PUBLICATION LIST Siitari, Heli Satu Maarit, 30.01.1973

# **A Peer-reviewed scientific articles**

(\* refers to student author, where the role of PI is scientifically significant)

1. Siitari H., Honkavaara J. & Viitala J. 1999: Ultraviolet reflection of berries attracts foraging birds: A laboratory study with redwings (Turdus iliacus) and bilberries (Vaccinium myrtillus). Proceedings of the Royal Society, London B 266:2125-2130.
2. Siitari, H., Honkavaara, J., Huhta, E. & Viitala, J. 2002a: Ultraviolet reflection and female mate choice in the pied flycatcher (Ficedula hypoleuca). Animal Behaviour 63, 97-102.
3. Siitari, H., Hovi, M. & Viitala, J. 2002b: Behavioural evidence on ultraviolet vision in a tetraonid species –foraging experiment with black grouse (Tetrao tetrix). Journal of Avian Biology 33, 199-202.
4. Siitari, H. & Huhta, E. 2002c Individual colour variation and male quality in pied flycatchers (Ficedula hypoleuca). –the role of ultraviolet reflection. Behavioral Ecology 13, 737-741.
5. Honkavaara, J., Koivula, M., Korpimäki, E., Siitari, H. & Viitala, J. 2002d: Ecological importance of ultraviolet vision and foraging in terrestrial vertebrates Oikos, 98, 505-511.
6. Kilpimaa, J., Alatalo, R.V. & Siitari, H. 2004: Trade-offs between sexual advertisement and immune function in the pied flycatcher (Ficedula hypoleuca). Proceedings of the Royal Society, London B 271, 245-250.
7. Honkavaara, J., Siitari, H. & Viitala, J. 2004: Fruit colour preferences of redwings (Turdus iliacis): experiments with hand-raised juveniles and wild-caught adults. Ethology 110, 1-13.
8. Alatalo, R.V., Siitari, H. & Rintamäki, P.T. 2004: Teeren soidin ja metsästyksen säätely. Suomen Riista (Black grouse lek and control of hunting, Finnish Wildlife, in Finnish with English summary) 50, 120-127.
9. Müller, W., Dijkstra, C..Groothuis, T.G.G., , Siitari, H. & Alatalo, R.V. 2004 Maternal antibody transmission and breeding densities in the Black-headed Gull (Larus ridibundus). Functional Ecology 18, 719-724.
10. Müller, W., Groothuis, T.G.G., Kasprzik, A., Dijkstra, C., Alatalo, R.V. & Siitari, H. 2005: Prenatal androgen exposure modulates cellular and humoral immune function of black-headed gull chicks. Proceedings of the Royal Society, London B 272, 1971-1977.
11. Ludwig, G.\*, Alatalo, R.V., Helle, P., Linden, H., Lindström, J. & Siitari, H. 2006: Short- and long-term population dynamical consequences of asymmetric climate change in black grouse. Proceedings of the Royal Society, London B 273, 2009-2016.
12. Pihlaja, M\*, Siitari, H. & Alatalo, R. V. 2006: Maternal antibodies in a wild altricial bird: effects on offspring immunity, growth and survival. Journal of Animal Ecology, 75, 1154-1164.
13. Siitari, H., Alatalo, R.V., Halme, P\*., Buchanan, K. L. & Kilpimaa, J. 2007: Color signals in the Black Grouse (*Tetrao tetrix*): signal properties and their condition dependency. American Naturalist, 169, S81-S92.
14. Honkavaara, J., Siitari, H., Saloranta, V.\* & Viitala, J. 2007: Avian seed ingestion changes germination patterns of bilberry, *Vaccinium myrtillus*. Annales Botanici Fennici, 44, 8-17.
15. Kilpimaa, J., Alatalo, R.V. & Siitari, H. 2007: Pre-hatching maternal effects in the pied flycatcher (Ficedula hypoleuca). Journal of Evolutionary Biology, 20, 717-724..
