
CURRICULUM VITAE

Takuya Iwamura, PhD

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66 boulevard Carl-Vogt
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ACADEMIC APPOINTMENTS:

- 2022 Sep - **Senior Lecturer**
Department of F.-A. Forel for Environmental and Aquatic Sciences
Institute of Environmental Science
University of Geneva, Switzerland
- 2020-2022 **Assistant Professor**
Department of Forest Ecosystems and Society, College of Forestry,
Oregon State University, OR, USA
- 2015-2020 **Senior Lecturer**
School of Zoology, Faculty of Life Sciences,
Tel Aviv University, Ramat Aviv, Israel
- 2012–2014 **NSF Postdoctoral Scholar**
School of Earth and Environmental Sciences, Stanford University, CA, U.S.A.

OTHER PROFESSIONAL EXPERIENCES:

- 2002-2004 **Business Strategy Consultant**
Booz & Co (Booz Allen Hamilton), Tokyo, Japan
Business restructuring for automobile & security industries
- 2001-2002 **Business Consultant**
Gemini Consulting, Tokyo, Japan
Business strategies & market analyses for automobile, energy & financial industries

EDUCATION:

- 2012 **Ph.D in Conservation Biology**
The University of Queensland, Brisbane, Queensland, Australia
Supervisor: Prof. Hugh P. Possingham
- 2006 **Master of Environmental Management (Geoinformation certificate)**
Duke University, Durham, NC, USA
Supervisors: Prof. Stuart L. Pimm, Prof. Dean Urban
- 2001 **Master of Media and Governance**
Keio University, Fujisawa, Japan
- 1999 **B.A. in Environmental Science**
Keio University, Fujisawa, Japan

GRANTS RECEIVED (AS PI):

- 2023 SNSF SOR4D Proposal Preparation Grant. “Sustainable Community Forests: agroforestry for biodiversity, poverty reduction and health in The Gambia”. SNSF. 5,000 CHF (received after passing pre-proposal stage, 21 out of 95 submissions)
- 2021-2024 McIntire Stennis Project Award “Soundscape of Pacific Northwest Old-growth Forest: Measuring forest structure and health in long-term experimental forests”. USDA National Institute of Food and Agriculture, (Support salaries of three relevant faculty members of College of Forestry + Discrete funding \$8000)
- 2020-2021 German-Israel Foundation for Scientific Research and Development, €19,500. “Revealing the role of governance in land use and ecological impacts in dryland: Social–Ecological System approach.”
- 2017-2020 Global Challenge Research Fund (GCRF), £500,000
“Health in a changing climate: the dynamic challenge of snake bite in South Asia”
International collaboration with 4 other PIs.

GRADUATE STUDENTS/POSTDOC SUPERVISIONS (AS PRIMARY):

Postdoctoral scholar

- Dr. Joseph J Erinjery (2017~2019), Tel Aviv University
 - Assistant Professor at Kannur University, India

PhD candidates

- Mr. Tanner Smith (2023~), University of Geneva
- Mr. Noam Ben-Moshe (2016~2023), Tel Aviv University
 - Scientist at The Steinhardt Museum of Natural History, Israel
- Dr. Amir Lewin (2015~2021), Tel Aviv University
 - Postdoctoral Scholar at Ben-Gurion University of Negev, Israel

MSc. students

- Ms. Axelle Lafoucriere (2023~), University of Geneva
- Ms. Tal Raz (2017-2020), Tel Aviv University
 - PhD candidate at Tel Aviv University, Israel
- Mr. Eyal Goldstein (2017-2019), Tel Aviv University
 - PhD candidate at Göttingen University, Germany
- Ms. Dana Levy (2015-2017), Tel Aviv University
 - PhD candidate at Ben-Gurion University of Negev, Israel

TEACHING EXPERIENCES:

- 2023 Co-Lecturer, Ecologie I&II (Undergraduate course for ecology), University of Geneva
- 2022 Lecturer, FES 524, Natural resource data analysis, Oregon State University (OSU)
- 2022 Lecturer, NR 455, Decision making for natural resource management, OSU
- 2021 Co-Lecturer, FES 525, Interdisciplinary collaboration for socio-ecological problems, OSU

