

STEVEN KLUG, Dept of Organismal Biology, Ecology, and Zoo Science, West Liberty University, West Liberty, WV, 26074, and JAMES WOOD, Dept of Organismal Biology, Ecology, and Zoo Science, West Liberty University, West Liberty, WV, 26074. Similarities in habitat and fossil assemblages of three Late Jurassic paleoenvironments and use in inferring presence of undiscovered dinosaur taxa.

This literature review seeks to examine the similarities of three Late Jurassic paleoenvironments, the Morrison Formation environment of North America, the Lourinhã Formation environment of Portugal, and the Tendaguru Formation environment of Tanzania, and use these similarities to infer presence of several missing taxa across these ecosystems. A comparison of literature on the habitats, geography, and dinosaur fossil taxa of these environments reveals a high degree of similarity despite wide geographical distribution. These similarities suggest that if one of these environments is missing fossil evidence for a dinosaur taxon with close relatives in the other two environments, the presence of the missing related taxon can be inferred, and that its absence is due to lack of fossilization or discovery. These conclusions are intended to assist in reconstructions of these ancient environments for the purposes of niche occupancy, and not to describe new taxa.