

A goat is a goat is a goat?

Taking farm animal diversity
into account to strengthen
policy recommendations for
animal welfare regulations

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[@Goatsthatstare](https://twitter.com/Goatsthatstare)



**I HAVE NO IDEA WHY I PRESENT A
TALK ON GOATS AT A LINGUISTICS WORKSHOP**

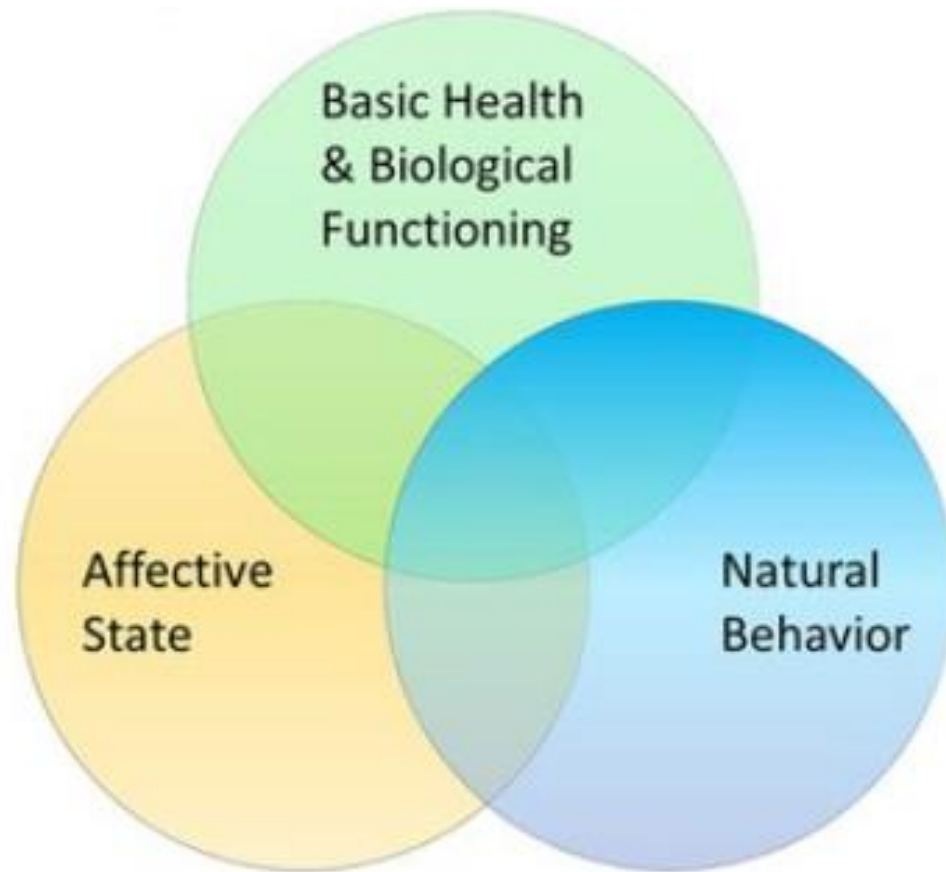
**AND AT THIS POINT
I'M TOO AFRAID TO ASK**

Policies/guidelines for animal welfare



When we keep animals under human care, it is our obligation to provide them with the best possible welfare!

Policies/guidelines for animal welfare



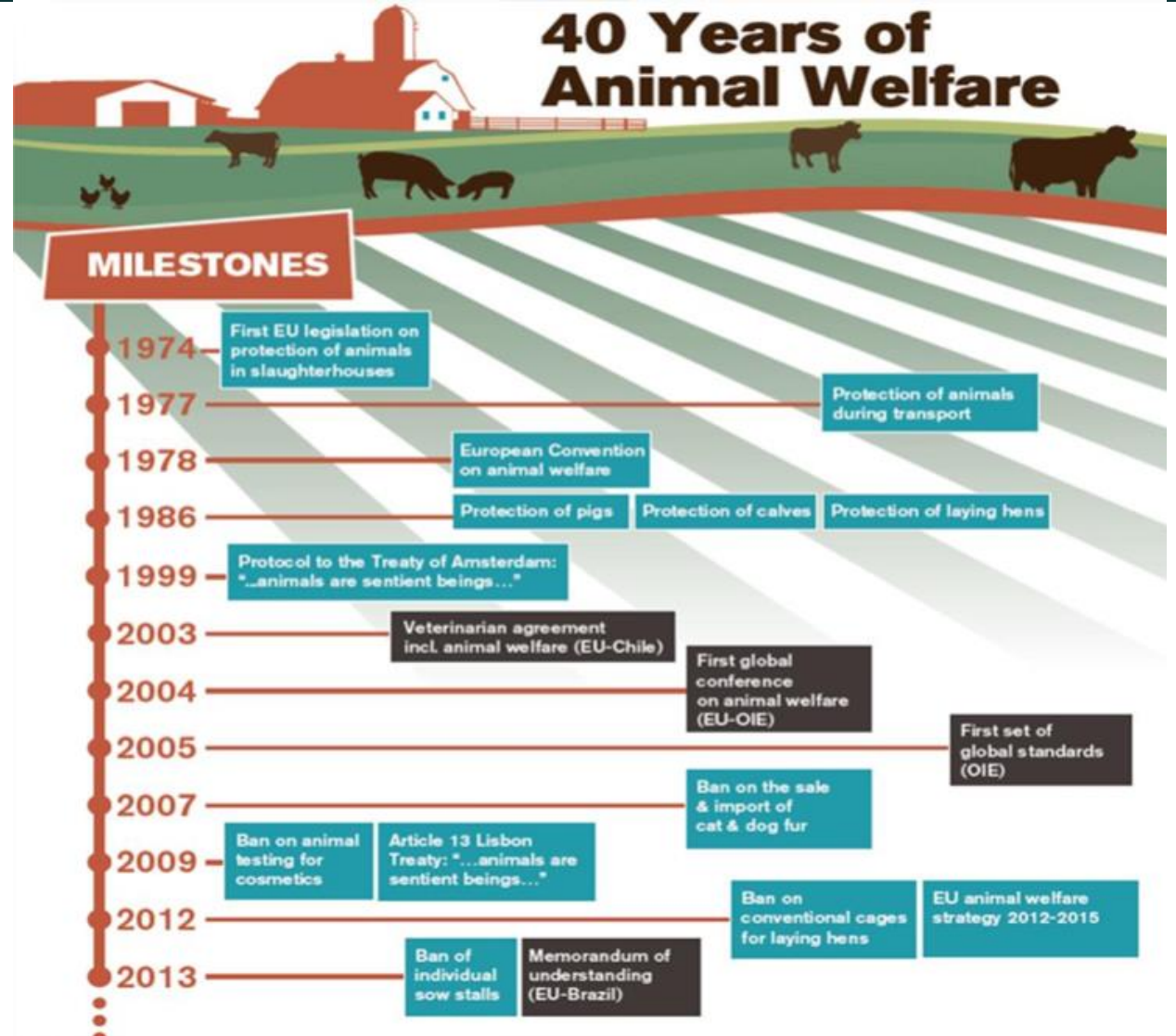
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Policies/guidelines for animal welfare

