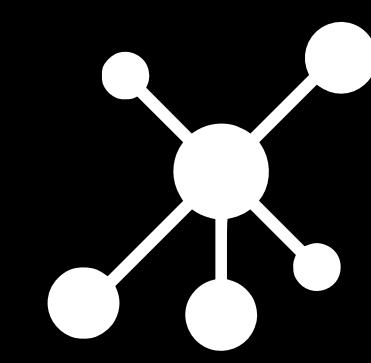


Growing global, empowered locally: the importance of the iNaturalist network

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The iNaturalist Network

iNaturalist hosts a global network of 21 national sites managed by local institutions such as government agencies, museums, universities, and non-profit organisations.

These sites are distributed across all continents (except Africa) and reflect a rich diversity of people and communities. However, the contributions and progress of the network remain understudied. Here we show the collective progress of the network through numbers.

- 1 How do network sites contribute to iNaturalist?
- 2 Does network membership matter?

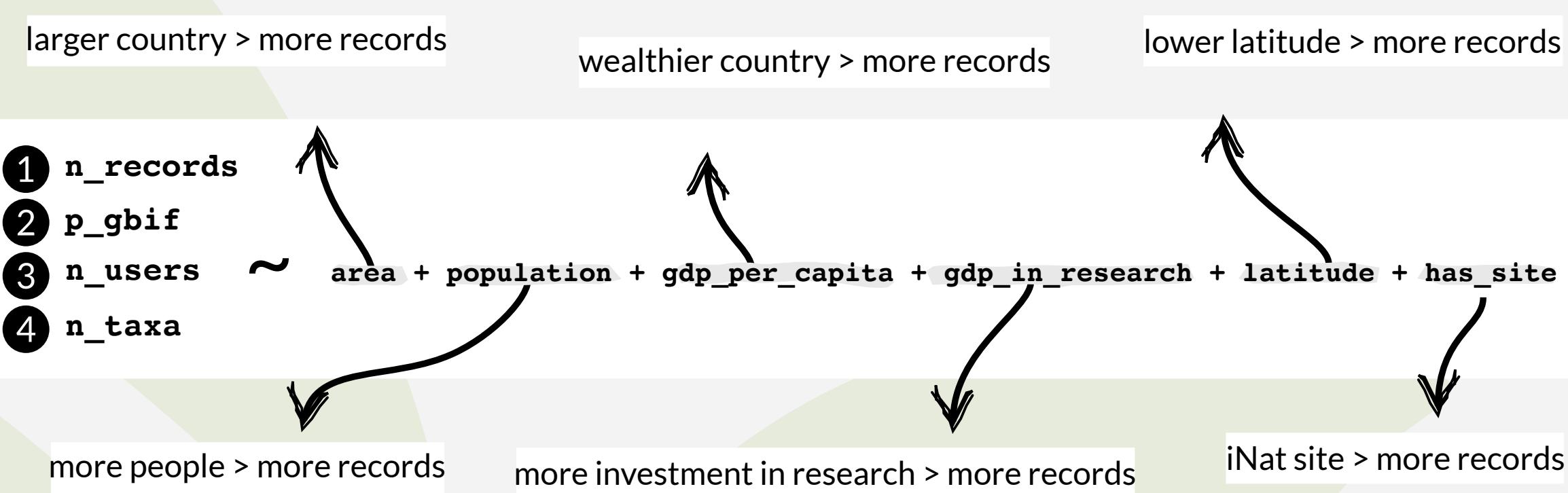


Methods

We tested different explanatory variables to identify which model best explains a country's: ① number of iNaturalist records (**n_records**), ② percentage of records that reach to GBIF (**p_gbif**), ③ number of users (**n_users**), and ④ number of taxa (**n_taxa**). Variables per country were extracted using the World Development Indicators (World Bank) on September 26th, 2025.

We retrieve data for 96 countries in total. We used Random Forest and run our models in R.

The data and code to reproduce our results can be found at: github.com/bienflorence/iNat_network_contributions



