

Supplementary material from:

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## **Supplementary Material 2 - Literature search methods used to investigate the impact of scientific colonialism in Latin American Paleontology**

### **Methodology**

We conducted an exhaustive revision of the literature reporting fossil aquatic mammals from Latin America published after the Cozzuol (1996) review. Our timeframe ranged from 1997 to 2021. The revision was primarily based on the authors' expertise and complemented with web-based searches. We focused the search on peer-reviewed published articles; we only included conference abstracts, theses, and dissertations when no articles were available for that particular record. All references were incorporated in Table 1 of the Supplementary Material. Fossil aquatic mammal taxa reported there, regardless of their taxonomic level of identification, represent a taxonomic occurrence (hereafter called a record). There are 239 records and 168 articles cited.

We investigated citation numbers of the references included above using the search engine GoogleScholar. Articles published in 2022 were excluded to avoid biased citation records. Conference abstracts, although rare, were excluded from this analysis due to their reduced access and citation metrics. We should note that Domning (1997) and Horowitz (2014) were unrecognized by GoogleScholar, and thus were excluded from the citation analysis. Therefore, the total number of articles analyzed was  $n = 130$ . When recording the number of citations for each paper, unpublished (*e.g.* deposited in pre-print servers such as biorxiv) or not genuine citations were excluded.

We then recorded the gender and regional location of the first author of each publication. Given the logistical difficulties in enquiring each author on their self-perceived gender identity, we used a binary distinction (female vs. male) based on their first name. When the gender of the first author was not evident, we searched for photos on their academic websites. We would like to note we are aware that personal identities, including gender, are a continuum that goes way beyond the male/female distinction, but it was not possible to confirm theirs with each author within the timeframe of this contribution. The regional location (Global North or Latin America) was based on the main institutional affiliation of the first author as reported in the paper.

The location (at the country level) of the collections housing published fossil aquatic mammal records from Latin America was obtained from the same Table reported above. For this analysis, we excluded records from Antarctica ( $n = 6$ ) as no regional collections are present there. Likewise, we excluded reports which comprised lost specimens ( $n = 2$ ). Records based on specimens housed in both local and overseas collections or overseas and private

collections simultaneously ( $n = 17$ ) were excluded to avoid oversampling. Therefore, the total number of records analyzed was  $n = 214$ .

We plotted all this information using package `ggplot2` (Wickham et al., 2016) in the software R using RStudio interface (v. 1.3.1093; RStudio Team, 2020). The publications citation records are detailed in the Supplementary Material 1.

Additional references:

RStudio Team (2020). RStudio: Integrated development environment for R. Boston, MA. Available from <http://www.rstudio.com/>

Wickham, H., Chang, W., & Wickham, M. H. (2016). Package 'ggplot2'. *Create elegant data visualisations using the grammar of graphics*. Version, 3.4.0, 1-299. <https://cran.r-project.org/web/packages/ggplot2/ggplot2.pdf>.