Theory vs Practice

Animal Welfare Assessment Frameworks

Assessment Tools

- 5 Freedoms (Farm Animal Welfare Council UK, 1979)
- 5 Domain Model (Mellor and Reid, 1994)

Animal Welfare Challenge	Compromise Grade				
	A: None	**B: Low**	**C: Mild to Moderate**	**D: Marked to Severe**	**E: Very Severe**
Domain 1: Nutrition					
Access to water in livestock, pets, working animals, etc.: Availability; inferred thirst	Water freely available: No to very low-level thirst	12-h interruption in water supply, cold weather: Low-level thirst	24-h interruption in water supply; hot weather: Moderate thirst	Within-group competition for limited water long term: Severe thirst	Water not available (supply failure, drought): Extreme thirst
Feeding level in sheep: Body condition score; inferred hunger	Good-level and stable body condition (3/5): No to very low-level hunger	Mid-level and stable body condition (2.5/5): Low-level hunger	Mid-level body condition (2.5/5), slowly decreasing: Moderate hunger	Rapidly decreasing or low-level body condition (1.5/5): Severe hunger	Very low body condition (0.5/5)—emaciated: Extreme hunger
Domain 2: Environment					
Heat load in sheep: Panting; inferred hyperthermic distress	Ambient conditions thermoneutral: No panting No hyperthermic distress		High radiant load, temperature, humidity: Closed mouth panting Mild to moderate distress		Extreme radiant load, temperature, humidity: Open mouth panting Very severe distress
Air quality in housed pigs: NH_4 levels; inferred eye and nasal irritation	Good ventilation, fresh air: No eye/nasal irritation		Ventilation poor: NH_4 10–15 ppm Mild eye/nasal irritation	Ventilation very poor: NH_4 greater than 25 ppm Marked eye/nasal irritation	
Domain 3: Health					
Amputation dehorning in calves: Acute cortisol stress response; inferred pain	Nerve blockade plus systemic analgesic: Complete pain relief Very low stress response Little or no acute pain		Nerve blockade alone or systemic analgesic alone: Partial pain relief Moderate to marked stress response Moderate to marked acute pain		No pain relief: Very marked stress response Very marked acute pain
Impeded breathing in dogs: Exercise intolerance; inferred breathlessness	Normal or long-nosed: Exercise tolerant, breathing normal No breathlessness		Moderately snub-nosed: Brief exercise bouts ended by laboured breathing Moderate breathlessness		Severely snub-nosed: Laboured breathing at rest, totally exercise intolerant Very severe breathlessness

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- Checklist has 26 points
- Substantial knowledge of species required
- Some questions are ethical/value-related
- Observation + judgement = ?
- Never 100% objective

Table 1. Checklist of questions to assess the suitability of species as companion animals.

Welfare of the animal

1 Is there adequate knowledge of the species with respect to:

    1.1 nutritional requirements?
    1.2 health care?
    1.3 environmental requirements for physical and thermal comfort?
    1.4 recognizing and preventing negative states such as fear, pain and distress?
    1.5 requirements for exercise, social interaction, and natural behaviour?

If there is adequate knowledge of the species' requirements, might the owner still have practical difficulty in providing:

    1.6 suitable food?
    1.7 veterinary services?
    1.8 an environment that meets the animal's needs regarding comfort, psychological welfare, exercise, social interaction, and natural behaviour?

2 Is the animal's size:

    2.1 so large when mature that the owners may be unable to accommodate it?
    2.2 so small that the animal might easily be injured?

3 Is the animal's life expectancy so great that the owner may lose the commitment or ability to provide care throughout its life?
4 Is there any appreciable risk of suffering, injury, illness, or death arising from:

    4.1 procurement?
    4.2 transportation

Welfare of others

5 Is the animal poisonous or venomous?
6 Is there any appreciable risk of the animal attacking or injuring:

    6.1 humans?
    6.2 other animals?

If a risk of injury exists, can it be made acceptably low by selecting safe individuals or by proper management?

7 Is there any appreciable risk of the animal transmitting disease to:

    7.1 humans?
    7.2 wild or domestic animals?

If a risk of disease transmission exists, can it be made acceptably low by finding individuals free from the disease(s) or by proper management?

