

List of publications

Scientific Articles:

2022

Amelot M, **Plard F**, Guinet C, Arnould J P Y, Grasco N, Tixier P. Increasing numbers of individuals use fisheries as feeding opportunities within subantarctic killer whale populations. *Biology Letters*, 18: 20210328.

Fay R, Martin J, **Plard F**. Distinguishing within from between individual effects: How to use the within-individual centering method for quadratic pattern. *Journal of Animal Ecology*, 91: 8-19.

2021

Plard F, Turek D, Schaub M. Consequences of violating assumptions of integrated population models on parameter estimates, *Environmental and Ecological Statistics*, 28: 667-669.

Plard F, Barthold J A, Gaillard JM, Coulson T, Tuljapurkar S. Demographic determinants of the phenotypic mother-offspring correlation. *Ecological Monographs*, in press.

Plard F, Chamot-clerc B, Cohas A. Influences of climatic and social environment on variable maternal allocation among offspring in Alpine marmots. *Journal of Animal Ecology*, 90: 471-482.

Traill* L, **Plard F***, Gaillard JM, Coulson T. Can we use functional traits to construct a generalised model for large herbivore populations. *Ecology*, 102: e03289.

Hernandez-Pacheco* R, **Plard F***, Grayson K L, Steiner U K. Demographic consequences of changing body size in a terrestrial salamander. *Ecology and Evolution*, 11: 174-185.

2020

Plard F, Arlettaz R, Jacot A, Schaub M. Disentangling the spatial and temporal causes of decline in a bird population. *Ecology and Evolution*, 10: 6906-6918.

2019

Plard F, Bruns A, Cimiotti D, Helmecke A, Hötter H, Jeromin H, Roodbergen M, Schekkerman H, Teunissen W, van der Jeugd H, Schaub M. Low productivity and unsuitable management drive the decline of central European lapwing populations. *Animal conservation*, 23: 286-296.

Plard F, Turek S, Gruebler M, Schaub M. IPM²: Towards better understanding and forecasting of population dynamics. *Ecological Monograph*, 89: e01364.

Plard F, Fay R, Kéry M, Cohas A, Schaub M. Integrated population models: powerful methods to embed individual processes in population dynamics models. *Ecology*, e02715.

2018

- Plard F**, Arlettaz R, Schaub M. Hoopoe males experience intra-seasonal while females experience inter-seasonal reproductive costs. *Oecologia*, 186: 665-675.
- Plard F**, Schindler S, Arlettaz R, Schaub M. Sex-specific heterogeneity in fixed morphological traits influences individual fitness in a monogamous bird population. *The American Naturalist*, 191: 106-119.

2017

- Coulson T, Kendall BE, Barthold JA, **Plard F**, Schindler S, Ozgul A, Gaillard JM, Modeling adaptive and non-adaptive responses of populations to environmental change. *The American Naturalist*, 190: 313-336.

2016

- Péron G, Gaillard JM, Barbraud C, Bonenfant C, Charmantier A, Choquet R, Coulson T, Grosbois V, Loison A, Marzolin N, Owen-Smith N, Pardo D, **Plard F**, Pradel R, Toïgo C, Gimenez O. Evidence of reduced individual heterogeneity in adult survival of long-lived species. *Evolution*, 70: 2909-2914
- Plard F**, Gaillard JM, Coulson T, Tuljapurkar S. Des différences, pourquoi? Transmission, maintenance and effects of phenotypic variance. *Journal of Animal Ecology*, 85: 356-370

2015

- Plard F**, Gaillard JM, Coulson T, Delorme D, Warnant C, Michallet J, Tuljapurkar S, Krishnakumar S, Bonenfant C. Quantifying the influence of measured and unmeasured individual differences on demography. *Journal of Animal Ecology*, 84: 1434-1445
- Lemaître JF, Vanpé C, **Plard F**, Pélabon C, Gaillard JM. Response to Packard: Make sure we do not throw out the biological baby with the statistical bath water when performing allometric analyses. *Biology Letters*, 11: 20150144
- Chalopin D, Naville M, **Plard F**, Galiana D, Volff JN. Comparative analysis of transposable elements highlights mobilome diversity and evolution in vertebrates. *Genome Biology and Evolution*, 96: 1516-1528
- Plard F**, Gaillard JM, Coulson T, Hewison AJM, Douhard M, Klein F, Delorme D, Warnant C, Bonenfant C. The influence of birth date via body mass on individual fitness in a long-lived mammal. *Ecology*, 96: 1516-1528.
- Lemaître JF, Berger V, Bonenfant C, Douhard M, Gamelon M, **Plard F**, Gaillard JM. Early-late life trade-offs and the evolution of ageing in the wild. *Proceedings of the Royal Society B: Biological Sciences*, 281: 20140792
- Plard F**, Yoccoz NG, Bonenfant C, Klein F, Warnant C, Gaillard JM. Disentangling direct and growth-mediated influences on early survival: a mechanistic approach. *Journal of Animal Ecology*, 84: 1363-1372

