

Barbara Class, PhD

Personal information

- Contact: barbara.a.class@gmail.com, bclass@usc.edu.au
- Date and place of birth: 30/10/1990, Strasbourg, France
- Languages: French (mother tongue), English (fluent)

Education

01/12/2013- 31/10/2017	PhD , doctoral program in Biology, Geography and Geology, University of Turku, Finland
01/09/2011- 30/06/2013	MSc in Ecophysiology and Ethology, University of Strasbourg, France
01/09/2008- 31/05/2011	BSc in Cell Biology and Physiology, University of Strasbourg, France

Research experience

09/03/2020-	Post-doctoral project: "Relationships between animal personality, social networks and disease transmission in an urban lizard" (Dr. Celine Frere's lab, University of the Sunshine Coast, Australia)
01/11/2017- 31/08/2019	Post-doctoral project: "Evolutionary quantitative genetics of animal personality and sexual selection in wild populations of blue tits and great tits" (Dr. Jon Brommer's lab, University of Turku, Finland)
01/12/2013- 31/10/2017	PhD project: "Evolutionary quantitative genetics of animal personality in the wild" (Supervised by Dr. Jon Brommer, University of Turku, Finland)
01/01/2013- 30/06/2013	MSc project: "Animal personality in the blue tits: ecological relevance and the importance of parental interactions" (Supervised by Dr. Jon Brommer, University of Turku, Finland)
15/05/2012- 30/06/2012	Scientific internship: "Effect of glucocorticoids and environmental conditions on chick growth in Adélie penguins" (Supervised by Dr. Thierry Raclot, University of Strasbourg, France)
1/10/2011- 30/11/2011	Scientific internship: "Individual decision-making in road crossing pedestrians" (Supervised by Dr. Cédric Sueur, University of Strasbourg, France)

Teaching

23/10/2020- 18/11/2020	Evaluator for Honours Thesis "Anthropogenic noise effects on anuran mating behaviour" by Charmaine Schou, University of the Sunshine Coast, Australia
2017-2019	Co-organizer of the course "Introduction to programming in R and its application in studying ecology and evolution", University of Turku, Finland
01/11/2017- 15/12/2017	Lecturer for the course "Advanced evolutionary Biology 2" (2 lessons), University of Turku, Finland
01/09/2016- 30/09/2016	Evaluator for MSc Thesis "Early weaning impacts personality and occurrence of stereotypic behavior in the domestic cat (<i>Felis catus</i>)" by Milla Ahola, University of Turku, Finland

Supervision/ Mentoring

09/03/2020-	Mentoring in Celine Frere's lab (University of the Sunshine Coast, Australia): <ul style="list-style-type: none">- Honours' student Jessica Tacey, "Do Eastern Water Dragons (<i>Intellagama lesueurii</i>) Modify Their Social Behaviour to Avoid Fungal Infection?" (07/2020-)
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- Ph.D student Coralie Delme, “Social tolerance in a gregarious lizard: consistency, lifetime changes and population-level consequences” (03/2020-)
- Ph.D student Nicola Kent, “Adaptive responses to urban environments and disease emergence in Eastern water dragons” (03/2020-)
- Ph.D student Sarah Ball, “Consistency and plasticity in agonistic behaviour in Eastern water dragons” (03/2020-06/2020)

01/01/2018-30/06/2018 **Co-supervision** in Jon Brommer’s lab: MSc student Marc Gilles, University of Strasbourg. “Blue tits (*Cyanistes caeruleus*) and caterpillars in a boreal forest: focus on the impacts of early food conditions on nestling development, survival and personality”.

08/04/2015-10/10/2015 **Co-supervision** in Jon Brommer’s lab: MSc student Kees Schreven, University of Groningen. ”Relationship between personality and early life body mass in the Blue Tit *Cyanistes caeruleus*”.

