

# Bioexploration with iNaturalist

Plant Diversity and Evolution 2019

© Lena Struwe, 2020

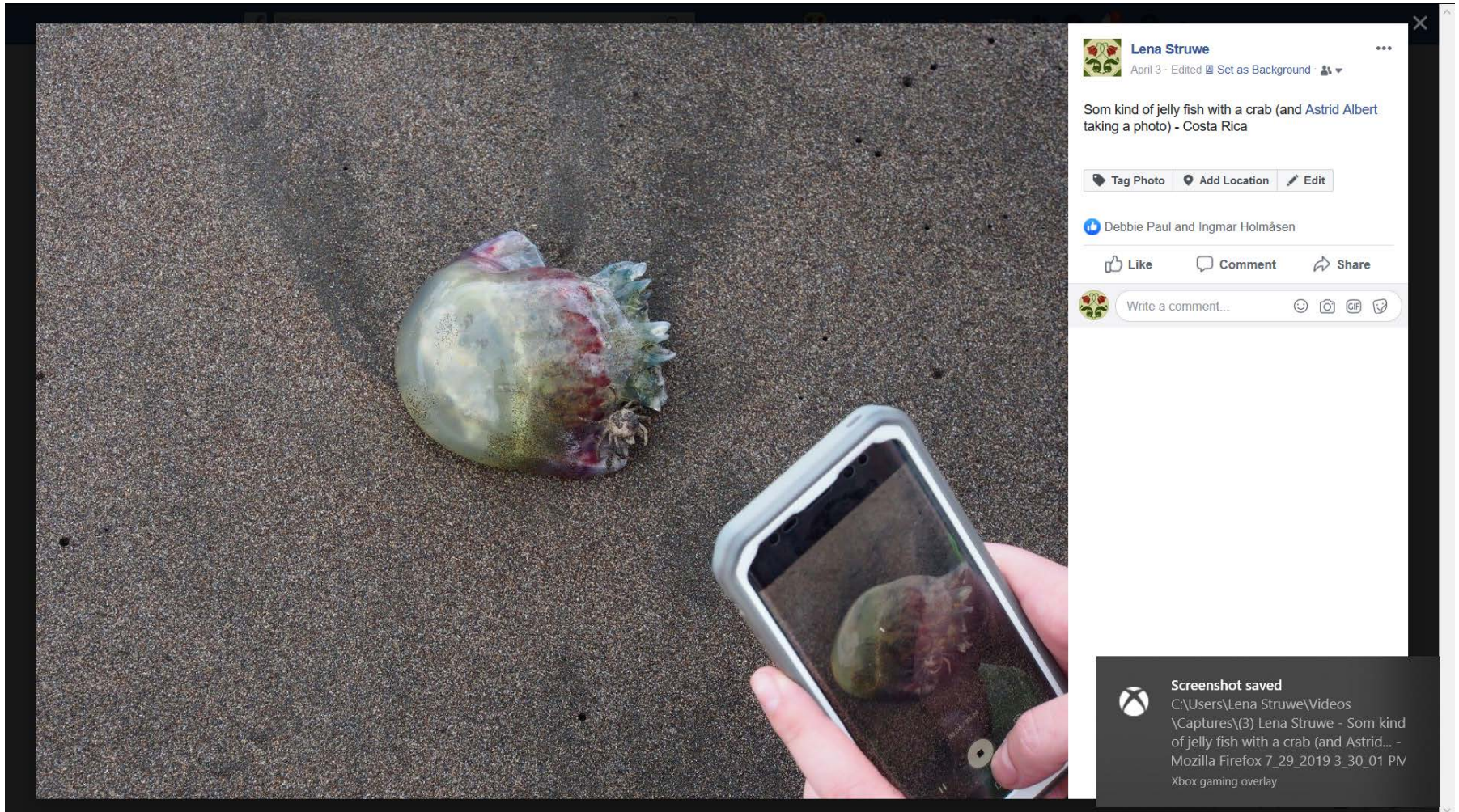
Rutgers University

A young girl with long blonde hair is shown from the chest up, wearing a blue long-sleeved shirt. She is holding binoculars to her eyes with both hands. The background is a dense green forest. The image is overlaid with white text with black outlines.









