

---

---

## A REVIEW OF AMPHIBIAN PROLAPSE EVENTS IN MULTIPLE SPECIES AT A ZOOLOGICAL INSTITUTION (2003-2012)

*S.T. Ferrell, DVM, Dipl ABVP, Dipl ACZM, NREMT-B, N.P. Lung, VMD, MS,\* and A.B. Marlar, DVM, MRCVS, Dipl ACVO*

*Fort Worth Zoo, 1989 Colonial Parkway, Fort Worth, TX 76110 USA*

---

### ABSTRACT

From 2003 to 2012, 35 prolapse events were recorded in the amphibian collection at the Fort Worth Zoo. Some incidents represented recurrent prolapses in the same individual animal. Species affected and number of recorded incidents were: Puerto Rican Crested Toad (*Peltophryne lemur*, n=15), Budgett's Frog (*Lepidobatrachus laevis*, n=1), Mission Golden-eyed Tree Frog (*Trachycephalus resinifictrix*, n=7), File-eared Tree Frog (*Polypedates otilophus*, n=2), Denny's Tree Frog (*Polypedates dennysi*, n=4), Chiricahua Leopard Frog (*Rana chiricahuensis*, n=5), and the Gulf Coast Toad (*Incilius valliceps*, n=1). Prolapsed structures (based on physical appearance, but not confirmed histologically), consisted of stomach (n=1), bladder (n=14), colon (n=9), cloaca (n=9), ovary/oviduct (n=8), combinations of those aforementioned structures (n=12), and otherwise unknown tissue of origin (n=7). Etiology was presumed in some cases: foreign bodies (n=3), spinal disease (n=2), and hormone stimulation for breeding (n=4). Otherwise, the etiology was unclear. Exact identification for age, sex, etc. was infrequently available due to group housing. Medical management with replacement of the prolapse was successful in 17 of 23 attempts, with no immediate re-prolapse in the next 12 hours. Surgery was immediately performed in 12/35 events shortly after presentation. Surgeries included: exploratory with replacement of tissues, exploratory with resection of externalized tissues and replacement, exploratory with a pexy of prolapsed tissues after replacement, and simple resection of externalized tissues and replacement of any stump from the cloaca. Two of the twelve surgical cases died of prolapse-related complications. The remaining 10/12 had no complications or re-prolapses. Prognosis is good for survival and reproduction following prolapse if proper and timely intervention is rendered.