Awards and funding

- 2020 ○ 30 000€ Finnish cultural foundation, 1-year post-doctoral research grant (00200217), “Ecological and evolutionary mechanisms of assortative mating in wild animals”
- 35 000\$ (CAD) Merit scholarship program for foreign students (PBEEE), 1-year post-doctoral research grant (291406): “Mechanisms and consequences of assortative mating: a comparative approach”
- ECR Scholarship to attend the ICQG6 conference, 3-13 November 2020, Brisbane, Australia
- 2019 ○ 500€ Oikos Finland prize for the best PhD thesis in Ecology and Evolution 2017
- 2016 ○ 570€ travel grant from the doctoral program in Biology, Geography, and Geology to attend the ISBE conference in Exeter.
- 2015 ○ 3 years funded doctoral position (University of Turku Graduate School)
- 2500€ for organizing AURA symposium 2016 (Foundation of the University of Turku)
- 2014 ○ 9894€ young researcher grant for PhD students (Foundation of the University of Turku)
- 3000€ for fieldwork expenses (Societas Pro fauna et Flora Fennica)
- 4000€ for fieldwork expenses (Oskar Öflunds Stiftelse)

Scientific publications

I have (co) authored 14 journal articles including 9 as a first author, and co-authored of 1 book chapter (h-index=8, 201 citations, 06/01/2021, Google Scholar).

Peer-reviewed journal articles

1. Dingemanse, N. J., **Class, B.**, & Holtmann, B. (2020). Nonrandom Mating for Behavior in the Wild?. Trends in Ecology & Evolution. *Accepted*
2. Westneat, D. F., Araya-Ajoy, Y. G., Allegate, H., **Class, B.**, Dingemanse, N., Dochtermann, N. A., Garamszegi, L. Z., Martin, J. G. A., Nakagawa, S., Réale, D., & Schielzeth, H. (2020). Collision between biological process and statistical analysis revealed by mean centring. Journal of Animal Ecology, August, 1–12.
3. **Class, B.**, & Brommer, J. (2020). Contrasting multilevel relationships between behavior and body mass in blue tit nestlings. Behavioral Ecology, 31(3), 702–710.
4. **Class, B.**, & Brommer, J. E. (2020). Can dominance genetic variance be ignored in evolutionary quantitative genetic analyses of wild populations? Evolution, 74(7), 1540–1550.
5. **Class, B.**, Brommer, J. E., & Oers, K. (2019). Exploratory behavior undergoes genotype–age interactions in a wild bird. Ecology and Evolution, 9(16), 8987–8994.

6. **Class, B.**, Klueen, E., & Brommer, J. E. (2019). Tail colour signals performance in blue tit nestlings. *Journal of Evolutionary Biology*, 32(9), 913–920.
7. **Class, B.**, Brommer, J.E. (2018) Shared environmental effects bias phenotypic estimates of assortative mating in a wild bird. *Biology Letters*, 14, 20180106.
8. Brommer, J.E., **Class, B.** (2017) Phenotypic correlations capture between-individual correlations underlying behavioral syndromes. *Behavioral Ecology and Sociobiology*, 71, 50.
9. **Class, B.**, Dingemanse, N.J., Araya-Ajoy, Y.G., Brommer, J.E. (2017) A statistical methodology for estimating assortative mating for phenotypic traits that are labile or measured with error. *Methods in Ecology and Evolution*, 38, 42–49.
10. **Class, B.**, Brommer, J.E. (2016) Senescence of personality in a wild bird. *Behavioral Ecology and Sociobiology*, 70, 733-744.
11. Brommer, J.E., **Class, B.** (2015) The importance of genotype-by-age interactions for the development of repeatable behavior and correlated behaviors over lifetime. *Frontiers in Zoology*, 12, S2.
12. **Class, B.**, Brommer, J.E. (2015) A strong genetic correlation underlying a behavioural syndrome disappears during development because of genotype-age interactions. *Proceedings of the Royal Society B*, 282, 20142777.
13. **Class, B.**, Brommer, J.E., Klueen E. (2014) Evolutionary quantitative genetics of behavioral responses to handling in a wild passerine. *Ecology and Evolution*, 4, 427-440.
14. Sueur C., **Class B.**, Hamm C., Meyer X., Pelé M. (2013) Different risk thresholds in pedestrian road crossing behaviour: a comparison of French and Japanese approaches. *Accident Analysis & Prevention*, 58, 59-63.

