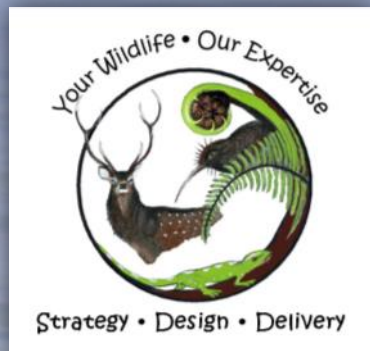


Predator Management: The Value in Understanding Animal Behaviour



Cam Speedy
Wildlife Management
Associates Ltd, Turangi



Predator Management

There are many tools in the predator toolkit
All have advantages, limitations & consequences



Most Powerful 'Tool' is Knowing Your Predator

How does each use the habitat at place?:

- Home ranges
- Social interactions
- Breeding rates
- Dispersal – timing & distances





30.17 inHg ↑

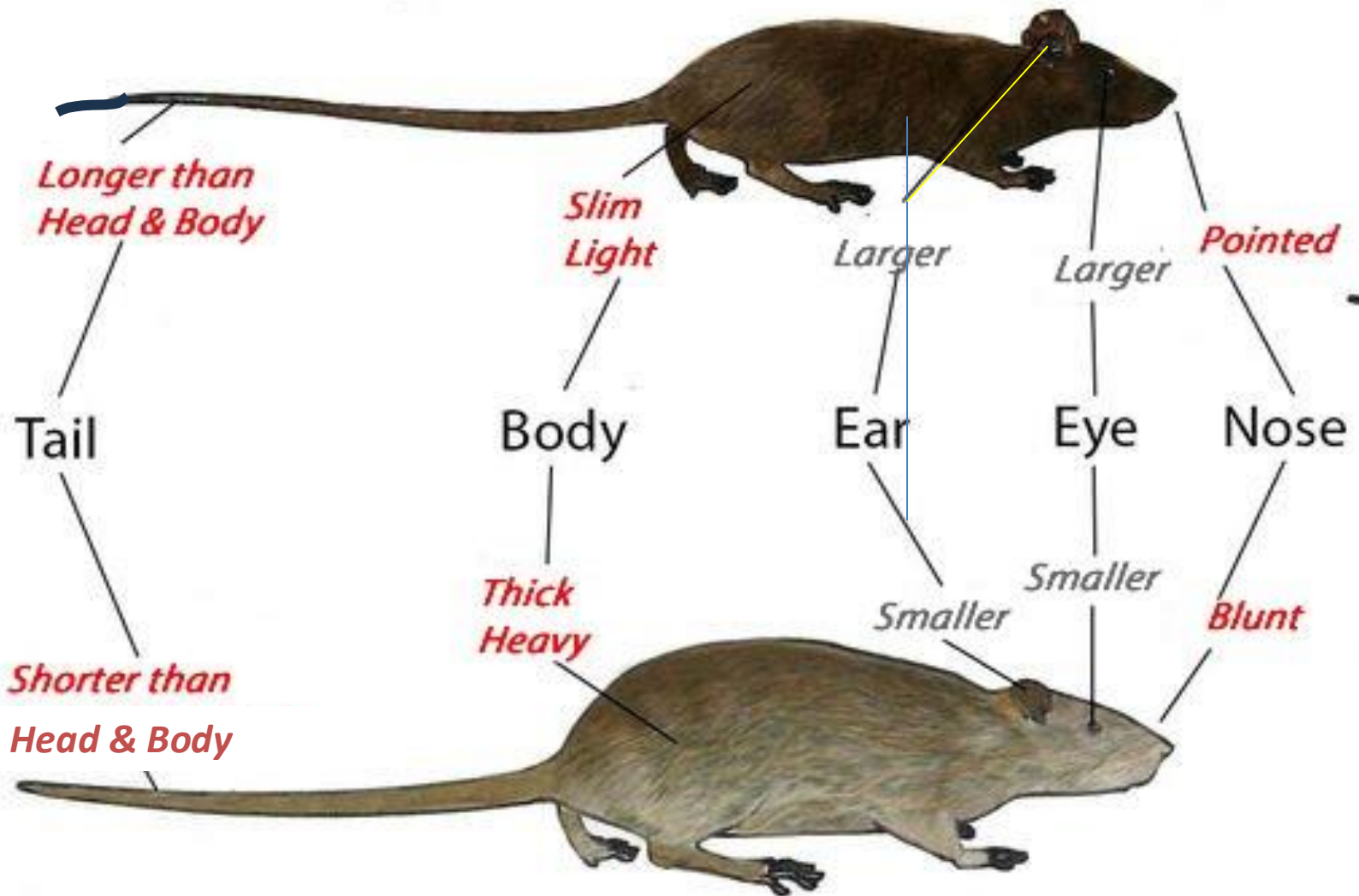
00:02

16°C



04/11/2024 08:19PM

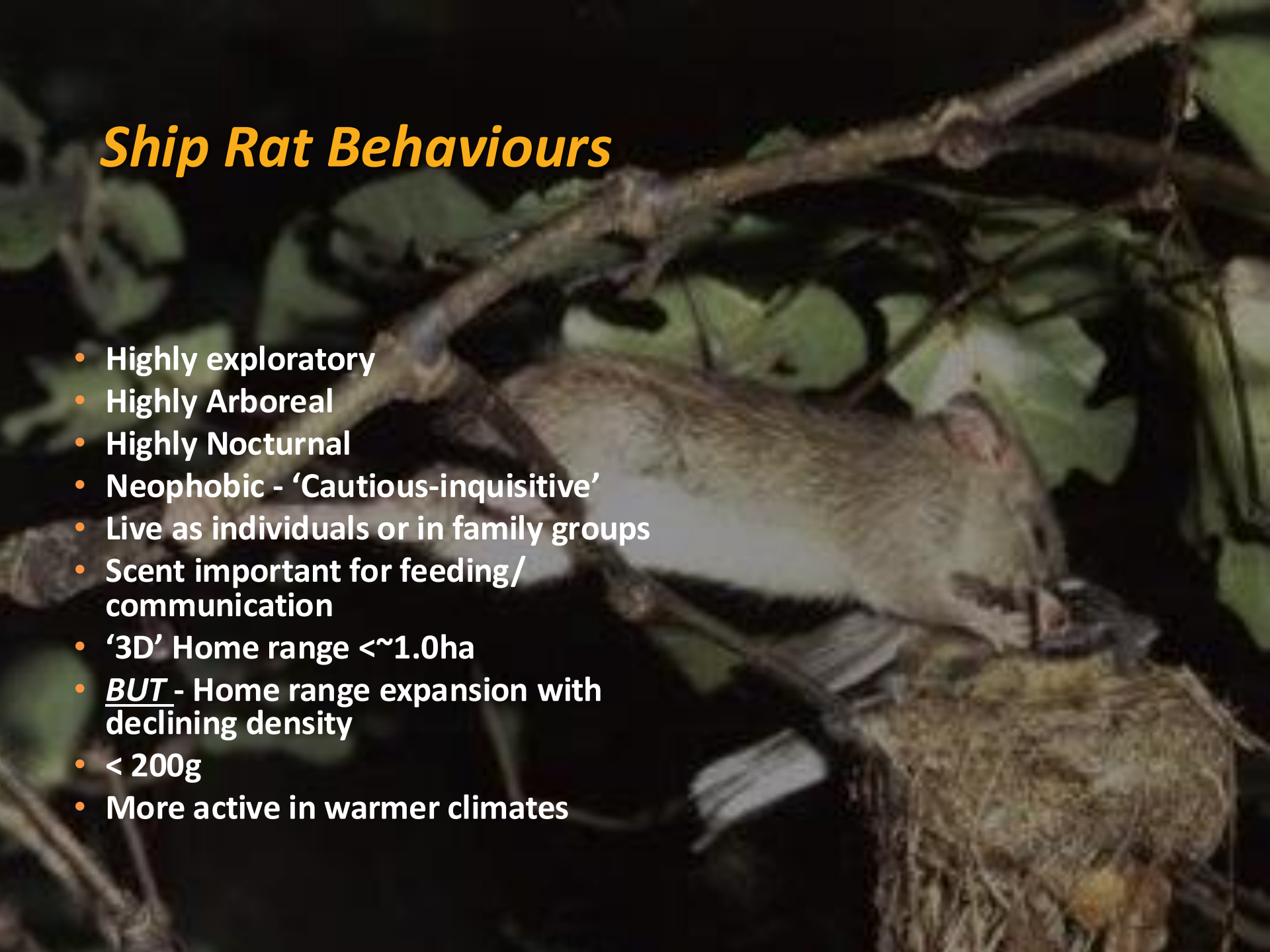
Ship Rat



Norway Rat

Ship Rat Behaviours

- Highly exploratory
- Highly Arboreal
- Highly Nocturnal
- Neophobic - 'Cautious-inquisitive'
- Live as individuals or in family groups
- Scent important for feeding/communication
- '3D' Home range $< \sim 1.0\text{ha}$
- BUT - Home range expansion with declining density
- $< 200\text{g}$
- More active in warmer climates



