Reporting

Reporting is critical for accountability to trappers, funders, councils etc. It's also really interesting. Find out more about the many easy reporting options here.

https://trap.nz/reports

- [Project reporting](#)
- [Creating a static hex project map](#)
- [Camera trap recording and reporting including AI](#)
- [Reporting using the NZAT / trap.nz reporting app](#)
- [Understanding the bait-taken calculations](#)

Project reporting

This is helpful for externally funded projects that are required to provide evidence of results achieved by the project.

The reports are broken into sections, Trap reports, Bait station reports, and Monitoring reports

Links to these reports can be found under the **reports** heading on your project page and can be generated using a variety of filters to show the data wanted.

The most commonly used are:

Trap records with map View/Download trap records. Optionally filter by date, species caught, etc

Heatmaps are available via the layer switcher (top right of the map)

Multi-project trap records Report traps across multiple projects

Project	Line	Code	Trap type	Date ▼	Status	Recorded by	Initial bait	Rebaited	Bait type	Strikes	Species caught	Maturity	Trap condition	Note
Waihoanga demo	ridge	T009	AT220	22 Jul 2022 - 08:59	Sprung	Lenore Winterburn	None	No	None	1	Stoat	Adult	Needs maintenance	
Waihoanga demo	ridge	tr12	Timms	20 Jul 2022 - 08:27	Still set, bait bad	Lenore Winterburn	Cheese	Yes	Dehydrated Rabbit	0	None	Adult	OK	
Waihoanga demo	ridge	tr11	Timms	20 Jul 2022 - 08:26	Sprung	Lenore Winterburn	Cheese	Yes	Dehydrated Rabbit	1	Rat	Adult	OK	
Waihoanga demo	ridge	R002 / R002 supplementary	DOC 200	20 Jul 2022 - 08:25	Still set, bait bad	Lenore Winterburn	Dehydrated Rabbit	Yes	None	0	None	Adult	OK	

Or Multi-project trap records (with map) This shows a difference between projects in a visual way. Allowing the users to see what each project is achieving.

Traps last checked

This shows the date the installations were last serviced. This helps ensure they do not fall outside of their default maintenance period.

Line traps last checked

The report shows the date each line was last checked. It takes the date from the most recent record across all the traps in each line. Use the Trap date last checked to see the date individual trap were checked.

Line	Date last checked	Traps
gully	2022-07-04 12:00	4
ridge	2022-07-22 08:59	8
track	2021-12-19 00:00	8

Trap date last checked with map

Trap date last checked

Map shows the number of days since trap was last checked. "N" for never.

Line	Trap type	Trap sub type		Retired	Start Date	End Date	Tags	
- Any - ∨	- Any - ∨			Active ∨				○

Items per page

| 25 ∨ | Apply | Reset |
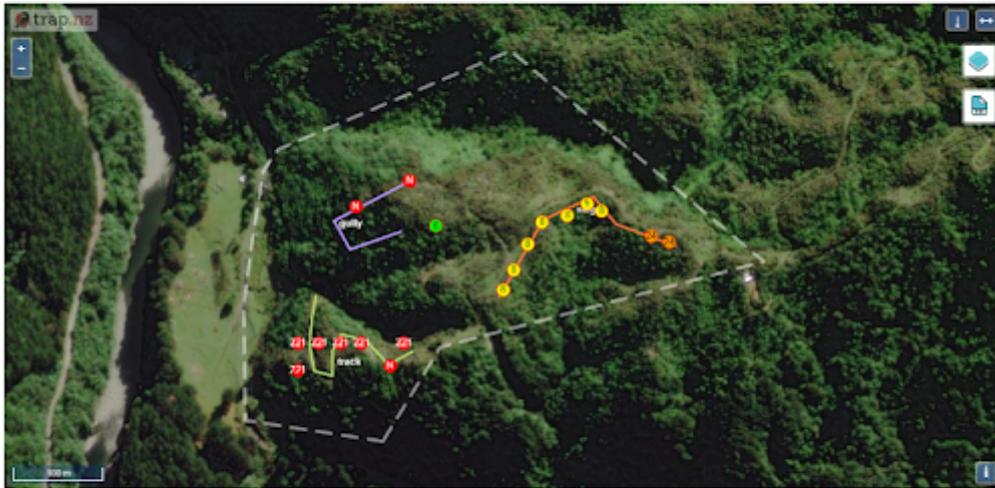
Code	Trap type	Line	Tags	Last checked	Days ago
double trap	DOC 200	gully		Never checked	
T010	AT220	gully		Never checked	
tr027	DOC 200	track		Never checked	
T009	AT220	ridge		22 Jul 2022 - 08:59	6
tr12	Timms	ridge		20 Jul 2022 - 08:27	8
tr11	Timms	ridge		20 Jul 2022 - 08:26	8
R002	DOC 200	ridge	test	20 Jul 2022 - 08:25	8
R003	DOC 200	ridge	test	20 Jul 2022 - 08:25	8
R004	Unspecified	ridge	test	20 Jul 2022 - 08:25	8