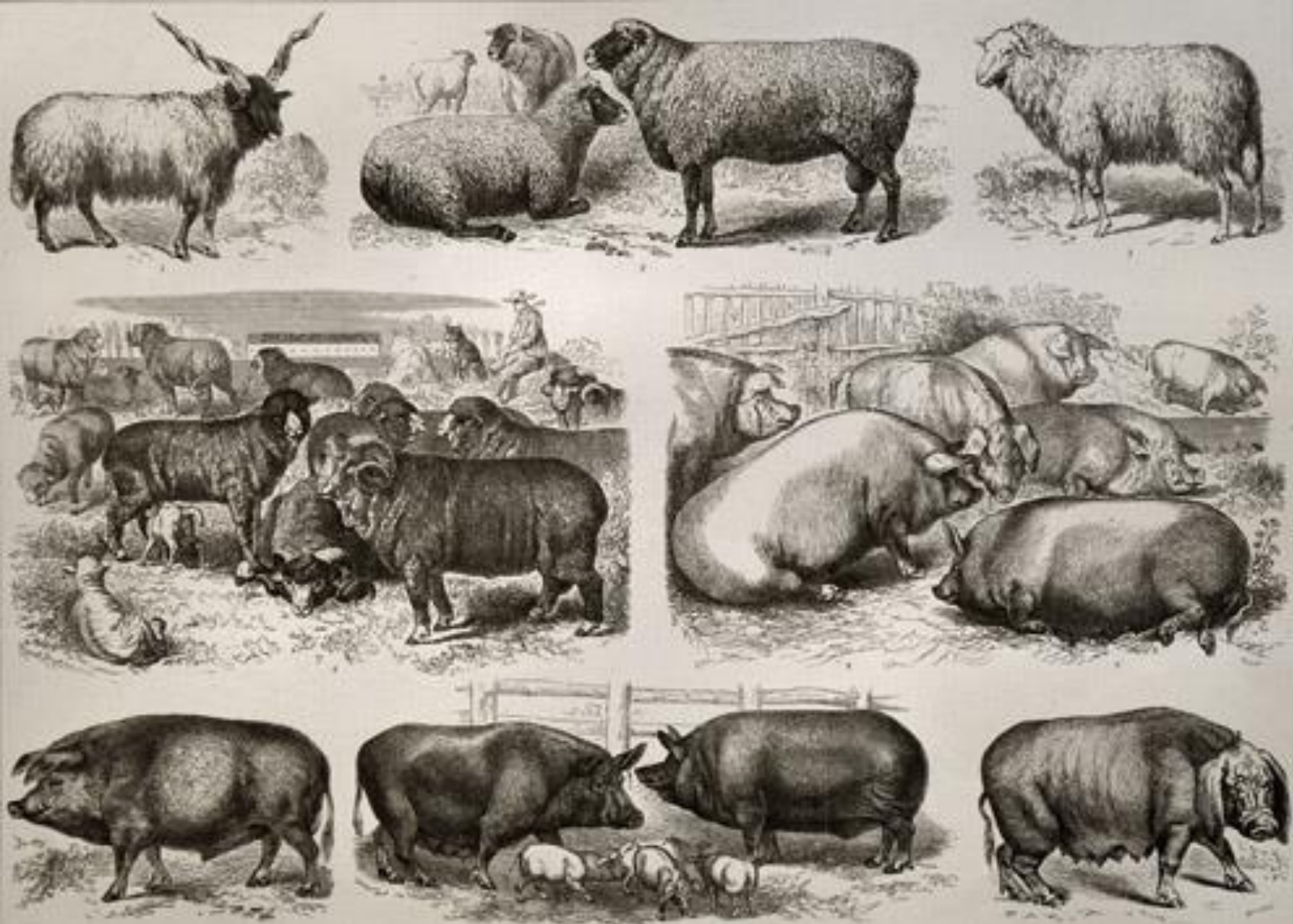
Stakeholder interests

Economic constraints

Evidence-based



Policies/guidelines for animal welfare



Species/breed
differences



Housing and
management

Geographical
context

Policies/guidelines for animal welfare

Research article

Goats prefer positive human emotional facial expressions

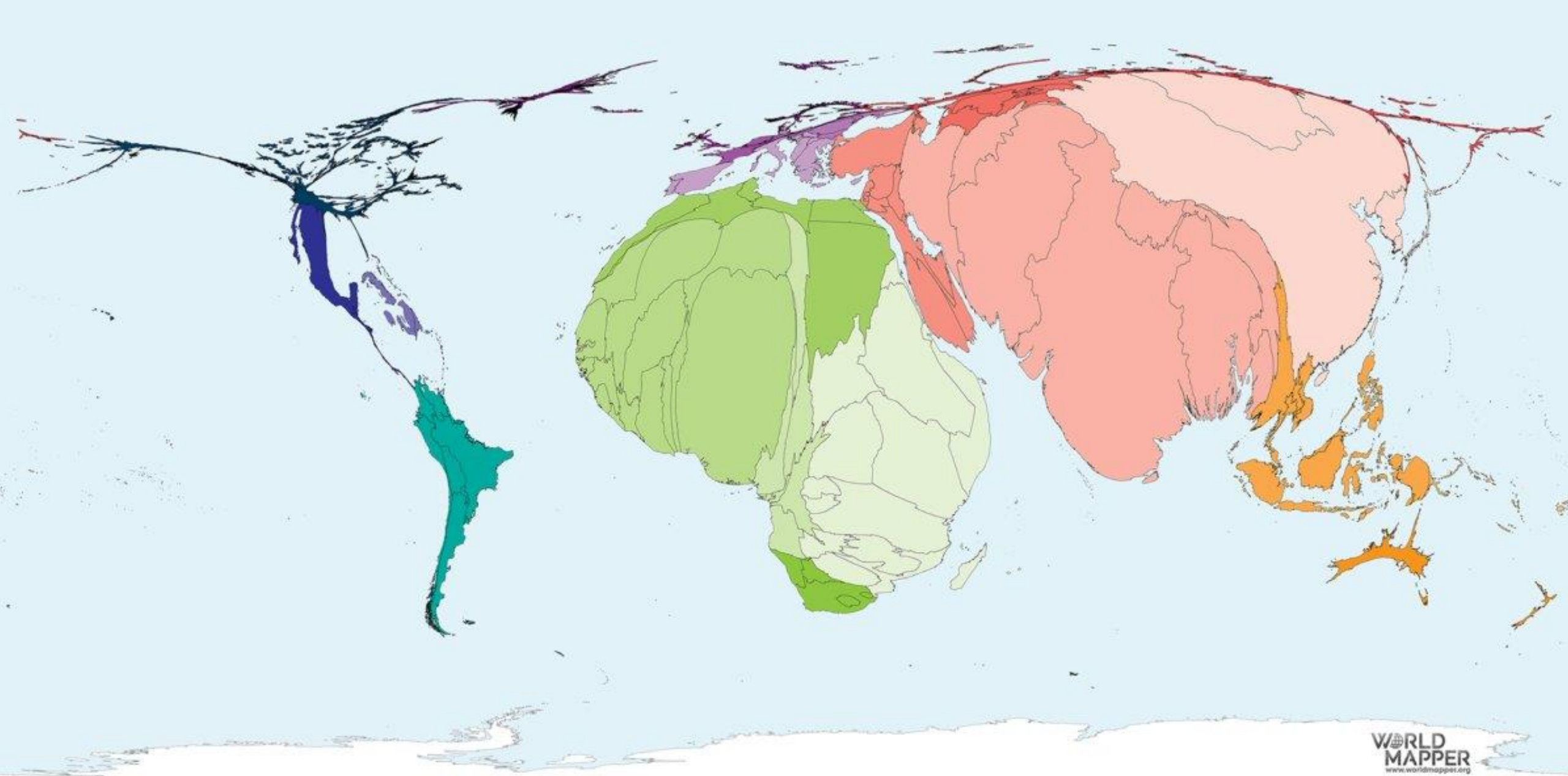
Christian Nawroth , Natalia Albuquerque, Carine Savalli, Marie-Sophie Single and Alan G. McElligott 