Norway Rat Behaviours

- Highly exploratory
- Strong swimmers
- Far less Arboreal
- Mostly nocturnal but also daytime
- Highly Neophobic - 'Cautious-inquisitive'
- Often live in colonies
- Scent important for feeding/communication
- Home Range av. ~6 ha
- Up to 600g
- Caché behaviour
- Heavy fur – active in cooler conditions





20:54 inHg

00:01

Previous (press and hold to rewind)

02:51AM G19

00:00:00 BV104-41 (RIF-50) 2347



20:04 inHg

00:00:00

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P06100 TT11073 E1020000 G1280000 BV13701 (RLL-30) 2340



20:02 inHg

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00:04



29.80 inHg -

00:01 18C



04/15/2024

05:00AM



Most Powerful 'Tool' is Knowing Your Predator

What drives them? (the 4 "F's"):

- Food (seed, fruit, prey, weather)
- Family (mating, protection of young)
- Fear
- Fighting (over food, over mates, when challenged - 'fight or flight')



Most Powerful 'Tool' is Knowing Your Predator

Behaviours:

- Cautious-inquisitive
- Neophobia
- Learned behaviours/avoidance
- Dominance-subordinance
- The 'Behavioural Battle'





Possum Night-Clubs



Possum Night-Clubs



Wallaby Night-Clubs



Possum Dominance Over Wallaby



Device Interaction - Possums



28.52 inHg ↓ 18°C 12/17/2024 01:48AM CAMERA 1

Device Interaction - Possums



28.42 inHg ↓ 15°C 12/18/2024 10:41PM CAMERA 1

Device Interaction - Possums



Device Interaction - Possums



28.66 inHg - 7°C ● 01/14/2025 01:12AM CAMERA1

Device Interaction – Stoats



27.36 inHg ↓ 9°C 10/06/2022 01:53PM CAMERA1

Device Interaction – Rats



28.04 inHg ↑ 44°F 03/14/2023 11:20PM CAMERA 1

Device Interaction – Rats



Device Interaction – Cats



Device Interaction – Cats



28.72 inHg ↑ 22°C 08/18/2023 02:42PM CAMERA 1

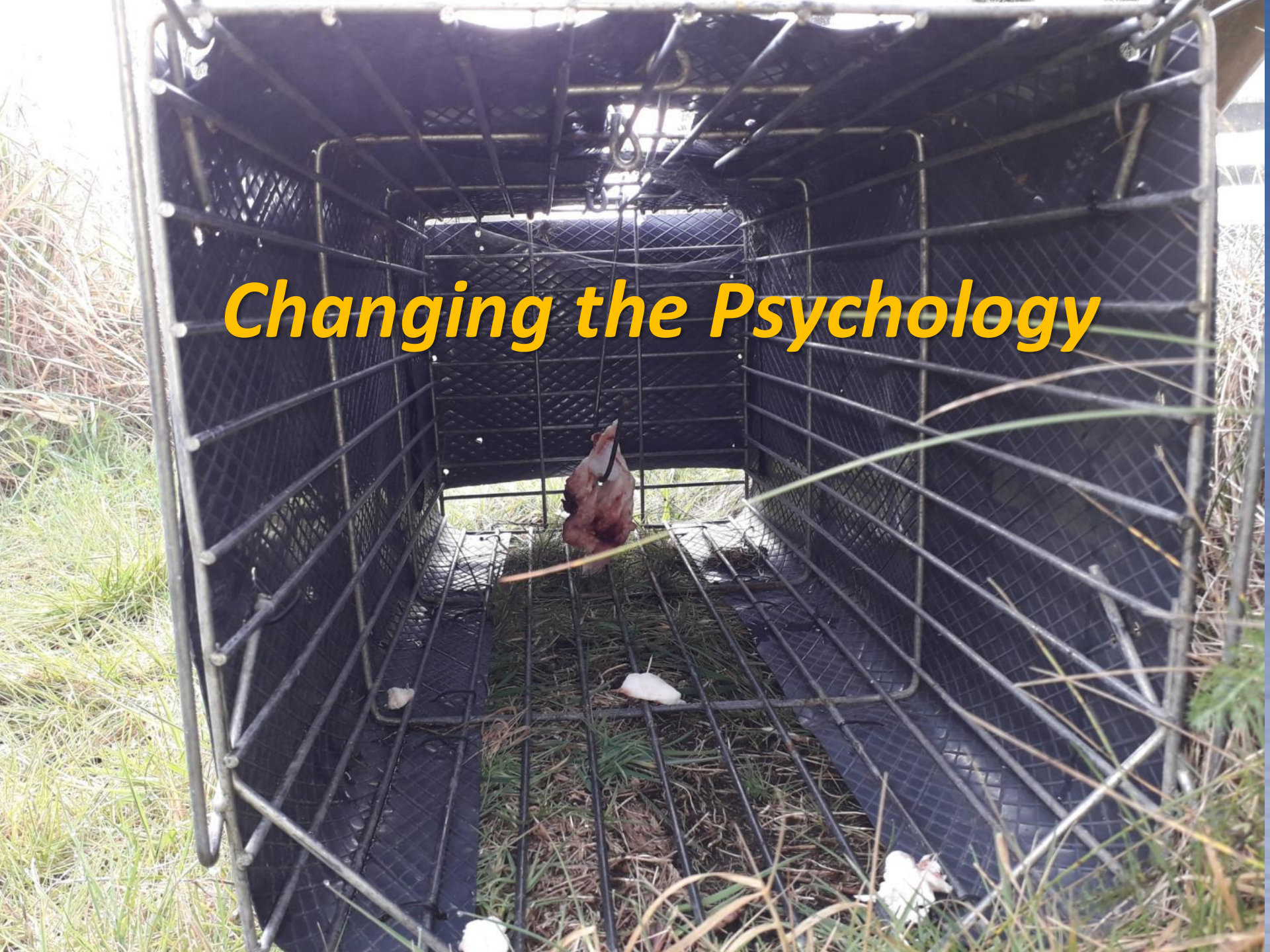
