



215,631  
Species Observed

# Using iNaturalist

## for documenting Invasive Weeds

San Diego Weed Management Area

June 6, 2019



Faerthen Felix - Western



Jonathan Snapp-Cook, USFWS, Partners for Fish and Wildlife Program  
iNaturalist username: snappcook

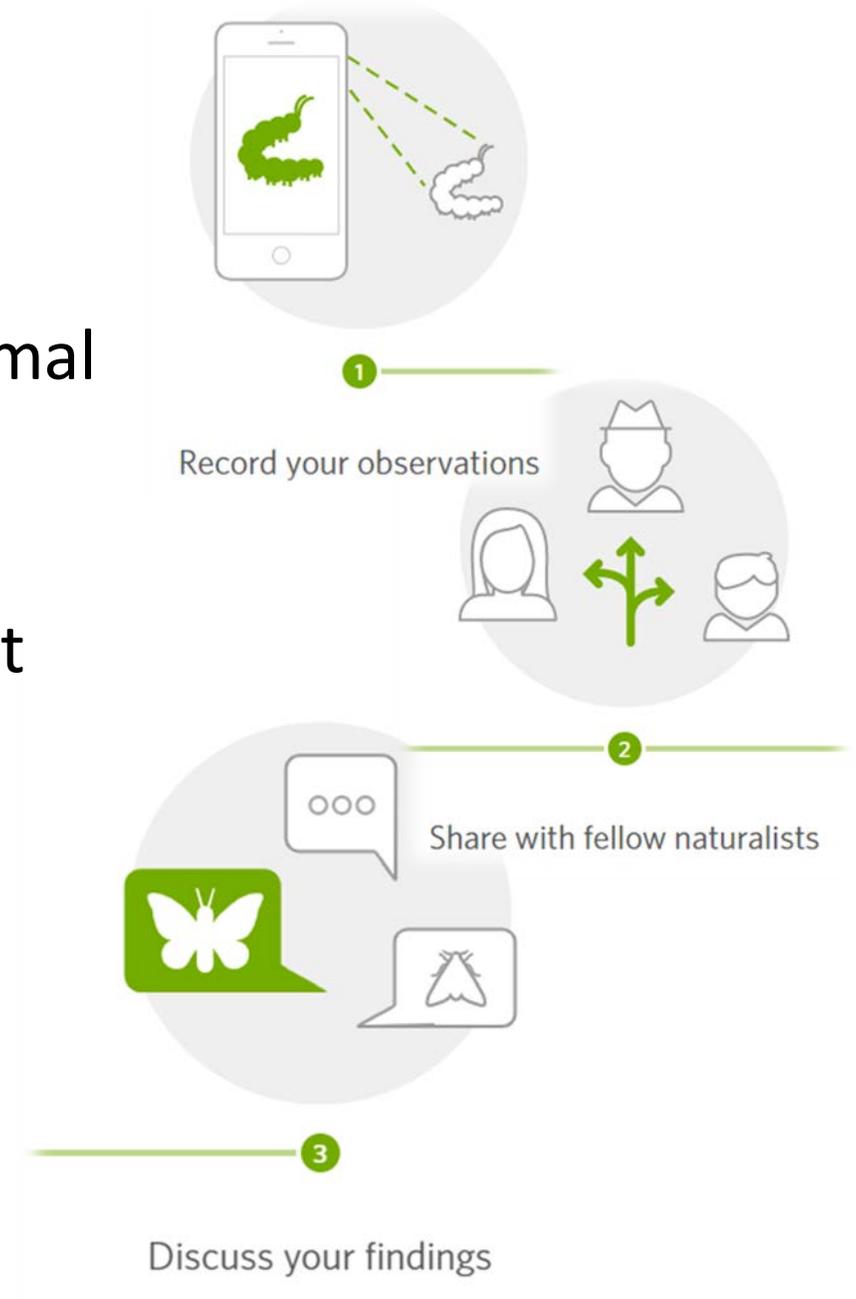
# What is iNaturalist?

- iNaturalist is an online tool and App for reporting, sharing and discussing observations of the natural world.

The screenshot displays the iNaturalist website interface. At the top, the iNaturalist logo is on the left, and navigation links for 'Explore', 'Community', and 'More' are in the center. On the right, there are links for 'Log In or Sign Up'. Below the navigation bar, the word 'Observations' is prominently displayed. To its right is a search bar with 'Species' and 'Location' input fields, a 'Go' button, and a 'Filters' button. A dark grey banner below the search bar shows global statistics: 'The World' with 21,187,595 OBSERVATIONS, 215,638 SPECIES, 80,848 IDENTIFIERS, and 581,599 OBSERVERS. Below this banner is a world map with a 'Map' button selected, and options for 'Grid', 'List', and 'Places of Interest'. The map is covered with grey dots representing observations. On the right side, a vertical list of observation cards is shown, including 'Common Blues' (Genus *Leptotes*), 'Unknown', 'Vervain' (Genus *Verbena*), and 'Snowy Egret' (*Egretta thula*).

# Why use iNaturalist?

- Improve your ability to identify plant and animal species
- Share your observations with others
- Use your skills to help observers identify what they have seen
- Provide information that is useful to others looking for and treating invasive non-native species



# Recent findings on iNaturalist via online search by Jason Giessow



*Euphorbia terracina*

ID: 0000 0000 0617 0031 [\[detail\]](#)

© 2017 Steve Matson

- *Euphorbia terracina* (carnation spurge): two confirmed new locations (Del Mar and Otay).



*Centaurea solstitialis*  
Yellow Star-thistle

ID: 0000 0000 0901 0082 [\[detail\]](#)

© 2001 Tony Morosco

- *Centaurea solstitialis* (yellow star thistle): one new confirmed report (in Encinitas), and many rejected Ids (all Tecolote).



*Carrichtera annua*  
Wards Weed

ID: 0000 0000 0218 0027 [\[detail\]](#)

© 2018 Unknown (California)

- *Carrichtera annua* (Ward's weed): one new report (Del Mar).



