Trapping protocol

2021-07-13

Preparation for field work

Before going to the field it's important the following are checked

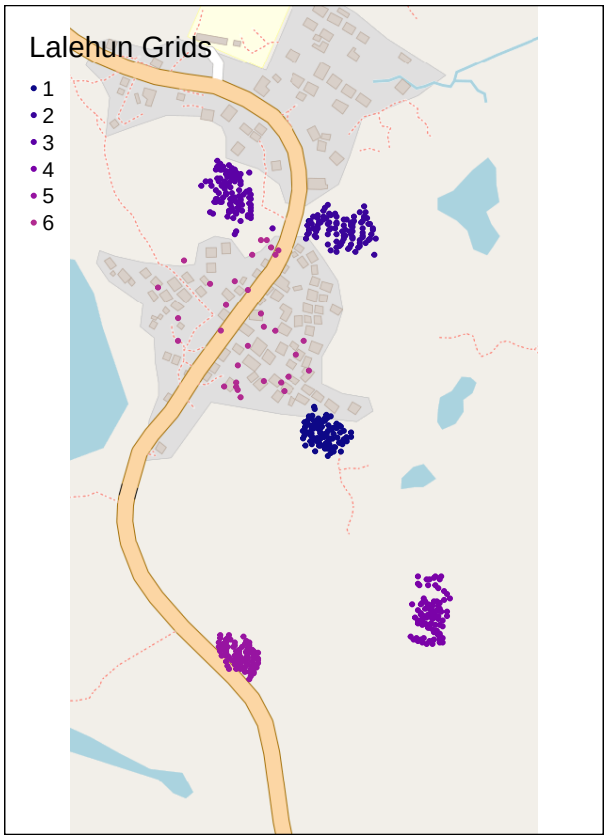
1. Adequate number of clean and functioning Sherman traps are brought. You will need at least **324** to set up the correct number so please bring some extra.
2. Enough sample pots for rodent specimens
3. Spare batteries for GPS devices
4. Battery packs if possible for the electronic tablets
5. Working portable freezer that can be stored at Panguma Hospital Lab
6. Paper copies of the data entry form in case the pads stop working

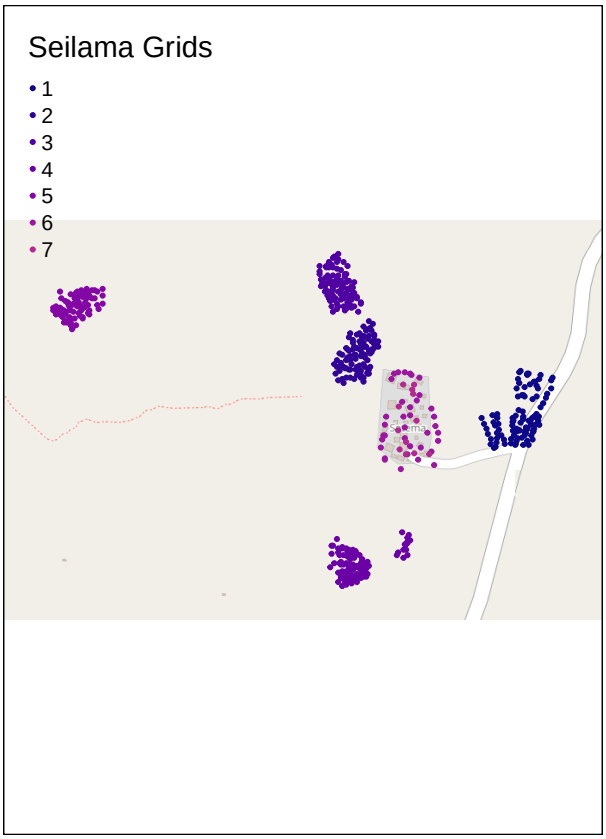
Finding the trap sites

Using the GPS device (GPS MAP65) to find the study sites.

The coordinates of the corners of the study grids are below. To find them you can use the GPS.

