





















Engaging Public Participation in Collections Digitization

Austin Mast, iDigBio, Florida State University Katie Pearson, California Phenology TCN













Outline

- Why engage the public in collections digitization?
- How are collections doing it?
 - Overview
 - Project Management
 - Public Engagement
 - California Phenology Project
 - WeDigFLPlants





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Why engage the public in collections digitization?

Public participation in digitization is a value-added activity.





Public participation as a value-added activity:

Decreases time (and money) spent on certain tasks





An example from Notes from Nature and the California Network

expeditions 13,729 specimens transcribed





An example from Notes from Nature and the California Network



(:) 2288 hours

13,729 specimens =



\$34,320





An example from Notes from Nature and the California Network

In reality, we only spend:





\$1,620





\$34,320 - \$1,620 = \$32,700 saved







Public participation is a value-added activity

- Decreases time (and money) spent on certain tasks
- Increases awareness of natural history collections and their importance

"You can't love what you don't know much about."

- David McCullough







Ellwood et al. 2018

After participating in a digitization event,

70% of participants indicated "higher" or "much higher" level of awareness of the value of biodiversity specimens.

91% of participants agreed that biodiversity collections merit public funding.





















Public participation is a value-added activity

- Decreases time (and money) spent on certain tasks
- Increases awareness of natural history collections and their importance
- Builds pool of potential dedicated volunteers...





Public participation is a value-added activity

- Decreases time (and money) spent on certain tasks
- Increases awareness of natural history collections and their importance
- Builds pool of potential dedicated volunteers...
 - ...and even scientists and collections professionals





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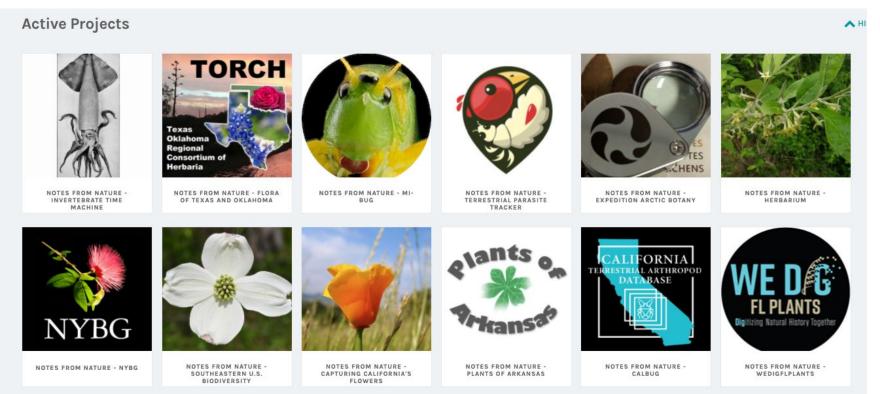
How are collections engaging the public in digitization?

- Online, at a diversity of platforms, such as Zooniverse, Digivol, DoeDat, Les Herbonautes, Die Herbonauten, and Smithsonian Transcription Center.
- Onsite, during "blitzes", classroom activities, and museum exhibits.
- Blending both during WeDigBio (now in April and October) and sustained collaborations with amateur enthusiast groups.





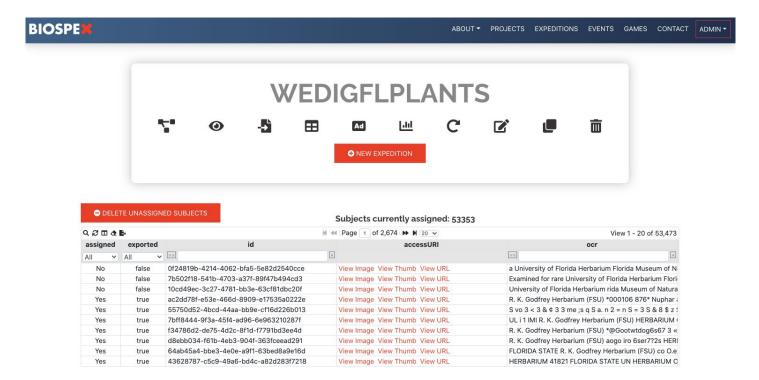
How are collections engaging the public in digitization?







How are collections engaging the public in digitization?







What is Zooniverse?