Multi-project Line date last checked

Line date last checked

The report shows the date each line was last checked. It takes the date from the most recent record across all the traps in each line. Use the Trap date last checked to see the date individual trap were checked.

Project Type	Project		
rural ▲▼	Demo Project Waihoanga demo Waihoanga koha demo test demo test demo	Apply	Reset

Project	Trap line	Date
Demo Project	Park traps	2022-06-16 08:44
Demo Project	W. Scientific Lh	2022-05-23 12:48
Demo Project	Central circuit	2022-06-14 13:26
Demo Project	Northern circuit	2022-06-16 09:17
Demo Project	[no line]	2022-06-03 11:01
Waihoanga demo	ridge	2022-07-22 08:59
Waihoanga demo	gully	2022-07-04 12:00
Waihoanga demo	track	2021-12-19 00:00

Corrected catch rate The corrected trap catch rate is expressed as the catches per 100 trap nights. Trap nights are the number of nights the trap is set for over the period selected. However, when a trap is sprung the trap is assumed to be available for only half the nights from the previous trap record date

Corrected catch rate

Corrected trap catch rate is expressed as the catches per 100 trap nights. Trap nights is the number of nights the trap is set for over the period selected. However, when a trap is sprung the trap is assumed to be available for only half the nights from the previous trap record date.

Trap ID

Line
gully
ridge
track

Date
Start date
19 Apr 2022

End date
28 Jul 2022

Species caught
None
Unspecified
Other
Bird
Canadian geese
Cat
Deer
Dog
Ferret

[Apply] [Reset]

Code	Line	Trap Nights	Catch strikes	Catches per 100 nights
Total:		172	18	10.47
R 005	ridge	21	2	9.52
R001	ridge	20.5	3	14.63
R002	ridge	48.5	3	6.19
R003	ridge	33	2	6.06
R004	ridge	33	2	6.06
T009	ridge	14	2	14.29
tr11	ridge	1	1	100.00
tr12	ridge	1	0	0.00
Tdbl 001	gully	0	1	
Tdbl002	gully	0	2	

Needing to know the amount of **hours taken to service the project?** Select tracks when in the App and record your tracks after which you access the projects page on the website, select **Reports** -**Project reports**

Select a displayed **track** the time spent checking the installations will show here

2022-07-29

View Edit

Start: Friday, July 29, 2022 - 10:55
End: Friday, July 29, 2022 - 10:55
Line: ridge
Project record type: Track

Trap Condition Shows traps across projects that have a condition set e.g. needs maintenance- now includes trap gone

Trap condition

Project	Code	Trap line	Date installed	Trap type	Record date	Trap condition	Status
demo 1	Mai003	Ridge line	2022-08-26	DOC 200	2023-01-10	OK	Trap gone
demo 1	R001 (retired)	Ridge line	2022-06-16	DOC 200	2023-01-10	Needs maintenance	Trap gone

This can also be downloaded as a csv file

Creating a static hex project map

The static project hex map is useful for projects to show an audience your project/projects catches in an interactive way

The hex map is great for embedding into project websites (i.e. wordpress custom html) via an html embed tag:

<embed src="https://trap.nz/static/hexmap/?birds&projects=[] style="width: 100vw; height: 700px" />

How do I get my own Hex Map?

