CURRICULUM VITAE

Filippo Galimberti, PhD

Born in Milan, 28 October 1965

Affiliations

- Elephant Seal Research Group, Milano, Italy
- Istituto di Ecologia Applicata, Roma, Italy

Education

- Degree in Biology (four years course), specialization in Zoology; 24-02-1989; Università degli Studi di Milano; full honor
- PhD in Animal Biology; 15-11-1996; Dipartimento di Biologia Animale, Università degli Studi di Roma *La Sapienza*; full honor

Research interests

- Mating tactics and sexual selection in polygynous mammals; measurement of phenotypic selection in natural populations; application of molecular methods in the study of animal mating systems
- Breeding strategies and evolution of life history in seals and sea lions
- Dominance, fighting behavior and evolution of male tactics of competition
- · Acoustic communication in mammals; role of acoustic communication in individual recognition
- Demography, population dynamics, and conservation biology of marine mammal populations
- Elephant seals general biology (northern and southern species)

Experience in research

- Field work on roe deer (*Capreolus capreolus*) population of the Parco Naturale Regionale dei Boschi di Carrega, Parma; three years of regular field work from 1987 to 1989 (demography and socionomy, time budgets, territorial behavior, mother-pup relationships, feeding strategies)
- Full honor degree thesis on: "Territorial and breeding behavior of roe deer (*Capreolus capreolus*) in the Boschi di Carrega Regional Natural Park"; supervisor: prof. Vincenzo Parisi, Museo di Storia Naturale, Università degli Studi di Parma
- Field work on southern sea lions (*Otaria byronia*) at Punta Norte (Valdés Peninsula, Argentina) from December 1991 to February 1992; pilot study for a research project on male mating strategies, under the supervision of dr. Claudio Campagna, CENPAT, Puerto Madryn (Argentina)
- Field work on southern elephant seals in the Valdés Peninsula (Argentina); two breeding seasons, August-November 1993 and August-November 1994; PhD research project on the action of sexual selection on male phenotype
- Full honor PhD thesis on: "Intermale competition and sexual selection in southern elephant seals (Mirounga leonina) of the Valdés Peninsula"; supervisor: prof. Luigi Boitani, Dipartimento di Biologia Animale, Università degli Studi di Roma *La Sapienza*, Roma
- Field work on southern sea lions at Punta Buenos Aires (Valdés Peninsula, Argentina); two breeding seasons,
 December 1992-February 1993 and December 1993-February 1994; research project on male mating strategies

- Field work on southern elephant seals in the Falkland Islands; ten breeding seasons, August-December 1995-2004; supervisor of a long term research project on southern elephant seals behavioral ecology
- Supervisor of five full honor degree thesis, three ongoing degree thesis and three PhD thesis on various aspects of elephant seals behavior, ecology, physiology and genetics
- Field work on northern elephant seals of the San Benitos Island (Baja California, Mexico); four breeding seasons, December-February 2001-2006; supervisors of long-term research project on northern elephant seals behavioral ecology