Book chapter

Brommer, J.E., **Class, B.** (2017) Personality from the perspective of behavioral ecology. In: Vonk J., Weiss A., Kuczaj S. (eds) *Personality in Nonhuman Animals*. Springer, Cham

Preprint

Brommer, J., **Class, B.**, & Covarrubias-Pazaran, G. (2019). Multivariate Mixed Models in Ecology and Evolutionary biology: Inferences and implementation in R. *EcoEvoRxiv*

Conference contributions

Accepted conference talks

Postponed to 2022	“Contrasting multilevel relationships between behavior and body mass in blue tit nestlings” (accepted in 2020), ISBE conference (Brisbane, Australia)
06/11/2020	“Can dominance genetic variance be ignored in evolutionary quantitative genetic analyses of wild populations?”, ICQG6 conference (Brisbane, Australia)
28/08/2019	“Tail colour signals performance in blue tit nestlings”, EOU conference (Cluj-Napoca, Romania)
20/08/2017	“How to estimate assortative mating for labile traits in the wild? “, EOU conference (Turku, Finland)
01/08/2016	“Senescence of personality in a wild bird”, ISBE Conference (Exeter, UK)
03/02/2016	“Senescence of personality in a wild bird”, Nordic Oikos Conference (Turku, Finland)

03/04/2014 “Evolutionary quantitative genetics of behavioral responses to handling in a wild passerine”, AURA symposium (Turku, Finland)

Invited talks

05/02/2019 “Evolutionary quantitative genetics of animal personality in the wild”, Oikos Finland Conference (Oulu, Finland)

03/07/2016 “How to estimate assortative mating for repeatable traits in the wild? “, Post-conference symposium “Statistical quantification of individual differences: educational and statistical approaches informing study design, analysis and inferences of multi-level behavioural data” (Exeter, UK)

Seminar talks

18/11/2020 Evolutionary quantitative genetics of behaviour in wild birds (invited by Niels Dingemanse, LMU, Germany)

02/07/2020 Evolutionary quantitative genetics of behaviour in wild birds (invited by Denis Réale, UQAM, Canada)

23/03/2018 Quantitative genetics of personality traits in blue tits and great tits (invited by Kees van Oers, NIOO, Netherlands)

Outreach activities

23/07/2018 **Invited talk:** “Animal personality in wild birds” at the crossover event “Our Festival/ Meidän festivaali” (Järvenpää, Finland)

19/10/2017 **Press release of PhD Thesis:**”Persoonallisuudella on väliä myös sinitiaiselle” on the Web page of the University of Turku:
<https://www.utu.fi/fi/Ajankohtaista/mediatiedotteet/vaitostiedotteet/Sivut/Persoonallisuudella-on-valia-my%C3%B6s-sinitiaiselle.aspx>

Organization of scientific events

19/08/2019-24/08/2019 **Symposium organizer:** “Assortative mating for quantitative traits: mechanisms, estimation, and evolutionary consequences”, co-organized with prof. Niels Dingemanse, ESEB conference (Turku, Finland)

18/08/2017-22/08/2017 **Member of the organizing team**, EOU Conference (Turku, Finland)

06/04/2016-07/04/2016 **Chair of the organizing committee**, AURA symposium (Turku, Finland)

Skills and other academic activities

Statistics and programming

- **R:** Simulations and power analyses, univariate and multivariate mixed models in asreml and other packages (contributing to the wiki: <https://github.com/JonBrommer/Multivariate-Mixed-Models-in-R/wiki>), pedigree reconstruction using microsatellite data with MasterBayes, R markdown, GitHub
- **ASReml:** univariate and multivariate animal models, random regressions
- **MARK:** capture-recapture models

Referee activity

I reviewed 27 manuscripts for various journals, among which Animal Behavior, Behavioral Ecology, Evolution, Journal of Animal Ecology, Journal of Evolutionary Biology, Oikos, Behavioral Ecology and Sociobiology, Ecology Letters, Evolution, Oxford Bibliographies (<https://publons.com/researcher/1458196/barbara-class/>)

Editorial work

I am currently co-editing with prof. Niels Dingemanse a special issue of Journal of Evolutionary Biology on “Assortative mating for labile traits and its fitness consequences in the wild”.

Memberships

- I am a member of SQuID (Statistical Quantification of Individual Differences), an international collaborative research network which aims to promote the teaching and use of mixed models in the fields of ecology and evolutionary biology.
- I am a member of the Society for the Study of Evolution (SSE).

Fieldwork

- 2020-: **Weekly behavioural surveys** (data collection), design and collection of **focal behavioural data**, and **catching and processing**, in an urban population of Eastern water dragons in Brisbane, Australia.
- 2014-2019: **Monitoring a population of wild blue tits** during the breeding season (01/05-21/06), Coordination and data collection (observation, catching and processing), Tammisaari, Finland

Other activities

- Photography
- Music (Flute)
- Pottery
- Hiking