Visit Reports

true

2021-10-04

Five villages have been enrolled, one will not be carried forward due to concerns from the local team. The village are:

- Bambawo (coordinates 8.009 N, -11.1303 E)
  - Visit 1 - 2021-06-23 to 2021-06-27
  - Visit 2 - 2021-10
- Lalehun (coordinates 8.1975 N, -11.0803 E)
  - Visit 1 - 2020-11-30 to 2020-12-03
  - Visit 2 - 2021-04-01 to 2021-04-04
  - Visit 3 - 2021-07-08 to 2021-07-12
  - Visit 4 - 2021-10
- Lambayama (coordinates 7.8544 N, -11.1897 E)
  - Visit 1 - 2021-06-28 to 2021-07-02
  - Visit 2 - 2021-10
- Seilama (coordinates 8.1222 N, -11.1936 E)
  - Visit 1 - 2020-12-05 to 2020-12-09
  - Visit 2 - 2021-04-12 to 2021-04-15
  - Visit 3 - 2021-07-13 to 2021-07-17
  - Visit 4 - 2021-10
- Baiama (coordinates 7.83708 N, -11.26845 E)
  - Visit 1 - 2021-07-03 to 2021-07-07
  - Visit 2 - 2021-10

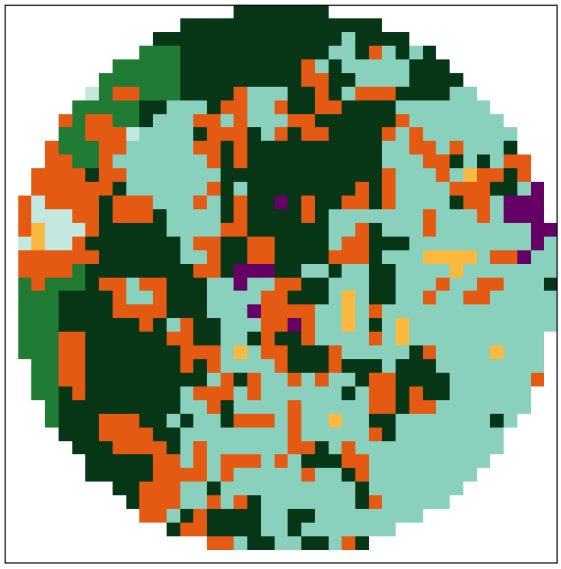
Rodents are trapped at up to 6 distinct trap sites per village with up to 49 traps per site. Data is collected on this group of data collection forms or on the digitised versions using electronic pads in the field using ODK all digital forms are encrypted locally on the device and sent to a server based at LSHTM. The `.xlsx` versions of the ODK forms are available on the OpenScience Framework project page.

We have currently obtained 7,270 trap nights across 3 visits (including the pilot).

There will ideally be study visits 4 times per year (every 3 months), dates will be confirmed with the study team.

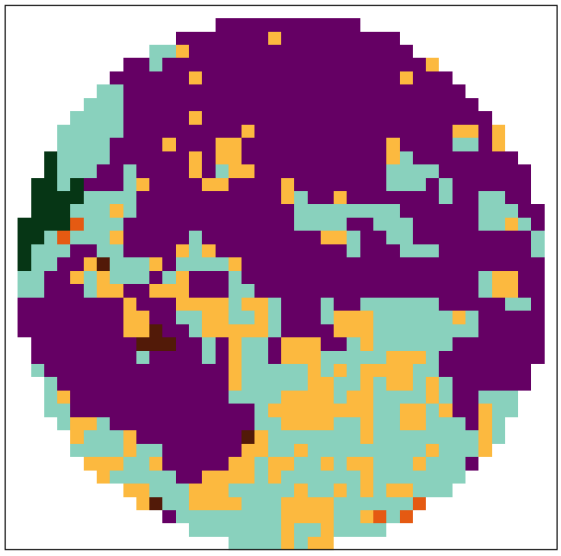
The land use predominantly obtained from Jung et al. and ground truthed through discussion with local communities guided the selection of the trapping sites at study villages.

