

Curriculum Vitae

Erik Svensson (Professor, Evolutionary Ecology).
Born 8 January 1967. Married to Pia Gustafsson. One daughter.

Research group leader (Department of Biology, Lund University, SWEDEN).

63 ISI-publications with a total of 2096 citations (Current h-index = 27).

Webpage : <http://www.zoo.ekol.lu.se/epb/people-en/es-en/es-en.htm>

Lab blog: <http://svenssonresearchlaboratory.blogspot.com/>

Researcher ID: <http://www.researcherid.com/rid/E-8324-2010>

1. Basic university education and exam

Bachelor of Science (Biology) at Lund University: 1991.

2. PhD

PhD in *Animal Ecology* obtained 6 June 1997. Thesis title: *Costs, benefits and constraints in the evolution of avian reproductive tactics: a study on the blue tit*.
Supervisor: Jan-Åke Nilsson.

3. Postdoctoral research and international research visits

Postdoctoral fellow: University of California, Santa Cruz (UCSC): 1997-1999.

Visiting researcher at UCSC: January-April 2003

Visiting professor (“Swedish Research Links”) at Stellenbosch University (South Africa): 2010-2012.

4. Appointments to higher university positions (docent and professor)

Professor in Animal Ecology at Lund University, 20 March 2008.

Docent in Animal Ecology at Lund University, 1 January 2003.

5. Current position and recent positions

Since 2008, I am appointed as full professor at the Department of Ecology at Lund University. Between 2004 and 2009, I held a six-year externally funded (100 %) position as *Senior Researcher* (funded by the Swedish Research Council, VR).

6. Past employments

Senior Researcher (“Särskild forskare”) in *Functional Ecology*, funded by Vetenskapsrådet: 2004-2009.

Junior Researcher ("Forskarassistent") funded by Vetenskapsrådet: 2000-2003.
Postdoctoral Researcher funded by STINT and the Fulbright Foundation: University of California, Santa Cruz, USA: 1997-1999.
PhD-student: University of Lund, Sweden: 1992-1997.

7. Paternity leave

August 1999 (One month).

8. PhD-students (main advisor)

Jessica K. Abbott: PhD-thesis finished in November 2006 (main advisor).

Thomas Gosden: PhD-thesis finished in May 2008 (main advisor).

Fabrice Eroukmanoff: PhD-thesis finished in November 2009 (main advisor).

Kristina Karlsson: PhD-thesis finished in November 2010 (main advisor)

Anna Runemark: PhD-thesis to be defended in January 2011 (main advisor).

9. Postdoctoral students

Maren Wellenreuther: 2007 – present ("Marie Curie" fellowship 2010 and 2011).

Shawn Kuchta: 2007-2009.

Machteld Verzijden (2010-2012)

Sophia Engel (2009-2011).

10. Teaching experience (undergraduate and PhD-student levels)

Basic Ecology (undergraduate level), Evolutionary Biology (PhD-level), Evolutionary Animal Ecology (undergraduate level), Evolutionary Quantitative Genetics (PhD-level), Field Faunistics (undergraduate level), Statistics and Experimental Design (undergraduate level).

11. Scientific awards and prizes

1. Best research photography in Sweden 2008: "Forskning & Framstegs" Fototävling: 25 000 SEK (2008).
2. The Royal Swedish Academy of Sciences: "Tage Erlanders award for research in the natural sciences": 100 000 SEK (2004).
3. The 50th Birthday Fund of His Majesty the King of Sweden: 75 000 SEK (2003).
4. The Fulbright Commission: Postdoctoral grant for research at University of California, Santa Cruz (UCSC): 50 000 SEK 1997-1998; 50 000 SEK and health insurance costs(1997-1998).

12. Invited speaker: Departments, conferences and workshops

Invited to present my research on several occasions to various research departments in Sweden (Alnarp (SLU), Lund, Skövde, Stockholm, Umeå, Uppsala), Europe

(Athens/Greece, Berlin (Germany), Copenhagen/Denmark, Glasgow (UK), Oxford (UK), Stuttgart (Germany), Vienna/Austria, Vigo/Spain, Oslo/Norway) and in *the US* (Austin, Berkeley, New York, Riverside, San Diego, Tallahassee, Michigan).