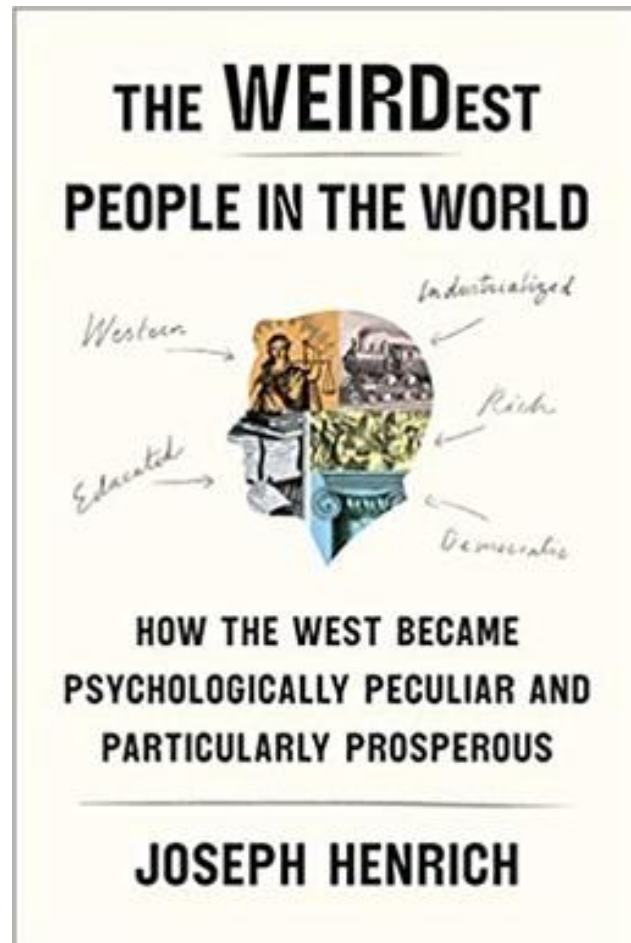
Goat behaviour and welfare research



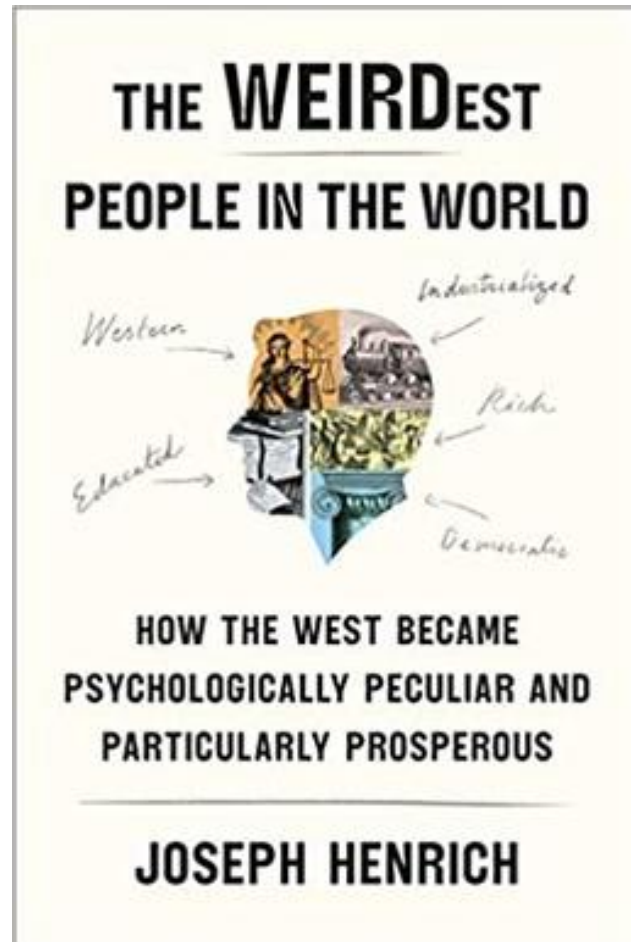




The WEIRDest goats



The STRANGEst goats



(Lack of) heterogeneity in study population

Breed differences in reactivity to humans

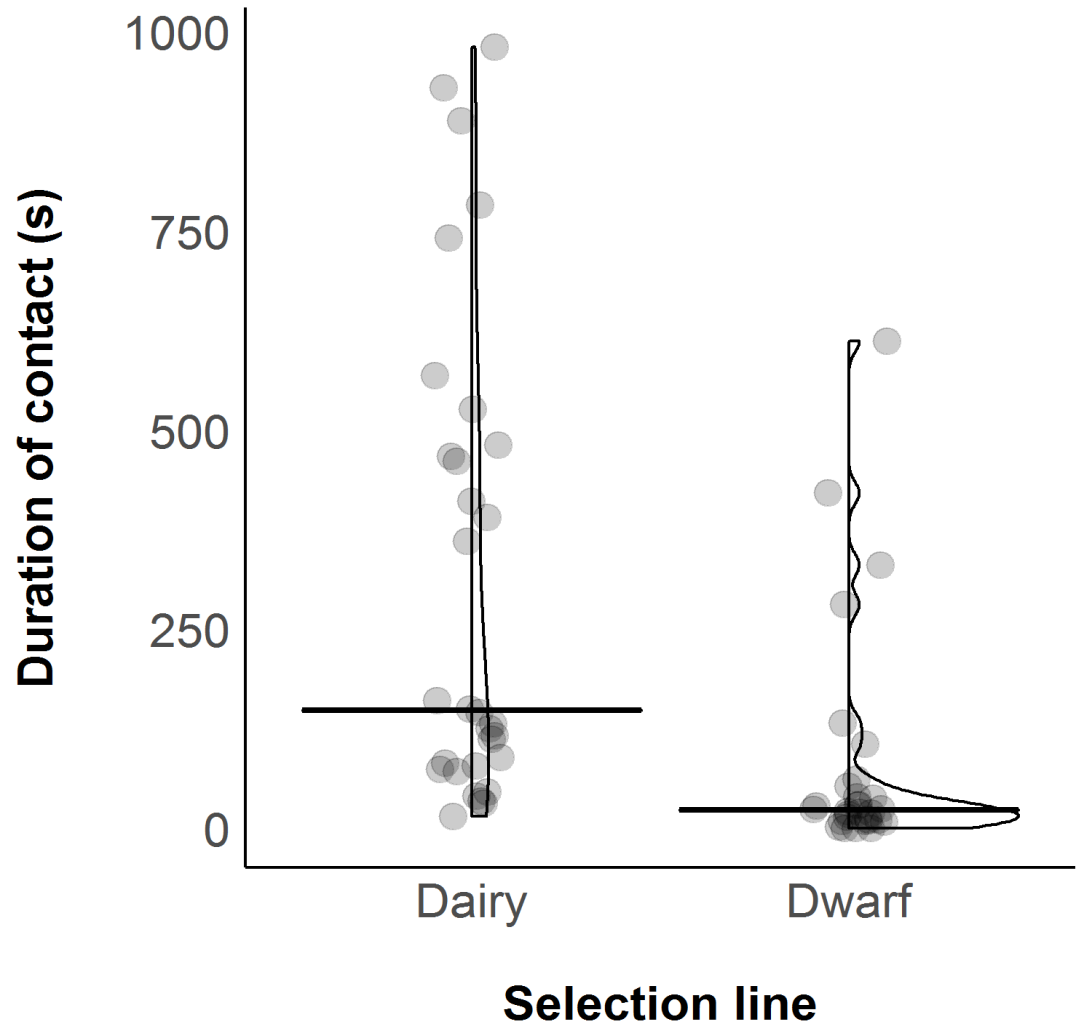
Adapted from: Rosenberger, K., Simmler, M., Langbein, J., Nawroth, C., & Keil, N. (2022). Responsiveness of domesticated goats towards various stressors following long-term cognitive test exposure. PeerJ, 10, e12893..



