

Bringing people close to nature is central to many zoo ideals. There's nothing like intimate contact with an animal to enhance connections, strengthen conservation commitment and even change perceptions.

At Zoos SA's Nature Theatre unit, much goes into the rearing of young animals to prepare them as animal ambassadors. Just as there are effective principles for the rearing of puppies, we have guidelines for the successful development of zoo animals in all their species diversity for a life in the animal encounter spotlight.

For our young Ambassador Animals, we have four simple Creature Comforts: Place, Space, Pace and Grace. This thematic shorthand helps us to cover all areas of a young animal's development and set up optimal circumstances for learning and growth.

Creature Comfort 1 - Place

Everything in Place for Quality Learning

First up, effective training needs a supportive environment. We sometimes refer to 'kaleidoscope moments' in our discussions. This language aims to put across that an animal's antecedent arrangements can change moment by moment and that we always need to be ready to check variables in our 'stimuli sets'. Home bases are essential to animal well-being and as our ambassadors spent so much time 'at home' relative to the amount of time that they are 'on show', we endeavour to ensure that this environment is conducive to supporting their wellbeing. The basics of access to food and water, shelter, compatible companions and are considered carefully.

When it comes to training calm focus in busy contexts full of people, we also take a similar approach. The goal is to achieve a session in which learning occurs and skill develops in both learners. For the acquisition of new behaviour, we start with training in a closed and quiet space, free of distraction (or as free as we can get it in a stimuli-rich zoo setting). Making sure we have all our equipment present and prepared and that our animal is motivated for what is on offer is part of the 'place' strategy.

As each session builds comprehension and ability, we then gradually change the features of the place to include more of the stimuli the animal is likely to encounter in subsequent training sessions. Although seemingly basic, it's amazing how often in the rushed schedule of the day we forget the importance of setting the place for success.

We recently hand-reared a small marsupial called a brush-tailed bettong, a small wallaby-like marsupial, as a future ambassador animal. Named Truffles (in recognition for the truffle finding ability of the species in their bush habitat) she was raised with every consideration given to her developmental needs, with each step in her training staged with care.

One of the most useful behaviours for a young animal is to step up onto a set of scales, as keeping in touch with weight is one of the most efficient ways to monitor growth and condition. Her trainer gently introduced this concept, using a syringe full of her hand-rearing formula as a lure during those first steps and ensuring that a small amount was given for each step (or hop) in the target direction. This behaviour became so robust that we were able to use her as a demonstration animal at our Bob Bailey Downunder Workshop before an audience of 75 Humanimal observers. We carefully set an antecedent arrangement of a large box with a Perspex front, set on a trestle table. We place textured matting on the table to provide traction for hopping action. In this context, she was visible, safe, supported and contained in an appropriate place to train the target behaviour.

Add to this mix a live film-relay of the action to make sure her petite smallness could be easily seen from the back, and we had skill acquisition in a new context for her and a fun lesson for Humanimals as well.

There's much to be said for knowing your learner's place and setting it up for effective learning.

Creature Comfort 2 – Space

Tune in to Choice Voice

During a recent workshop event, I heard a keynote speaker talk about the initial steps in forming relationships with animals. One of her quips stuck: ‘Come Bearing Gifts’. She was referring mainly to some kind of food reinforcer to start the connection. I liked it and reflected on it, and eventually revised it thus: ‘Come bearing gifts - *and make the foremost gift that of Space*’.

I was remembering a lesson clearly delivered some time ago by a chowchow puppy I came across at a street side cafe. Its plush cuteness overrode my spatial respect chip and I crowded him out in an overwhelming urge to smooch. This was greeted with a throaty rumble that would’ve done credit to a grizzly bear and caused me to prop back and remember my manners.

It prompted me to reflect that before we can connect, we need to assess. Body language plays a crucial role here – on approach, check in. Have a look at the environment and what the animal is doing therein. This may read as a very basic offering to the experienced trainer but observation has taught this Humanimal that this simple notion can go a long way to shaping strong interest. It effectively says to the animal:

“I see you are there and I know that your first priority before food is safety. I respect that and I am ready to connect on *your* cue, rather than mine”.

This has proven especially useful for young learners, as so often their world is a sensory layer cake with multiple cognitive processes running at once. I want that youngster to know that I respect its space and that I am prepared to engage with any seeking in my direction – or not.