Regularly invited as plenary speaker to the following workshops and symposia during the last years: *Behavioural ecology, genetics and conservation biology in Odonates* (Jyväskylä, Finland; 2005), *Graduate school in Evolutionary Ecology*, (Jyväskylä, Finland; 2006), *6th Ecological Genetics Symposium* (Leuven, Belgium 2007), *13th Annual European Meeting of PhD Students in Evolutionary Biology* (Höör, Sweden; 2007), *6th Symposium on the Lacertid Lizards of the Mediterranean Basin* (Mytilene, Greece; 2008), *12th Congress of the European Society for Evolutionary Biology (ESEB)*(Turin, Italy, 2009).

13. Referee requests

Regular referee for the following journals *Am. Nat.*, *Anim. Behav.*, *Behav. Ecol.*, *Behav. Ecol. Sociobiol.*, *Biol. Lett.*, *Can. J. Zool.*, *Condor*, *Ecography*, *Ecological Modelling*, *Ecology*, *Ecology Letters*, *Evol. Ecol.*, *Ethology*, *Ecology & Evolution*, *Evolution*, *Evolutionary Applications*, *Funct. Ecol.*, *Genetica*, *Heredity*, *Herpetological Journal*, *J. Anim. Ecol.*, *J. Avian Biol./Ornis Scand.*, *J. Exp. Biol.*, *J. Evol. Biol.*, *Marine and Freshwater Research*, *Mol. Ecol.*, *Nature Communications*, *Oecologia*, *Oikos*, *Ornis Svec.*, *PLoS Biol.*, *PLoS ONE*, *PNAS*, *Proc. R. Soc. Lond. B.*, *Trends Ecol. Evol.*

14. Editorial Boards

1. *Proceedings of the Royal Society of London: Biological Sciences* (2003-2008)
2. *Journal of Evolutionary Biology* (2004-2008)
3. *PLoS ONE* (2006-2009)
4. *American Naturalist* (2008-)
5. *Evolution* (2010-)

15. Other scientific appointments and commissions

Expert evaluator for the *European Commission* (EU) (2003, 2004 and 2005).
External "peer reviewer" on research applications to *The Binational Science Foundation* (BSF; USA/Israel; 1996), *The National Science Foundation* (NSF; USA; 1999 and 2006); *The Natural Environmental Research Council* (NERC; UK; 2000).
National Geographic Society (NGS).

Publication list (in chronological order)

