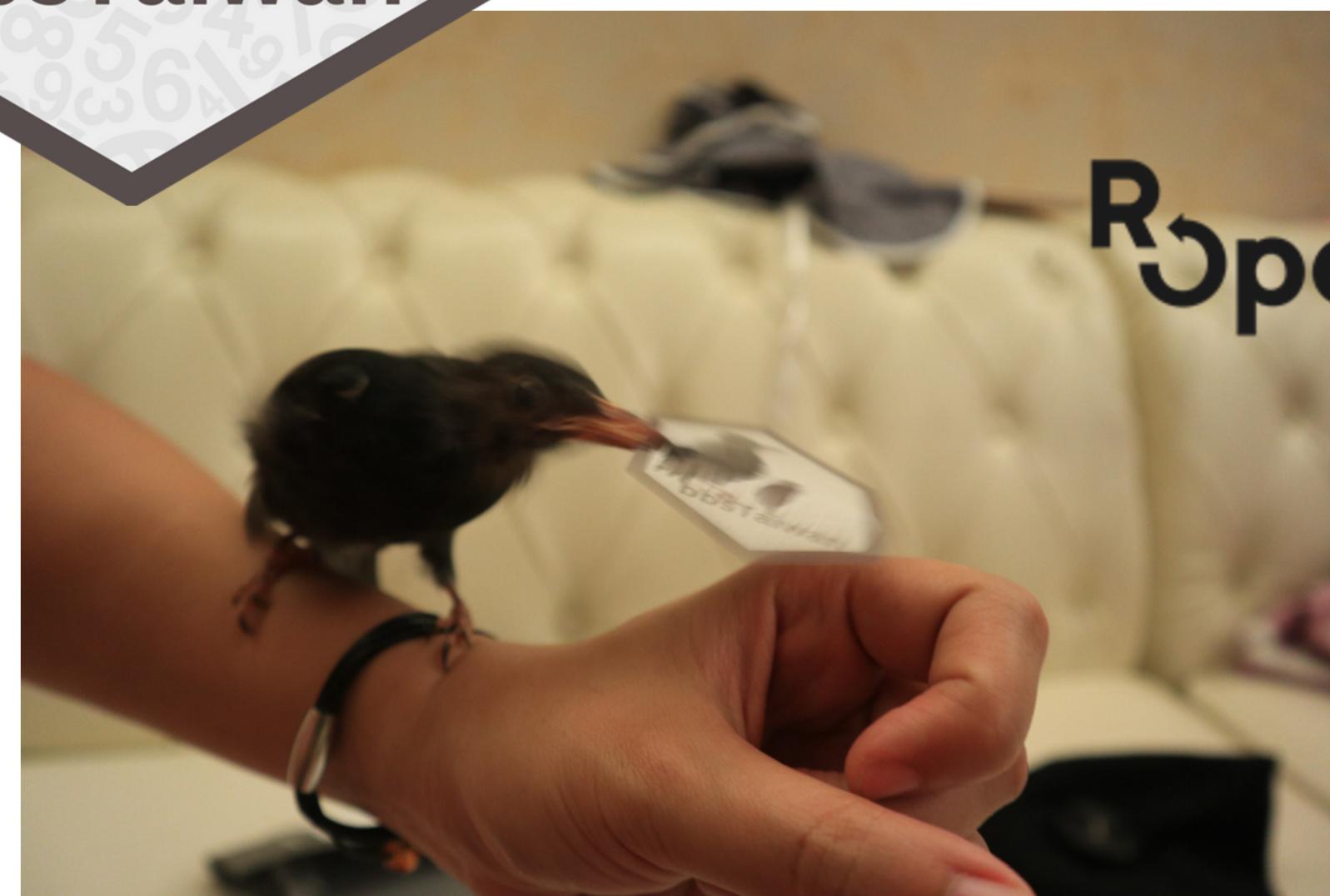




bbsTaiwan

用簡單程式分析臺灣繁殖季鳥類大調查資料

an R package to streamline the retrieval and analysis of Taiwan BBS data



ROpenSci



illustration for rOpenSci by Lydia Hill

Package website

bbsTaiwan 1.0.0 [Get started](#) [Reference](#)

bbsTaiwan



Overview 簡介 

The goal of `bbsTaiwan` is to streamline the retrieval and analysis of Taiwan Breeding Bird Survey (BBS) data. This package facilitates data access from GBIF, where Taiwan BBS data are stored. While the data is openly available on GBIF, its complex arrangement in the Darwin Core format can make it challenging to understand and use, often requiring advanced data wrangling skills. The `bbsTaiwan` package is designed to simplify this process, making it easier to access and utilize Taiwan BBS data.

