

Training Reptiles

Can it be done?

An article by Amy Wilkinson

Reptiles are often dismissed as primitive, unintelligent and slimy creatures. It's true that some have changed little in the years they've existed – crocodiles especially. But this could be seen as proof that they have evolved to a point which works well, so there is little need for improvement! And many a person has exclaimed "it isn't slimy like I thought" upon handling their first reptile. So in this article I will attempt to discuss their intelligence, and their capacity for being trained.

Basic principles

The simple principle of training is getting an animal to do an action or behavior when a signal or command is given. The actual teaching can be complicated or simple, depending on what the animal is being trained to do. Positive reinforcement does this by rewarding the animal when it performs the action or behavior that the trainer wants. Sometimes a bridge is used (such as a clicker) so the animal makes the connection between the action wanted and the signal upon which the action is performed.

So, how does this all apply to reptiles?

Senses

When you start training, or considering training a reptile, don't

forget that they're reptiles! They have different senses, priorities and instincts compared to training an animal like a dog.

These senses govern how the reptile perceives the world. So if an animal has poor eyesight you're unlikely to have much luck training them with visual cues such as used in target training. However, animals which we consider to not rely on some senses do still use them (and so could be taught utilizing those senses). A study by Holtzman and colleagues in 1999 found that cornsnakes rely on visual cues when moving around and not just chemical cues as previously thought. A more recent study by Leal and Powell (2011) found that Puerto Rican anoles were not only able to learn that the colour of a cap indicated if there was food beneath it or not, but they were also able to quickly

learn and relearn the colour that signaled there was food underneath.

However audio cues would not be suitable for training a snake or chelonian - though they are aware of sounds their hearing is more attuned to low frequency vibrations. Comparatively, most lizards have good hearing, except burrowing species, and crocodylians which have the most sensitive and widest ranging hearing of all reptiles.

The signal used in training needs to be clear to reptile, as well as the reward. For example a food reward is more likely to be an effective reward than a pat on the head. It should be noted though that suitable food items should be used as rewards, and food eaten as part of training should be taken into consideration of the overall diet to avoid obesity.

Heat

It's easy to take for granted how important heat is to a reptile, and how much their natural bodily functions are affected if they are unable to reach their optimal body temperature (OBT).

But unless a reptile is able to reach its OBT, it is unable to perform more complex behaviours and instead will do what it can to reach OBT ie. moving closer to a heat source. So an important aspect of training in captivity is ensuring the reptile has the correct husbandry and has reached its OBT before beginning training.

Training successes

Training reptiles is already common in animal collections, with simple target training making it easier to take blood samples, weigh and move animals. Tap training is also utilized by many keepers with large, potentially dangerous snakes to avoid a feeding response as soon as the enclosure is opened. I'm currently working on the reverse – training my snake to know when it is feeding time.

So, it's relatively easy to train a reptile, though for some species and more complicated actions the training period may be longer. But as long as the signal is simple, the reptile understands what behavior is required and is promptly rewarded for performing that action,



One of the Aldabra giant tortoises at Paignton Zoo being target trained (2013). Photo taken by author

anyone could train their reptile (and you may find you have inadvertently already done so). However, there are a couple of training faux pas!

Things to avoid

- ◆ Trying to train when you and/or the animal are tired – you'll just get frustrated and may end up undoing previous training
- ◆ Over repetition of a signal. When training any animal a signal given once should be sufficient. If you give the signal repeatedly it'll lose meaning, and the animal may learn that it doesn't have to perform the required action on the first signal.
- ◆ If trying to train to differentiate between colours, or demonstrate intelligence, set up an impartial test and limit other factors which might influence the animal's choice.

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