

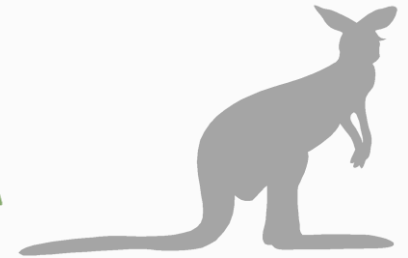
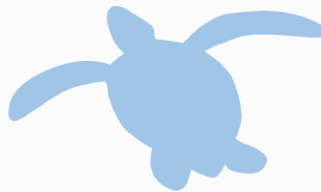
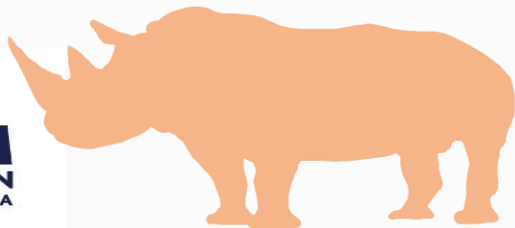
Promoting Positive Animal Welfare

The Zoo and Aquarium Association Accreditation Program

*Recognising Commitment
to Positive Animal Welfare*



**ZOO
AQUARIUM**
ASSOCIATION
AUSTRALASIA

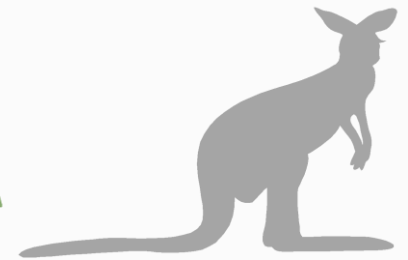
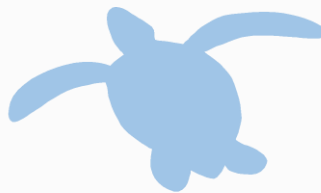
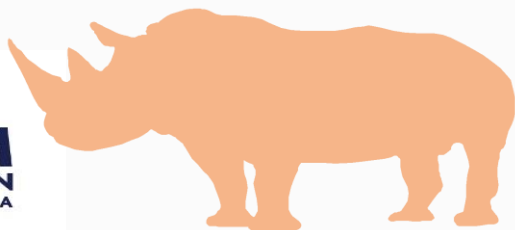


The ZAA Accreditation Program

A Framework for incorporation of positive welfare state into welfare assessment

- Builds upon the Five Domains Model*
- Recognises negative and positive affective states in animals

* Mellor, D. J., and N. J. Beausoleil. "Extending the 'Five Domains' model for animal welfare assessment to incorporate positive welfare states." *Animal Welfare* 24.3 (2015): 241-253.



Sample Size:

ACCREDITATION ROUND 2 2015 - 2017



87 out of 92
ZAA members
assessed



744
Exhibits assessed



241
species assessed

Assessing Positive Welfare – Key Learnings

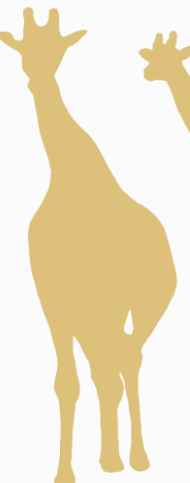
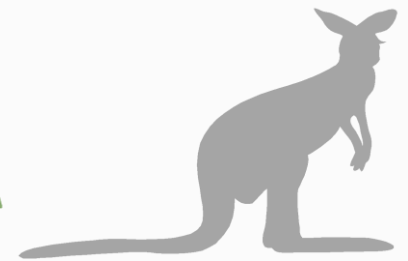
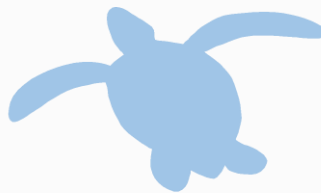
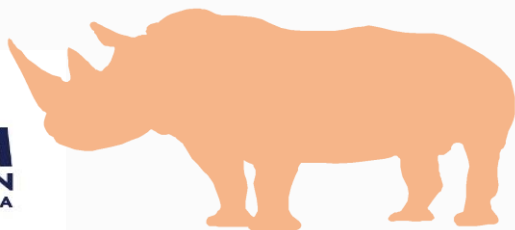
Different 'criteria' needed between minimizing negative experiences and promoting positive experiences.

Is the animal getting too cold/hot?

VS...

Is the animal experiencing thermal related pleasures?

Develop community awareness of what Positive Welfare looks like so it can be properly assessed.



