Mt Victoria Vermin Trappers Report

Trap line: Telford

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Last run: 2024-05-05

Contents

1 Introduction

This is a simple report of trapping activity and outcomes for the Mt Victoria Vermin Trappers' **Telford** trap line which covers the northern part of Wellington's Southern Walkway between Roseneath Park & Lookout and Mount Victoria Lookout.. It uses the latest 'complete trapline' records since 2017-03-06 downloaded from trap.nz at 2024-05-05 14:28:28.453675.

The **Telford** trap line comprises 34 traps made up of the types shown in Table 1. This includes 3 supplementary traps.

```
## Warning: fonts used in ‘flextable‘ are ignored because the
## ‘pdflatex‘ engine is used and not ‘xelatex‘ or ‘lualatex‘. You
## can avoid this warning by using the
## ‘set_flextable_defaults(fonts_ignore=TRUE)‘ command or use a
## compatible engine by defining ‘latex_engine: xelatex‘ in the
## YAML header of the R Markdown document.
```

Table 1: Trap types

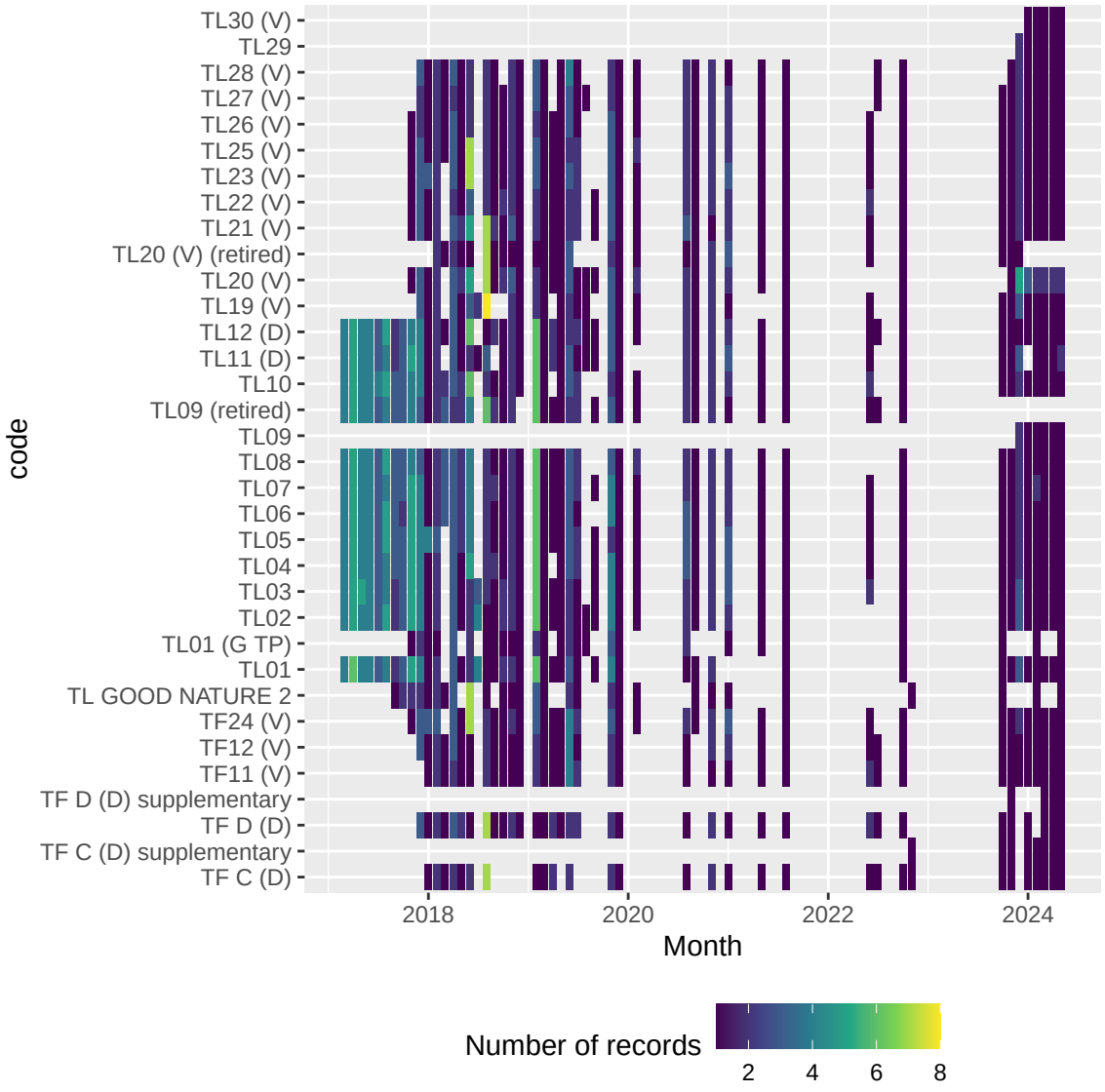
trap type	N
A24	2
DOC 200	6

Table 1: Trap types

trap type	N
Victor	26

2 Trap checking frequency

Figure **??** shows the frequency of records for each trap by month since the start of trapping. Normally we would hope there to be at least 2 checks per month. There are some clear gaps which will affect any subsequent 'trend' analysis.



3 Species caught

The species caught since the beginning of the monitoring dataset (2017-03-06) are shown in Table **??**. Note that this does not (cannot) include any species killed by the A24 traps (or indeed any other traps) which have then been eaten as carrion or otherwise removed before the trap has been re-checked.

In addition the frequency of checking (see Figure **??**) is likely to affect the frequency of species capture since 'full' traps are unlikely to attract further kills until cleared.

