

Regular Poster Session 2 (Thursday, October 19,
2023, 4:30 - 6:30 PM)

**A NEW VERTEBRATE-BEARING LOCALITY
FROM THE CARNIAN (LATE TRIASSIC) OF
VIRGINIA (NEWARK SUPERGROUP,
TAYLORSVILLE BASIN)**

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The Carnian-Norian Taylorsville Basin (TVB)
includes some of the oldest Mesozoic fossils in the
mid-Atlantic region of North America. Exposed at
various sites northwest of Richmond, Virginia, USA,
the TVB has primarily produced redfieldiiform fish,
with less common coelacanths and semionotids.
Tetrapod fossils include the partial skeleton and
isolated bones of the doswelliid archosauriform
Doswellia kaltenbachi, as well as isolated bones of
poposauroid archosaurs and other unidentified
reptiles.

Here, we report on a new vertebrate-bearing locality
near the town of Ashland in Hanover County,
Virginia from the Falling Creek Formation of the
basal Doswell Group, the lowest unit of the TVB
section. The site occurs along a tributary of South
Anna River that exposes a linear kilometer of
interbedded fossiliferous conglomerates, sandstones,
mudstones, and microlaminated siltstones. The
mapped stratigraphic position of this outcrop places it
within correlative, and lithologically similar Carnian
age strata identified in outcrop and in industry rock
cores and cuttings from the TVB.

The siltstones produce abundant spinocaudatans
(clam shrimp), skeletons of semionotiform and
redfieldiiform fishes, and one conical, striated reptile
tooth. A well-preserved blattodean and partial beetle

elytra indicate that these siltstones may represent an
insect lagerstätte. The less-well laminated mudstones
are dominated by plant fossils, including
bennettitid leaves, stems and leaves of the conifer
Pagiophyllum, horsetails, and wood fragments.
Animals are represented by bivalve steinkerns and by
a bromalite containing ganoid fish scales.

The sandstones have produced indeterminate plant
fragments and vertebrate fossils. Fish fossils include
isolated, three-dimensionally preserved
actinopterygian skull elements and scales. Reptile
materials are dominated by unserrated conical teeth
and rare serrated teeth. Archosauromorph materials
include one partial limb skeleton and an association
of two vertebrae and a rib. The new reptile fossils
differ from equivalent elements in *D. kaltenbachi*,
indicating a higher diversity of reptile taxa from the
TVB than previously known. Apomorphically
identifiable phytosaur fossils are absent, as is true of
known Carnian age strata in eastern North America.
These records add to the developing picture of the
Carnian-Norian transition in North America and
valuable points of floral and faunal comparison for
similar-age basins of the southern Newark
Supergroup.

Funding Sources This project was financially
supported by the Virginia Museum of Natural History
Foundation. Fieldwork support and equipment were
provided by the landowners.

Regular Poster Session 4 (Saturday, October 21,
2023, 4:30 - 6:30 PM)

**SYSTEMATICS OF THE LONG-NOSED
FLORIDATRAGULINE CAMELS
(ARTIODACTYLA: CAMELIDAE)**

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The weird-looking tubular-snouted camels known as
floridatragulines have been a controversial group
ever since the first specimens were found in the
1930s. We describe only the second known skull of
Floridatragulus dolicanthereus, which gives us a
better understanding of their cranial anatomy and
proof of association of the jaws and skull, because
the holotype skull was badly crushed and mostly