

Curso PEDECIBA BIOLOGÍA

Biogeografía de la Conservación

El objetivo del curso es presentar a través de la exposición de seminarios individuales por parte de los estudiantes de los temas actuales relacionados con la Biogeografía de la Conservación. A través de esta modalidad se pretende que el estudiante se familiarice con los principios y teoría de esta rama de la Biogeografía. En concreto se trabajará con el concepto de “Déficit wallaceano” referido a la deficiencia que se tiene en el conocimiento sobre la distribución de las especies. (Ej. Bases de datos online, Colecciones científicas, Modelos Biogeográficos de Distribución, Áreas protegidas, Listas Rojas de especies, Análisis de desajustes).

Programa

1. Presentación del curso. Evaluación sobre el conocimiento previo que tienen los estudiantes de esta disciplina en base a cuestionario previamente diseñado. Distribución de los artículos a presentar por los estudiantes en el curso (2 artículos por alumno, el segundo elegido por el estudiante).
2. Colecciones científicas y bases de datos.
3. Modelos de distribución de especies.
4. Áreas protegidas y análisis de desajustes.
5. Listas Rojas y criterios de categorización.

Bibliografía

Ladle, R.J., Whittaker, R.J. (eds). 2011. Conservation biogeography. Willey-Blackwell, Chichester, UK.

Lomolino, M.V., Riddle, B.R., Whittaker, R.J., Brown, J.H. 2010. Biogeography, 4th edn. Sinauer, Sunderland, MA, USA.

Listado de seminarios:

Ludmilla M. S. Aguiar et al. 2020. Where are the bats? An environmental complementarity analysis in a megadiverse country. *Diversity and Distributions*, 26:1510–1522.

Fabio Albuquerque, Paul Beier. 2015. Global patterns and environmental correlates of high-priority conservation areas for vertebrates. *Journal of Biogeography* 42, 1397–1405.

Achyut K. Banerjee et al. 2022. Setting the priorities straight-Species distribution models assist to prioritize conservation targets for the mangroves. *Science of The Total Environment*, 806, 150937.

Mary E. Blair et al. 2022. Species distribution modeling to inform transboundary species conservation and management under climate change: promise and pitfalls. *Frontiers of Biogeography*, 14(1).

José C. Brito et al. 2016. Conservation Biogeography of the Sahara-Sahel: additional protected areas are needed to secure unique biodiversity, *Diversity and Distributions* 22, 371–384.

Alba Estrada, Raimundo Real. 2018. Assessment of the National Park network of mainland Spain by the Insecurity Index of vertebrate Species. *PlosOne* <https://doi.org/10.1371/journal.Pone.0197496>

Alba Estrada, A. Márcia Barbosa y Raimundo Real. 2018. Changes in potential mammal diversity in national parks and their implications for conservation. *Current Zoology*, 2018, 1–9 doi: 10.1093/cz/zoy001

Arabella C. Eyre et al. 2022. Using species distribution models and decision tools to direct surveys and identify potential translocation sites for a critically endangered species. *Diversity and Distributions*, 28(4), 700-711.

- Camila K. Fagundes et al. 2016. Testing the efficiency of protected areas in the Amazon for conserving freshwater turtles. *Diversity and Distributions*, 22, 123–135.
- Xiao Feng et al. 2022. A review of the heterogeneous landscape of biodiversity databases: Opportunities and challenges for a synthesized biodiversity knowledge base. *Global Ecology and Biogeography*, 31:1242–1260.
- Janet Franklin 2013. Species distribution models in conservation biogeography: developments and challenges. *Diversity and Distributions*, 19, 1217–1223.
- Veronica F. Frans et al. 2022. Integrated SDM database: Enhancing the relevance and utility of species distribution models in conservation management. *Methods in Ecology and Evolution*, 13(1), 243-261.
- Pierre Gaüzere et al. 2016. Can protected areas mitigate the impacts of climate change on bird's species and communities? *Diversity and Distributions*, 22, 625–637.
- Emilio García-Roselló et al. 2015. Can we derive macroecological patterns from primary Global Biodiversity Information Facility data?. *Global Ecology and Biogeography*, 24(3), 335-347.
- Sabela Lois et al. 2015. Spatial extent of biotic interactions affects species distribution and abundance in river networks: the freshwater pearl mussel and its hosts. *Journal of Biogeography*, 42(2), 229-240.
- Ubirajara Oliveira et al. 2016. The strong influence of collection bias on biodiversity knowledge shortfalls of Brazilian terrestrial biodiversity. *Diversity and Distributions*, 22, 1232–1244.
- Stuart L. Pimm et al. 2014. The biodiversity of species and their rates of extinction, distribution, and protection. *Science*, 344(6187), 1246752.
- Riccardo Poloni et al. 2022. Conservation biogeography of high-altitude longhorn beetles under climate change. *Insect Conservation and Diversity*.
- Raimundo Real et al. 2009. Conservation biogeography of ecologically interacting species: the case of the Iberian lynx and the European rabbit. *Diversity and Distributions*, 15: 390–400.
- David M. Richardson, Robert J. Whittaker. 2010. Conservation biogeography – foundations, concepts and challenges. *Diversity and Distributions*, 16: 313–320.
- David M. Richardson. 2012. Conservation biogeography: what's hot and what's not?. *Diversity and Distributions*, 18: 319–322.
- M. P. Robertson et al. 2010. Getting the most out of atlas data. *Diversity and Distributions*, 16: 363–375.
- Ana S. L. Rodrigues et al. 2014. Spatially Explicit Trends in the Global Conservation Status of Vertebrates. *PLoS ONE* 9(11): e113934. doi:10.1371/journal.pone.0113934
- David Romero et al. 2016. Comparison of approaches to combine species distribution models based on different sets of predictors. *Ecography*, 39: 561-571.
- David Romero et al. 2014. Modelling favourability for invasive species encroachment to identify areas of native species vulnerability. *The Scientific World Journal*. 2014: 9 páginas. Available on-line at: <http://www.hindawi.com/journals/tswj/2014/519710/>.
- Robert J. Whittaker et al. 2005. Conservation Biogeography: assessment and prospect. *Diversity and Distributions*, 11: 3–23.