- 2021 Lecturer, NR 455 eCampus, Decision making for natural resource management, OSU
- 2020 Lecturer, Theories and Tools for Spatial Ecology, Tel Aviv University
- 2019 Lecturer, Scientific Literacy (Undergraduate class), Tel Aviv University
- 2019 Lecturer, Theories and Tools for Spatial Ecology, Tel Aviv University
- 2018 Co-Lecturer, Biostatistics, Tel Aviv University
- 2018 Lecturer, Theories and Tools for Spatial Ecology, Tel Aviv University
- 2017 Co-Lecturer, Biostatistics, Tel Aviv University
- 2017 Lecturer, Theories and Tools for Spatial Ecology, Tel Aviv University
- 2016 Co-Lecturer, Biostatistics, Tel Aviv University

ABSTRACTS AT INTERNATIONAL MEETINGS:

1. A. Lewin, J. Erinjery and **T. Iwamura** (2019) The impacts of governance in agricultural land use on biodiversity in Arava Valley, International Congress of Conservation Biology
2. **T. Iwamura** (2019) Insights from land system science for conservation (Session abstract), International Congress of Conservation Biology
3. **T. Iwamura** (2019) How to avoid conservation leakage? – Systematic conservation planning incorporating people's decision making, 4th Open Science meeting, Global LAND Program
4. Raz, T., K. Hobson, G. Perlman, Y. Kiat, and **T. Iwamura** (2019) Identifying the African wintering habitats of Israeli migratory birds, International Bird Observatory Conference, Eilat
5. **T. Iwamura** (2018) International biennial conference on Drylands, Deserts, and Desertification
6. **T. Iwamura**, Y. Rotman, Y. Kiat, Y. Lenard, G. Perlman (2017) A mixed approach based on field data and remote sensing for the Afro-Eurasian migratory bird flyways, International Congress for Conservation Biology, Cartagena, Columbia
7. **T. Iwamura** (2016) Invasive modeling for Colorado Potato beetle, Society of Conservation Biology Asia meeting (Conservation Asia), Singapore, Singapore
8. **T. Iwamura** (2015) A novel approach for analyzing migratory species, International Congress for Conservation Biology, Montpellier, France, 2015
9. **T. Iwamura** (2013) Agent-based modeling for indigenous land management, Association of American Geographer Annual Meeting, Los Angeles, USA
10. **T. Iwamura** (2011) Evaluation of protected areas under climate change, International Congress for Conservation Biology, Auckland, New Zealand (Student award finalists)
11. **T. Iwamura** (2011) The impacts of sea-level rise on migratory shorebirds, International Conference of Spatial Ecology & Conservation, Birmingham, UK, 2011
12. **T. Iwamura** (2009) Global conservation planning under climate change, European Congress of Conservation Biology, Prague, Czech
13. **T. Iwamura** (2008) Conservation prioritization for climate stability, Society of Conservation Biology annual meeting, Chattanooga, USA

INVITED LECTURES, AND WORKSHOP:

- 2019 International Congress of Conservation Biology, Kuala Lumpur, Malaysia, *Symposium Organizer & Invited Lecturer*
- 2019 4th Open Science meeting, Global LAND Program, Bern, Switzerland, *Invited lecturer*
- 2019 Israel Conference for Conservation Science, Technion, Israel, *Invited lecturer*
- 2017 International biennial conference on Drylands, Deserts, and Desertification, Sde Boker, Israel, *Invited lecturer*
- 2017 EU COST Land-Sea Conservation Project “MARCONS” workshop, Lisbon, Portugal

2016 EU COST Land-Sea Conservation Project “MARCONS” workshop, Zagreb, Croatia

AWARDS AND SCHOLARSHIPS:

