PARSEC : Building New Tools for Data Sharing and Reuse through a Transnational Investigation of the Socioeconomic Impacts of Protected Areas

Consortium Leaders: Nicolas Mouquet, David Mouillot, Alison Specht and Shelley Stall.

http://parsecproject.org

Objectives

(a) Predict the socioeconomic outcomes of natural protected areas (PAs) on rural communities using a novel combination of satellite imagery and artificial intelligence;

(b) Determine the influence of PAs on consumption expenditure and asset health of rural communities;

(c) Improve future environmental decision-making;

(d) Improve digitial connections between researchers, their funding, publications and data;

(e) Improve recommendations for the research data workflow and skills for research teams;

(f) Increase the number of citations to data sets and better attribute them to the data creator;

(g) Promote credit for open and FAIR data management and preservation for data reuse;

(h) Provide tools for researchers to view how the data they have deposited is used and cited.

Synthesis-science strand (David Mouillot)

WP1: Stratified sampling of 200 rural communities close to and far from natural protected areas (PAs) using matching algorithms.

WP2: Estimate socioeconomic conditions in the selected rural communities using remote sensing and artificial intelligence.

WP3: Using paired comparison tests determine whether proximity to a PA can improve socioeconomic outcomes. Identify contributing factors.

WP4: Dissemination (website, data sharing, scientific publications, newsletters, conferences).

improve data workflow for research teams

Data-science strand (Shelley Stall)

WP5: Develop leading practices, toolkits and workshops to support data sharing.

WP6: Improve capability for researchers to view how deposited data has been used, cited and reused (widget, web-accessible researcher profile).

FUNDING: 1258K€

Duration: 48 months

Participating countries

BRAZIL: University of São Paulo - FAPESP (P. Pizzigatti Corrêa) plus postdoc and technical support (FAPESP)

FRANCE: Foundation for Research on Biodiversity, University of Toulouse III - ANR (N. Mouquet)

JAPAN: National Institute of Information & Communications Technology, Research Institute for Humanity and Nature - JST (Y. Murayama)

USA: American Geophysical Union - NSF (S. Stall)

Cooperating partners

NCI, Australia (L. Wyborn), BGS, UK (H. Glaves)

Associated organisations

DataCite, ORCID, ESIP, RDA, EDI, WDS, AST, JWP, TNC