First turn on the device and press the find button on the front above mark. Use the direction buttons to select Coordinates and press enter. This takes to a page that asks you to enter the location. The left and right arrows at the bottom of the screen move across the numbers you can control what is highlighted using the directional buttons and enter selects. This will then produce a purple line that will guide you to the coordinates. Tie some ribbon to a plant to identify this corner of the grid and then perform the same for the 3 other corners.





Lalehun

We have set up **six** sites in Lalehun. Each site represents a grid that we set lines of traps in. Each line is 7 traps.

For each of the below grids there are coordinates for the corners of the grid. Try and set up lines of traps within the grids so it would be easier if you find the corners first

1. **Grid 1**: Edge of the village
   - Closest to the village = 8 11.801 N and 11 4.767 W
   - Furthest from the village = 8 11.782 N and 11 4.742 W
   - 8 11.781 N and 11 4.775 W
   - 9 11.769 N and 11 4.758 W
2. **Grid 2**: Within and near a wet rice field
   - Closest to the village = 8 11.921 N and 11 4.771 W
   - 8 11.94 N and 11 4.758 W
   - Furthest in the field = 8 11.923 N and 11 4.727 W
   - 8 11.908 and 11 4.739 W
3. **Grid 3**: Split into two, one part on the banana field and fallow land, the other on the banana field and pineapple garden
   - Near the compound = 8 11.9417 N and 11 4.811 W
   - In the fallow land = 8 11.92 N and 11 4.822 W
   - By the water store = 8 11.967 N and 11 4.826 W
   - In the fallow land = 8 11.953 N and 11 4.838 W
4. **Grid 4**: Long term fallow land
   - Closest to the road = 8 11.644 N and 11 4.699 W
   - Across the hill = 8 11.687 N and 11 4.696 W

- Up the hill = 8 11.644 N and 11 4.681 W
- Up the hill furthest from the road = 8 11.687 N and 11 4.68 W

5. **Grid 5**: Cassava plantation
   - Close to the road = 8 11.619 N and 11 4.811 W
   - Down the hill along the road = 8 11.633 N and 11 4.831 W
   - Into the field = 8 11.647 N and W 11 4.832 W
   - 8 11.635 N and 11 4.806 W
6. In 3 lines through the village
   - Line 1 beginning = 8 11.911 N and 11 4.797 W
   - Line 1 end = 8 11.819 N and 11 4.79 W
   - Line 2 beginning = 8 11.888 N and 11 4.822 W
   - Line 2 end = 8 11.82 N and 11 4.802 W
   - Line 3 beginning = 8 11.872 N and 11 4.828 W
   - Line 3 end = 8 11.809 N and 11 4.818 W
7. **Within houses**
   - 4 traps per home

We will add another "site" which will be traps within the houses. For the traps in the houses it is important to note what the room is used for, the type of material the house is made from and the type of roof.

For Lalehun we want to have traps in homes from across the village. Please try and make sure that traps are placed in homes from as many as the squares of **Figure 2** as possible. You will also need to record how many houses you asked to place traps in and how many said no. There is a separate **Indoor** sheet to record this on.

Seilama

Is positioned in a relatively forested area South West of Panguma. There is significant agricultural activity with fallow, clearance and burning practices used.

We have set up **six** sites in Seilama.

