



# Riverine bird monitoring at Tiputini

Standardized biodiversity monitoring using an app

# Bird monitoring in the Neotropics



- Little is known about long-term trends of tropical birds (Pollock et al., 2022)
- 50 % decline of bird species at TBS in a 22 year time period (Blake & Loiselle, 2024)

!

- Monitoring is an essential part of conservation
- Birds are a good indication of ecosystem health!
- New technologies make bird monitoring more effective and reliable!

# Survey itinerary

- Drift survey with point counts
- Morning surveys (06:00am – 11:00am)
- Afternoon surveys (02:00pm – 06:00pm)
- 10 km upstream survey
- 10 km downstream survey
- Go with motor 10 km upstream and drift,  
or drift from TBS downstream



# Practicalities

- Check with the Tigre if the boat is available
- Go with two birders PLUS a Tigre
- Meet with the Tigre at 06:00am OR 02:00pm



# Observations



## Drift counts

- Count before and in between points
- If a bird/flock is observed during a point as well, then do not note it as a drift count!



## Point counts

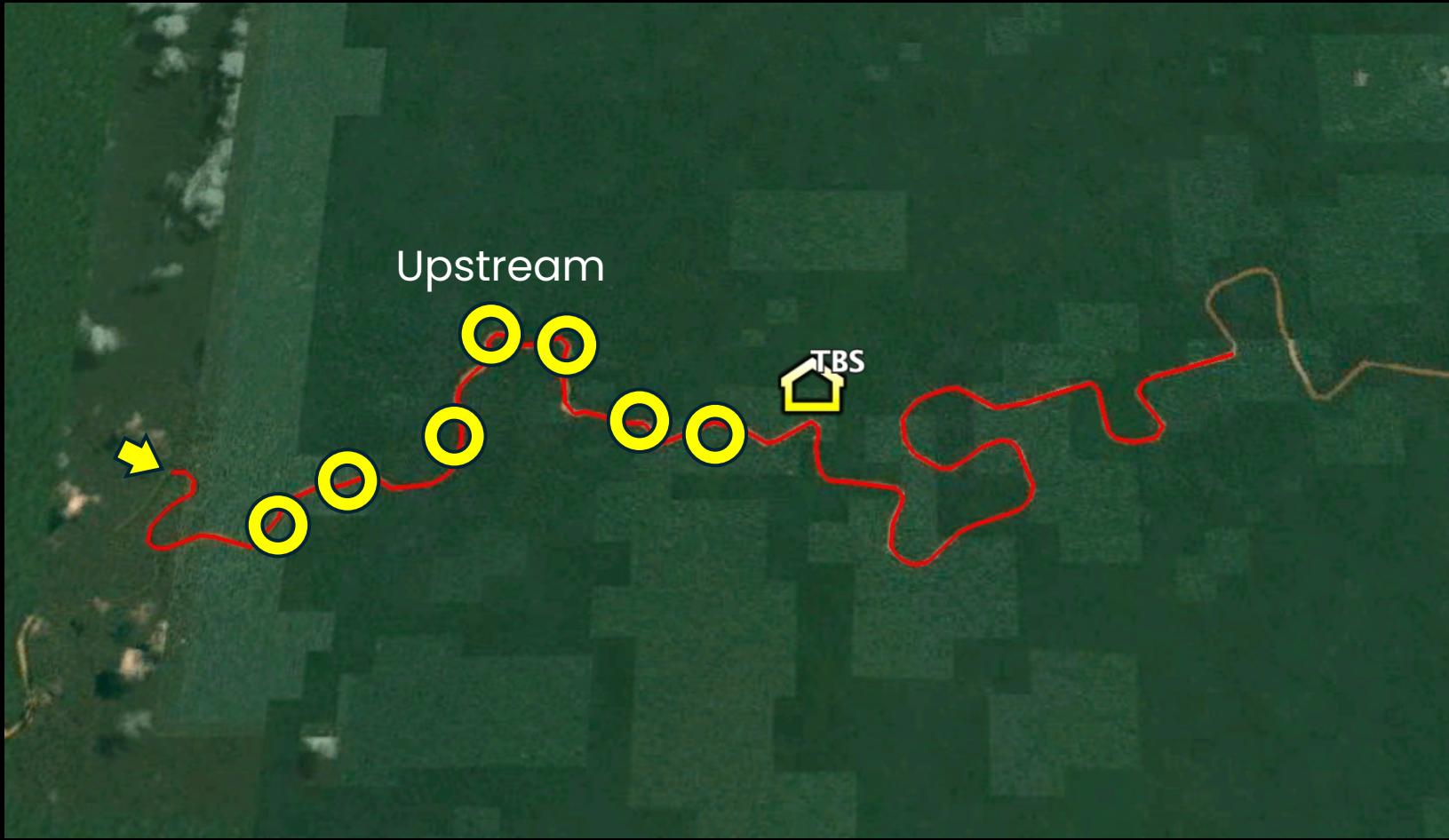
- Randomly select points, >300 meter distance in between
- >7 per survey
- 2 minutes of settling time
- 15 minutes of observing
- Survey stops after your 7th point



