



Biodiversity and Environment Database System (BIOME)

Shin
National Biodiversity Centre
National Parks Board
Singapore

Overview of current situation

BIOME (biome.nparks.gov.sg)

– established in 2011

- Migration of data
- Engagement of various stakeholders



– established in 2015

- Established Citizen Science program under Community in Nature action plans
- E.g. Biodiversity Watches Series, BioBlitz



- Enhanced in 2016 to Sightings module, Sightings Project mode, biodiversity research permits application module
- Plan for enhancements to support survey module in 2018



biome

Biodiversity and Environment Database System

-  SIGHTINGS
-  MAP
-  RESEARCH
-  ABOUT US
-  HELP
-  LOGIN/SIGN UP
- 



Seen an interesting animal or plant? You can now share it using the SGBioAtlas app! The SGBioAtlas is a citizen science-based app for you to share your biodiversity sightings. It uses crowd-sourced information to map the distribution of flora and fauna throughout Singapore.



Photo credit: Albert Tan Que Hong



Dancing dropwing



Recorded By:
JOSHUA LIM
Spotted:
10 September 2015
Category:
Arachnid / Insect

[View >>](#)

Sightings

SIGHTINGS

MAP

RESEARCH

RESOURCES

ABOUT US

HELP

WELCOME CHOH BHINI

Home > Sightings > All Sightings

Sighting Details



Right click to download and view the full image.

f

SHARELIKE

1 likes

Spotted wood owl

Strix seloputo

✓ Verified by Expert

Recorded By: [Susanna Ho](#)

+ FOLLOWING

Category: Bird

Date Spotted: 22 Apr 2016

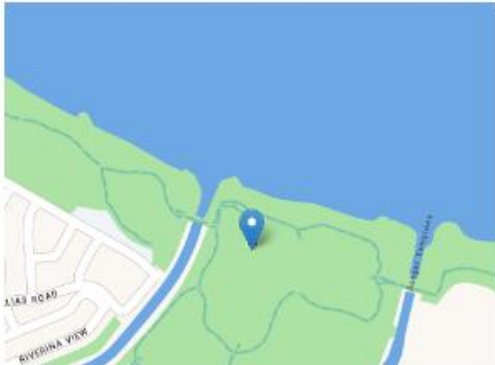
Description:

COMMENT

PUI MIN HENRIETTA WOO

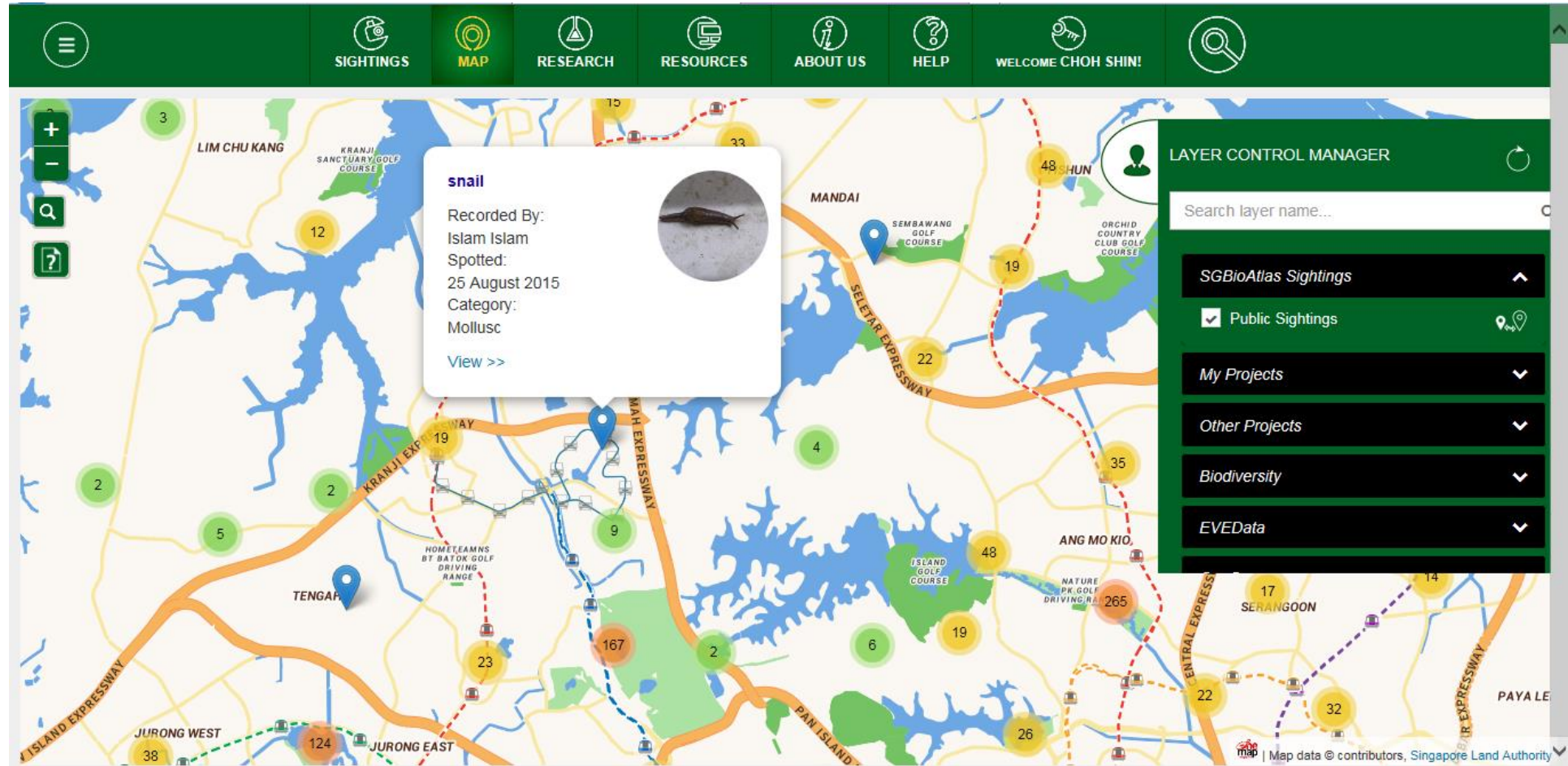
15 Jul 2018 14:20

Nice shot!



Social media
features

Singapore Biodiversity Atlas



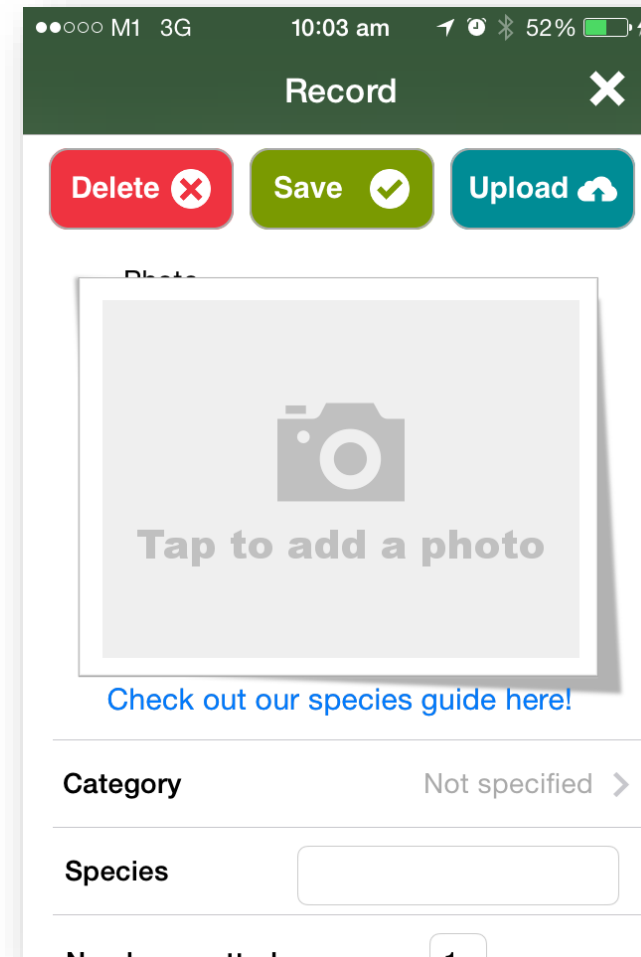
Record biodiversity sightings

Allows user to record:

- **Photograph**
- **Category** – Animal: Fish, Bird, Mammal, Arachnid, Insect, etc., Plant: Tree, shrub, herb, epiphyte, palm, etc.
- **Species** – Search and select by common and scientific name.
- **Number of individuals spotted**

Automatically records:

- **Contributor**
- **Geographical Coordinates**
- **Date, Time**



The screenshot shows a mobile app interface for recording biodiversity sightings. At the top, there's a status bar with 'M1 3G', '10:03 am', and '52%' battery. Below the status bar is a dark green header with the word 'Record' and a close button (X). Under the header are three buttons: 'Delete' (red with an X icon), 'Save' (green with a checkmark icon), and 'Upload' (teal with a cloud icon). The main content area features a large grey box with a camera icon and the text 'Tap to add a photo'. Below this is a blue link that says 'Check out our species guide here!'. At the bottom, there are input fields for 'Category' (currently 'Not specified' with a right arrow), 'Species' (an empty text box), and 'Number spotted' (a numeric input field with the value '1').

Step 1:



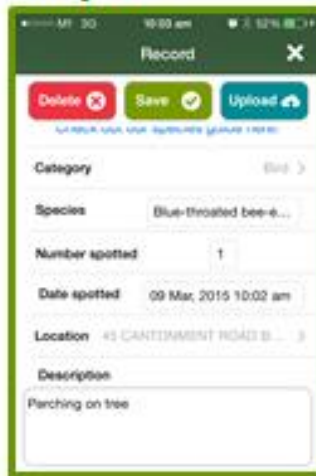
Take a photo of the animal or plant. Remember that identification guides are available through the app to help you identify the species.

or



Identify the species in one of the identification guides

Step 2:



Ensure that the information in the various fields is accurate.

Step 3:



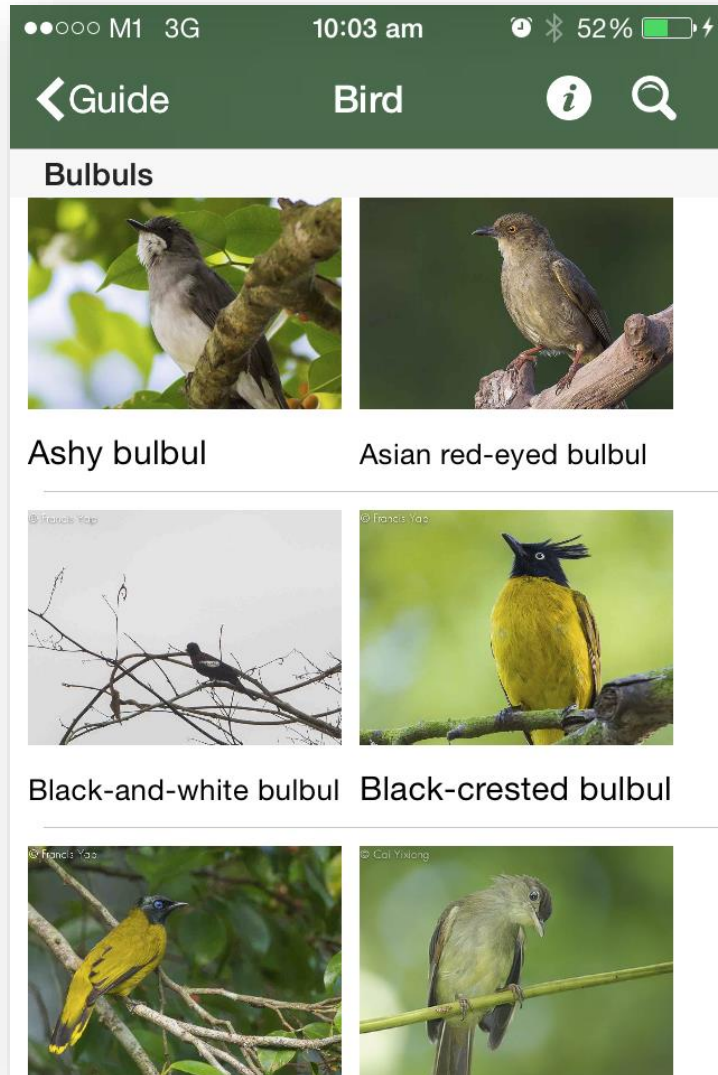
Upload the sighting!