2012	University of Queensland Deans’ Award for Research Higher Degree Excellence. Top 10%PhD theses (approx. 1 person per department)
2008–2011	University of Queensland Research Scholarship (Graduate school, UQ) \$43,000AUD/year
2008–2011	UQ International Research Tuition Award (Graduate school, UQ) Exemption from paying tuition of \$35,000AUD/year
2007	Research Scholar scholarship (School of Biological Sciences, UQ) \$5,000AUD
2007	Endeavour Asia Awards (Australian government) \$50,000AUD
2006	Research Scholarship (World Wildlife Fund, USA)
2005–2004	Nicholas School of Environment and Earth Sciences Scholarship (Duke University) \$4,500 USD/ year
2000	Travel scholarship for international conference (Keio University)
1999–2000	Mori Research Scholarship (Keio University) \$2,000 USD/year

EXPERIENCES IN ENVIRONMENTAL FIELD:

2012	Consultant for Wildlife Conservation Society, NY. Climate change adaptation.
2009	Consultant, Greenpeace. Conduct geospatial analyses for REDD in Indonesia
2006	Research assistant, Conservation Science Program, World Wildlife Fund, Washington DC
2005	Intern, Conservation Science Program, World Wildlife Fund, Washington DC
2004	Field volunteer, Research on tree frogs in cloud forest, Bilsa nature reserve, Ecuador

OTHER QUALIFICATIONS:

Languages: English (fluent), French (lower intermediate), Hebrew (intermediate), Japanese (native).

Professional skills: GIS (ArcGIS/QGIS), Remote sensing (ENVI, R), Programming (R, Python, NetLogo, Java, C++, etc)

PUBLICATIONS:

* Underlined names indicate the students and postdocs I supervised as a primary advisor.

1. G. Murali, T. Iwamura, S. Meiri and U. Roll (2023) Future temperature extremes threaten land vertebrates, *Nature*. **1-7**
2. E. Goldstein, J. J. Erinjery, G. Martin, A. Kasturiratne, D. S. Ediriweera, R. Somaweera, H. J. de Silva, P. Diggle, D. G. Laloo, K. A. Murray, T. Iwamura (2023) Climate change maladaptation for health: Agricultural practice against shifting seasonal rainfall affects snakebite risk for farmers in the tropics. *iScience*. **26**, 105946.
3. E.S. Saager, T. Iwamura, T. Jucker, and K.A. Murray (2023) Deforestation for oil palm increases microclimate suitability for the development of the disease vector *Aedes albopictus*, *Scientific Reports*. **13** (1), 9514
4. T. Raz, Y. Kiat, K.J. Kardynal, Y. Aharon-Rotman, G. Perlman, K.A. Hobson and T. Iwamura (2023) Stopover-site feather isotopes uncover African non-breeding grounds of migratory passerines, *J. of Ornithology*. 1-15
5. N. Shumway..., N. Ben-Moshe, T. Iwamura..., and Martine Meron (2023) Exploring the risks and benefits of flexibility in biodiversity offset location in a case study of migratory shorebirds, *Conservation Biol.* <https://doi.org/10.1111/cobi.14031>