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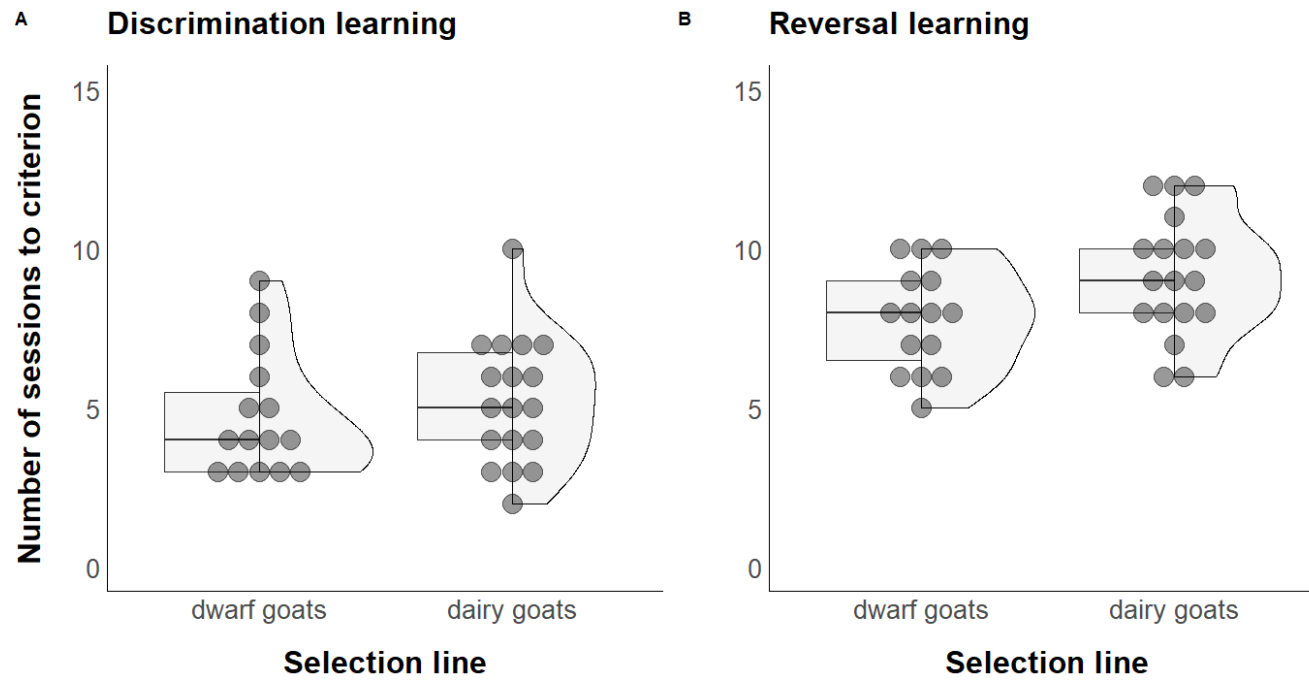
(Lack of) heterogeneity in study population



**Breed differences in
behavioural flexibility**

Nawroth, C., Rosenberger, K., Keil, N. M., & Langbein, J. (2022). Goats (*Capra hircus*) from different selection lines differ in their behavioural flexibility. *Frontiers in Psychology*, 12, 796464.

