

CURRICULUM VITAE AND LIST OF PUBLICATIONS

• **Education**

B.Sc. 1989 -1992: Hebrew University of Jerusalem (HUJI), Faculty of Life Sciences, *magna cum laude*.

M.Sc. 1992 - 1995: HUJI, Department of Genetics, *summa cum laude*.

Advisors: Profs. D. Abeliovich and J. Zlotogora.

Title of thesis: "Genetic Localization of X-Linked Mental Retardation Genes".

Ph.D. 1997 - 2003: Tel-Aviv University (TAU), Department of Zoology

Advisors: Profs. T. Dayan and D. Saltz (BGU).

Title of thesis: "Modeling Population Growth in Time and Space following reintroduction - The Reintroduced Persian Fallow Deer".

• **Employment History**

2013 (Dec) - current: Senior Lecturer, The Mitrani Department of Desert Ecology (MDDE), The Jacob Blaustein Institutes for Desert Research (BIDR), Ben-Gurion University of the Negev (BGU)

2007 (Oct) - 2013: Lecturer, MDDE, BIDR, BGU

2005 – 2007 (Sept): Post-doctoral Fellow, University of Haifa, Institute of Evolution (with Prof. L. Blaustein, subject: Spatial ecology of fire salamanders: Integration of capture-recapture and population genetic data and implications for conservation).

2004 -2005 (July): Post-doctoral Fellow, University of California at Berkeley, Department of Environmental Science Policy & Management (with Prof W. Getz, subjects: a) Disease dynamics in Colonizing Populations; b) Space use patterns of African buffalo and implications for disease dynamics).

2003: Post-doctoral Fellow, BGU, BIDR, MDDE (with Prof D. Saltz, subject: Using a spatially-explicit model of a reintroduced species to identify development impacts on habitat availability and space use patterns).

• Professional Activities(a) Professional functions outside universities/institutions

2014-current: Commission Member of the IUCN SSC Equid specialist group

2012-current: Member of the Minerva Center for Movement Ecology

• Awards, Citations, Honors, Fellowships(a) Honors, Citation Awards

- 1995 HUJI Rector's award for excellence in studies.
- 1996 HUJI Medical School award for an excellent M.Sc. thesis.
- 1998-1999 TAU Dean's Ph.D. Fellowship, awarded for academic excellence, TAU.
- 1999-2002 Charles Clore Doctoral Scholarship for excellence in academic studies.
- 2000 The Adessman travel grant for active participation in international conference, Department of Zoology, TAU.
- 2001 The George S. Wise Faculty of life Sciences award in the name of Ian Karten, for excellence in academic studies and research.
- 2001 Aharon Katzir travel award, Weizmann Institute of Science, for active participation in an international conference and workshop.
- 2001 Prize for excellent student presentation, 31st Annual Conference of the Israel Society for Ecology & Environmental Quality Science, Tel-Aviv.
- 2001 Honorable mention for excellent student presentation, 38th Meeting of the Zoological Society of Israel, Haifa University, Haifa.
- 2002 British Ecological Society student award to attend an international conference.
- 2002 The Rami Levin prize for academic excellence, Department of Zoology, TAU.
- 2005 Society for Conservation Biology travel award to attend the 2005 Asia section meeting, Kathmandu, Nepal
- 2005 NSF-IGERT traveling award for participation in the 3rd Annual Ecology and Evolution of Infectious Diseases Workshop in Fort Collins, Colorado.
- 2009 The Rich fund: Grants for women in Academia
- 2010 Ben-Gurion University Rector's award for outstanding teaching in the academic year 2009-10.

(b) Fellowships

- 2006-2007 VATAT Post-Doctoral Fellowship.
- 2003-2004 Rothschild Post-Doctoral Fellowship.

- 2002-2003 Kreitman Foundation Post-Doctoral Fellowship, BGU.
- 2002-2003 Heschel Center Fellowship for Environmental Learning and Leadership studies.
- 1993-1995 Hebrew University Medical school fellowship for M.Sc. studies.

