

Citizen Science across LTSER platforms

Training session (a catalyst for network collaboration)

Inês do Rosário & Patrícia Tiago

1st February 2023



Presentations and agenda

Activity 1



Inês do Rosário



Patrícia Tiago

Agenda

Main Topics

Presentations and agenda - activity 1

Basics of Citizen Science - activity 2

Why use Citizen Science at LTSER platform - activity 3

Break

Joining iNaturalist - activities 4, 5 and 6

LTSER umbrella project - activity 7

What will you learn?

What is Citizen science – CS

What is CS, main areas and relevant milestones of CS, with a particular focus on biodiversity projects

How to use iNaturalist

Log in, register species, create a project, validate data, download data

Explore possibilities for platforms

Explore different types of projects that can be developed within iNaturalist, for different taxa or engaging different groups of citizens /stakeholders

Explore advantages for eLTER network

Discuss the possibilities of using iNaturalist for each platform and to the network as a whole

Basics of Citizen Science

What is citizen science?

The involvement of non-professionals in contemporary scientific research and environmental monitoring.

Other designations: participatory science, collaborative science.

Wikipedia, 2005

“a project (or ongoing program of work) which aims to make scientific discoveries, verify scientific hypotheses, or gather data which can be used for scientific purposes, and which involves large numbers of people, many of whom have no specific scientific training.”





The oldest Citizen Science Programme

Prior to the turn of the 20th century - hunters - Christmas "Side Hunt."
Conservation early stages / Declining of bird populations.
Christmas Day 1900 - ornithologist Frank M. Chapman a new holiday tradition "Christmas Bird Census".

Important milestones



In the 1990s the concept of citizen science appeared simultaneously in the United States of America and in the United Kingdom, meaning volunteer data collection to support ornithological research, in the United States of America, and integration of science and citizenship to advance policy goals, in the United Kingdom.



The number of articles published in the last ten years that refer, or use citizen science as a scientific tool, has increased significantly in recent years.



Three associations with a broad geographic base emerged to standardize concepts and objectives of the field, to unite and improve expertise, and to power citizen science encompassing educators, scientists, data managers, non-profit organizations, politicians and others.



Main Areas

Biology

Space

History

Climate

Environment

Arts

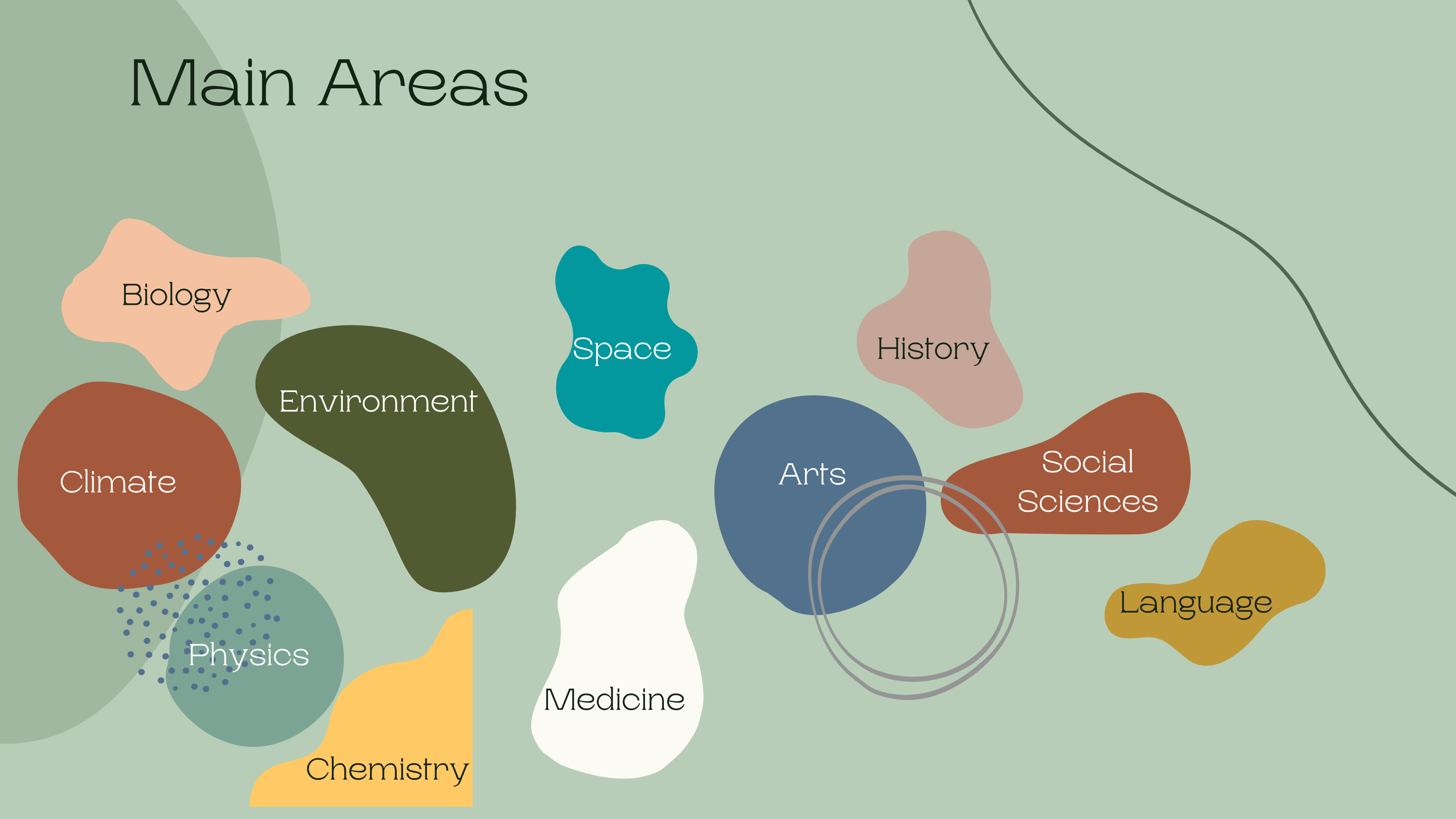
Social
Sciences

Language

Physics

Medicine

Chemistry



Study from 2016

Largest impact of citizen science is in research on biology, conservation and ecology.

International Treaties

Identify the need to evaluate change in the status and trends of global biodiversity.

Citizen Science

Taken into consideration to evaluate regional and global changes in the trends and status of biodiversity.



Activity 2



Create a citizen Science project

Small groups using Miro platform

Create a Citizen Science project (excluding biodiversity area)

- Give a name
- Identify the aims of the project
- Justify for what the data collected can be used for



Why use Citizen
Science at LTSER
platform?

96 Citizen science programs at
25 LTSER Platforms

74%

Almost none
was the same

included biodiversity

Survey to platforms (2019)



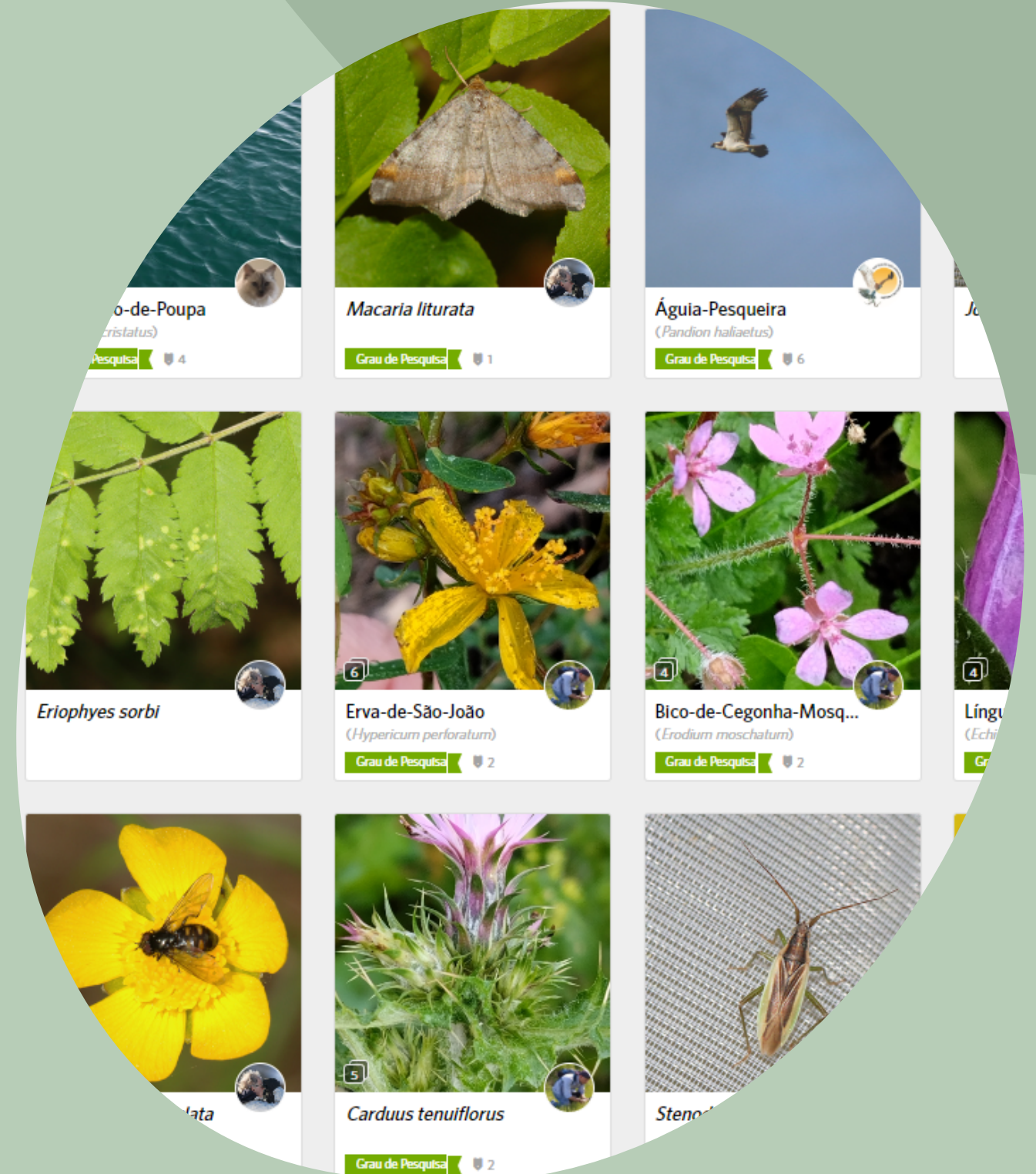
What can we do to improve the links between citizen science programs across LTSER platforms?

Create a common project
that can be managed by
LTSER members and where
any citizen can participate

iNaturalist

A JOINT INITIATIVE BY THE CALIFORNIA
ACADEMY OF SCIENCES AND THE
NATIONAL GEOGRAPHIC SOCIETY.

Stable and
durable



Promote

Register



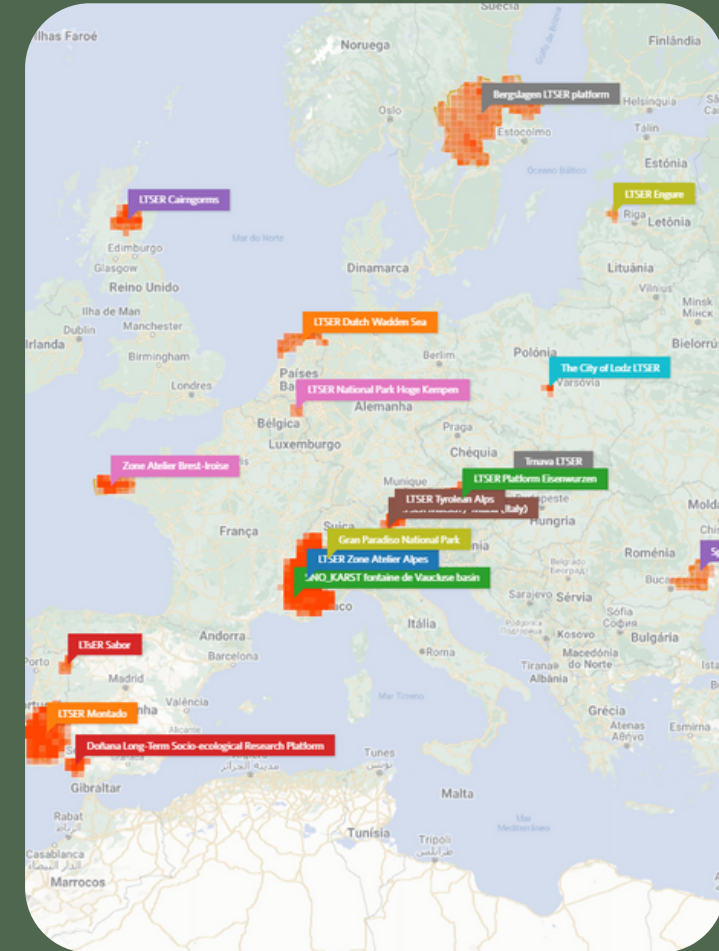
Promote the long-term biodiversity monitoring by citizen scientists in all platforms

Engage



Engage with local stakeholders and citizens and still contribute to an European scale