*Ageratina adenophora*  
Sticky Snakeroot

ID: 0000 0000 0412 1424 [\[detail\]](#)

© 2012 Robert Sikora

- *Ageratina adenophora* (eupatory): one new report (lower Bonita)

# *Euphorbia terracina* (carnation spurge): two confirmed new locations (Del Mar and Otay).

Geraldton Carnation Weed (*Euphorbia terracina*) ! Research Grade

Introduced in Diegan Coastal Terraces, CA, US: Arrived in the region via anthropogenic means

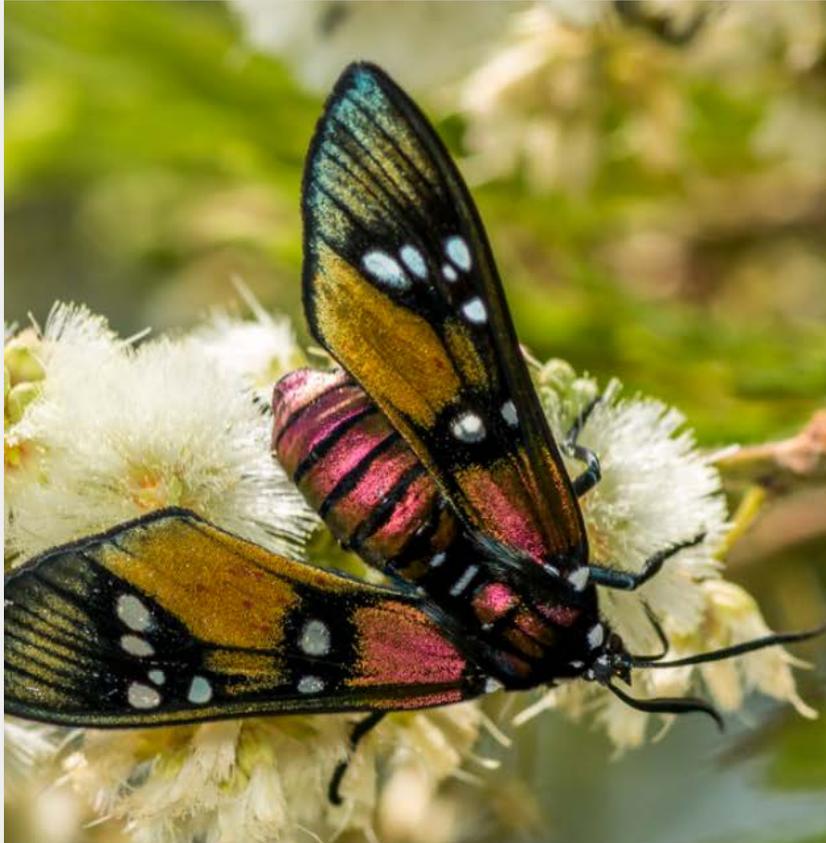
The screenshot shows a mobile application interface for field observations. At the top, a dark header bar contains the location 'San Diego' and navigation tabs for '12 OBSERVATIONS', '1 SPECIES', '2 IDENTIFIERS', and '3 OBSERVERS'. Below the header is a map of San Diego with several orange triangles indicating observation locations. A sidebar on the left includes map controls like zoom in (+), zoom out (-), and a compass. On the right, a list of observations for 'Geraldton Carnation Weed (*Euphorbia terracina*)' is displayed, each with a thumbnail image, location, date, and grade.

Observation	Location	Date	Grade	Count	Time
Geraldton Carnation Weed ( <i>Euphorbia terracina</i> )	San Diego, Califor...	Apr 23, 2019	Research Grade	1	1mo
Geraldton Carnation Weed ( <i>Euphorbia terracina</i> )	525 Hunte Pkwy, Ch...	Dec 20, 2018	Research Grade	1	6mo
Geraldton Carnation Weed ( <i>Euphorbia terracina</i> )	San Diego, Califor...	Mar 29, 2018	Research Grade	2	1y
Geraldton Carnation Weed ( <i>Euphorbia terracina</i> )	San Diego, Califor...	Mar 29, 2018	Research Grade	2	1y
Geraldton Carnation Weed					

# How to get and use iNaturalist

<https://www.inaturalist.org/signup>

**iNaturalist**



Join the largest group of naturalists in the world!

I'm not a robot  reCAPTCHA  
Privacy · Terms

Yes, license my photos, sounds, and observations so scientists can use my data.  
[Learn More](#)

I consent to allow iNaturalist to store and process limited kinds of personal information about me in order to manage my account  
[Learn More](#)

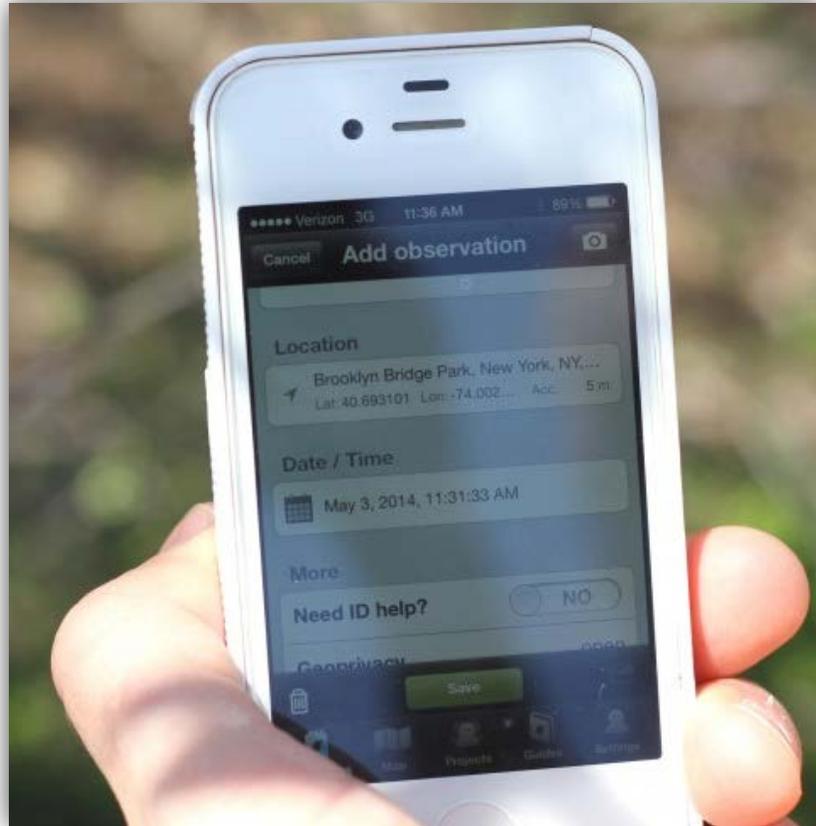
[Create an Account](#)

[Already have an account? Log in.](#)