Bambawo



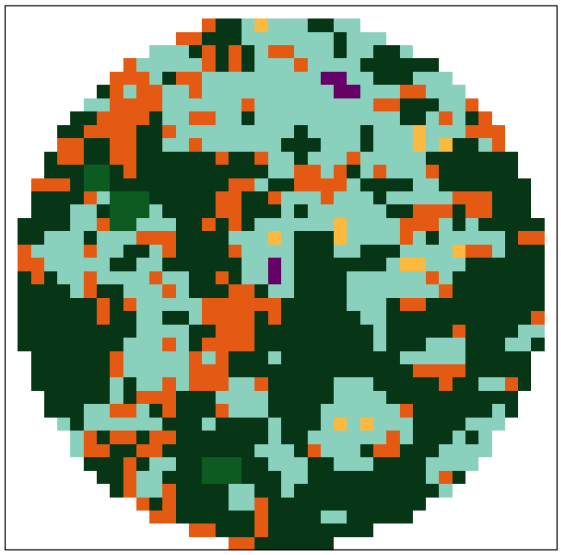
Laleh

Lambayama



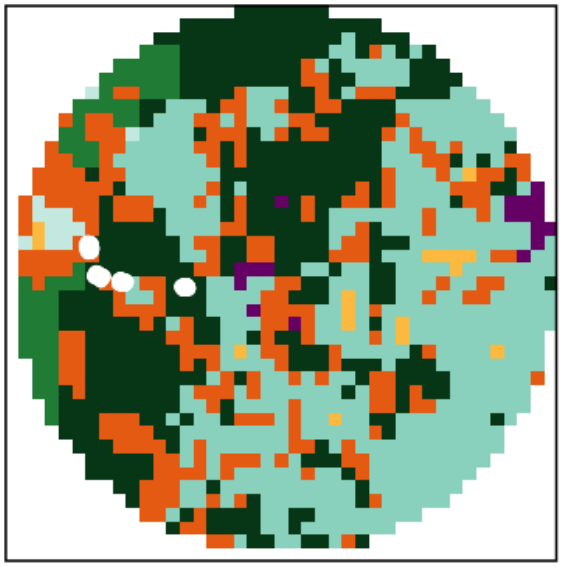
Seilam

Baiama

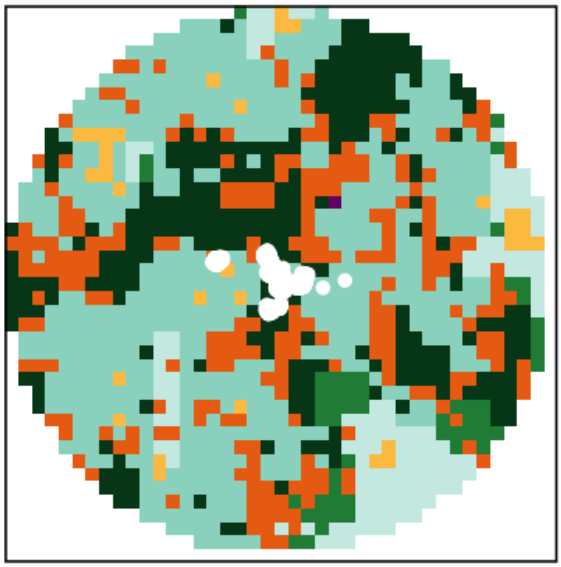


The trap locations are shown overlayed on these habitat maps below.

