
iNaturalist
Smartphone Photography
for iNaturalist
Photo by Abhas Misaraj, iNaturalist

Photo by Alison Young, iNaturalist

What's the hardest thing for you to photograph?

- Insects and spiders
- Birds
- Plants
- Small things in general
- All of it

Welcome!

Arya Natarajan
Sr. Communications Manager

Tony Iwane
Director of Community Support

Photo by Alison Young, iNaturalist

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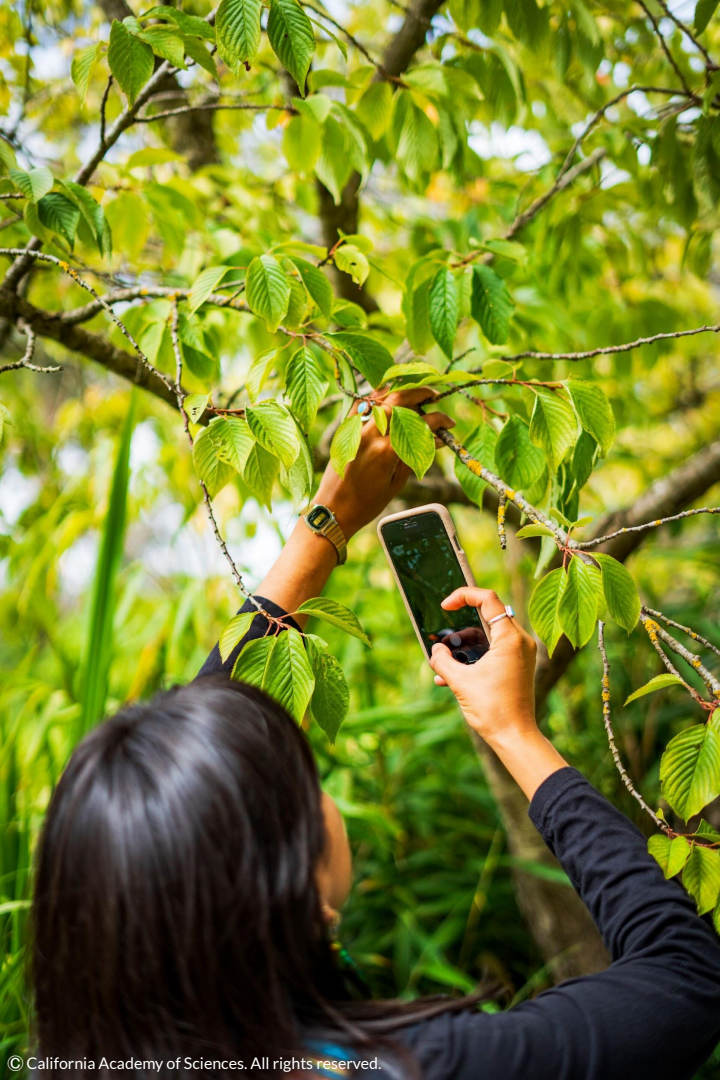

Reminders

- **Yes, this is being recorded!**
- Use the Q&A to ask questions
- Watch for poll questions
- **Yes, we'll email you a link to the recording & slides later today!**

Overview

- Smartphone Pros and Cons
- How to set up your device
- Photographing plants
- Photographing insects
- Macro photography
- Photographing mushrooms
- Importing photos into iNaturalist
- Q&A if time

Before we start

I'll be discussing **both iNat and default device camera** apps.

I'll be going over **principles** more than specific how-tos, because there are so many different implementations of camera apps.

Your device's camera may act differently, but the **basic principles should be similar**.

Please **abide by all local rules and regulations**, and please stay safe.

Don't touch or approach things that may be dangerous or harmful.

And please remember…

Photographs on iNaturalist are primarily considered **evidence**, they don't have to be pretty or perfect.

Ugly is OK, just try to keep photos clear, focused, and accurate if possible.

