

What is Conservation Paleobiology? Tracking 20 Years of Research and Development

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Conservation paleobiology has coalesced over the last two decades since its formal coining, united by the goal of applying geohistorical records to inform the conservation, management, and restoration of biodiversity and ecosystem services. Yet, the field is still attempting to expand its identity beyond its academic roots. Here, we ask a deceptively simple question: What is conservation paleobiology? To track its development as a field, we synthesize complementary perspectives from a survey of scientific community members familiar with conservation paleobiology and a systematic literature review of publications that used the term. We present an overview of conservation paleobiology's research scope and compare survey participants' perceptions of what it is and what it should be as a field. We find that conservation paleobiologists use a variety of geohistorical data in their work, although research is typified by near-time records of marine mollusks and terrestrial mammals collected over local to regional spatial scales. Our results also confirm the field's broad disciplinary basis: survey participants indicated that conservation paleobiology can incorporate information from a wide range of disciplines spanning conservation biology, ecology, historical ecology, paleontology, and archaeology. Finally, we show that conservation paleobiologists have yet to reach a consensus on how applied the field should be in practice. The survey revealed that many participants thought the field should be more applied but that most do not currently engage with conservation practice. Reflecting on how conservation paleobiology has developed over the last two decades, we discuss opportunities to promote community cohesion, strengthen collaborations within conservation science, and align training priorities with the field's identity as it continues to crystallize.

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