Photo by  
**Felix Fleck**  
in Querétaro, Mexico

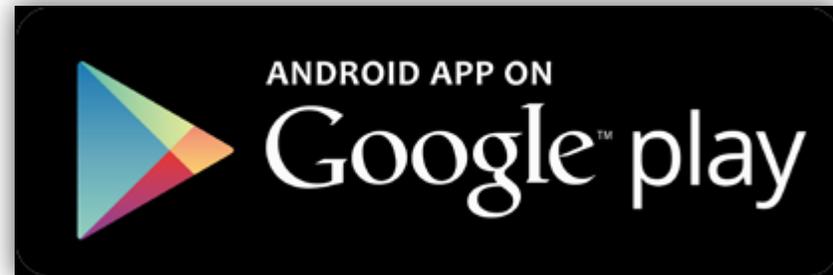
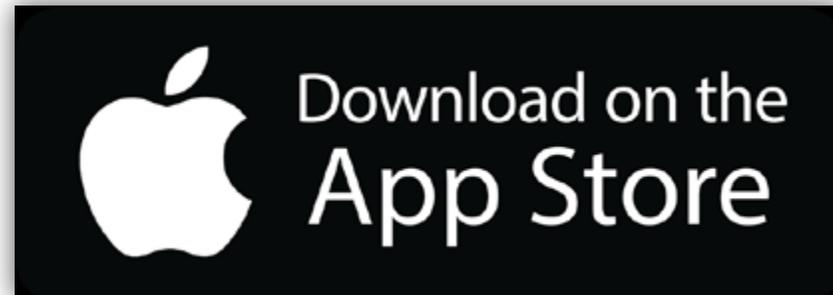


# The iPhone and Android app

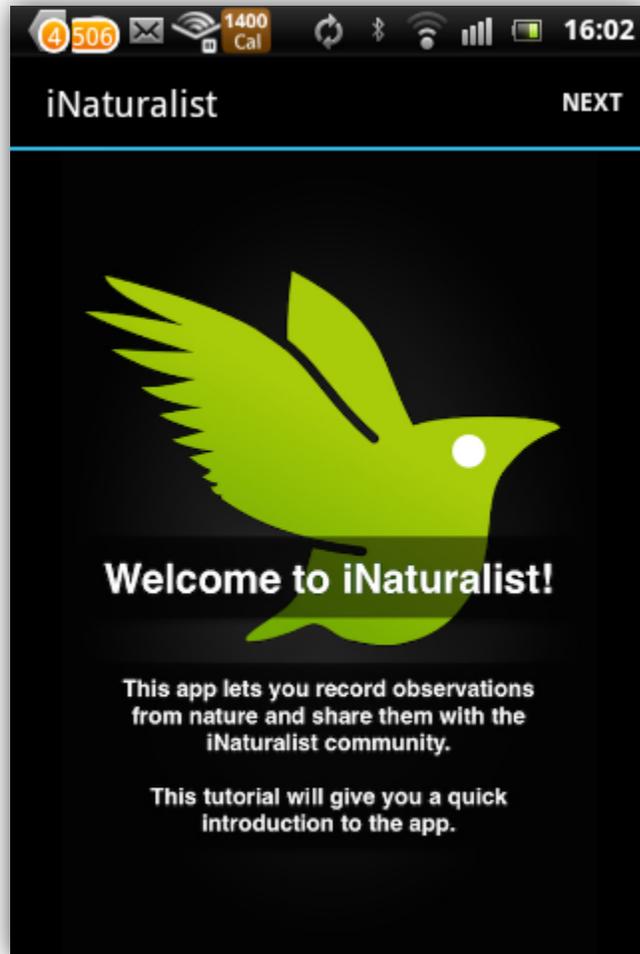


**The app is a convenient way to record and share observations.**

**Just download from the App Store or Google play depending on your device – it is FREE!**



# The iPhone and Android app



This is a quick tutorial for the Android version.

You can find the same tutorial on the App by going to:

**Settings >> Launch tutorial**



# iNaturalist iPhone Tutorial

Explore Projects **Observe** Guides Me

Tap observe to create an observation

Cancel Edit observation

Before saving your observation, you can add more photos

WHAT DID YOU SEE?

Northern Cloudywing

NOTES

Or refine a coarse category like 'Insects' by searching for a more precise category