Pros of Smartphone Cameras

- You often have them with you
- They have GPS
- They connect to the internet
- They don’t use film
- They use autofocus

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Cons of Smartphone Cameras

- They're made for taking photos of humans, food, and landscapes
- They not great for distant subjects or extremely close subjects
- They…use autofocus

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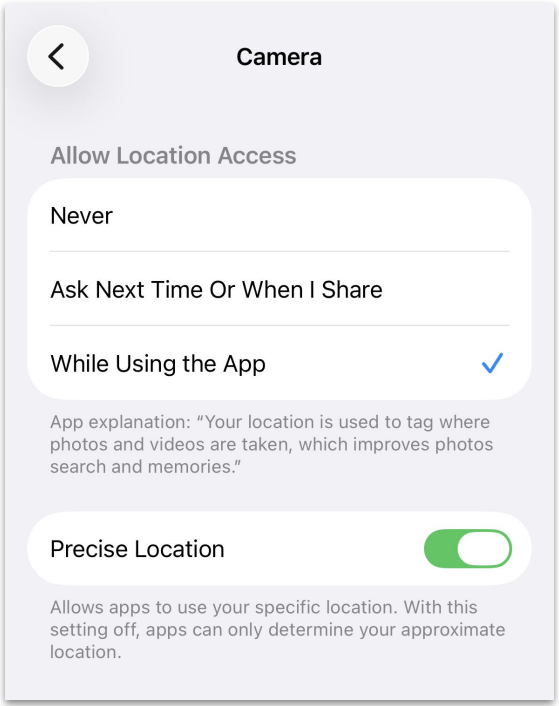
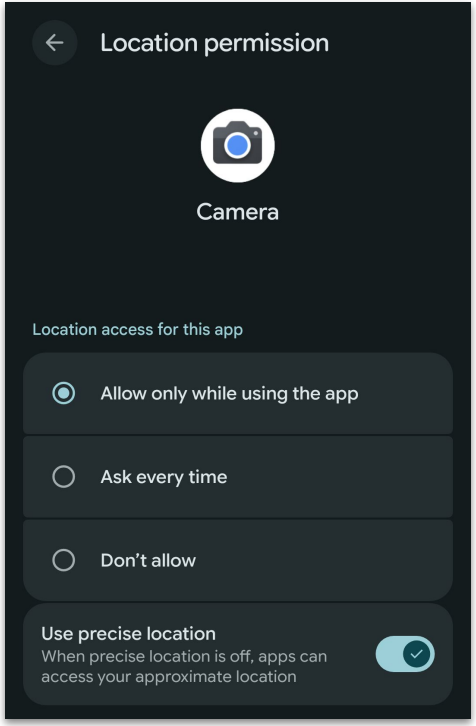
Setting up your camera