A dense forest scene with moss-covered tree trunks and branches. In the foreground, there are large, vibrant green ferns. The background is filled with more trees and foliage, creating a lush, green environment.

*80% of device encounters DO NOT
result in any pest interaction!*

A photograph of a lush, moss-covered forest. The scene is filled with tall, slender trees whose trunks and branches are heavily laden with vibrant green moss. In the foreground, large, feathery ferns with bright green fronds are prominent. The overall atmosphere is one of a wild, ancient, and undisturbed natural space.

**There is no point having kit out
there that predators ignore!**

Changing the Psychology



A photograph showing the interior of a wire mesh cage. A dead animal, possibly a raccoon, is lying on the metal floor of the cage. The cage is made of dark metal bars and chain-link fencing. A large, jagged red starburst graphic is superimposed over the image, containing the text "DANGER !" and "- DO NOT ENTER -".

DANGER !
- DO NOT ENTER -

A photograph of a dog, possibly a pit bull mix, sitting inside a wire cage. The cage is made of metal bars and chain-link fencing. The dog is looking towards the camera. The background is dark and indistinct. Overlaid on the image is a large, jagged green outline that frames the text. The text is in a green, bold, sans-serif font. The word 'WELCOME!' is in all caps. The words 'More free' are in title case, with 'More' underlined. The words 'Give-aways Inside' are in title case. The overall tone of the image is somewhat somber due to the cage setting.

WELCOME!
More free
Give-aways Inside



Increasing Interaction Rates using behaviour....

Lower Caution/Increase inquisitiveness

- *Close devices*
- *Prefeed (7 – 10 days)*
- *Utilise pest communication channels*
- *Win their confidence – with endorsements from friends & family*
- *Food and social interaction cues*
- *Train them to do what you want & they'll teach each other*

Feral Cat behaviour....