The hex map only displays publicly listed projects. ensure your project has the **List this project publicly** and **Share summary** data checkboxes ticked (you can find these information in the projects Edit page.)

Use the URL in the format below. Add your project ID number(s) to the brackets, if multiple projects, comma seperate the numbers.

eg: https://trap.nz/static/hexmap/?projects=[109200,380101,967870,420471,173214,183460]

And if you are wanting to display bird counts
https://trap.nz/static/hexmap/?projects=[109200,380101,967870,420471,173214,183460]&birds

To find your project ID(s), navigate to the project home page where you will find the ID in the URL, eg:
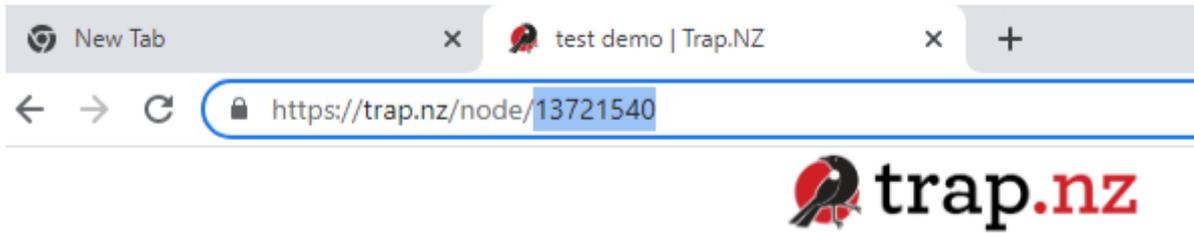
How do I see the results?

Copy and past the URL into a browser to test the results. It should looks something like this:
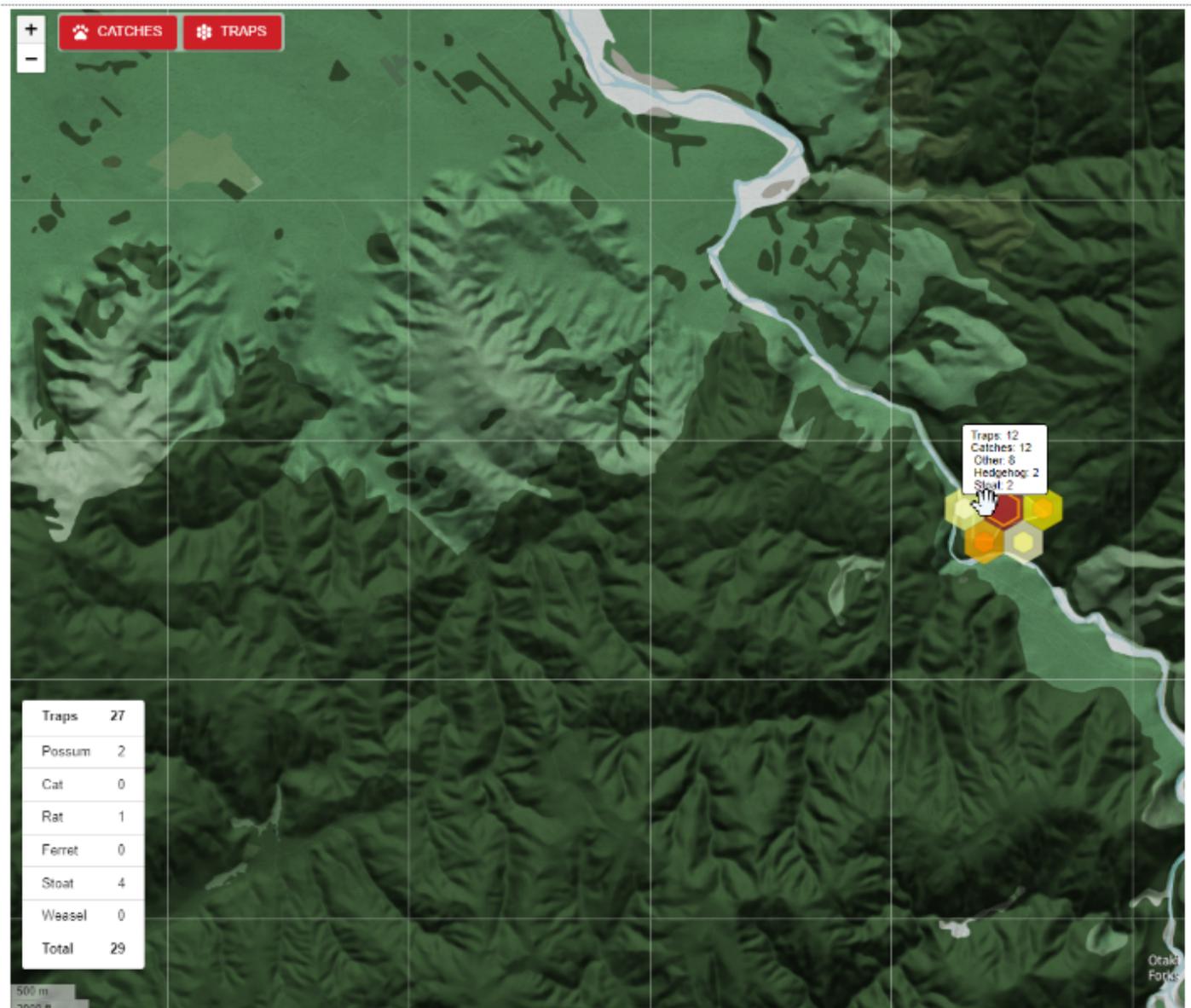
You can filter the catches and traps to reflect the catch you are wanting to display