- The world's largest and most popular platform for people-powered research. https://www.zooniverse.org/about
- A large community of participants.
- **Cyberinfrastructure**, including the public engagement interface, progress dashboard, Talk forum, project builder, and APIs.
- A project team of 30+.
- **Experience**, from which policies and best practice documents have been derived.





























What is Zooniverse?

PROJECT #6428

About

Collaborators

Field guide Tutorial

Media

Visibility

Talk

Data Exports

Workflows

Subject Sets

NEED SOME HELP?

Read a tutorial

Ask for help on talk Glossary

OTHER ACTIONS

Delete this project

Input the basic information about your project, and set up its home page.

Avatar



Pick a logo to represent your project. To add an image, either drag and drop or click to open your file viewer. For best results, use a square image of not more than 50 KB.

Background image



This image will be the background for all of your project pages, including your project's front page. To add an image, either drag and drop or left click to open your file viewer. For best results, use good

This project is part of the Notes from Nature organization.

If you are not a collaborator on the organization, please coordinate with this project's other collaborators for additional information regarding the affiliated organization.

NAME

Notes from Nature - WeDigFLPlants

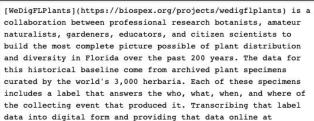
You cannot change a live project's name. Your project's URL is /projects/md68135/notes-from-naturewedigflplants

DESCRIPTION

Build the historical baseline for plant diversity and distribution in Florida.

This should be a one-line call to action for your project that displays on your landing page. Some volunteers will decide whether to try your project based on reading this, so try to write short text that will make people actively want to join your project. 222 of 300 characters remaining.

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What is Notes from Nature?

- An organization of projects on Zooniverse, benefitting from what Zooniverse provides.
- A group of enthusiastic **participants**.
- Field Book cyberinfrastructure.
- Reconciliation code for typical output.
- A support team.
- Experience, especially as captured in Zooniverse's Talk forum and tutorials.





What is BIOSPEX?

- Cyberinfrastructure for project management, including expedition creation, engagement statistics, implementation of NFN reconciliation code, and expert review interface.
- Cyberinfrastructure for **public engagement**, including a project dashboard, event manager, and game generator.
- A support team.
- Experience, especially as captured in Resources page.





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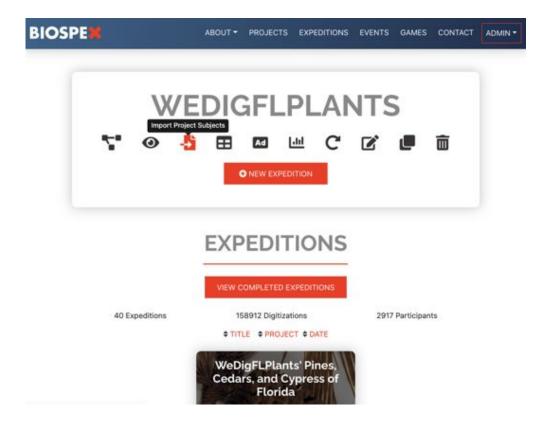


















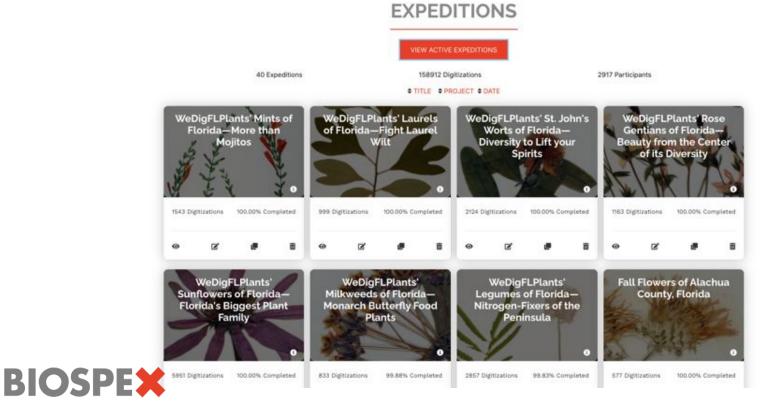
Subjects currently assigned (20000 max. per Expedition): 0