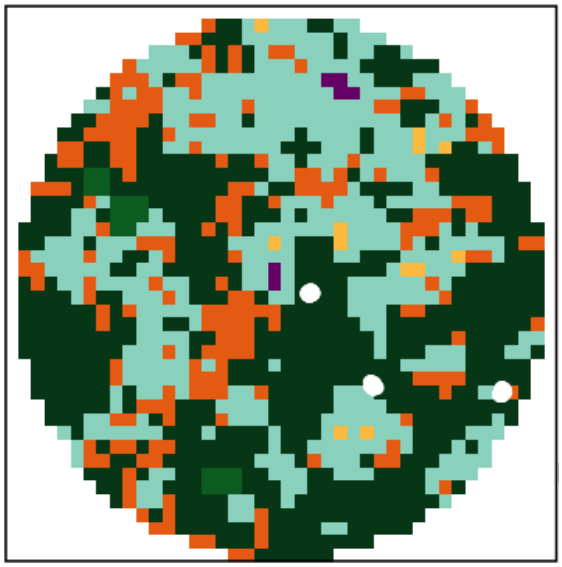
Bambawo



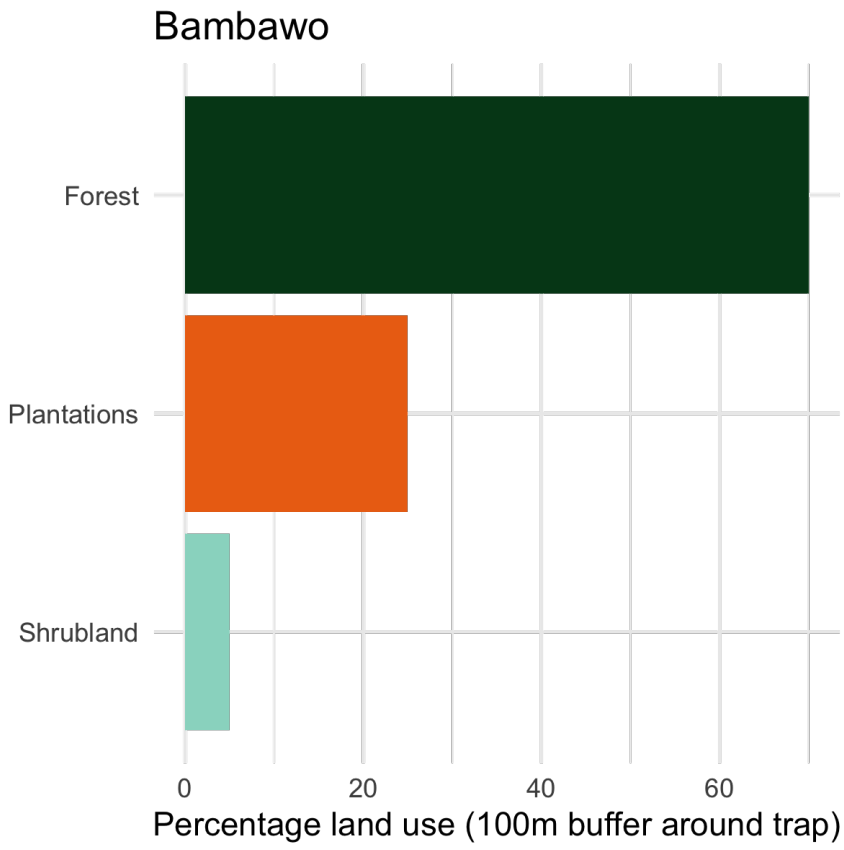
Seilama

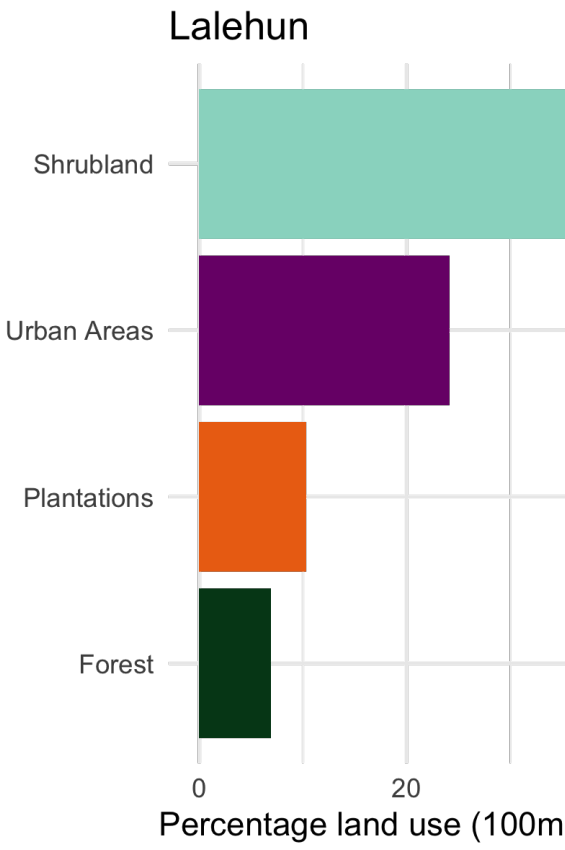


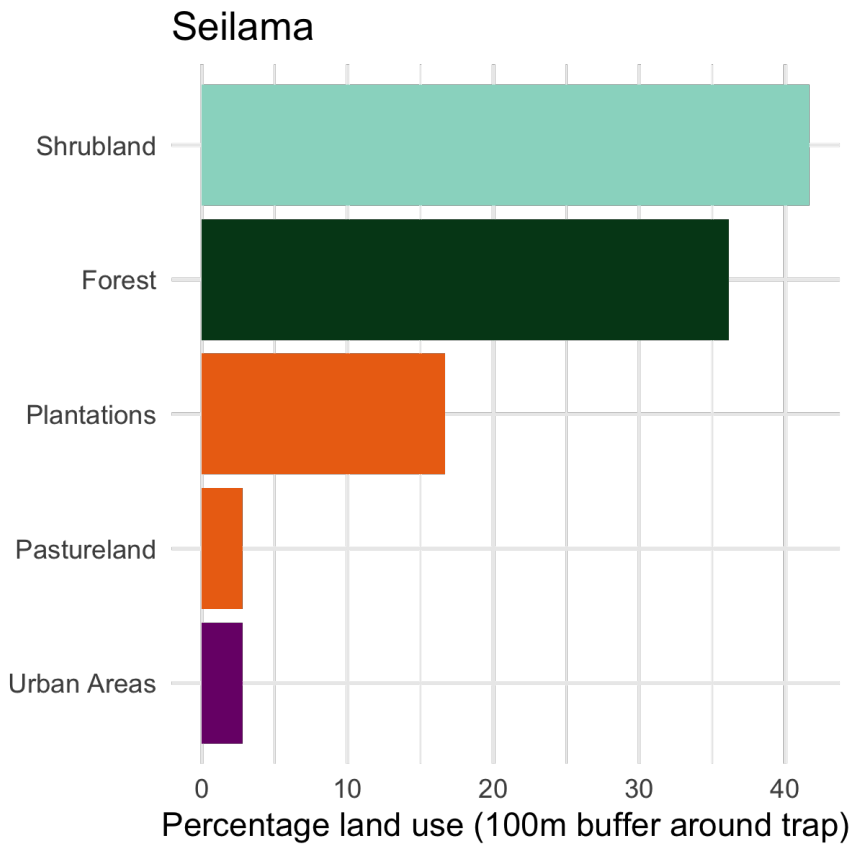