Network



Strengthening the interaction between LTSEr platforms and creating opportunities to work together in CS programs

Umbrella project timeline



Present the project

First presented within the eLTER newsletter, SPF, other eLTER events



Add more LTSER platforms

Continue to add platforms to the umbrella project, ideally done by the platform owners



Training

For platforms (managers, researchers, etc) to create projects, latter for engage citizens, other more specific



Common initiatives

In the future common CS initiatives can be promoted using the umbrella project

Activity 3



My platform

Individual exercise using Menti

Think of your platform, site or a natural place of interest

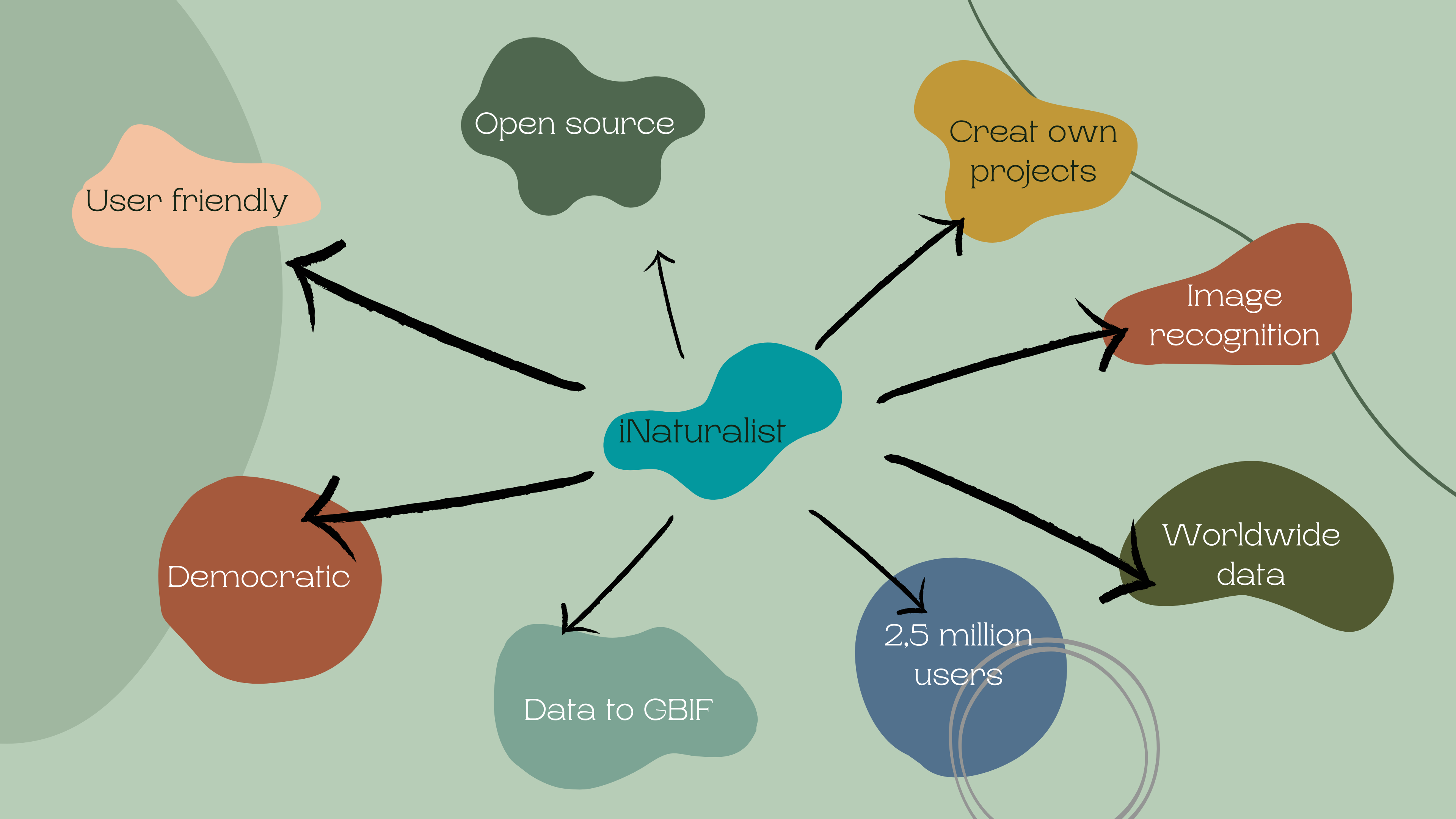
- Identify taxonomic groups of interest
- Identify the citizens/stakeholders to engage in CS projects

Coffee break





Joining iNaturalist

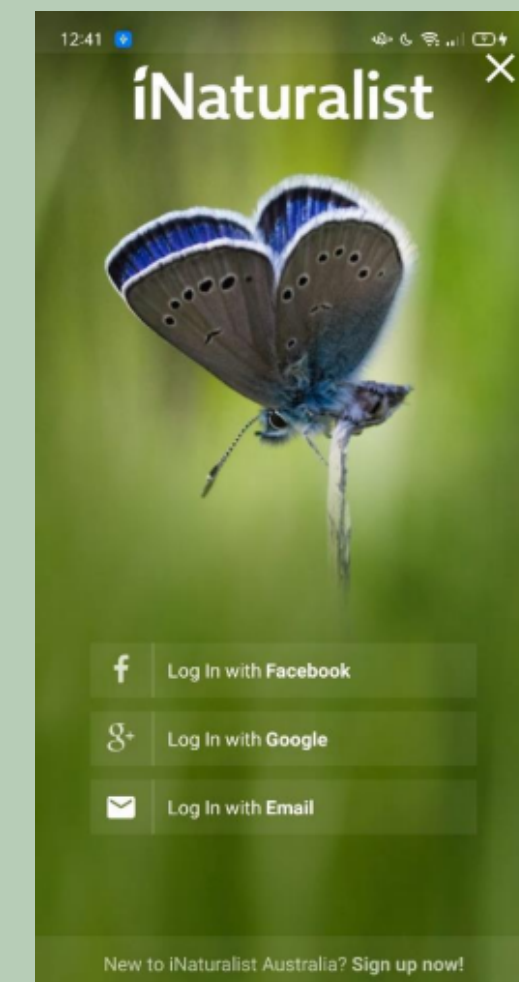
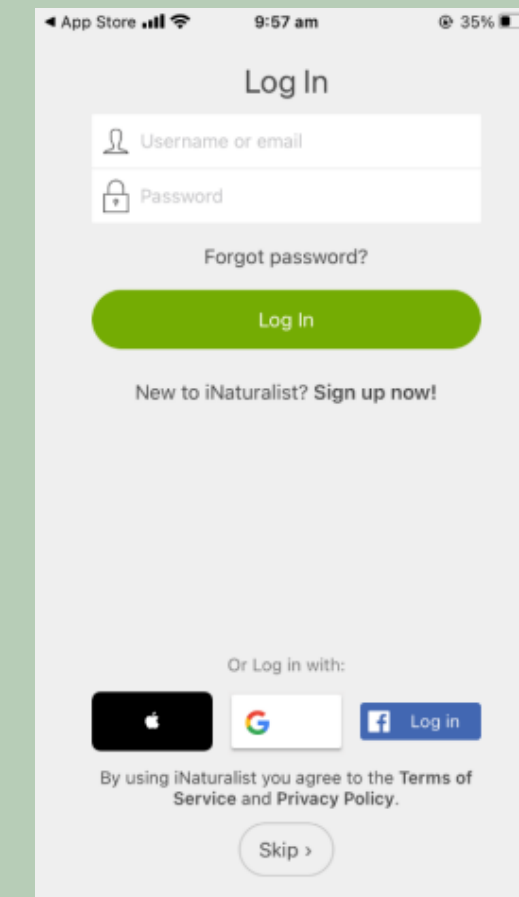
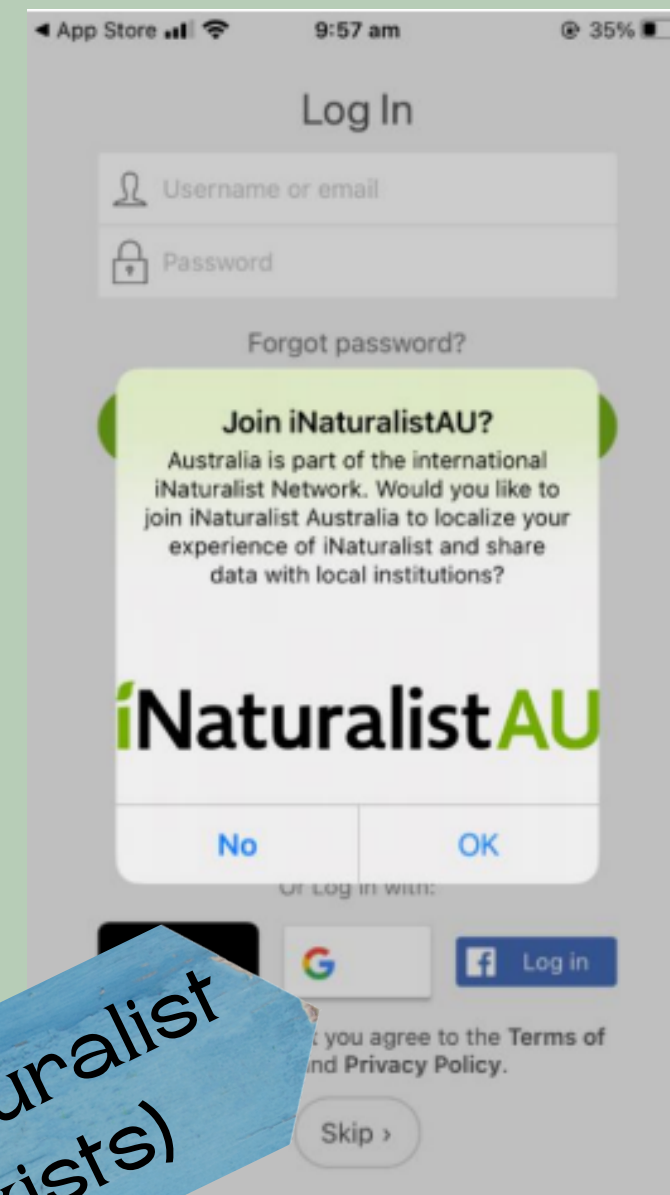
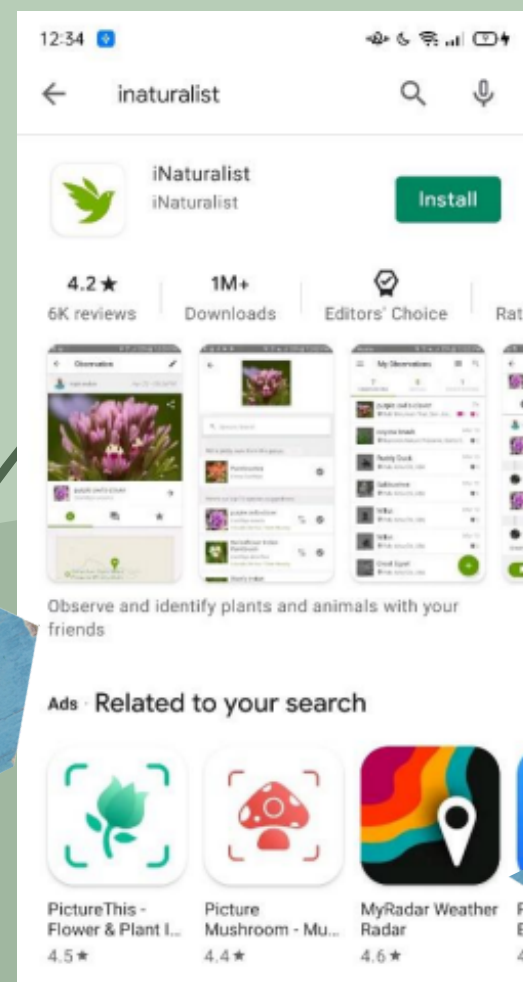
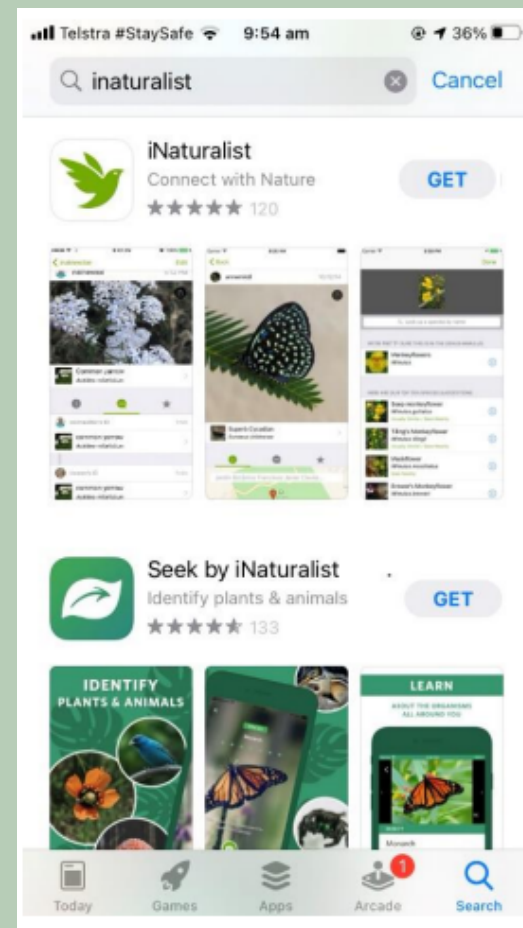