6. N. Ben-Moshe, M. Rosensaft, and **T. Iwamura** (2023) Land-use changes interact with geology to facilitate dispersal of the rock hyrax (*Procavia capensis*) and leishmaniasis across Israel and the West Bank, *Ecology and Evolution*. **13** (3), e9915
7. G. Martín, J. Erinjery, D. Ediriweera, H.J. de Silva, D.G. Lalloo, **T. Iwamura**, and K.A. Murray (2022) A mechanistic model of snakebite as a zoonosis: Envenoming incidence is driven by snake ecology, socioeconomics and its impacts on snakes, *PLOS Neglected Tropical Diseases*. <https://doi.org/10.1371/journal.pntd.0009867>
8. A. Lewin, J. Erinjery, D. Nissim, **T. Iwamura** (2022) Social-ecological cascade effects of land use on vertebrate pest dynamics in arid agricultural communities. *Ecological Applications*, e2804.
9. G. Martin, J. Erinjery, R. Gumbs, R. Somaweera, D.S. Ediriweera, P.J. Diggle, A. Kasturiratne, D. Lalloo, H.J. de Silva, **T. Iwamura**, and K. Murray (2022) 'Integrating snake distribution, abundance and expert-derived behavioural traits predicts snakebite risk, *J. of Applied Ecology*. <https://doi.org/10.1111/1365-2664.14081>
10. A. Lewin, J. Erinjery, Y.L.W. Polain, E. Tripler, and **T. Iwamura** (2021) Evaluating the role of agricultural regimes on predator-prey interactions in a hyperarid region of Israel, *Journal of Arid Environment*. 192, 104547.
11. G. Martin, C. Yáñez-Arenas, R. Rangel-Camacho, K.A. Murray, E. Goldstein, **T. Iwamura**, and X. Chiappa-Carraraa (2021) Implications of global environmental change for the burden of snakebite, *Toxicon: X*. 100069,
12. D.S. Ediriweera, A. Kasthuriratne, A. Pathmeswaran, N.K. Gunawardene, S.F. Jayamanne, K. Murray, **T. Iwamura**, G. Isbister, A. Dawson, D.G. Lalloo, H.J. de Silva, and P.J. Diggle (2021) Evaluating spatiotemporal dynamics of snakebite in Sri Lanka: Monthly incidence mapping from a national representative survey sample, *PLOS Neglected Tropical Diseases*. **15** (6) <https://doi.org/10.1371/journal.pntd.0009447>
13. Y. Aharon-Rotman, T. Raz, G. Perlman, Y. Kiat, A. Balaban and **T. Iwamura** (2021) Limited flexibility in departure timing of migratory passerines at the East-Mediterranean flyway, *Scientific Report*
14. E. Goldstein, J. Erinjery, G. Martin, Ediriweera, D.S., A. Kasturiratne, H. Janaka de Silva, Peter Diggle, D.G. Lalloo, K. Murray, and **T. Iwamura** (2021) Estimating snakebite risks with Agent-based modeling of snake-farmer interactions, *PLOS Neglected Tropical Diseases* **15** (1), e0009047
15. **T. Iwamura**, A. Guzmán-Holst, and K.A. Murray (2020) Accelerating invasion potential of disease vector *Aedes aegypti* under climate change, *Nature Communications* **11** (1), 1-10
16. N. Ben-Moshe and **T. Iwamura** (2020) Shelter availability and human attitudes as drivers of rock hyrax (*Procavia capensis*) expansion along a rural-urban gradient, *Ecology and Evolution* **10** (9), 4044-4065
17. K.A. Murray, G. Martin, and **T. Iwamura** (2020) Focus on snake ecology to fight snakebite, *Lancet* **395** (10220), e14
18. D.S. Ediriweera, A. Kasturiratne, N.K. Gunawardena, **T. Iwamura**, K.A. Murray, P.J. Diggle, D.G. Lalloo, and H.J. de Silva (2019) Adjusting for spatial variation when assessing individual-level risk: a case-study in the epidemiology of snake-bite in Sri Lanka, *PLoS One* **14** (10), e0223021
19. S. Giakoumi, V. Hermoso, S.B. Carvalho, V. Markantonatou, M. Dagys, **T. Iwamura**, W.N. Probst, R.J. Smith, K.L. Yates, V. Alpanidou, T. Novak, N. Ben-Moshe, *et al.* (2019) Conserving European biodiversity across realms. *Conservation Letters* <https://doi.org/10.1111/conl.12586>
20. **T. Iwamura**, Y.L.W. Polain, and M. Mascia (2018) Incorporating people into conservation planning: insights from Land System Science. *Frontiers in Ecology and Environment* <https://doi.org/10.1002/fee.1824>
21. U. Roll, **T. Iwamura**, and O. Berger-Tal (2018) National conservation science conferences as a means of bridging conservation science and practice. *Conservation Biology* <https://doi.org/10.1111/cobi.13060>
22. N.J. Murray, P.P. Marra, R.A. Fuller, R.S. Clemens, K. Dhanjal-Adams, K.B. Gosbell, C.J. Hussell, **T. Iwamura**, D. Melville, C.D.T. Minton, A.C. Riegen, D.I. Roggers, E.J. Woehler, and C.E. Studds (2018) The large-scale drivers of population declines in a long-distance migratory shorebird, *Ecography* <https://doi.org/10.1111/ecoq.02957>
23. L.M. Barr, J.E.M. Watson, H.P. Possingham, **T. Iwamura**, and R.A. Fullar (2016) Progress in improving the protection of species and habitats in Australia. *Biological Conservation*. **200**: 184-191
24. **T. Iwamura**, E. F. Lambin, K. M. Silvius, J. B. Luzar, and J. M. Fragoso (2016) Socio-environmental sustainability of indigenous lands: Simulating the impacts of external pressures and livelihood change in the Guyanese Amazon. *Frontiers in Ecology and the Environment*. **14** (2) 77-83

