# Tal Polak (PhD)

Mishol Racham 15, Bear Ora, Israel

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## **EDUCATION**

• Doctor of Philosophy (PhD)

**Conservation Biology** 

**Title of thesis:** Using fine and coarse conservation

targets to maximize cost-effectiveness of road mitigation and protected areas

University of Queensland Australia

2012-2016

• Master of Science (M.Sc.), with honors

**Desert Ecology** 

Title of thesis: Reintroduction as an

ecosystem restoration tool: A cast study of reintroduced ungulates as vectors for

seed-dispersal

**Ben-Gurion University** 

Israel

2007-2010

• Bachelor of Science (B.Sc.), with honors

Biology and Environmental science

**Hebrew University** 

Israel

2004-2007

## **PUBLICATIONS**

 Benjamin Breslau, Tal Polak, Benny Shalmon, Elli Groner. 2020. Evidence of browsing pressure on the critically endangered Acacia gazelle (*Gazella acaciae*). Journal of Arid Environments,

https://doi.org/10.1016/j.jaridenv.2019.104019

- Tal Polak, Emily Nicholson, Clara Grilo, Joseph R Bennett, Hugh P Possingham. 2019. Optimal planning to mitigate the impacts of roads on multiple species. Journal of applied ecology, 52(1) 201-213.
- Gwenllian D. Iacona., William J. Sutherland Bonnie Mappin Vanessa Adams
   Paul R. Armsworth Tim Coleshaw Carly Cook Ian Craigie Lynn Dicks James A.
   Fitzsimons Jennifer McGowan Andrew Plumptre Tal Polak Andrew Pullin
   Jeremy Ringma Ian Rushworth Andrea Santangeli Annette Stewart Ayesha
   Tulloch Jessica Walsh Hugh P. Possingham. 2018. Standardized reporting of
   the costs of management interventions for biodiversity conservation.
   Conservation Biology, 32(5), 979-988.
- Polak T., Watson J.E., Bennett J.R., Possingham H.P., Fuller R.A., Carwardine J. (2016) Balancing Ecosystem and Threatened Species Representation in Protected Areas and Implications for Nations Achieving Global Conservation Goals. Conservation Letters. DOI: 10.1111/conl.12268
- Polak, T<sup>\*</sup>., Watson, J.E.M., Fuller, R.A., Joseph, L.N., Martin, T., Possingham, P.P., Venter, O. and Carwardine, J.2015. Representing ecosystems in protected areas is unlikely to save threatened species. Royal Society Open Science, 2, 150107.
- Polak, T<sup>^</sup>., Rhodes, J. R., Jones, D. and Possingham, P.P. 2014. Optimal planning for mitigating the impacts of roads on wildlife. Journal of Applied Ecology. 51 (3), 726-734. doi: 10.1111/1365-2664.12243
- Polak, T<sup>^</sup>., Gutterman, Y., Hofman, I. and Saltz, D. 2014. Redundancy in seed dispersal by three sympatric ungulates: a reintroduction perspective. Animal Conservation, 17, 565-572. doi: 10.1111/acv.12122
- Polak, O., **Polak, T**. and Shashar, N. 2014. Effects of habitat relocation on fish community structure- a case study. Environmental Biology of Fishes, 1-11.

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Berger-Tal\*, O., Polak\*, T., Ben Zvi, A., Saltz, D., Lubin, Y. and Kotler, B.P. 2011. Integrating animal behavior and conservation biology: a conceptual framework. Behavioral Ecology, 22 (2), 236-239. doi:10.1093/beheco/arq224.
 \* Equal first authors.

- Polak, T., Korine, C., Yair. S. and Holderied, M.W. 2011. Differential effects of artificial lighting on flight and foraging behaviour of two sympatric bat species in a desert. Journal of Zoology, 285 (1), 21-27. doi:10.1111/j.1469-7998.2011.00808.x
- Polak, T<sup>^</sup> and Saltz, D. 2011. Reintroduction as an ecosystem-restoration technique. Conservation Biology, 25 (3), 424-424.

## **COMMENTARY PUBLICATIONS**

- **Polak T**<sup>^</sup>. 2015. Help others—and help your career. Science, 350, 246.
- Tal Polak, Jonathan Rhodes, Hugh Possingham. 2015. Using maths to plan roads for wildlife in The curlew has landed, Decision Point, 92, 12.