Baiama

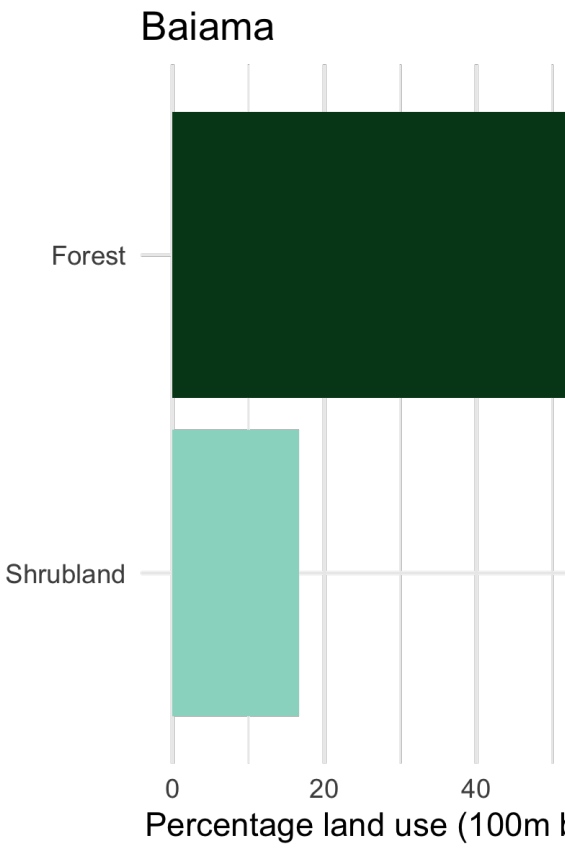


The proportion of nights trapping in each habitat gave good coverage of land use types in Eastern Sierra Leone.

