

PALEONTOLOGICAL SIGNIFICANCE OF FOSSIL FISH FROM THE ARARIPE BASIN

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The Araripe Basin provides a paleontological resource of the highest international significance. The region is especially famous for its fossil fishes, both in sheer numbers and biological diversity, and is the Aptian-Albian, Gondwanan equivalent of Solnhofen, Holzmaden and Monte Bolca in Europe, or Bear Gulch and Green River in North America. Since the fossil fish of Araripe first came to the attention of scientists in the 1830's, more than 40 nominal species have been documented, with almost two dozen genera represented by type species from Araripe. Their abundant, complete and well preserved remains are highly informative sources of morphological data, especially following chemical preparation, and they are also important for biogeographical studies. The fossil fish are also rich sources of data concerning soft tissue preservation and autecology, including parasites, predator-prey relationships, reproductive seasonality and individual longevity and mortality. Future research on this important paleontological resource, in both field and laboratory, will undoubtedly expand upon these directions of research.