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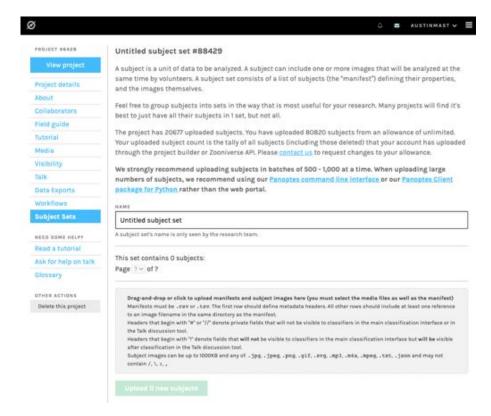


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Download	50428644 https://doi.org/10.1004	DOZENI ODZINA		10.07.10200477702		
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transcript	305.csv	1.46MB	2020-10- 10	2020-11- 06	ů	
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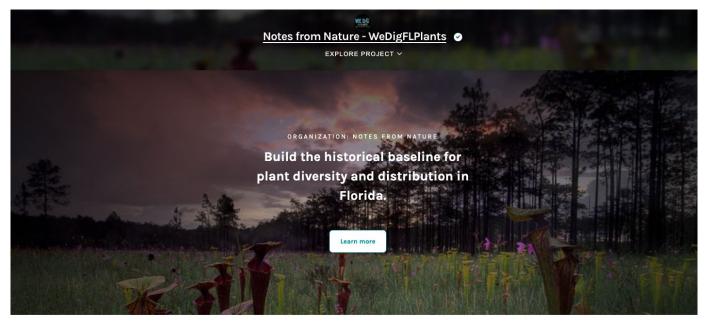