8 Does the animal have objectionable characteristics (eg noise, odour, uncleanliness, unruliness, destructive behaviour) that may prove unacceptable to:

    8.1 the owner?
    8.2 the community?

9 Does the animal have other characteristics (eg solitary, sedentary or nocturnal nature) that may cause the owner to lose interest and commitment?

Risks to the environment

10 Is there any appreciable risk of the animal causing ecological damage if it escapes or IS released?
11 For species that exist in the wild, are trade and transportation subject to adequate regulation and enforcement?
12 If there is ongoing wild capture, is there any appreciable risk that capture might have undesirable effects on native populations and ecosystems?
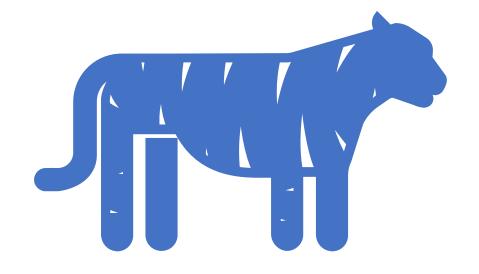
If a risk exists, can it be avoided by use of captive-breeding that does not depend on continued wild capture?

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- EMODE (Warwick et al., 2014)
- Pet Suitability of Mammal Species Assessment (Koene et al., 2016)

Assessment Tools

- 5 Opportunities to Thrive (Vicino, G., 2015)
- Adaptation on 5 Domain Model (Sherwen et al., 2018)
- Guidelines for Inspection of Companion and Commercial Animal Establishments (Warwick et al., 2018)
- Animal Care Audit (Donkey Sanctuary of Canada)
- Ambassador Animal Evaluation Tool (AZA, 2016)

