



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

DIVERSUS: Links between functional diversity, ecosystems and social dynamics: a wrap-up of concepts, methods and baseline information (SGP-CRA 2015)

After five years of our previous project (CRN 2015), we have successfully built a network of scientists capable of dealing with the links between biodiversity, ecosystem processes and ecosystem services in the Americas. This endeavor was challenging for a number of reasons, chief among them the lack of a tradition of interdisciplinary research, the scarcity of protocols for dealing with functional diversity, and the lack of physical, biological and social information gathered in a comparable way across research sites in very different contexts. Our interdisciplinary network of scientists is now interacting fluidly, sharing a common conceptual framework, protocols, questions, and is highly involved in different capacity-building activities. The network has overcome the stage in which multi-institutional collaboration is just a constellation of individual site-based projects. The numerous joint articles, databases, postgraduate theses and tools, as well as its repercussion in the scientific community, go far beyond the juxtaposition of independent projects. At the same time, all these achievements point to new opportunities for synthesis and integration. Among them we have now identified new questions that were not obvious when we started this project and that will be addressed in this new stage.

Goals

- Publication of network-wide products on functional diversity and ecosystem processes
- Synthesis and more detailed development of our interdisciplinary method for linking biodiversity, ecosystem services, and the benefits perceived by different social actors
- Links between functional diversity and major ecosystem properties across sites using a modeling approach
- Understanding the links between land use change, ecosystem services and social conflict at the territorial scale
- Identification of new key questions and prospective partners
- Dissemination of results, major products, major findings

Ongoing tasks

- Analysis of the network of decomposition experiments and synthesis on how functional diversity and climate control decomposition
- Synthesis of the patterns of functional diversity found in different areas in the light of community assembly theory
- Assessment of the extent to which different functional diversity indices predict ecosystem productivity
- Focus groups to get feedback from stakeholders on our interdisciplinary methods
- At least one product unpacking our interdisciplinary framework and methods

Principal investigator and lead agency

Sandra M. Díaz - sdiaz@efn.uncor.edu
Instituto Multidisciplinario de Biología Vegetal (IMBIV) (CONICET-Universidad Nacional de Córdoba (UNC), Argentina)

Co-investigators

M. Sydonia Bret-Harte (Institute of Arctic Ecology, University of Alaska, Fairbanks, USA), Daniel Cáceres (Facultad Cs. Agropecuarias, UNC, Argentina), Fernando Casanoves (CATIE, Costa Rica), Bryan Finegan (CATIE, Costa Rica), Marielos Peña-Claros (IBIF, Bolivia), Natalia Pérez-Harguindeguy (IMBIV - UNC, Argentina)

Project web site: www.nucleodiversus.org

List of publications: <http://www.nucleodiversus.org/index.php?mod=page&id=29>



Knowing that not all components of biodiversity are equally important for different ecosystem benefits has direct implications in designing biodiversity monitoring and management strategies.



Equally fundamental is to understand what aspects of biodiversity are useful for different social actors with different political power.