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Breed differences in
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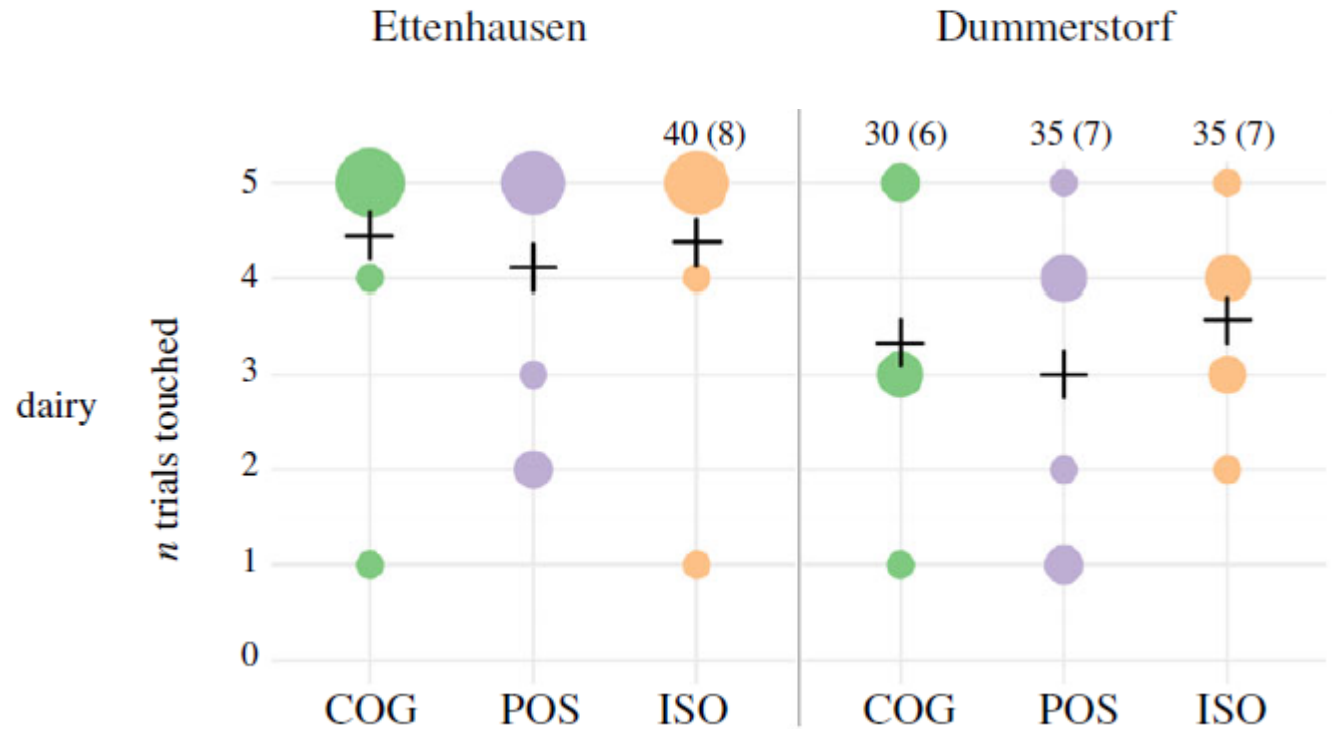
Site differences in problem-solving



Rosenberger, K., Simmler, M., Langbein, J., Keil, N., & Nawroth, C. (2021). Performance of goats in a detour and a problem-solving test following long-term cognitive test exposure. *Royal Society Open Science*, 8(10), 210656.