**HEY KIDS! THERE'S THIS NEW GAME  
THAT'S JUST LIKE POKEMON GO- BUT  
INFINITELY BIGGER!**

**IT'S CALLED 'TAXONOMY'- NOW PUT YOUR PHONE DOWN  
AND LEARN SOMETHING**

# Digital revolution in biodiversity discovery tools – everyone can be an explorer!






	nataliemhowe's ID
	flowering plants Phylum Magnoliophyta
	alex_abair's ID
	plantain <i>Plantago</i>
	nataliemhowe's ID
	bracted plantain <i>Plantago aristata</i>
	srall's ID
	bracted plantain <i>Plantago aristata</i>

# Why use iNaturalist?




(=Why become  
an iNatter?)


< Details





WE'RE PRETTY SURE THIS IS IN THE GENUS ALBIZIA.


Albizia
i

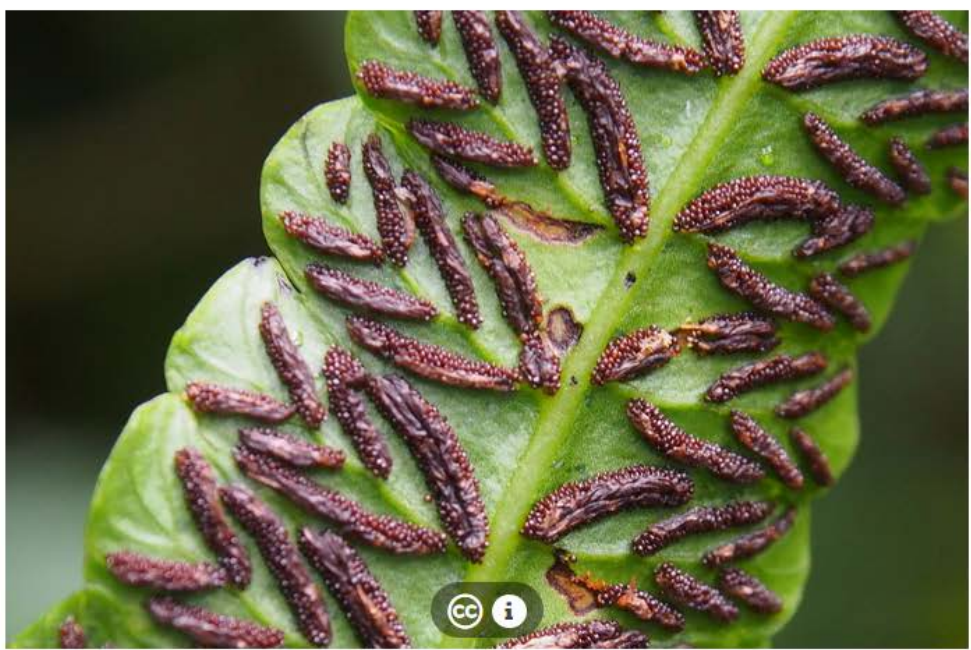
HERE ARE OUR TOP TEN SPECIES SUGGESTIONS:


Persian Silk Tree  
Albizia julibrissin  
Visually Similar / Seen Nearby
i


Plume Albizia  
Paraserianthes lophantha  
Visually Similar
i


White Leadtree  
Leucaena leucocephala  
Visually Similar
i

*Diplazium urticifolium* Research Grade Edit



 **vilseskog** 8,776 observations < >

Observed: Mar 10, 2015 Submitted: Apr 22, 2015 · 11:10 PM EDT

Map Satellite



Monteverde Cloud Forest Biological Preserve

Monteverde

Google

Map Data Terms of Use Report a map error

Monteverde, Costa Rica Details

☆ Be the first to fave this observation!