LOCATION

Ohlone Greenway, El Cerrito, CA, US  
Lat:37.905811 Lon: -122.301... Acc. 10m

DATE / TIME

Mar 31, 2015, 4:28:33 PM

MORE

Need ID help?  NO

Geoprivacy open

PROJECTS

Choose projects

SAVE

Edit the location

Edit the date

Request ID help

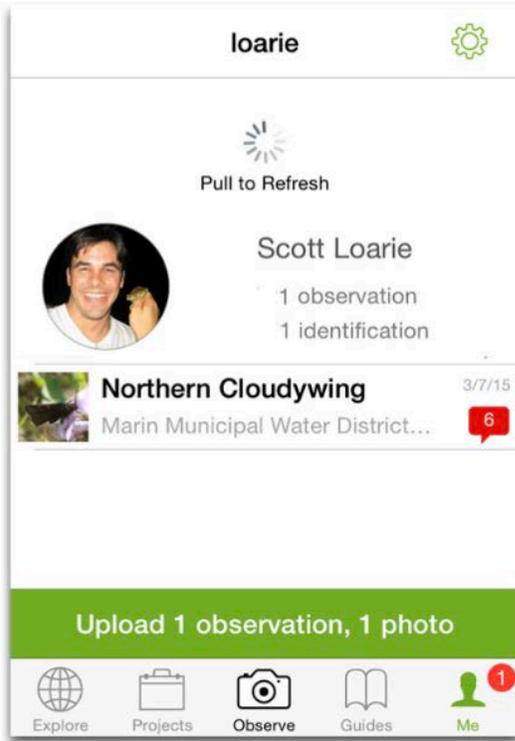
Obscure or hide coordinates

Add the observation to projects you've joined



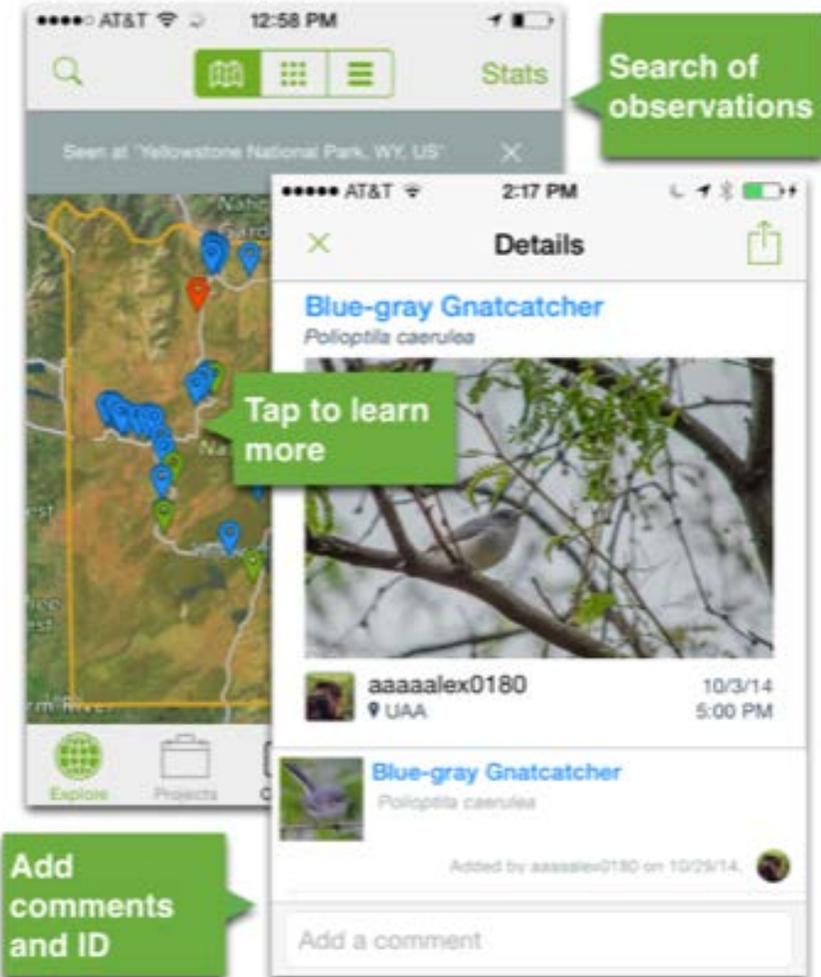
# iNaturalist iPhone Tutorial

Save your observation and upload to share it with the iNaturalist community. An internet connection is required for upload preferably WiFi



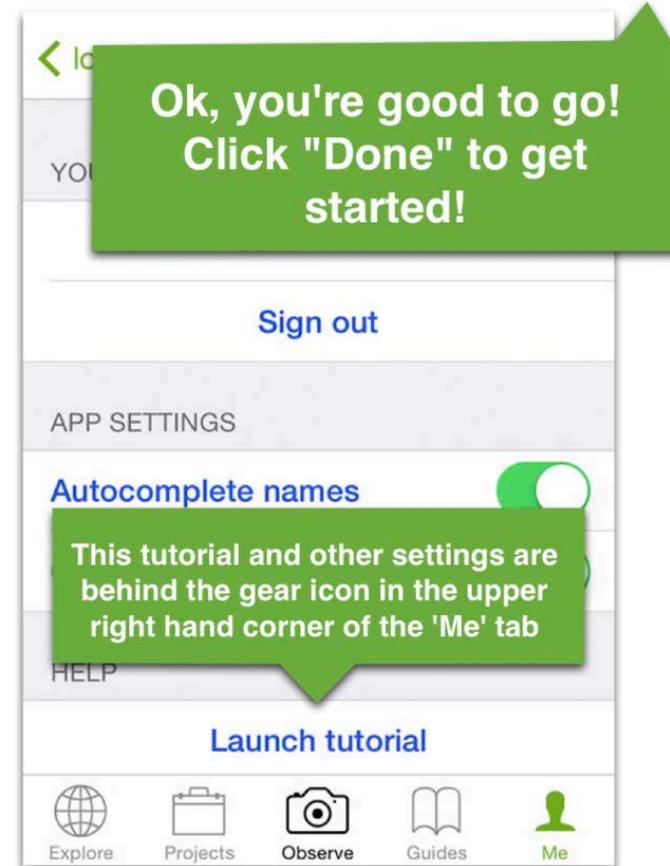
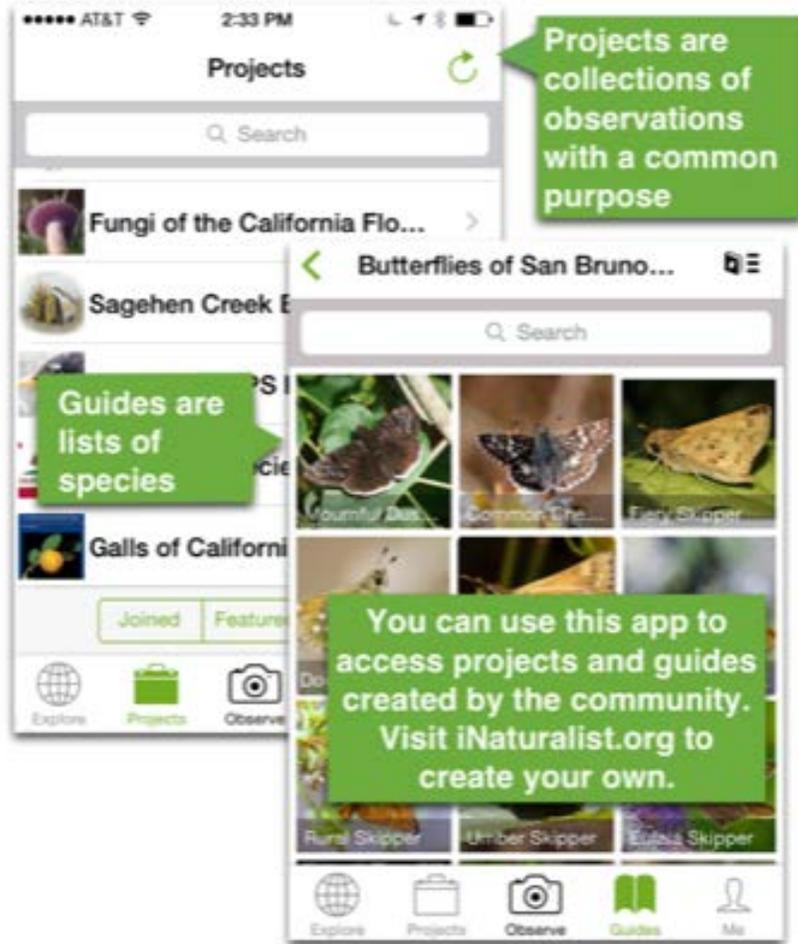
After uploading pull to check for community feedback