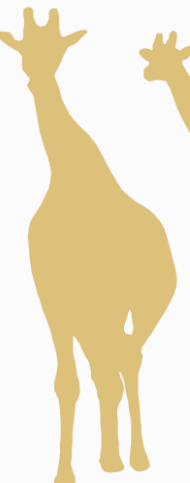
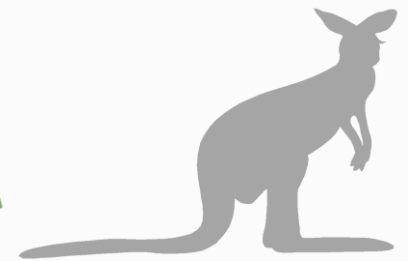
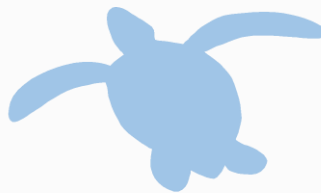
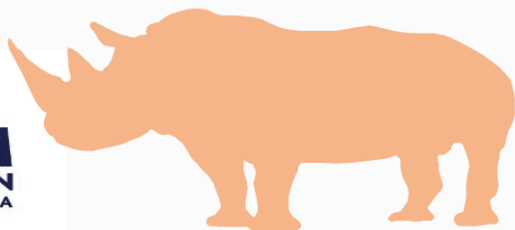
Assessing Positive Welfare – Key Learnings

Assessing for good care/good housing does not mean positive experiences are automatically occurring.

- (Lead a horse to water....) Good care creates ‘opportunities’ for good experiences but is the animal effectively engaging with these?

Need an assessment tool that can establish if positive experiences are occurring

e.g. Five Domains Model, ZAA Welfare Assessment Tool



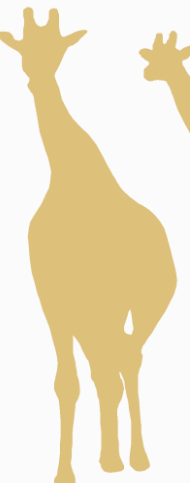
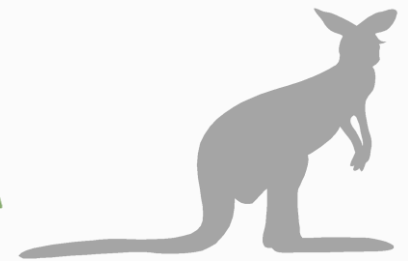
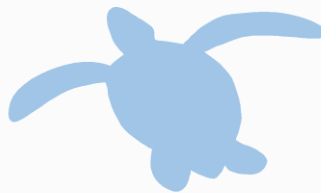
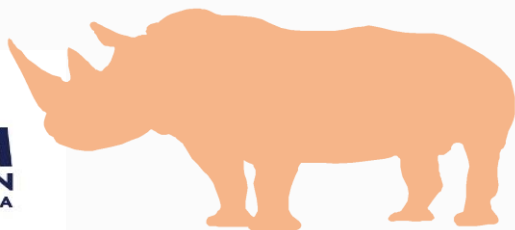
Assessing Positive Welfare – Key Learnings

By recognizing animals have affective states, the same criteria can be consistently applied between:

- Different species
- Individuals of same species
- Different situations (Animals in zoos, labs, pets etc...)

Enables a uniform approach in welfare assessment

- E.g – Gorilla welfare vs Lizard welfare



The Five Domains Model

Physical/Functional Domains

Working
Example:

Survival-Related Factors						Situation-Related Factors	
1: Nutrition		2: Environment		3: Health		4: Behaviour	
Restrictions on:	Opportunities to:	Unavoidable/imposed conditions	Available conditions:	Presence of:	Little or no:	Exercise of 'agency' impeded by:	'Agency' exercised via:
Water intake Food intake Food quality Food variety Voluntary overeating Force-feeding	Drink enough water Eat enough food Eat a balanced diet Eat a variety of foods Eating correct quantities	Thermal extremes Unsuitable substrate Close confinement Atmospheric pollutants: CO ₂ , ammonia, dust, smoke Unpleasant/strong odours Light: inappropriate intensity Loud/otherwise unpleasant noise Environmental monotony: ambient, physical, lighting Unpredictable events	Thermally tolerable Suitable substrate Space for freer movement Fresh air Pleasant/tolerable odours Light intensity tolerable Noise exposure acceptable Normal environmental variability Predictability	Disease: acute, chronic Injury: acute, chronic; husbandry mutilations Functional impairment: due to limb amputation; or lung, heart, vascular, kidney, neural or other problems Poisons Obesity/leanness Poor physical fitness: muscle de-conditioning	Disease Injury Functional impairment Poisoning Body condition appropriate Good fitness level	Invariant, barren environment (ambient, physical, biotic) Inescapable sensory impositions Choices markedly restricted Constraints on environment-focused activity Constraints on animal-to-animal interactive activity Limits on threat avoidance, escape or defensive activity Limitations on sleep/rest	Varied, novel, engaging environmental challenges Congenial sensory inputs Available engaging choices Free movement Exploration Foraging/hunting Bonding/reaffirming bonds Rearing young Playing Sexual activity Using refuges, retreat, or defensive attack Sleep/rest sufficient