Activity 4

Sign up to iNaturalist



Installing the app



Google Play
App Store

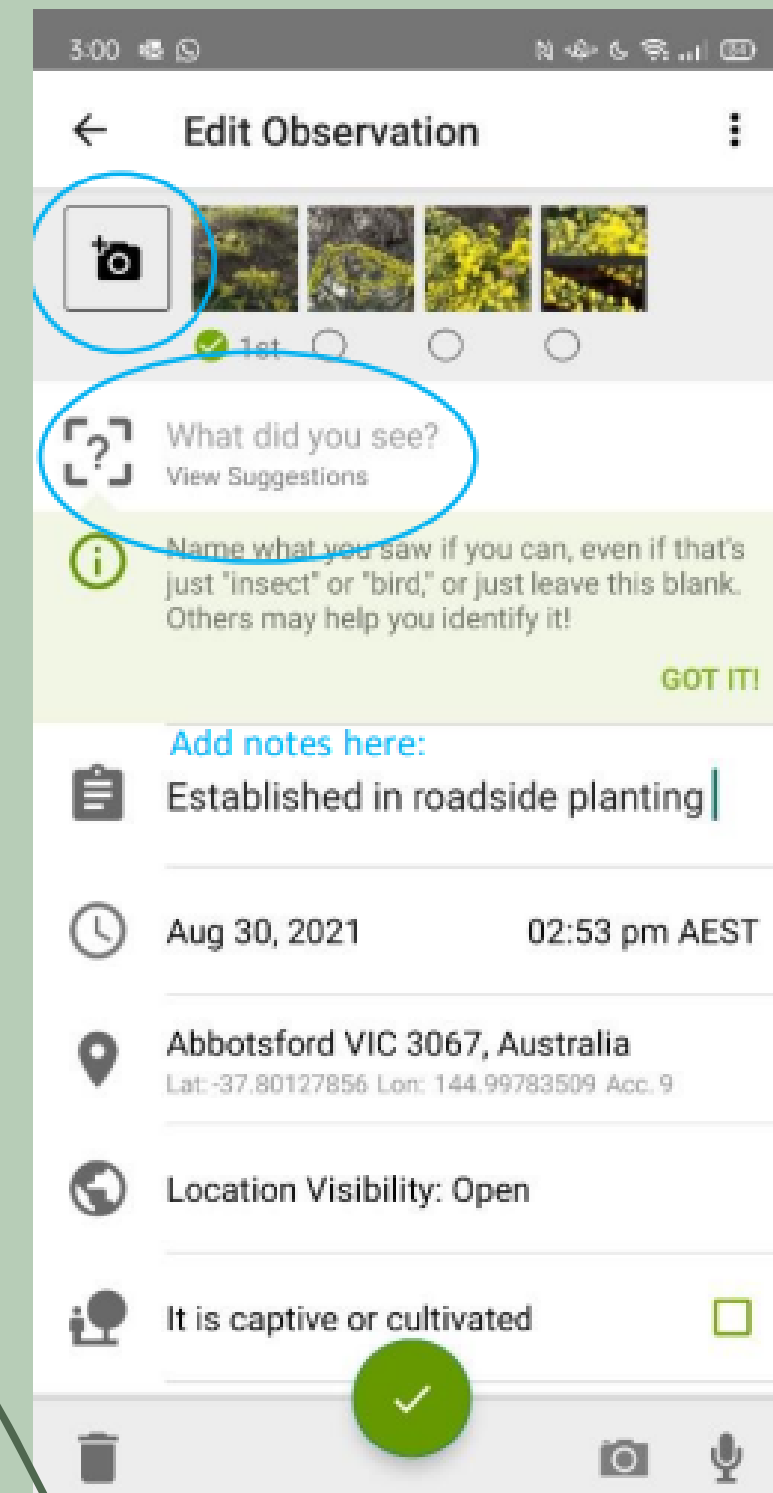
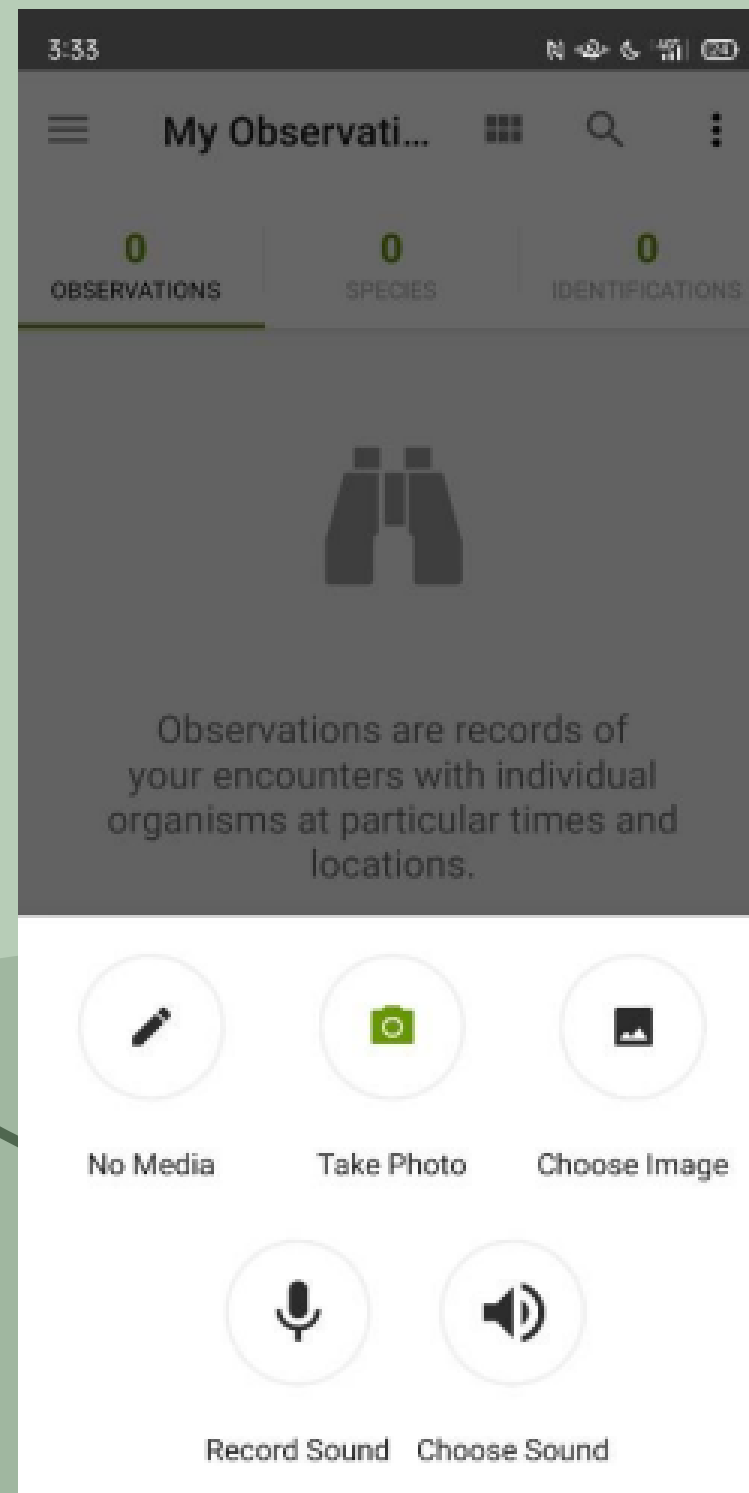
Join the local iNaturalist
network (if exists)

