

Publications

Cubaynes, S., Aars, J., Yoccoz, N., Pradel, R., Wiig, O., Ims, R. and Gimenez, O. 2021. Modeling the demography of species providing extended parental care: A capture-recapture approach with a case study on Polar Bears (*Ursus maritimus*). *Ecology and evolution*. 11(7):3380-92.

Coste CF, Bienvenu F, Ronget V, Ramirez-Loza JP, Cubaynes, S., Pavard S. 2021. The Kinship Matrix: Inferring the Kinship Structure of a Population from its Demography. In press in *Ecology Letters*.

Cubaynes, S., Galas S., Richaud M., Sanz A., Pradel R., Tavecchia G., Colchero F., Shefferson R., and Camarda C. G. 2021. Survival analyses across the tree of life (book chapter) in *Demographic Methods across the tree of life*, edited by Gamelon M. and Salguero-Gomez R., Oxford University Press.

Deelen, J., Evans, D.S., Arking, D.E. [...], Cubaynes, S., [...], and Murabito J.M. 2019. A meta-analysis of genome-wide association studies identifies novel longevity genes. *Nature Communications* (10) pp. 3669.

Folio, D.M., Aars, J., Gimenez, O., Derocher, A.E., Wiig, O. and Cubaynes, S. 2019. How many cubs can a mum nurse? Maternal age and size influence litter size in polar bears. *Biology Letters*, 15(5), p.20190070.

Louvrier, J., Duchamp, C., Lauret, V., Marboutin, E., Cubaynes, S., Choquet, R., Miquel, C. and Gimenez, O., 2018. Mapping and explaining wolf recolonization in France using dynamic occupancy models and opportunistic data. *Ecography*, 41(4), pp.647-660.

Herr, M., Jeune, B., Fors, S., Andersen-Ranberg, K., Ankri, J., Arai, Y., Cubaynes, S., Santos-Eggimann, B., Zekry, D., Parker, M. and Saito, Y., 2018. Frailty and associated factors among centenarians in the 5-COOP countries. *Gerontology*, 64(6), pp.521-531.

Deere, J.A., Coulson, T., Cubaynes, S. and Smallegange, I.M., 2017. Unsuccessful dispersal affects life history characteristics of natal populations: The role of dispersal related variation in vital rates. *Ecological Modelling*, 366, pp.37-47.

Ripple, W. J., Wolf, C., Newsome, T. M., [...], Cubaynes, S., [...], and 15,364 scientist signatories from 184 countries. (2017). World scientists' warning to humanity: A second notice. *BioScience*, 67(12), 1026-1028.

Robine, J. M., and Cubaynes, S. Esp'érance de vie, esp'érance de sant'e : tendances convergentes ou divergentes sur le plan mondial? in: A.M. Guillemard, E. Mascova, S. Moulias (dir) *La D'ecouverte*, coll. *Recherches*, 2017, pp. 37-58

Robine, J. M., and Cubaynes, S. (2017). Worldwide demography of centenarians. *Mechanisms of Ageing and Development*, 165, pp.59-67.

Pozo, R., Schindler, S., Cubaynes, S., Cusack, J., Coulson, T. and Malo, A. (2016). Modeling the impact of selective harvesting on red deer antlers. *The Journal of Wildlife Management*, 80, 978-989.

Cubaynes, S., MacNulty, D. R., Stahler, D. R., Quimby, K. A., Smith, D. W., and Coulson, T. (2014). Density-dependent intraspecific aggression regulates survival in northern Yellowstone wolves (*Canis lupus*). *Journal of Animal Ecology*, 83, 1344-1356.

Desprez, M., Harcourt, R., Hindell, M. A., Cubaynes, S., Gimenez, O., and McMahon, C. R. (2014). Age-specific cost of first reproduction in female southern elephant seals. *Biology Letters*, 10, 20140264.

Cubaynes, S., Lavergne, C., and O. Gimenez. (2013) Fitting animal survival models with temporal random effects. *Environmental and Ecological Statistics*, 1-12.

Massey, J., Cubaynes, S., and T. Coulson. (2013) Will central Wyoming elk stop migrating to Yellowstone, and should we care? *Ecology*, 94, 1271-1274.

Bolker, B. M., Gardner, B., Maunder, M., Berg, C. W., Brooks, M., Comita, L., Crone, E., Cubaynes, S., et al. (2013) Strategies for fitting nonlinear ecological models in R, AD Model Builder, and BUGS. *Methods in Ecology and Evolution*, 4, 501–512.

Gimenez, O., Abadi, F., Barnagaud, J.Y., Blanc, L., Buoro, M., Cubaynes, S., Desprez, M., Gamelon, M., Guilhaumon, F., Lagrange, P., Madon, B., Marescot, L., Papadatou, E., Papaix, J., Peron, G. and S. Servanty (2013). How can quantitative ecology be attractive to young scientists? Balancing computer/desk work with fieldwork. *Animal Conservation*, 16, 134-136.

Cubaynes, S., Lavergne, C., Marboutin, E., and Gimenez, O. (2012). Assessing individual heterogeneity using model selection criteria: how many mixture components in capture–recapture models? *Methods in Ecology and Evolution*, 3, 564-573.

Cubaynes, S., Doutrelant, C., Gregoire, A., Perret, P., Faivre, B. and O. Gimenez. (2012) Testing hypotheses in evolutionary ecology with imperfect detection: Structural Equation Modeling of capture-recapture data. *Ecology*, 93, 248-255.

Caniglia, Romolo, Fabbri, E., Cubaynes, S., Gimenez, O., Lebreton, J. D., and Randi, E. (2012). An improved procedure to estimate wolf abundance using non-invasive genetic sampling and capture–recapture mixture models." *Conservation Genetics*, 13, 53-64.

Cubaynes, S., Doherty, P.F., Schreiber, E.A., Gimenez, O. (2011) To breed or not to breed: a seabird's response to extreme climatic events. *Biology Letters*, 7, 303-306.

Marescot, L., Pradel, R., Duchamp, C., Cubaynes, S., Marboutin, E., Choquet, R., Miquel, C. and Gimenez, O. (2011) Capture-recapture population growth rate as a robust tool against detection heterogeneity for population management. *Ecological Applications*, 21, 2898-2907

Cubaynes, S., Pradel, R., Choquet, R., Duchamp, C., Gaillard, J-M., Lebreton, J-D., Marboutin, E., Miquel, C., Reboulet, A., Poillot, C., Gimenez, O. (2010) Importance of accounting for detection heterogeneity when estimating abundance: the case of French wolves. *Conservation Biology*, 24, 621--626.

Papaix, J., Cubaynes, S., Buoro, M., Charmantier, A. Perret, P. and Gimenez, O. (2010) Combining capture--recapture data and pedigree information to assess heritability of demographic parameters in the wild. *Journal of Evolutionary Biology*. 23, 2176–2184.

Rouan, L., Cubaynes, S., C. Duchamp, C. Miquel, A.-M. Reboulet, O. Gimenez, J.-D. Lebreton, R. Choquet and R. Pradel (2008). Modèles de mélange en Capture-Recapture. Proceedings of the Meeting of the French Statistical Society, Marseille, France.