16. Lebigre, C\*., Alatalo, R.V., Siitari, H. & Parri, S. 2007: Restrictive mating by females on black grouse leks. Molecular Ecology, 16, 4380 - 4389.
17. Strand, T., Westerdahl, H., Höglund, J., Alatalo, R.V. & Siitari, H. 2007: The *MHC* class II of the Black grouse (*Tetrao tetrix*) consists of low numbers of *B* and *Y* genes with variable diversity and expression. Immunogenetics, 59, 725-734.
18. Johnsen, A., Fidler, A.E., Kuhn, S., Carter, K.L., Hoffmann,A., Barr, I.R., Biard, C., Charmantier, A.., Eens, M., Korsten, P., Lambrechts, M.M., Siitari, H., Tomiuk, J., and Kempenaers, B. 2007: Avian *Clock* gene polymorphism: evidence for a latitudinal cline in allele frequencies. Molecular Ecology, 16 (22) , 4867–4880 .
19. Karell, P., Pietiäinen, H., Brommer, J. & Siitari, H. 2007: A possible link between parasite defence and residual reproduction. Journal of Evolutionary Biology, 20, 2248-2252.
20. Ludwig, G.X\*., Alatalo, R.V., Helle, P., Nissinen, K. & Siitari, H. 2008: Large-scale drainage and breeding success in boreal forest grouse. Journal of Applied Ecology, 45, 325-333.
21. Karell, P., Kontiainen, P., Pietiäinen, H., Siitari, H. & Brommer, J. 2008: Maternal effects on offspring immunoglobulins and egg size in relation to natural and experimentally improved food supply. Functional Ecology, 22, 682-690.
22. Lebigre, C.\*, Alatalo, R.V., Forss, H. & Siitari, H. 2008: Low levels of relatedness on black grouse leks despite male philopatry. Molecular Ecology, 17, 4512-4521.
23. Tschirren, B., Siitari, H., Saladin, V. & Richner, H. 2009: Transgenerational immunity in a bird-ectoparasite system: do maternally trasferred antibodies affect parasite fecundity or the offspring's susceptibility to fleas? Ibis, 89, 160-170.
24. Karell, P., Pietiäinen, H., Siitari, H., Pihlaja, T., Kontiainen, P. & Brommer, J.E. 2009: Parental allocation of additional food to own health and offspring growth in a variable environment. Canadian Journal of Zoology, 87, 8-19.
25. Pitala, N., Siitari, H., Gustafsson, L. & Brommer, J.E. 2009: Ectoparasites help to maintain variation in cell-mediated immunity in the blue tit – hen flea system. Evolutionary Ecology Research, 11,79-94.
26. Lebigre, C.\*, Alatalo, R.V., & Siitari, H. 2010: Female-biased dispersal alone can reduce the occurrence of inbreeding in black grouse (Tetrao tetrix). Molecular Ecology, 19, 1929-1939.
27. Pitala, N., Siitari, H., Gustafsson, L. & Brommer, J.E. 2010: Costs and benefits of experimentally induced changes in the allocation of growth versus immune function under differential exposure to parasites. PloS ONE 5(5): e10814.
28. Staszewski, V. & Siitari, H. 2010: Antibody injection in the egg yolk: Maternal antibodies *per se* affect offspring humoral immune response. Functional Ecology, 24: 1333-1341 doi: 10.1111/j.1365-2435.2010.01745.x
29. Ludwig, X.L., Alatalo, R.V., Helle, P. & Siitari, H. 2011: Individual and environmental determinants of early brood survival in black grouse. Wildlife Biology, 16(4): 367-378.
30. Härmä, O., Kareksela, S., Siitari, H. & Suhonen, J. 2011: Pygmy Owl (*Glaucidium passerinum*) and the usage of ultraviolet cues of prey. J. Avian Biology, 42: 89-91 doi: 10.1111/j.1600-048X.2010.05192.x