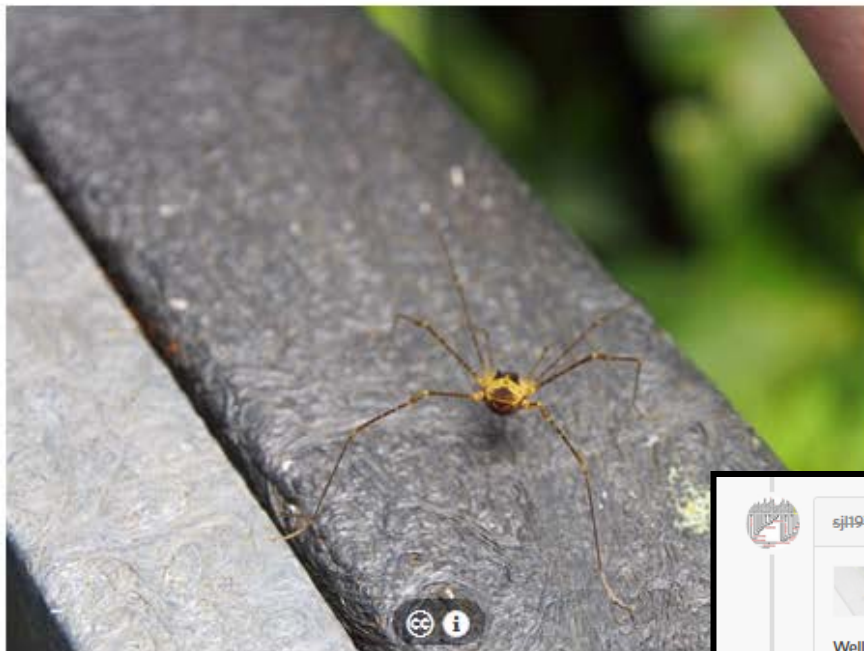


# Findings: Taxonomic discovery

*Eucynorta conigera*

Research Grade

Edit ▾



vilseskog

4,376 observations



Observed:

Mar 10, 2015

Submitted:

May 3, 2015 · 10:34 AM EDT



sj1197 suggested an ID

1y ▾



*Eucynorta*

A member of Harvestmen (Order Opiliones)

Well, that took me a couple of hours today! I'd seen a museum specimen from Nicaragua that was very similar and just couldn't place it to genus. So with a bit of a renewed effort, and extra insights from your photos, I got to likely be *Eucynorta*, which like many other cosmetid genera are quite frankly a taxonomic mess. Anyway, passing by several possible species, I came to *Eucynorta conigera* as an option, described way back in 1904\* from just "Costa Rica". The listed collector is well known for Guatemala, and I was doubtful he'd ever been to Costa Rica [and so I'd been thinking this original specimen was actually Guatemalan, etc]. A few years later in 1909 another another author listed a second specimen as this species from El Higuito, near San Mateo, CR. But, no comparison was made to original specimen (and this author seems to be regularly wrong), so I was skeptical. Then, the revelation came to me that 'conigera' means 'cone-bearing', seemingly referring to the unusually broad 'coniform' spines on its dorsum. The original diagnostic drawing from 1897 isn't great, but the description matches yours - including things like the long legs with yellow annulations. Let's now add that I've also seen the original type specimen, and I think it fits well enough! So, maybe the original collector did visit Costa Rica, and MAYBE the later author wasn't always wrong with his identifications (but he may still be). But, anyway, yours seems very close to *E. conigera*, indeed can specifically be that. It's only been 100 years since it was first known, then essentially forgotten. I can't begin to imagine how many visitor have gone through Monteverde with cameras and seen them, yet you're only person I know who has photographed one and shared it! It beats your great *Micrathena* :) [\*edited date]



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About

Third finding ever of this species described in 1904, last one was in 1909, first ever photo, first definite collection from Costa Rica, clears up a type collection locality issue.



sj1197 suggested an ID





## Flora and Fauna of Rutgers University (NJ, USA)

### About

Members 7

This is the cumulative list of all species observations from Rutgers University campuses, gardens, forests, field and research stations, farms, and other university-owned properties in the state of New Jersey, USA. Discover and report what species that live at Rutgers; wild or captive/cultivated are all OK. This project is auto-