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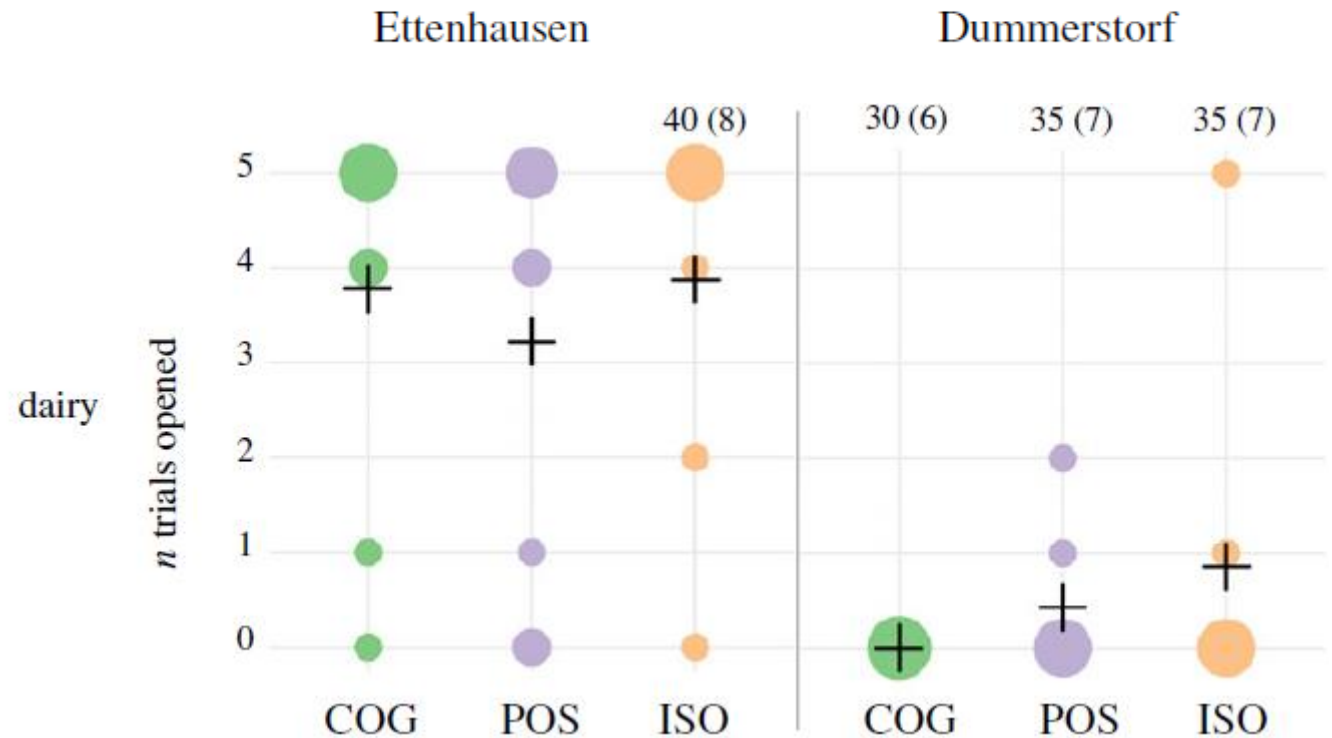
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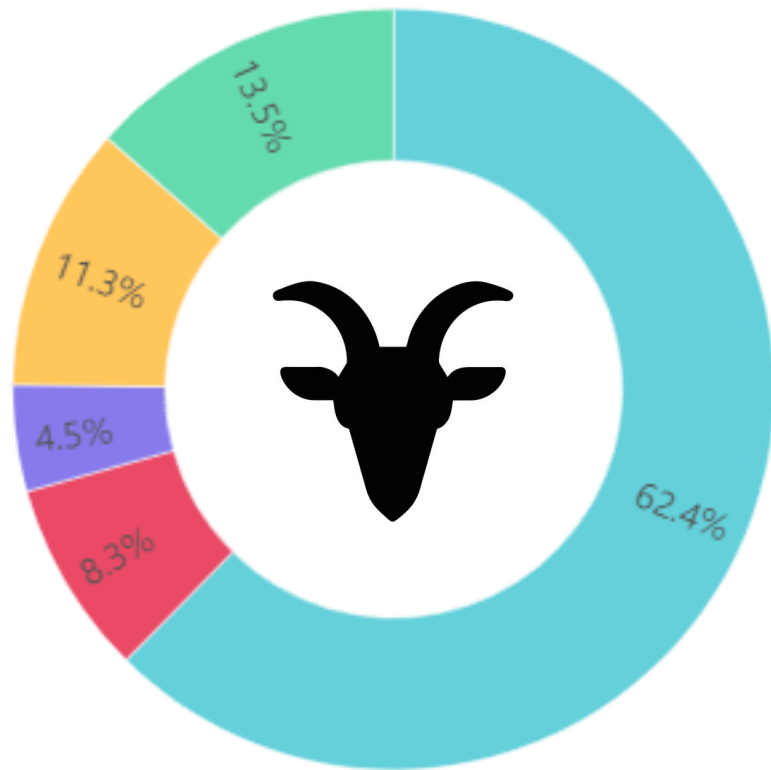
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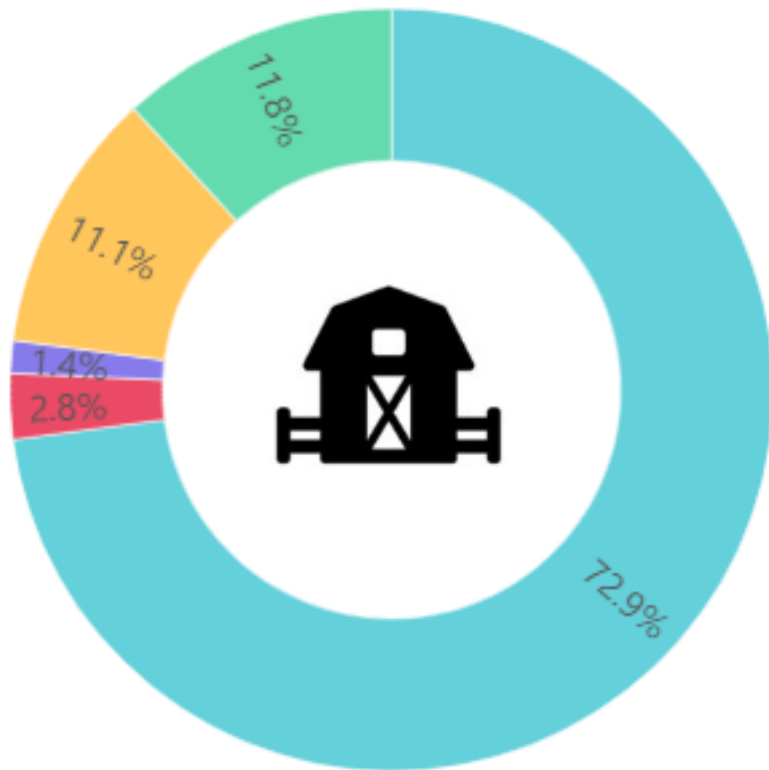


• 1 • 2 • 3 • more than 3 • n/a

**Scoping review on goat
behaviour and welfare
studies (n = 134)**

Most rely on one breed!

