

ICHNOFACIES MODELS IN CONTINENTAL ENVIRONMENTS

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Continental ichnology has expanded recently and various recurrent assemblages have been defined. Fully subaqueous lacustrine environments are typified by the *Mermia* ichnofacies, which is characterized by grazing and feeding traces, subordinate locomotion traces, high to moderate ichnodiversity, and low degree of specialization of grazing strategies. Diversity levels result from minor variations of simple grazing patterns. The *Scoyenia* ichnofacies is restricted to transitional subaerial to subaqueous environments, typically floodplains and lake margins. It is characterized by meniscate traces and arthropod trackways, and low to moderate diversity. Both softground and firmground ichnocoenosis are present. Terrestrial ichnofaunas are climatically controlled and display the most complex patterns. The *Termitichnus* ichnofacies originally was defined to include all paleosol ichnofaunas. However, the situation of terrestrial environments is far more complex and this ichnofacies does not reflect the diversity of paleosols. Formal definition of a *Termitichnus* ichnofacies in a more restricted sense (i.e. termite nest assemblages in closed forests) should await documentation of additional studies. Paleosols in ecosystems of herbaceous communities are characterized by the *Coprinisphaera* ichnofacies, which is dominated by dung beetles nests and hymenopterous cells. This ichnofacies occurs in alluvial plains, crevasse splays, levees, abandoned point bars, and vegetated eolian deposits, reflecting the capacity of insects to nest in paleosols of varied sedimentary environments. Recognition of continental ichnofacies is complicated by their more restricted temporal range that results from progressive colonization of continental ecospace and evolutionary innovations through the Phanerozoic.