

Trade-offs between reducing complex terminology and producing accurate interpretations from environmental DNA: Comment on “Environmental DNA: What’s behind the term?” by Pawlowski et al. (2020)

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Abstract

In a recent paper, “Environmental DNA: What’s behind the term? Clarifying the terminology and recommendations for its future use in biomonitoring”, Pawlowski et al. argue that the term eDNA should be used to refer to the pool of DNA isolated from environmental samples, as opposed to only extra-organismal DNA from macro-organisms. We agree with this view. However, we are concerned that their proposed two-level terminology specifying sampling environment and targeted taxa is overly simplistic and might hinder rather than improve clear communication about environmental DNA and its use in biomonitoring. Not only is this terminology based on categories that are often difficult to assign and uninformative, but it

ignores what is in our opinion the most important distinction within eDNA: the type of DNA (organismal or extra-organismal) from which ecological interpretations are derived.

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