Activity 5

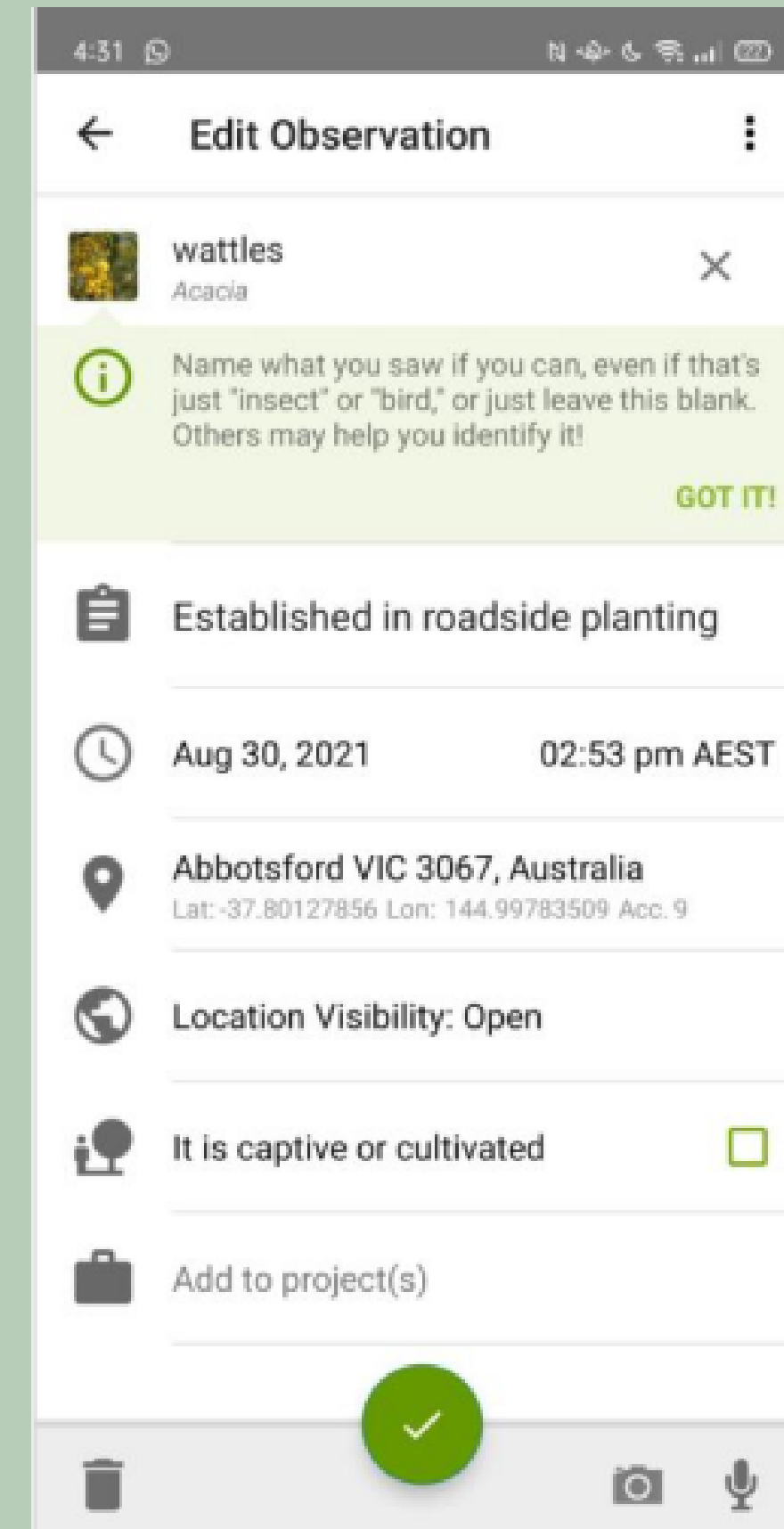
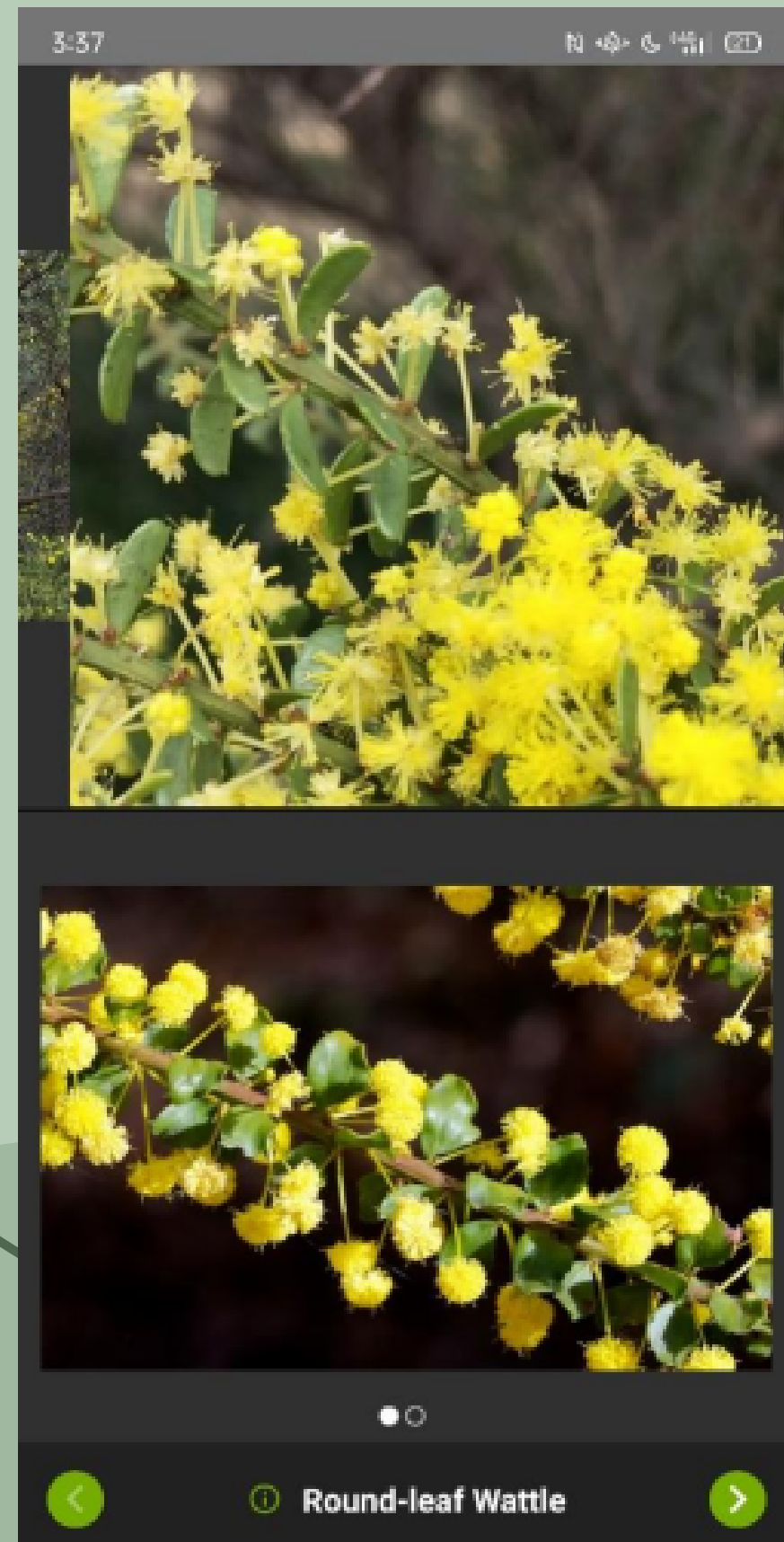
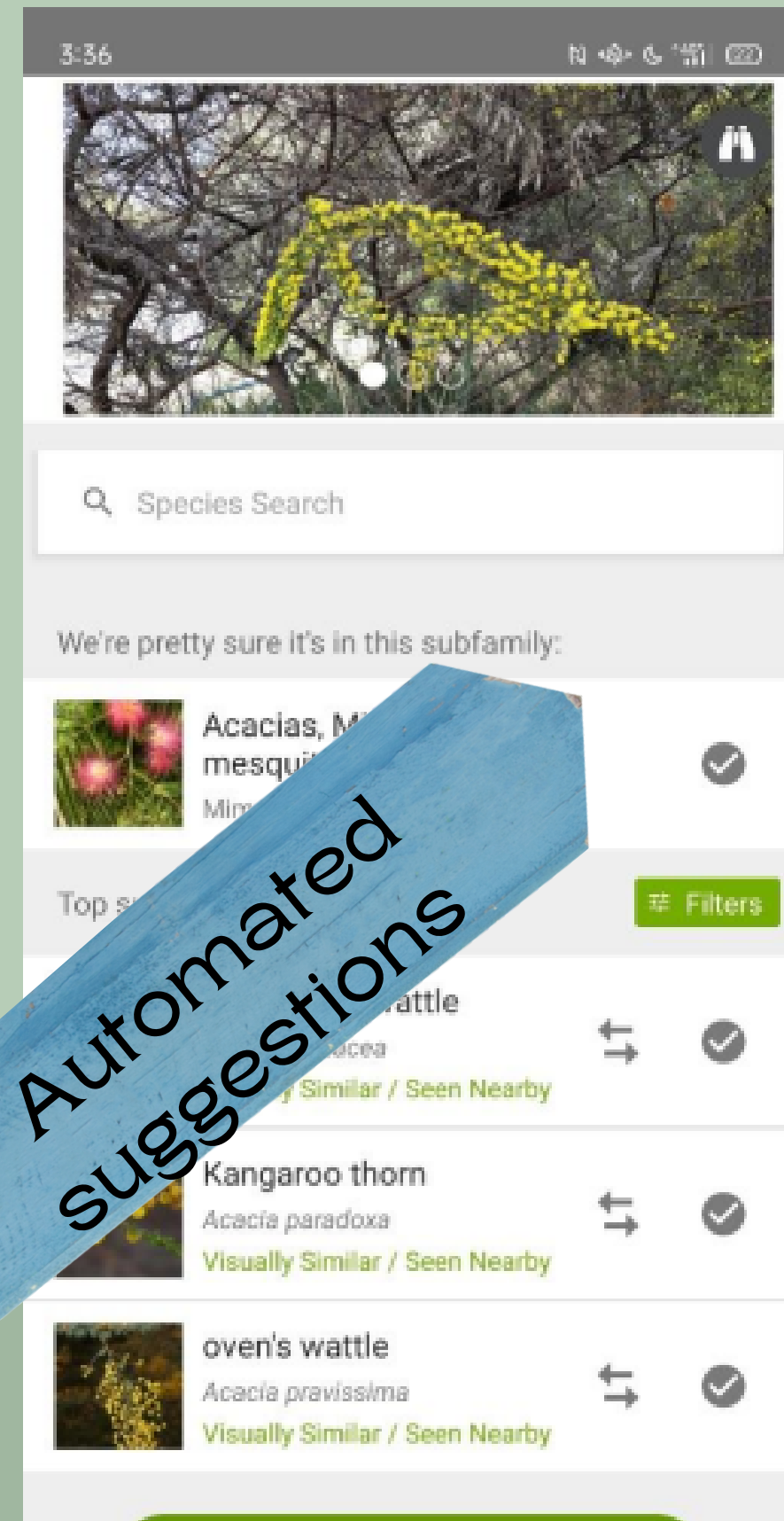
Register a species in
the App iNaturalist



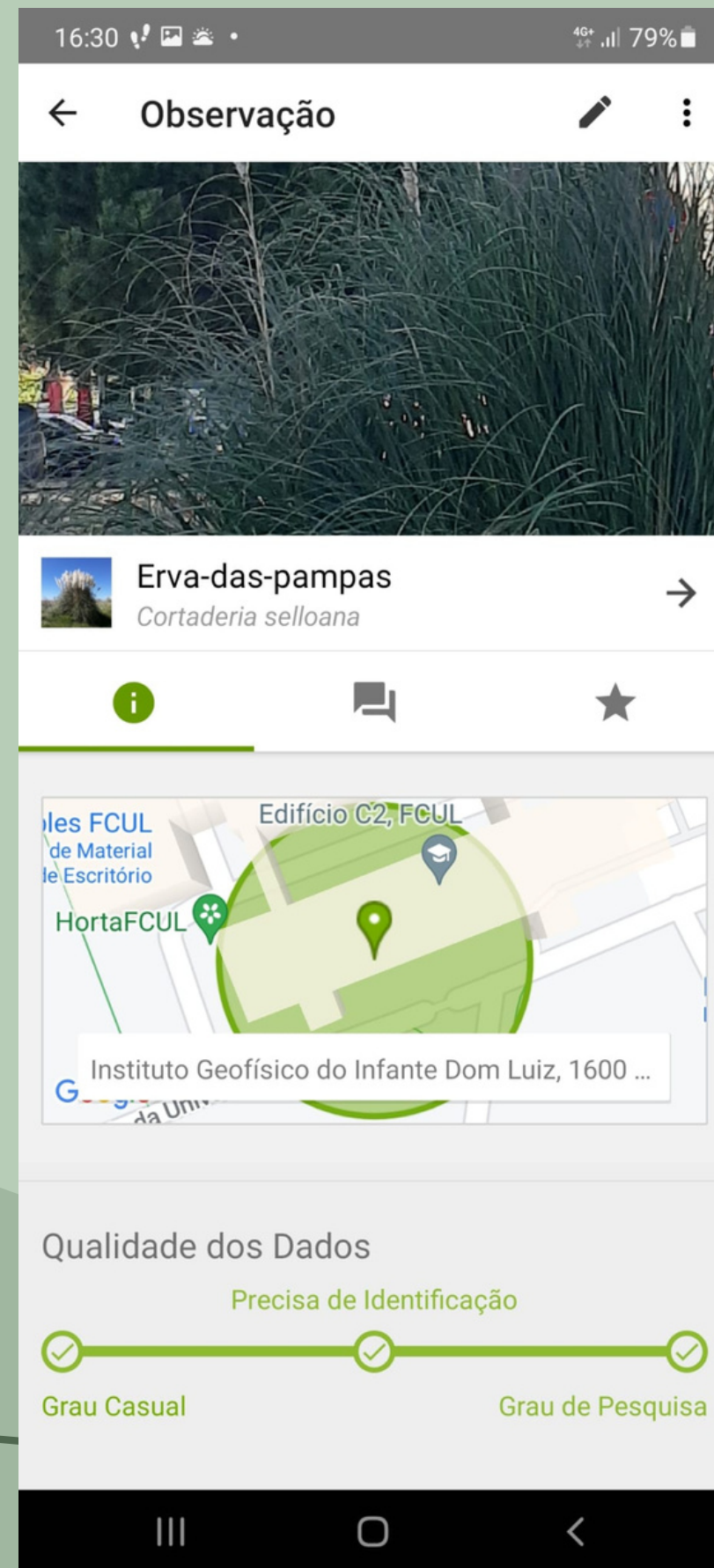
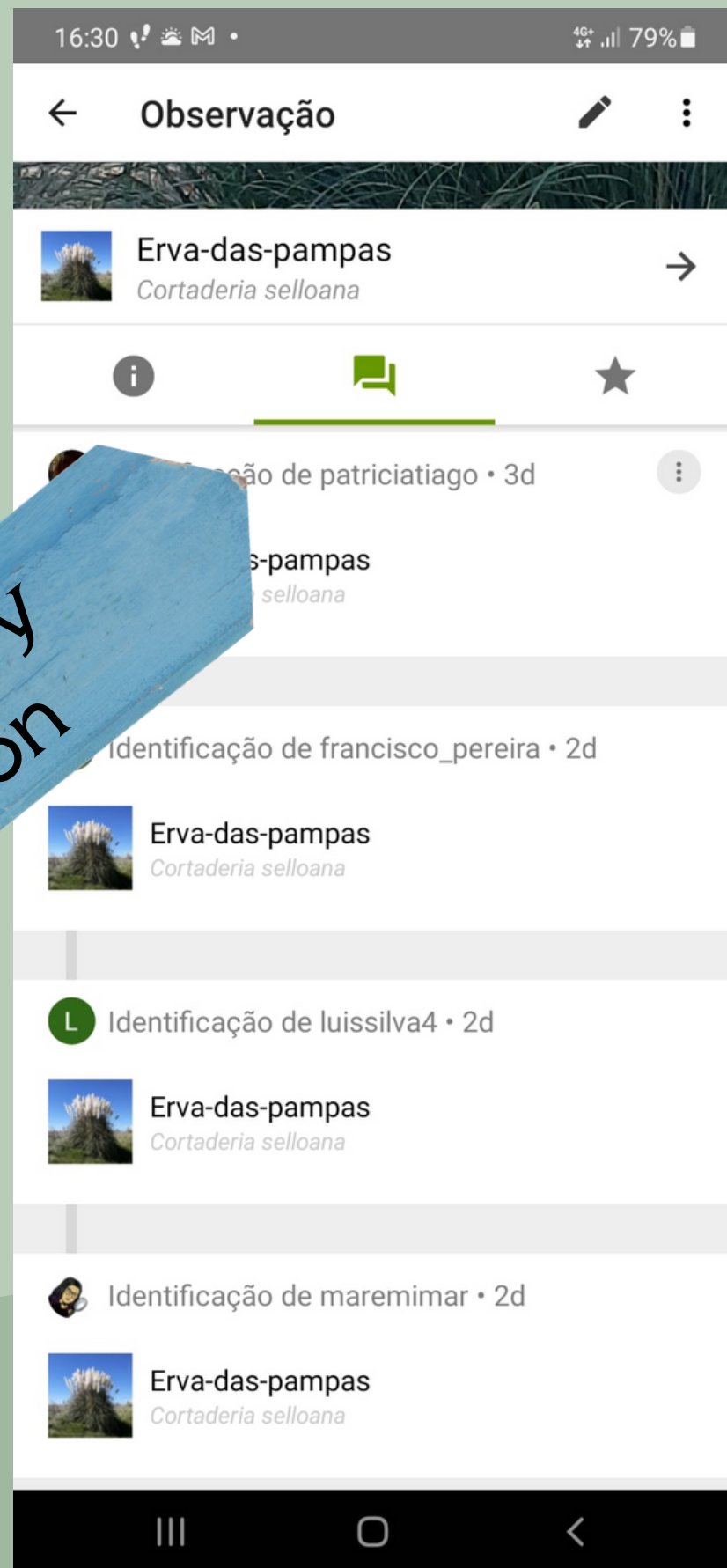
Using the app



New observation



Community
validation



Projects in the platform



Bioblitz 2022
Barbados - T&T - Jamaica

Acerca de Participe 212

This year the Trinidad and Tobago Bioblitz is joining forces with colleagues in Jamaica and Barbados for a inter-island backyard bioblitz! Join this project now, so that on the 3rd & 4th of December, all of your backyard observations will be added and we can compare findings between these three unique & biodiverse countries!