Tap badges to see feedback and join the conversation

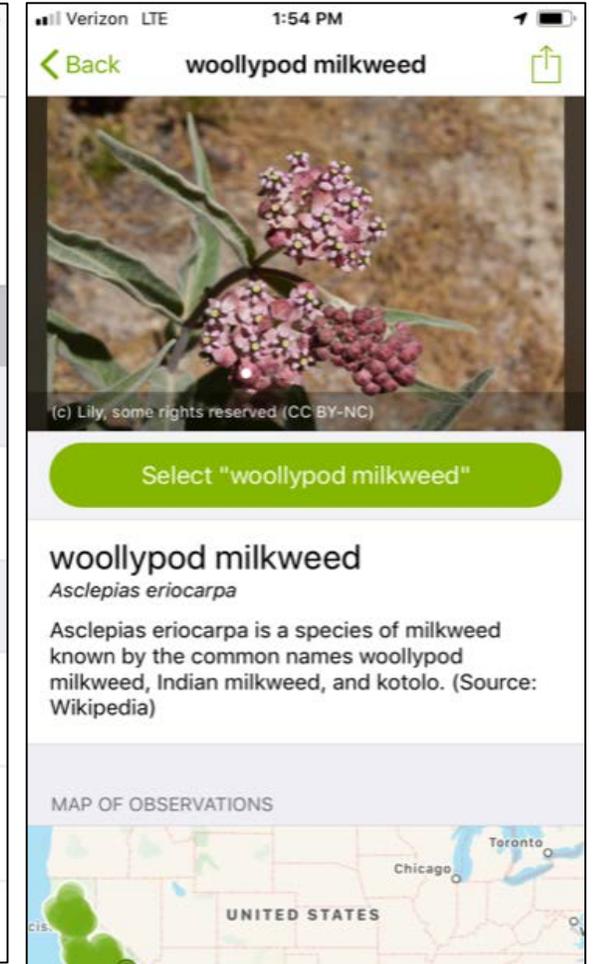
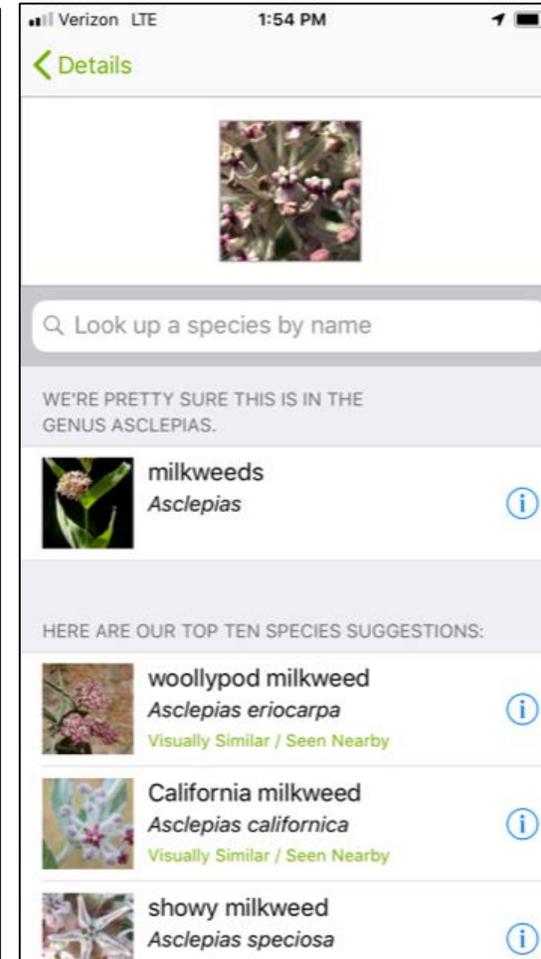
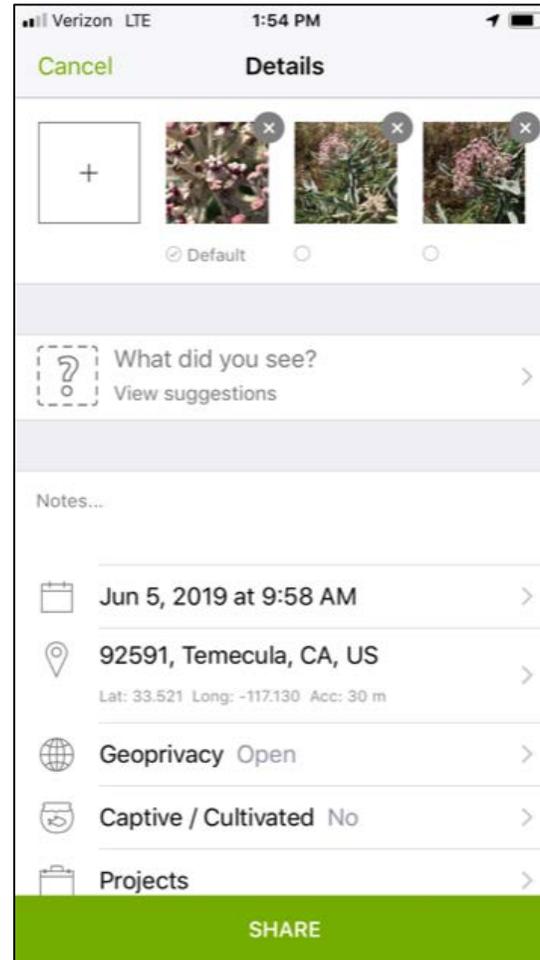




# iNaturalist iPhone Tutorial

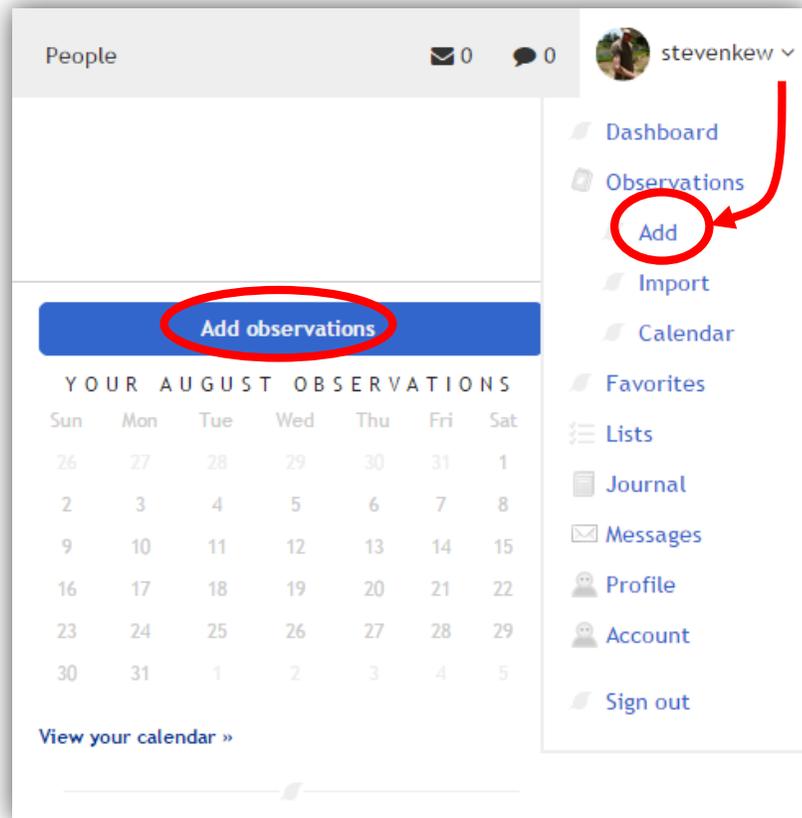


# Making an Observation on iPhone



Posting observations  
from your desktop  
on **iNaturalist**

# From computer – www.iNaturalist.org



**An observation can include these elements:**



**Many fields are optional, but the more information you can provide the better!**

# Add essential data to your observation

Start typing a species name

Enter the name of the place.