[Read More >](#)

[Edit Project](#)

[NEWS](#)



### Overview

13,973  
OBSERVATIONS

1,826  
SPECIES

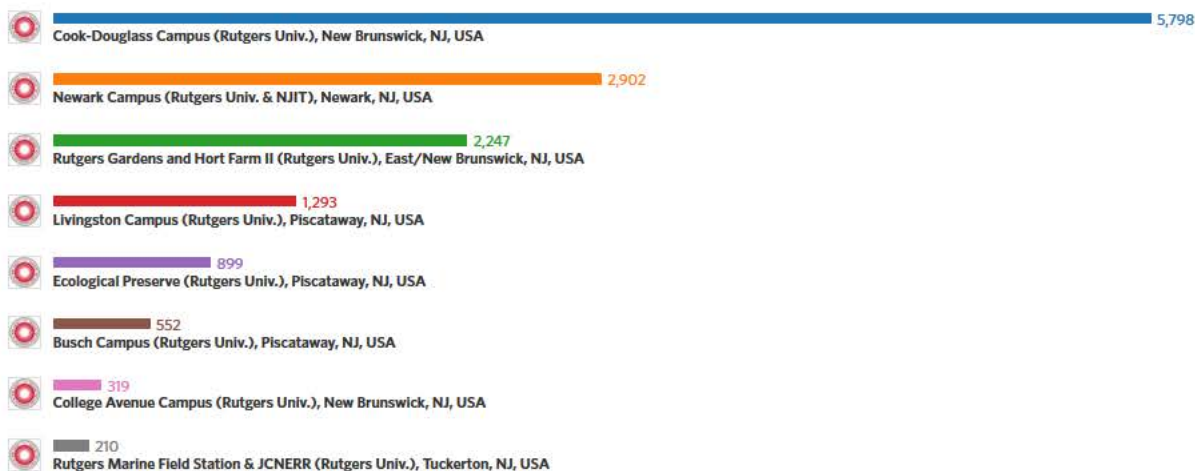
1,086  
IDENTIFIERS

667  
OBSERVERS

[Stats](#)

### Leaderboard

Sort By: [Observations](#) | [Species](#) | [Observers](#)



[View More](#)