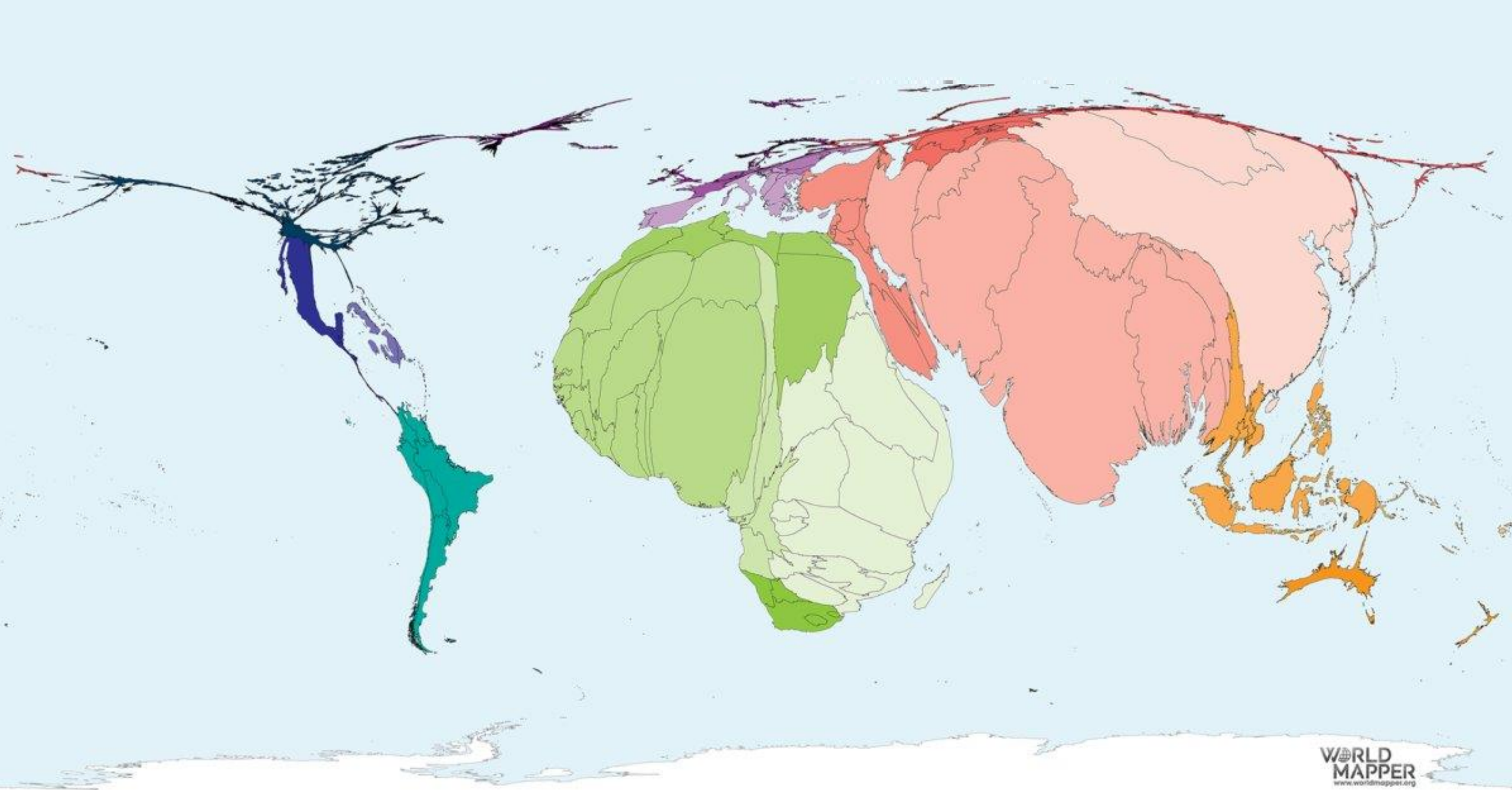
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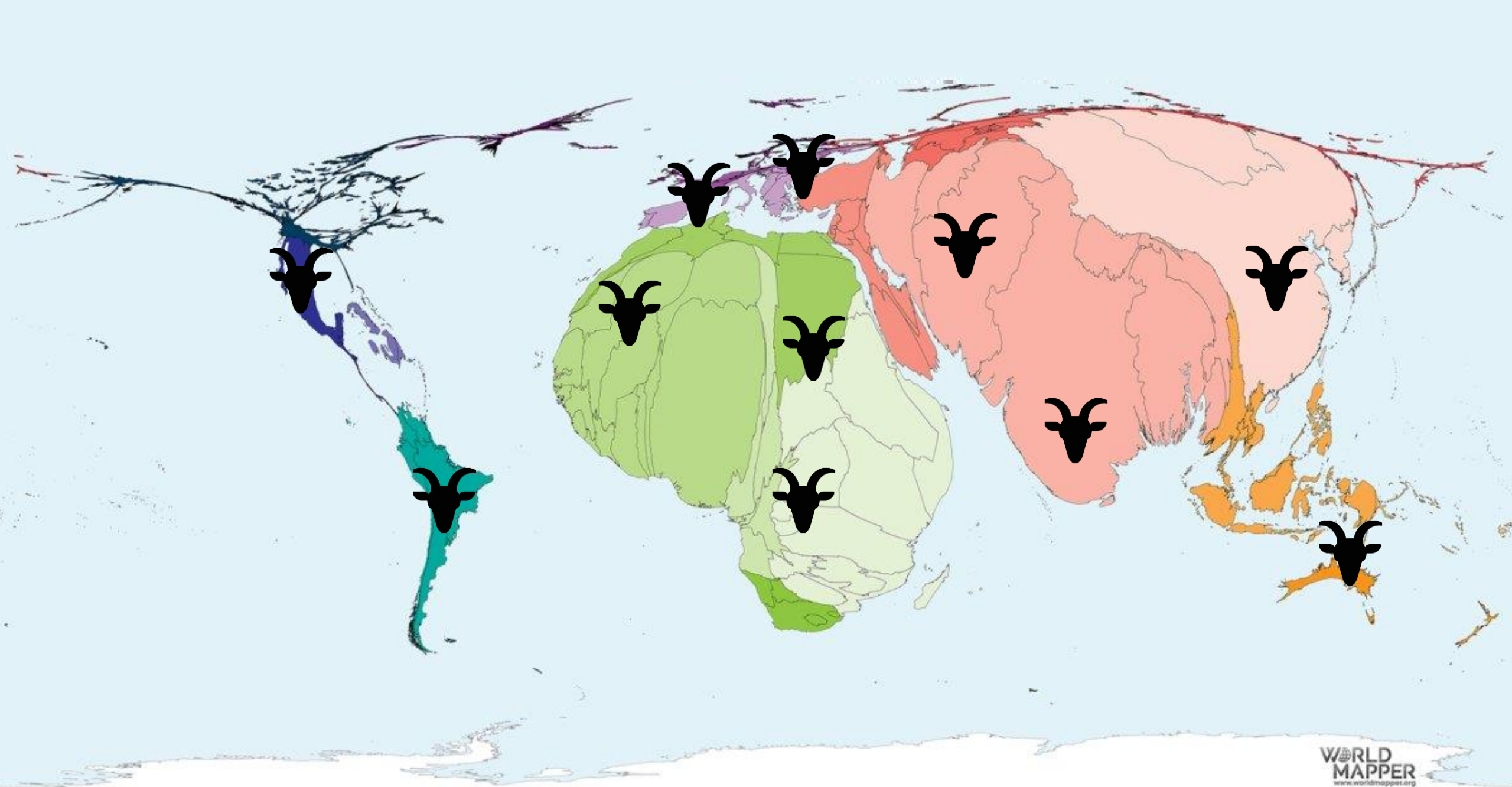


• 1 • 2 • 3 • more than 3 • n/a

**Scoping review on goat
behaviour and welfare
studies (n = 134)**

**Most are conducted on
single sites!**





ManyGoats

Large-scale
collaborative farm
animal behaviour
network



ManyGoats - Aim



**Improving external
validity of goat
behaviour and welfare
research through
identical and testing
protocols across many
facilities around the
world**

ManyGoats - Team



ManyGoats 1 – a proof of concept

Avoidance distance test

- Group setting (no isolation)
- Measuring direct behavioural response (no training needed)
- Proxy for reactivity towards humans



