

## **Luciano Bosso**



Born in Castellammare di Stabia (Italy) on 24/06/1983

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### **Current Position:** Post Doc

Supervisor: Prof.ssa Maria Luisa Chiusano

Appointed on project: PO FEAMP 2014/2020 line 2.51 - Campania Region

### **Affiliation:**

Department of Research Infrastructures for Marine biological resources (RIMAR), Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

Institute and Location	Degree / Function	Year	Field of Study
Department of Agricultural Sciences, University of Naples "Federico II", Naples, Italy	Bachelor's Degree	2004-2007	Environmental and Forestry Sciences
Vesuvius National Park, Naples, Italy	Scientific Consultant	2007	Ecology and Zoology
Department of Agricultural Sciences, University of Naples "Federico II", Naples, Italy	Master's Degree	2007-2009	Environmental and Forestry Sciences
Calanchi di Atri Natural Reserve, Atri, Italy	Scientific Consultant	2010	GIS and Ecological modelling
Department of Agricultural Sciences, University of Naples "Federico II", Naples, Italy	International Ph.D. in Natural Resources and Environmental Sciences (Italy/Chile)	2010-2014	Microbial ecology

Departamento de Ingegnería Química, Universidad de La Frontera, Temuco, Chile	Visiting Research	2011-2012	Microbial ecology
Natural History Museum "La Specola", Florence, Italy	Scientific consultant	2012	Bat ecology and conservation
Department of Agricultural Sciences, University of Naples "Federico II", Naples, Italy	Scientific consultant	2013	GIS and Ecological Modelling
Agriculture & Food Science Centre, University College Dublin, Dublin, Ireland	Visiting Research	2013	Soil ecology
INNOVA scarl, Naples, Italy	Scientific consultant	2019	Data acquisition/processing and cartography of the bats in the Vivara island
Department of Agricultural Sciences, University of Naples "Federico II", Naples, Italy	Post Doc	2016-2020	Spatial ecology
Department of Research Infrastructures for Marine biological resources (RIMAR), Stazione Zoologica Anton Dohrn, Naples, Italy	Post Doc	2021-present	GIS and Ecological Modelling

### **Appointments and awards**

2020-2029: National scientific qualification for Associate Professor of Zoology (code: 05/B1)

2018-2027: National scientific qualification for Associate Professor of Ecology (code: 05/C1)

2021: Guest Editor of "Forests - MDPI" for the Special Issue: "Mediterranean Forest Changes in Response to Climate and Human Activity during the Holocene"

2020-2021: Guest Editor of "Journal for Nature Conservation - Elsevier" for the Special Issue: "Biological uniqueness: tools and advances to protect endemism"

2019-2020: Guest Editor of "Sustainability - MDPI" for the Special Issue: "Remote Sensing, Spatial Analysis and Ecological Modelling to Predict Potential Distributions of Invasive Species"

2019-present: Editorial Board Member of "Scientific Reports - NATURE" (category: Ecology and Evolutionary Biology)

2019-present: Associate Editor of "Ecology and Evolution - WILEY"

2018-present: Associate Editor of "Conservation Science and Practice - WILEY"

2018-present: Associate Editor of "Frontiers Ecology and Evolution - FRONTIERS" (category: Biogeography and Macroecology)

2017-present: Academic Editor of "Landscape and Ecological Engineering - SPRINGER"

2016: Elsevier certificate for highly cited research in recognition of the contribution to the quality of "Journal for Nature Conservation" made by the publication: "Bossò et al., 2013. Modelling geographic distribution and detecting conservation gaps in Italy for the threatened beetle Rosalia alpina. Journal for Nature Conservation, 21:72- 80"

2015: "Italian Agricultural Scientific Association (AISSA)" award for the best Ph.D. thesis in microbial ecology discussed in Italy

2014: "Accademia Ercolanese" award for the best Ph.D. thesis discussed at the University of Naples Federico II

2012: Finalist of the "Start Cup Campania Competition" with the project: "BioCoReTech: new bioremediation technology"

2011: "Italian literary" award for the best manuscript in environmental issues (provided by the Italian Ministry of the Environment and Protection of Land and Sea)

2010-present: Reviewer for several journals in Ecology, Macroecology, Conservation Biology and Evolution (e.g. Diversity and Distribution, Journal of Biogeography, Global Change Ecology, Ecography, Ecology and Evolution, Biological Conservation, Mammal Review, Journal for Nature Conservation).