🐾 Catches

- ◉ All
- ○ Rat
- ○ Cat
- ○ Possum
- ○ Ferret
- ○ Stoat
- ○ Weasel

⚙ Traps

Camera trap recording and reporting including AI

Projects using motion-triggered cameras ('camera traps') can use the Trap.NZ's camera trap functions to load and tag images, optionally using image recognition software (AI, artificial intelligence) for assist in detecting species.

In order to load and tag images, you will need to create a monitoring station with a type "Camera" for each of your camera traps. A Camera station will have a button to allow the uploading of images.

The new AI identification option allows members to upload and tag captured images to your trap.nz project easily.

1. Select the camera on your trap.nz project you are wanting to add images to.

2. Open the installation and select **upload images**
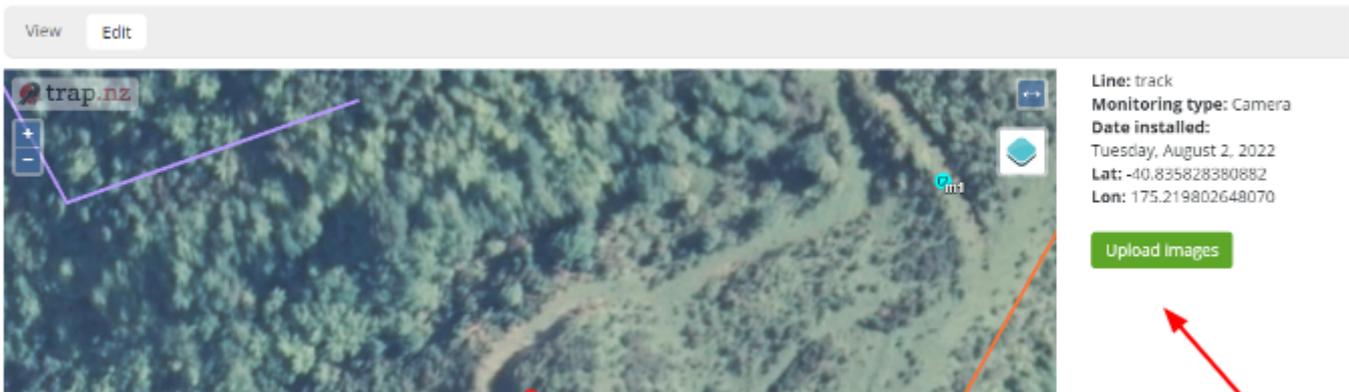
3. You will be prompted to drag and drop your files into the trap.nz page