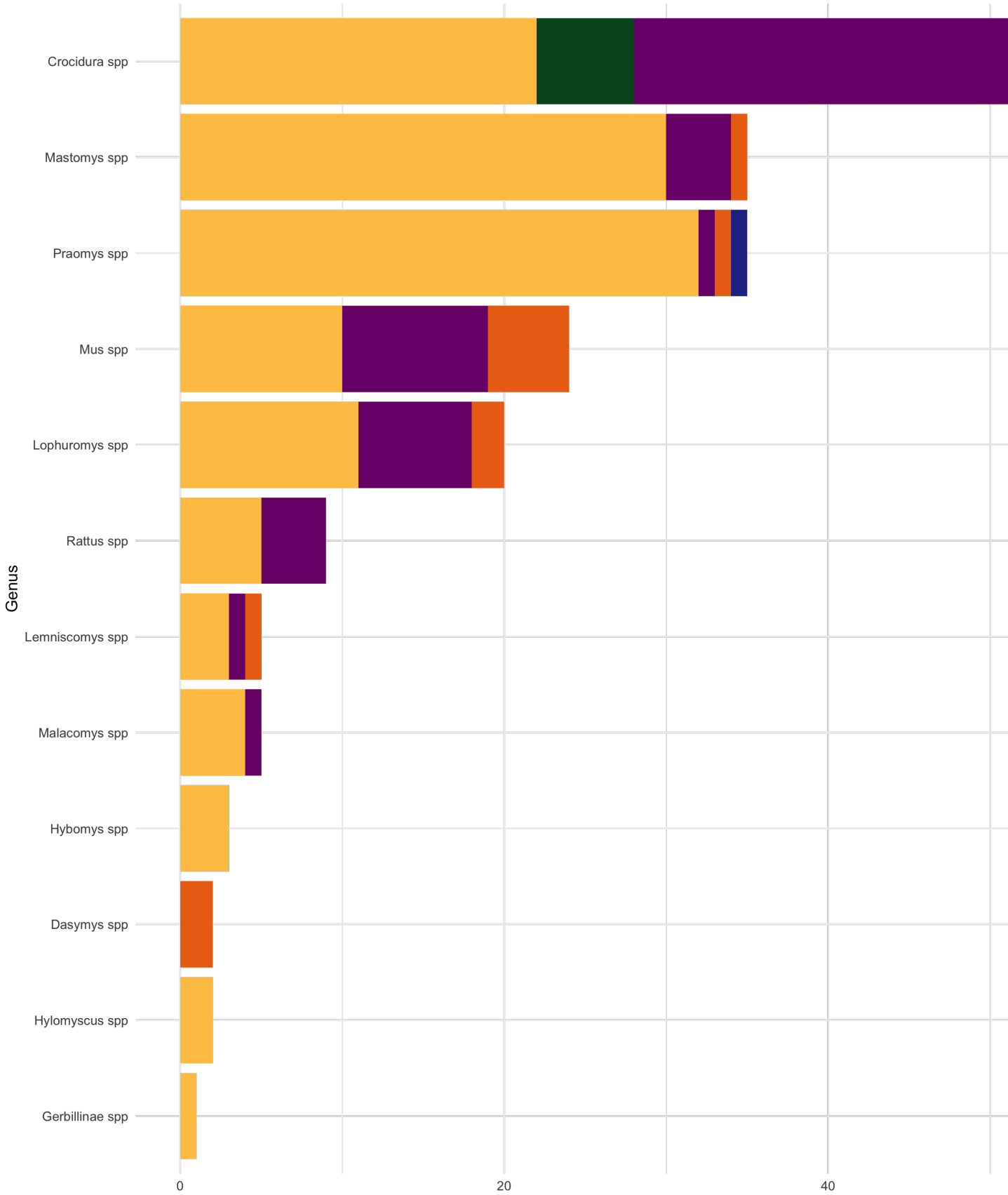

Bambawo
Forest
Plantations
Shrubland
0
20
40
60
Percentage land use (100m buffer around trap)


