

Dr. Josh A. Firth

Merton Street, Merton College, University of Oxford, Oxford, OX1 4JD

Email: Joshua.Firth@zoo.ox.ac.uk; Website: www.FirthNetwork.com

Professional Preparation

BBSRC Discovery Fellowship (current post)	University of Oxford	Mar 2019 – Mar 2022
Junior Research Fellowship (<i>current post</i>)	Merton College, Oxford	Oct 2017 – Oct 2020
EGI Research Fellowship	University of Oxford	May 2016 – Oct 2017
D.Phil. Zoology	University of Oxford	Oct 2012 – June 2016
B.Sc. Biology (1 st Class)	University of Sheffield	Sept 2009 – June 2012

Awards and Grants

Oct 2020-24	Fully Funded EGI Studentship (Co-Supervisor)	£67,140
Nov 2019-20	OXBER Seed Grant (Co-Investigator)	£16,643
Oct 2019-23	Fully Funded EGI Studentship (Co- Supervisor)	£67,140
Apr 2019-22	NERC Standard Grant (Co-Investigator)	£804,076
Mar 2019-22	BBSRC Discovery Fellowship Award (PI - 3yr)	£374,663
Jan 2018-20	Merton College Addition Research Funds (PI - 3yr)	£9000
April 2018	ISBE Travel Award	£800
Oct 2017	Merton College Junior Research Fellowship (PI 3yr)	£123,687
Sept 2017	Publons Top #2 Reviewer (2/322) Oxford University	-----
May 2016	EGI Research Fellowship (PI -1.5yr)	£47,025
May 2016	Oxford MPLS Exceptional DPhil Acknowledgment	-----
March 2016	ISBE Travel Award	£375
Oct 2015	DPhil Studentship Extension (6month)	£7026
Oct 2012-15	NERC Studentship (3 years)	£41,463
Dec 2015	Academic Development Fund LMH Award	£300
Feb 2015	Academic Development Fund LMH Award	£300
Feb 2014	Academic Development Fund LMH Award	£300
Oct 2012	LMH MPLS Divisional Award	£2000
June 2012	Highest mark during Undergraduate	£100
June 2011	Highest mark during 2 nd Year	£50

Teaching Experience

2019-Feb	DPhil training workshops; “making research available to children”
2018-Present	Co-supervision of PhD students
2017-Present	Assessment of Undergraduate examination for Department of Zoology
2017-Present	Undergraduate lectures for Department of Zoology, Oxford
2016-Present	Assisting supervision of PhD students
2015-16	Supervising Masters research student
2015-Present	Supervising Undergraduate research projects
2014	Tutorials in Group Living, Collective Behaviour and Social Networks
2014	Assisting teaching Animal Behaviour undergraduate module
2014	Teaching for Oxford Continuing Education Department: Ornithology
2013	Tutorials in Sexual Selection and Animal Behaviour
2013	Assisting teaching Quantitative Methods undergraduate module

Publications

[39] Arlidge WNS, **Firth JA** et al. Understanding the potential for information spread about bycatch reduction initiatives in small-scale fisheries. **Nature Communications**; *In Review*