Get started ◆

WeDigFLPlants' Pines, Cedars, and Cypress of Florida













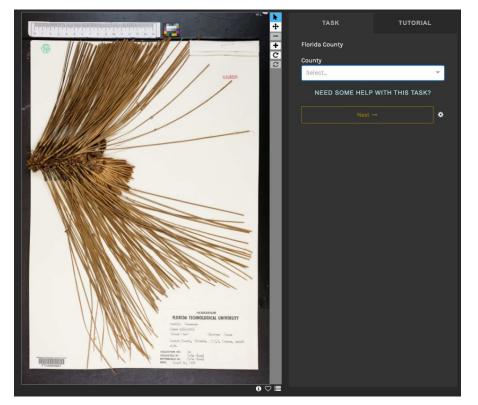








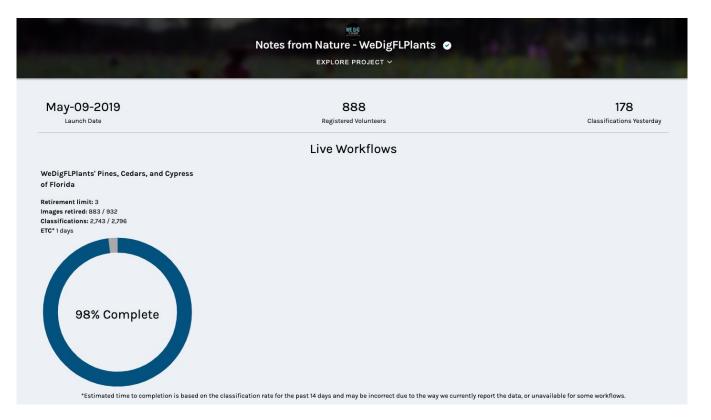






















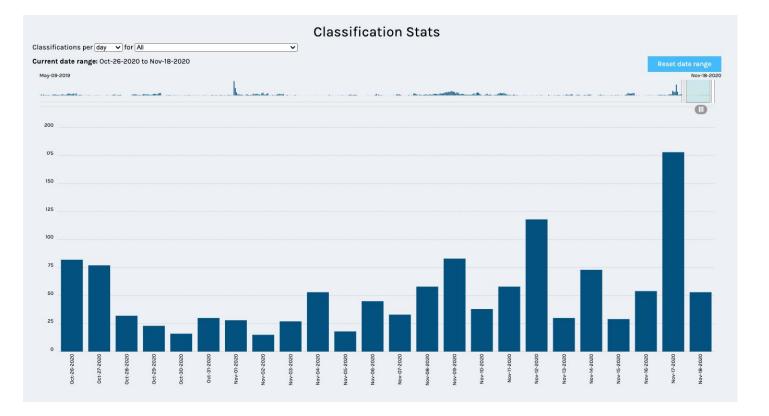






























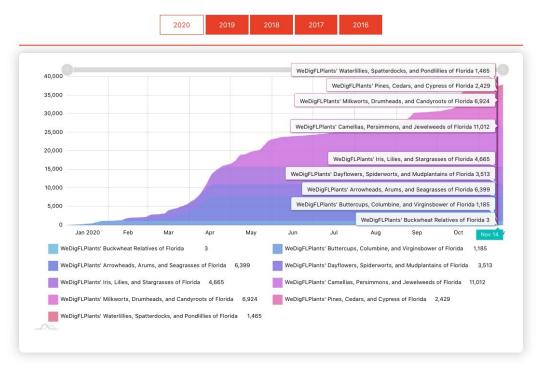








DIGITIZATIONS

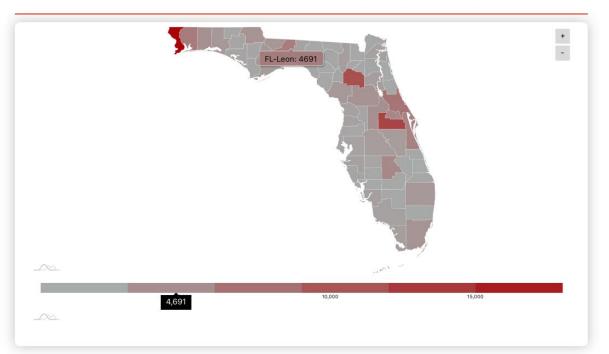








HEAT MAP DIGITIZED SPECIMENS



















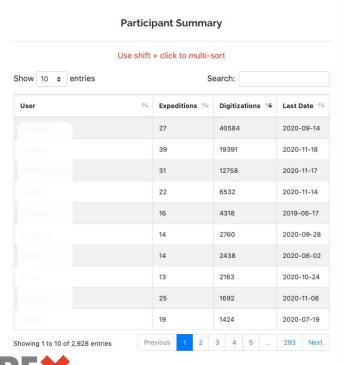


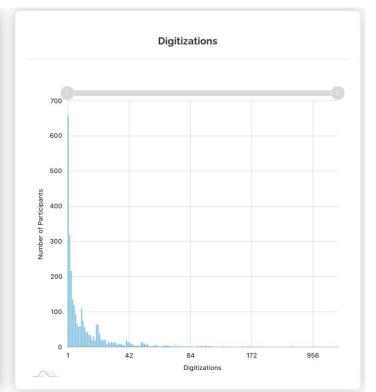








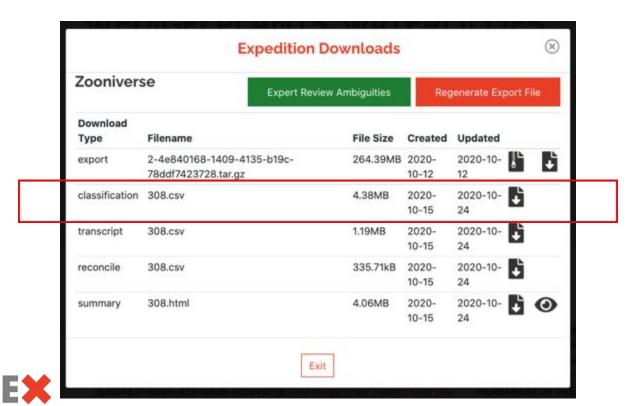






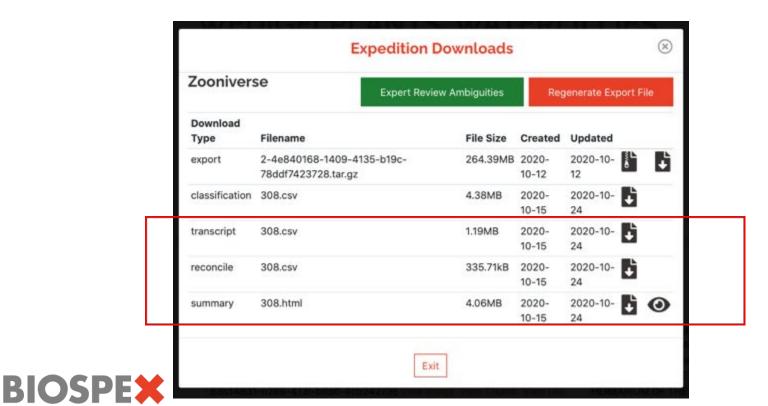






































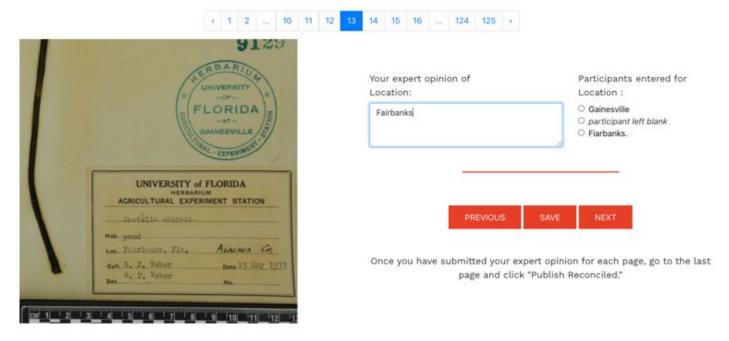


















Zooniverse	Expert Review Ambiguities			Regenerate Export File	
Download Type	Filename	File Size	Created	Updated	
classification	270.csv	12.51MB	2020-04-18	2020-04-18	Ė
transcript	270.csv	8.79MB	2020-04-18	2020-04-21	Ì
reconcile	270.csv	2.36MB	2020-04-18	2020-04-18	Ì
summary	270.html	28.44MB	2020-04-18	2020-04-18	0
reconciled_with_expert_opinion	270.csv	2.39MB	2020-08-28	2020-08-28	ì





