[Ler Mais >](#)

Project Journal

Visão geral 4.728 1.281 400 124 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES

EVENTO EM CURSO 

Skyline High School Biological Survey

Acerca de Participe 107

This project is for current and former students at Skyline High School to contribute to our understanding of the creatures we share our world with. If you are posting in this project for credit in my biology class, you will need to log your observations in a spreadsheet, which is available in Google Classroom. You'll also need to

[Ler Mais >](#)

PROJECT MEMBERS ONLY Project Journal

Visão geral 4.782 890 754 80 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES



European Farmland Biodiversity Challenge

Acerca de Participe 4


A farm is much more than the crops under cultivation, or the livestock being fed and cared for. Each farm is also an ecosystem of naturally occurring flora and fauna – the more biodiversity the better, for the good of the environment and sustainable food production. To support and celebrate the role of biodiversity

[Ler Mais >](#)

Project Journal

Visão geral 1.724 801 447 39 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES



Flies of the US and Canada

Acerca de Participe 261

Discover and explore the true flies of North America! Identification tools are posted at <https://sites.google.com/view/flyguide/>

[Ler Mais >](#)

Project Journal

Visão geral 1.417.322 5.005 19.729 162.491 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES



Fishes of the Mediterranean

Acerca de Participe 44

This project aims to map the distribution of marine fish species in the Mediterranean Sea through the collection of photo observations.

[Ler Mais >](#)

Project Journal

Visão geral 61.513 483 1.768 3.824 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES



George Guides and Scouts 2022
ABR 29, 2022 - MAI 2, 2022

Acerca de Participe 36

2022 City Nature Challenge

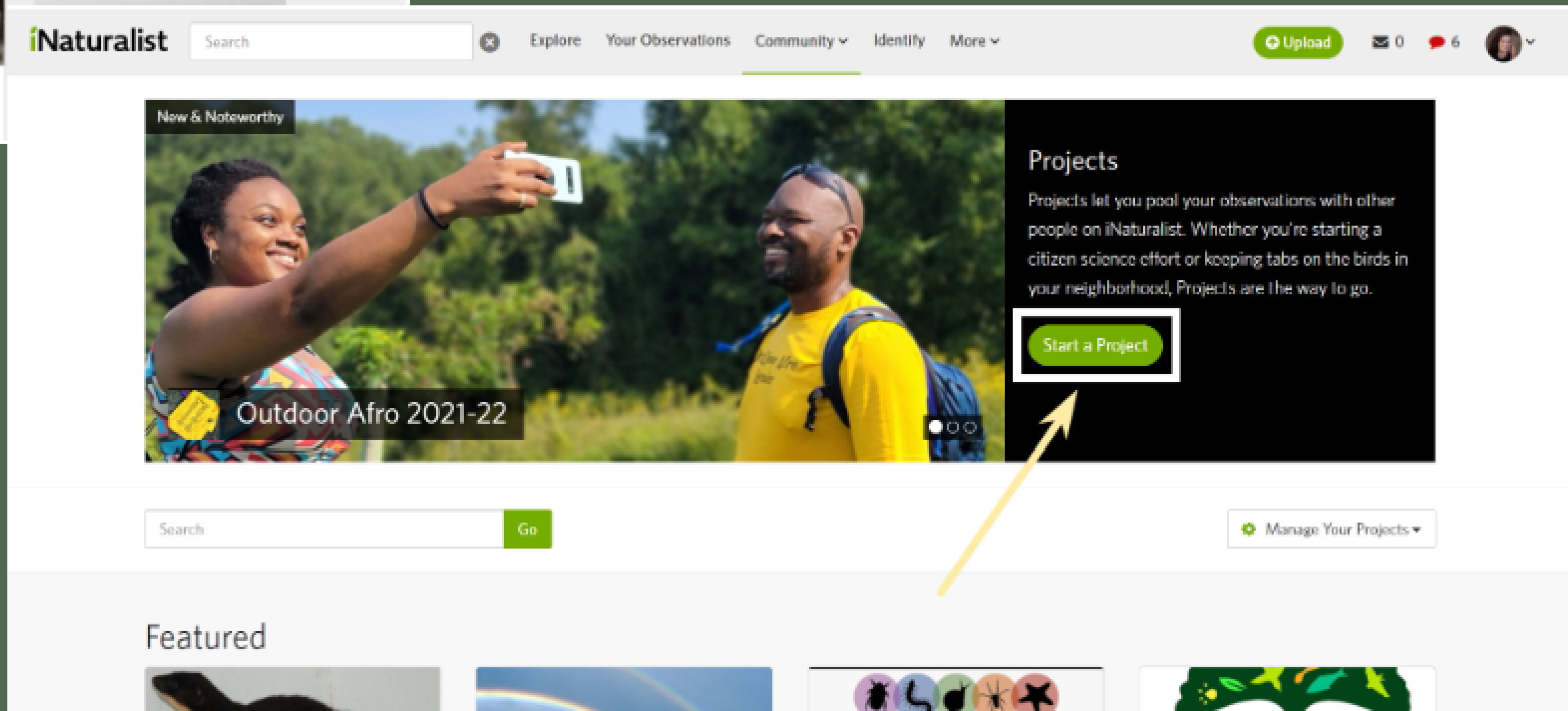
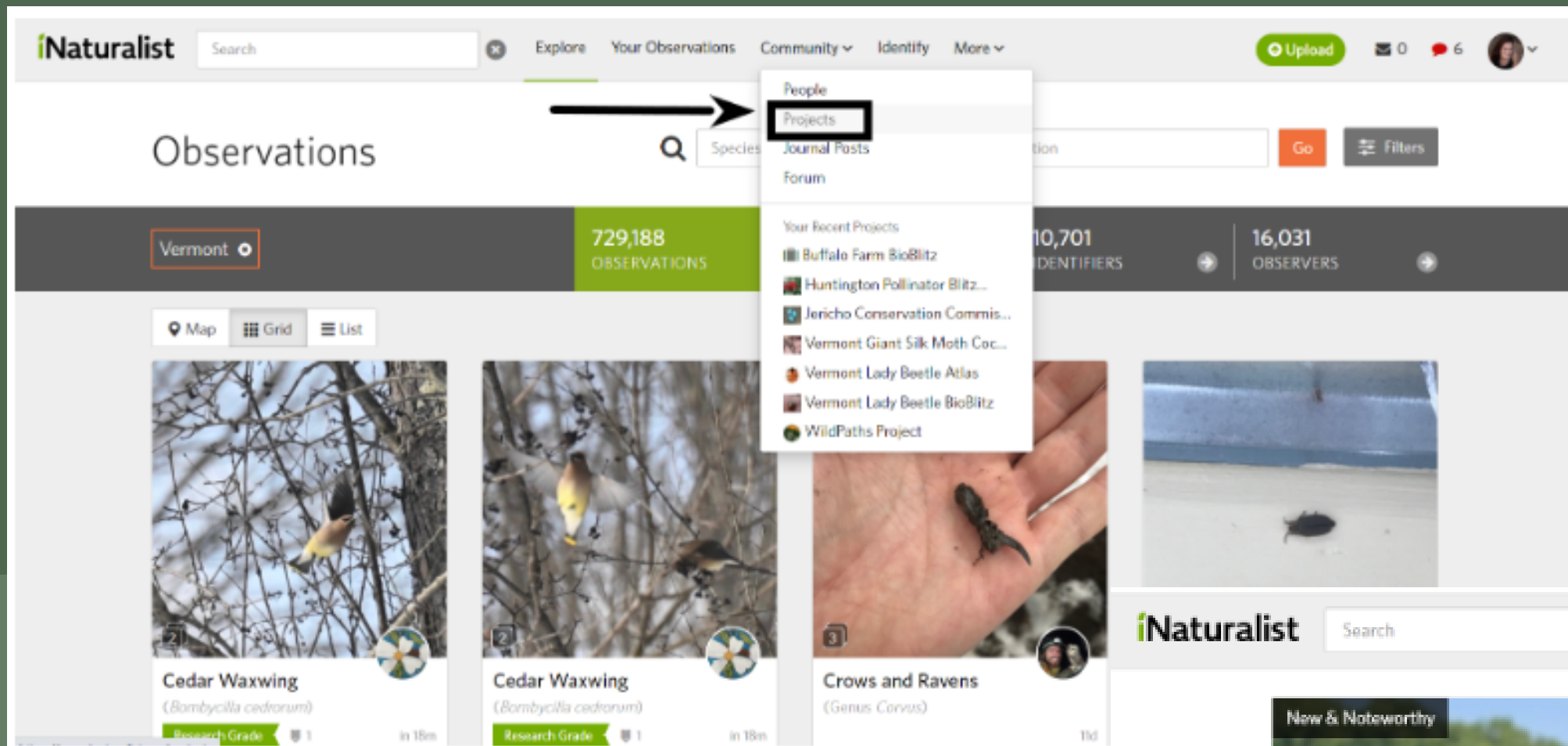
[Ler Mais >](#)

Project Journal

Visão geral 1.218 495 180 32 Estatísticas

OBSERVAÇÕES ESPÉCIES IDENTIFICADORES OBSERVADORES

Create your own project



Create your own project

- Multiple project administrators
- No manual addition of observations

Collection Projects

A collection project allows you to gather and visualize observations using the core iNaturalist search tools. Everything that meets the parameters set by the project will be automatically included.

Collection Project features:

- Data visualizations
- Leaderboards among individuals
- Can be included in multiple umbrella projects
- Start and end date/times (for bioblitz-type events)

Get Started

[View Sample](#)

Umbrella Projects

An umbrella project can be used to compare statistics across two or more Collection or Traditional Projects. The other projects need to exist before you can add them to an umbrella project. You can include hundreds of projects under a single umbrella. Umbrella projects cannot contain other umbrella projects.

Umbrella Project features:

- Visual comparisons of data among projects under the umbrella
- Leaderboards among projects
- Click through to individual projects

Get Started

[View Sample](#)

Project Details

Project Name *

Vermont Lady Beetle BioBlitz

☒ Display project name

Project Icon (PNG, JPG, or GIF)

Optional icon. Should be a minimum of 72px x 72px and will be cropped to a square.

[Choose file](#) (or drag and drop)



Polished_Lady_Beetle_(Cycloneda_munda)_NathalieL...

Project Banner (PNG or JPG)

Optional banner image. Ideal dimensions are 760px by 320px.

[Choose file](#) (or drag and drop)



par7.jpg

Project Summary *

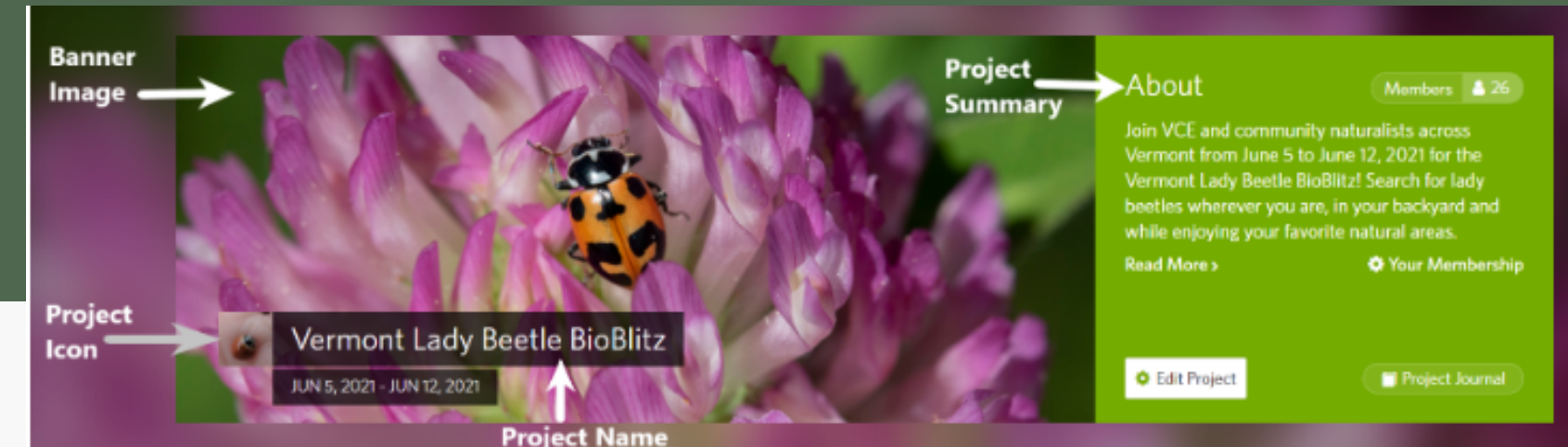
Give a concise explanation of your project. Approximately the first 200 characters will be visible to the right of the project home screen banner so put the best stuff first!