Enter the date

Describe what you saw

Upload a photo (many photos) by clicking "Choose File" and finding a photo file on your hard drive.

Save

The screenshot shows the iNaturalist observation form with several red arrows pointing to specific fields:

- An arrow points to the "What did you see?" field containing "Orgyiini".
- An arrow points to the "Where were you?" field containing "Name of the place you made the observation".
- An arrow points to the "When did you see it?" field containing "2015-07-10 9:34:44 AM BST".
- An arrow points to the "Add media" section, specifically to the "Selected photos" area which shows a photo and a "Choose Files" button.
- An arrow points to the "Save observation" button at the bottom left.

The form includes various other fields and options such as "Was it captive / cultivated?", "ID Please?", "Add photos", "Add sounds", "Source: your hard drive", "View original", "Sync obs. w/ photo metadata?", "Add taxonomic tags to selected Flickr photos", "Re-order photos", "Tags", "Change geoprivacy", and "More fields".

# Add optional data to your observation

The screenshot shows the iNaturalist observation form for the species 'Orgyiini'. The form includes fields for 'What did you see?' (Orgyiini), 'Where were you?' (Name of the place you made the observation), 'When did you see it?' (2015-07-10 9:34:44 AM BST), and a 'Description' box. A map shows the location near Kew, London. The 'Add media' section shows a selected photo. The 'Tags' field is empty. The 'More fields' section has a 'Start typing field name' dropdown and 'Create a new field' and 'View all fields' buttons. The 'Save observation' button is highlighted. A 'Change geoprivacy' dropdown is set to 'open'.

**Describe  
what  
you saw**

**Add  
tags**

**Add  
additional  
data  
through  
fields**

**“Geoprivacy” controls whether the coordinates are shown publicly. Choose “obscured” or “private” for sensitive species and locations.**

# After posting your observation

Periwinkles (Genus *Vinca*) · Observed by onjalalaina · May 26, 2015 · 05:04 PM HST

☆ Add to favorites + Add to project ↻ Share

Photo © Guy Eric Onjalalaina, some rights reserved

Added: May 26, 2015 06:42:59 -1000  
App: iNaturalist Android App  
[Add/edit more fields](#)

Comments & Identifications

- onjalalaina's ID: ~~Dogbanes~~ (Family Apocynaceae) [Agree?](#)  
Posted by onjalalaina 3 months ago
- david\_goyder's ID: Periwinkles (Genus *Vinca*) [Agree?](#)  
Posted by david\_goyder 2 months ago
- onjalalaina's ID: Periwinkles (Genus *Vinca*)  
Posted by onjalalaina 2 months ago

Add a comment Add an identification

Location: 51.47832793, -0.30161597 (Google, OSM)  
Places: Royal Botanic Gardens, Kew, Hounslow, ENG, GB  
[More...](#)  
Lat 51.47832793, Lon -0.30161597  
Accuracy: 3m  
Geoprivacy: open  
[Hide details](#)

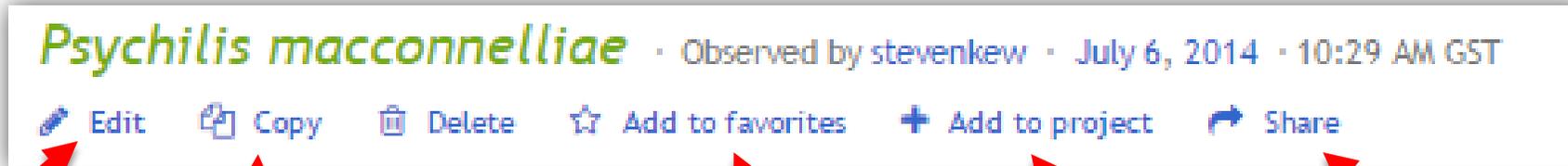
Data Quality Assessment

Community-supported ID?	Yes
	1 person agrees
	0 people disagree
Community ID at species or lower?	No
Date?	Yes
Georeferenced?	Yes
Photos or sounds?	Yes
Observation wild/naturalized?	Unknown
Does the location seem accurate?	Unknown
	What do you think?
Does the date seem accurate?	Unknown
	What do you think?

