

Ichnological science outreach activities: its significance and brief performance reports

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This study discusses the significance of ichnological science outreach activities, and briefly reports several examples of ichnological science outreach activities recently performed by the author. Trace fossils, which are also called as ichnofossils, are defined as sedimentary structures of animal behavior origin, which are preserved in ancient strata. This means that detailed paleo-ethological interpretations can be obtained by analyzing trace fossils. In addition, in some cases, it is known that trace fossil assemblages occurred from a sedimentary succession can reveal detailed bathymetric setting/depositional environment of the succession. Therefore, trace fossils are important materials for both geology and paleontology fields. However, it is very rare that the body fossil of an animal is preserved in an ancient rock, which is closely associated to the trace fossils produced by this animal. Therefore, to appropriately interpret the paleoecological aspects recorded in trace fossils, behavioral ethological data of modern animals are definitely essential. This means that both geological and biological backgrounds are required for ichnological research. On the other hand, it can be also said that trace fossils have great potential for tools of geological science outreach activities. It is possible that trace fossils may become the initial motivators to begin learning biology, suggesting that trace fossils can finally open the door to geology field. In spite of such importance, the number of ichnological science outreach activities are much less than that of outreach activities of another research fields in earth and planetary sciences. Therefore, this study actually presents several examples of ichnological science outreach activities recently performed by the author.

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