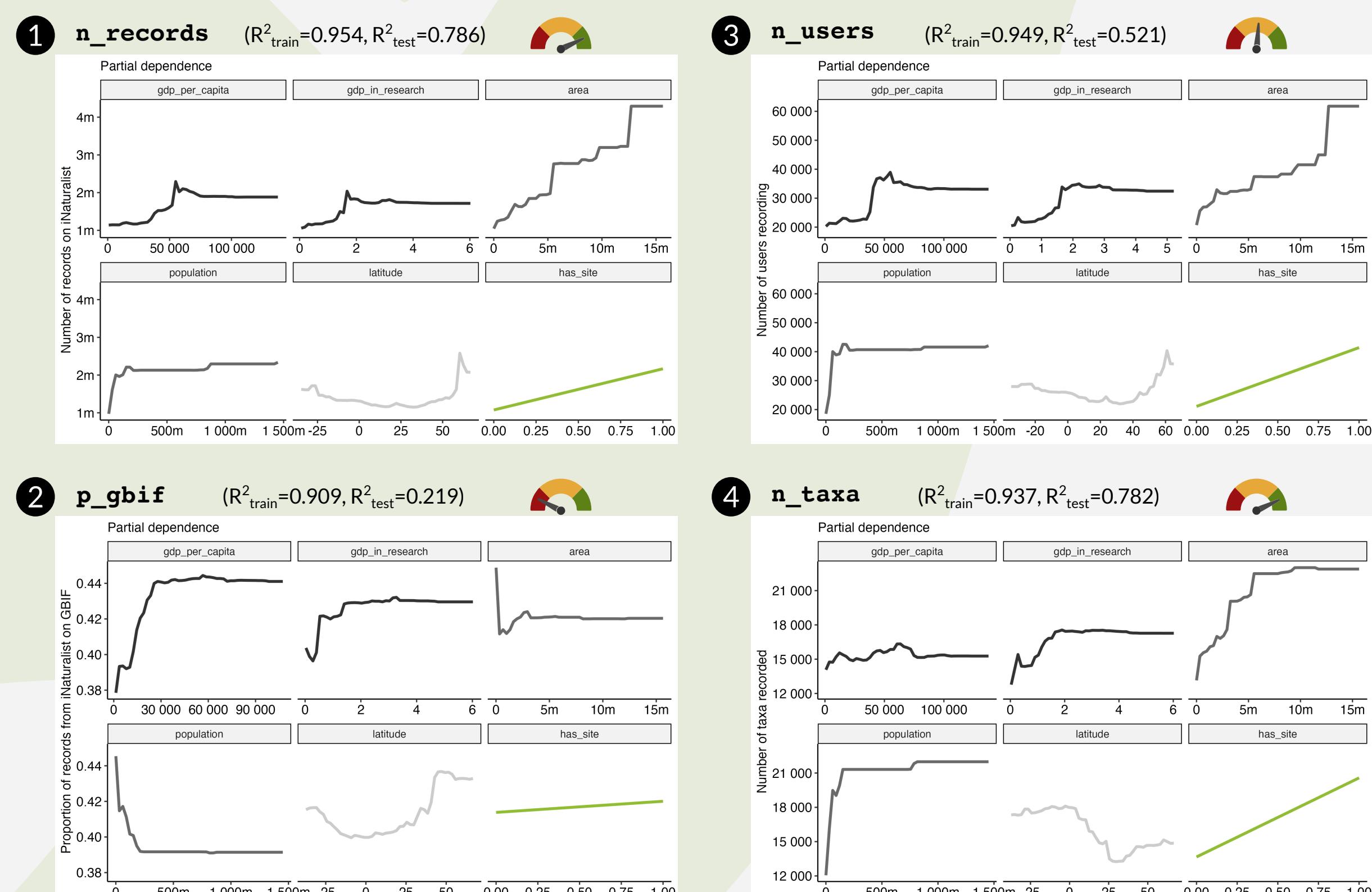
Results

1 The network contributes substantially to the global platform

Region	Observations	% observations in GBIF	Species	Users
Network	77,508,080	47.2 %	517,873	1,250,436
Rest of the world	56,627,549	42.5 %	1,101,571	1,193,248
United States	117,967,387	45.8 %	110,457	1,934,413

2 Countries with a national site consistently show high numbers

How much explains?	Observations	% observations in GBIF	Species	Users
Having a site	9.1 % of the R ²	0.6 % of the R ²	10 % of the R ²	6.5 % of the R ²



Implications for global citizen science

Half of iNaturalist records come from the US, but network countries together contribute almost 60% of the rest. These countries have also more users documenting than the rest of the world combined (excluding the US).

Our model explained little of the variation in how many iNaturalist records reach GBIF ($R^2 < 0.3$). But for records, users, and taxa, population and land area were strong drivers – and having a national site consistently made a big difference.

National sites not only manage platforms, but also lead outreach, education, and curation efforts tailored to their cultural and ecological contexts.

Since users often engage beyond national borders, e.g., through identifications, taxon curation, and travel, our results suggest that the efforts of the network have contributed significantly to iNaturalist's global success beyond the United States.

The data and code to reproduce our results can be found at: github.com/bienflorence/iNat_network_contributions

Takeaway

Coordinated local strategies are the key to global citizen science success!



Credits

Photos: (1) *Bipinnula montana* in Uruguay (@mateoalmada CC-BY); (2) *Anarhynchus alexandrinus* in Spain (@sergio_ibarra_mellado CC BY-NC); (3) *Opuntia cochenillifera* in Mexico (@carlos2 CC BY-NC); (4) *Moloch horridus* in Australia (@kgdc CC BY-NC); (5) *Glaucus atlanticus* in New Zealand (@tangatawhenua CC BY-NC); (6) *Chrysocyon brachyurus* in Argentina (@constanzamcl CC BY-NC); (7) *Aguapanela arvi* in Colombia (@felipe_barrerao CC BY-NC); (8) *Oxythyrea funesta* in Portugal (@pcaseirito CC BY-NC).

Icons: juicy_fish, Dave Gandy, and Kiranshastry via Flaticon.com

Acknowledgments

We are deeply grateful to the global iNaturalist community and to all users across the network who contribute to local sites.

We also wish to express our profound gratitude to the iNaturalist team for creating and nurturing this inspiring platform that empowers people everywhere to connect with biodiversity and science.

Data and code



This poster!



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