31. Ludwig, X.L., Alatalo, R.V., Helle, P. & Siitari, H. 2011: Individual and environmental determinants of daily black grouse nest survival rates at variable predator densities. Annales Zoologi Fennici, 47:387-397.
32. Eeva, T., Ruuskanen, S., Salminen, J-P., Belskii, E., Järvinen, A., Kerimov, A., Korpimäki, E., Krams, I., Moreno, J., Morosinotto, C., Mänd, R., Orell, M., Qvarnstroöm, A., Siitari, H., Slater, F.M., Tilgar, V., Visser, M.E., Winkel, W, Zang, H. & Laaksonen, T. 2010: Geographical trends in the yolk carotenoid composition of the pied flycatcher (*Ficedula hypoleuca*). Oecologia, 165: 277-287 doi: 10.1007/s00442-010-1772-4.
33. Soulsbury, C., Alatalo, R.V., Lebigre, C. & Siitari, H. 2011: Age-dependent inbreeding risk in the lekking black grouse. Biology Letters, doi: 10.1098/rsbl.2011.0379.
34. Karell, P., Ahola, K., Karstinen, T., Kolunen, H., Siitari, H. & Brommer, J. 2011: Blood parasites mediate morph-specific maintenance costs in a colour polymorphic wild bird. Journal of Evolutionary Biology 24, 1783-1792.
35. Lebigre, C.\*, Alatalo, R.V., Siitari, H. & Staszewski, V. 2011: Leucocyte counts variation and male fitness in the lekking black grouse (*Tetrao tetrix*). Journal of Ornithology, 153. 95-102.
36. Brommer, J., Pitala, N., Siitari, H. & Gustafsson, L. 2011: Body size and immune defense of nestling blue tits (*Cyanistes caeruleus*) in response to manipulation of ectoparasites and food supply. Auk 12: 556-563.
37. Ruuskanen, S.,, Heli Siitari, Tapio Eeva, Eugen Belskii, Antero Järvinen, Anvar Kerimov, Indrikis Krams, Juan Moreno, Chiara Morosinotto, Raivo Mänd, Erich Möstl, Markku Orell, Anna Qvarnström, Juha-Pekka Salminen, Fred Slater, Vallo Tilgar, Marcel E. Visser, Wolfgang Winkel, Herwig Zang, Toni Laaksonen 2011: Geographical Variation in Egg Mass and Egg Content in a Passerine Bird, PLoS ONE, in press
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39. Kervinen, M.\*, Alatalo, R.V., Lebigre, C.L., Siitari, H. & Soulsbury, C.D. 2012: Determinants of yearling male lekkingeffort and mating success in black grouse (Tetrao tetrix). Behavioral Ecology in press doi: 10.1093/beheco/ars104.
40. Hämäläinen, A., Alatalo, R.V., Lebigre, C.L., Siitari, H. & Soulsbury, C.D. 2012: Fighting behavior as a correlate of male mating success in the black grouse (*Tetrao tetrix*). Behavioral Ecology and Sociobiology, 66. 1577-1586.
41. Morales, J., Ruuskanen, S., Laaksonen, T., Eeva, T., et al. Siitari, H. Et al. 2013: Variation in eggshell traits between geographically distant populations of pied flycatchers *Ficedula hypoleuca*. Journal of Avian Biology, 44: 111-120.
42. Ruuskanen, S., Lehikoinen, E., Nikinmaa, M., Siitari, H., Waser, W. & Laaksonen, T. 2013: Long lasting effects of yolk androgens on phenotype in the pied flycatcher (*Ficedula hypoleuca*). Behavioral Ecology and Sociobiology, 67: 361-372.
43. Lebigre, C., Alatalo, R.V.A. & Siitari, H. 2013: Physiological costs enforce the honesty of lek display in the black grouse (*Tetrao tetrix*). Oecologia DOI 10.1007/s00442-012-2548-9. In press.
44. Morosinotto, C., Ruuskanen, S., Korpimäki, E., Siitari, H., Thompson, R. & Laaksonen, T. 2013: Predation risk affects the levels of maternal immune factors in avian eggs. Journal of Avian Biology. In press.