• Scientific Publications

(a) Chapters in collective volumes

1. **Bar-David, S.**, Dolev, A., Dayan, T., and Saltz, D. 1999. Behavioral and ecological aspects of reintroduced Persian fallow deer (*Dama dama mesopotamica*). In *Advances in Deer Biology*, Proceedings of the 4th International Deer Congress. Zomborszky, Z. (editor), Pannon University of Agriculture Faculty of Life Science, Kaposvár, Hungary. pp. 187-189.
2. Dolev, A., **Bar-David, S.**, Yom-Tov, Y., and Saltz, D. 1999. Home range establishment in reintroduced Persian fallow deer (*Dama dama mesopotamica*). In *Advances in Deer Biology*, Proceedings of the 4th International Deer Congress. Zomborszky, Z. (editor), Pannon University of Agriculture Faculty of Life Science, Kaposvár, Hungary. pp. 41-43.
3. Saltz, D., Lourie, A., **Bar-David, S.**, and Dolev, A. 1999. Planning and implementing a long-term reintroduction program for Persian fallow deer (*Dama dama mesopotamica*). In *Advances in Deer Biology*, Proceedings of the 4th International Deer Congress. Zomborszky, Z. (editor), Pannon University of Agriculture Faculty of Life Science, Kaposvár, Hungary. pp. 190-193.
4. Getz, W. M., J. O. Lloyd-Smith, P. C. Cross, S. **Bar-David**, P. L. Johnson, T. C. Porco, and Sánchez, M. S. 2006. Modeling the invasion and spread of contagious disease in heterogeneous populations. Feng, Z., Dieckmann, U., Levin, S.A. (eds.), *Disease Evolution: Models, Concepts and Data Analyses*, AMS-DIMACS Vol. 71: 113-144
5. **Bar-David, S.**, Lloyd-Smith, J. O., and Getz, W. M. 2006. Dynamics and Management of Infectious Disease in Reintroduced Populations: the Case of Persian fallow Deer in Israel. McNeely J. A., McCarthy T.M. (eds.), *Conservation Biology in Asia: Current Status and Future Perspectives*, the Society for Conservation Biology. 340-362.
6. Geigl, E., **Bar-David, S.**, Beja-Pereira, A., Cothran, E. G., Giulotto, E., Hrabar, H., Oyunsuren, T., Pruvost, M., 2016. Genetics and Paleogenetics of Equids, in 'Wild Equids: Ecology, Conservation, and Management' edited by Ransom J. and Kaczensky P., *Johns Hopkins University Press*.

(b) Refereed articles in scientific journals

1. Zlotogora, J., Lerer, I., **Bar-David, S.**, Ergaz, Z., Abeliovich, D. 1995. Homozygosity for Waardenburg Syndrome. *American Journal of human Genetics* 56: 1173-1178.
2. **Bar-David, S.**, Lerer, I., Kimchi Sarfaty, C., Gelman Kohen, Z., Meiner, V., Zlotogora, J., and Abeliovich, D. 1996. Localization of two X-linked mental retardation (XLMR) genes to Xp: MRX37 gene at Xp22.31-p22.32 and a putative MRX gene on Xp22.11-p22.2. *American Journal of Medical Genetics* 64: 83-88.
3. Dolev, A., Saltz, D., **Bar-David, S.**, and Yom-Tov, Y. 2002. The impact of repeated releases on the space-use patterns of reintroduced Persian fallow deer (*Dama dama mesopotamica*) in Israel. *Journal of Wildlife Management*. 66: 737-746.
4. Perelberg, A., Saltz, D., **Bar-David, S.**, Dolev, A., and Yom-Tov, Y. 2003. Seasonal and circadian changes in the home ranges of reintroduced Persian fallow deer. *Journal of Wildlife Management*. 67: 485-492.
5. **Bar-David, S.**, Saltz D., Dayan T. Dolev, A., Perelberg, A. 2005. Demographic models and reality in reintroductions: the Persian fallow deer in Israel. *Conservation Biology* 19:131-138.
6. **Bar-David, S.**, Saltz, D., Dayan, T. 2005. Predicting the spatial dynamics of reintroduced populations – The Persian fallow deer. *Ecological Applications* 15: 1833-1846. (Article featured in the *Bulletin of the Ecological Society of America*. 2005. 86: 121-123).
7. **Bar-David, S.**, Lloyd-Smith, J. O., and W. M. Getz. 2006. Dynamics and Management of Infectious Disease in Colonizing Populations. *Ecology* 87: 1215-1224.
8. **Bar-David, S.**, Segev O., Peleg N., Hill N., Templeton A.R., Schultz S.B., and Blaustein L. 2007. Long distance movement by Fire Salamander (*S. s. infraimmaculata*) and Implications for habitat fragmentation. *Israel Journal of Ecology & Evolution* 53: 143-160.
9. **Bar-David, S.**, Saltz, D., Dayan T., and Shkedy, Y. 2008. Using spatially expanding populations as a tool for evaluating landscape planning: the reintroduced Persian fallow deer as a case study. *Journal for Nature Conservation* 16: 164-174.
10. **Bar-David S.**, Bar-David I, P. C., Rayn, S. J., Knechteland-Cross, C. U., and Getz, W. M. 2009. Methods for assessing movement path recursion with application to African buffalo in the Kruger regions of South Africa. *Ecology* 90: 2467-2479.
11. Saltz D., **Bar David S.** Zidon R., Dolev A., Perelberg A., King R., and Berger-Tal, O. 2011. Reintroducing the Persian fallow deer *Dama mesopotamica* in Israel – a chronology. *Animal Production Science*: 51, 251–258.

