

Mahdieh Tourani

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 @TouraniMa

www.researchgate.net/profile/Mahdieh_Tourani

- Education**
- Norwegian University of Life Sciences**, Ås, Norway
PhD in Applied Quantitative Ecology, 2020
Dissertation: “Leveraging non-invasive monitoring of carnivores using hierarchical models”. Advisor: Richard Bischof
- University of Oxford**, Oxford, UK
Postgraduate Diploma in International Wildlife Conservation Practice, 2015
- Lund University**, Lund, Sweden
Master of Science in Biology: Animal Ecology, 2013
Thesis: “Predicting potential distribution for *Equus hemionus* in a changing world”. Advisor: Ola Olsson
- Shahid Beheshti University**, Tehran, Iran
Bachelor of Science in Biology: Zoology, 2010
- Research Positions**
- University of California**, Davis, USA
Quantitative Wildlife Ecology Postdoctoral Researcher, 2021
Analysing camera trap data and producing analytics for Wildlife Insights. Advisors: Daniel Karp and Rahel Sollmann
- Norwegian University of Life Sciences**, Ås, Norway
Postdoctoral Researcher, Oct 2020 to Mar 2021
Estimating red deer density in the Bohemian Forest Ecosystem
Advisors: Richard Bischof and Wibke Peters
- Swedish University of Agricultural Sciences**,
Grimsö Wildlife Research Station, Riddarhyttan, Sweden
Research assistant, May-Nov 2014
Conducting a systematic review of interventions to reduce large carnivore predation on livestock. Advisor: Guillaume Chapron
- Research interests**
- Quantitative Ecology, Ecological Modelling, Spatial Ecology,
Non-invasive Wildlife Monitoring, Carnivore Ecology,
Population Dynamics, Wildlife Conservation and Management

Peer-reviewed
publications

10. **Tourani M**, Dupont P, Nawaz MA, Bischof R. (2020) Multiple observation processes in spatial capture-recapture models: how much do we gain? *Ecology*, 101(7): e03030. <https://doi.org/10.1002/ecy.3030>
9. **Tourani M**, Brøste E, Bakken S, Odden J, Bischof R. (2020) Closer, sooner, or longer: detectability of mesocarnivores at camera traps. *Journal of Zoology*, 312(4): 259–270. <https://doi.org/10.1111/jzo.12828>
8. Bischof R, Milleret C, Dupont P, Chipperfield C, **Tourani M**, et al. (2020) Estimating and forecasting spatial population dynamics of apex predators using transnational genetic monitoring. *PNAS*, 117(48): 30531-30538. <https://doi.org/10.1073/pnas.2011383117>
7. Dupont P, Milleret C, **Tourani M**, Brøseth H, Bischof R. Integrating dead recoveries in spatial capture-recapture models. Accepted in *Ecosphere*.
6. Moqanaki EM, Milleret C, **Tourani M**, Dupont P, Bischof R. Consequences of ignoring variable and spatially-autocorrelated detection probability in spatial capture-recapture. *bioRxiv*. <https://doi.org/10.1101/2020.12.24.424360>
5. van Eeden LM, Eklund A, ..., **Tourani M**, Treves A (2018) Carnivore conservation needs evidence-based livestock protection. *PLoS Biology*, 16(9): e2005577. <https://doi.org/10.1371/journal.pbio.2005577>
4. Eklund A, López-Bao JV, **Tourani M**, Chapron G, Frank J (2017) Limited evidence on the effectiveness of interventions to reduce livestock predation by large carnivores. *Scientific Reports*, 7: 2097. <https://doi.org/10.1038/s41598-017-02323-w>
3. Moqanaki EM, Farhadinia MS, **Tourani M**, Akbari H (2016) The caracal in Iran - current state of knowledge and priorities for conservation. *Cat News: Special Issue 10*, 27-32. <https://tinyurl.com/y7wom9bn>
2. **Tourani M**, Moqanaki EM, Boitani L, Ciucci P (2014) Anthropogenic effects on the feeding habits of wolves in an altered arid landscape of central Iran. *Mammalia*, 78(1): 117–121. <https://doi.org/10.1515/mammalia-2012-0119>
1. **Tourani M**, Moqanaki EM, Kiabi BH (2012) Vulnerability of striped hyaenas, *Hyaena hyaena*, in a human-dominated landscape of central Iran. *Zoology in the Middle East*, 56: 133-136. <https://doi.org/10.1080/09397140.2012.10648948>