We recently benefited from some solid schooling in bearing the gift of space in hand-rearing two fallow deer fawns. As deer have been honed by their evolution to have reflexes ready to respond to some pretty hard-core predators, they were perfect teachers for us. Any sudden, fast or hard moves saw flight responses that effectively taught us to slow down and take care – our history of mainly dealing with a contact yard full of bomb-proof goats definitely needed some revision.

The simple notion of respecting space has brought enormous richness to my life with animals. Initial slower steps are such a powerful boon to speeding up learning in later interactions - take the time rather than the space and notice the difference.

Creature comfort 3 – Pace

Start at the Level of the Learner

Have you ever trained a chameleon? At Adelaide Zoo, we enjoy the company of three of these alien-like lizards. Renowned for their swivel eyes that can scan independently of each other, curious swaying gait and slow-frame approach to life; they are a truly remarkable animal to train.

We were fortunate to acquire two young chameleons from Taronga Zoo and had the opportunity to raise them to enjoy their own spotlight in an encounter named ‘Chameleons and Co’. To prepare them for this, we had to totally shift our approach. Accustomed to high-pace training settings with parrots and cockatoos where reinforcers frequently flow rapid-fire, it was quite something to have to slow right down. This was harder than you might think. When an animal is moving really slowly, the consequence delivery finds it difficult to target exactly what behaviour should be paid – it definitely feels more ‘lumpy’ than ‘splitty’. For us, it was a matter of looking at our criteria and designing it compatibly with the animal’s pace. We started to know that when a slow-frame movement stopped and when both barrels of those schizoid eyes trained forward, we were in business.

Learning to read body language and match ourselves to the style and pace of our animals has brought many benefits, especially in the patience stakes. Chameleons have taught us as much as any high-octane cocky!

Creature Comfort 4– Grace

Practice Firm Principles and Gentle Manners

My secondary schooling occurred at a Lutheran College whose motto read ‘Fortiter in re, Suaviter in modo’, which translates to ‘Firm in Principle, Gentle in Manner’. Little did I know it at the time, being a spotty-faced dweeb of a teenager, but this elegant Latin would emerge as a guiding notion in my adult life – especially around animals.

It’s a useful guide to being successful in almost any field. Firmness and gentleness can combine with beguiling potency to influence our animal relationships. For our purposes in this arena, I’ll clarify that by firmness, I mean staying firm on using the scientific principles of applied behaviour analysis. Sensitive antecedent arrangement and meaningful consequences around target behaviour are the bedrock of training success. It’s here that the most pervasive and elegant powers come into play but so often their power is denied when we’re faced with tight time constraints, unforeseen events and our own tendency to interpret motivation rather than respond to action.

Young animals need us to be firm in principle and gentle in manner in our approach to behaviour modification. Cramming a quick training session into the day in order to tick that box frequently impedes learning. Rushing a training session so often leads to progress-thwarting frustration, lack of clarity, imprecise delivery of information and backward steps, especially in those early acquisition stages for the youngster.

We learned this with our penguins. In the last 12 months we’ve raised six home-bred babies to add to our flock of some 21 birds. For birds raised in the dark, dank confines of a burrow, sudden interactions such as the sudden lifting of a nest box lid cause a flood of light way outside the ethogram of the species. By approaching slowly, talking gently, raising the lid a small amount and gradually opening, we had a calm rather than cowering behaviour. Their responses quickly taught us that careful arrangement of antecedents and sensitive delivery of reinforcers was the way to go.

At times, this took some remembering when faced with the enthusiastic arousal of hungry penguins who can consume a dozen or more fish on one sitting. Gently lining up the head of the fish with the moving maw of a growing penguin chick took some practice to achieve without restraint. Our firmness to training principles coupled to our gentleness in approach had them eating out of our hands in no time. And the reward for the crew? The reinforcing pleasure of a waddle of confident penguin behaviour, tripping over their flat feet to get to us not only at feed time, but any time we showed up.

Super-Size all Four into the Ultimate Training Combo!

Effective training is a synthesis of all four creature comforts. By remembering that Place, Space, Pace and Grace all interact in every training session, we can practice and build the conceptual and practical coordination in our approach to shape robust behaviour in our learners. We might learn a thing or two about improving our own experience, too. And the last word needn’t come from me -take it from Terry Ryan of Legacy Canine: “Honour thy animal – it didn’t ask to be here!”