12. Berger-Tal, O., **Bar-David S.**, and Saltz D. 2012. An assessment of a multiple release sites strategy for a Persian fallow deer reintroduction. *Conservation Biology* 26: 107-115.
 13. Renan S., Speyer, E., Shahar N., Templeton, A.R., and **Bar-David, S.** 2012. A Factorial Design Experiment as a Pilot Study for Non-Invasive Genetic Sampling. *Molecular Ecology Resources* 12: 1040-1047.
 14. Blank, L., Sinai I., **Bar-David, S.**, Peleg, N., Segev, O., Sadeh, A., Templeton, A. R., Merilä, J., and Blaustein, L. 2013. Genetic population structure of the endangered fire salamander (*Salamandra infraimmaculata*) at the southernmost extreme of its distribution. *Animal Conservation*. 16: 412-421.
 15. Davidson, A., Carmel, Y., and **Bar-David, S.** 2013. Characterizing movement pathways using a non-invasive approach: The reintroduced Asiatic wild ass in the Negev. *Landscape Ecology*. 28:1465–1478.
 16. Gueta T., Templeton A.R, and **Bar-David S.** 2014. Development of genetic structure in a heterogeneous landscape over a short time frame: the reintroduced Asiatic wild ass. *Conservation Genetics*. 15: 1231-1424. 17.
 - Greenbaum G., Templeton A. T., Zarmi Y., and **Bar-David S.** 2014. Dynamics of Allele frequency changes following founder events: A theoretic mathematical model. *PlosOne* 9(12).
 18. Renan S. , Greenbaum G. , Shahar N. , Templeton A.R, Bouskila A., and **Bar-David S.** 2015. A simulation approach to study mating system of elusive species: the reintroduced Asiatic wild ass. *Molecular Ecology* 24: 1433-1446.
 19. Berger-Tal O. and **Bar-David S.** 2015. Synthesized evidence of recursive movement behavior across species. *Ecoshpere*. Accepted.
 20. Giotto N., J-F., Gerard , A. Ziv. , A. Bouskila , and S. **Bar-David**. 2015. Space-use patterns of the Asiatic wild ass (*Equus hemionus*): complementary insights from displacement, recursion movement and habitat selection analyses. *Plos One* 10 (12).
 21. Greenbaum, G., A. R. Templeton, and **S. Bar-David**. 2016. Inference and Analysis of Population Structure Using Genetic Data and Network Theory. *Genetics* 202:1299-+.
- (c) Published scientific reports and technical papers
1. **Bar-David, S.**, Saltz, D., Dayan, T., and Shkedy, Y. 2005. Planning for landscape connectivity in the upper Galilee using a spatially-explicit model of a reintroduced Persian fallow deer. Submitted to the Israel Nature and Parks Authority.
 2. Waner S., Morto U. **Bar-David S.**, 2014. Road kills of Asiatic wild asses: causes and implications to conservation. Submitted to the Israel Nature and Parks Authority.

3. Giotto N. Bouskila A. and **Bar-David S.**, 2015. Water use by the Asiatic wild ass in the Negev Highlands. Submitted to the Israel Nature and Parks Authority.
4. Berger-Tal, O., **S. Bar-David**, A. Dolev, & D. Saltz. 2016. Reintroduction of the Persian fallow deer to the northern region of Israel. In: Soorae, P.S. (ed.) Global Re-introduction Perspectives: 2015. Gland, Switzerland: IUCN/SSC Re-introduction Specialist Group. (In Press).

(d) Unrefereed professional articles and publications

1. **Bar-David, S.**, Tal, A. 1996. Harnessing activism to protect Israel's environment: A survey of public interest activity and potential. Adam Teva V'din, The Israel Union for Environmental Defense, Israel.
2. Handrus, E., Saltz, D., and **Bar-David, S.** 2003. Reintroducing Persian Fallow deer in Israel. International Zoo News. 50: 142-146.