25. Nicol, S., R.A. Fuller, **T. Iwamura**, and I. Chadès (2015) Adapting environmental management to uncertain but inevitable change, *Proceedings of Royal Society B*. **282**: 20142984
26. Butt, N., K. Epps, H. Overman, **T. Iwamura**, and J.M.V. Fragaoso (2015) Assessing carbon stocks using indigenous peoples' field measurements in Amazonian Guyana, *Forest Ecology and Management*. **338** 191-199
27. **T. Iwamura**, E. Lambin, K.M. Silvius, J.B. Luzar, and J.M.V. Fragaoso (2014) Agent-based modeling of hunting and subsistence agriculture on indigenous lands: understanding interactions between social and ecological systems, *Environmental Modelling & Software*. **58** 109-127
28. O. Venter, R.A. Fuller, D.B. Segan, J. Carwardine, T. Brooks, S.H.M. Butchart, M. Di Marco, **T. Iwamura**, L. Joseph, D. O'Grady, H.P. Possingham, C. Rondinini, R.J. Smith, M. Venter, and J.E.M. Watson (2014) Targeting global protected area expansion for imperiled biodiversity, *PLoS Biology*. **12** (6): e1001891
29. **T. Iwamura**, R.A. Fuller, and H.P. Possingham (2014) Optimal management of a multispecies shorebird flyway under sea-level rise, *Conservation Biology*. DOI:10.1111/cobi.12319
30. Watson J.E.M., **T. Iwamura***, and N. Butt (2013) Mapping vulnerability and conservation action in a time of climate change. *Nature Climate Change*. **3** 989-944 ***Credited as a leading author**
31. **T. Iwamura**, A. Guisan, K.A. Wilson, and H.P. Possingham (2013) How robust are global conservation priorities to climate change? *Global Environmental Change*. **23** 1277-1284
32. **T. Iwamura**, H.P. Possingham, I. Chadès, C. Minton, N.J. Murray, D.I. Rogers, E. Treml, and R.A. Fuller (2013) Migration magnifies the impact of sea level rise on coastal shorebirds. *Proceedings of Royal Society B*. **280** : 20130325
33. **T. Iwamura**, K.A. Wilson, O. Venter, and H.P. Possingham (2010) A climatic stability approach to prioritizing global conservation investments. *PLoS ONE* **5** (11): e15103
34. Venter, O., W.F. Laurence, **T. Iwamura**, K.A. Wilson, R.A. Fuller, and H.P. Possingham (2009) Harnessing carbon payments to protect biodiversity. *Science* **326** (5958):1368-1368
35. Carwardine, J., K.A. Wilson, G. Ceballos, P.R. Ehrlich, R. Naidoo, **T. Iwamura**, S. Hajkovicz, and H.P. Possingham (2008) Cost-effective priorities for global mammal conservation. *Proceedings of the National Academy of Sciences of the United States of America* **105** (21): 11446-11450
36. Bode M., J.E.M. Watson, **T. Iwamura**, and H.P. Possingham (2008) The cost of conservation: Letter in response to Kremen et al. *Science* **321** (5887): 340-340
37. R. Naidoo, and **T. Iwamura** (2007) Global-scale mapping of economic benefits from agricultural lands: implication of conservation priorities. *Biological Conservation* **140**: 40-49