2014

- Plard F**, Gaillard JM, Coulson T, Hewison AJM, Delorme D, Warnant C, Nilsen EB, Bonenfant C. Long-lived and heavier females give birth earlier in roe deer. *Ecography*, 37: 241-249
- Lemaître JF, Vanpé C, **Plard F**, Gaillard JM. The allometry between secondary sexual traits and body size is non-linear among cervids. *Biology Letters*, 10: 20130869
- Plard F**, Gaillard JM, Coulson T, Hewison AJM, Delorme D, Warnant C, Bonenfant C. Mismatch between birth date and vegetation phenology slows the demography of roe deer. *PLoS Biology* 12: e1001828
- Douhard M, **Plard F**, Gaillard JM, Capron G, Delorme D, Klein F, Duncan P, Loe LE, Bonenfant C. Fitness consequences of environmental conditions at different life stages in a long-lived vertebrate. *Proceedings of the Royal Society B: Biological Sciences*, 281: 20140276

2013

- Plard F**, Gaillard JM, Bonenfant C, Hewison AJM, Delorme D, Cargnelutti B, Kjellander P, Nilsen EB, Coulson T. Parturition date for a given female is highly repeatable within five roe deer populations. *Biology Letters*, 9:20120841
- Gaillard JM, Hewison AJM, Klein F, **Plard F**, Douhard M, Davison R, Bonenfant C. How does climate change influence demographic processes of widespread species? Lessons from the comparative analysis of contrasted populations of roe deer. *Ecology Letters*, 16: 48–57

2012

- Plard F**, Bonenfant C, Delorme D, Gaillard JM. Modeling reproductive trajectories of roe deer females: fixed or dynamic heterogeneity? *Theoretical Population Biology*, 82:317-328

2011

- Plard F**, Bonenfant C, Gaillard JM. Revisiting the allometry of antlers among deer species: male-male sexual competition as a driver. *Oikos*, 120: 601-606

2010

- Célerier A, Huchard E, Alvergne A, Fejan D, **Plard F**, Cowlshaw G, Raymond M, Knapp LA, Bonadonna F. Detective mice assess relatedness in baboons using olfactory cues. *Journal of Experimental Biology*, 213:1399-1405

Book Chapter

- Gaillard JM, Lemaître JF, Berger V, Bonenfant C, Devillard S, Douhard M, Gamelon M, **Plard F**, Lebreton JD. 2016. Encyclopedia of Evolutionary Biology. Vol. 2, chapter Life histories, axes of variation in, pages 312–323. Oxford: Academic Press

International Conferences:

2021:

Plard F, Simmonds E. Organisation of the session “Integral Projection Modelling”. Euring, Québec, Canada.

Plard F, Hernandez-Pacheco R, Steiner U K. Demographic consequences of the influence of environmental change on phenotypic traits, Université de Sherbrooke, Québec, Canada. Présentation orale invitée

Plard F, Hernandez-Pacheco R, Steiner U K. Estimate the influence of environmental change on population dynamics with little data, Holar University College, Iceland

2020: Plard F, Turek D, and Schaub M. Consequences of violations of assumptions using Integrated Population Models. Evolutionary demography society 7th annual meeting, Roros, Norway.

2017:

Plard F, Turek D, Gruebler M and Schaub M. Combining integral projection and integrated population models. Conference of the Ecological Society of America, Portland, USA.

Plard F, Turek D, Gruebler M and Schaub M. IPM²: Towards better understanding and forecasting of population dynamics. Euring, Barcelona, Spain.

Plard F, Schindler S, Arlettaz R, and Schaub M. Life-history strategies in hoopoes. University of Zurich, Switzerland.

2016: Plard F, Schindler S, Arlettaz R, and Schaub M. Sex and Life-history strategies. International Statistical Ecology Conference Seattle, Seattle, USA.

2014: Plard F, Gaillard JM, Coulson T, Hewison AJM, Douhard M, Klein F, Delorme D, Warnant C, Bonenfant C. Born to get lucky. Evolutionary demography society 2nd annual meeting, Stanford, USA.

2013: Plard F, Gaillard JM, Coulson T, Delorme D, Warnant C, Michallet J, Tuljapurkar S, Krishnakumar S, Bonenfant C. Quantifying the influence of unmeasured individual differences and age on demography. International Conference on Individual Differences, Groningen, the Netherlands.

2011: Plard F, Bonenfant C, Gaillard JM. Stochasticity and tactic in individual life-history. Workshop on Comparative Evolutionary Biodemography, Chizé, France.

Workshop:

2019: Plard F. Hands-on introduction to integrated population models and their challenges, AMINOR Workshop, Tromsø, Norway.