

Disciplina: Mudanças climáticas e biodiversidade

45h

Ementa: Efeito das mudanças climáticas sobre os organismos e ecossistemas. Mudança climática global: principais causas e evidências, padrões globais e regionais de mudança climática; Principais mecanismos de impacto da mudança climática sobre a biodiversidade; Previsibilidade dos impactos; Mecanismos de adaptação ao aquecimento; Migrações, extinções, invasões e mudanças na biodiversidade; Efeitos do aquecimento sobre os organismos, ecossistemas e consequências ecológicas; Efeitos indiretos do aquecimento: ex., alterações hidrológicas; Efeitos do aumento nos níveis de CO₂.

Bibliografia

- BARKER, A.C., GLYNN, P.W., RIEGL, B. 2008. Climate change and coral reef bleaching: An ecological assessment of long-term impacts, recovery trends and future outlook. *Estuarine, Coastal and Shelf Science* 80: 435-471.
- BRANDER, K.M. 2007. Global fish production and climate change. *Proceedings of the National Academy of Science* 104: 19709-19714.
- BURROWS, M.T., et al. 2011. The pace of shifting climate in marine and terrestrial ecosystems. *Science* 334, 652-655.
- CUFF, D.J., GOUDIE, A.S. 2009. *The Oxford companion to global change*. Oxford University Press, Oxford.
- HIDDINK, J.G., HOFSTEDE, R.T. 2008. Climate induced increases in species richness of marine fishes. *Global Change Biology* 14, 453–460.
- IPCC 2007. *Climate change 2007: synthesis report*. Intergovernmental Panel of Climatic Change (www.ipcc.ch)
- KERNAN, M. BATTARBEE, R.W., MOSS, B. (eds.) 2010. *Climate change impacts on freshwater ecosystems*. Wiley-Blackwell, Oxford.
- LINDENMAYER, D., BURNS, E., THURGATE, N., LOWE, A. 2014. *Biodiversity and environmental changes: monitoring, challenges and direction*. CSIRO Publishing, Collingwood.
- LOVEJOY, T.E., HANNAH, L. 2005. *Climate change and biodiversity*. Yale University, Michigan.
- MIDDLETON, B.A. (ed.) 2012. *Global change and the function and distribution of wetlands*. Society of Wetland Scientists / Springer, New York.
- PARMESAN, C., YOHE, G. 2003. A globally coherent fingerprint of climate change impacts across natural systems. *Nature* 421: 37-42.

- PARMESAN, C. 2006. Ecological and evolutionary responses to recent climate change. *Annual Review of Ecology, Evolution, and Systematics* 37: 637-669.
- POST, E. 2013. *Ecology of climate change: the importance of biotic interactions*. Monographs in Population Biology n° 52. Princeton University Press, Princeton.
- SINGH, M., SINGH, R.B., HASSAN, M.I. (eds.) 2014. *Climate change and biodiversity – Proceedings of IGU Rohtak Conference Vol. 1*. Springer, Tokyo.
- STEFFEN, W. et al. 2009. *Australia's biodiversity and climate change*. CSIRO Publishing, Collingwood.

Periódicos recomendados: *Global Change Biology; Proceedings of the National Academy of Science; Global Environmental Change; Basic and Applied Ecology; Ecological Processes; Oikos; Oecologia; Diversity and Distributions; PloSBiology; Ecological Applications; Journal of Applied Ecology; Ecological Indicators; Ecology and Society; Conservation Biology; Biological Conservation; Biodiversity and Conservation; Environmental Conservation; Science; Nature*; entre outros.