Lalehun
Shrubland
Urban Areas
Plantations
Forest
0
20
Percentage land use (100m

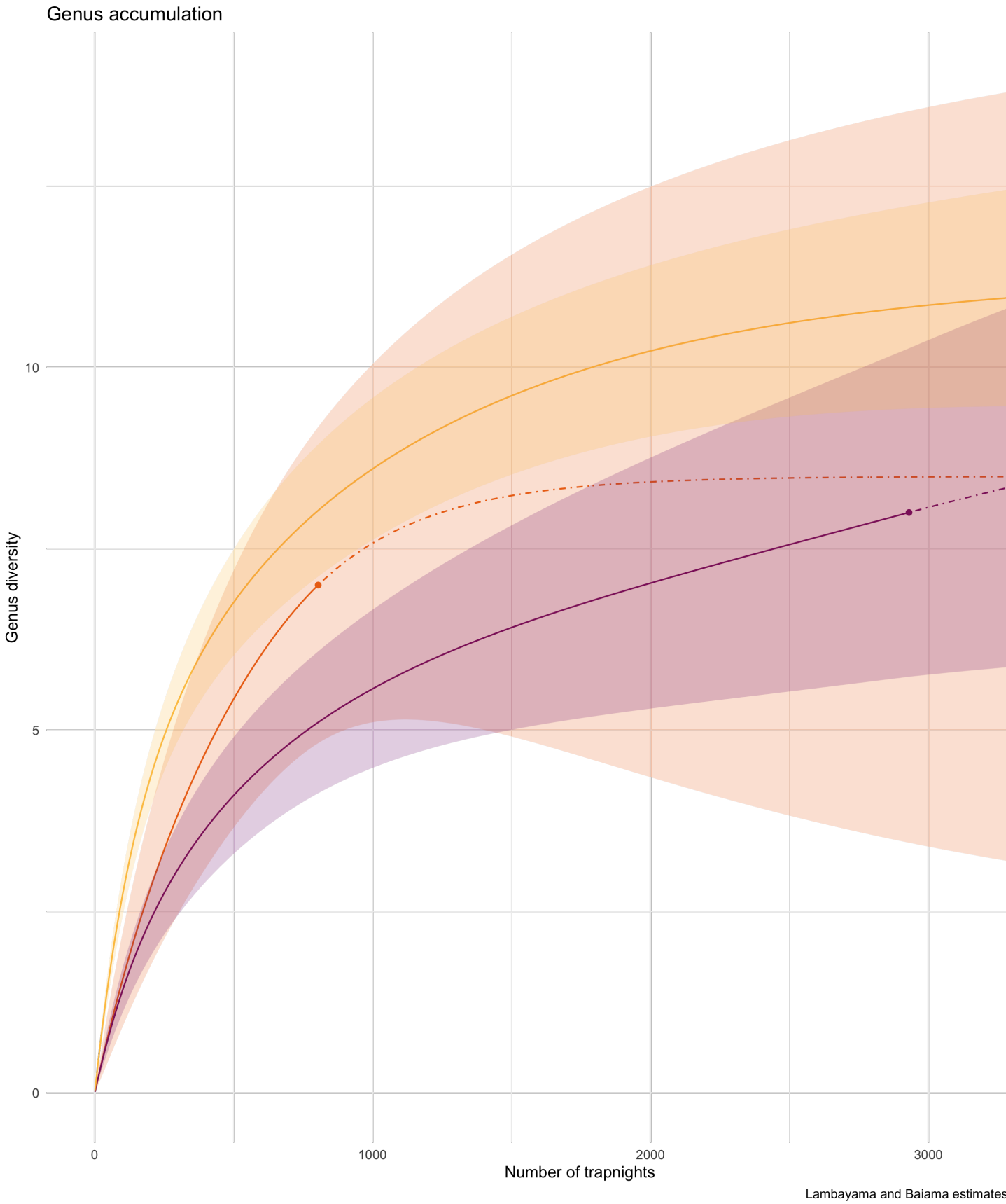

Seilama
Shrubland
Forest
Plantations
Pastureland
Urban Areas
0
10
20
30
40
Percentage land use (100m buffer around trap)