Give it location permission, which is done in your device's Settings app





Photographing Plants

with your Smartphone

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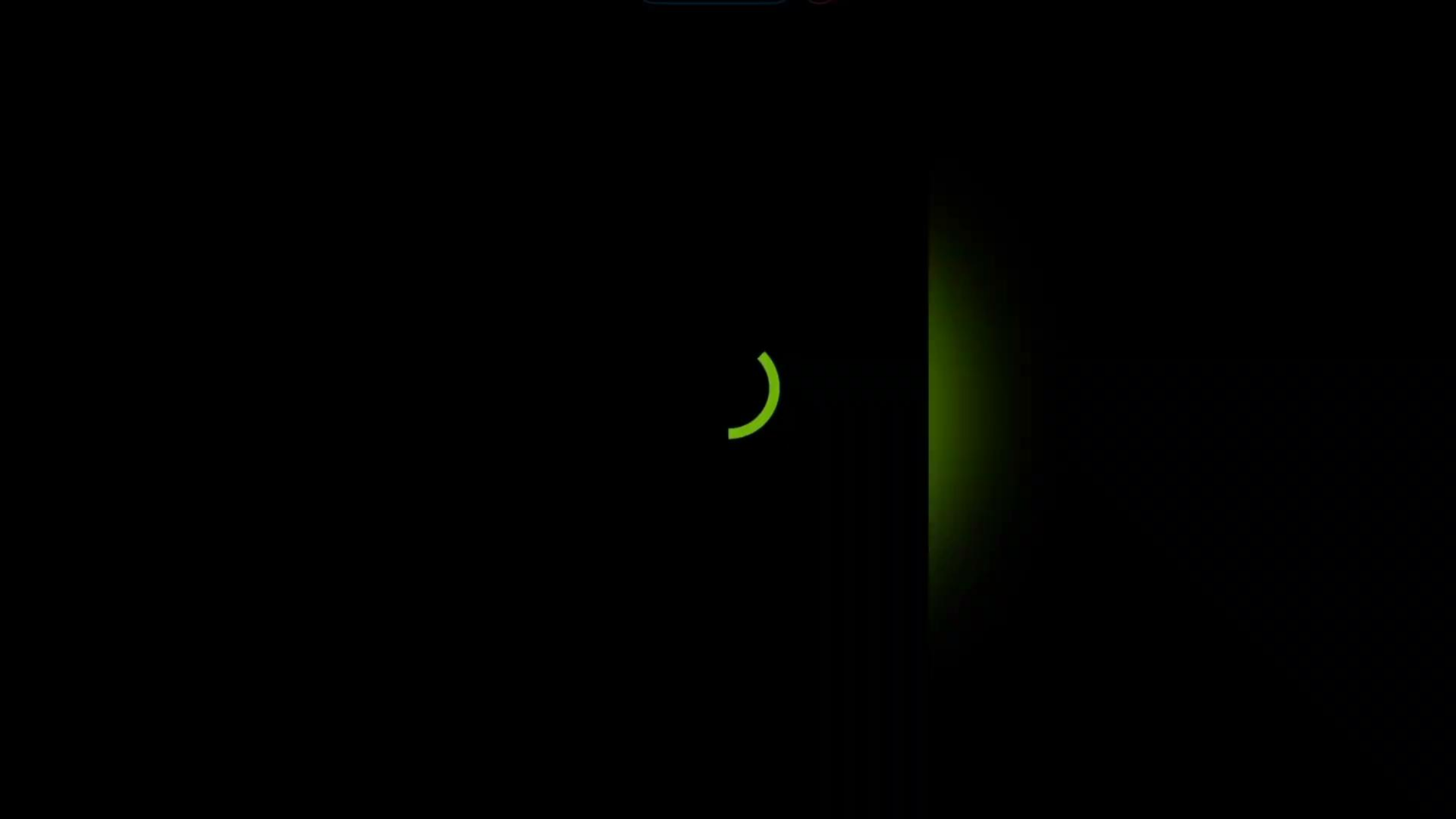
Principles for iNatting Plants

- Plants **don't move** (yay!)
- Plants are **everywhere**
- It's often necessary to take **multiple photos** of plants
- Get **details** if you can. Distant photos of trees are likely not very identifiable
- **Smartphones often don't like focusing on plants**, especially small ones
- **Give the camera something bigger to focus on, like your hand**



When you see a plant…

- **Take your time** if you can!
- Use your **hand or a focus object** if it's safe to do so
- Try to get shots of
  - Flowers or fruit
  - Backs or sides of flowers
  - Leaves
  - Needle cluster, if a pine
  - Overall shape/size/habit

Photographing Small Animals

with your Smartphone

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Principles for iNatting Small Animals

- They don’t stay still (grr!)
- They **often respond to quick movements** and shadows
- Your phone often doesn’t like focusing on them
- They **often patrol small areas** or return to a perch
- **You won’t be able to always photograph them**

When you see a small animal, like an insect…

- Freeze and **take a safety shot** from where you are
- Keep your eye on the subject and **move slowly closer to** it, taking more safety shots each time
- **Watch your surroundings** and step
- Try to not let your **shadow** touch it
- If you can get close, take multiple angles
- Accept that **you often may not get what you want**

