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Recent Reptile Fossils from the Pindaï Caves of New Caledonia.

Kennedy, A. M.[1]
alicia.m.kennedy@utexas.edu
1. Jackson School of Geosciences, The University of Texas at Austin, Austin, TX

Excavations in the Pindaï Caves of New Caledonia, a large island in the South Pacific, yielded an assemblage rich in fossil remains of squamates. The fossiliferous deposits are known from six caves along the northwest coast of the Grand Terre. The fossils I examined are from four of the caves, and are hypothesized to be from degraded owl pellets. Radiocarbon analysis yielded dates of 1370 to 5590 calibrated YBP spanning the deposits. Because humans are thought to have reached New Caledonia about 2800 YBP, these assemblages provide an opportunity to examine the effects of human arrival on the herpetofauna of New Caledonia. Approximately 25,000 fossils of squamates, comprising chiefly maxillae, premaxillae, prefrontals, frontals, parietals, quadrates, dentaries, surangulars, and vertebrae were recovered from the Pindaï Caves. All are attributable to Gekkota, Varanidae, and Scincidae, with the diplodactylid gecko species *Rhacodactylus trachyrhynchus* being the most common. Similar to the New Caledonian avifauna, which experienced elevated extinction rates upon the arrival of humans, the Pindaï fossil herpetofauna includes at least one extinct species. Additionally, *Rhacodactylus trachyrhynchus* is rare in the region today, and is known from only a single recent specimen. Gekkonid geckos, which are widespread in coastal New Caledonia today, are absent. Gekkonids may have been introduced as recently as 235 years ago with the arrival of Europeans, but the arrival of Melanesians nearly 3000 years ago may have precipitated ecological changes that altered patterns of relative abundance and species composition of lizards.

Keywords: Holocene, lizard, South Pacific.