**'Casual' observations become 'Research Grade' when the community agrees.**

**Interaction with the iNaturalist community through comments and identifications**

# After posting your observation



Edit any of the data from your observation

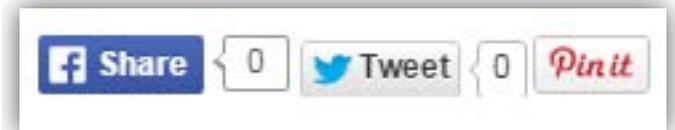
Make a copy of the observation

Delete the observation

'Favourite' an observation

Add observation to a project

Share an observation



# Working with Data in iNaturalist



# Exploring data iNaturalist

← → ↻ 🏠 <https://www.inaturalist.org/observations?nelat=32.6763051302915&nelng=>

Apps PUPS Welcome Page 81430 Carlsbad FW... Login- ECOS Quicktime Sign i

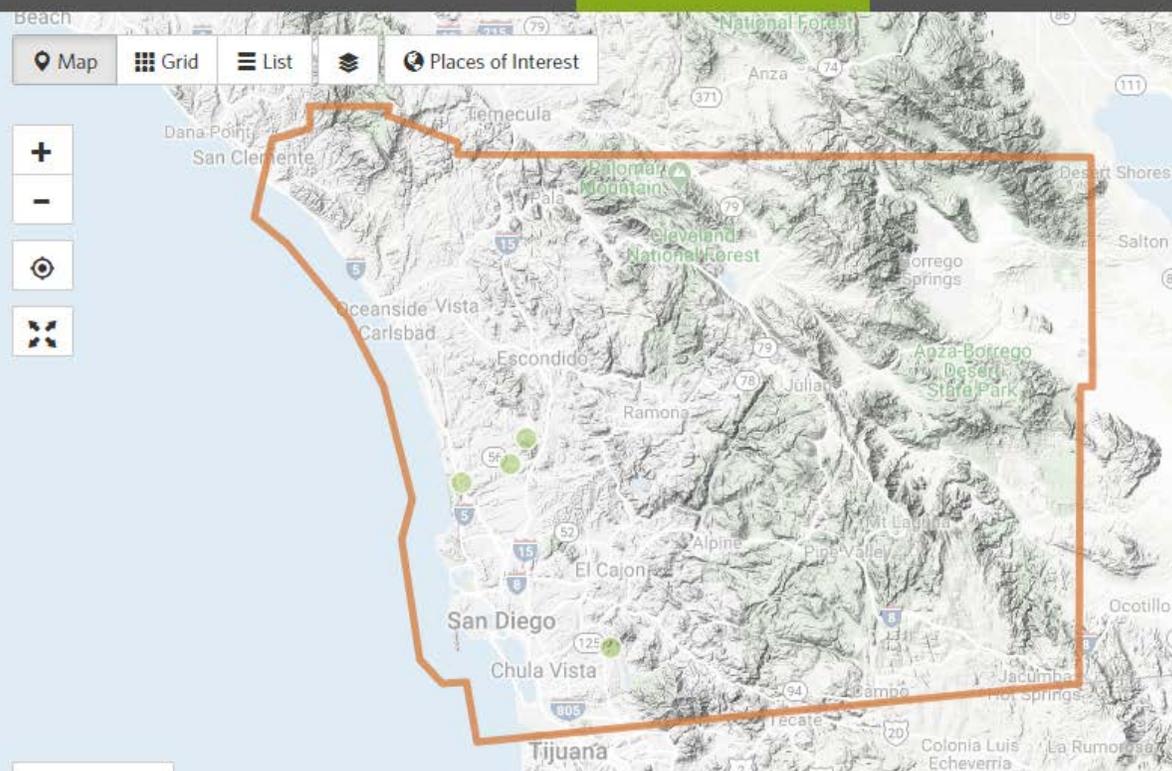
**iNaturalist**  [Explore](#) [Your Observations](#) [Community](#) [Identify](#) [More](#)

## Observations



**12** OBSERVATIONS **1** SPECIES **2** IDENTIFIERS **3** OBSERVERS

Map Grid List Places of Interest



**Geraldton Carnation Weed**  
(*Euphorbia terracina*)  
San Diego, Califor... • Apr 23, 2019  
Research Grade 1 1mo

**Geraldton Carnation Weed**  
(*Euphorbia terracina*)  
525 Hunte Pkwy, Ch... • Dec 20, 2018  
Research Grade 1 6mo

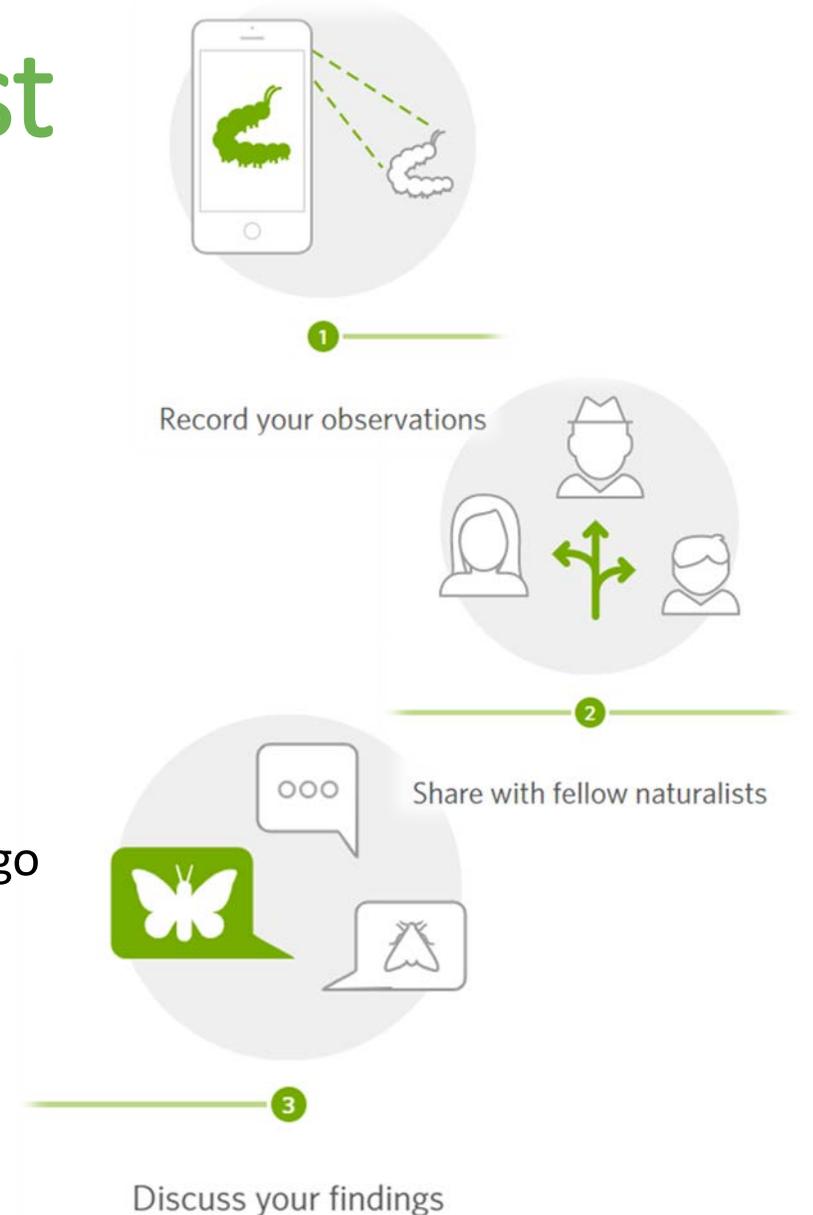
**Geraldton Carnation Weed**  
(*Euphorbia terracina*)  
San Diego, Califor... • Mar 29, 2018  
Research Grade 2 1y

**Geraldton Carnation Weed**  
(*Euphorbia terracina*)  
San Diego, Califor... • Mar 29, 2018  
Research Grade 2 1y

**Geraldton Carnation Weed**

# Advanced tools in iNaturalist

- Download Data in a table format that can be imported into GIS
- Set up projects to:
  - Focus on a geographic area
    - Example: San Diego National Wildlife Refuge Lands
  - Focus on a list of species
    - Example: Early Detection Rapid Response list for San Diego County
- Help others identify what they have posted



Slides on How to Use iNaturalist from:

Zavamaniry Gasy Project

A project to speed up and enhance  
The collection of data for plant science  
In Madagascar.