Drag & drop some files here, or click to select files
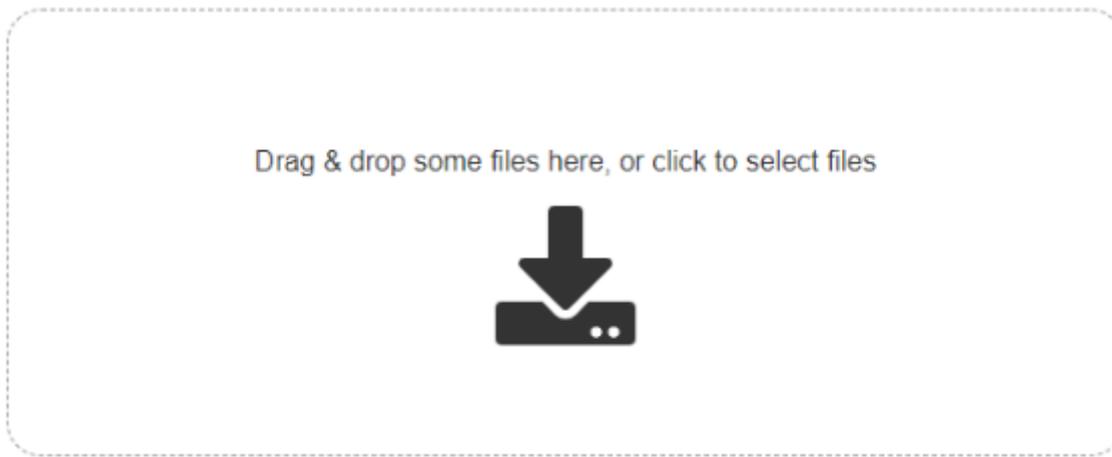
4. Your images will display ready for uploading. If the date/time shown is incorrect you can alter these settings here
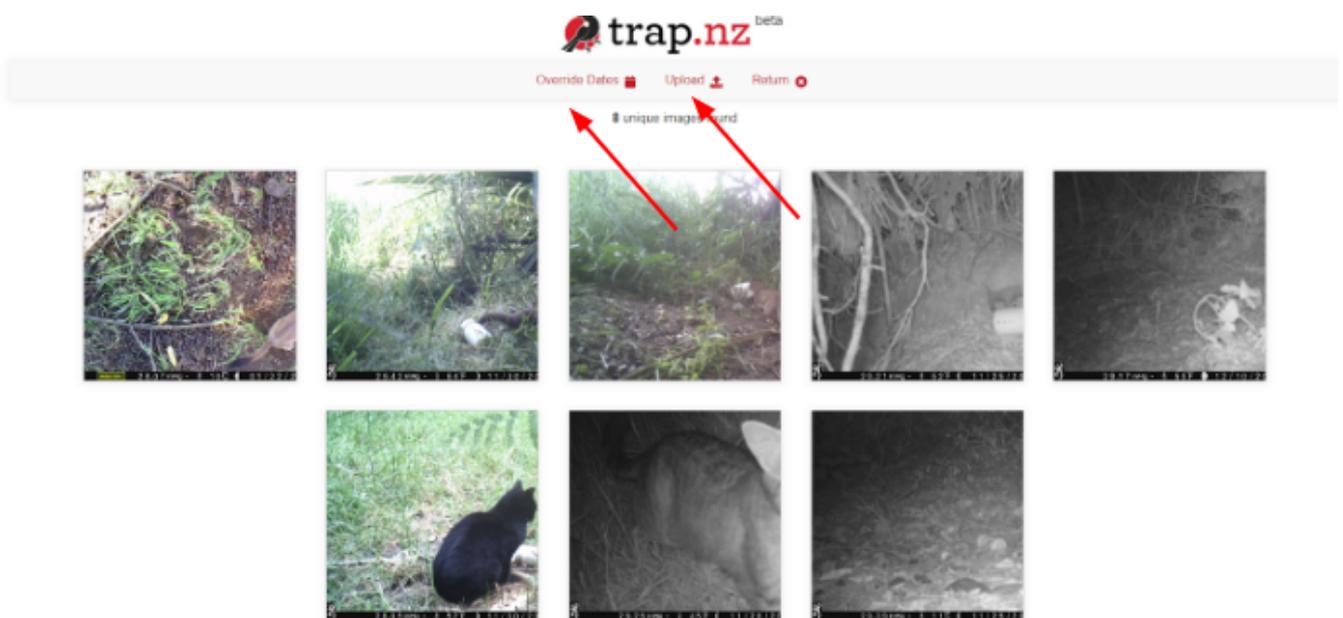
Note: the programme will detect any duplicate images ensuring you don't accidentally load them twice
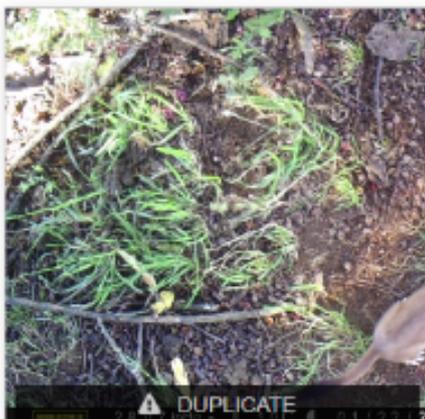
5. The images have all loaded successfully when the 100% appears in the bottom left corner