## Auditory counts

- Have the audio device on constantly
- Lay the device in the front of the boat

# Point counts





# Point counts



# Take with you

- Binoculars
- Auditory equipment 
- Compass (can be digital)
- Timer (can be digital)
- Camera
- Rainproof gear
- Fully charged phone with the SMART Mobile app





SMART



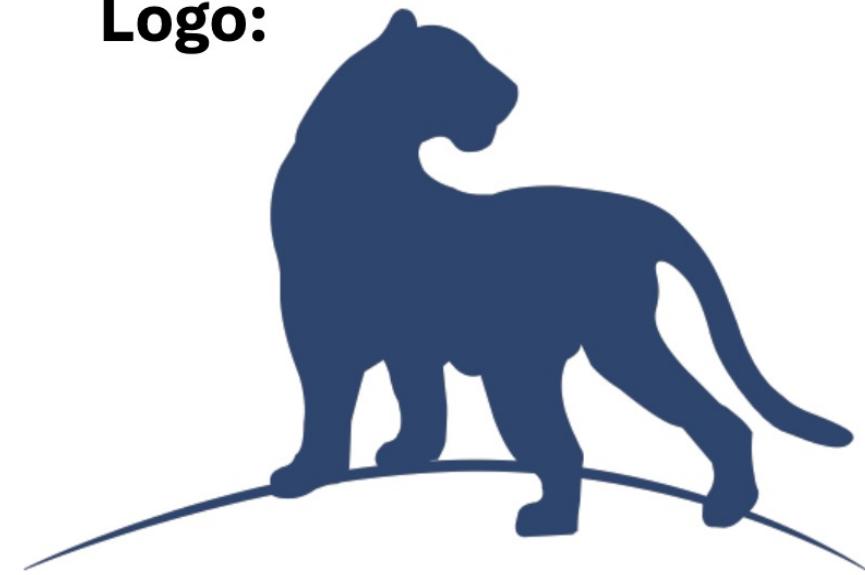
# **Instructions to make a survey with SMART Mobile**

# Install SMART Mobile

- **Search for it as ‘SMART Mobile for conservation’.** It isn’t always one of the first options if typed differently
- Or, scan one of the following QR codes:



Logo:



# **SMART basic symbols**

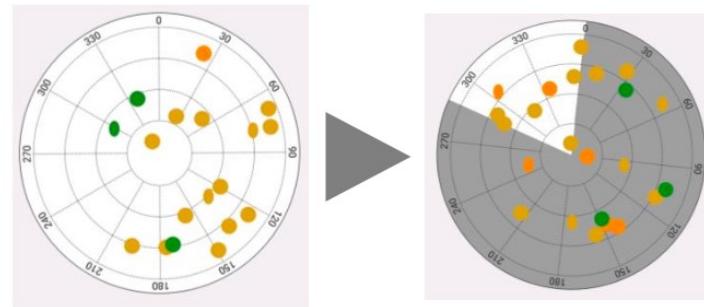
- Go back



- Confirm/advance

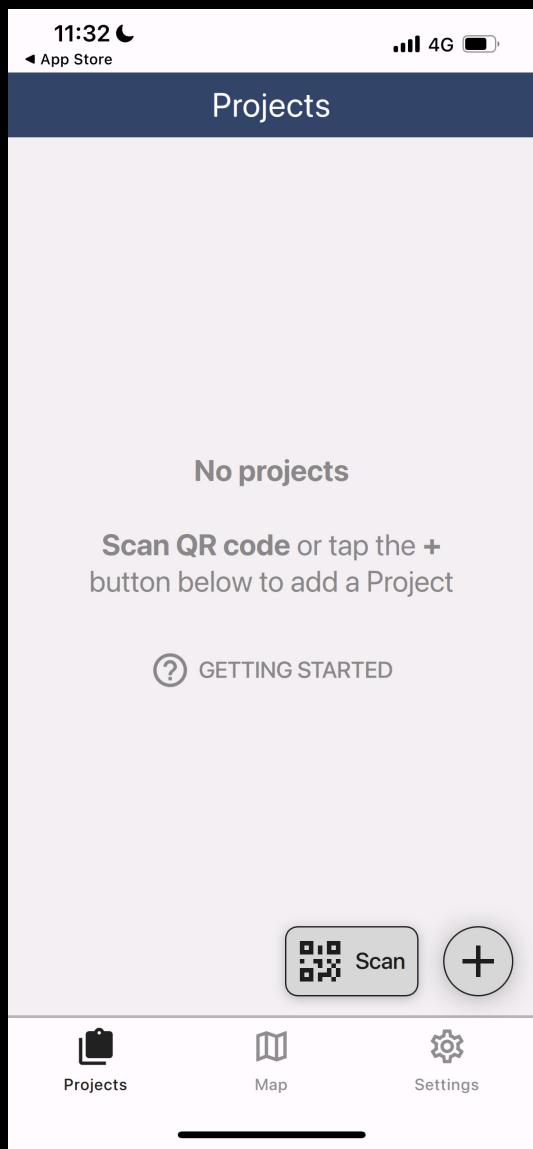


- Location being recorded



- Helping information to fill information while doing surveys





## Load the surveys to **SMART Mobile**

- 1) In **Projects**, click ‘+’ symbol
- 2) Select '**SMART Connect**'
- 3) Ask the TBS supervisor (Esteban) to give you access to the surveys
- 4) Wait... and check if '**Riverine bird survey (BR)**' are loaded



Username: RioTiputini  
Password: smarttbs

# Grant setting access

5) Click on one survey

6) Allow for the following settings:

Location: Precise

Background location: All the time

(allows SMART to record your location even if your screen is off while doing the survey)

Camera

Audio Recording



Projects

Riverine birds survey (BR)  
2025/07/23 21:56:57

Scan

+

Projects

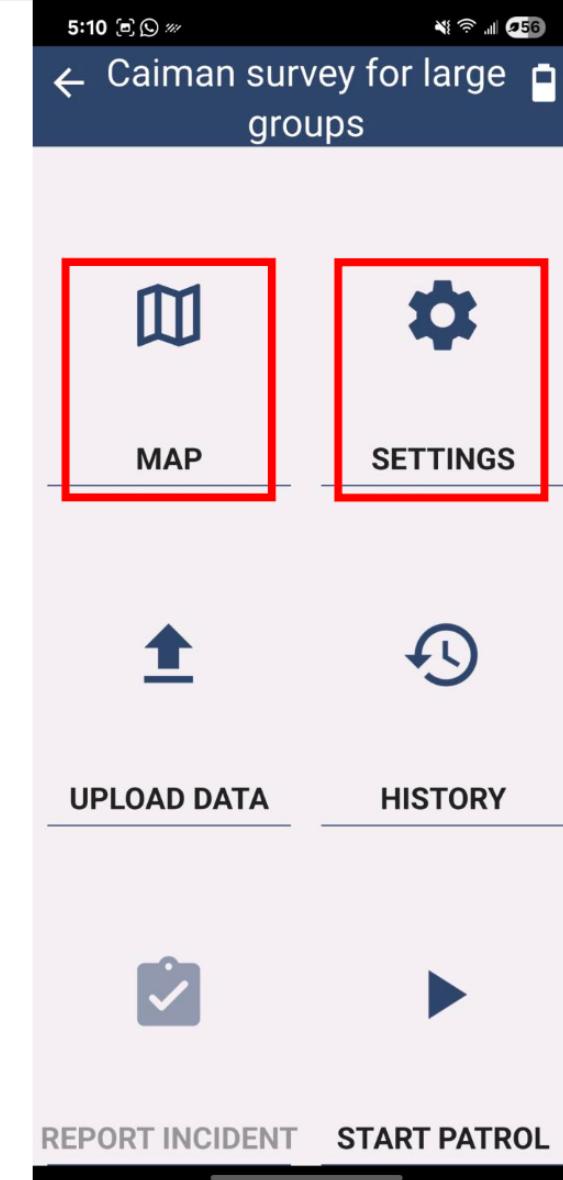
Map

Settings

\*Settings should be modified in your phone settings if permission isn't asked automatically