- [38] Culina A, **Firth JA**, Hinde C. Familiarity breeds success: earlier winter meeting of a pair relates to breeding benefits in a monogamous passerine population. **Proceedings of the Royal Society B**; *In Revision*
- [37] Firth J, **Firth JA** et al. "Muscles and mood": examining cross-sectional and longitudinal relationships between muscular strength and depression in the UK Biobank. **American Journal of Psychiatric Research**; *In Revision*
- [36] Farine DR, **Firth JA*** et al. Ecology of woodland songbird social networks: data and insights from large-scale monitoring of individual behaviour. **Journal of Animal Ecology**; *In Revision*
- [35] Gamelon M, **Firth JA**, Salguero-Gomez R. Longitudinal demographic data collection - Chapter in 'Demographic Methods across the Tree of Life'. **Oxford University Press**. *In Revision*
- [34] Albery GF, Kirkpatrick L, **Firth JA**, Bansal S. Unifying spatial and social network analysis in disease ecology. **Journal of Animal Ecology**; *In Revision*
- [33] Jackson S, Firth J, **Firth JA** et al. Is free bus travel associated with less loneliness and social isolation? A prospective population-based study in England. **BMJ Open**; *Accepted*
- [32] Reichert S, Crofts S, Davidson G, **Firth JA** et al. 2020. Individual and social determinants of spatial learning performance in a multi-species field-system. **Royal Society Open Science**; DOI: 10.1098/rsos.192107
- [31] Jarić I, Correia RA, Brook, BW, Buettel JC, Courchamp F, DiMinin E, **Firth JA** et al. 2020. iEcology: harnessing the Big Data revolution to gain insights into the natural world. **Trends in Ecology and Evolution**; DOI: 10.1016/j.tree.2020.03.003
- [30] **Firth JA**. 2019. Considering Complexity: Animal Social Networks and Behavioural Contagions. **Trends in Ecology and Evolution**; DOI: 10.1016/j.tree.2019.10.009
- [29] **Firth JA** et al. 2019. Handgrip strength is associated with hippocampal volume and white matter hyperintensities in major depression and healthy controls: a U.K. Biobank study. **Psychosomatic Medicine**; DOI: 10.1097/PSY.0000000000000753
- [28] Mindy-Roth A, **Firth JA** et al. 2019. Partner's age, not social environment, predicts extrapair paternity in wild great tits (*Parus major*). **Behavioural Ecology**; DOI: 10.1093/beheco/arz151
- [27] Bosse M, Spurgin LG, Laine VN, Cole EF, **Firth JA** et al. 2019. On the importance of time scales when studying adaptive evolution: response to Perrier and Charmantier. **Evolution Letters**; DOI: 10.1002/evl3.112
- [26] Jackson S, **Firth JA** et al. 2019. Social isolation and physical activity mediate associations between free bus travel and wellbeing among older adults in England. **Journal of Transport and Health**; DOI: 10.1016/j.jth.2019.03.006
- [25] Ioannou C, Rocque F, Herbert-Read J, Duffield C, **Firth JA**. 2019. Predators attacking virtual prey reveal the costs and benefits of leadership. **PNAS**; DOI: 10.1073/pnas.1816323116
- [24] Firth J, Torous, J, Stubbs, B, **Firth JA** et al. 2019. The "online brain": how the Internet may be changing our cognition. **World Psychiatry**; DOI: 10.1002/wps.20617
- [23] Someville M, **Firth JA** et al. 2018. Movement and conformity interact to establish local behavioural traditions in animal populations. **PLoS Computational Biology**; DOI: 10.1371/journal.pcbi.1006647

- [22] Firth JA. et al. 2018. Personality shapes pair bonding in a wild bird social system. *Nature Ecology & Evolution*; DOI: 10.1038/s41559-018-0670-8
- [21] Firth JA. et al. 2018. Spatial, temporal and demographic based differences in wild great tits' nest-site visits and the consequences for reproduction. *Journal of Avian Biology*; DOI: 10.1111/jav.01740
- [20] Firth J, Firth JA et al. 2018. Association Between Muscular Strength and Cognition in People with Major Depression or Bipolar Disorder and Healthy Controls. *JAMA Psychiatry*; DOI: 10.1001/jamapsychiatry.2018.0503
- [19] Firth S, Firth JA*. 2018. How do birds cope with losing members of their group? *Frontiers in Young Minds*; DOI: 10.3389/frym.2018.00008 *joint lead author
- [18] Firth J, Stubbs B, Vancampfort D, Firth JA. et al. 2018. Grip Strength Is Associated With Cognitive Performance in Schizophrenia and the General Population: An UK Biobank Study of 476 559 Participants. *Schizophrenia Bulletin*; DOI: 10.1093/schbul/sby034
- [17] Firth JA. et al. 2017. Indirectly connected: simple social differences can explain the causes and apparent consequences of complex social network positions. *Proceedings of the Royal Society B*; DOI: 10.1098/rspb.2017.1939.
- [16] Bosse M, Spurgin LG, Laine VN, Cole EF, Firth JA. et al. 2017. Recent natural selection causes adaptive evolution of an avian polygenic trait. *Science*; DOI: 10.1126/science.aal3298
- [15] Firth J, Stubbs B, Vancampfort D, Schuch FB, Rosenbaum S, Ward PB, Firth JA, et al. 2017. The Validity and Value of Self-reported Physical Activity and Accelerometry in People With Schizophrenia: A Population-Scale Study of the UK Biobank. *Schizophrenia Bulletin*; DOI:10.1093/schbul/sbx149
- [14] Firth JA. et al. 2017. Wild birds respond to flockmate loss by increasing their social network associations to others. *Proceedings of the Royal Society B: Biological Sciences*; 284 (1854): 20170299. DOI: 10.1098/rspb.2017.0299
- [13] Johnson, K. Aplin, LA. Cole, EF. Farine, DR. Firth, JA. Patrick, SC. Sheldon, BC. 2017. Male great tits assort by personality during the breeding season. *Animal Behaviour*, 128: 21-32. DOI: 10.1016/j.anbehav.2017.04.001
- [12] Firth, JA. 2016. Carry-over and consequences of social connections amongst wild birds. University of Oxford. DPhil Thesis.
- [11] Firth, JA. & Sheldon, BC. 2016. Social carry-over effects underpin trans-seasonally linked structure in a wild bird population. *Ecology Letters*; 19 (11): 1324–1332. DOI: 10.1111/ele.12669
- [10] Voelkl, B. Firth, JA. & Sheldon, BC. 2016. The socio-ecology of fear: Nonlethal predator effects on the social composition of wild bird flocks. *Scientific Reports*; 6: 33476. DOI: 10.1038/srep33476
- [9] Firth, JA. et al. 2016. Pathways of information transmission amongst wild songbirds follow experimentally imposed changes to social foraging structure. *Biology Letters*; 12 (6): 20160144. DOI: 10.1098/rsbl.2016.0144
- [8] Crates, RA. Firth, JA*. et al. 2016. Individual variation in winter supplementary food consumption and its consequences for reproduction in wild birds. *Journal of Avian Biology*; 10.1111/jav.00936. *joint lead author