`bbsTaiwan` package 的目的是簡化臺灣繁殖鳥類大調查（BBS）資料的檢索和分析。該 package 可以即時取得存放在 GBIF 平台上的 BBS 資料。`bbsTaiwan` package 旨在簡化 BBS 的取得以及基本的分析、資料視覺化，讓使用者能更容易地檢索和利用臺灣 BBS 資料。

Links

[Browse source code](#)
[Report a bug](#)

License

[Full license](#)
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Citation

[Citing bbsTaiwan](#)

Developers

Sunny Tseng
Author, maintainer

SCAN ME



<https://sunnytseng.github.io/bbsTaiwan/>

bbsTaiwan R package 於是誕生！



簡單取得 BBS 資料

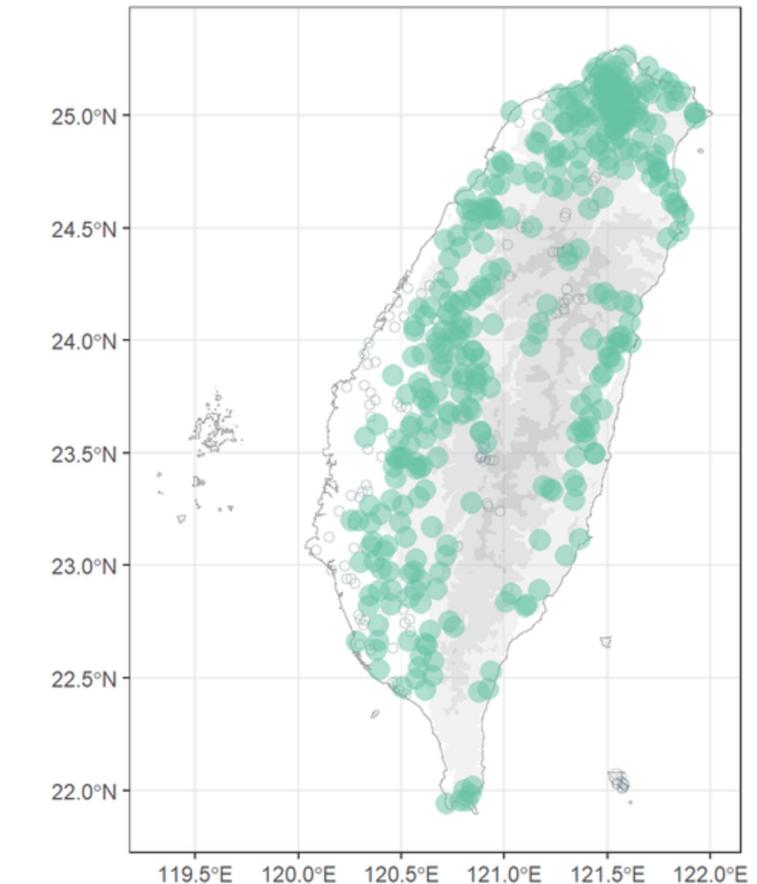
```
> bbs_fetch("紅嘴黑鵲")
```

year	month	day	site	locationID	decimalLatitude	decimalLongitude	weather	wind	habitat	scientificName	vernacularName
2009	4	26	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	3	10	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	4	5	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	3	10	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	4	26	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	4	5	A02-01	A02-01_01	25.11127	121.8163	NA	NA	C1:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲
2009	4	26	A02-01	A02-01_02	25.11121	121.8196	NA	NA	C2:A1:NA:NA	Hypsipetes leucocephalus	紅嘴黑鵲