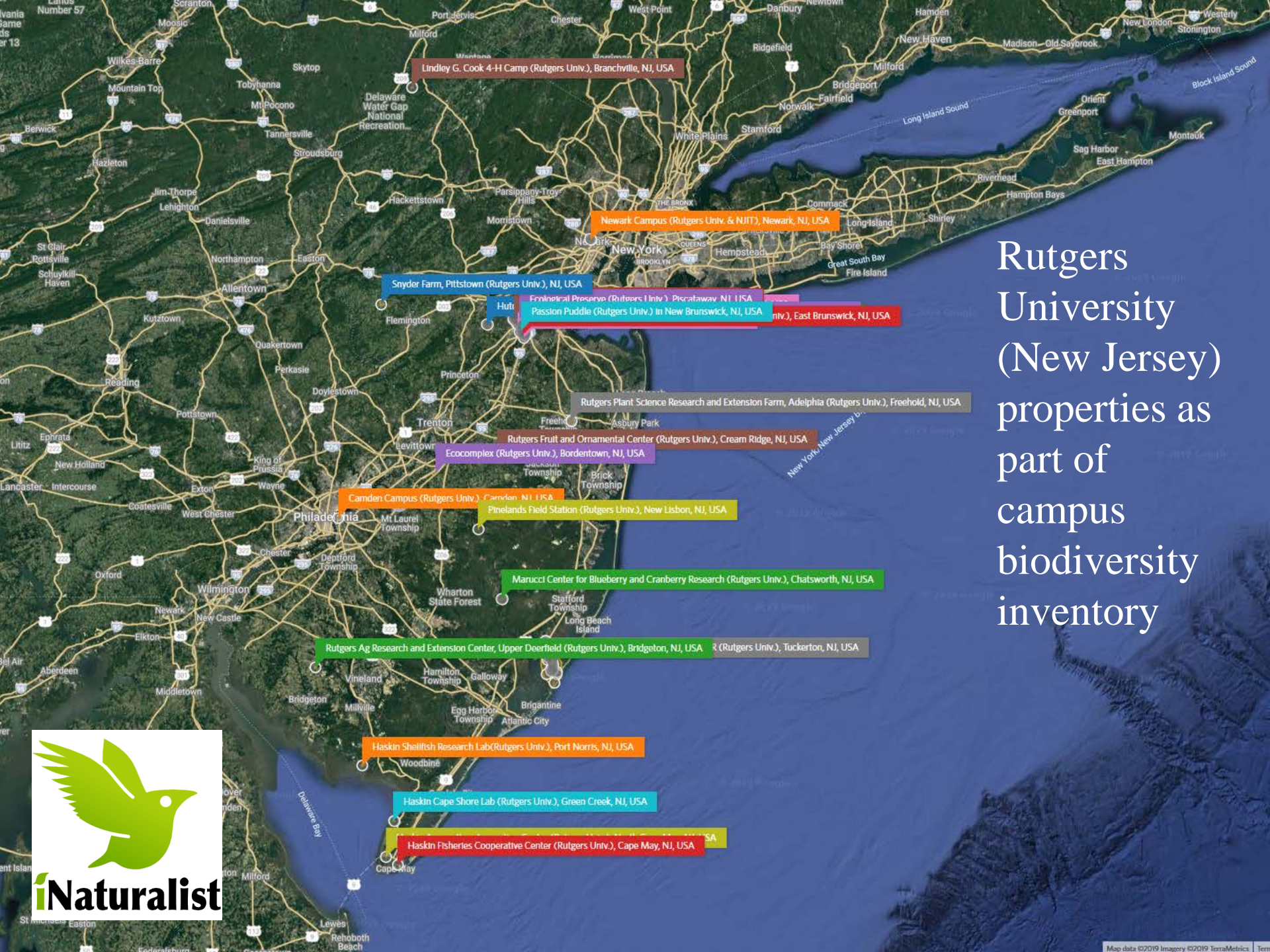
### Map of Observations



PROJECTS:  
Flora and  
Fauna of  
Rutgers  
University  
(campus  
inventory)