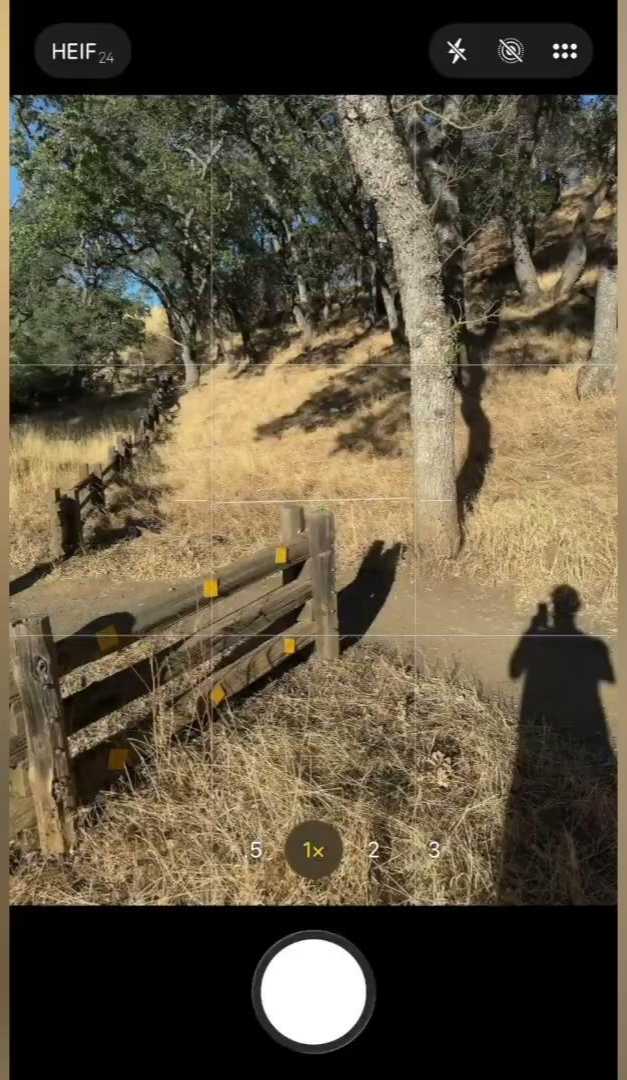
HEIF 24
5
1×
2
3

Photo by Alison Young, iNaturalist

What phone are you using?

- iPhone, recent model (14 or newer)
- Android, recent model
- iPhone, older model
- Android, older model
- Other

Using a Macro Lens

with your Smartphone

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Macro Photography

Macro photography allows you to take in-focus photos at a very short distance. You can capture more detail, but there are drawbacks:

- With a smartphone you generally have to be a **very close to the subject**, so it's not great for insects, spiders, etc.
- The "**depth of field**", or how much of the image is in focus, is **very thin**.
- Depending on your phone, **it can be almost impossible to autofocus**

Some newer phones have a macro mode built-in, which is usually pretty good. For other phones, you will need to add a macro lens. **Clip-on macro lenses can usually be purchased for a few US dollars**, and generally go over the main lens of the phone.

Try not to cover any other lenses with it, that will confuse the software.

Keep your lens clipped to your hat, shirt, backpack strap, etc, for easy use.

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Macro Photography

Things to keep in mind when using a macro lens/macro mode:

- You **must get the lens within a few centimeters** of the subject
- **Keeping the subject steady** with your other hand, or another tool or surface, helps a lot
- You will **likely need to take several photos**, and pick the best one
- If Autofocus is not working well, **use focus lock and then move the phone to focus**

.5
1×
2
Exposure
Portrait
Photo
Night Sight
Pano

Photographing Fungi

with your Smartphone

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Photographing Fungi

With fungi, you often need to take photos of several parts of the fruiting body. **For mushrooms, you want at least 3-4 photos**:

- A photo of the **top** of the mushroom
- A photo from the **side**
- A photo that shows details from **under the** cap
- A **wider photo** that shows where the mushroom is growing

Even then, keep in mind that **it can be difficult to get a good identification for fungi**. There's a lot we're still learning about them.

Often the most difficult shot to get is that of the underside of a mushroom or shelf fungus.

There are two ways to do it without ripping up the fungus:

- Use the **selfie camera** on your phone.
- **Bring a small mirror** and place it under the mushroom.

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Importing Photos

with your Smartphone

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Current Android App

With our current Android app, you can import a batch of photos. They will be combined into one observation upon import, so the each batch should only be photos from one encounter with one organism.

- **You can start in the app and import photos, or start in your gallery**, select photos, then share them *to* the iNaturalist app
- **Press and hold on the first photo** you want to import. That will allow you to select more photos to import in that batch.
- **Photos stored in the cloud may not be imported with location information**. It's best to download images to your device before importing.