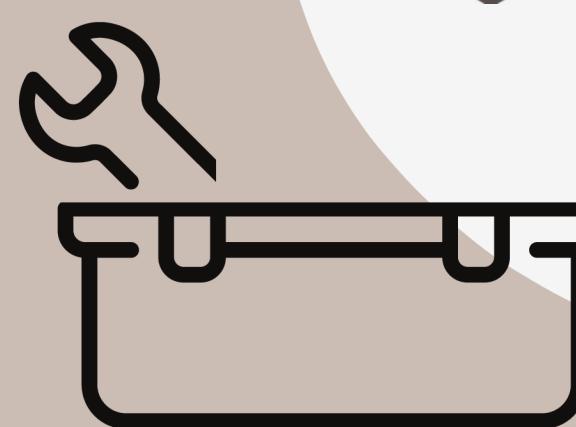


簡單BBS 資料視覺化

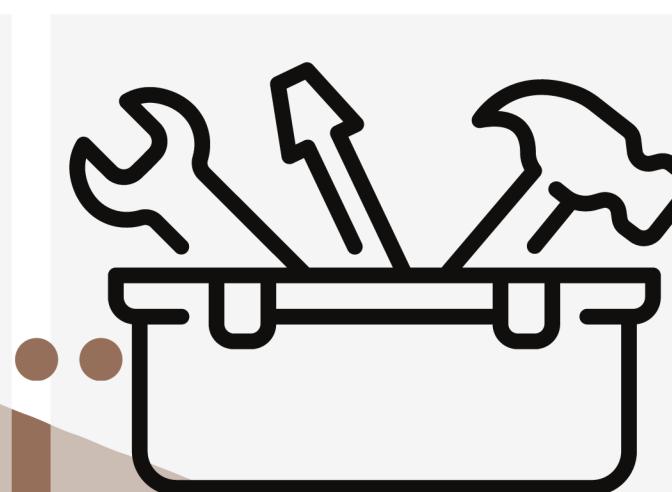
```
> bbs_plotmap("紅嘴黑鵲")
```



bbsTaiwan R package 於是誕生!



基本的 R



基本的 R
加上 package



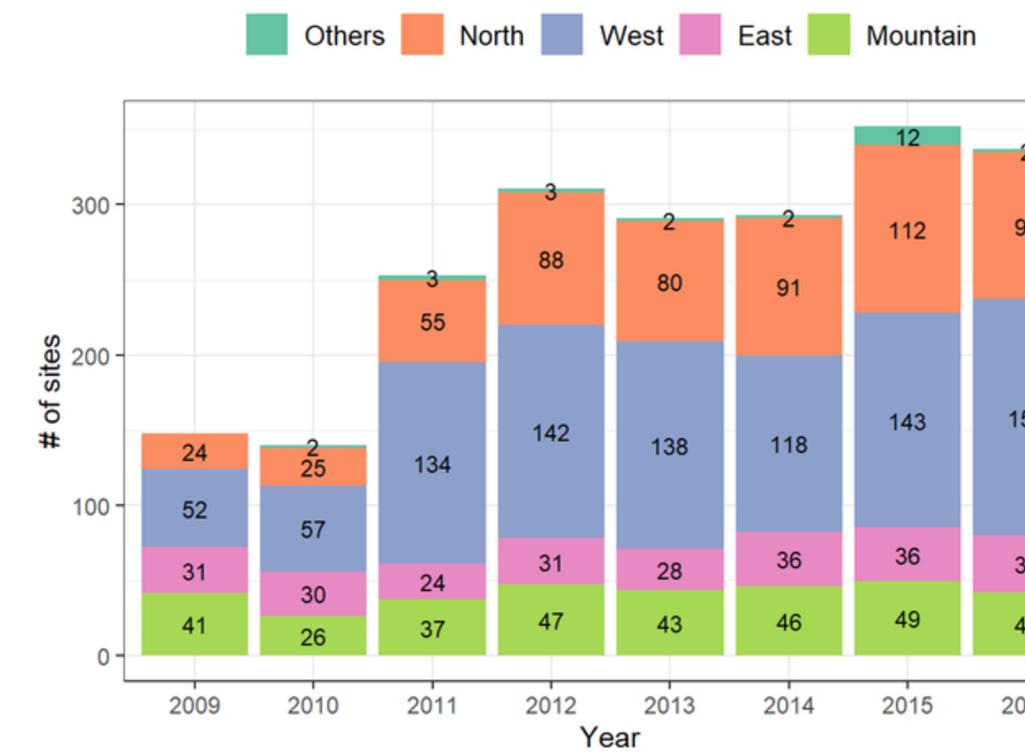
簡單看物種分布

```
> bbs_plotmap(c("白頭翁", "烏頭翁"))
```

