

Comments to the Author

I appreciate the time invested by the authors carefully considering the comments made by the reviewers and editor. As I see it, there are two problems with the amphipod result. One is if the correct assignment has been made – although the amphipods could be a marine talitrid, they could also be another closely related family (or families). The other problem is what this result means – are most of the amphipods prey of fish that the tāiko have scavenged in fisheries waste? If so, that would be an interesting result, because it would appear that the petrels are highly dependent on trophic subsidies from the fisheries industry (further confirming the study by Freeman 1998), and that the prey of fish are of consequence for the petrels. That is, changes in the diet of the fish could have cascading impacts on petrels. Although further work needs to be done to confirm this, if true it would have conservation implications.

I am mostly satisfied that the authors have addressed my concerns to the best of current knowledge. However, I think the authors could check the assignment of the amphipods and if it makes sense to use a higher level (see below). That problem notwithstanding, I expect that the present research will help stimulate future studies to help resolve some of the open questions.

I think the limitations of matching taxonomic units with the identified sequences available mean the authors must be very cautious with the assignment of the Talitridae. Whilst there are marine talitrids (e.g., Lowry and Bopiah 2012), their assignment in the present study could be the result of 1) insufficient information or 2) incorrect information resulting in a faulty match. For the latter scenario, a genus like *Allorchestes* (from the family Dogielinotidae) – a coastal marine amphipod that was previously associated the Talitridae (see Hurley 1957) – could mislead the authors due to a faulty match in the genetic database (so it could be worth checking this and/or considering using a higher-level grouping under the superfamily Talitroidea). The ongoing challenges in amphipodan taxonomy probably needs to be recognized, and Fenwick (2001) described *Allorchestes* as “another long-confused species” temporarily placing it under the Hyalidae. For more recent taxonomic information I recommend the authors refer to the WoRMS online register (e.g., AphiaID: 236962). Their exact taxonomic identity notwithstanding, I think in all probability the amphipod(s) are marine species, since the other crustaceans found in the diet of tāiko (and most likely the fish they feed on) are all coastal marine species.

At any rate, I am happy that the authors recognize the potential for the “Russian dolls” problem with regards to fish and potential prey items, having dealt with this in the revised manuscript. It could be worth highlighting that a food web approach might resolve these problems (by unequivocally describing the diet of prey fish).

I can comment that the controversy over “what is environmental DNA?” is not new: there has been considerable discussion on this matter in the literature (see Pawlowski et al. 2020, Rodriguez-Ezpeleta et al. 2021). I personally have no problem with DNA from fecal samples sourced in the environment being described as environmental DNA, but using dDNA is fine as long as it is clear that DNA from fecal samples has been metabarcoded.

Please see an annotated version of the manuscript [here](#) for some suggested changes.

Literature cited

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