Talks & Posters

8. *Landscape-level patterns in wolverine home range size using non-invasive monitoring and hierarchical modelling* (oral presentation)
International Statistical Ecology Conference (vISEC),
Sydney (virtual), Australia – June 2020
7. *Estimating animal density by integrating non-invasive DNA sampling and camera traps* (poster)
Wildlife Research and Conservation Conference,
Berlin, Germany – October 2019
6. *What are hierarchical models and why do we use them in ecology?* (oral presentation)
IRSAE's 9th Summer School in Applied Ecology,
Holar, Iceland – August 2019
5. *Revealing anthropogenic impacts on the carnivore guilds using non-invasive sampling and hierarchical models* (oral presentation)
IRSAE's 7th Summer School in Applied Ecology,
Evenstad, Norway – August 2017
4. *Moving from diagnosis to action: a conceptual framework for carnivore conservation* (poster)
Student Conference on Conservation Science,
University of Cambridge, Cambridge, UK – March 2016
3. *Is there any room for the Asiatic wild ass?* (oral presentation)
WildCRU's Masters Day, University of Oxford, Oxford, UK
– May 2015
2. *King or queen in the African savanna: what matters for lion habitat use?* (oral presentation)
Symposium on Carnivore Ecology, University of Oxford, Oxford, UK – September 2015
1. *Evaluating conservation priority landscapes for the endangered Asiatic wild ass under climate change scenarios* (poster)
Student Conference on Conservation Science, University of Cambridge, Cambridge, UK - March 2015

Teaching experience

- Norwegian University of Life Sciences, Ås, Norway**
1. Lecturer and lab assistant in *Methods in Natural Sciences* (ECOL300), MINA – Spring 2018-2019
 2. Lecturer and teaching assistant in *Exploring and Analysing Data in Ecology and Natural Resource Management* (ECOL340), MINA – Autumn 2017-2020

3. Course coordinator and lecturer in *Human-Wildlife Interactions* (NATF350), MINA – Spring 2019

4. Teaching assistant in *Ecology and Management of Natural Resources in the Tropics* (NATF320), MINA – Spring 2019

5. Mentoring analytical modules for the 2nd eLearning *Wildlife Conservation Course* for early-career conservationists based in Africa, WildCRU, **University of Oxford**, Autumn 2019

Student supervision

Co-advisor for 2 master theses in Ecology/Environment and Natural Resources at MINA, Norwegian University of Life Sciences, Ås, Norway:

1. Sigurd Bakken (2018) *Evaluating the effect of olfactory lures on detection probability during camera trapping*, May 2018.

2. Laura Bartra Cabré (2020) *Disentangling the drivers of European badger activity at multiple temporal scales*, June 2020.

Workshops & Internships

11. *Analysis of animal movement data using hidden Markov models* by M. Chimienti at **IRSAE's 9th Summer School in Applied Ecology**, Holar, Iceland – August 2019

10. *Introduction to NIMBLE: the fanciest member in the BUGS family* by P. de Valpine at **Swiss Ornithological Institute**, Sempach, Switzerland – May 2018

9. *Modelling demographic processes in populations using BUGS and JAGS* by M. Kery & M. Schaub at **Centre for Biodiversity Dynamics**, Norwegian University of Science and Technology NTNU, Trondheim, Norway – August 2017

8. *Exchange stay at Patuxent Research Refuge*, US Fish and Wildlife Service, Maryland, USA, hosted by A. Royle – July 2017

7. *Camera trapping study design and data analysis for occupancy and density estimation* by J. Nichols, C. Sutherland, A. Royle & J. Kolowski at **Smithsonian-Mason School of Conservation**, Virginia, USA – June 2017

6. *Internship at Wildlife Conservation Research Unit (WildCRU)*, University of Oxford, Oxford, UK, hosted by A. Loveridge & D. Macdonald – May 2016

5. *The Camera Trapping Workshop* by L. Talent & R. Amin at **Student Conference on Conservation Science (SCCS)**, University of Cambridge, Cambridge, UK – May 2016
4. *Exploring data in R* by L. Talent at **University of Oxford** (online course), UK – November 2015
3. *Resource Selection Function analysis* by R. Montgomery at **WildCRU**, University of Oxford, Oxford, UK – July 2015
2. *Conservation and landscape genetics in a changing world* at **Graduate Research School in Genomic Ecology (GenEco)**, Lund University, Lund, Sweden – April 2013
1. *Internship* at Biology and Biotechnology Department “C. Darwin”, **Sapienza University of Rome**, Rome, Italy, hosted by L. Boitani & P. Ciucci – July 2011

Reviewer
for journals

Methods in Ecology and Evolution, Ecology and Evolution, Animal Conservation, Frontiers in Ecology and Evolution, Conservation Science and Practice, African Journal of Ecology, Environment Development and Sustainability, Mammalia, Journal of Mammalogy, Hystrix – the Italian Journal of Mammalogy, The journal of Wildlife Management
(<https://publons.com/researcher/1237450/mahdieh-tourani/>)

Languages
and Skills

English (fluent), Persian (native), Norwegian (intermediate)
Programming in R (advanced level; spatial and statistics), Hierarchical modelling through JAGS and NIMBLE (e.g. spatial capture-recapture, occupancy, time-to-event and species distribution models), GIS (ArcGIS, QGIS, GRASS), L^AT_EX, Inkscape, Microsoft Office