<sup>^</sup>Corresponding Author

**Number of citations: 740** 

h-index: 9 i10-index: 9

## PUBLISHED ABSTRACTS AND ORAL PRESENTATIONS

- \*Peled, T., Tsoar, A. and Motro, U. 2007. What are the factors that affect insectivorous bats biodiversity in Jerusalem metropolitan area? Israel Journal of Ecology and Evolution 54(2): 246. Was given as an oral presentation at the 44<sup>th</sup> annual meeting of the Zoological Society of Israel.
- \*Peled, T., Yair. S., Korine, C. and Holderied, M.W. 2009. Bats fly differently in the light. Israel Journal of Ecology and Evolution 55(2): 157-180. Was given as an oral presentation at the 45<sup>th</sup> annual meeting of the Zoological Society of Israel.

 \*Peled, T., Saltz, D, and Gutterman, Y. 2010 Reintroduced species as vectors for seed-dispersal. Israel Journal of Ecology and Evolution 56(1): 75-109. Was given as an oral presentation at the 46<sup>th</sup> annual meeting of the Zoological Society of Israel.

## **ACCEPTED ABSTRACTS, ORAL OR POSTER PRESENTATIONS**

- Polak, T., Nicholson, E., Grilo, C., Bennett, J. and Possinghma, H. P. Optimal planning for mitigating the impacts of roads on wildlife: a multiple species approach. Was presented as an oral presentation at the 44<sup>th</sup> annual meeting of the Israeli society for ecology and environmental science, Tel Aviv, Israel. 2016.
- Polak, T., Watson, J. E.M., Fuller, R. A., Joseph, L.N., Martin, T.G.,
   Possingham, H.P., Venter, O. and Carwardine, J. Efficient expansion of global protected areas requires simultaneous planning for species and ecosystems.
   Was presented as a poster presentation at the 43<sup>th</sup> annual meeting of the Israeli society for ecology and environmental science, Jerusalem, Israel, 2015.

   Won the "Best Poster" award.
- Polak, T., Nicholson, E., Grilo, C., Bennett, J. and Possinghma, H. P. Optimal planning for mitigating the impacts of roads on wildlife: a multiple species approach. Was presented as an oral presentation at the 27<sup>th</sup> International Congress for Conservation Biology, Montpelier, France, 2015. This talk was one of the 12<sup>th</sup> finalist talks for the student award competition.
- Polak, T., Watson, J. E.M., Fuller, R. A., Joseph, L.N., Martin, T.G.,
  Possingham, H.P., Venter, O. and Carwardine, J. Efficient expansion of global
  protected areas requires simultaneous planning for species and ecosystems.
  Was presented as a poster presentation at the 27<sup>th</sup> International Congress for
  Conservation Biology, Montpelier, France, 2015.
- Polak, T., Watson, J. E.M., Fuller, R. A., Joseph, L.N., Martin, T.G.,
  Possingham, H.P., Venter, O. and Carwardine, J. Representing ecosystems in
  protected areas is unlikely to save threatened species. Was presented as an
  Oral Presentation at the Ecological Society of Australia 2014 conference, Alice
  Springs, Australia.

- Polak, T., Rhodes, J., Jones, D. and Possingham, H. P. Optimal planning for mitigating the impacts of roads on wildlife. Was presented as an oral presentation at the 26<sup>th</sup> International Congress for Conservation Biology, Baltimore, MD, USA, 2013
- Polak, T., Yair. S., Korine, C. and Holderied, M.W. Effect of light on foraging behavior of bats: Bats fly differently under artificial light. Was presented as an oral presentation at the 2013 SCCS-Australia conference at The University of Queensland.
- Polak, T., Rhodes, J., Jones, D. and Possingham, H. P. Optimal planning for mitigating the impacts of roads on wildlife. Was presented as an oral presentation at the SCB Oceania 2012: People and Conservation in Land and Sea Country at the University of Darwin conference.
- \*Peled, T., Saltz, D, and Gutterman, Y. Reintroduced species as vectors for seed-dispersal. Was presented as an oral presentation at the 94<sup>th</sup> Ecological Society of America annual meeting, Albuquerque, NM, USA, 2009.
- Berger-Tal, O., \*Peled, T., Ben Zvi, A., Saltz, D., Lubin, Y. and Kotler, B.P. A conceptual framework integrating animal behavior and conservation biology.
   Was presented as an oral presentation at the 10<sup>th</sup> Sede Boqer Symposium in Memory of Merav Ziv, Sede Boqer, Israel, 2009.
- \*Peled, T., Yair. S., Korine, C. and Holderied, M.W. Effect of light on foraging behavior of bats: Bats fly differently under artificial light. Was accepted as a poster at the 23rd annual meeting of the Society for Conservation Biology, Beijing, China, 2009.
  - \* Maiden Name

## **CONFERENCE ORGANIZATION**

- Member of the organization committee for the 1<sup>st</sup> student conference for conservation sciences-Australia. 2013. Brisbane, Australia.
- Inventor and organizer of the Society for Conservation Biology first Scientist
   Auction fundraising event at the 26<sup>th</sup> International Congress for Conservation
   Biology, Baltimore, MD, USA, 2013.