Join VCE and community naturalists across Vermont from June 5 to June 12, 2021 for the Vermont Lady Beetle BioBlitz! Search for lady beetles wherever you are, in your backyard and while enjoying your favorite natural areas.

Project Summary Background Color

Make sure to choose a color dark enough so the white overlaid text is legible.

#74ac00



Create your own project

Observation Requirements

Specify the filters for which observations to include in your project. You can select multiple species (or taxa), places, dates, or other criteria for observations to be automatically included.

Note: If you do not select taxa, places, or users, all will be included by default.

Include Taxa <input type="text" value="Birds, monarch, etc."/> 	Include Places <input type="text" value="Zion National Park, Miami, etc."/> <input type="text" value="Vermont, US"/>	Include Users <input type="text" value="kueda, simon123, etc."/>
Exclusion Filters		
Exclude Taxa <input type="text" value="Birds, monarch, etc."/>	Exclude Places <input type="text" value="Zion National Park, Miami, etc."/>	Exclude Users <input type="text" value="kueda, simon123, etc."/>

Project Members Only

Check the box below to only include observations made by users who have joined this project. Use the Exclude Users filter above to exclude observations from specific users, including the project owner and admins.

☐ Only display observations from project members (people who have joined the project)

With Annotation

Include only observations annotated with a particular attribute (e.g. life stage), or a particular attribute and value (e.g. life stage = adult). There is a limit of one annotation filter per project.

Data Quality

Select at least one Quality Grade. Further explanation for each Quality Grade can be found on our [FAQ page](#).

☒ Research Grade ☒ Needs ID
☐ Casual

Media Type

Optionally filter for observations with photos, sounds, or both.

☒ Any ☐ Has Sound ☐ Has Photo
☐ Has Both Photo and Sound

Establishment Means

Select "Native" to include only taxa that have been marked as "Native" to the place(s) in your project. Select "Introduced" to include only taxa that have been marked as "Introduced" to the place(s) in your project.

☒ Any ☐ Native ☐ Introduced

Date Observed

Use this for a time-limited event, bioblitz, or seasonal project. Select a single date, range of dates, or which months of the year the observations must be made in (regardless of year). If using the Date Range section, make sure you have the correct times and time zones selected, or delete the time/time zone text to include observations made anytime that entire day. You can leave the Start Date or End Date blank if you want to limit the project by only one date.

☐ Any ☐ Exact

☒ Range

(Note: you can delete the time zone and precise times if you want to include whole days.)

☐ Months

Members

Trust

If you want access to the hidden coordinates of obscured observations, this option will allow people who have joined this project to trust the project admins with access to those hidden coordinates. Project members will be able to grant access to the hidden coordinates of any of their observations that appear in this project, or just the observations that are obscured because of threatened taxa.

However, this will also notify all trusting project members every time you change the project observation requirements, so they can reassess whether they want to continue trusting you given the new requirements. Your access to hidden coordinates will be revoked for one week after changing the observation requirements so members have time to do this.

☒ Allow members to trust this project with hidden coordinates

You should be able to view hidden coordinates for observations by trusting members.

Admin(s)

Note: these users will be able to edit ALL project details including admins. Admins must be existing members of the project.

jpupko (owner)
 kpmcfarland

Search

Explore Your Observations Community Identify More

Upload 0 6

Vermont Lady Beetle BioBlitz

JUN 5, 2021 - JUN 12, 2021

Project Summary

About

Members 26

Join VCE and community naturalists across Vermont from June 5 to June 12, 2021 for the Vermont Lady Beetle BioBlitz! Search for lady beetles wherever you are, in your backyard and while enjoying your favorite natural areas.

Read More >

Your Membership

Edit Project

Project Journal

Overview 150 OBSERVATIONS 12 SPECIES 31 IDENTIFIERS 66 OBSERVERS Stats

Recent Observations

Project Journal

View All

Activity 6



Create a citizen Science Biodiversity project in iNaturalist platform

Create a Citizen Science project in iNaturalist
platform

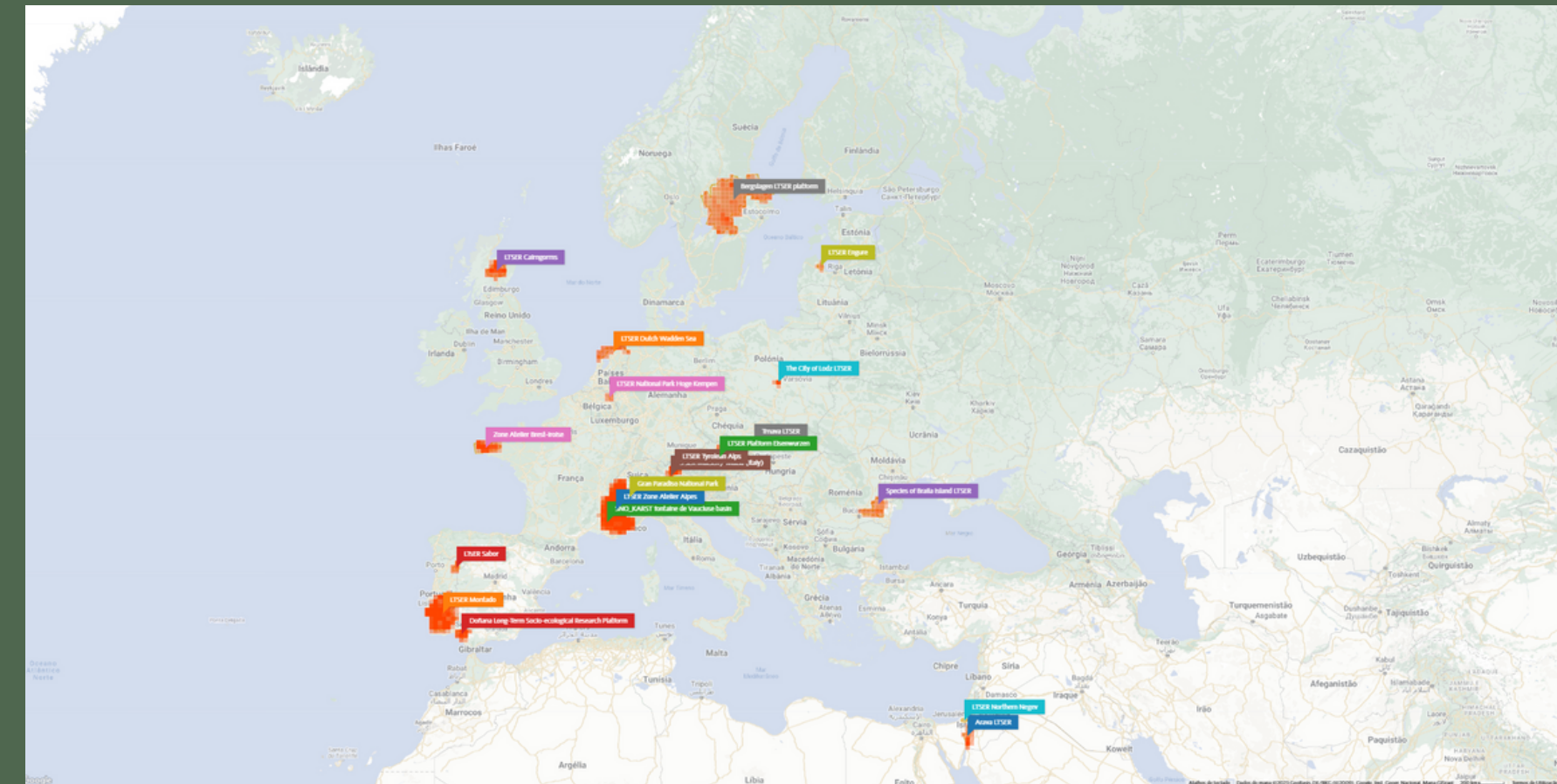
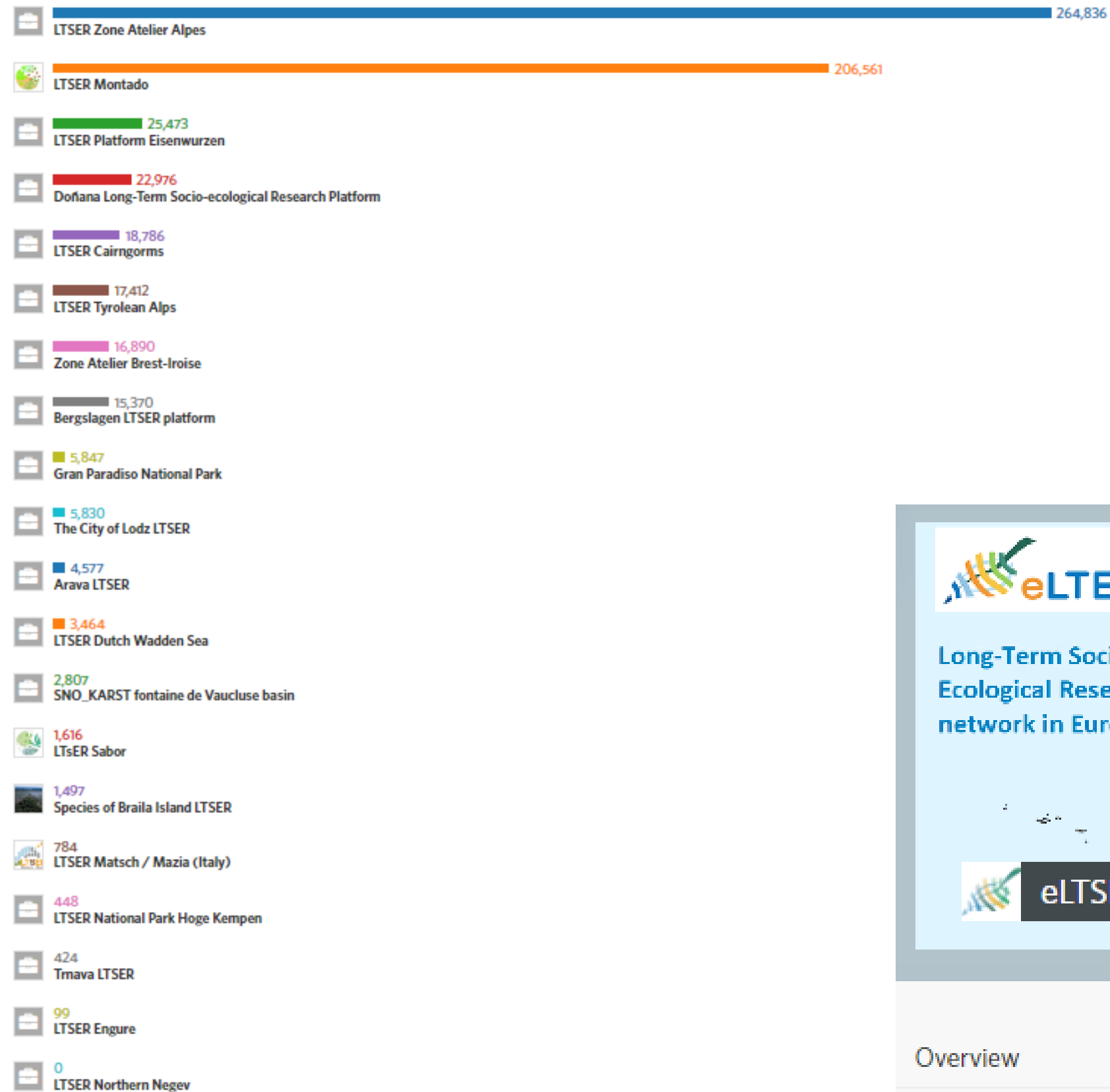


LTSER umbrella project

LTSER Platforms

20 platforms

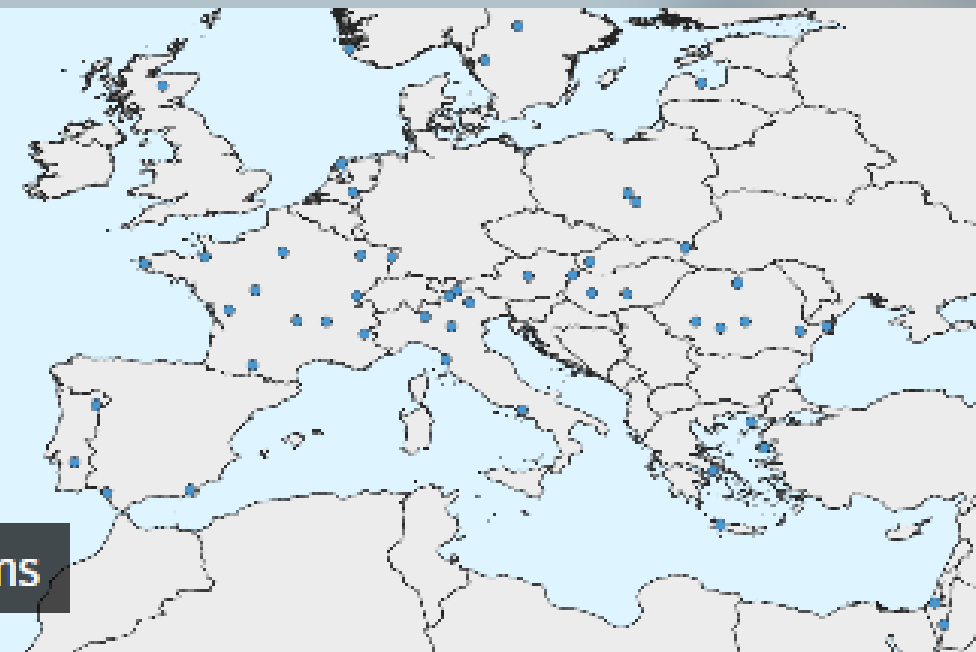
Leaderboard Sort By: Observations | Species | Observers