Baiama
Forest
Shrubland
0
20
40
Percentage land use (100m b

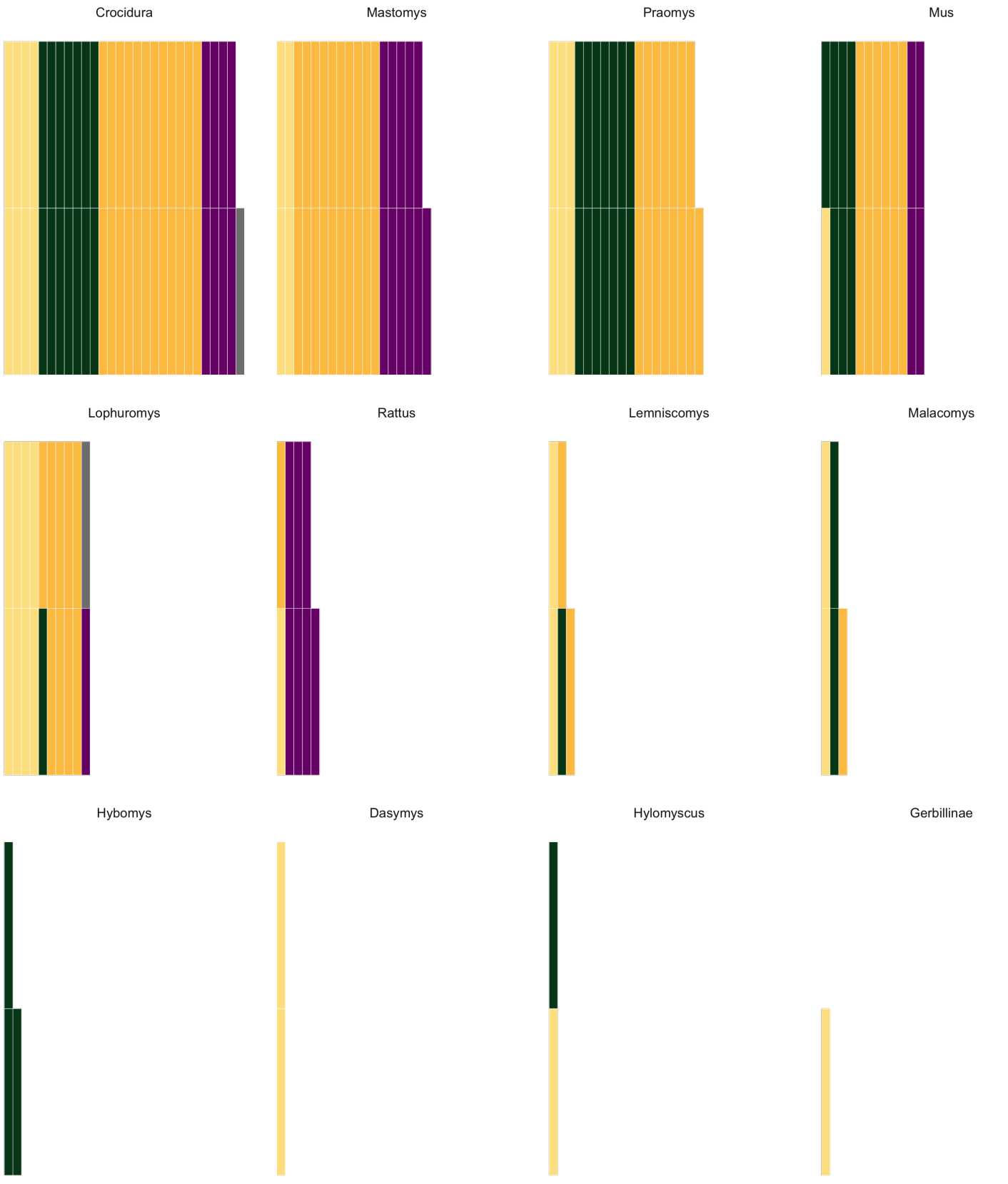
The trap success rate is around 4% this is fairly acceptable based on the review I did. We have trapped 137 rodents from at least 13 species. The majority of trapped individuals have been shrews (crocidura), *Mastomys sp.*, *Praomys sp.*, *Mus minutoides* and *Lophuromys sp.*. Data from the most recent trapping activities from visit 3 during the rainy season have so far shown a dramatic drop in trap success.


Genus
Crocidura spp
Mastomys spp
Praomys spp
Mus spp
Lophuromys spp
Rattus spp
Lemniscomys spp
Malacomys spp
Hybomys spp
Dasymys spp
Hylomyscus spp
Gerbillinae spp
0
20
40

Species accumulation curves have been produced for the first two visits from Lalehun and Seilama. It has not been possible to produce equivalent plots for Baiama and Lambayama due to the low number of individuals/species trapped in those locations.


Genus accumulation
Genus diversity
0
5
10
0
1000
2000
3000
Number of trapnights
Lambayama and Baiama estimates

As we catch an increasing number of individuals we are seeing them clustering within expected habitats.


Crocidura
Mastomys
Praomys
Mus
Lophuromys
Rattus
Lemniscomys
Malacomys
Hybomys
Dasymys
Hylomyscus
Gerbillinae
1 box per trappe