Profile of Prof. Vassiliki Kati

I am a Professor of Biodiversity Conservation in the Department of Biological Applications & Technologies in the University of Ioannina, Greece. I am head of the Biodiversity Conservation Lab (BCL) in the same Department. More information on my biography in https://bc.lab.uoi.gr/en/who-we-are/vassiliki-kati/. Visit https://bc.lab.uoi.gr/en/ to discover the people, projects, activities, research outputs and social impact of our research undertaken in our Lab.

Research profile

I am a field biologist, with expertise in the taxonomy and ecology of a wide range of animal groups, (grasshoppers, butterflies, dragonflies, amphibians, reptiles, birds, mammals). I build up primary biodiversity databases, with a special focus on Mediterranean mountainous ecosystems. International collaboration, independence, ecological breadth, and a consistent focus on providing solutions to major conservation problems are the four points that depict my research profile. The last research projects I have initiated concerned the sustainable spatial planning of wind farms without undermining biodiversity goals, the delineation of roadless areas as pristine landscapes of high ecological and aesthetic value that should be preserved as such, and several projects on the conservation of endemic and threatened grasshopper species. I have also recently initiated "apollo" the first voluntary citizen-science scheme for monitoring Greek butterflies.

Social profile

It is my belief that biodiversity conservation and ecological justice are the greatest challenges of our century. Science can provide real answers to our biodiversity crisis-era; we do not have the luxury to do science without implementation and vice versa. For this reason, I am active as a conservation biologist, attempting to apply scientific findings in practice and to bridge the gap between local and international policymaking. I am a member of several international and national scientific societies and NGOs, having also chaired the Education Committee of the SCB-Europe and having organized the first international summer school on conservation biology for five years. I am together with Haritakis and we have a lovely daughter, Myrto. If I was not to be a scientist, I would be a musician or a book writer of novels and fairy tales…. Who knows, maybe these dreams will come true one day…

Recent projects on Grasshoppers

2021: OITI- Investigating the endemic and threatened entomofauna in Oiti and Tymphristos. Goal: Study of the distribution and ecological requirements of fourteen important grasshoppers in the mountains of Oiti and Tymphristos and suggestion of conservation measures for two species that are both endemic and endangered (EN) - *Parnassiana tymphrestos* and *Oropodisma tymphrestosi*. Period: 2021-2022. Funding: Management Agency of Oiti National Park. Institute: BCL - University of Ioannina. Role: Coordinator.

2021: PARNO-Improving the knowledge of Parnassos' endemic and threatened entomofauna. Goal: Study of the distribution and ecological requirements of eleven important grasshopper species in Parnassos National Park and proposal of conservation measures for four endemic and endangered species: Parnassiana parnassica (CR), Oropodisma parnassica (EN), Stenobothrus graecus (GR), Glyphanus obtusus (GR). Period: 2021-2022. Funding: Management Agency of Parnassos National Park. Institute: BCL - University of Ioannina. Role: Coordinator.

2021: PINS-Monitoring and improving the knowledge of the endemic and threatened entomofauna in the area of the Management Agency of Lake Pamvotis. Goal: Study of the distribution and ecological requirements of important insect species in Mitsikeli and Nemertsika mountains and the broader area (Ioannina, Pogoni). It targets the butterfly *Ephydrias aurinia,* the endemic cave-cricket of Perama cave *Dolichopoda graeca,* and other important grasshopper species such as the species of Community interest *Paracaloptenus caloptenoides* and the endemic and endangered species *Prionotropis willemsorum.* The study concludes to a spatial database and data on the species ecological requirements with concrete conservation measure suggestions where applicable. Period: 2021-2023. Funding: Management Agency of Pamvotis Lake. Institute: BCL - University of Ioannina. Role: Coordinator.

2021: LAC-Conservation management of the endemic species Chorthippus lacustris. Goal: Increase current knowledge on the ecological requirements of the Epirus dancing grasshopper (critically endangered and endemic species) and action plan to restore its populations and improve its conservation status in the basin of Pamvotis Lake. The project includes the implementation of the conservation actions proposed and the assessment of their success through monitoring for the species. LAC is implemented in collaboration with the staff of the Management Agency of Pamvotis Lake. Period: 2021-2023. Funding: Management Agency of Pamvotis Lake. Institute: BCL - University of Ioannina. Role: Coordinator.

Publications

Selected publications on insect ecology and conservation (** popular science/textbooks)

Kati, V., Willemse, L. 2020. "Database of endemic and/or threatened Orthoptera species in the Natura 2000 sites of Greece.", Mendeley Data, v1, http://dx.doi.org/10.17632/3jgf74nsgd.1

**Kati, V. 2020. Threats and conservation of Greek fauna. In: Pafilis, P. (Ed). The fauna of Greece: Biology and management of wildlife. Broken Hill Publishers Ltd. Nicosia, Cyrpus. Pp 991-1021.