Thanks!

KMCC blog - recherche et conservation de la biodiversité de Madagascar

**Kew**  
ROYAL BOTANIC GARDENS

**KMCC**  
Kew Madagascar Conservation Centre

**CATEGORIES**

- April Trust Yams
- biodiversity research
- CEPF
- Darwin Initiative Agroforestry
- Darwin Initiative Yams

**JRS BIODIVERSITY FUND**

## TRAINING PACKAGE FOR THE INATURALIST ZAVAMANIRY GASY PROJECT

🕒 6 SEPTEMBRE, 2016 👤 TEAMKMCC 💬 LAISSER UN COMMENTAIRE

by **Steve Bachman, Helene Ralimanana, Romer Rabarijaona and Stuart Cable**

The [Zavamaniry Gasy](#) Project aims to speed up and enhance the collection of data for plant species in Madagascar. Utilising the [iNaturalist](#) citizen science platform and using smart phones with integrated GPS and cameras, the process of making observations of

<https://teamkmcc.wordpress.com/2016/09/06/training-package-for-the-inaturalist-zavamaniry-gasy-project/>

# Thank you to fellow iNaturalist users



Lauren Jonker – acorncap – Acorn Cap Native Plant Nursery in Riverside County



Jason Giessow – jasonedrr – Dendra Inc.



John Martin – johnmartin – USFWS, San Diego National Wildlife Refuge

- Also thanks to Cynthia Powell and Michelle Tollett at Cal Flora, Jessie Vinje at CBI, and Chris McDonald at UCANR for early input on this talk.

My contact info:



Jonathan Snapp-Cook, USFWS  
Jonathan\_snapp-cook@fws.gov  
Partners for Fish and Wildlife Program  
iNaturalist username: snappcook





# Identifying observations with iNaturalist

# Help someone with an Identification

Click to browse observations

The screenshot shows the iNaturalist.org website. At the top, a navigation bar contains the following items: **Observations** (circled in red with a red arrow pointing to it from the text 'Click to browse observations'), Species, Projects, Places, Guides, and People. Below the navigation bar is a banner with various nature icons (a lizard, a mushroom, a snail, a bird, a mouse, a frog, and a hand holding a magnifying glass) and a 'Welcome!' message to iNaturalist.org. On the left, there is a 'Explore Your World!' section with a map icon. In the center, there is a section titled 'Observations by Everyone' with a subtext '1 - 200 of 1,712,738'. To the right of this section is a search bar with a magnifying glass icon and the word 'Search' (circled in red with a red arrow pointing to it from the text 'Search'). Below the search bar is a map of the world with several colored pins (blue, green, orange, pink) indicating observation locations. To the right of the map is a list of observations. The first observation is for 'Snakes Suborder Serpentes' by user 'before-its-gone-journey' on August 20, 2015, at a location in Southeast Asia. It has 2 photos and a 'Needs ID' tag. The second observation is for 'Red-spotted newt (notophthalmus viridescens)?' by user 'hannanabid' on August 26, 2015, at a location in North America. It also has a 'Needs ID' tag.

# Help someone with an Identification

Filter e.g. by taxonomy or area or 'Needs ID'

The screenshot shows the iNaturalist interface for "Observations by Everyone" (1 - 200 of 1,712,738). The left sidebar contains filters for "w/ photos", "w/ sounds", "out of range", "Qual", "Identifications" (any, most agree, some agree), "Show only" (various animal icons), "Place" (Madagascar Country), "Taxon" (Coffees, Bedstraws, and Allies), and "Exact rank" (any). A "Search" button is at the bottom of the sidebar. The main area features a map of Madagascar with numerous green location pins. A red arrow points from the "Search" button to the search input field. Another red arrow points from the "Search" button to the "Redo search in map area" button at the bottom of the map. A third red arrow points from the "Needs ID" link of the "Phyllopentas flava" observation to the "Choose an observation" text on the right. The right sidebar lists several observations, with the "Phyllopentas flava" entry highlighted by a red box.

Observations by Everyone 1 - 200 of 1,712,738

Search  search all fields

Filter by  w/ photos  w/ sounds  out of range  Qual

Identifications  any  most agree  some agree

Show only

Place Madagascar Country

Taxon

Exact rank any Highest rank any

Search

Choose an observation

Zooming in to an area will also filter to a location if you click 'Redo search'

Phyllopentas flava

Observer franck

Date February 21, 2009

Place Itremo (Google, OSM)

Needs ID View »

Start typing a species name, or "Lookup" from external sources

Photo © franck, some rights reserved

Location: Itremo (Google, OSM)  
Places: Amoron'i mania, Fianarantsoa, MG, AF [More...](#)  
Lat -20.595751, Lon 46.63298  
Accuracy: 8125m  
Geoprivacy: open [Hide details](#)

Added: Aug. 25, 2015 10:26:50 +0300  
Origin [IUCN Red List]: Native  
Plant Growth Form [IUCN Red List]: Forb or Herb  
Leaf [Plant Identification]: Simple  
Height (m): 0.6  
Flowering Phenology: flower  
Madagascar Vegetation Type: Plateau grassland-wooded grassland mosaic  
[Add/edit more fields](#)

Comments & Identifications

franck's ID: *Phylloentas flava*, a member of *Coffees, Bedstraws, and Allies* (Family Rubiaceae) [Agree?](#)  
Posted by franck 1 day ago

**Add a remark to help the observer understand your identification**

Subscribe to this observation  Mark as reviewed

**Data Quality Assessment**

Community-supported ID?	No	0 people agree	0 people disagree
Community ID at species or lower?	No		
Date?	Yes		
Georeferenced?	Yes		
Photos or sounds?	Yes		
Is the organism wild/naturalized?	Unknown	What do you think?	Yes / No
Does the location seem accurate?	Unknown	What do you think?	Yes / No
Does the date seem accurate?	Unknown	What do you think?	Yes / No
Appropriate?	Yes		
Still needs ID?	Yes	What do you think?	Yes / No
Quality grade	Needs ID		

[Hide details](#)

Observation © franck  
 some rights reserved  
Is this observation inappropriate, spam, or offensive? [Flag this observation](#)  
If you think this observation is inaccurate, please add an ID, participate in the quality assessment above, or describe the inaccuracy in a comment.

Adding an ID will help make a more robust community identification

At least two matching identifications from two different people are needed to reach 'Research Grade'