1. *Peer-reviewed publications in international scientific journals*

1. Nilsson, J.-Å. & Svensson, E. 1993. Energy constraints and ultimate decisions during egg-laying in the blue tit. *Ecology* **74**: 244-251.
2. Nilsson, J.-Å. & Svensson, E. 1993. Causes and consequences of egg mass variation between and within blue tit clutches. *J. Zool., Lond.* **230**: 469-481.
3. Nilsson, J.-Å. & Svensson, E. 1993. The frequency and timing of laying gaps. *Ornis Scand.* **24**: 122-126.
4. Svensson, E. 1995. Avian reproductive timing: When should parents be prudent? *Anim. Behav.* **49**: 569-575.
5. Svensson, E. & Nilsson, J.-Å. 1995. Food supply, territory quality and reproductive timing in the blue tit (*Parus caeruleus*). *Ecology* **76**: 1804-1812.
6. Merilä, J. & Svensson, E. 1996. Health status and fat reserves in migrating goldcrests *Regulus regulus*. *Funct. Ecol.* **9**: 842-848.
7. Svensson, E. & Nilsson, J.-Å. 1996. Mate quality affects offspring sex ratio in blue tits. *Proc. R. Soc. Lond. B.* **263**: 357-361.
8. Nilsson, J.-Å. & Svensson, E. 1996. The costs of reproduction: a new link between current reproductive effort and future reproductive success. *Proc. R. Soc. Lond. B.* **263**: 711-714.
9. Svensson, E. & Merilä, J. 1996. Molt and migratory condition in blue tits *Parus caeruleus*: a serological study. *Condor* **98**: 825-831.
10. Svensson, E. & Nilsson, J.-Å. 1997. The trade-off between molt and parental care: a sexual conflict in the blue tit? *Behav. Ecol.* **8**: 92-98.
11. Svensson, E. & Skarstein, F. 1997. The meeting of two cultures: bridging the gap between ecology and immunology. *Trends Ecol. Evol.* **12**: 92-93.
12. Svensson, E. 1997. *Costs, benefits and constraints in the evolution of avian reproductive tactics: a study on the blue tit*. PhD-thesis, Lund University, Sweden.
13. Svensson, E. 1997. Natural selection on avian breeding time: Causality, fecundity-dependent and fecundity-independent selection. *Evolution* **51**: 1276-1283.
14. Svensson, E. 1997. The speed of life-history evolution. *Trends Ecol. Evol.* **12**: 380-381.
15. Merilä, J. & Svensson, E. 1997. Are fat reserves in migratory birds affected by condition in early life? *J. Avian Biol.* **28**: 279-286.
16. Svensson, E. & Sheldon, B. C. 1998. The social context of life history evolution. *Oikos* **83**: 466-477.
17. Råberg, L., Grahn, M., Hasselquist, D. & Svensson, E. 1998. On the adaptive significance of stress-induced immunosuppression. *Proc. R. Soc. Lond. B.* **265**: 1637-1641.
18. Sinervo, B. & Svensson, E. 1998. Mechanistic and selective causes of life-history trade-offs and plasticity. *Oikos* **83**: 432-442.
19. Svensson, E., Råberg, L., Koch, C. & Hasselquist, D. 1998. Energetic stress, immunosuppression and the costs of an antibody response. *Funct. Ecol.* **12**: 912-919.
20. Svensson, E. & Hedenström, A. 1999. A phylogenetic analysis of the evolution of moult strategies in Western Palearctic Warblers (Aves: Sylviidae). *Biol. J. Linn. Soc.* **67**: 263-276.
21. Svensson, E. & Sinervo, B. 2000. Experimental excursions on adaptive landscapes: density-dependent selection on egg size. *Evolution* **54**: 1396-1403.
22. Sinervo, B. & Svensson, E. & Comendant, T. 2000. Density cycles and an offspring

- quantity and quality game driven by natural selection. *Nature* **406**: 985-988.
23. **Svensson, E.**, Sinervo, B. & Comendant, T. 2001a. Density-dependent competition and selection on immune function in genetic lizard morphs. *Proc. Natl. Acad. Sci. USA* **98**: 12561-12565.
 24. **Svensson, E.**, Sinervo, B. & Comendant, T. 2001b. Condition, genotype-by-environment interaction and correlational selection in lizard life-history morphs. *Evolution* **55**: 2053- 2069.
 25. Råberg, L., Westberg, M., Hasselquist, D., **Svensson, E.** & Nilsson, J-Å. 2002. Basal metabolic rate and the evolution of the adaptive immune system. *Proc. R. Soc. Lond. B.* **269**: 817-821.
 26. Sinervo, B. & **Svensson, E.** 2002. Correlational selection and the evolution of genomic architecture. *Heredity* **89**: 329-338.
 27. **Svensson, E.**, Sinervo, B. & Comendant, T. 2002. Mechanistic and experimental analysis of condition and reproduction in a polymorphic lizard. *J. Evol. Biol.* **15**: 1034-1047.
 28. Comendant, T., Sinervo, B., **Svensson, E.I.**, & Wingfield, J. 2003. Social competition, corticosterone and survival in female lizard morphs. *J. Evol. Biol.* **16**: 948-955.
 29. **Svensson, E.I.** & Sinervo, B. 2004. Spatial scale and temporal component of selection in side-blotched lizards. *Am. Nat.* **163**: 726-734.
 30. **Svensson, E.I.**, Kristoffersen, L., Oskarsson, K. & Bensch, S. 2004. Molecular population divergence and sexual selection in the banded demoiselle (*Calopteryx splendens*). *Heredity* **93**: 423-433.
 31. **Svensson, E.I.**, Abbott, J. & Härdling, R. 2005. Female polymorphism, frequency-dependence and rapid evolutionary dynamics in natural populations. *Am. Nat.* **163**: 726-734.
 32. **Svensson, E.I.** & Abbott, J. 2005. Evolutionary dynamics and population biology of a polymorphic insect. *J. Evol. Biol.* **18**: 1503-1514.
 33. Abbott, J. & **Svensson, E.I.** 2005. Phenotypic and genetic variation in emergence and development time of a trimorphic damselfly. *J. Evol. Biol.* **18**: 1464-1470.
 34. **Svensson, E. I.**, Eroukhmanoff, F. & Friberg, M. 2006. Effects of natural and sexual selection on adaptive population divergence and premating isolation in a damselfly. *Evolution* **60**: 1242-1253.
 35. Gosden, T.P., **Svensson, E.I.** (2007) Female sexual polymorphism and fecundity consequences of male mating harassment in the wild. *PLoS ONE* **2**: e580. doi:10.1371/journal.pone.0000580.
 36. **Svensson, E.I.** & Friberg, M. 2007. Selective predation on wing morphology in sympatric damselflies. *Am. Nat.* **170**: 101-112.
 37. **Svensson, E. I.** & Gosden, T.P. 2007. Contemporary evolution of secondary sexual traits in the wild. *Funct. Ecol.* **21**: 422-433.
 38. Miles, D.B., Sinervo, B., Hazard, L.C., **Svensson, E.I.**, Costa, D. 2007. Relating endocrinology, physiology and behaviour using species with alternative mating strategies *Funct. Ecol.* **21**: 653-665.
 39. **Svensson, E.I.** 2007. Evolutionary genetics for organismal biologists. *Anim. Biol.* **57**: 359-362.
 40. **Svensson, E.I.**, Karlsson, K., Eroukhmanoff, F. & Friberg, M. 2007. Gender differences in species recognition and the evolution of asymmetric sexual