Zografou, K., Grill, A., Wilson, R.J., Halley, J.M., Adamidis, G.C., Kati, V. 2020. Butterfly phenology in Mediterranean mountains using space-for-time substitution. Ecology and Evolution, 10: 928–939.https://doi.org/10.1002/ece3.5951. Open access.

Tzirkalli, E., Kadis, C., Halley, J.M., Vogiatzakis, I., Wilson, R.J., Zografou, K., Antoniou, A., Tsintides, T., Makris, C., Kati, V*., 2019. Conservation ecology of butterflies on Cyprus in the context of Natura 2000. Biodiversity and Conservation. 28(7), 1759-1782.

Maes, D., et al. 2019. Integrating national checklists and Red Lists for prioritising European butterfly conservation actions. Journal of Insect Conservation 22 (2):301-330/

**Kati, V. 2018. Identification key of grasshoppers of Greece. Translation in Greek from the book: Willemse, L.P.M., R.M.J.C. Kleukers & B. Odé 2018.The grasshoppers of Greece. EIS Kenniscentrum Insecten & Naturalis Biodiversity Center, Leiden. pp 2-72.

Lemonnier-Darcemont, M., Kati, V., Willemse, L., Darcemont, C. 2018. Effects of changing grazing systems on the threatened genus Peripodisma (Orthoptera: Acrididae: Melanoplinae) in the Mediterranean mountains of the southern Balkans. Journal of Mediterranean Ecology 16: 67-79.

Zografou, K., Adamidis, G., Komnenov, M., Kati, V., Sotirakopoulos, P., Pitta, E., Chatzaki, M. 2017. Diversity of spiders and orthopterans responds to intra-seasonal and spatial environmental changes. Journal of Insect Conservation 21(3): 531-543.

Zografou, K., Wilson, R.K., Halley, J.M., Tsirkalli, E., Kati V. 2017. How are arthopod communities structured and why are they so diverse? Answers from Mediterranean mountains using hierarchical additive partitioning. Biodiversity and Conservation 26(6): 1333-1351.

Hochkirch, A., et al. 2016. European Red List of Grasshoppers, Crickets and Bush-crickets. Luxembourg: Publications Office of the European Union. 94 p.

Zografou, K., Adamidis, G.K., Grill, A., Kati, V., Wilson, R.J., Halley, J.M. 2015. Who flies first? Habitat-specific phenological shifts of butterflies and orthopterans in the light of climate change: a methodological case study from south-east Mediterranean. Ecological Entomology 40: 562-574.

**Willemse, L., Kati, V, Odé, B. 2014. Epirus Grasshopper: a Prima Ballerina Courtship! In: Hegan, A (ed), No More Endlings: saving species one story at a time, Motivational Press, Melbourne, 246-253.

Zografou, K., Kati, V., Grill, A., Wilson, R.J., Tzirkalli, E., Pamperis, N.L., Halley, J.M. 2014. Signals of climate change in butterfly communities in a Mediterranean protected area. PlosOne. 9 (1), e87245.

Zografou, K., Kati, V., Grill, A., Wilson, R.J., Tzirkalli, E., Pamperis, N.L., Halley, J.M. 2014. Signals of climate change in butterfly communities in a Mediterranean protected area. PlosOne. 9 (1), e87245.

Kati, V. Poirazidis, K., Dufrêne, M., Halley, J.M., Korakis, G., Schindler, S. Dimopoulos P. 2010. Towards the use of ecological heterogeneity to design reserve networks: a case study from Dadia National Park, Greece. Biodiversity & Conservation 19 (6): 1585-1597.

Zografou, K., Sfenthourakis, S., Pullin, A., *Kati, V. 2009. On the surrogate value of red-listed butterflies for butterflies and grasshoppers: a case study in Grammos site of Natura 2000, Greece. Journal of Insect Conservation 13: 505-514.

Kati, V., Mani, P., von Helversen, O., Willemse, F., Elsner, N., Dimopoulos, P. 2006. Human land use threatens endemic wetland species: the case study of Chorthippus lacustris (Orthoptera: Acrididae) in Epirus, Greece. Journal of Insect Conservation 10: 65-74

Kati,V., Dufrêne M., Legakis A., Grill A., Lebrun Ph. 2004. Conservation management for the Orthoptera in the Dadia reserve, Greece. Biological Conservation 115: 33-44.