**(Those below are in refereed conference publications but belong to this first group) :**

1. Siitari-Salmela H., Honkavaara J. & Viitala J. 1999: UV in plant-animal interactions: A laboratory study with birds and berries. Advances in Ethology 34:133 (supplement to Ethology).
2. Viitala J., Koivula M., Siitari-Salmela H. & Honkavaara J. 1999: UV-vision and foraging in birds. Advances in Ethology 34:134 (supplement to Ethology).
3. Honkavaara, J., Siitari, H. & Viitala, J. 2001: Fruit preferences of redwings: effect of colour and contrast. Advances in Ethology 36:177 (supplement to Ethology).
4. Ludwig, G.X.\*, Alatalo, R., Helle, P., Lindström, J. & Siitari, H. 2006: Population level consequences of temporally variable climatic change in Black Grouse. Journal of Ornithology 47:26 (abstract in conference supplement no 1).
5. Alatalo, R.V., Höglund, J., Siitari, H., Kilpimaa, J. & Lebigre, C. 2006: Evolution of multiple ornaments in the Black Grouse. Journal of Ornithology 47:62 (abstract in conference supplement no 1).
6. Siitari, H., Alatalo, R. & Rantanen, E.\* 2006: Investment in offspring in relation to offspring sex and laying order in the lekking Black Grouse. Journal of Ornithology 47:109 (abstract in conference supplement no 1).
7. Lebigre, C.\*, Alatalo, R.V. & Siitari, H. 2006: Why do Black Grouse females not mate multiply? Journal of Ornithology 47:200 (abstract in conference supplement no 1).
8. Pihlaja, M.\*, Siitari, H. & Alatalo, R.V. 2006: The development of adaptive immunity during the nestling period in the Common Magpie. Journal of Ornithology 47:230 (abstract in conference supplement no 1).

# **E Articles, tv- and radio programs popularizing science**

1. Konneveden tutkimusaseman arkea, Suomen Luonto 3/2000 (an interview representing research at the Konnevesi research station, Finnish Nature, in Finnish)
2. Several radio interviews in national radio channels after public defence of PhD, April 2001
3. Introducing maternal effects project in national TV news, April 2002
4. Luonto lähellä, Paul Sägersfjärd TV1, representing black grouse research in national tv 2007
5. Luonto lähellä, Paul Sägersfjärd TV1, representing magpie research in national TV May 2007
6. Kovanen, M.\* & Siitari, H. Teerestystä tutkijan silmin. Jahti- journal for game people, an article about black grouse hunting. August 2008.
7. Siitari, H. Päijät-Hämeen Metsälehti : Teerenpeliä ja teeritutkimusta 2/2010 (representing lek system in forest management, in Finnish) .
8. Siitari, H. & Kovanen, M.: Kanalintujen määrää arvioitaessa tulee arvioida useita tekijöitä. Factors used in estimating grouse populations. Helsingin Sanomat 28.9.2010 (in Finnish).
9. Siitari, H. Teeret soitimella. Jahti-lehti, 2/2011 (Jahti --Journal of Finnish Hunter’s Association, article for hunters about black grouse lek and effects of hunting on grouse populations) (in Finnish).
10. Nurmi, J., Ludwig, G., Lindén H., Helle, P. & Siitari, H. Metsästäjä-lehti 3/2012 (Metsästäjä –journal of Finnish Hunting Association, article on natural population range variation for grouse species and management plan) (in Finnish)
11. Several Newspaper articles about good hunting practices (in Finnish)

**G Monographs**

1. Siitari, H. 2001: Ultraviolet sensitivity in birds: Consequences on foraging and mate choice. Jyväskylä Studies in Biological and Environmental Science 94, 31pp.

Jyväskylä 18.3.2013

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