2010: "Formica Onlus" award for the best applied ecological studies on threatened species and biodiversity issues

2009: "XXVII Giovanni Binaghi" award for the best master degree thesis in ecological entomology discussed in Italy

2008: "Città del Castagno" award for the best bachelor degree thesis in forest eco-pathology discussed in Italy

### **Other matters relevant to scientific career**

2019-present: Laboratory assistant of the course "How to write a scientific article" for all the students of the Department of Agricultural Sciences, University of Naples Federico II, Italy

2017-present: Member of the Italian Society of Ecology (SItE) and Italian Teriological Association (ATIt)

2016-present: Scientific outreach activities in the European Researchers' Night

2014-present: Scientific outreach activities in the International Day for Biological Diversity

2010-present: Laboratory assistant of Plant biology/ecology (BIO/01) and Conservation Biology (BIO/07) for undergraduate students in Environmental and Forest Sciences, of the Department of Agricultural Sciences, University of Naples Federico II, Italy

### **My research in media**

<http://www.nationalgeographic.it/natura/>

<https://www.ilmattino.it/napoli/citta/vesuvio>

<https://www.lifegate.it/persone/news/pipistrelli-incendio-vesuvio>

<https://www.montagna.tv/cms/133007/parco-del-vesuvio-i-pipistrelli-come-bioindicatori-in-caso-di-incendio/>

<http://www.unina.it/-/17861801-effetti-ecologici-sulla-fauna-dell-incendio-che-ha-colpito-il-vesuvio-nel-2017->

[www.scientificamerican.com/article/italy-s-olive-trees-didnt-have-to-die/](http://www.scientificamerican.com/article/italy-s-olive-trees-didnt-have-to-die/)

<http://xylellacodiro.blogspot.com/2016/09/big-data-modeling-suggests-xylella-may.html>

[www.atenenapoli.it/news/archivio-storico/un-premio-letterario-per-il-dottorando-luciano-bosso](http://www.atenenapoli.it/news/archivio-storico/un-premio-letterario-per-il-dottorando-luciano-bosso)

[www.unina.it/-/7249317-scienze-delle-risorse-ambientali-consegna-dei-diplomi-di-dottorato](http://www.unina.it/-/7249317-scienze-delle-risorse-ambientali-consegna-dei-diplomi-di-dottorato)

<https://www.unina.it/-/12437536-xylella-fastidiosa-nel-bacino-del-mediterraneo->

<https://www.repubblica.it/ciconianigra>

[https://napoli.repubblica.it/vesuvio\\_i\\_pipistrelli](https://napoli.repubblica.it/vesuvio_i_pipistrelli)

## **Publications**

Author of 42 publications on ISI-journals

### ***List of publications of the last 10 years:***

#### ***Journal Papers (Selected Publications)***

Di Pasquale G, Saracino A, Bosso L, Russo D, Moroni A, Bonanomi G, Allevato E. (2020). Coastal pine-oak glacial refugia in the Mediterranean basin: a biogeographic approach based on charcoal analysis and spatial modelling. *Forests*, 11(6), 673. <https://doi.org/10.3390/f11060673>

Raffini F, Bertorelle G, Biello R, D'Urso G, Russo D, Bosso L. (2020). From nucleotides to satellite imagery: approaches to identify and manage the invasive pathogen *Xylella fastidiosa* and its insect vectors in Europe. *Sustainability*, 12(11), 4508. <https://doi.org/10.3390/su12114508>

Ancillotto L, Bosso L, Mori E, Mazza G, Herkt M, Galimberti A, Ramazzotti F, Russo D. (2020). An African bat in Europe, *Plecotus gaisleri*: biogeographic and ecological insights from molecular taxonomy and Species Distribution Models. *Ecol Evol*, 10: 5785-5800. <https://doi.org/10.1002/ece3.6317>

Smeraldo S, Bosso L, Fraissinet M, Bordignon L, Brunelli M, Ancillotto L, Russo D. (2020). Modelling risks posed by wind turbines and electric power lines to soaring birds: the black stork (*Ciconia nigra*) in Italy as a case study. *Biodivers Conserv*, 29: 1959-1976. <https://doi.org/10.1007/s10531-020-01961-3>

Bertolino S, Sciandra C, Bosso L, Russo D, Lurz P, Di Febbraro M. (2020). Spatially-explicit models as tools for implementing effective management strategies for invasive alien mammals. *Mammal Rev*, 50: 187-199. <https://doi.org/10.1111/mam.12185>

Salinas-Ramos VB, Ancillotto L, Bosso L, Sánchez-Cordero V, Russo D. (2020). Interspecific competition in bats: state of knowledge and research challenges. *Mammal Rev*, 50: 68-81. <https://doi.org/10.1111/mam.12180>

Ancillotto L, Bosso L, Salinas-RamosVB, Russo D. (2019). The importance of ponds for the conservation of bats in urban landscapes. *Landsc Urban Plan*, 190: 103607. <https://doi.org/10.1016/j.landurbplan.2019.103607>

Mohammadi S, Ebrahimi E, Shahriari Moghadam M, Bosso L. (2019). Modelling current and future potential distributions of two desert jerboas under climate change in Iran. *Inform*, 52: 7 - 13. <https://doi.org/10.1016/j.ecoinf.2019.04.003>

Ancillotto L, Mori E, Bosso L, Agnelli P, Russo D. (2019). The Balkan long-eared bat (*Plecotus kolombatovici*) occurs in Italy – first confirmed record and potential distribution. *Mamm Biol*, 96: 61-67. <https://doi.org/10.1016/j.mambio.2019.03.014>