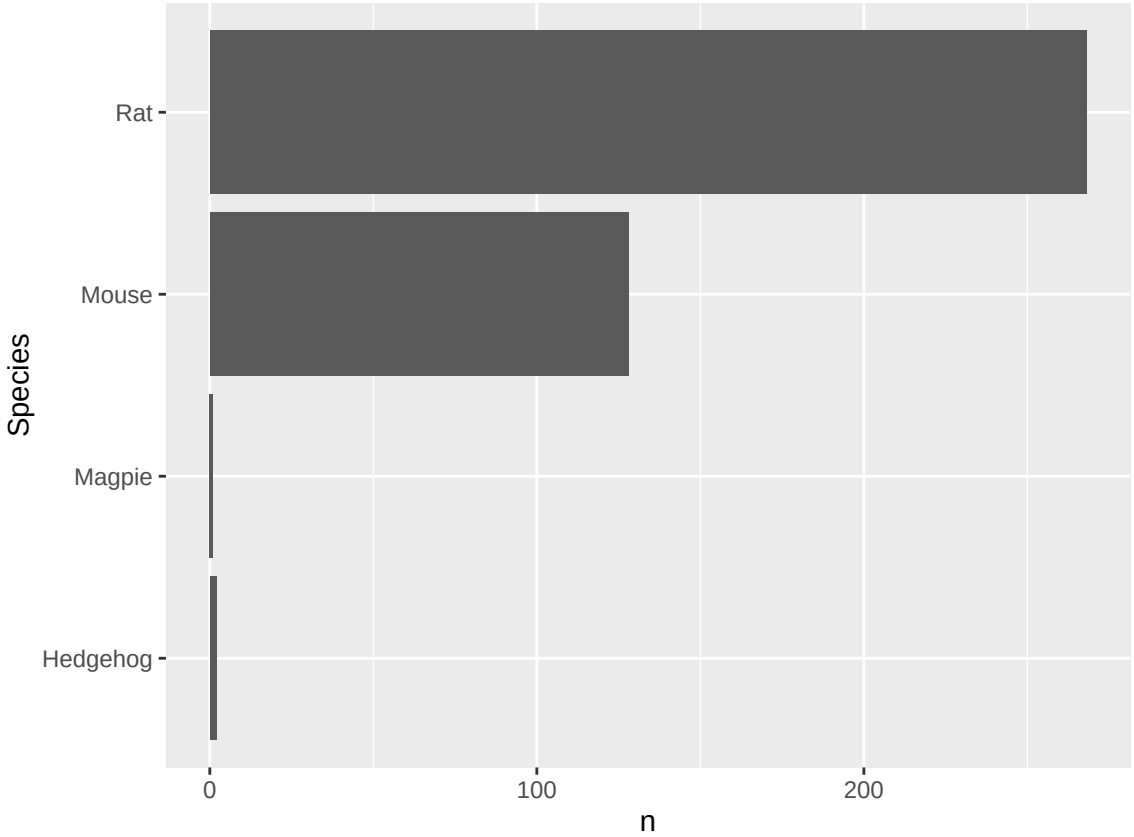
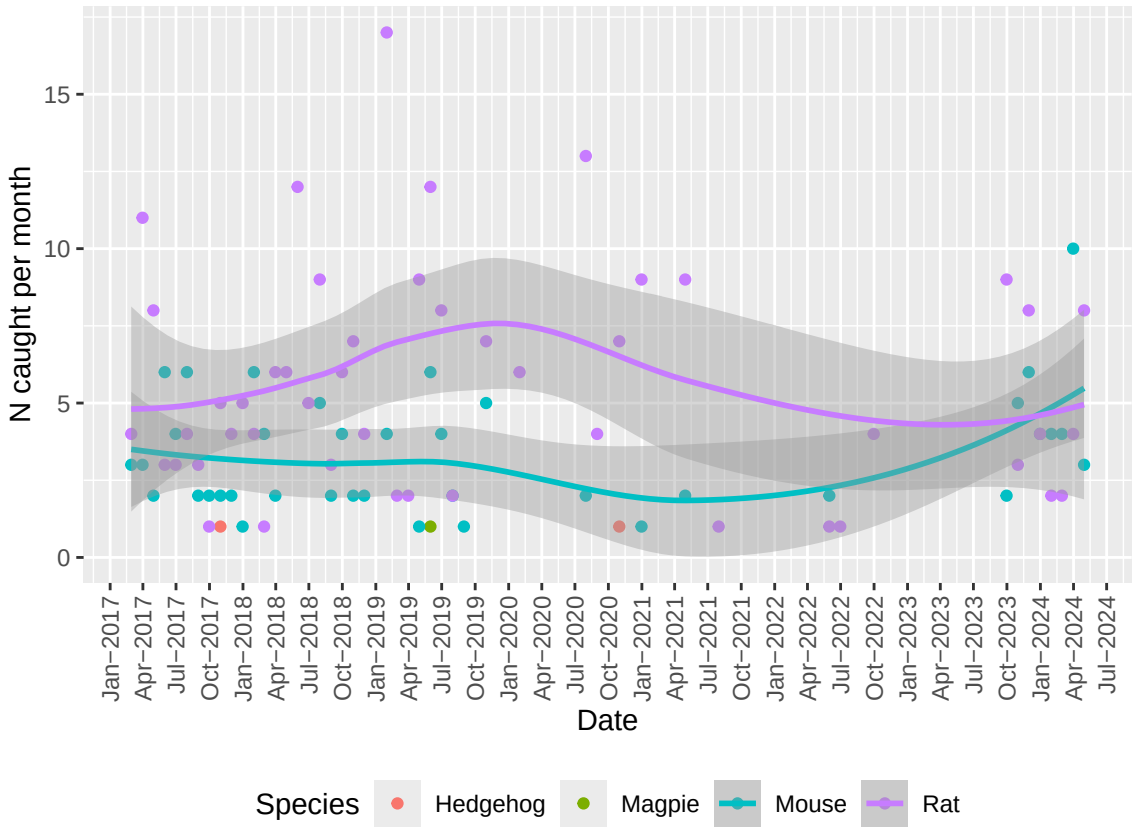


Figure **??** shows the frequency of capture of different recorded species over time as frequency per month with additional smoothed fit lines for each species where sufficient data exists.

