ILLINOIS
Veterinary Teaching Hospital
COLLEGE OF VETERINARY MEDICINE

Funded Study: Developing a Body Condition Score in Bearded Dragons
University of Illinois Wildlife Epidemiology Laboratory

Study Title: Validation and development of a body condition score based upon computed tomography (CT) in the bearded dragon (Pogona vitticeps)

Purpose of Study
Body condition scoring (BCS) is an integral component of the physical examination for all animals and involves assigning a numerical value for an animal's muscle and fat content, based upon species-specific physical examination parameters. Specific and validated BCS have been developed for a wide range of mammals (dogs, cats, laboratory animals, horses, pigs, etc) and there are well accepted BCS for groups of avian species (parrots, birds of prey and poultry) however, very little attention has been paid to BCS of reptiles despite their popularity in the companion animal sector. The purpose of this study is to develop a species-specific BCS for the bearded dragon that will enable clinicians to better ascertain health and drive additional research metrics in the future.

Inclusion Criteria
- Central/inland bearded dragons (Pogona vitticeps) of either gender, health status, and color pattern
- Anybody condition (under, normal, or over conditioned) will be included, however, there are a limited number of CT scans for each body condition category available.

Exclusion Criteria
- Bearded dragons < 1 year of age
- Dragons needing/requiring a contrast-CT

Eligibility Diagnostics
Prior to study entry, pet owners will be charged an initial consultation fee. No additional diagnostics are required to determine eligibility.

Protocol
Study dragons will be sedated and have a CT scan performed. The results of the imaging will be shared with client and referring veterinarian and will be able to be used in real time to recommend further diagnostics and/or therapies. After CT acquisition, several morphometric measurements (weight, length, tail diameter, etc.) and specific photographic images will be taken.

The CT data collected from each dragon will be manipulated in three-dimensional imaging software to calculate the percentage body fat. The morphometric measurements and images will be used to validate the body condition scoring system through statistical modelling.

Compensation

Owners are responsibility for eligibility requirements, the cost of sedation and any additional diagnostics or therapies that are recommended for the treatment of their bearded dragon. The study will cover the cost of a non-contrast CT scan and standard radiographic interpretation. Owners are responsible for payment of radiographic interpretation if a more rapid turn-around time is needed.

Contact Information

Please reach out to Dr Krista Keller, kak@illinois.edu for more information and to facilitate scheduling.