

Alban Sagouis

Scientific Programmer

PERSONAL DETAILS

<i>Mail</i>	sagouis@pm.me
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SKILLS

<i>Languages</i>	French (mother tongue) English (fluent) Spanish (intermediate) German (beginner)
<i>Reviewing</i>	Hydrobiologia, Scientific Reports, Fish and Fisheries, Methods in Ecology and Evolution
<i>Data extraction</i>	R (pdftools, staplr, tabulapdf* (formerly tabulizer), jsonlite, stringi, subtools*, parzer*)
<i>Data wrangling</i>	R (data.table, dplyr, tidyr, sTools*, BioTIMER*) Python (pandas)
<i>Taxonomy</i>	R (rgnparser*, taxize)
<i>Package building</i>	R (devtools, covr, revdepcheck, codemeter)
<i>Consolidating data and code</i>	R (testthat, checkmate)
<i>Spatial tools</i>	R (sf, terra, geosphere, parzer*, BioTIMER*, dggridR)
<i>Reproducibility</i>	R (renv)
<i>Simulation</i>	R (mobsim*, ercDataSimulation*)
<i>Other programming languages</i>	Basic knowledge of bash, C++, Python and julia
<i>Other tools</i>	git and gitHub Positron, RStudio, Visual Studio Code Quarto, R Markdown, Jekyll, R Shiny and L ^A T _E X Apple iWork, Microsoft Office, ArcGIS

(*) I created, I maintain or I contributed to the packages with an asterisk.

PROFESSIONAL EXPERIENCE

Scientific programmer – Data manager

2019-present

iDiv – Biodiversity Synthesis Group

I aggregate, restructure and standardise heterogeneous data from the literature. As a scientific developer, I organise research projects, provide expert opinions on existing R programs, and promote reliable data management for improved reproducibility and archiving of scientific work. I collaborate with sDiv groups, with the iDiv data repository project BioDivBank, with BioTIME and maintain various rOpenSci packages. Team leader: Pr. Jonathan Chase.

Scientific assistant – Post-doc

2017-2019

FU Berlin – IGB Leibniz-Institut Berlin – AG Jeschke

In the framework of the INDYNET project, I lead analyses for a post-doc project studying fish responses following invasive species dynamics. This project aimed at using null models to assess critical abundances above which alien species had detrimental effects on diversity metrics. As a BIBS post-doc, I analysed taxonomic and functional diversity of aquatic invertebrate communities along a urbanisation gradient in Berlin and Brandenburg. I assisted post-docs and PhD students managing and analysing data and presenting their results. Team leader: Pr. Jonathan Jeschke.

Post-doc

2018

IZW Leibniz-Institut Berlin, Ecological Dynamics Department

Short-term project aimed at conducting a meta-analysis of the effects of European and North-American beavers on terrestrial and aquatic plants, invertebrates, fish and amphibians. Supervisors: Pr. Stephanie Kramer-Schadt and Dr. Viktoriia Radchuk.

PhD student

2013-2017

Irstea, Aix en Provence

I analysed lake fish community responses to disturbances using diversity indices. Following this first metric assessment, eutrophication and non-native species effects on fish community assembly rules were analysed at the European scale thanks to null models and various taxonomic and functional metrics. MARS project tasks also included participating to a meta-analysis, workshops and report redaction. Under the supervision of Dr. Christine Argillier and Dr. Franck Jabot. Defended July 2017 in presence of Pr. Emili García-Berthou and Dr. Gaël Grenouillet as main committee members.

SELECTED PUBLICATIONS

Sagouis A., Blowes S. A., Xu W. & Chase J. M. Checklist Change: resurrecting naturalistic historical data for community change analysis. In prep. *Global Ecology and Biogeography*

Shen M., van Klink R. Xu W., Sagouis A., Chase J. M. 2026. Land Use Influences on Freshwater Biodiversity. *Global Ecology and Biogeography*. [link](#)

Dornelas M., Antão L. H., Bates A. E. , Brambilla V., Chase J. M., Chow C. F. Y., Fontrodona-Eslava A., Magurran A. E., Martins I. S., Moyes F., Sagouis A., ... 2025. BioTIME 2.0: Expanding and Improving a Database of Biodiversity Time Series. *Global Ecology and Biogeography*. [link](#)

Shen M., Van Klink R., Sagouis A., ... & Chase J. M. 2024. FreshLanDiv: A global database of freshwater biodiversity across different land uses. *Global Ecology and Biogeography*. [link](#)

Blowes S. A., McGill B., Brambilla V., Chow C. F. Y., Engel T., Fontrodona-Eslava A., Martins I. S., McGlinn D., Moyes F., Sagouis A., Shimadzu H., van Klink R., Xu W., Gotelli N. J., Magurran A. E., Dornelas M. & Chase J. M. 2024. Synthesis reveals approximately balanced biotic differentiation and homogenization. *Science Advances*. [link](#)

Martins I. S., Schrodte F., Blowes S. A., Bates A. E., Bjorkman A. D., Brambilla V., Carvajal Quintero J., Chow C. F. Y., Daskalova G. N., Edwards K., Eisenhauer N., Field R., Fontrodona-Eslava A., Henn J. J., van Klink R., Madin J. S., Magurran A. E., McWilliam M., Moyes F., Pugh B., Sagouis A., Trindade-Santos I., McGill B. J., Chase J. M. & Dornelas M. 2023. Widespread shifts in body size within populations and assemblages. *Science*. [link](#)

Xu W., Blowes S. A., Brambilla V., Chow C. F. Y., Fontrodona-Eslava A., Martins I. S., McGlinn D., Moyes F., Sagouis A., Shimadzu H., van Klink R., Magurran A. E., Gotelli N. J., McGill B. J., Dornelas M. & Chase J. M. 2023. Regional occupancy increases for widespread species but decreases for narrowly distributed species in metacommunity time series. *Nature Communications*. [link](#)

Grenié M., Berti E., Carvajal Quintero J., Dädlow G. M. L., Sagouis A. & Winter M. 2023. Harmonizing taxon names in biodiversity data: A review of tools, databases and best practices. *Methods in Ecology and Evolution*. [link](#)

Blowes S. A., Daskalova G. N., Dornelas M., Engel T., Gotelli N. J., Magurran A. E., Martins I. S., McGill B., McGlinn D. J., Sagouis A., Shimadzu H., Supp, S. R. & Chase J. M. 2023. Local biodiversity change reflects interactions among changing abundance, evenness, and richness. *Ecology*. [link](#)