This plot appears to be particularly affected by the frequency of checking patterns shown in Figure **??**. However if we compare periods of relatively frequent checking it appears thaty the frequency of rat capture is lower in early 2024 than in (e.g.) early 2020. However it also appears that the frequency of mouse capture has increased.

```
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : span too small.  fewer data values
## than degrees of freedom.

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : at 17465

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : radius 30.03
```

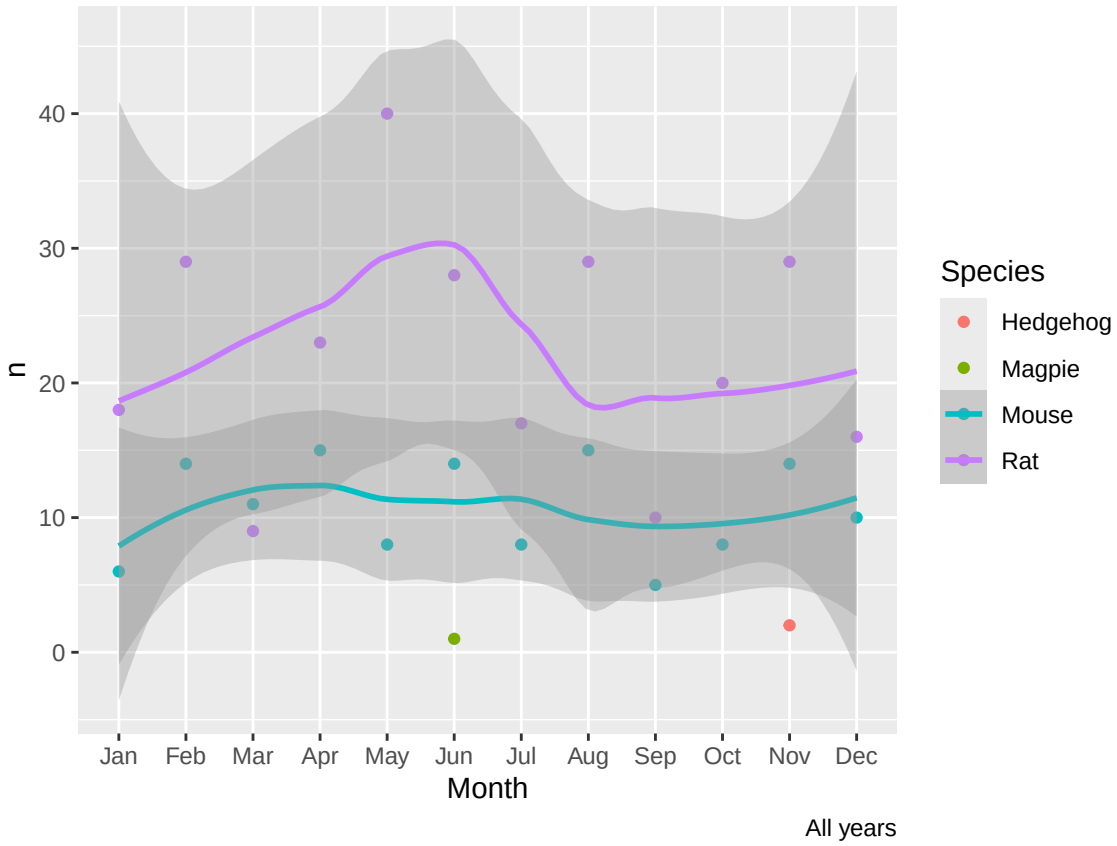
```
## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : all data on boundary of
## neighborhood. make span bigger

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : pseudoinverse used at 17465

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : neighborhood radius 5.48

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : reciprocal condition number 1

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : at 18571

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : radius 30.03

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : all data on boundary of
## neighborhood. make span bigger

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : There are other near singularities
## as well. 30.03

## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : zero-width neighborhood. make span
## bigger
## Warning in simpleLoess(y, x, w, span, degree = degree,
## parametric = parametric, : zero-width neighborhood. make span
## bigger

## Warning: Failed to fit group 1.
## Caused by error in `predLoess()`:
## ! NA/NaN/Inf in foreign function call (arg 5)
```



4 Seasonal analysis

Do we find a monthly/seasonal pattern?

```
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```



5 Summary

Goes here