Assessing Animal Facilities in Practice

- Unknown territory
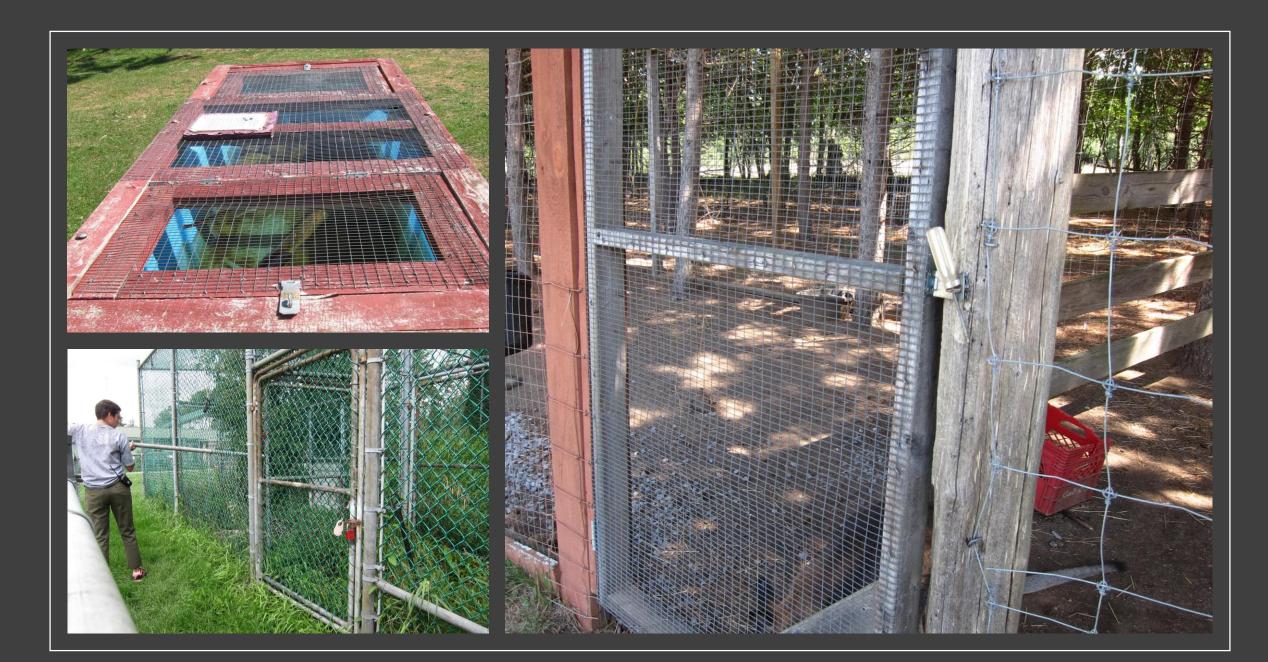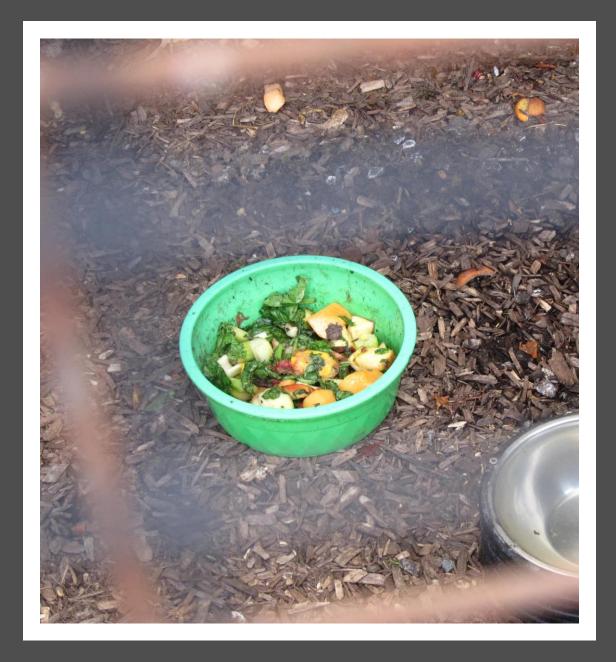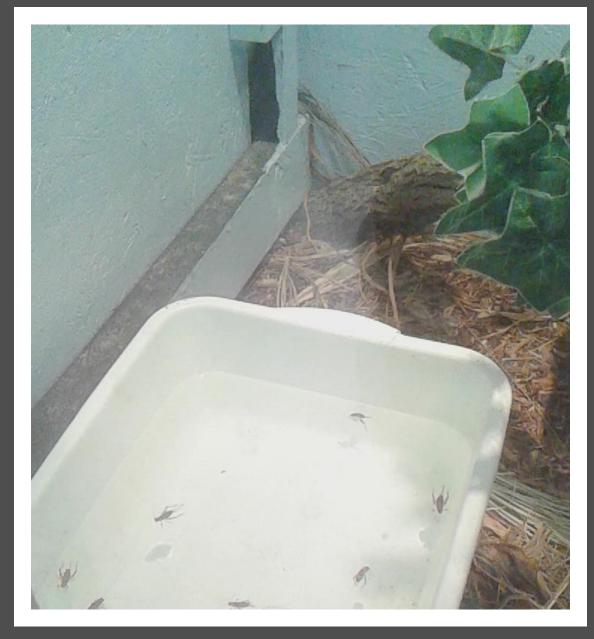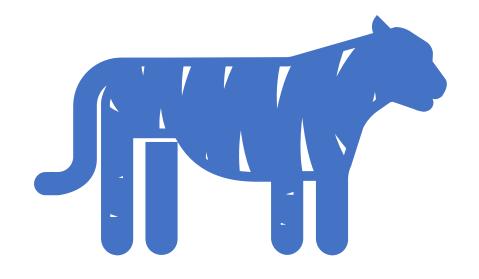- Number of enclosures
- Animal species
- Time limitation
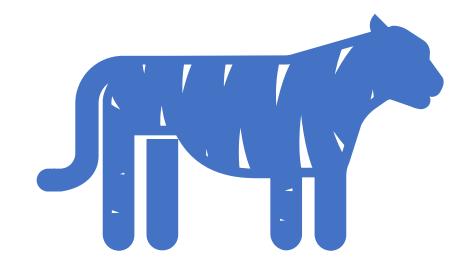
Other considerations

- Take pictures / recordings

- Prioritize enclosures

- Use literature research to close any knowledge gap

- Compare findings to what legislation requires

Thank you for your time