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Drive by vestiges of the past: A non-salient Vertebrate track site from the Upper Triassic near Lake Achensee/Tyrol

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Ichnofossils from tetrapod vertebrates are remarkably sparse in Austria. Contrary to the French- Italian- and Swiss Alps, where vertebrate track sites of similar age are well-documented, the only known Austrian footprints from the Middle and Upper Triassic are recorded of the Drau Range, Carinthia. Here we present a new track assemblage from the early Upper Triassic Northalpine Raibl Beds near Lake Achensee in Tyrol, Austria. Tracks are directly located near the federal highway B181 and are imprinted on the top of steeply inclined decimetre thick dolostone banks and occur over multiple horizons within an interval of 10 m within the Northalpine Raibl Beds. They occur solitary or as assemblages at three individual stratigraphic levels.

Two distinct types of tracks on the biggest bedding surface could be identified as manus and pes tracks as they show differences in size and occur as pairs (manus on average 15 cm and pes on 30 cm in length) indicating lateral sequence walking. The morphology of the autopodium is weakly preserved, as the tracks are only perceivable as elliptic shaped concave epireliefs, some still partially filled with the surrounding substrate material. However, the morphological features suggests digitigrade locomotion of at least one undetermined ichnotaxon.

The occurrence of vertebrate tracks in the Northalpine Raibl Beds, which show current ripples, subaquatic dunes and other indicators of shallow water milieu, allow for new insights into the paleoenvironment and enhance its biostratigraphic significance.

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