- isolation. *Curr. Biol.* **17**: 1-5.
41. Abbott, J.K. & **Svensson, E.I.** 2008. Ontogeny of sexual dimorphism and phenotypic integration in heritable morphs. *Evol. Ecol.* **22**: 103-121.
 42. Abbott, J.K., Bensch, S., Gosden, T.P. & **Svensson, E.I.** 2008. Patterns of genetic differentiation in a colour polymorphism and in neutral genetic markers reveal rapid genetic changes in natural damselfly populations. *Mol. Ecol.* **17**: 1597-1604.
 43. Gosden, T.P. & **Svensson, E.I.** 2008. Spatial and temporal dynamics in a sexual selection mosaic. *Evolution* **62**: 845-856.
 44. Eroukhmanoff, F. & **Svensson, E.I.** Phenotypic integration and shared covariance structure in calopterygid damselflies. *J. Evol. Biol.* **21**: 514-526.
 45. Runemark, A., Gabirot, M., Bensch, S., **Svensson, E.I.**, Martín, J., Pafilis, P., Valakos, E.D. & Hansson, B. 2008. Identification of polymorphic microsatellite loci in *Podarcis gaigeae* and *Podarcis hispanica* (Squamata: lacertidae) and assessment of their utility in three other *Podarcis* species. *Mol. Ecol. Resources* **8**: 1367-1370.
 46. **Svensson, E.I.**, Abbott, J.K., Gosden, T.P. & Coreau, A. 2009. Female polymorphisms, sexual conflict and limits to speciation processes in animals. *Evol. Ecol.* **23**: 93-108.
 47. Gosden, T.P. & **Svensson, E. I.** 2009. Density-dependent male mating harassment, female resistance and male mimicry. *Am. Nat.* **173**: 709-721.
 48. Eroukhmanoff, F. & **Svensson, E.I.** 2009. Parallelism and historical contingency during rapid ecotype divergence in a freshwater isopod. *J. Evol. Biol.* **22**: 1098-1110.
 49. Eroukhmanoff, F., Outomuro, D., Ocharan, F.J. & **Svensson, E.I.** 2009. Patterns of phenotypic divergence in wing covariance structure of calopterygid damselflies. *Evol. Biol.* **2**: 214-224.
 50. **Svensson, E.I.** 2009. Understanding the egalitarian revolution in human social evolution. *Trends Ecol. Evol.* **24**: 233-235.
 51. Wellenreuther, M., Runemark, A., **Svensson, E.I.** & Hansson, B. 2009. Isolation and characterization of polymorphic microsatellite loci for the Skyros wall lizard *Podarcis gaigeae* (Squamata: Lacertidae). *Mol. Ecol. Res.* **8**: 1367-1370.
 52. Eroukhmanoff, F. & **Svensson, E.I.** 2009. Contemporary parallel diversification, antipredator adaptations and phenotypic integration in an aquatic isopod. *PLoS ONE* **4(7)**: e6173. doi:10.1371/journal.pone.0006173
 53. **Svensson, E.I.**, McAdam, A.G. & Sinervo, B. 2009. Intralocus sexual conflict over immune defence, gender load and sex-specific signaling in a natural lizard population. *Evolution* **63**: 3124-3135.
 54. Eroukhmanoff, F., Hargeby, A. & **Svensson, E.I.** 2009. Rapid adaptive divergence between ecotypes of an aquatic isopod inferred from F_{ST} - Q_{ST} analysis. *Mol. Ecol.* **18**: 4912-4923.
 55. Wellenreuther, M., Tynkkynen, K. & **Svensson, E.I.** 2010. Simulating range expansion: male species recognition and loss of premating isolation in damselflies. *Evolution* **64**: 242-252.
 56. Abbott, J.K. & **Svensson, E.I.** 2010. Differential breakdown of intersexual genetic correlations in an intraspecific mimicry system. *Evol. Ecol. Res.* **12**: 105-118.
 57. **Svensson, E.I.** & Råberg, L. 2010. Resistance and tolerance in animal enemy-victim coevolution. *Trends Ecol. Evol.* **25**: 267-274.
 58. Wellenreuther, M., Vercken, E. & **Svensson, E.I.** 2010. A role for ecology in male