Organizer of scientists' raffle fundraising and networking event at the 27<sup>th</sup>
 International Congress for Conservation Biology, Montpelier, France, 2015.

## **ACHIEVEMENTS**

- Tech LDD prize for best poster at the 43<sup>th</sup> annual meeting of the Israeli society for ecology and environmental science, Jerusalem, Israel, 2015.
- Finalist for the best student presentation competition at the 27<sup>th</sup> International Congress for Conservation Biology, Montpelier, France, 2015.
- CEED-ECR Travel Grant 2014
- School of biological science Travel grant
- IPRS scholarship for research of higher degree, 2011-on going
- UQ Centennial scholarship, 2011-on going
- ARC CEED, top up scholarship, 2011 –on going
- Negev scholarship for higher degree, 2011
- The University of Queensland, international conference travel award, 2013
- M.Sc MAGNA CUM LAUDE
- B.Sc MAGNA CUM LAUDE
- Dean's list for academic year 2006, Hebrew University of Jerusalem.
- Dean's list for academic year 2007, Hebrew University of Jerusalem.
- The Israeli zoological society, Travel award, 2009.
- ESA Student Section International Travel Award, 2009.
- Faran scholarship for academic excellence, 2010.

## **RESEARCH GRANTS**

• The Professor Aharon Shulov Fund, the Tisch Family Zoological Gardens in Jerusalem, Grant in Aid of Research, 2005.

## **SKILLS**

Highly proficient in computer skills including MS office, statistical programs (SPSS, STATISTICA), MatLab, R, ArcGIS, Sigma Plot and MARXAN. Excellent oral and writing skills in English and Hebrew. Extremely good under pressure, team player with strong leadership skills. Organized and have high administrational abilities. Very strong in presentation and public speaking abilities. Able to learn new skills fast with little guidance.

I also have an official 4x4 induction certification and First aid including CPR and oxygen resuscitation and an Open Water diving license.

## **EMPLOYMENT HISTORY**

### \* REGIONAL ECOLOGIST

### Israeli Nature and Park authority

• In charge of Eilat and Arava region

2016- current

- Decision making
- Protected area planning
- Threatened species management
- Ecological monitoring
- Scientific reaserch

#### **❖ MIMSHAK FELLOW**

- Scientific advisor
- Writing reports
- Advising decision makers

**Israeli Ecological Society** 

**Ministry of Transport** 

2015-2016

### **\*** TUTOR

- BIOL 2010 Ecology
- BIOL 3214 Applied Ecology
- Demonstrating for students
- Leading discussions
- Report marking

### University of Queensland

2012-current

#### **❖ TEAM MANAGER**

#### **Oranim Educational Initiatives**

Managing a team of 4 coordinators (See below)

2011

- Overall responsibility of 90 volunteers
- Management skills
- Administration skills
- Organizational skills

## **\* VOLUNTEER COORDINATOR**

**Oranim Educational** 

**Initiatives** 

• Responsible for 10-30 volunteers

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- Coordinating volunteer work with recipient organizations
- Organizing educational activities for the volunteers.
- Power-Point presentation
- Team work
- Human resources management skills

#### **❖ INFORMATION OFFICER**

- Providing information in hazardous materials incidents
- Working under pressure
- Working with professional rescue forces
- High computer skills
- Chemistry and medical knowledge

### **\*** TOURIST GUIDE

- Guiding groups in Hebrew and English
- Protecting the natural assets of the reserve
- Working in a team
- Costumer relations
- Public speaking and presentation

### **❖** GENERAL MANAGER

- In charge of visitors' welfare
- Information and site maintenance
- Public relations

### **DECK HAND**

- 60 foot motor-sail boat
- Boat maintenance
- Boat handling and sailing

2010

**Ministry of Environmental Protection** 

**Israel** 

2004-2010

**Israel Nature and Parks Authority** 

2003-2007

**Israel Nature and Parks Authority** 

**Castel National Park** 

2003-2004

**Butler Swim with Dolphins** 

**New Zealand** 

2002

- Guest hospitality
- Snorkeling instructor

### \* PARK RANGER

## **Israel Nature and Parks Authority**

2001-2002

- Protecting the native wildlife
- Visitors' education and information
- Conservation law enforcement
- Working in a team
- Costumer relations

### **\* RADIO COMMUNICATION OFFICER**

**Israel defense forces** 

2000-2001

- In charge on communication devices
- Operating phone lines network
- In command of the communication unite
- Technical skills
- Management skills