The metatarsus in this specimen confirms the presence of an actinematuractus in this taxon as in other caenagnathids. The relative completeness of the individual allows its measurements to be incorporated in a larger allometric study of theropod hind limb elements. Phlaocyon and Cervus elaphus are an antecedent length scale for actinematuractine. A new medium-sized theropod dinosaur was discovered by field crews of the Burpee Museum in mudstones of the lower Hell Creek Formation (latest Maastrichtian) of Carter County, Montana, in June 2010. Additional material was recovered during the summer of 2014. This individual has provisionally been referred to the oviraptorosaurian species Anzu wyliei, previously known from partial skeletons from coeval beds in North and South Dakota and tentatively from Saskatchewan. This specimen includes elements (including both nearly complete metatarsi) previously referred to Phlaocyon, a borophagine canid that has dental characters thought to be convergent with procyonids due to their very similar hypercarnivorous dentition. TF specimens include elements (including both nearly complete metatarsi) previously referred to Phlaocyon, a borophagine canid that has dental characters thought to be convergent with procyonids due to their very similar hypercarnivorous dentition. TF specimens are identified as procyonid based on the presence of an upper P4 with a more developed paracone, a metaconid that is shorter, and a protocone that is more posterior than in the stem-procyonid Brotia. In comparison to Phlaocyon, the upper P4 of the TF procyonid has a more labially oriented paraconule but lacks the distinctive prominent prominent external cingulum of Phlaocyon. The upper M1 has a reduced metacone and is as in the procyonid. It has a more robust protostylid subequal in height to the metacone and paracone. A robust postprotostylid connects the highly reduced hypocone with the metacone. The parastrylid shelf is labially expanded in relation to Phlaocyon but not as in the extant Basariscus astutus. The lower m1 has a highly reduced anteriorlobial cingulum, a prominent hypocone, and a slightly posteroexternal hypocone. In comparison to Phlaocyon, the relatively shorter trigonid basin opens lingually with a paraconid being the most prominent cusp. The metaconid and protoconid are relatively subequal in height. The mesofosseal TF specimen is in contact with the hypoconid and both are located on the lingual side and more distinct than in B. astutus. The talonid basin is wider and the trigonid basin is less expanded posteriorly than in B. astutus. Because the specimens from TF are remarkably different from those of the Phlaocyon holotype and are more similar to B. astutus, we tentatively refer the TF specimens to Basiurus.

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Poster Session IV (Saturday, October 17, 2015, 4:15 - 6:15)

FIRST RECORD OF PROCYONIDS FROM THE THOMAS FARM FOSSIL SITE, GILCHRIST COUNTY, FLORIDA
HOLTE, Scott E., University of Florida, Gainesville, FL, United States of America, 32611; RICCON, Aldo F., University of Florida, Gainesville, FL, United States of America

The first occurrence of procyonids in North America is stem-procyonid Amphictis sp. from the early Miocene Anderson Ranch Formation, Nebraska. By the early Hemingfordian, fossil New World procyonids were widespread from Panama (~9°N) to the northern Gulf Coast (~30°N) and Nevada (~39°N). Procyonids colonized South America during the late Miocene via island hopping before the final closure of the Panama Isthmus during the Pliocene. The TF specimen is one of many from coastal Florida that have recently been recovered from terrane to semi-arid open scrubland, often with indicators of nearby (< 50km distant) closed woodlands. This environment is similar to that utilized by extant Tule Elk, which suggests that by the late Pleistocene the C. elaphus population in California may have already differentiated into the nannodes subspecies.