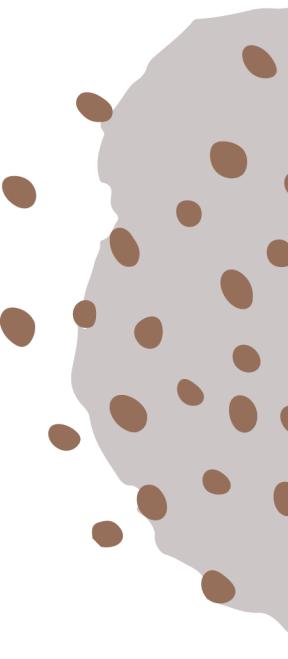
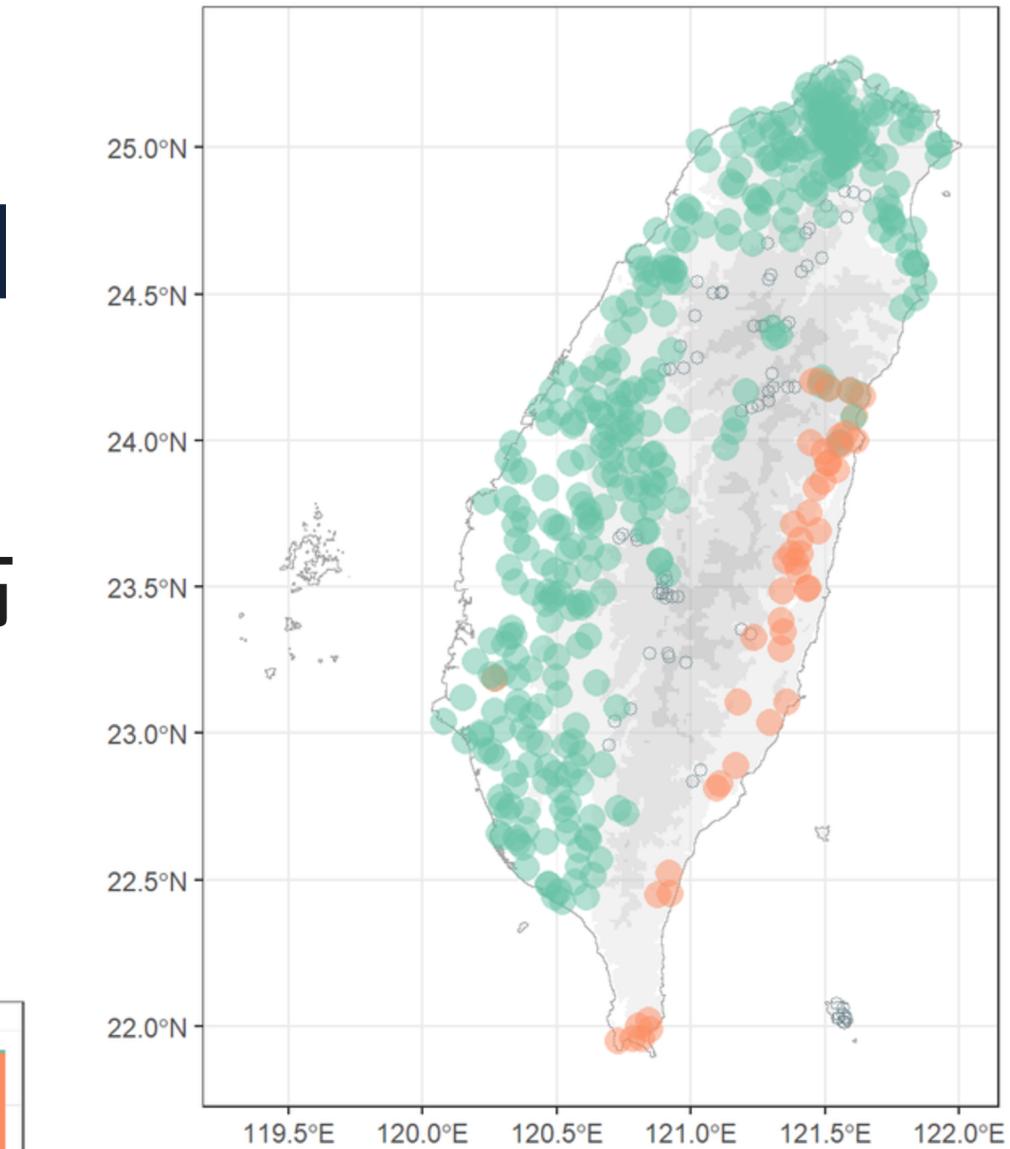