ManyGoats 1 – a proof of concept

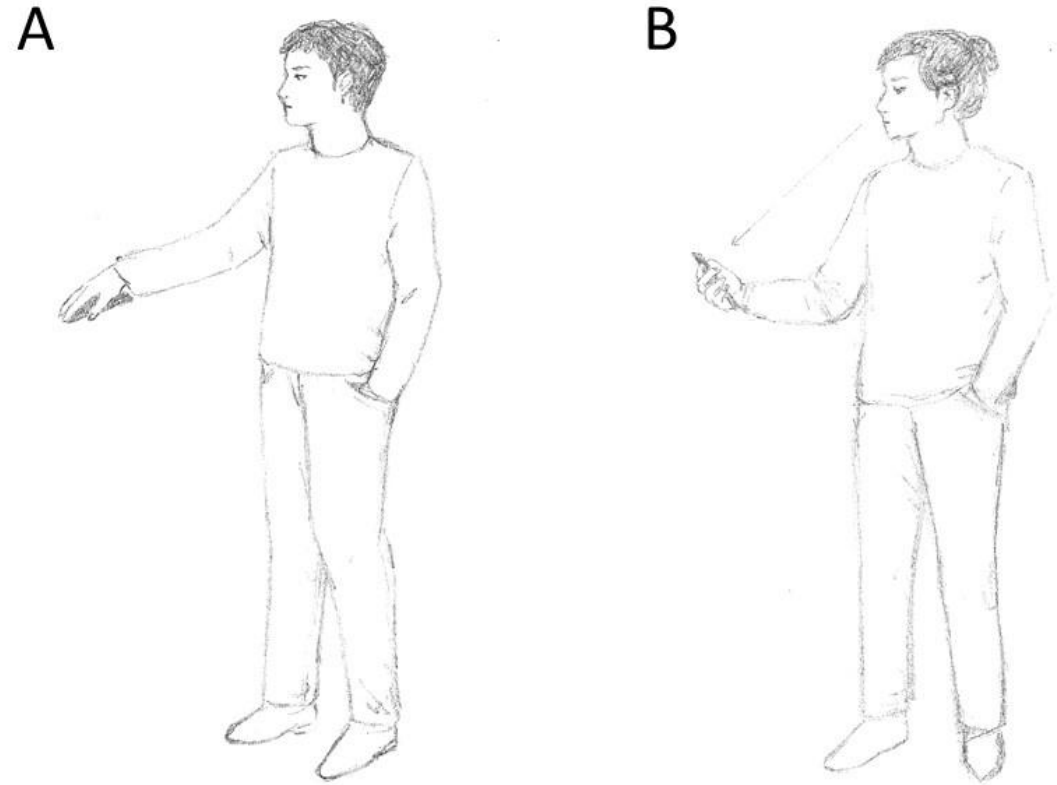
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- Impact of human attention

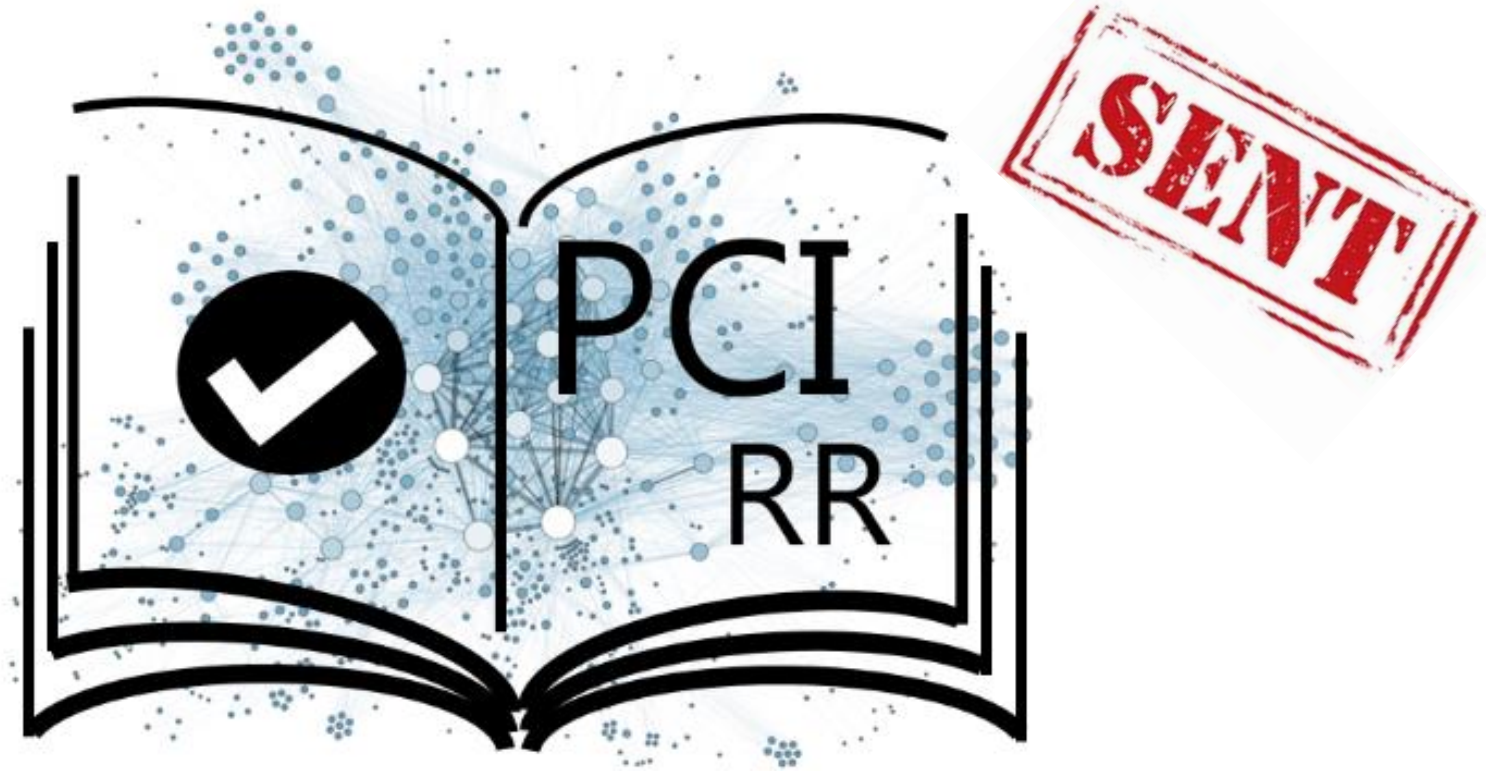
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Avoidance distance test

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ManyGoats 1 – a proof of concept



Wrap-up

Making general welfare recommendations based on single-site studies?

Goats are kept at a variety of contexts

Idiosyncrasies at individual sites make more general claims difficult

External validity needs to be high if results should contribute to improved husbandry conditions



Thank you!



Thank you!



<https://www.themanygoatsproject.com>



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@TheManygoats



TheManyGoats

ManyGoats

multi-site | open | collaborative