Long-Term Socio-Ecological Research network in Europe



eLTER Platforms



About

Members 6

LTSEr (Long-Term Socio-Ecological Research) platforms support socio-ecological studies within the LTER-Europe network (<https://elter-ni.eu/>). These areas represent the main habitats, land use forms and practices, economic and social units relevant for broader regions. At LTSEr platforms adequate information is available to allow for

[Read More >](#)

[Your Membership](#)

[Edit Project](#)

[Project Journal](#)

Overview

613,037
OBSERVATIONS

19,063
SPECIES

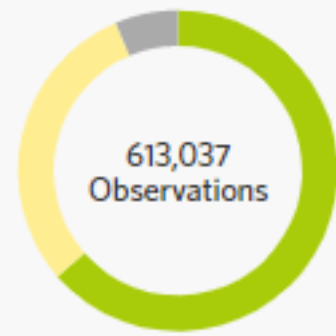
11,686
IDENTIFIERS

24,799
OBSERVERS

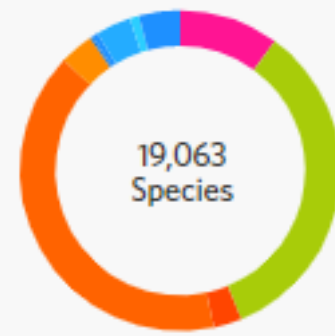
[Stats](#)

LTSER Platforms

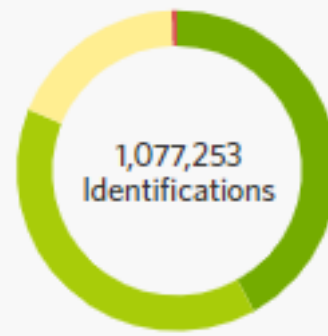
Stats



● Research Grade
● Needs ID
● Casual

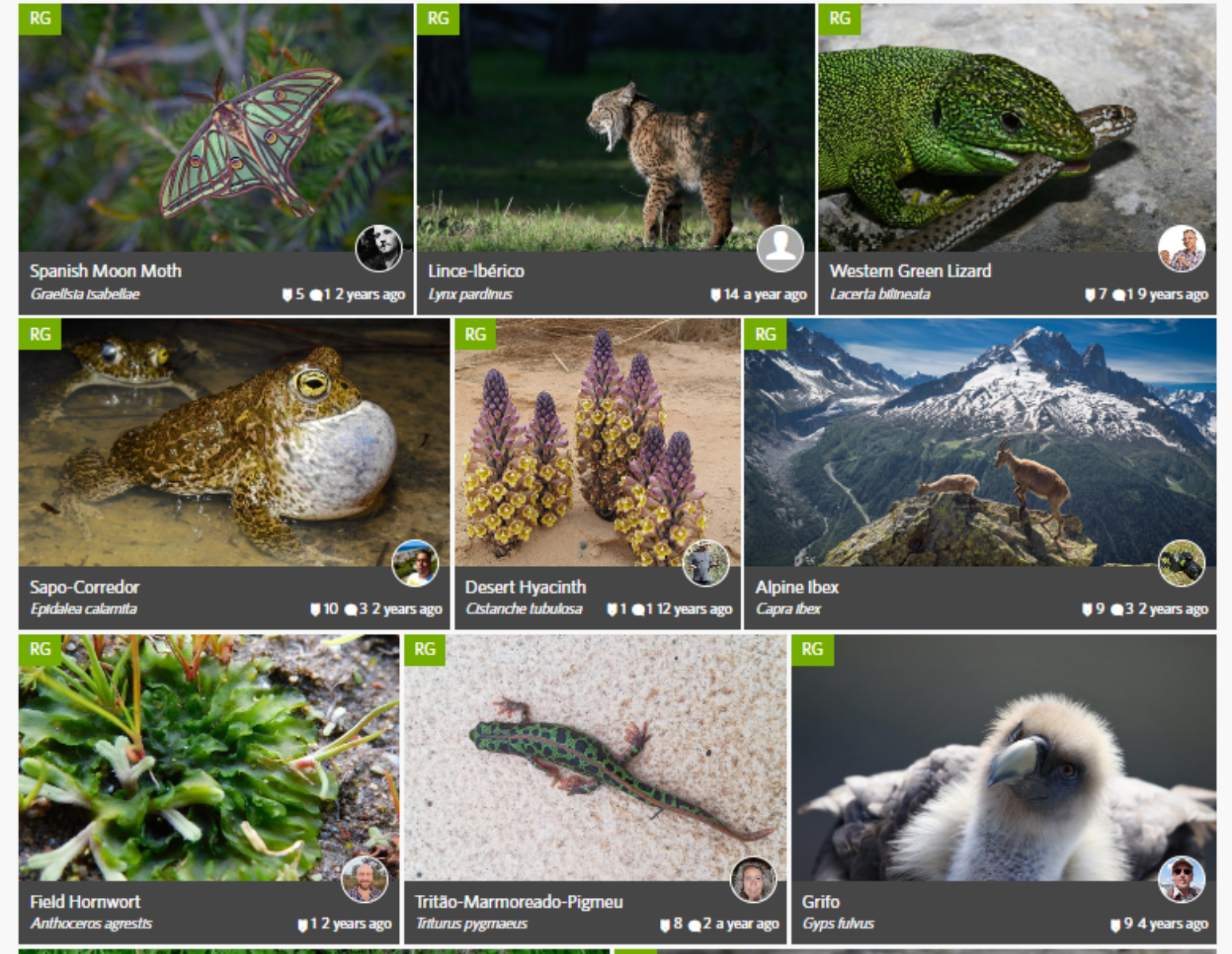


● Unknown
● Protozoans
● Fungi
● Plants
● Chromista
● Mollusks
● Insects
● Arachnids
● Ray-Finned F...
● Amphibians
● Reptiles
● Birds
● Mammals
● Other Animals

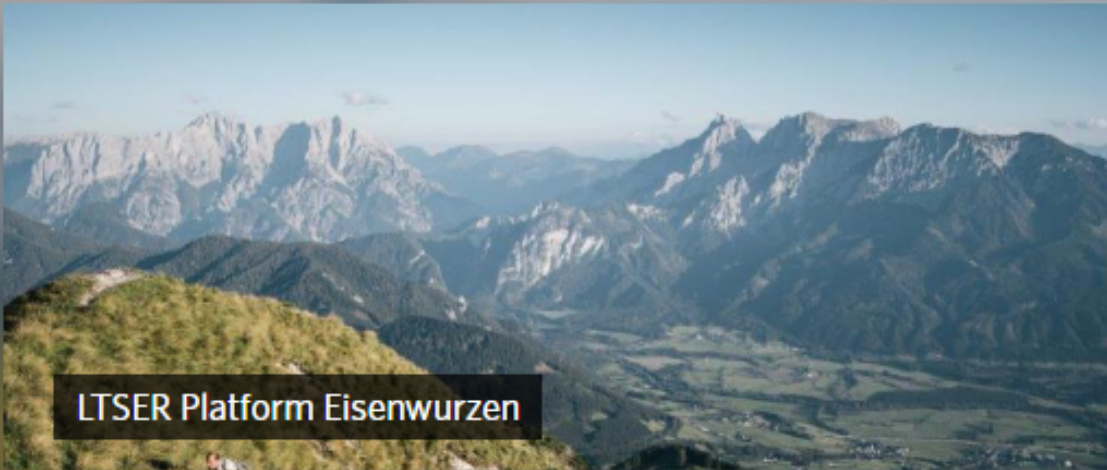


● Improving
● Supporting
● Leading
● Maverick

Most Comments and Faves



LTSER Platforms



LTSER Platform Eisenwurzen

About

Members 3

The LTSER platform Eisenwurzen represents both a natural space and a historically developed social and economic area (<https://deims.org/d0a8da18-0881-4ebe-bccf-bc4cb4e25701>). It does not correspond exactly to federal county borders but extends over 91 municipalities and a total area of 5,904 km2 in the counties of Upper Austria,

[Read More >](#)[Your Membership](#)

[Edit Project](#)[Project Journal](#)

Overview

25,473
OBSERVATIONS

3,541
SPECIES


1,993
IDENTIFIERS

1,171
OBSERVERS


Stats

Recent Observations


View All




Crows and Ravens
Genus *Corvus*




Orquídea-Fragrante
Gymnadenia conopsea 2 7 months ago



Byssal Resin-Leafcut...
Trachusa byssina 1 2 months ago




Greater Butterfly-Or...
Platanthera chlorantha 2 7 months ago



Most Observations

hyacinthus	1,239
oe5gho	1,003
alexmaringer	637
gabrielmayrhofer	501
merleg	496
evasegn	487


[View All](#)[View Yours](#)



Most Species

hyacinthus	513
merleg	323
oe5gho	306
gabrielmayrhofer	293
daphnea	291
herbertt	284

[View All](#)[View Yours](#)

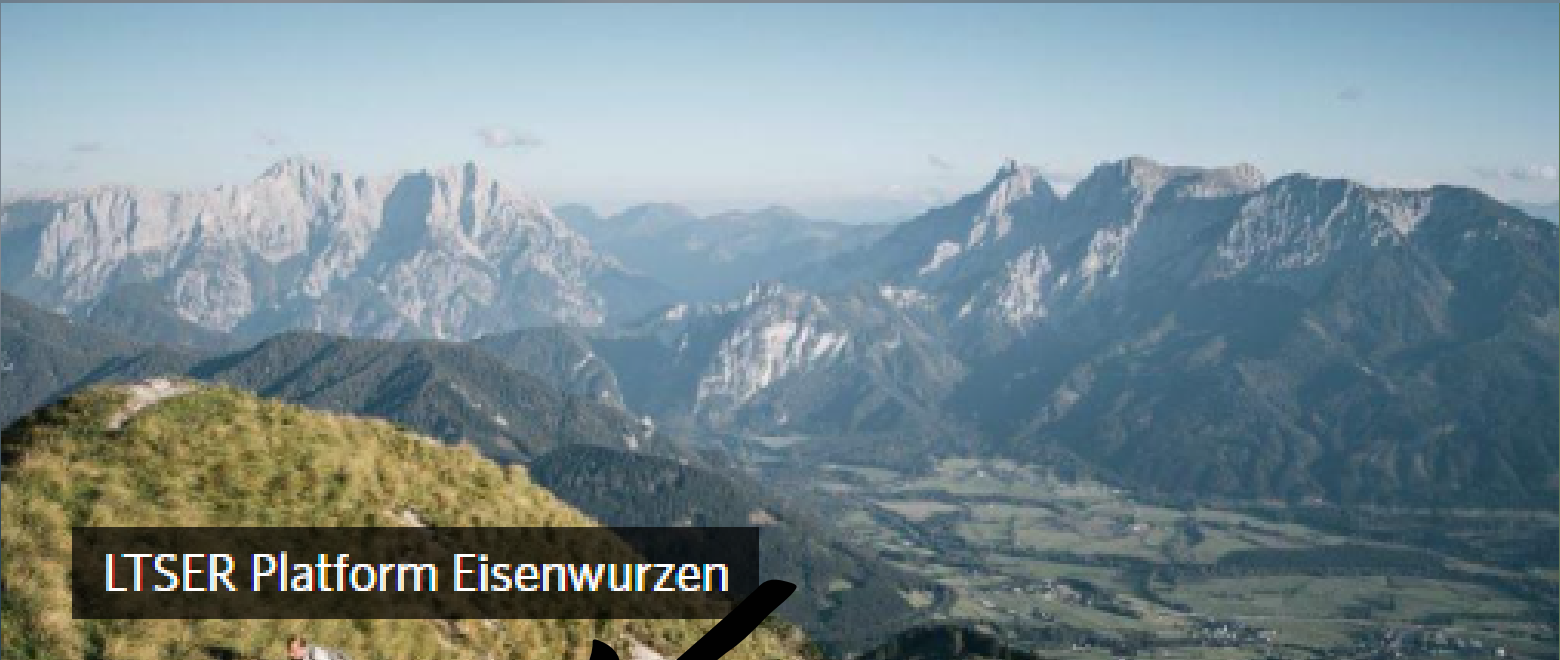


Most Observed Species

Common Spotted Orchid	157
Christmas-Rose	122
Silver-washed Fritillary	91
Orquídea-Fragrante	88
Roman Snail	85
Liverleaf	85

[View All](#)[View Yours](#)

LTSER Platforms



LTSER Platform Eisenwurzen

About

The LTSER platform Eisenwurzen represents both a natural space and a historically developed social and economic area (<https://deims.org/d0a8da18-0881-4ebe-bccf-bc4cb4e25701>). It does not correspond exactly to federal county borders but extends over 91 municipalities and a total area of 5,904 km² in the counties of Upper Austria,