- mate discrimination of immigrant females? *Biol. J. Linn. Soc.* **100**: 506-518.
59. **Svensson, E. I.**, Eroukhmanoff, F., Karlsson, K., Runemark, A. & Brodin, A. 2010. A role for learning in population divergence of mate preferences. *Evolution* (in press).
60. Zuguang, G., Brydegaard, M., Lundin, P., Wellenreuther, M., Runemark, A., **Svensson, E. I.** & Svanberg, S. 2010. Insect monitoring with fluorescence LIDAR techniques: field experiments. *Appl. Optics* (in press).
61. Karlsson, K., Eroukhmanoff, F. & **Svensson, E.I.** 2010. Plasticity towards the social environment: effects of density and sex ratio on mating behaviour following ecotype divergence. *PLoS ONE* (in press).
62. Karlsson, K., Eroukhmanoff, F. & **Svensson, E. I.** 2010. Parallel divergence in mate guarding behaviour following colonisation of a novel habitat. *J. Evol. Biol.* (in press).
63. Runemark, A., Hansson, B., Pafilis, P., Valakos, E.D. & **Svensson, E. I.** 2010. Island biology and morphological divergence in of the Skyros wall lizard *Podarcis gaigeae*: a combined role for local selection and genetic drift on color morph frequency divergence? *BMC Evol. Biol.* (in press).

2. Book chapters in international scientific volumes (peer-reviewed)

1. Sinervo, B. & **Svensson, E.I.** 2003. The origin of novel phenotypes: Correlational selection, epistasis and speciation. In: *Environment, Development and Evolution*. B. K. Hall, R. D. Pearson and G.B. Müller, Eds. The John Hopkins University Press.
2. Tynkkynen, K., Kotiaho, J.S. & **Svensson, E.I.** 2008. Interspecific interactions and premating reproductive isolation. Chapter 11 in Córdoba-Aguilar, A. (editor): *Dragonflies and Damselflies: Model Organisms for Ecological and Evolutionary Research*. Oxford University Press, Oxford.

3. Book Editor

Currently, I am editing a book together with Prof. Ryan Calsbeek (Dartmouth College, USA) entitled “*The Adaptive Landscape in Evolutionary Biology*”. This book will be published in 2012, in memorial of late population geneticist Sewall Wrights classical paper in 1932. Publisher: Oxford University Press (OUP).