歷年調查樣區數量及分布

```
> bbs_history()
```



● Pyconotus sinensis ● Pyconotus taivanus

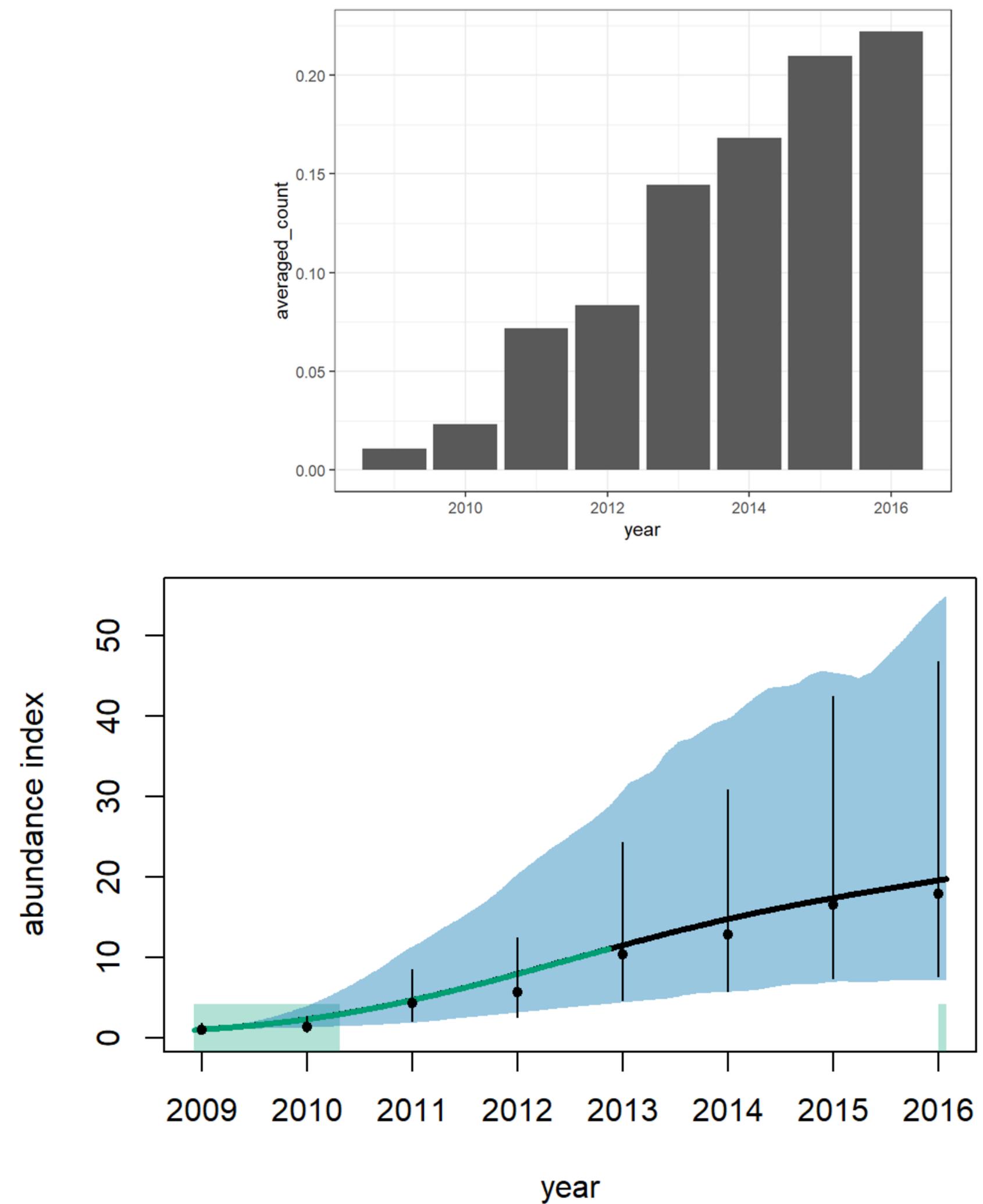
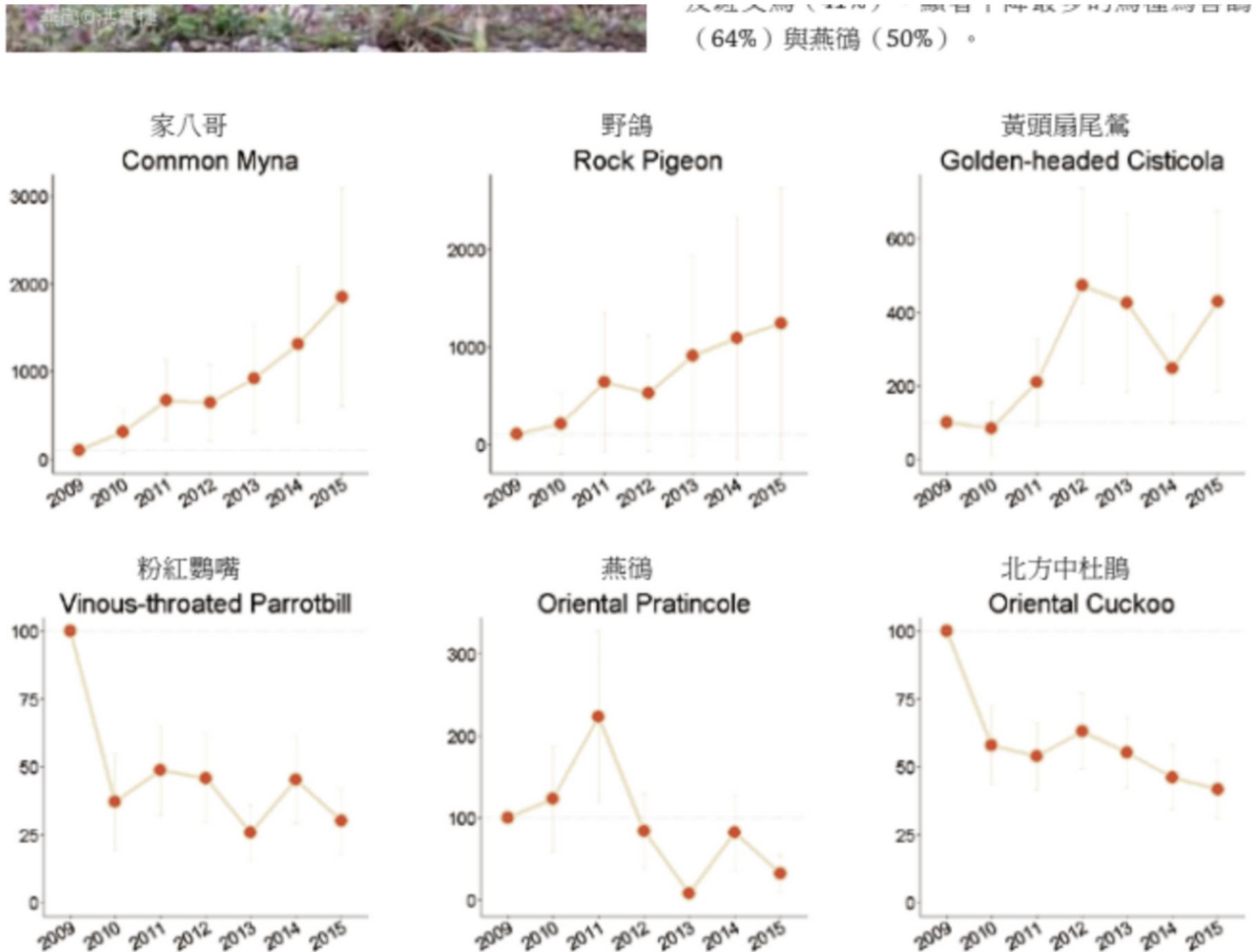


