

# Luca Bütikofer

PhD (dissertation passed), Msc Bsc | [lucabutikofer@gmail.com](mailto:lucabutikofer@gmail.com) | +44 (0) 7724 046109

In-depth expertise in geographic information systems, spatial analysis and modelling, with a focus on ecological systems (habitat suitability, dispersal, land use and climate change modeling).

Expert in R: coding, package building and data presentation (including maps), and 3D graphics.

Expert in ecological field work, especially with herpetofauna, and in remote locations and difficult conditions.

Experienced in classic and geometric morphometrics

Experienced in freshwater ecology; macroinvertebrate taxonomy; birds-, mammals-, dragonflies- and butterflies- field techniques.

Published wildlife photographer.

## Publications

- 2017 Butikofer, L.; Jones, B.; Sacchi, R.; Mangiacotti, M.; Ji, W. (2017). A new method for modelling biological invasions from early spread data accounting for anthropic dispersal. Under revision at PlosOne.
- 2017 Butikofer, L.; Mangiacotti, M.; Sacchi, R.; Ji, W. (2017). Climate migrants' survival threatened by "C" shaped anthropic barriers. Under submission at Integrative Zoology.
- 2017 Butikofer, L.; Ji, W.; Gleeson, D.; (2017). Early stage habitat fragmentation scenario for nature reserves in young New Zealand suburbs. In preparation for New Zealand Journal of Ecology.
- 2013 Butikofer, L.; Sacchi, R.; Pupin, F.; Pellitteri-Rosa, D.; Razzetti, E.; Pella, F.; Fasola, M.; (2013). Sexual dimorphism and allometry of the lacertid *Mesalina balfourii* (BLANFORD, 1881), endemic to the Archipelago of Socotra (Yemen). Herpetozoa.
- 2010 Razzetti, E.; Sindaco, R.; Grieco, C.; Pella, F.; Ziliani, U.; Pupin, F.; Riservato, E.; Pellitteri-Rosa, D.; Butikofer, L.; Suleiman, A.S.; Al-Aseily, B.A.; Carugati, C.; Boncompagni, E.; Fasola, M. (2010). The herpetofauna of the socotran archipelago, Yemen (Reprilia). Zootaxa.

## Grants and Scholarships

- 2015-2017 Institute of Natural and Mathematical Sciences. University Fees coverage: NZD 14,000.
- 2015-2016 Institute of Natural and Mathematical Sciences. Scholarship: NZD 10,000.
- 2012-2015 Massey University. Doctoral Scholarship: NZD 75,000.
- 2015 James Sharon Watson Conservation Trust, Forest & Bird (NZ). Research grant: NZD 5,000.
- 2013 Society for the Research on Amphibians and Reptiles in New Zealand. Field work support: NZD 400
- 2012 Massey University Research Fund. Research grant: NZD 12,000.
- 07-08. 2011 National Science Council of Taiwan. Research Scholarship: EUR 1,165

## Software

- GIS Proficient in ArcWiew and Qgis. Expert at spatial analysis using R.
- Coding Expert in R, including building functions and packages (see published package *Bioliniv*), graphics (2D & 3D), data representation (including spatial). Proficient in Unix, Python, html and css. Experienced in Cluster computation.
- Graphics Knowledgeable in Adobe Photoshop, -Lightroom and -Illustrator.

## Education

- Current PhD in Ecology at Massey University (New Zealand), Institute of Natural and Mathematical Sciences. Thesis title: Spatial dynamics of anthropogenically altered dispersal patterns. Supervisor: Dr. Weihong Ji (dissertation passed).
- 2011 MSc in Sustainable Management of the Environment at Pavia University (final grade: 110/110 with honours). Dissertation title: Geometric morphometrics on Socotra lizards and semaphore gekos (*Pristurus*), Supervisor: Dr. Roberto Sacchi.
- 2008 BSc in Environmental Sciences at at Pavia University (final grade: 110/110). Dissertation title: Ecological characterisation of oxbow lakes habitat along Ticino river (Pavia). Supervisor: Prof. Roberto Sconfiatti.

## Work

- 09.12-04.2016 Reptiles Facility, Massey University (NZ)  
Maintenance of facilities for native reptiles breeding program and care of captive lizards.
- 09-10.2012 Bioresearches Group Ltd.  
Native lizard recovery and relocation from development sites.
- 06-08.2011 Stierlin landscaping, Muzzano (CH)  
Plant nursery, gardening and landscaping.
- 06-08.2009 Banca Popolare di Sondrio (CH)  
Bank Postal Services.
- 06-08. 2007 Wood Workshop John Abbott, (UK)  
Custom carpentry production.
- 06-08. 2006 Alpine Mountain Hut, Unione Ticinese Operai Escursionisti (CH)  
Hospitality, cooking, waist management, maintenance, front of house.
- 06.02-09.2003 Chemical Quality Control Laboratory, Pharmaton SA (CH)  
UV, IR, Atom Absorption, HPLC, TLC and other classical chemistry techniques (distillation, extraction, etc.).

## Memberships and Collaborations

- 2012-2016 Society for the Research on Amphibians and Reptiles in New Zealand
- 2012-2016 New Zealand Ecological Society
- 2009-2011 Collaboration with the Swiss Ornithological Station of Sempach for the monitoring of alpine nesting birds and wintering water birds.
- 2009-2011 ProNatura, Swiss Association for the Protection of Nature
- 2003-2007 Ficedula, Swiss-Italian Association for the Protection of Birds
- 2007-2012 Swiss-Italian Society of Natural Sciences

## Languages

- English Fluent  
Italian Native  
French, German Conversational