

Code sharing increases citations but remains uncommon

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Abstract

Biologists increasingly rely on computer code to collect and analyze their data, reinforcing the importance of published code for transparency, reproducibility, training, and a basis for further work. Here we conduct a literature review examining temporal trends in code sharing in ecology and evolution publications since 2010, and test for an influence of code sharing on citation rate. We find that there is wide room for improvement in sharing code, as scientists are overwhelmingly (95%) failing to publish their code and that there has been no significant improvement over time. We also determined that there is a significant incentive to share, as we additionally find that code sharing can considerably improve citations, particularly when combined with open-access publication.

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