find. Visit her citizen science blog at <http://ezpixels.com/mscblog/> to see more.

The 128th Street cattle tank before (above) and after (below) the recent rains.



## Big Game Surveys

On January 17 and 18, 2013, the Arizona Game and Fish Department will fly helicopter surveys of the McDowell Sonoran Preserve to count the number of deer, javelina, and other large animals. This data will be used to make animal-population estimates and ultimately give us a better understanding of the health of our large mammal populations. Melanie Tluczek, MSFI research coordinator, will accompany the survey team on the 17th as an observer and to help record data. Melanie says she is thrilled about the opportunity to take part in this important work (and to fly in a helicopter!). During January, Melanie will prepare for the trip by doing online training. She will share her experience in the February issue of *The Field Institute Insider*.



PastFinder field team searching for evidence of human activity.



Steward Larry Levi holds a Stoneman Road-era can lid found on the survey.

## Human History

In December the McDowell Sonoran PastFinders continued their quest for obscured segments of the Stoneman Road. The Stoneman Road is an old military road dating back to 1870, and is the oldest known artifact of military activity in Scottsdale. The PastFinders have been diligently searching for sections of the road that seem to have disappeared just north of Fraesfield Mountain. Last month they walked transects across the area in question looking for evidence of ranching and road use. The most interesting find was a grouping of discarded food cans that dated back to the late 1800s, supporting the hypothesis that a segment of the Stoneman Road had indeed run through the area.

## Volunteers Needed for Photo Work

As part of our mammal surveys, we've been placing trail cameras around the Preserve to capture photos of animals. The City of Scottsdale also has a trail camera and recently shared the City's photographs with us—all 12,000 of them! We need volunteers to look through the photos for animals that are not yet on our list. Contact Melanie Tluczek ([melanie@mcdowellsonoran.org](mailto:melanie@mcdowellsonoran.org)) if you are interested.

## MSFI Survey and Program Schedule for January 2013

### Ground-Dwelling Arthropod Fieldwork

Stevan Earl, our ground-dwelling arthropod principal investigator from Arizona State University, will be leading a field team to collect ground-dwelling arthropods from pitfall traps again in

January. Fieldwork involves a hike to the pitfall traps, followed by about an hour of collecting the small cups that were set into the ground to capture insects. Dates and times TBA.

### Bird Surveys

Bird surveys will resume in January to document birds that are wintering on the Preserve. Details TBA. Contact Melanie Tluczek at

[melanie@mcdowellsonoran.org](mailto:melanie@mcdowellsonoran.org) if you are interested in getting involved.

### Citizen Science Training

On January 19, we will hold our first-ever Citizen Science training to teach the basics of ecological research, field techniques, and much more. Training

will take place at Scottsdale Community College, (building and room number TBA) from 8:00 a.m. to 12:00 p.m. Stewards who complete the training,

take (or have taken) Natural History I, and have participated in two different Field Institute projects will become official Citizen Scientists. This training

will help prepare volunteers for working on the human impact surveys and taking leadership roles in the Field Institute.

### Monitoring Restoration Site

In January, we will be monitoring a number of restoration sites to look at plant survival. One of the Field Institute's objectives is to examine the efficiency of the Conservancy's restoration efforts and to provide management recommendations, once we have collected enough data. During 2013, we will visit areas where the Conservancy has

worked with the City of Scottsdale and corporate partners to plant cactus and distribute seeds. We will take photographs and count cactus plants that have survived. Plan on approximately 2 to 3 hours each day with some hiking. Please RSVP so we can plan supplies.

**January 24, 8:00 a.m.** Meet at the intersection of 128th Street and Ranch Gate Road, where we will carpool to several restoration sites. Plan on a very light hike.

**January 25, 8:00 a.m.** Meet at Tom's Thumb Trailhead. Plan on about a half-mile hike from the trailhead to several sites along the Marcus Landslide Trail.

**January 27, 1:00 p.m.** For those who work on weekdays or are in school, we have scheduled fieldwork on a Sunday. Meet at the intersection of 136th Street and Rio Verde Road. Plan on a 1.2-mile hike to Black Hills Tank.

### PastFinder Lecture Series

**January 29, 5:30 p.m. to 7:00 p.m.** Meet at the Arabian Library. This lecture is first of a three-part series presented by the McDowell Sonoran Field Institute's PastFinders. This lecture is titled "The

Stoneman Road," and covers the history and findings from the PastFinder explorations of 2012. See **Coming Events**, below, for more about this lecture series.

## *Coming Events*

### Field Institute Lecture Series

The Field Institute will host its second flora and fauna lecture series, which offers an in-depth look at the flora and fauna surveys.

**Wednesdays, March 6 through April 3, 2013, 6:30 p.m.–7:30 p.m. Palomino Library.**

**March 6.** Walter Thurber of the Desert Rivers Audubon Society and Phil Hartley, McDowell Sonoran Conservancy steward, will talk about the Conservancy bird surveys.

**March 13.** Steve Jones, long-time botanist and principal investigator for the Conservancy's floral survey, will talk about the plants that he and MSFI volunteers have documented in the McDowell Sonoran Preserve during 2012.

**March 20.** Russ Haughey, director of Scottsdale Community College's Center for Native and Urban Wildlife, will talk about his work with the McDowell Sonoran Conservancy leading the small mammal surveys.

**March 27.** Ron Rutowski, professor at Arizona State University and butterfly expert, will present the results of the 2012 flying insect survey.

**April 3.** Stevan Earl from Arizona State University will be talking about the ground-dwelling insects on the Preserve.



### PastFinder Lecture Series

January 29, 5:30 to 7:00 p.m. at the Arabian Library. "The Stoneman Road." History and findings from the PastFinder explorations of 2012.

February 26, 5:30 to 7:00 p.m. at the Palomino Library. "How Archaeologists Study a Site and How Scottsdale Safeguards Sites in the McDowell Sonoran Preserve."

March 26, 5:30 to 7:00 p.m. at the Palomino Library. "Researching and Searching Air Disasters."



PastFinders starting an early morning field outing at 136th Street and Rio Verde Road.

### **—Quote of the Month—**

Sunshine is delicious, rain is refreshing, wind braces us up, snow is exhilarating; there is really no such thing as bad weather, only different kinds of good weather.

—John Ruskin, 19th Century English writer, art critic, and social thinker

Each month we feature a science- or nature-related quote. If you have a quote that you find inspiring and would like to share, please send it to Melanie Tluczek at [melanie@mcdowellsonoran.org](mailto:melanie@mcdowellsonoran.org).