# Rutgers University (New Jersey) properties as part of campus biodiversity inventory





Overview

13,973 OBSERVATIONS

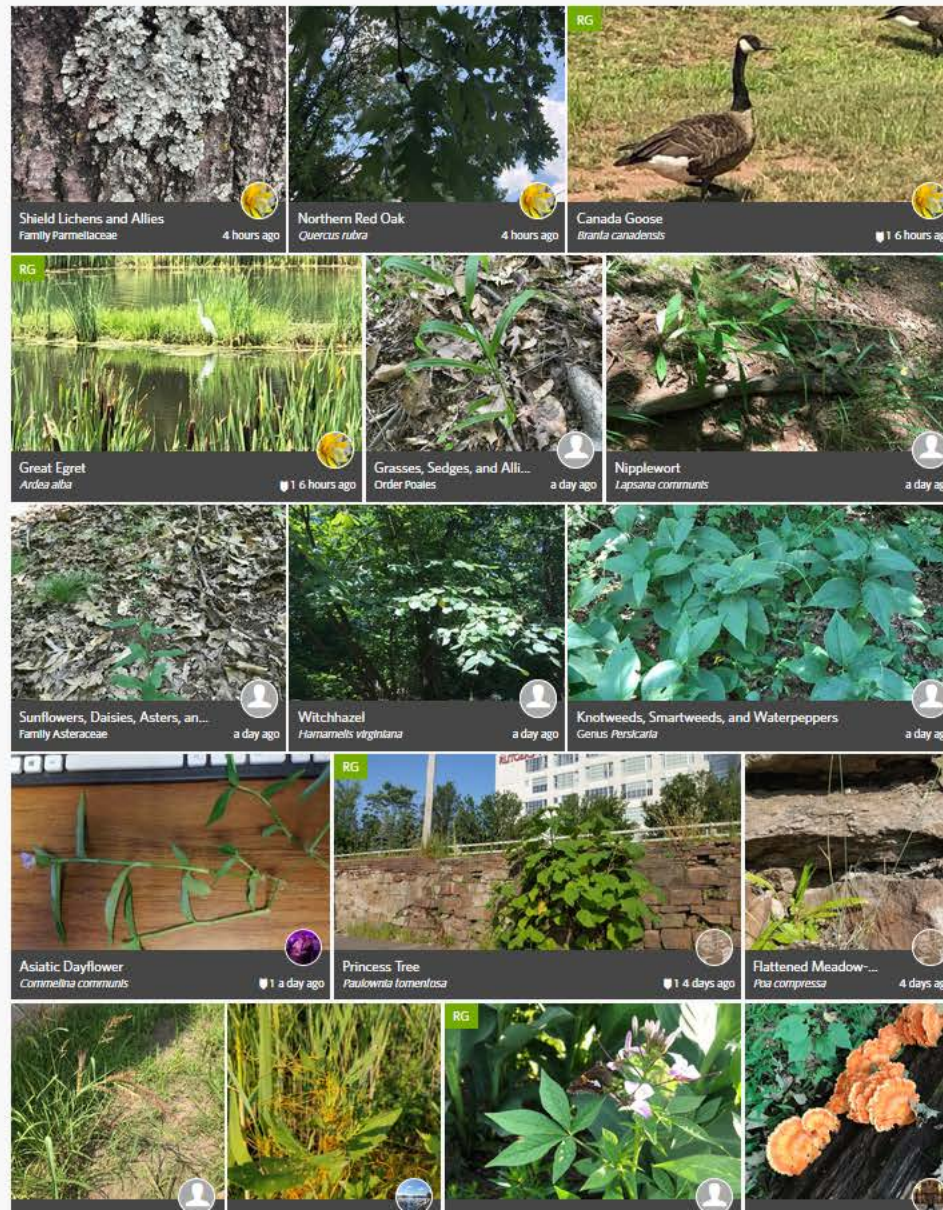
1,826 SPECIES

1,086 IDENTIFIERS

667 OBSERVERS

Stats

Map Grid List Identify Search Export Observations



Observations  
of campus  
biodiversity  
inventory at  
Rutgers  
University





Media coverage

# MANY RARE ANIMAL AND PLANT SPECIES FOUND AT RUTGERS' CAMPUSES



JEN URSILLO | March 27, 2019

These colorful versute sharpshooters (*Graphocephala versuta*) were observe...



# Getting started on iNaturalist

<https://www.inaturalist.org/pages/getting+started>

<https://www.inaturalist.org/pages/video+tutorials>

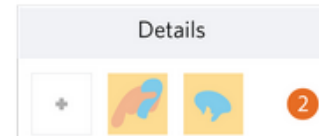
Remember, iNaturalist is no joke, so please don't get banned for bad behavior.

## How to Make an Observation with your iPhone

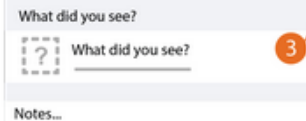
1 Tap **observe**.



2 Add one or more photos as **evidence**.



3 Choose **what** you saw.



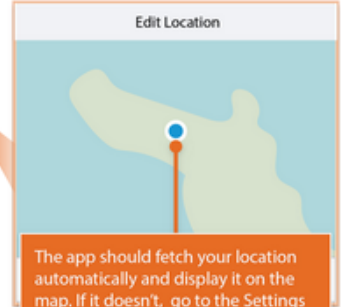
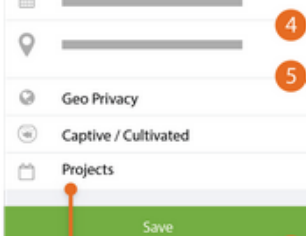
Choose one of the computer vision suggestions, search for something else, or type in a 'Placeholder' if offline



4 **When** you saw it should be added automatically.

