



### July 2021 update on the progress of translatE project

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## 1. Searches for non-English-language literature on the effectiveness of conservation interventions

After several years of working together, we are happy that our study showing that non-English-language studies provide crucial evidence for informing global biodiversity conservation is now available as a <u>preprint</u> at bioRxiv. It was also great to see that the preprint had already attracted some attention, e.g., on Twitter and <u>here</u>.

After screening **419,680** peer-reviewed papers in **16** languages, we identified **1,234** non-English-language studies providing evidence on the effectiveness of biodiversity conservation interventions, compared to **4,412** English-language studies identified with the same criteria (Figure 1). With this data, we have tested four common perceptions that are rarely corroborated together: (i) the amount of relevant scientific evidence that is available only in non-English languages is negligible, (ii) the number of relevant studies being published in non-English languages has been decreasing over time, (iii) the quality of non-English-language studies (measured using the study designs adopted) is lower than that of English-language studies, and (iv) evidence published in English represents a random subset of evidence published across all languages. Our analyses demonstrate that *three out of the four common perceptions on the role of non-English-language scientific knowledge are not supported by evidence. Learn more about this study here.* 

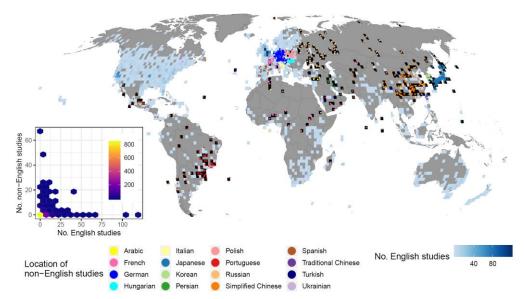


Figure 1. The location of 1,234 non-English-language studies with coordinate information, compared to the number of English-language studies testing the effectiveness of conservation interventions within each  $2^{\circ} \times 2^{\circ}$  grid cell (952 grid cells in total). Amano et al. (2021) bioRxiv 2021.05.24.445520; doi: https://doi.org/10.1101/2021.05.24.445520.





#### 2. English-language barriers to local decision making

The translatE project also aims to understand language barriers to the application of English-language knowledge on biodiversity conservation. Here, we aim to understand how decision-makers perceive language as a barrier to the use of science in their conservation decision making.

To date we have successfully identified collaborators in **40 countries/regions** and those **in 33 countries/regions** out of the 40 have already completed their tasks. We are now closing the data collection phase and are also about to finish the analysis and paper writing. We hope to share the first draft of the paper with relevant collaborators soon.

We would like to thank not only those colaborators who helped us get the information but also report authors/editors who took the time to contribute to this part of the project. Much appreciated!

#### 3. Other news

#### New preprint - Language barriers in global bird conservation

<u>Dr Pablo Negret</u> led a study to investigate the number of official languages spoken within the distributions of 10,863 bird species around the world and identify which ones might be particularly affected by consequences of language barriers. The study shows that **1,587 bird species** have **10 or more official languages spoken within their distributions**. Additionally, 75.6% of the 10,863 bird species, 93.6% of the migratory species, and 55.5% of the threatened (59% of vulnerable (VU), 52.5% of endangered (EN) and 47.9% of critically endangered (CR)) species have two or more official languages within their distributions (Figure 2). Threatened, migratory and wide-ranging species have statistically more official languages spoken within their distribution, compared to non-threatened, non-migratory and narrow-ranging species. The study also reported that high numbers of species with especially many languages within their distribution are found in Eastern Europe, Russia and central and western Asia.

Read more about this study now available as a preprint <u>here</u>. Also, explore which language is especially associated with many species in each region, with <u>the bird language diversity app!</u>





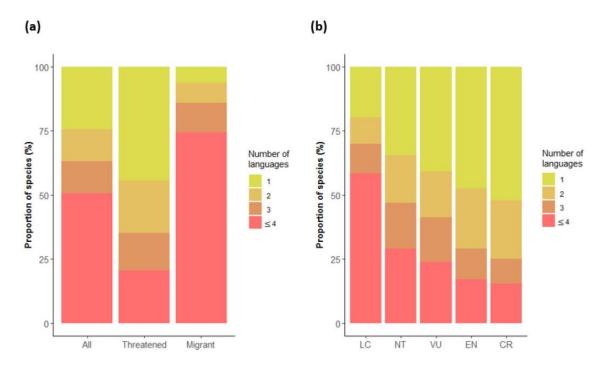


Figure 2. Language diversity among birds. (a) Number of official languages spoken within the distributions of all bird species (n=10,863), threatened species (n=1,427) and migratory species (n=1,939). (b) Number of official languages spoken within the distributions of bird species by threat category (as assessed by the International Union for Conservation of Nature). Negret et al. (2021) bioRxiv 2021.05.24.445290; doi: https://doi.org/10.1101/2021.05.24.445290

### New opinion piece in Nature Human Behaviour – Ten tips for overcoming language barriers

Our <u>new opinion piece</u> "Ten tips for overcoming language barriers in science" has just been published in *Nature Human Behaviour*. It has summaries in three non-English languages (French, Japanese, and Spanish) too so please do have a read!

Language barriers have serious consequences in science, creating inequality for under-represented communities, making non-English-language knowledge inaccessible, and impeding the uptake of science by decision-makers. Yet language barriers in science are rarely tackled seriously enough. To change the current lack of concerted efforts, we believe scientific communities need a clear checklist for tackling and solving language barriers. Here we have listed ten tips to help everyone in science, technology, engineering, and mathematics (STEM) start tackling and solving this issue. We hope the ten tips serve as a starting point for academia in ending the lack of concerted efforts and solving this overlooked issue.

This paper is based on collaboration with scientists working in diverse disciplines (we met at <u>eLife #ECRWednesday Webinar</u> back in 2020).

Read the article here.

View the ten tips in a storytelling format here.





# Presentaiton "Why language matters in conservation and what you can do?" at AER Live now available on Youtube

On 27<sup>th</sup> May, Dr Tatsuya Amano gave a workshop at the British Ecological Society (Applied Ecology Resources Live workshop series) about the importance of addressing language barriers in conservation and how we can start tackling this issue today. Many thanks to those who joined the workshop! In case you missed it, you can now watch the recording here.

#### Workshop on language barriers for early career researchers in publication process

We are delighted to announce that the translatE has been awarded the UQ 2021 Grant for Mentoring and Diversity in Biology. With this we plan to expand our work on identifying academic journals committed to tackling language barriers.

As the initial step we organised a workshop on language barriers to academic publishing on 7<sup>th</sup> July. The workshop had two major objectives. In the first half, Editors-in-Chief from three journals (<u>Evolution</u>, <u>Biotropica</u>, and <u>Ornitología Neotropical</u>) discussed how their journals try to address language barriers to publishing and how non-native English speakers can improve publication processes.

The recording of this part of the workshop is now available here.

In the second half, we discussed how we can measure journals' commitment to addressing language barriers and what might explain differences among journals. Based on the discussion we are now developing a collaborative project to collect more information from journals and write a paper. We are still recruiting collaborators for this, so if you are keen, please register here (<a href="https://forms.gle/9K6oscf4nsRwJ48N9">https://forms.gle/9K6oscf4nsRwJ48N9</a>; limited to 50 people max).

Thanks very much everyone who attended the workshop, especially the three Editors-in-Chief, Prof. Tracey Chapman, Prof. Jennifer Powers, and Dr. Paulo Pulgarín-R for their very inspiring talks!

Thanks for reading our July project update packed of good news! We are glad to share our progress in our aim to break language barriers for sciences with you. Until next time!