# Adjust the language and load the offline survey map

- 7) Click in '**Settings**'
- 8) Choose the **language** of preference
- 9) Click in '**Map**'
  - **Wait** for the survey map to load
  - You may need to **zoom** into Ecuador to see it
  - Click '**Follow**' to locate yourself, if needed



\*In order to see the map while you're off-line doing the survey, the map has to be loaded and seen with internet first. You may conduct the surveys you wish thereafter

11:22

4G

## Projects



Riverine birds survey (BR)

2025/07/23 21:56:57



Scan



Projects



Map

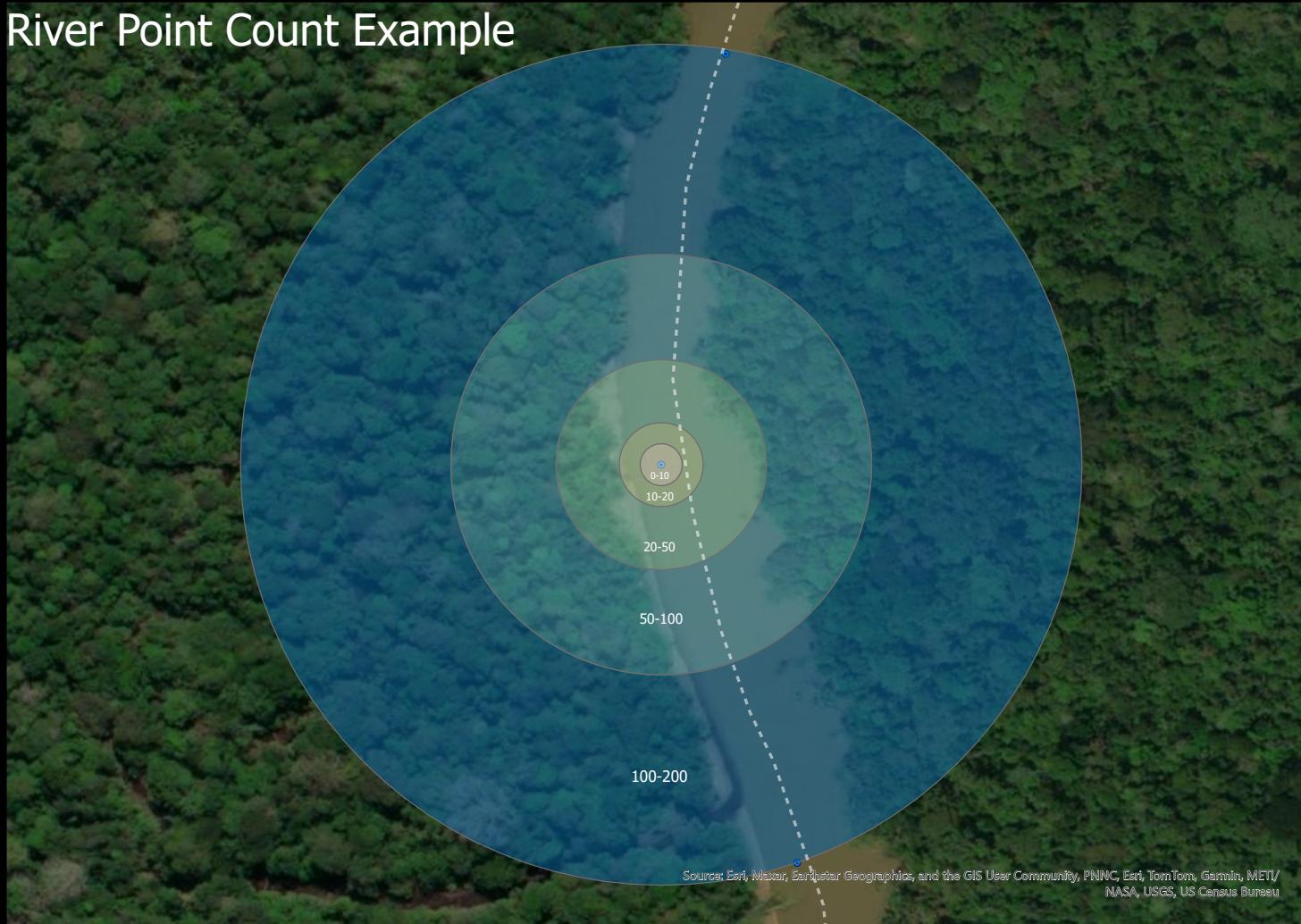


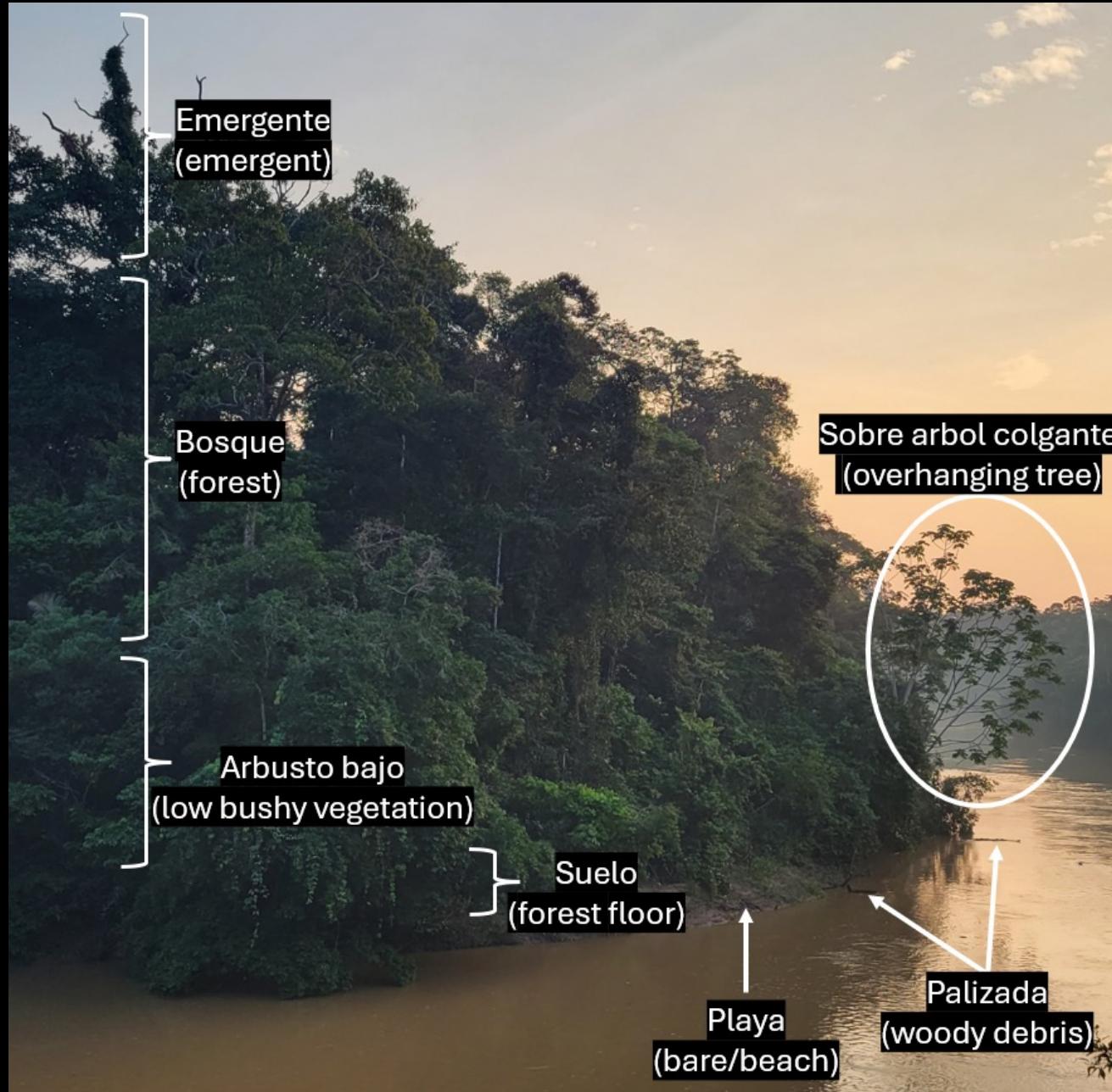
Settings





# Distance





# Data

Send audio data to: [beerrappange@me.com](mailto:beerrappange@me.com)

# Recap

- Check if you have all the gear
- Drift counts in between and before points
- Point counts: >7 counts, >300m in between them, 2 minutes of settling time, 15 minutes of counting
- Bring an audio device
- Survey stops after your 7th point

# Thank you very much and good luck!