My Observations

58,914 OBSERVATIONS | 9,517 SPECIES | 181,889 IDENTIFICATIONS


Anise Swallowtail — 2d
Powell St, Emeryville, CA, US — 2


Western and Clark's Grebes — 2d
Powell St, Emeryville, CA, US — 3


Fuzzy Gall Wasp — 4d
Mitchell Canyon Road, Clayton, CA, US — 2


Feron — 4d
Mitchell Canyon Road, Clayton, CA, US — 1


Sawfinger Scorpion — 3d
Terrace Trail, Clayton, CA, US — 1


drippy acorn disease — 4d
Mitchell Canyon Road, Clayton, CA, US — 2


Blastobasis — 3d
Mount Diablo State Park, Contra Costa, Cal... — 1


Ten-lined June Beetle — 3d
Mount Diablo State Park, Contra Costa, Cal... — 3


Geometer Moths — 3d
Mount Diablo State Park, Contra Costa, Cal... — 1


Pherne — 3d
Mount Diablo State Park, Contra Costa, C

Pyralid and Crambid Snout Moths — 3d

iNaturalist iPhone App

With our newer iNaturalist app for iPhones (which will be coming to Android), you can import a batch of photos and they can be sorted into multiple observations.

- **Select photos in your Photos app and share to iNat, or start in iNat**, press and hold and camera, and choose to import photos.
- You can then **group photos in the batch** into different observations.
- You then **process the observations one by one** and save them.