Predator Detection & Behaviour Monitoring



*Traps that Account for
Cautious Behavior...*



*Traps that Account for
Cautious Behavior...*



*How do Animals
Communicate using Scent
Trails...?*





Trap Location

- <20% of traps catch >80% of predators
- Predators are 'efficient' – learn how they use the landscape
- Monitor & critique every set



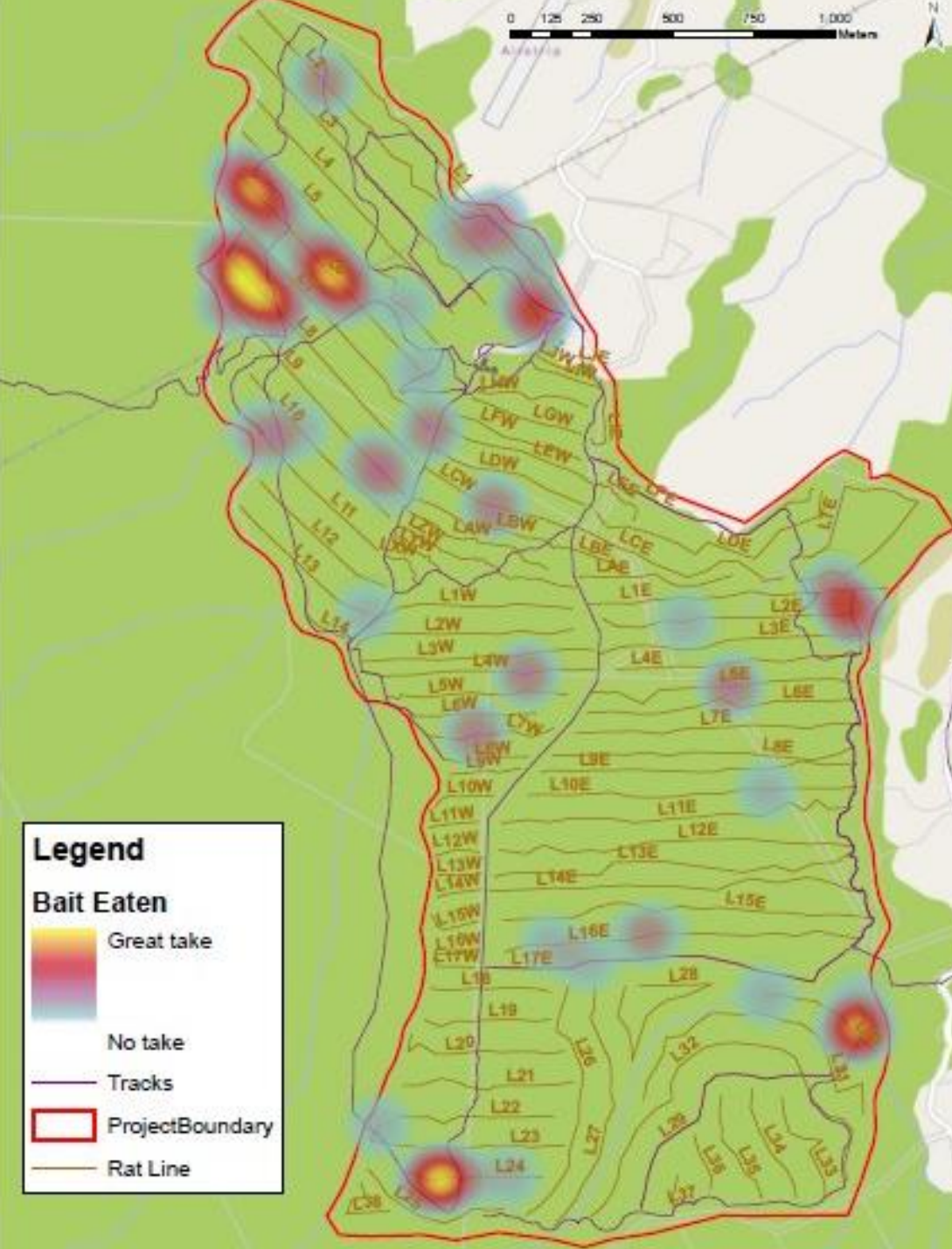
Trap Location



- **Linear features in the landscape** (roads, tracks, game-trails, rivers, ridges, tree rows, hedge rows, fence-lines, culverts)
- **Ferrets & cats don't like water** – target bridges and log crossings
- **Avoid cold wet sites** – warm & dry are always best
- **Hay-barns make great cat/ferret trap sites**