1. **Grid 1**: Palm plantation, near the village and main road
   - Close to the main road = 8 7.325 N and 11 11.539 W
   - Down the road away from the village = 8 7.375 N and 11 11.511 W
   - 8 7.375 N and 11 11.535
   - Set this corner yourself
2. **Grid 2**: Cacao and Coffee plantation
   - Close to the village = 8 7.378 N and 11 11.649 W
   - Along the stream = 8 7.4 N and 11 11.643 W
   - 8 7.413 N and 11 11.653 W
   - Away from the village = 8 7.384 N and 11 11.67 W
3. **Grid 3**: Recently harvested dry rice field
   - Close to the village = 8 7.424 N and 11 11.657 W
   - Along the ravine = 8 7.446 N and 11 11.66 W
   - 8 7.467 N and 11 11.672 W
   - 8 7.443 N and 11 11.685 W
4. **Grid 4**: Wet rice plantation
   - Closest to the village = 8 7.234 N and 11 11.651 W
   - Furthest from the village = 8 7.22 N and 11 11.669 W
   - Into the field = 8 7.255 N and 11 11.673 W
   - 8 7.234 N and 11 11.678 W
   - Line outside of grid beginning = 8 7.258 N and 11 11.619 W
   - Line outside of grid end = 8 7.258 N and 11 11.619 W
5. **Grid 5**: Disturbed forest, long term fallow
   - Closest to the village = 8 7.413 N and 11 11.871 W
   - Away from the village = 8 7.428 N and 11 11.884 W

    - 8 7.441 N and 11 11.861 W
    - 8 7.43 N and 11 11.849 W
6. Within the village, outside of houses, two lines of 7 within the village
    - Set in a ring around the village
    - Line 1 beginning = 8 7.307 N and 11 11.625 W
    - Line 1 end = 8 7.357 N and 11 11.624 W
    - Line 2 beginning = 8 7.31 N and 11 11.6 W
    - Line 2 end = 8 7.362 N and 11 11.611 W
7. **Within home**

Seilama is a much smaller village so just try and make sure that you have good coverage of the different areas of the village when setting the traps in houses.

Bambawo

Bambawo was selected due to its proximity to the national park and relatively heavily forested areas of Eastern Province while being on the outskirts of Kenema.

Four sites have been established in the village. We were missing traps for the first visit so two further trap sites will be established on the the next visit. Traps across the village and within the houses will be placed starting at visit 2.

1. **Grid 1**: Far forest site. Previously used by mining company. Remains of accomodation houses for miners in the area. Forest currently used for animal trapping, nil significant disturbance. +
2. **Grid 2**: Rice farm on hillside recently cleared and burned.
3. **Grid 3**: Old quarry site. Open mining now not significantly used. Low lying shrub surrounds
4. **Grid 4**: Mixed used agricultural land near the village. Currently grain and banana.

Lambayama

Baiama

Data collection process

Direct ODK entry (Preferred)

There are three forms you can access through ODK connect on your mobile phone or the study team tablets. The forms once saved will automatically be sent to the ODK server once they can connect to the internet. There is a sim card in the tablet that can be loaded with credit.

1. site_setup_v2: This sheet is completed for each site on the first day of trapping. It is important to ensure you correctly write the trap number and it's coordinates. If you make any errors you can edit the file or notify Dianah/David and they can amend it. You will describe each site, the habitat and surroundings of each trap and the coordinates for each trap. Photos can be taken if you are having difficulty completing the questions.
2. trap_check_v1: This sheet is used to collect information about the number of traps missing **bait**, **have been sprung shut** or contain **rodents** the next morning. It may be easier to note the traps on a piece of paper first and then to enter the data into ODK.
3. rodent_v1: This sheet is used to collect information about the trapped rodent. The most important parts of this are to ensure that the trap number and rodent number are correct. The trap number is important to know where the rodent came from. The rodent number should be made by putting the number of the visit, then the 3 letters of the village and then the number this rodent is for this visit. For example: + The 12th rodent trapped in the 2nd visit in Seilama would be 2SEI-012 + The 3rd rodent trapped on the 1st visit in Bambawo would be 1BAM-003

Data entry sheets

The **Trap site setup** sheet needs to be completed once for each trap site (the grid of 49 traps) once during the study visit for all of the sites that are setup (so 7 including the indoor traps). I expect 7 completed forms from each village. Please try and be as accurate as possible with the GPS coordinates.

The **Trap check** sheet needs to be completed for each trap site for each study night.

The **Rodent** sheet needs to be completed for each rodent that has been trapped.

The **Indoor** sheet only needs to be completed once for each set of traps placed indoors, so once per village.