6. You can now choose to match with the AI and select return, be patient as this can take some time depending on the quantity being processed

6. If you choose to match it with the Artificial intelligence software, the chip icon appears when it has matched.

You can exit the page while it is being processed without fear of loosing your records or having to start again.
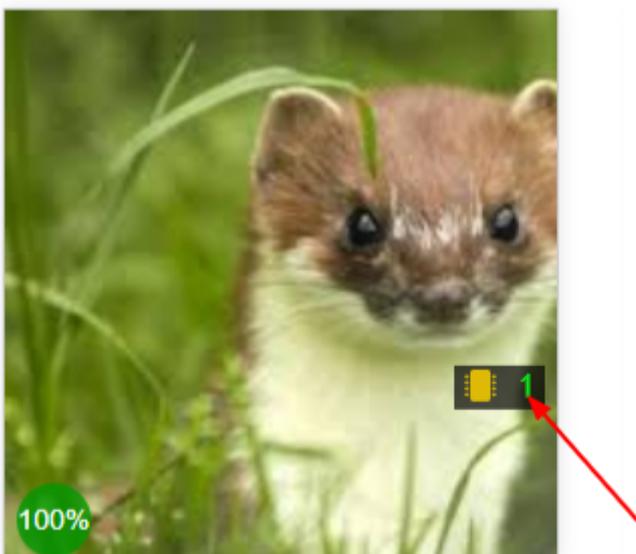
7. You will be redirected to the camera installation page, the records are displayed under the map, and you can now tag/ review species in the image set.

Camera images

Tag species in this image set

Date	Reviewed	Species detected	Images		
19 Sep 2022 - 11:15	No	Cat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Cat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Cat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Stoat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Stoat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Stoat	🖼	edit	delete
19 Sep 2022 - 11:15	No	Ferret	🖼	edit	delete
19 Sep 2022 - 11:15	No	Hedgehog	🖼	edit	delete

8. You can either use the mouse or the keyboard arrow keys to navigate the images. This allows you to easily edit the results

Sometimes the AI gets it right

Sometimes the AI gets it wrong, you can edit the details by selecting the correct species

9. To run reports from the Camera images, select the monitoring tab, manage records, manage camera images, and select the filters you would like to use

Reports can be exported using csv found at the bottom of the report page

For video help click the you tube link here https://www.youtube.com/watch?v=anBWH_9UY_s

Reporting using the NZAT / trap.nz reporting app

Individuals with one or more traps can see records of their trap interactions using the app.

To use the report, log in to trap.nz (with the account you use on the AT220 app) and go to https://trap.nz/_/nzat/at220-telemetry-report. It can also be found on the reports menu on trap.nz.

The report will show a series of 'Telemetry Records' documenting your sessions connecting the App to the trap. Typically, there should be a record for when you connect to the trap and another for when you disconnect (even if you just walk away or disconnect the battery, the app will save the disconnect record using the latest data collected from the trap). This allows further comparison of the records to identify what, if anything, has changed during the session.

By default, the report will filter in on last month's activities, but you can adjust the date range as needed.

You can further filter the records by:

Trap (name and wifi SSID code)

Battery

App Version

Firmware Version

App Platform (Android or iOS)

Remote Comms (This is for future remote capabilities)

Source (App vs Remote comms, again future focused)

Last Reboot Reason

Trap Health Status

Health Status reason

As well as the results, the report presents the totals and ranges (Battery Voltages, App and Firmware versions, etc) returned from the applied filters.

