



28 July 2023

Sustainable wildlife management and primary production

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What is wildlife?

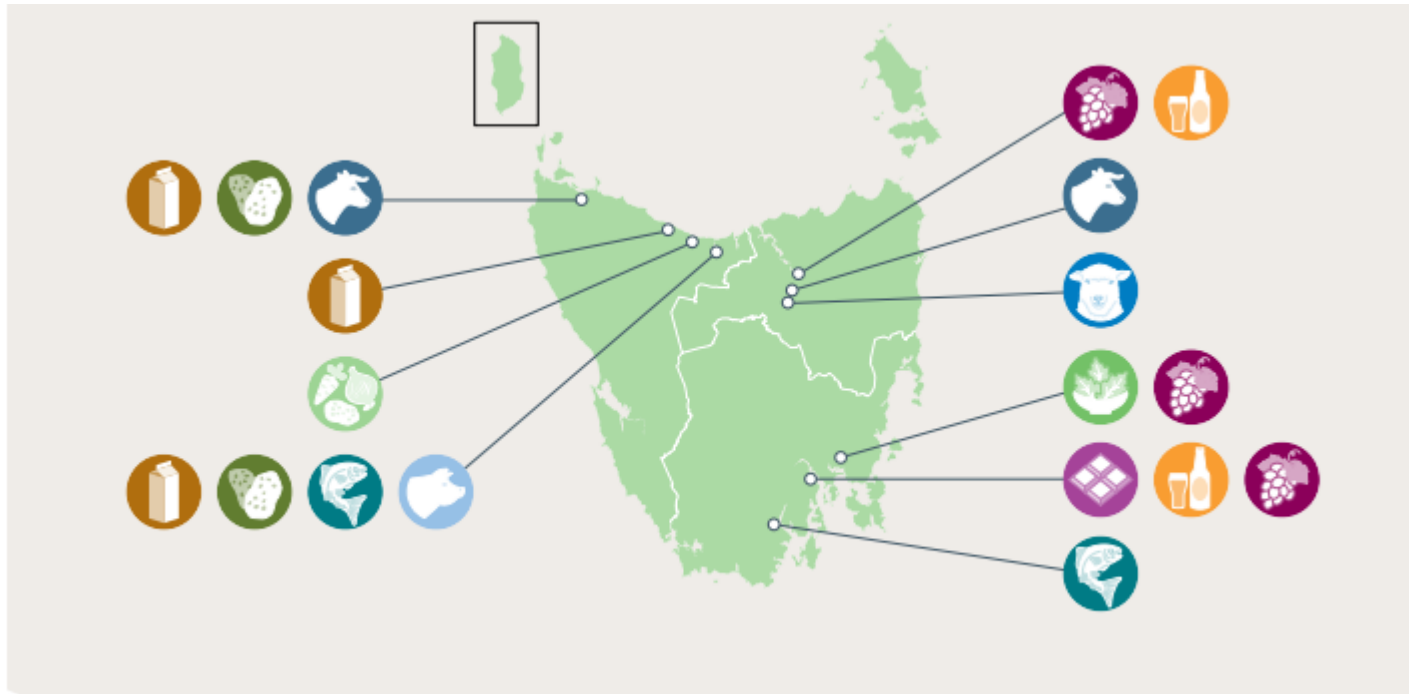


Legal status of wildlife

- *Nature Conservation Act 2002*
 - *Nature Conservation (Wildlife) Regulations 2021*
 - Protected
 - Partly Protected
 - Unprotected
-
- The *Animal Welfare Act 1993* applies to all.

Annual farm gate value of Tas agriculture = \$2.4b

- Most land and water-based industries interact with wildlife.



Which came first - agriculture or wildlife?

Friend or foe?



Presence does NOT mean pest

Wildlife damage

- Direct competition for food
- Destruction of botanical composition
- Fouling
- Premature harvest
- Disease vectors
- Infrastructure

Permit tests

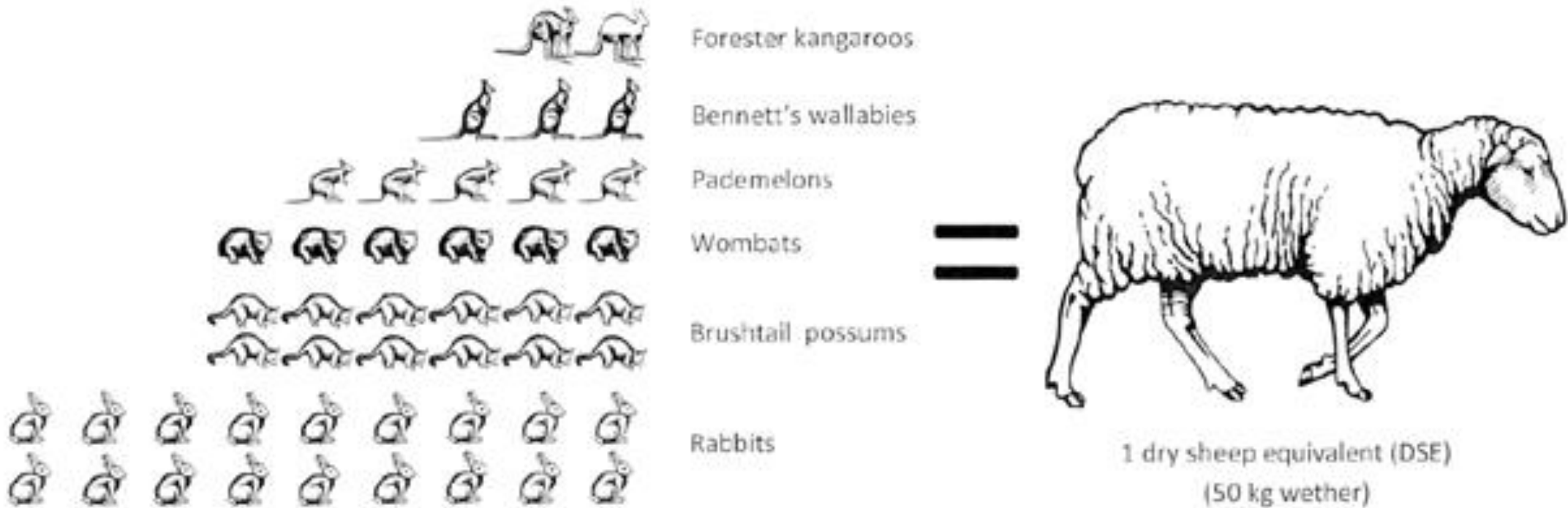
A permit to take partly protected wildlife can only be granted when:

- Taking wildlife is necessary to protect crops, stock or infrastructure
- AND
- Financial loss is likely to occur.

These reasons must be documented.

Grazing equivalents

Grazing equivalents - wild animals to domestic stock



Birds are more challenging.

Cost of wildlife damage

Species	Wildlife/DSE	2021 take	Total DSE
Bennetts wallaby	3	475974	158650
Rufous wallaby	5	406878	81375
Brush possum	12	228254	19021
Forester kangaroo	1.5	7439	4959
Deer	1	29650	29650
Total			293664

Cost of wildlife damage

- Total DSE of taken herbivores = 293664
- @\$50/dse = \$14.68m

PLUS

- Unquantifiable damage
- Loss due to birds, cats
- Equates to farm gate value of Tasmanian production of honey, eggs, nuts or hops

Do nothing is NOT an option

- Do nothing and loss compounds
- Deer population increase = 5.2% compound

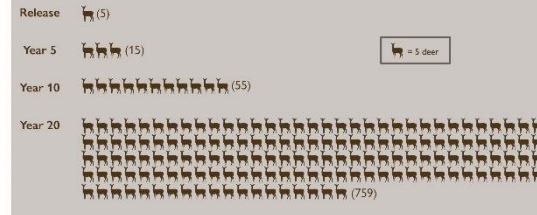
Why?

Success of agriculture =

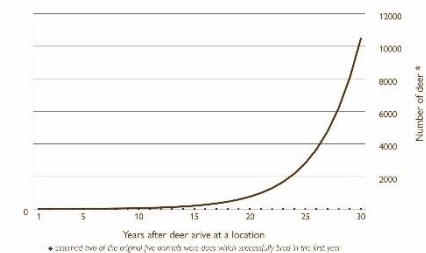
- More food
- More habitat

A FEW DEER soon
become TOO DEAR!

What happens if you leave 5 deer to do their thing.



Look what happens after 30 years!



Show sustainable take

Spotlight survey

- Commenced in 1975
- Wild native and non-native mammal species are recorded
- Cover areas of Tasmania where hunting occurs
- Provide a long-term time series of data for detecting population trends.
- Animals counted along 187 10km transects



Line transect counts
Waterbird survey
Citizen Science

Control principles

- Reduce
- Move on
- Block out

Whatever tool is used it must be:

- Practical
and
- Economic

Aim is to reduce impact not eliminate.

Reduce

- Lethal control will remain, but we can do it better.
- New tools
 - Thermals
 - Aerial
- Skills

Thermal imaging



Game changer for detection
and control



Aerial



Efficient and cost effective but welfare cannot be compromised as with all lethal control.

Limestone coast experience

1 fallow deer every 155 secs

First shot to confirmed kill = 11.1 secs

Mean pursuit time = 49.5 secs

Animal welfare is NOT compromised

Limestone coast efficiency

Method	Deer/hour
1 rifle	8-10
1 rifle + thermal	12
1 rifle + 1 shot gun +thermal	23

Skills and persistence

Recreational v professional shooting

Recreational & farmer shooters

# wallabies/hour	% trips
<=2	44
<6	77
<12	94

Professional shooter take 20-30 wallabies/hour

Regular shooting reduces and deters.
Beware learned behaviour.

Moving on



Wildlife learns quickly.
Can give respite window until
a critical stage is passed.

Block out

Fencing works well if done well and maintained.



Fencing is not set and forget
Works 24/7
Cost = game – normal cost



Tools

There are no silver bullets and set and forgets.

Wildlife are resilient, adaptive and smart so for best results:

- Understand:
 - the problem
 - animal behaviour.
- Evaluate results and innovate.

Right tool – Right Place – Right time

Have a plan

Property Based Wildlife Management Plans:

- Demonstrate a strategic approach to wildlife management
- Show balance between conservation and control
- Support access to SPWL for deer in Zone 1
- Articulate relationships between stakeholders
- Support social licence

GST can help develop a PBWMP

Social licence

Social licence is critical to ongoing wildlife management.

Issues to consider:

- Linking wildlife management to production agriculture
- Lethal control is humane
- Wildlife populations are managed sustainably
- Wildlife carcasses are not wasted
- PPP applications are assessed responsibly
- What we say is what we do

How do we communicate these messages?

Top three take home messages

1. Wildlife and primary production are inextricably linked.
2. Tools are available to sustain wildlife populations within acceptable windows.
3. Accountability is increasing so maintenance of social licence is essential.

Tools, resources & training

- Invest in technology and skills –thermals & aerial
- Communicate effectively and honestly
- Data driven



1157 landing page reviews
50928 people reached
\$2000 budget



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