Step 4:

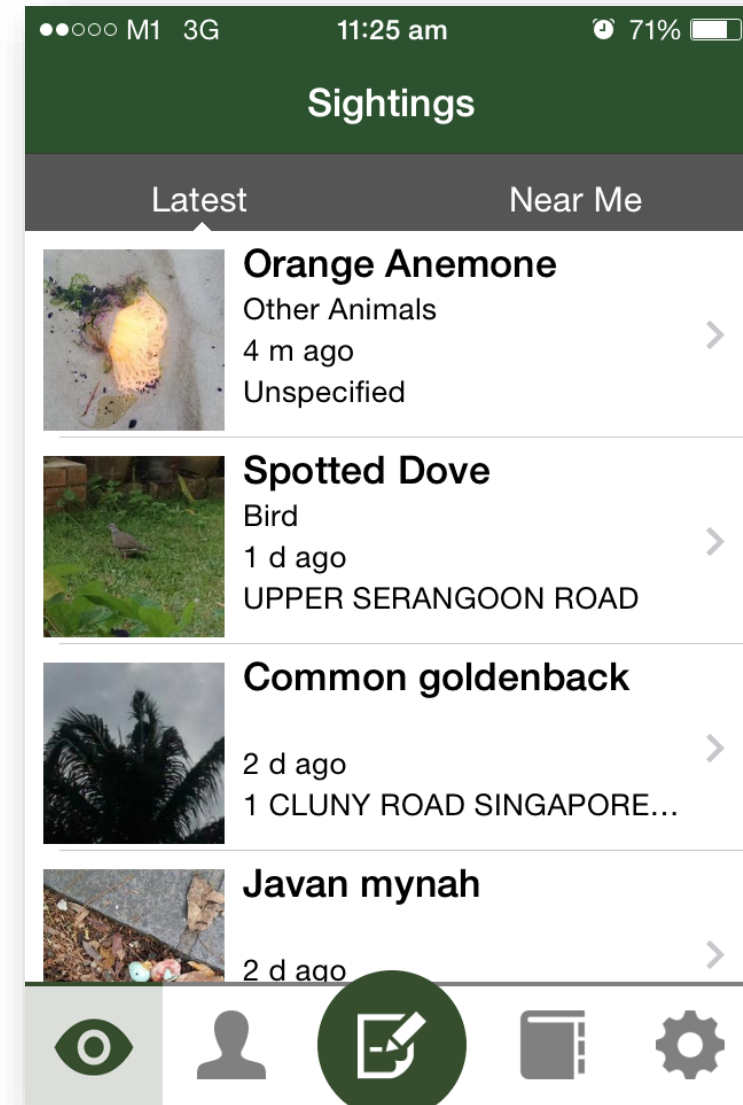
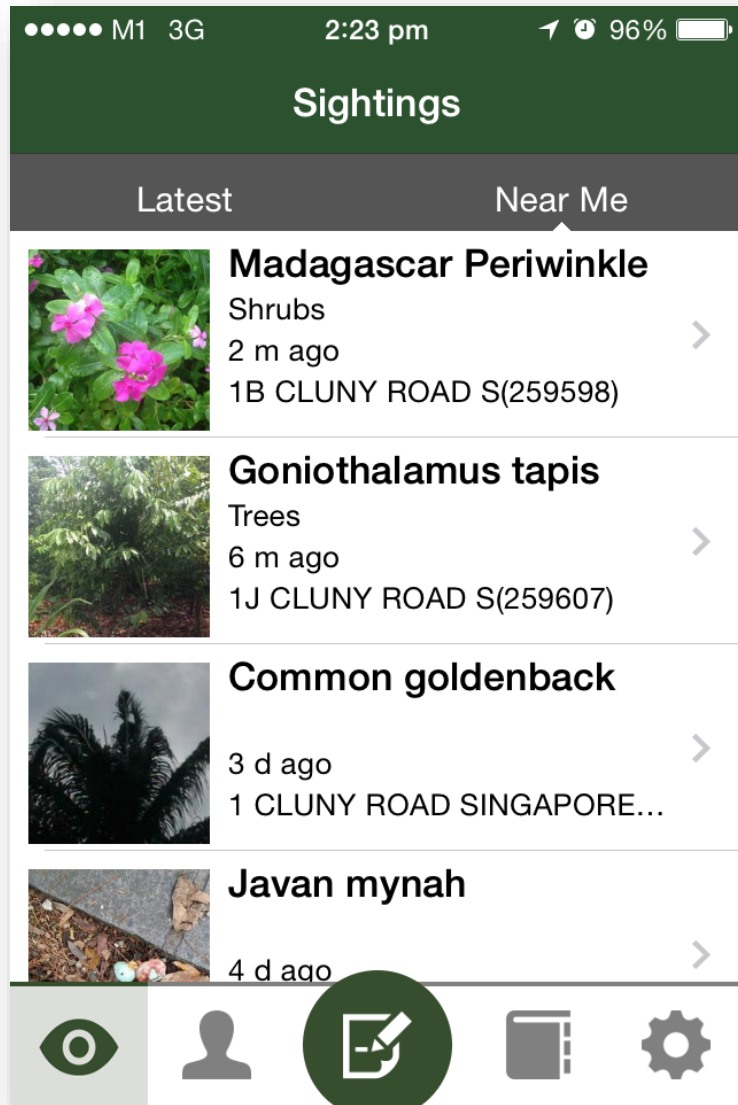