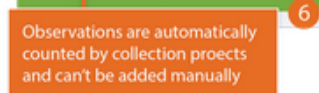


5 **Where** you saw it should be added automatically. If it doesn't, check Privacy in the Settings app.



The app should fetch your location automatically and display it on the map. If it doesn't, go to the Settings app and tap Privacy to enable Location Services for iNaturalist

6 **Save** your observation.



Observations are automatically counted by collection projects and can't be added manually

7 **Upload** to share with the community. This should happen automatically. If it doesn't, tap the Upload button. You can turn off automatic upload from the app settings from the Me tab.



8 Check back for **activity** on your observation from the community or be notified by email to the address in your account settings.



## How to Make an Observation with your Android

1 Tap the **observe** button from the My Observations tab.

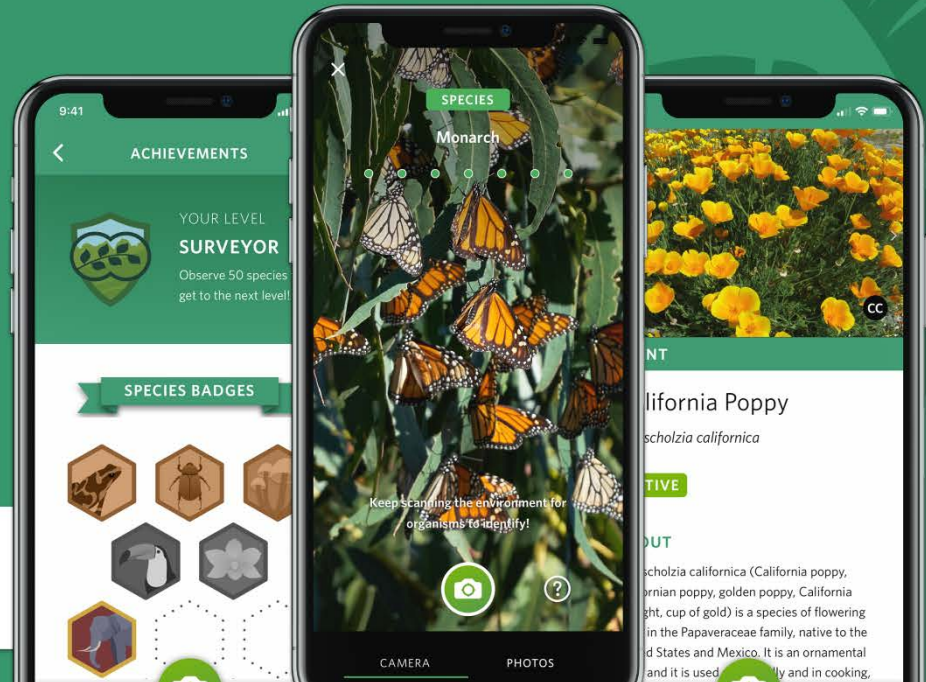


# SEEK, companion app to iNaturalist, will help you find species.

Get outside, explore, and learn about the nature all around you!

**seek**   
by iNaturalist

iNaturalist is a joint initiative of the California Academy of Sciences and the National Geographic Society





# Why use iNaturalist?

## Organized data storage

- Easy geolocation of findings

- Helps people recall things they've seen before

- Builds Life Lists

- Allows for comparisons and competitions to motivate discovery

- Provides a great dataset as an example for students to use in learning

  - Quantitative analysis

  - Data visualization



**Project tools:**  
Auto-calculation  
of top five  
species, top 5  
observers  
List of  
participants and  
their numbers

# iNaturalist Species Bingo Project

- 50 specific plant species to find anywhere (Weeds & Ethnobotanicals) during Sept 1 to Oct 31.
- Observe, photograph, upload to iNaturalist
- Add to iNaturalist class project:  
**Rutgers PIDivEvol 2019**
- 2 bingo sheets to hand in (**deadline November 4**)