

Picking Mosquitoes for Whole-Genome-Sequencing

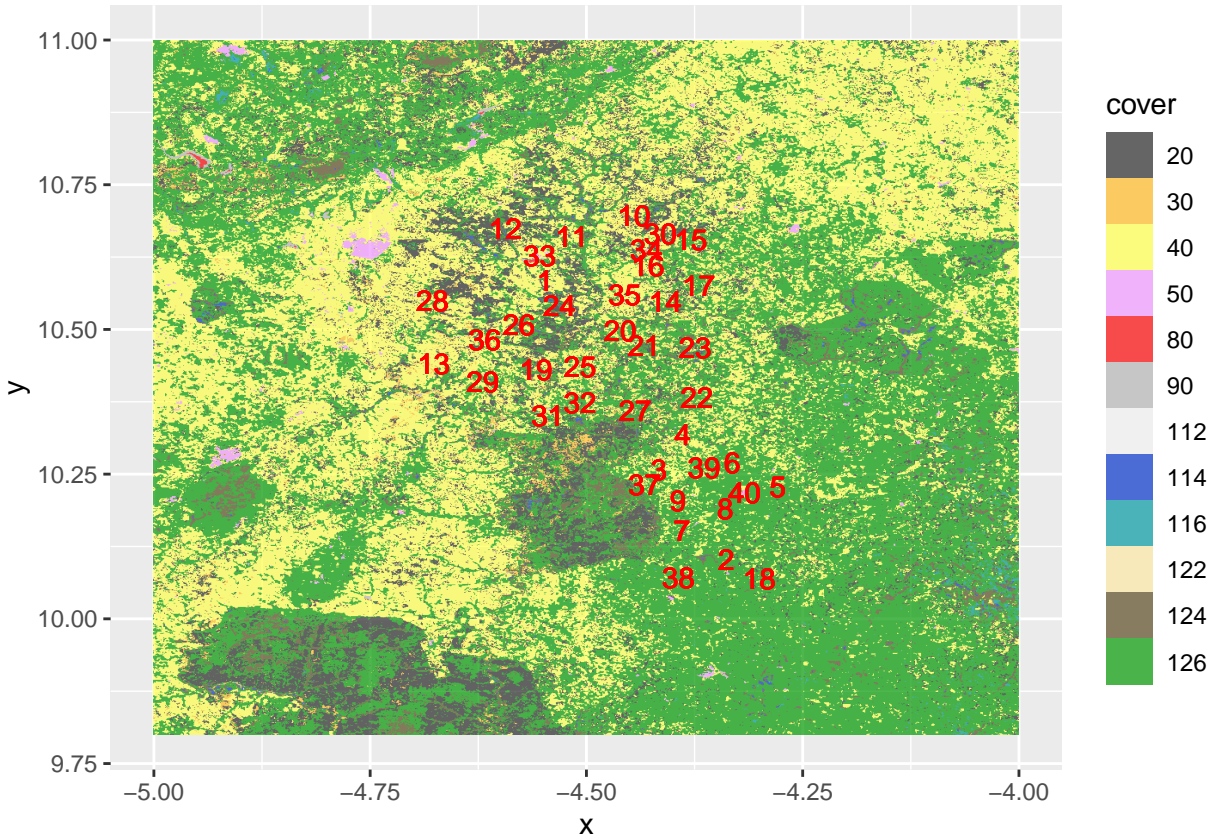


Figure 1: Cluster numbers overlaid on map of land cover (see **Table 1** for detailed key)

Joining, by = "cluster"