Bosso L, Ancillotto L, Smeraldo S, D'Arco S, Migliozzi A, Conti P, Russo D. (2018). Loss of potential bat habitat following a severe wildfire: a model based rapid assessment. *Int J Wildland Fire*, 27(11) 756-769. <https://doi.org/10.1071/WF18072>

Ancillotto L, Studer V, Howarrd T, Smith VS, McAlister E, Beccaloni J, Manzia F, Renzopaoli F, Bosso L, Russo D, Mori E. (2018). Environmental drivers of parasite load and species richness in introduced parakeets in an urban landscape. Parasitol Res, 117(11): 3591-3599. doi: 10.1007/s00436-018-6058-5

Russo D, Bosso L, Ancillotto L. (2018). Novel perspectives on bat insectivory highlight the value of this ecosystem service in farmland: Research frontiers and management implications. Agric Ecosyst Environ, 266: 31-38. <https://doi.org/10.1016/j.agee.2018.07.024>

Smeraldo S, Di Febbraro M, Bosso L, Flaquer C, Guixé D, Lisón F, Meschede A, Juste J, Prüger J., Puig-Montserrat X, Russo D. (2018). Ignoring seasonal changes in the ecological niche of non-migratory species may lead to biases in potential distribution models: lessons from bats. Biodivers Conserv, 27; 2425–2441. <https://doi.org/10.1007/s10531-018-1545-7>

Bosso L, Smeraldo S, Rapuzzi P, Sama G, Garonna AP, Russo D. (2018). Nature protection areas of Europe are insufficient to preserve the threatened beetle *Rosalia alpina* (Coleoptera: Cerambycidae): evidence from species distribution models and conservation gap analysis. Ecol Entomol, 43:192-203. doi: 10.1111/een.12485

Kabir M, Hameed S, Ali H, Bosso L, Ud Din J, Bischof R, Redpath S, Ali Nawaz M. (2017). Habitat Suitability and Movement Corridors of Grey Wolf (*Canis lupus*) in Northern Pakistan. PLoS ONE, 12(11): e0187027. <https://doi.org/10.1371/journal.pone.0187027>

Bosso L, Luchi N, Maresi G, Cristinzio G, Smeraldo S, Russo D. (2017). Predicting current and future disease outbreaks of *Diplodia sapinea* shoot blight in Italy: species distribution models as a tool for forest management planning. For Ecol Manag 400:655-664. <https://doi.org/10.1016/j.foreco.2017.06.044>

Bosso L, De Conno C, Russo D. (2017). Modelling the risk posed by the zebra mussel *Dreissena polymorpha*: Italy as a case study. Environ Manage 60:304–313. doi: 10.1007/s00267-017-0882-8

Smeraldo S, Di Febbraro M, Ćirović D, Bosso L, Trbojević I, Russo D. (2017). Species distribution models as a tool to predict range expansion after reintroduction: A case study on Eurasian beavers (*Castor fiber*). J Nat Conserv 37: 12 - 20. <http://dx.doi.org/10.1016/j.jnc.2017.02.008>

Russo D, Sgammato R, Bosso L. (2016). First sighting of the humpback whale *Megaptera novaeangliae* in the Tyrrhenian Sea and a mini-review of Mediterranean records. Hystrix, 27 (2): 219-221. doi:10.4404/hystrix-27.2-11737

Bosso L, Mucedda M, Fichera G, Kiefer A, Russo D. (2016). A gap analysis for threatened bat populations on Sardinia. Hystrix, 27 (2): 212-214. doi:10.4404/hystrix-27.2-11788

Bosso L, Di Febbraro M, Cristinzio G, Zoina A, Russo D. (2016). Shedding light on the effects of climate change on the potential distribution of *Xylella fastidiosa* in the Mediterranean basin.

Bosso L, Russo D, Di Febbraro M, Cristinzio G, Zoina A. (2016). Potential distribution of *Xylella fastidiosa* in Italy: a maximum entropy model. Phytopathol Mediterr, 55(1):62–72. doi: 10.14601/Phytopathol\_Mediterr-16429

Russo D, Di Febbraro M, Cistrone L, Jones G, Smeraldo S, Garonna AP, Bosso L. (2015). Protecting one, protecting both? Scale-dependent ecological differences in two species using dead trees, the *rosalia longicorn* beetle and the barbastelle bat. *J Zool*, 297 (3):165–175. DOI: 10.1111/jzo.12271

Russo D, Di Febbraro M, Rebelo H, Mucedda M, Cistrone L, Agnelli P, De Pasquale PP, Martinoli A, Scaravelli D, Spilinga C, Bosso L. (2014). What story does geographic separation of insular bats tell? A case study on Sardinian Rhinolophids. *PLoS ONE* 9(10): e110894. doi:10.1371/journal.pone.0110894

Bosso L, Rebelo H, Garonna AP, Russo D. (2013). Modelling geographic distribution and detecting conservation gaps in Italy for the threatened beetle *Rosalia alpina*. *J Nat Conserv*, 21:72- 80. doi: ,<http://dx.doi.org/10.1016/j.jnc.2012.10.003>