Trap Location

Office formulated "grids"
don't account for
predator 'site'
preferences

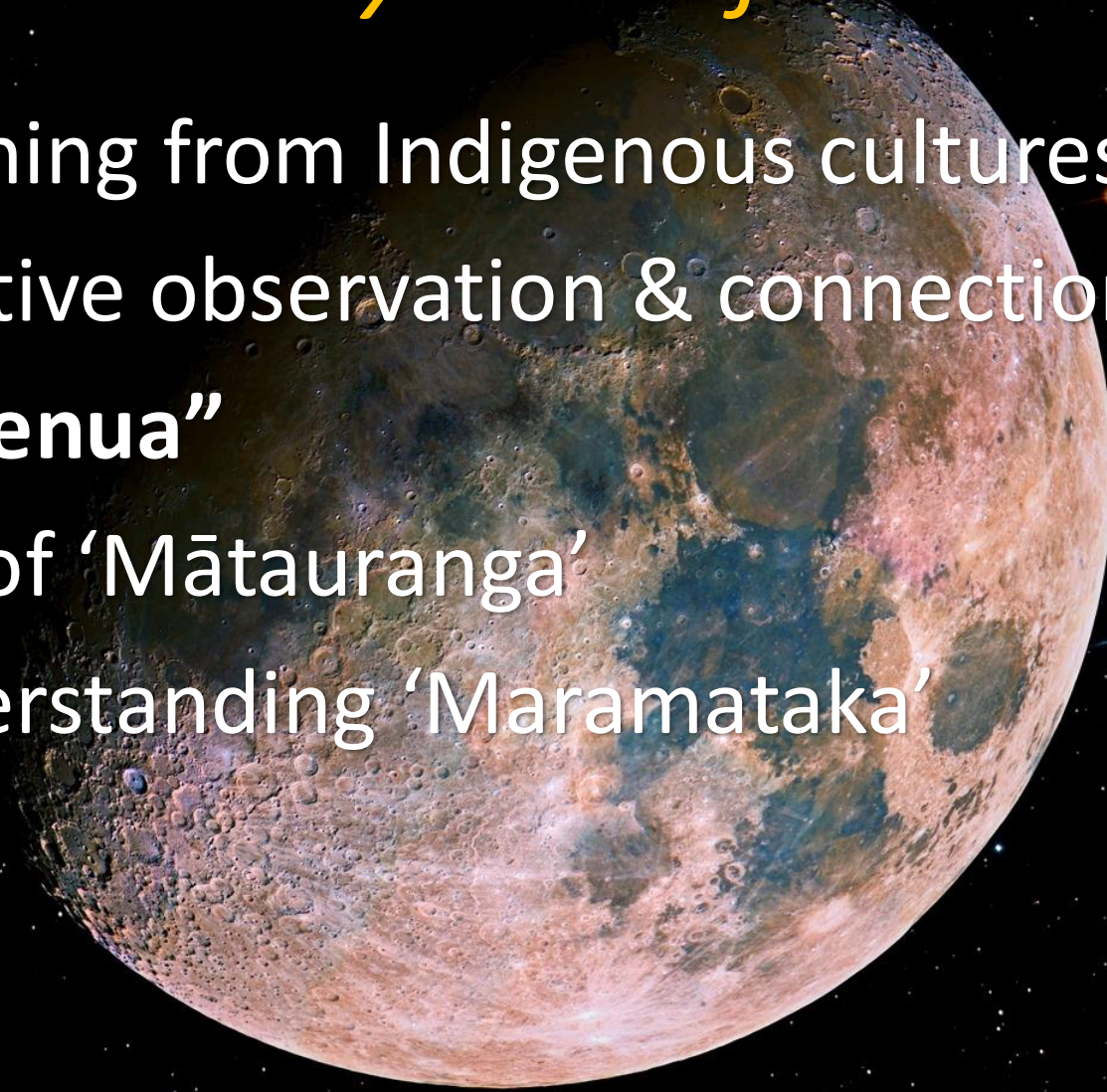


The Rhythms of Nature

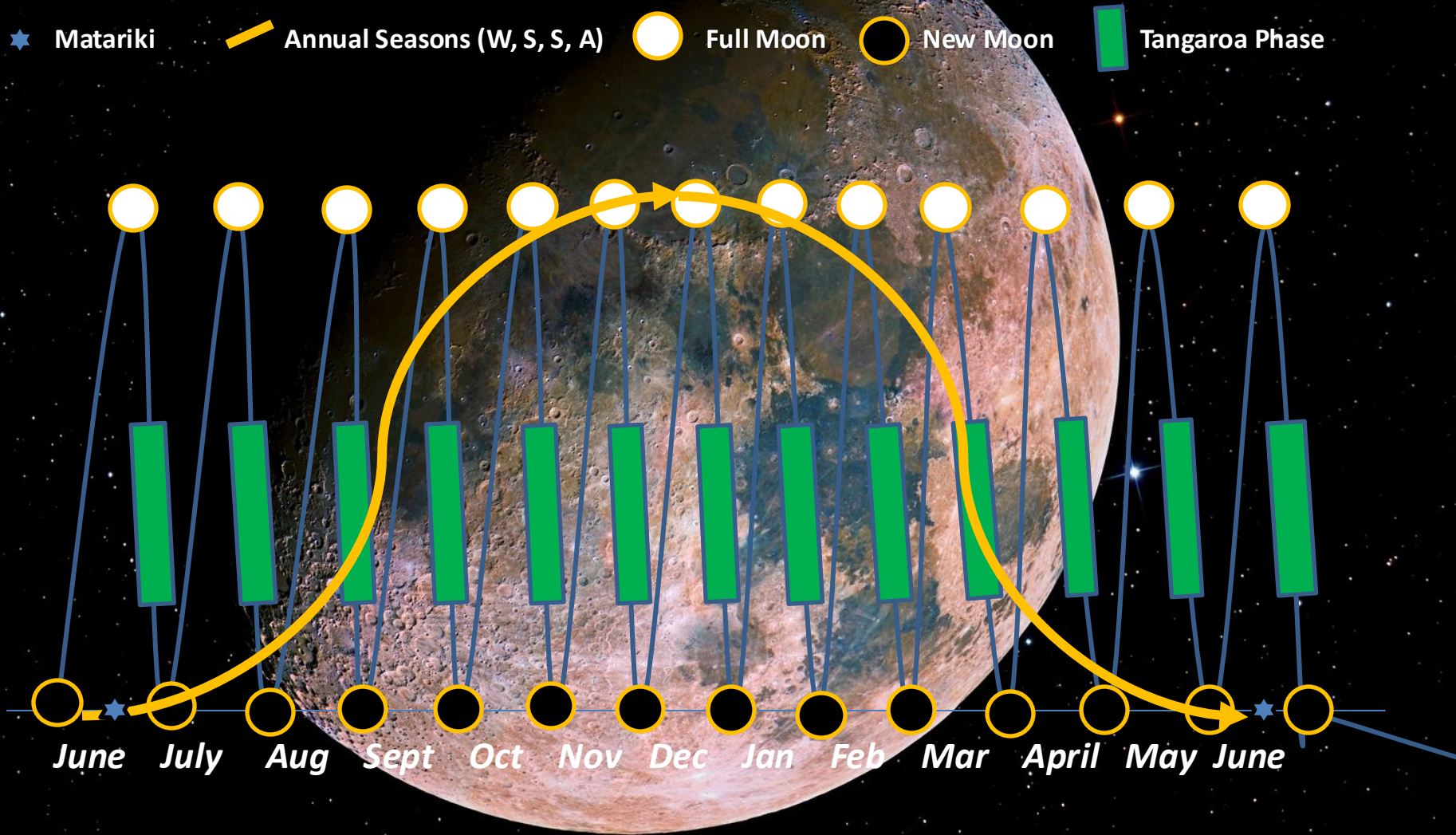
- Do you plant by the moon?
- Do you fish by the moon?
- Do you hunt by the moon?
- Do you trap by the moon?
- Do you watch weather influences?
- Or do you check your traps on a schedule (“every 4th Wed”)?

The Rhythms of Nature

- Learning from Indigenous cultures
- Intuitive observation & connection 'at place'
- **"Whenua"**
- Use of 'Mātauranga'
- Understanding 'Maramataka'



The Rhythms of Nature – the basis of the Maramataka (Māori Lunar Calendar)



Summary

- *Every tool can work – every tool can fail*
- *Understanding animal behaviour at place is at the core of success*
- *Put them at the centre of your thinking*
- *Train them to do what you want – using food & sex rewards*
- *Understand the influences of seasonality & Maramataka*
- *Understand the influences of weather*
- *By better understanding the animal - you will become WAY better trappers*

www.predatorfreenz.org



Questions/Comments?