Scientific publications

- Galimberti, F. and Boitani, L. 1999. Demography and breeding biology of a small, localized population of southern elephant seals (*Mirounga leonina*). *Marine Mammal Science* 15: 159-178.
- Galimberti, F., Boitani, L. and Marzetti, I. 2000. The frequency and costs of harassment in southern elephant seals. *Ethology Ecology & Evolution* 12: 345-365.
- Galimberti,F., Boitani,L. and Marzetti,I. 2000. Female strategies of harassment reduction in southern elephant seals. *Ethology Ecology & Evolution* 12: 367-388.
- Galimberti,F., Boitani,L. and Marzetti,I. 2000. Harassment during arrival to land and departure to sea in southern elephant seals. *Ethology Ecology & Evolution* 12: 389-404.
- Galimberti, F., Sanvito, S. and Boitani, L. 2000. Marking of southern elephant seals with passive integrated transponders. *Marine Mammal Science* 16: 500-504.
- Sanvito, S. and Galimberti, F. 2000. Bioacoustics of southern elephant seals. I. Acoustic structure of male aggressive vocalizations. *Bioacoustics* 11: 259-285.
- Sanvito,S. and Galimberti,F. 2000. Bioacoustics of southern elephant seals. II. Individual and geographical variation in male aggressive vocalizations. *Bioacoustics* 11: 287-30.
- Galimberti,F. and Sanvito,S. 2001. Modelling females haul out in southern elephant seals (*Mirounga leonina*). *Aquatic Mammals*. 27: 92-104.
- Galimberti, F., Sanvito, S., Boitani, L. and Fabiani, A. 2001. Viability of southern elephant seal population of the Falkland Islands. *Animal Conservation* 4: 81-88.
- Galimberti, F. 2002. Power analysis of population trends: an application to elephant seals of the Falklands. *Marine Mammal Science*. 18: 557-566.
- Galimberti, F., Fabiani, A. and Sanvito, S. 2002 Opportunity for selection in southern elephant seals: the effect of spatial scale of analysis. *Journal of Zoology London*. 256: 93-97.
- Galimberti,F., Fabiani,A. and Sanvito, S. 2002. Measures of breeding inequality: a case study in southern elephant seals. *Canadian Journal of Zoology* 80: 1240-1249
- Galimberti, F., Gallastroni, A. and Sanvito, S. 2002. Behavioural and morphometric measurements of parental investment in southern elephant seals at the Falkland Islands. *Polar Biology* 25: 399-403.
- Fabiani,,A., Hoelzel,A.R., Galimberti,F. and Meulbert,M.M.C. 2003. Long-range paternal gene flow in the Southern elephant seal. *Science* 299: 676.
- Galimberti,F., Fabiani,A. and Boitani,L. 2003. Socio-spatial levels in linearity analysis of dominance hierarchies: a case study on elephant seals. *Journal of Ethology* 21: 131-136
- Sanvito, S. and Galimberti, F. 2003. Source level of male vocalizations in the genus *Mirounga*: repeatability and correlates. *Bioacoustics* 14: 45-57.

- Fabiani, A., Galimberti, F., Sanvito, S. and Hoelzel, A. R. 2004. Extreme polygyny among southern elephant seals at the Falkland Islands: behavioral estimates and genetic paternity. *Behavioral Ecology* 15: 961-969.
- Sanvito, S., Galimberti, F., Delahunty, K. M. and McKay, D. W. 2004. Blood spots in Pinnipedia hormone studies: measure of cortisol levels in southern elephant seals (*M. leonina*). *Aquatic Mammals* 30: 251-256
- Sanvito, S., Galimberti, F., Sanvito, R. and Braschi, C. 2005. The "seal prick": a low invasive method for blood sampling in free ranging male elephant seals. *Marine Mammal Science* 21(3): 210-217.
- Fabiani, A, Galimberti, F, Sanvito, S. and Hoelzel, R.A. 2006. Kin associations and site fidelity in southern elephant seals (*Mirounga leonina*) of the Falkland Islands. *Animal Behaviour*, in press.

Submitted manuscripts

- Galimberti, F., Sanvito, S., Braschi, C. and Boitani, L. The cost of success: reproductive effort in male southern elephant seals. Submitted to *Behavioural Ecology and Sociobiology*.
- Sanvito,S., Galimberti,F. and Miller,E.H. Vocal learning and cultural transmission in southern elephant seals. Submitted to *Animal Behaviour*.
- Sanvito, S., Galimberti, F. and Miller, E.H. Honest signaling in vocal communication of male southern elephant seals. Submitted to *Animal Behaviour*.

Technical papers

• Galimberti,F. & Sanvito,S. 1999. A very spatial relationship. GPS mapping aids understanding of elephant seals behavior. *GPSWorld* 10(7): 22-30.

Professional skills

- Professional knowledge of statistics and biometry (consultant); long-term experience in the use and programming of statistical software (Stata, SPSS, Systat, S-PLUS, Matlab)
- Good knowledge of software for modeling and simulation of animal populations (VORTEX, Mark), analysis of genetic data (Cervus, Relatedness, Popgen), and bioacoustics (Canary, Raven, PRAAT)
- Professional knowledge of computing (hardware, software, networks; consultant); advanced knowledge of graphic, image processing, DTP, and pre-press software
- Professional knowledge of database programming, including and development of vertical solutions for data collection, management, and analysis (FileMaker, 4th Dimension, Access, My SQL, XTalk; consultant)
- Good knowledge of GIS technique and software (ArcView, ArcGIS); long experience in the use of GPS for topography and mapping; working knowledge of photogrammetric techniques and software (PhotoModeler)
- More than twenty years of experience of supervision of field team in difficult environmental and logistic conditions (trekking in wild areas, climbing and mountaineering expeditions, field research projects)
- Good skills in maintenance and repair of scientific instruments; good knowledge of practical electronics and mechanics
- · Good English and working Spanish

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