Welcome To Santa Barbara Zoo FrogWatch USA "Review and Assessment"

SANTA BARBARA ZOO CONSERVATION PROGRAMS

FROG WATCH USA™

http://farm5.static.flickr.com/4125/5075845130_b25dc58b1e.jpg

FrogWatch Review

COMING UP:

- *Collaborative review of the FrogWatch USA program*
- *Are you field ready?*
- *Review of local frog calls*
- *Submitting your data*
- *Assessment process and certification.*

What is Citizen Science?

- Research collaboration between scientists and volunteers
- Expands opportunities for scientific data collection
- Provides community members access to scientific information

Large Scale! Long-term projects!

What are the benefits of participating in FrogWatch?

What are the benefits of participating in FrogWatch?

- Learn about and explore the nature of science
- Collect scientific data on frogs and toads
- Learn more about wetlands and local amphibian diversity
- Spend time in community wetlands

Lake Los Carneros Goleta, CA

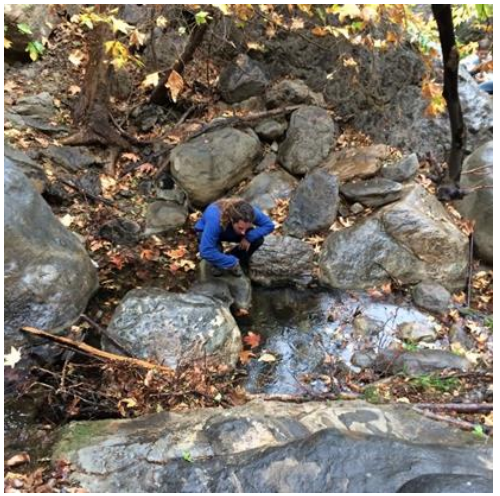
What can FrogWatch Data Tell Us?

What can FrogWatch Data Tell Us?

- Describe local species diversity
- Detect rare and invasive species
- Suggest shifts in species diversity, range, and phenology over time
- Serve as an indicator of wetland health
- Inform the development of land management strategies

Are you field ready?

- Amphibians
- Declines
- Habitats
- Protocols
- Tools



What are the three orders of amphibians?

Frogs and Toads

Salamanders and Newts

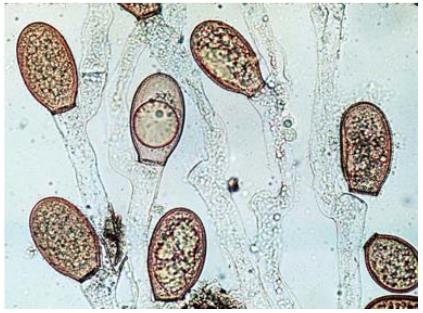
Caecilians

Local Anurans?

- How many local anuran species do we have in Southern California?

  - African Clawed Frog (*invasive*)
  - Arroyo Toad
  - Baja California Chorus Frog
  - Bullfrog (*invasive*)
  - California Chorus Frog
  - California Red-legged Frog
  - Foothill Yellow-legged Frog (*only high altitudes!*)
  - Western Spadefoot
  - Western Toad

Factors responsible for Amphibian Decline



- Habitat loss and fragmentation
- Pollutants
- Introduction of non-native, invasive species
- Climate disruption
- Parasites and disease

What defines a wetland?

- The presence of plants that are known to grow in saturated conditions
- Soils that lack oxygen
- Water that is visible on the surface year round or seasonally
- The existence of amphibians at the site

Types of wetlands

Types of wetlands

Types of wetland (per FrogWatch)

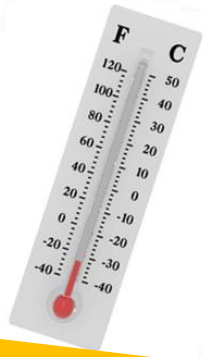
- Marshes
  - Frequently covered in water; emergent soft-stemmed vegetation
- Vernal pools
  - Form in spring from melting snow or rains; often dry in summer
- Swamps
  - Saturated soil, sometimes with standing water; plant life dominated by woody plants
- Bogs
  - Include spongy peat, derive water from precipitation; highly acidic waters support low plant diversity
- Fens
  - Like bogs, but also receive water from sources like groundwater, and therefore gain nutrients that support more diverse plant life

What to bring?

- Smart phone! or…

- Datasheet
- Clipboard
- Pencil/pen
- Thermometer
- Watch
- Flashlight or headlamp

- *Optional:* Field guide, tape recorder, camera, rain gear



How do you know it’s ok to go?

The Beaufort Scale

0 **Calm**: smoke rises vertically.

1 **Light Air**: rising smoke drifts; weather vane inactive.

2 **Light Breeze**: leaves rustle; can feel wind on face.

3 **Gentle Breeze**: leaves and twigs in constant motion; small flags extend.

4 **Moderate Breeze**: moves small branches; raises dust and loose paper.

5 **Fresh Breeze**: small trees in leaf begin to sway.

Let’s see how well you know your protocol…

- What Beaufort scale is too windy to monitor?
- What time can your monitoring session begin?
- How long do you have to acclimate upon arrival?
- How long do you listen?

Let’s see how well you know your protocol…

- What do you do if there is a disturbance?
- How many data sheets should you submit to your Chapter Coordinators?
- Where and when can you submit your data sheets for FrogWatch?

Datasheets….

Datasheets:

should be submitted to FrogWatch digitally (through Fieldscope) AS SOON AS POSSIBLE after each monitoring sessions.

You're almost ready to be a citizen scientist!

- Your future as a FrogWatch citizen scientist:
  - You pass your assessment
  - You pick a site(s) to survey and name it
  - You turn in four data sheets to us (email, postal service, or Fieldscope site name)
  - You continue to go out at least once a month to survey for frogs and toads and upload your data to Fieldscope (or send it to us and we can do it)

Frog calls…

0 – No frogs or toads heard calling
1 – Individuals can be counted; there is space between calls
2 – Calls of individuals can be distinguished, but there is some overlapping of calls
3 – Full chorus, calls are constant, continuous, and overlapping

Even if you don't hear any frogs or toads, it's still important to record and submit the data!

Assessment and Certification

You are almost there! All that is left to do is pass the assessment.

- Assessments will be emailed to registrant and will be available on the Zoo's website
- 1 assessment per email
- Pass with 80% or higher

More Citizen Science!

If you love FrogWatch USA and would like to continue your citizen science adventures, check out some of these other great projects.

- Citizenscience.gov
- Zooniverse.org
- Monarchmilkweedmapper.org

Many small contributions have big results, get involved!

Questions???

Resources…

- Santa Barbara Zoo Frog Watch chapter page
  - https://www.sbzoo.org/frogwatch-usa/
  - Questions? Email frogwatch@sbzoo.org
- AZA Frog Watch USA
  - https://www.aza.org/frogwatch
- iNaturalist App – various projects
  - Thomas Fire Plant and Wildlife Recovery Observations
  - RASCals
  - Wildlife of Santa Barbara County, CA
  - Ventura County Biodiversity Watch