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Public Engagement

Growing your participant community can be challenging and time-intensive (but also rewarding)





Who might be interested in the **subject matter**, the **task**, or the **perks**?





















































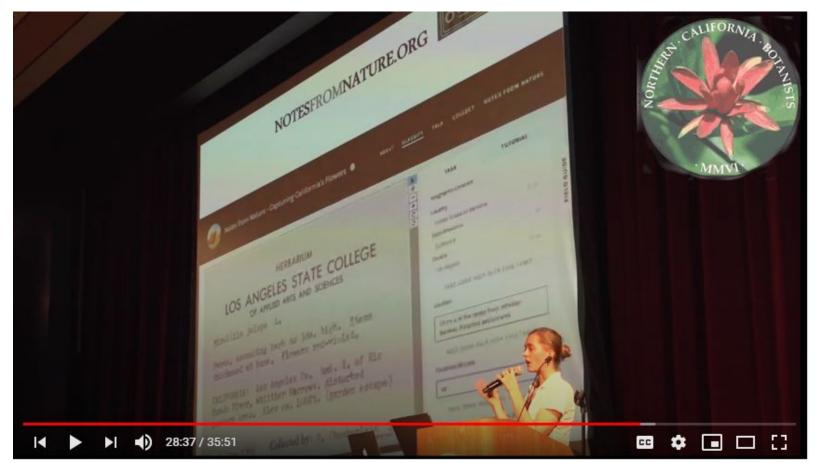
















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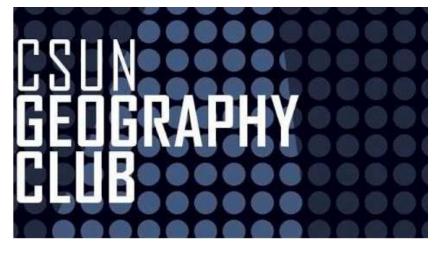




















Who might be interested in the **subject matter**, the **task**, or the **perks**?



































AmeriCorps



Association of Environmental Professionals



































How do we get new users involved? (some ideas)





















- Online talks, presentations, and announcements
 - Long presentation example: https://www.youtube.com/watch?v=2sIQ4YKpq4Y
 - Short announcement example (during the "Open Announcements" part of this program): http://www.sci.sdsu.edu/plants/sdbs/Meetings/2020-10/index.html
- Digitization events





Want to HELP SCIENCE study California WILDFLOWERS?