[Read More >](#) [Your Membership](#)









[Edit Project](#) [Project Journal](#)

[Members](#) 3

Overview


25,473 OBSERVATIONS 3,541 SPECIES 1,993 IDENTIFIERS 1,171 OBSERVERS [Stats](#)

[Map](#) [Grid](#) [List](#) [Identify](#) [Search](#)

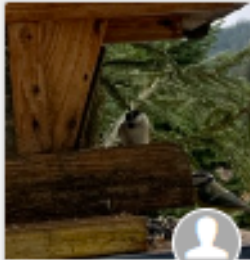
Media	Name	User	Observed	Place	Added
	Germander Speedwell (<i>Veronica chamaedrys</i>) Research Grade 1	 kienberg	Jul 15, 1981 9:30 PM CEST	📍 Scheibbs, Österreich	Mar 20, 2020 9:34 PM CET
	European Globeflower (<i>Trollius europaeus</i>) Research Grade 1	 wrbkat	Jun 4, 1988 12:00 AM CEST	📍 Lilienfeld, Österreich	Mar 26, 2021 12:31 AM CET
	Moss Camplon (<i>Silene acaulis</i>) Research Grade 1	 wrbkat	Jul 8, 1988 12:00 AM CEST	📍 Lilienfeld, Österreich	Mar 27, 2021 12:54 AM CET
	Saffron-flowered Saxifrage (<i>Saxifraga mutata</i>)	 wrbkat	Jul 9, 1988 12:00 AM CEST	📍 4462 Reichraming, Österreich	Mar 26, 2021 11:48 PM CET

Identify

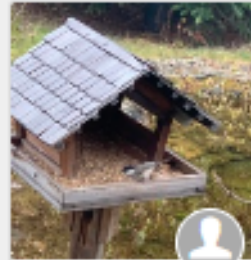
[Go](#) [Filters 2](#) ☐ Reviewed



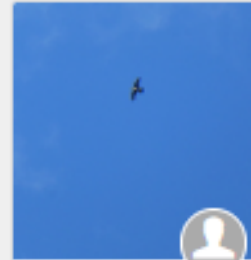
Crows and Ravens
Genus *Corvus*



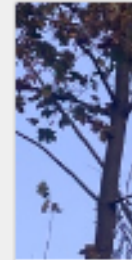
Chickadees and Allies
Genus *Parus*



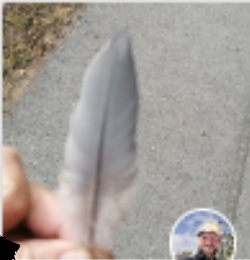
Chickadees and Allies
Genus *Parus*




Typical Falcons
Genus *Falco*




Melro
Turdus merula



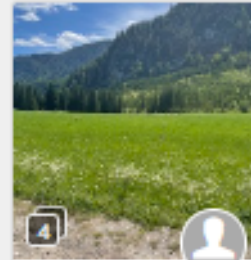
Pombo-Torcz
Columba palumbus




Passarinhos
Order Passeriformes



Accipiters
Genus *Accipiter*

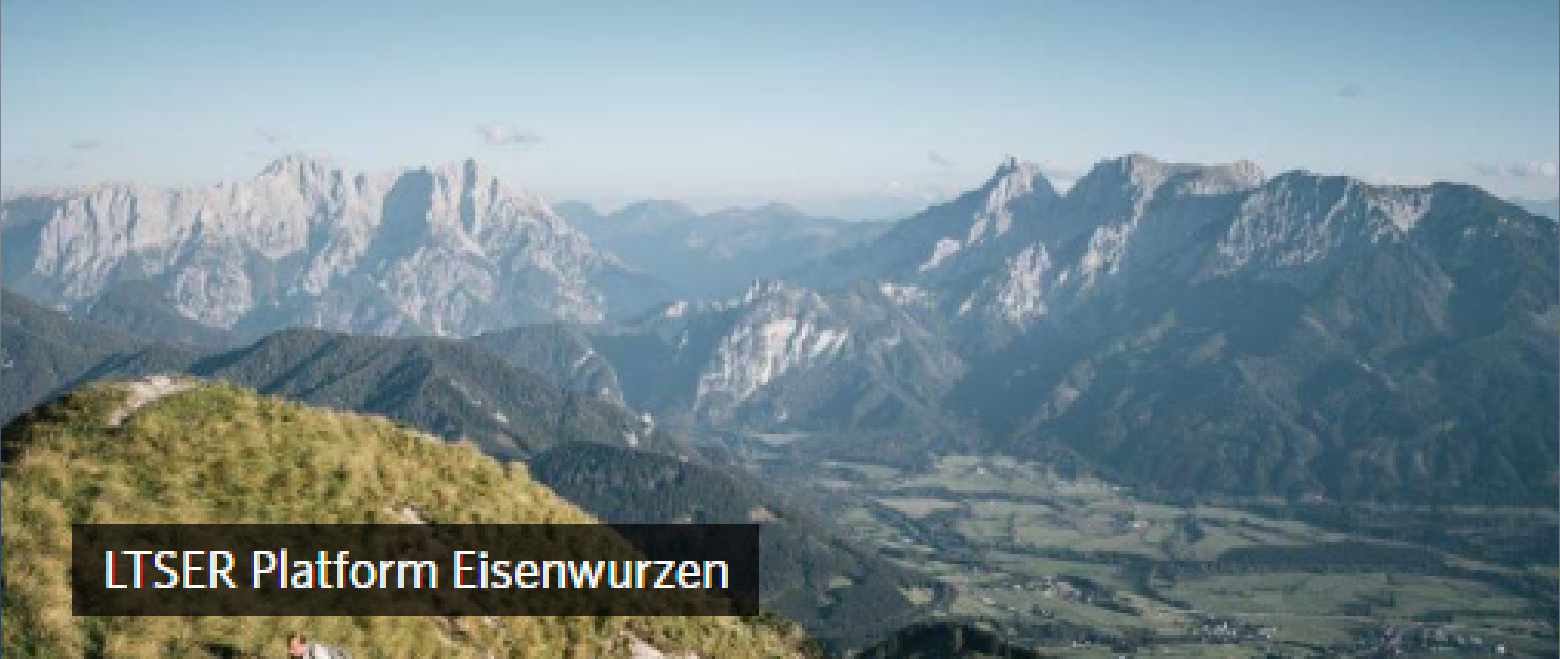


Hawks, Eagles, and Kites
Family Accipitridae



Petinha-R
Anthus sp.

LTSER Platforms



LTSER Platform Eisenwurzen

About

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[Read More >](#) [Your Membership](#)









[Edit Project](#) [Project Journal](#)

[Members](#) 3

Overview

25,473 OBSERVATIONS 3,541 SPECIES 1,993 IDENTIFIERS 1,171 OBSERVERS [Stats](#)

[Map](#) [Grid](#) [List](#) [Identify](#) [Search](#) [Export Observations](#)


Media	Name	User	Observed	Place	Added
	Germander Speedwell (<i>Veronica chamaedrys</i>) Research Grade 1	 kienberg	Jul 15, 1981 9:30 PM CEST	📍 Scheibbs, Österreich	Mar 20, 2020 9:34 PM CET
	European Globeflower (<i>Trollius europaeus</i>) Research Grade 1	 wrbkat	Jun 4, 1988 12:00 AM CEST	📍 Lilienfeld, Österreich	Mar 26, 2021 12:31 AM CET
	Moss Camption (<i>Silene acaulis</i>) Research Grade 1	 wrbkat	Jul 8, 1988 12:00 AM CEST	📍 Lilienfeld, Österreich	Mar 27, 2021 12:54 AM CET
	Saffron-flowered Saxifrage (<i>Saxifraga mutata</i>)	 wrbkat	Jul 9, 1988 12:00 AM CEST	📍 4462 Reichraming, Österreich	Mar 26, 2021 11:48 PM CET


Export Observations

1 Create Query

Create an observation query just like you would elsewhere on the site. You can also cut and paste an observations URL from another site. Your query should return **no more than 200,000 observations**.

quality_grade=any&identifications=any&projects%5B%5D=ltser-platform-eisenwurzen

Search 

search all fields 

Filter

☐ w/ photos ☐ w/ sounds

Quality grade ☒ Any ☐ Research ☐ Needs ID

















Reviewed ☒ Any ☐ Yes ☐ No

Identifications ☒ any ☐ most agree ☐ some agree ☐ most disagree

Captive / Cultivated ☒ Any ☐ Yes ☐ No

Geoprivacy Taxon Geoprivacy

Show only

☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐ 

Place

SW Lat. SW Lon. NE Lat. NE Lon.

Not in place

Taxon

Observed on

Not in taxon

Exact Rank

Highest Rank Lowest Rank

Verifiable

☒ Any ☐ Yes ☐ No

Threatened

☒ Any ☐ Yes ☐ No

Introduced

☒ Any ☐ Yes ☐ No

Native

☒ Any ☐ Yes ☐ No

Popular

☒ Any ☐ Yes ☐ No

User

Username or User ID [clear](#)

Ident. user

Username or User ID [clear](#)

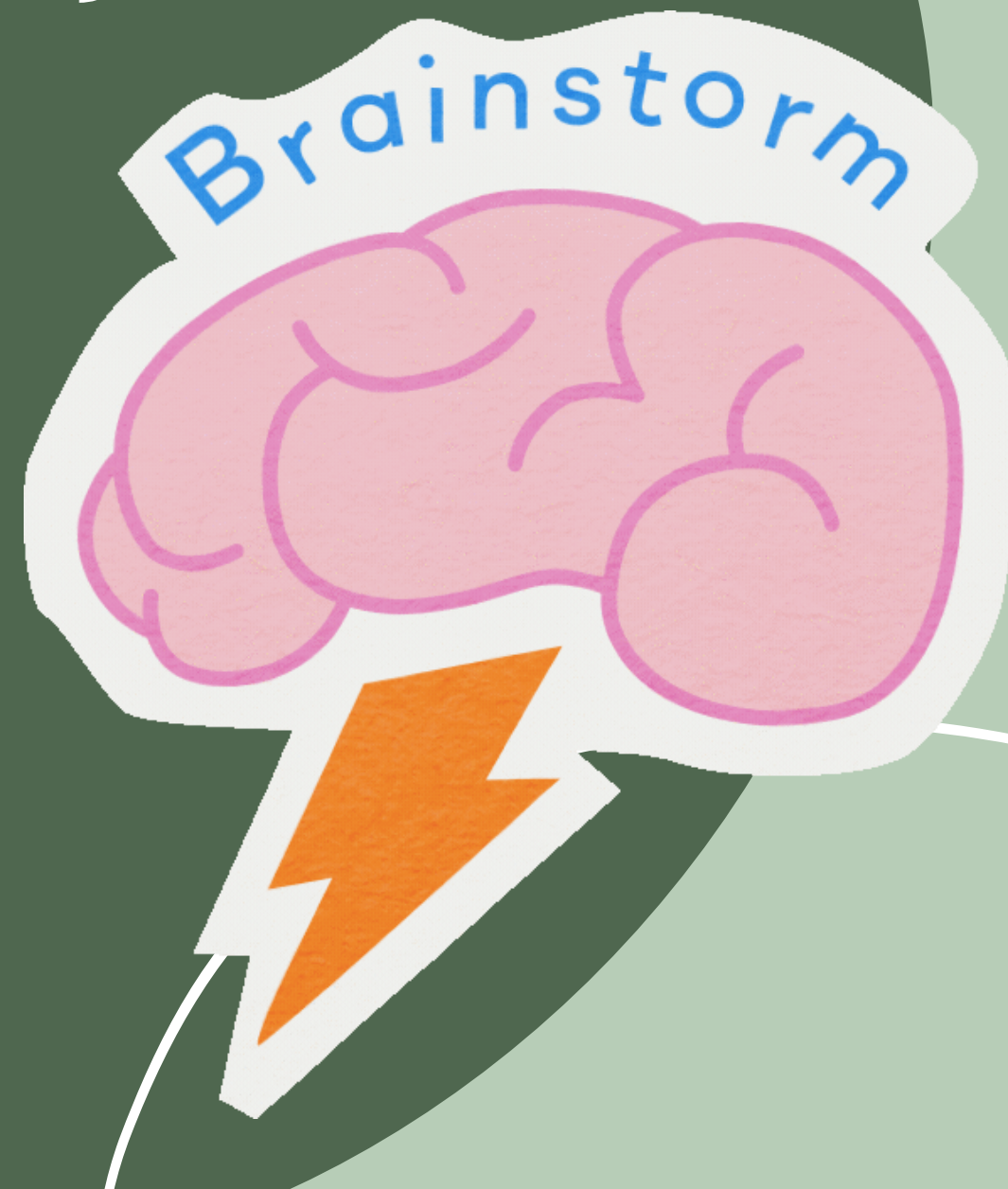
Project

Project ID or URL, e.g. 333 or my-project [clear](#)

Taxon IDs

Multiple taxon IDs, separated by commas, e.g. 333,666 [clear](#)

Activity 7



What questions can we answer using this tool?

Thinking about the taxonomic groups that we have already identified as relevant, as well as the stakeholders, what kind of questions could we help to answer using this type of projects?

Thank you

Obrigada!