3:21

tiwane

58,917 OBSERVATIONS

9,519 SPECIES

Anise Swallowtail

Papilio zelicaon

Powell St, Emeryville, CA, US

7/27/26 4:45 PM PDT

2 0

Western and Clark's Grebes

Genus *Aechmophorus*

Powell St, Emeryville, CA, US

7/27/26 4:28 PM PDT

3 0

Fuzzy Gall Wasp

Cynips conspicuus

Mitchell Canyon Road, Clayton, CA, US

7/25/26 7:36 PM PDT

2 0

Genus *Feron*

Mitchell Canyon Road, Clayton, CA, US

7/25/26 7:36 PM PDT

1 0

Sawfinger Scorpion

Serradigitus gertschi

Terrace Trail, Clayton, CA, US

7/25/26 10:40 PM PDT

1 0

ppy Acorn Disease

dalea quercina

Mitchell Canyon Road, Clayton, CA, US

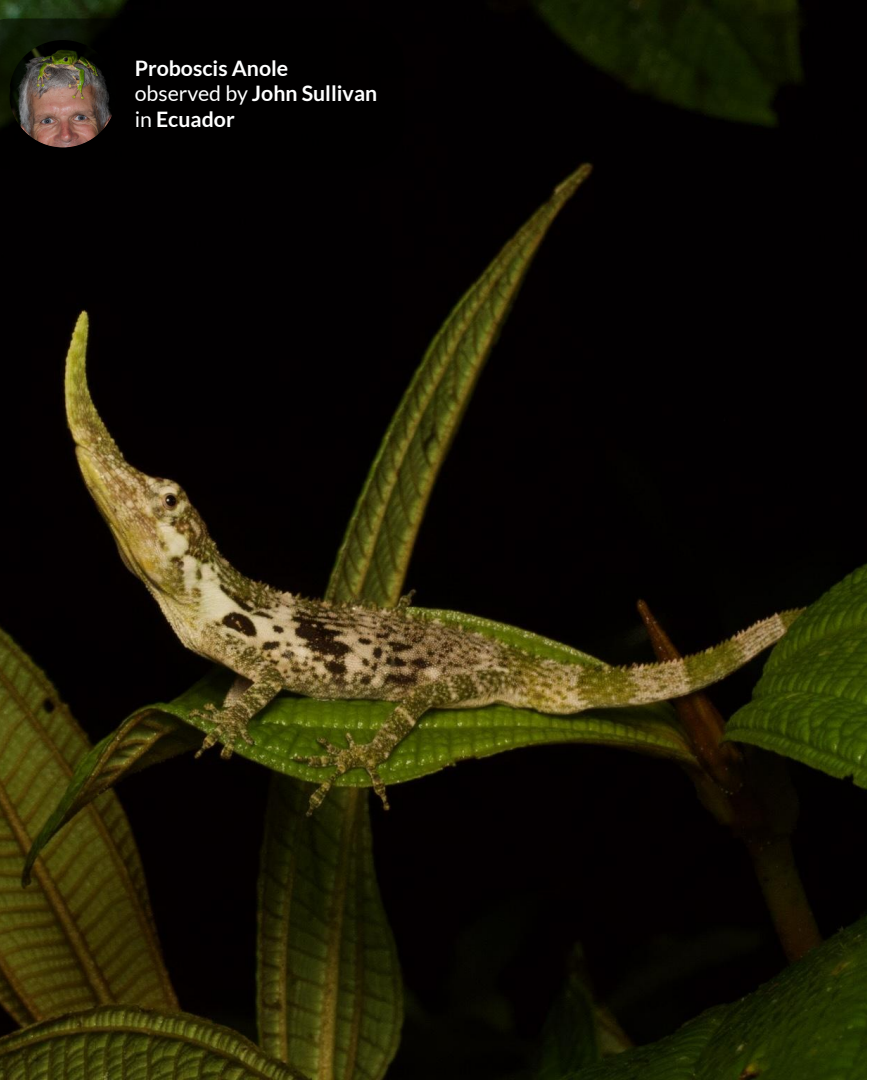
2 0

Menu Explore Me Activity

Photo by Alison Young, iNaturalist

How long have you been using iNaturalist?

- I just joined
- Under a year
- 1-5 years
- 5+ years
- I haven't tried using iNaturalist yet



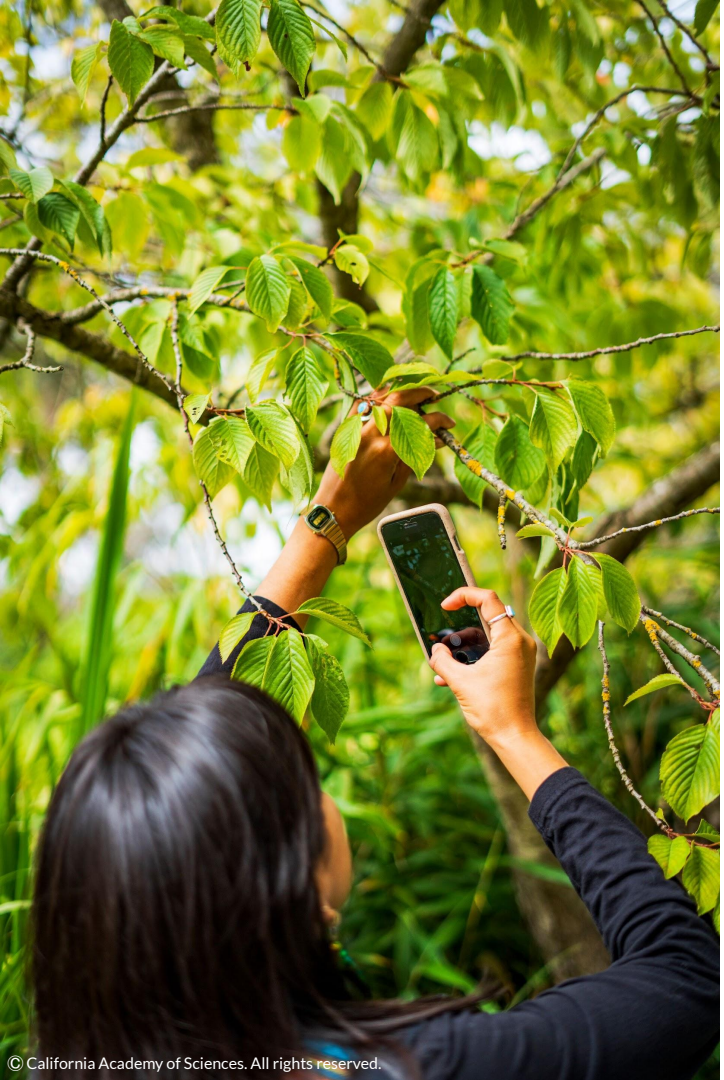
Wrapping Up

- Photos on iNat are **evidence**
- Smartphones are **imperfect tools** for many iNat subjects
- There are **techniques and principles** you can use to make up for some of these deficits
- **Practice! It takes time to work on these techniques**
- **Be safe, have fun**, it's OK if you can't photograph everything. It's all about being in and appreciating nature

Questions?

Knuckles Pygmy Lizard
observed by **Ravisara Jayamanna**
in **Sri Lanka**

Share your feedback on this webinar!



Reminders

- **Yes, this was recorded!**
- **Please take our feedback survey** (it's short!)
- **Later today we'll email you the:**
  - Recording
  - Slides
  - Feedback survey

Thanks for joining us!

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