COME EARLY TO THE NEXT CNPS-SLO CHAPTER
MEETING AND LEARN ABOUT
HELPING CALIFORNIA HERBARIA USING
NOTES FROM NATURE

6:00 PM, THURSDAY, NOV. 7 SAN LUIS OBISPO VETS HALL

BRING A LAPTOP OR TABLET IF YOU CAN



DO YOU DIG BIO?

Join the Hoover Herbarium for an international volunteer event, without even leaving campus!
Fisher Science Hall (33) Room 258
Friday, October 18, 2019

12:10 PM

1:10 PM

2:10 PM

3:10 PM

Stay as long as you'd like!

Games | Prizes

RSVP online at https://tinyurl.com/wedigbio Space is limited!































eventbrite

Q Search for events

Browse Events

This event has ended.



APR 13

Citizen Science Day at the Robert F. Hoover Herbarium

Free

0

Sales Ended

Details

Help the Robert F. Hoover Herbarium make vital biodiversity data publicly available by transcribing plant specimen data

About this Event

Herbarium specimen (dried, pressed plant) data is critical to our understanding of plant life on Earth, but having these data locked away in cabinets greatly reduces their availability for research. The Robert F. Hoover Herbarium at Cal Poly is working toward creating digital images and specimen records for all 80,000 specimens in the collection. You can help! In this event, we will learn a little bit about the herbarium before diving into transcribing data from specimen images using Notes from Nature, a user-friendly online platform.

Date And Time

Sat, April 13, 2019 10:00 AM - 12:00 PM PDT Add to Calendar

Location

Fisher Science Computer Lab, Room 33-258 1 Grand Ave San Luis Obispo, CA 93407 View Map





eventbrite

Q Search for events

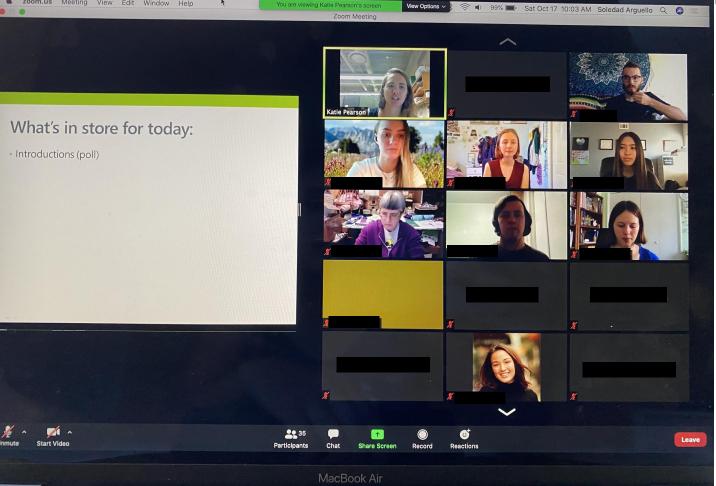
Browse Events

This event has ended.





zoom.us Meeting View Edit Window Help



You are viewing Katie Pearson's screen





















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 - Short announcement example (during the "Open Announcements" part of this program): http://www.sci.sdsu.edu/plants/sdbs/Meetings/2020-10/index.html
- Digitization events
- Stay engaged with new users
 - In Notes from Nature, via "Talk"

Notes from Nature - Capturing California's Flowers Talk

Notes from Nature - Capturing California's Flowers Talk > Notes

Search or enter a #tag

Notes

General comment threads about individual subjects

Unsubscribe You're receiving notifications because you've subscribed to new discussions in this board (daily email)

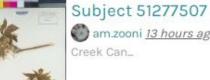
A Moderator Controls



Subject 51277337

a 1 Participant am.zooni 12 hours ago [#CalStLA4 expedition] The verbatim #date is "28 Feb. 1973 (flowers) 11 🗩 1 Comment

may...



m.zooni 13 hours ago [#CalStLA4 expedition] I selected Coconino #county, based on "Oak

1 Participant ■ 1 Comment



CA. I'm guessing it was just a misspelling.



⚠ Helpful (0) Reply Link A Report & Edit X Delete

November 14th 2020, 1:23 pm



I'll bet it was a misspelling of San Ysidro! https://en.wikipedia.org/wiki/San_Ysidro, San_Diego





















How do we get new users involved? (some ideas)

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- Digitization events
- Stay engaged with new users
 - In Notes from Nature, via "Talk"
- Celebrate "wins" and user contributions

https://www.capturingcaliforniasflowers.org/blog-recap

Your Help Matters: A Threatened Plant Discovery

4/17/2020

Notes from Nature volunteers may not have known it at the time, but while they transcribed the label of this small and unassuming plant specimen, they were documenting the occurrence of a rare, threatened species.