Find the mapped sighting you have uploaded via SGBioAtlas at www.biome.nparks.gov.sg

Fauna guides to help you identify species



Awareness of local biodiversity

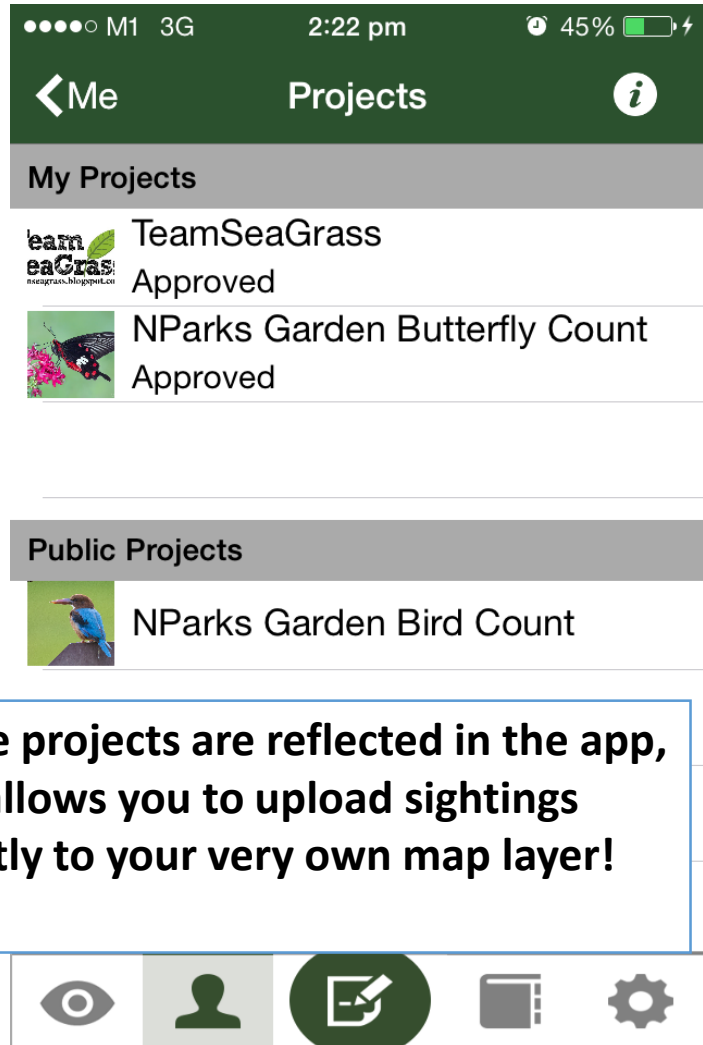


Create/Join Project

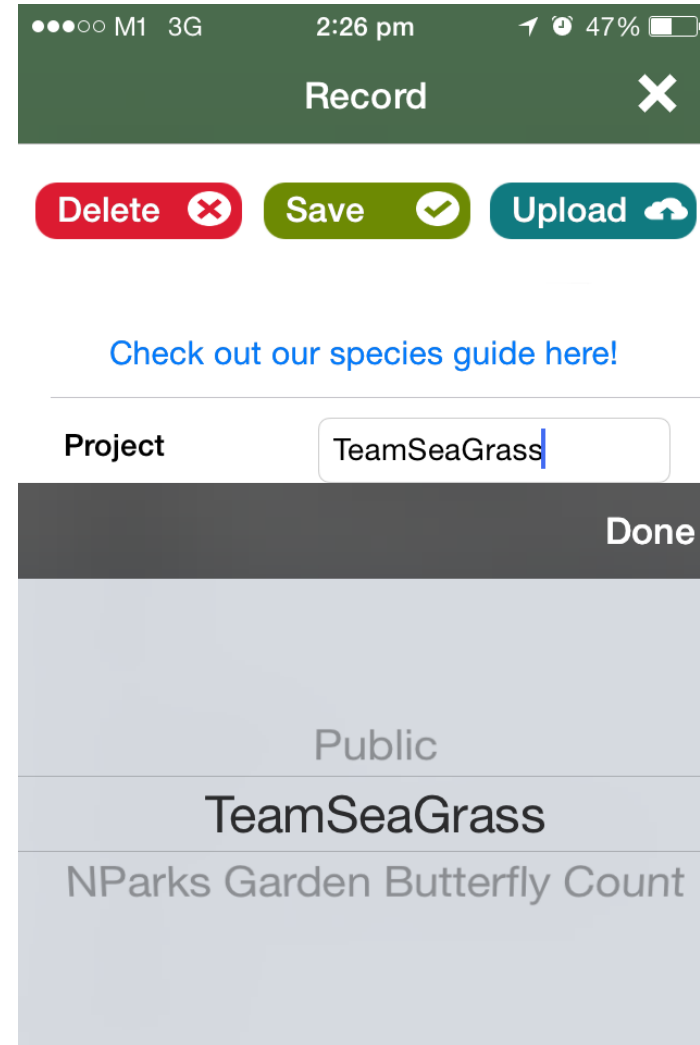
The screenshot shows the Biome website interface. The top navigation bar includes the National Parks logo, the Biome logo, and a tagline 'Biodiversity and Environment Database System'. A secondary navigation bar contains links for SIGHTINGS, MAP, RESEARCH, RESOURCES, ABOUT US, HELP, and WELCOME CHOY SHIN!. The main content area is titled 'Join Project' and features a search bar for project titles. Below this, three project listings are displayed, each with a placeholder image, a title, a description, a status, and a 'JOIN PROJECT' button.

Project Title	Description	Status	Action
Families for Nature SGBioAtlas	This project is targeted at families who are participating in the Families for Nature programme 2016. Submit sightings of interesting animals and plants around you. Once three or more sightings have been submitted in a single month, you will receive a piece of the map! The map will be mailed to the address you have provided when you registered for the Families for Nature programme.	Auto Approve Membership Request Inactive	JOIN PROJECT
Raffles' Banded Langur Volunteers	As a part of on-going conservation strategy for Raffles' Banded Langur, this volunteer group will collect langur sightings in Singapore forests. Please join the project if you have attended the volunteer briefing session at Singapore Botanic Gardens. It may take up to a week to process your request to join the project. If you are interested in becoming a volunteer, please contact Andie Ang -	Active	JOIN PROJECT
Rail Corridor Biodiversity	This project is used to identify flora and fauna seen and heard along the Railway Corridor.	Active	JOIN PROJECT
Beautiful birds	Everything about birds		JOIN PROJECT

Project mode



**These projects are reflected in the app,
and allows you to upload sightings
directly to your very own map layer!**



The strategic vision for the future

- Increase Knowledge of Biodiversity and the Natural Environment
- Identification of knowledge gaps
- Use data science to guide policy making

Challenges

- Difficulty to map historical data (non-spatial)
- Difficulty in documenting all activities, validating, curating data
- Data in disparate format (challenges to fully adopt Darwin Core)
- Sensitivity of data

The type of cooperation or support that would be beneficial

- Better understanding of CHM requirements