Affective Experience Domain

5: Mental State							
Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive
Thirst	Wetting/quenching pleasures of drinking	Forms of discomfort: Thermal: chilling, overheating	Forms of comfort: Thermal	Breathlessness	Comfort of good health and high functional capacity	Anger, frustration	Calmness
Hunger (general)	Pleasures of different tastes/smells	Physical: joint pain, skin irritation	Physical	Pain: many types		Boredom, helplessness	Engaged, in control
Hunger (salt)	Pleasure of salt taste	Physical: stiffness, muscle tension		Debility, weakness		Loneliness, isolation	Affectionate sociability
Malnutrition malaise	Masticatory pleasures	Respiratory: e.g. breathlessness	Respiratory	Sickness, malaise		Depression	Maternally rewarded
	Postprandial satiety	Olfactory	Olfactory	Nausea		Sexual frustration	Excitation/playfulness
Bloated, over full	Gastrointestinal comfort	Auditory: impairment, pain	Auditory	Dizziness			Sexual gratification
Gastrointestinal pain		Visual: glare/darkness eye strain	Visual	Physical exhaustion	Vitality of fitness	Anxiety, fearfulness, panic, anger	Secure/protected/confident
		Malaise from unnatural constancy	Variety-related comfort			Neophobia	Likes novelty
						Exhaustion	Energised/refreshed

Welfare Status

The Five Domains model highlighting mainly *survival-related* and mainly *situation-related* factors and their associated *physical/functional domains*, and examples of aligned *negative* or *positive affects* assigned to the *mental domain*. **The overall affective experience in the mental domain equates to the welfare status of the animals.** Note that an animal exercises 'agency' (domain 4: behaviour) when it engages in *voluntarily, self-generated and goal-directed behaviours* that may be accompanied by positive affective experiences which animals find rewarding.

[Mellor, D.J. and Beausoleil, N.J. (2015). Extending the 'Five Domains' model for animal welfare assessment to incorporate positive welfare states. *Animal Welfare* 24: 241-253]

Animal Welfare Science and Bioethics Centre, Massey University, Palmerston North, New Zealand

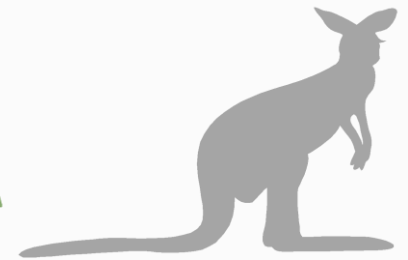
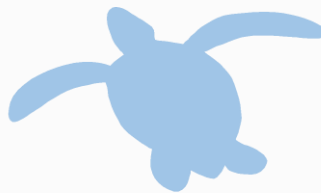
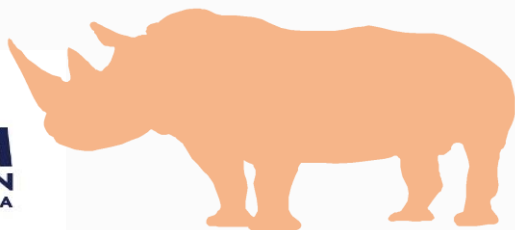
Working
Example:



Assessing Positive Welfare – Key Learnings

We must acknowledge the gaps in our species knowledge

- Create a framework to allow new Scientific Data/Evidence to be recognised as they develop.
- Until then, we cannot determine if a condition is negative or positive.
- But it cannot be ignored! Research should be encouraged to understand what it could be.



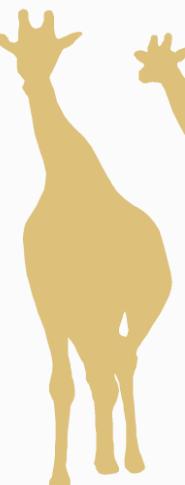
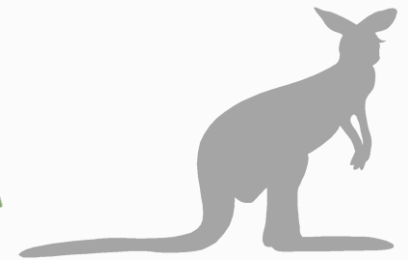
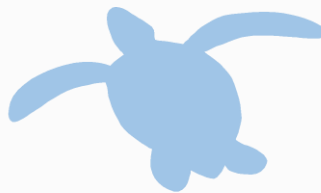
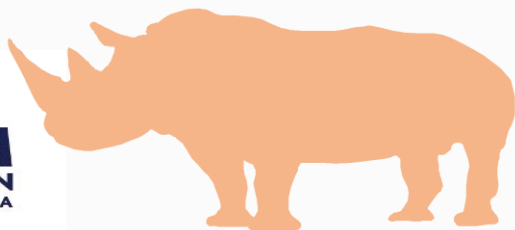
Final Point

When is Positive Welfare ‘good enough’?

- Individual animals have different lives = different opportunities = different positive experiences.
- As long as negative experiences are continuously minimised and, where practicably possible, positive experiences are continuously enhanced then perhaps it is good enough for now?
- Recognise the caring organisation/people as the species experts, as only they know the individual animals and their lived experiences.

“The benchmark is how your animal responds to what you do, not what other zoos do”

- Tassin Barnard, Australia Walkabout Wildlife Park.



Thank you

