REPTILE TRAINING AND ENRICHMENT: A USEFUL TOOL FOR THE ZOO VETERINARIAN

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ABSTRACT

Both the words training and enrichment appear to have been lost when used in conjunction with the words reptile or amphibian. Even though enrichment is attempted in many species, reptiles are often kept in small sterile environments. Enriching captive reptiles will allow them to exhibit their natural array of behaviors. Similarly, we rarely hear the word training used in association with reptiles and amphibians. When veterinarians hear the word training, we think of large mammals such as hoof stock or primates that have been trained to allow for passive diagnostic sampling, ultrasound and radiographs. These same techniques can be used to train reptiles and amphibians to assist with medical procedures and to facilitate everyday keeper/animal interactions.

Enrichment

Enrichment can be defined as a process for improving or enhancing animal environments and care within the context of their inhabitants’ behavioral biology and natural history. It is a dynamic process in which changes to structures and husbandry practices are made with the goal of increasing behavioral choices available to animals and drawing out their species-appropriate behaviors and abilities, thus enhancing animal welfare.

The enrichment framework developed at Disney’s Animal Programs provides us with a process to ensure that our enrichment program meets the needs of the animals, and provides them with the opportunity to experience enhanced animal welfare. Animal welfare involves both the physical health of the animals (e.g., preventing and treating illnesses and injuries), as well as their psychologic well-being. As an important aspect of welfare, an animal’s psychologic well-being is influenced by whether it can:

- Perform its highly motivated behaviors;
- Respond to environmental conditions using its evolutionary adaptations;
- Develop and use its cognitive abilities;
- Effectively cope with challenges in its environment.

Thus keeping a snake in a plastic box with newspaper and a water bowl is not sufficient and we should attempt to provide a more complex environment to watch and enjoy the animals we keep in captivity. Of course balancing proper husbandry, thermoregulation and veterinary concerns
becomes more difficult, however I think it is our obligation to do this for the animals we keep in
captivity. For more comprehensive information please take a look at
www.animalenrichment.org for a full description and how to develop and enrichment plan.

Training

When I think of animal training I think of the old parrot shows or circuses where animals were
trained to complete a variety of unnatural acts for our entertainment. Training now has a different
context which includes “training” animals to exhibit a variety of behaviors for husbandry,
education, and yes, entertainment purposes. Sometimes we influence (train) animals’ behavior
inadvertently through our actions, our husbandry routines, or through other stimuli present in the
captive environment. In effect, animal care staff are always training and they need to be aware of
that fact. Training is all about associations. The key to an optimal captive environment is to
facilitate animals’ opportunities to make associations that enhance their well-being.

Following the “SPIDER” system of training. Setting Goals, Planning, Implementing,
Documenting, Evaluating and Readjusting, it is possible to train reptiles for a variety of
behaviors. For example at Disney’s Animal Kingdom Nile crocodiles (Crocodylus niloticus) are
trained to shift and crate on command, Dendrobatid frogs (Dendrobatid spp.) will station on a
weigh scale, Komodo dragons (Varanus komodoensis) will target, follow a laser pointer, station
in a crate and station to have their nails trimmed.

We suggest here that in order to select the most effective and appropriate techniques to shape
(train) behavior, it is necessary to consider three things:

1) The animal’s natural history – it’s important to consider the animal’s predispositions. For
example, it may make more sense to ask an arboreal animal to station off the ground/on a perch.
2) The animal’s individual history – it’s important to consider the early rearing/life experiences
of the animal being trained. For example, an animal that’s imprinted on humans may be trained
substantially differently than a wild-caught animal brought in as an adult.
3) The animal’s function or “role” in your collection – the animal may be in the collection as
part of a breeding program or part of an education program. The type of training and your level
of interactions with that animal may differ depending on the function this animal serves in your
collection.

Of course everyone has different goals for training and as a veterinarian our goals may differ
from private owners and zoos alike. The scope of this talk cannot scratch the surface of how to
implement a training program however to get more information on this topic go to
www.animaltraining.org which has a full plan to start your own training program.