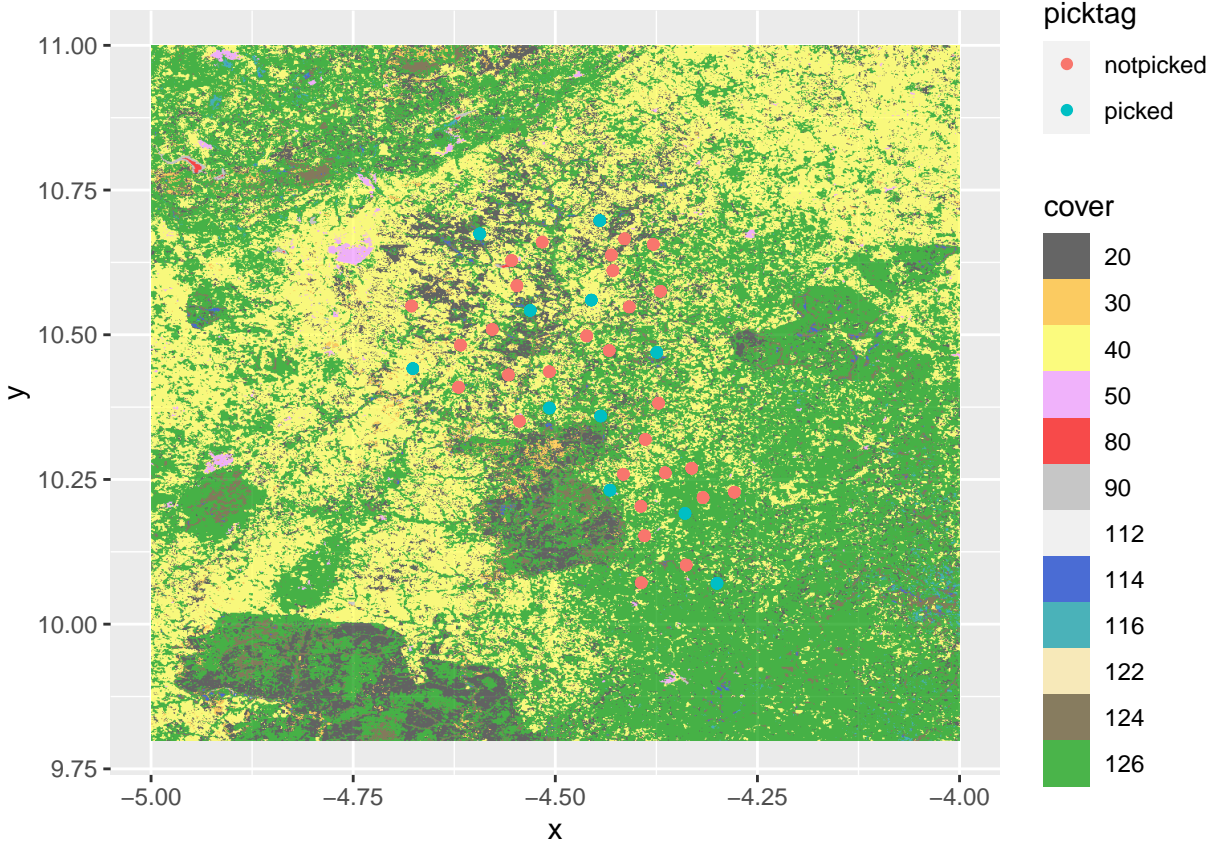


Figure 2: Picked/unpicked Clusters plotted on a map of land cover (see **Table 1**)

It looks like a cline of thinning forest from S-N with some shrubland roughly where Mafalda defined the forest park as. So let's make sure we have some samples represented by all of these.

We want to sample in four, evenly spaced time points. The tables I am using to generate these figures suggest that sampling began for all Clusters in Y1.S2, so this seems like a good starting point. Then maybe we could pick Y1.S4 (which looks like the first 'half' of the DUO rollout), Y2.S2 (after the second 'half' of the staggered DUO rollout) and Y2.S4 (after the rollout has been completed).

- We picked: **37, 8, 27, 23, 32, 13, 12, 35, 24, 18, 10**
- From each sample, we want to sequence 10 mosquitoes, over four time points, per cluster (440 samples in total)
- Some of the mosquitoes will fail to sequence well, so it may be worth seeing if we can use a few 'spare' per sample set
- In this case, perhaps the time points ought to be **Y1.S2, Y1.S4, Y2.S2, Y2.S4**

The land cover data above is from here from Copernicus.

Table 1: Metadata table for land cover values

##	V1	V2	V3
## 1	0	#282828	Unknown. No or not enough satellite data available.
## 2	20	#FFBB22	Shrubs.
## 3	30	#ffff4c	Herbaceous vegetation
## 4	40	#F096FF	Cultivated and managed vegetation / agriculture.
## 5	50	#FA0000	Urban / built up.

## 6	60	#B4B4B4	Bare / sparse vegetation.
## 7	70	#F0F0F0	Snow and ice
## 8	80	#0032C8	Permanent water bodies
## 9	90	#0096A0	Herbaceous wetland.
## 10	100	#FAE6A0	Moss and lichen.
## 11	111	#58481F	Closed forest, evergreen needle leaf.
## 12	112	#009900	Closed forest, evergreen broad leaf.
## 13	113	#70663E	Closed forest, deciduous needle leaf.
## 14	114	#00CC00	Closed forest, deciduous broad leaf.
## 15	115	#4E751F	Closed forest, mixed.
## 16	116	#007800	Closed forest, not matching any of the other definitions.
## 17	121	#666000	Open forest, evergreen needle leaf.
## 18	122	#8DB400	Open forest, evergreen broad leaf.
## 19	123	#8D7400	Open forest, deciduous needle leaf.
## 20	124	#A0DC00	Open forest, deciduous broad leaf. periods.
## 21	125	#929900	Open forest, mixed.
## 22	126	#648C00	Open forest, not matching any of the other definitions.
## 23	200	#000080	Oceans, seas. Can be either fresh or salt-water bodies.