You can sort the results by most of the columns in the report.

Clicking on a view button on any row will allow you to inspect the record in detail, where you can also expand fields to look in detail at the technical state of the trap via Logs, EEPROM, etc.

The export to CSV button exports the set of records for external use as you see fit based on the filters you have applied.

Link to NZAT manual download

Understanding the bait-taken calculations

The bait-taken calculations can be a bit confusing to begin with, however, once you understand them it makes calculating the quantity of bait used within your project much easier.

When entering records in the field, the bait taken is automatically calculated by trap.nz based on the figures you have supplied.

There are some key points to know are :

* Bait taken is calculated from bait remaining on the current record minus the calculated bait remaining from the previous record with the additions and subtractions

* Records with the same date and time are invalid and will make calculations unreliable

* Bait-taken calculations are updated every few minutes, so may take some time to recalculate after changes are made

When working out the bait taken added you start at the bottom of the table and work up, In the case below

Bait station record date	Active ingredient	Formulation	Bait remaining	Removed	Added	Bait taken	Images		
2023-01-24 12:49	Brodifacoum	Block	0.085Kg	0.085Kg	0.200Kg	0.115Kg		edit	delete
2023-01-20 14:05	Brodifacoum	Block	0.050Kg	0.050Kg	0.200Kg	0.150Kg		edit	delete
2022-11-03 13:47	Brodifacoum	Block	0.050Kg	0.050Kg	0.200Kg	0.150Kg		edit	delete
2022-11-01 15:07	Brodifacoum	Block	0.066Kg	0.066Kg	0.200Kg	0.134Kg		edit	delete
2022-11-01 15:05	Brodifacoum	Block	0.000Kg	0.000Kg	0.200Kg	0.000Kg		edit	delete

1. On 01/11/22 the bait station had 0.200kg (1) added

Bait station record date	Active ingredient	Formulation	Bait remaining	Removed	Added	Bait taken
2022-11-01 15:05	Brodifacoum	Block	0.000Kg	0.000Kg	0.200Kg	0.000Kg

2. On the next visit (working up the table) 0.134kg had been taken (2), leaving 0.066kg remaining (3). The remaining old bait (0.066kg) (4) was removed and fresh bait supplied 0.200kg (5)
   [0.200 - 0.134 =0.066] {0.066 - 0.066 = 0.000} [0.000 + 0.200 = 0.200]

Bait station record date	Active ingredient	Formulation	Bait remaining 3	Removed 4	Added 5	Bait taken 2
2022-11-01 15:07	Brodifacoum	Block	0.066Kg	0.066Kg	0.200Kg	0.134Kg

3. The following visit 0.150kg had been taken (6) leaving 0.050kg (7), the 0.050kg was removed (8) and another 0.200kg was added of fresh bait (9)
[0.200 - 0.150 = 0.50] {0.050 - 0.050 = 0.000} [0.000+ 0.200 = 0.200]

Bait station record date	Active ingredient	Formulation	Bait remaining 7	Removed 8	Added 9	Bait taken 6
2022-11-03 13:47	Brodifacoum	Block	0.050Kg	0.050Kg	0.200Kg	0.150Kg

4. On the next visit, 20/01/23 the same quantity was taken as the previous visit so the calculations are the same as above

Bait station record date	Active ingredient	Formulation	Bait remaining	Removed	Added	Bait taken
2023-01-20 14:05	Brodifacoum	Block	0.050Kg	0.050Kg	0.200Kg	0.150Kg

5. On the final visit showing 24/01/23, 0.115kg had been taken (10) leaving 0.085kg(11) remaining, the 0.085kg (12) was removed and 0.200kg (13) of fresh bait added
[0.200 - 0.115 = 0.085] {0.085 - 0.085 = 0.000} [0.000+0.200=0.200]

Bait station record date	Active ingredient	Formulation	Bait remaining 11	Removed 12	Added 13	Bait taken 10
2023-01-24 12:49	Brodifacoum	Block	0.085Kg	0.085Kg	0.200Kg	0.115Kg