Phacelia mustelina, comically called "weasel phacelia" or more elegantly "Death Valley round-leaved phacelia" is an uncommon annual herb of eastern California and western Nevada. The California Native Plant Society ranks this species as rare, threatened, and endangered in California and elsewhere, and indeed, in our database (CCH2.org), only 39 herbarium specimens exist from the past 100+ years.

0 Comments

This blog is curated by the project manager of the California Phenology Network, Katie Pearson.

Archives

Author

October 2020 September 2020 August 2020 July 2020 June 2020 May 2020

https://www.capturingcaliforniasflowers.org/volunteers.html

Volunteers

We would not be able to reach our digitization goals without our hard-working and dedicated volunteers.













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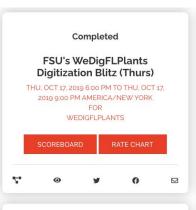


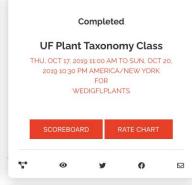


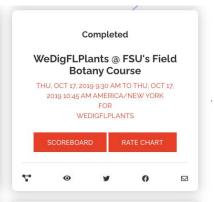


















































		SCOREBOARD	\otimes		
	WeDig	FLPlants' Gators v Nole	s		
		489			
Transcriptions					
#	Team	Transcriptions			
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2	Noles	102			
		Completed			



EXIT

















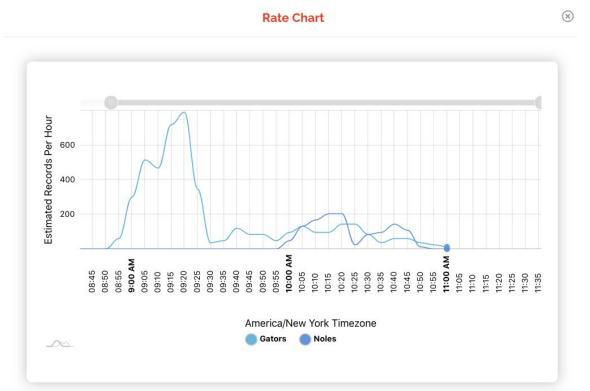


















HELP BEHIND-THE-SCENES AT A MUSEUM AS A CITIZEN SCIENTIST

Grades: 9-12

Aligned Standards

Florida State Standards

The Practice of Science: SC.912.N.1.4: Identify sources of information and assess their reliability according to the strict standards of scientific investigation.

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

Evaluation of digital information resources: SC.912.CS-PC.3.4: Analyze and evaluate public/government resources and describe how using these resources for communication can affect change.

Next Generation Science Standards

HS-PS4-2. Evaluate questions about the advantage of using digital transmission and storage information.

Summary

Students will learn about the importance of biodiversity research collections (specifically, herbaria), the types of data that their specimens hold, the process of digital data creation about the specimens, and the online publishers of that digital data. Students will act as citizen scientists and transcribe labels of plant specimens then explore the research value of the data that they create.

























with a pines	rida communi an open overs and a charact arub understo	tory of eristics le	Scrub	Dry	
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Creek	Open	WE D G	Disturbed	Floodplain	
Wet	Hammock	Edge	Loamy	Shaded	
Forest	orest Ditch Sandy		River	Pond	









Acknowledgements

Notes from Nature, BIOSPEX, and WeDigFLPlants have involved many collaborators, such as Rob Guralnick, Michael Denslow, Julie Allen, and Rafe LaFrance (UF), Laura Trouille and Mark Bouslog (Zooniverse), and Robert Bruhn, Erica Krimmel, Greg Riccardi, Libby Ellwood, Katie Pearson, Jeremy Spinks, Monika Arora, Shiva Krishna Imminni, and Jillian Goodwin (Florida State University).

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References

Ellwood ER et al. 2018. Worldwide Engagement for Digitizing Biocollections (WeDigBio): The biocollections community's citizen-science space on the calendar. *BioScience* 62(2):112-124. doi:10.1093/biosci/bix143