bbsTaiwan 五個主要 function

• • •

- `bbs_history()` examine the number of BBS sites surveyed each year; 顯示每年調查的 BBS 站點數量
- `bbs_sites()` return the coordinates of all BBS sites; 顯示所有 BBS 樣點坐標
- `bbs_fetch()` fetch the cleaned version of Taiwan BBS occurrence data by species; 取得經過清理的物種出現資料
- `bbs_plotmap()` visualize species distribution across all BBS sites; 視覺化物種分佈
- `bbs_translate()` translate bird species' Chinese common name to scientific name; 將鳥類的中文俗名翻譯為學名

用 bbsTaiwan 做出 BBS 官方的年報成果





嘉義大學生物資源學系生物多樣性中心工作坊

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無需程式背景，事先下載 R 及 RStudio 佳
無需事先報名，帶著筆電到現場參與即可



2024

9/25 (週三) 12:30 - 2:00 pm



嘉義大學(蘭潭) 生資系 A24-207
棲地生態研究室/生物多樣性中心



曾奕晴 (Sunny)

R package 軟體工程師;
Birds Canada 鳥音資料分析師



柯智仁 (Jerome)

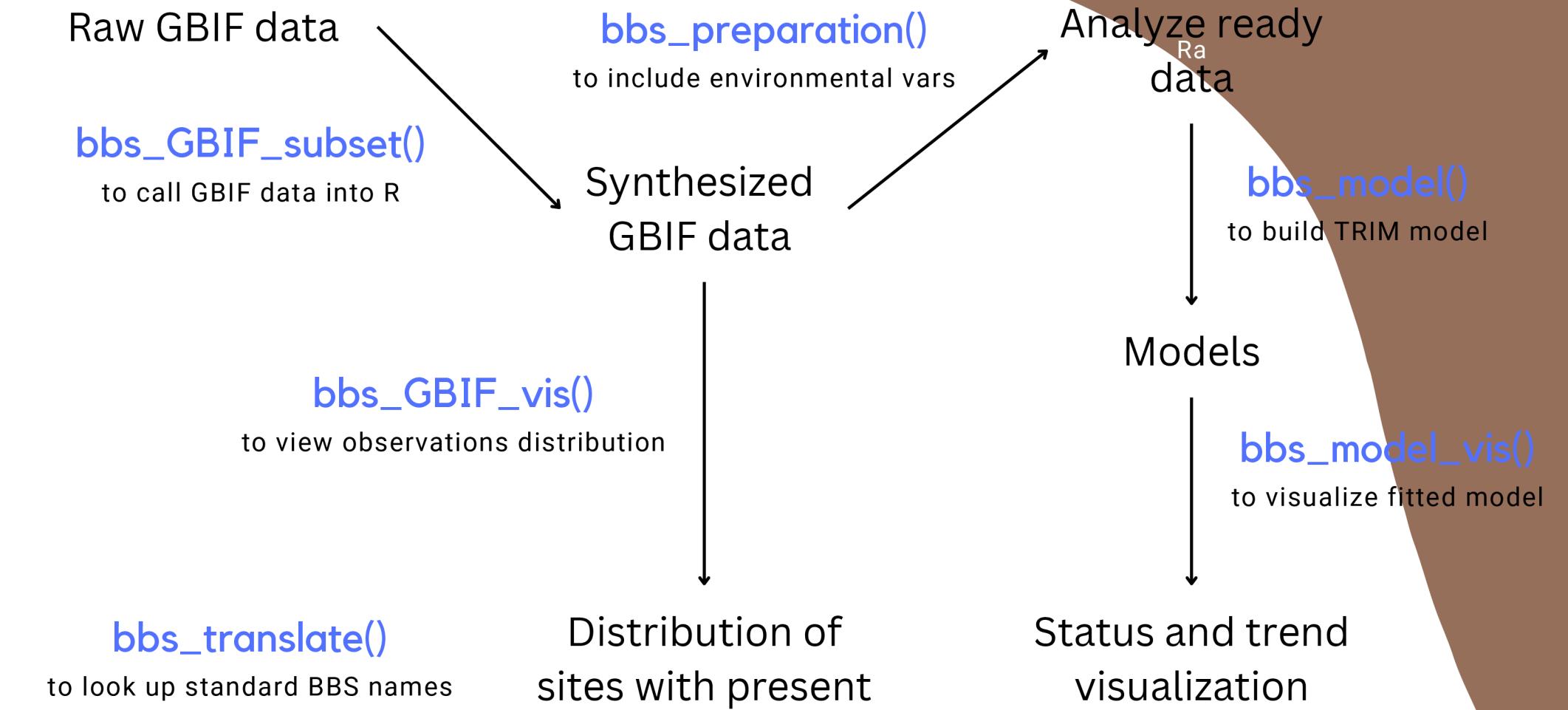
BBS 鳥音補習班班主任;
生物多樣性研究所副研究員





Not happening as planned ...

- rOpenSci cohort
- Eunseop
- Yanina



- logo design
- Github (branch, version, etc.)
- Connection with my own country