[7] Firth, JA. et al. 2015. Experimental Evidence that Social Relationships Determine Individual Foraging Behavior. **Current Biology**; 25 (23): 3138–43. DOI: 10.1016/j.cub.2015.09.075

[6] Firth, JA. & Sheldon, BC. 2015. Experimental manipulation of avian social structure reveals segregation is carried over across contexts. **Proceedings of the Royal Society B: Biological Sciences**; 282 (1802): 20142350. DOI: 10.1098/rspb.2014.2350

[5] Firth, JA. et al. 2015. The influence of nonrandom extra-pair paternity on heritability estimates derived from wild pedigrees. **Evolution**; 69(5): 1336-44. DOI: 10.1111/evo.12649

[4] Farine, DR. Firth, JA*. et al. 2015. The role of social and ecological processes in structuring animal populations: a case study from automated tracking of wild birds. **Royal Society Open Science**; 2(4): 150057-150057. DOI: 10.1098/rsos.150057 *joint lead author

[3] Aplin, LM. Firth, JA. et al. 2015. Consistent individual differences in the social phenotypes of wild great tits, *Parus major*. **Animal Behaviour**; 108:117-127. DOI: 10.1016/j.anbehav.2015.07.016

[2] Firth, J. Cotter, J. Torous, J. Bucci, S, Firth, JA. & Yung AR. 2015. Mobile Phone Ownership and Endorsement of “mHealth” Among People With Psychosis: A Meta-analysis of Cross-sectional Studies. **Schizophrenia Bulletin**; DOI: 10.1093/schbul/sbv132

[1] Psorakis, I. Voelkl, B. Garroway, CJ. Radersma, R. Aplin, LM. Crates, RA. Culina, A. Farine, DR. Firth, JA. et al. 2015 Inferring social structure from temporal data. **Behavioral Ecology and Sociobiology**; 69(5): 857-866 DOI: 10.1007/s00265-015-1906-0

Presentations

Invited Seminars:

Nov 2020	Cambridge University; <i>Behaviour, Ecology and Evolution seminar series</i>
Dec 2019	Imperial College London; <i>Ecology & Evolution seminar series</i>
Oct 2019	Oxford University; <i>Edward Grey Institute seminar series</i>
May 2019	Edinburgh University; <i>Institute of Evolutionary Biology Departmental seminar series</i>
Mar 2019	Leeds University; <i>Ecology and Evolution seminar series</i>
Mar 2019	Sheffield University; <i>Ecology, Evolution and Environment seminar series</i>
Oct 2017	Cork University; <i>Biological, Earth and Environmental Sciences seminar series</i>
Apr 2017	Chester University; <i>LivLabs Social Network Analysis invited plenary</i>
Mar 2017	OOS; <i>Oxford Ornithological Society lecture series</i>
Nov 2016	Exeter University; <i>Research in Animal Behaviour seminar series</i>
Nov 2016	Bristol University; <i>Workshops in Ecology and Behaviour seminar series</i>

Selected Conference Presentations:

2019	BBSRC Biennial Fellows Conference	Glasgow, 18-19 th June
2019	Oxford Ageing Symposium – Zoology	Oxford, 5 th June
2018	17 th International Behavioural Ecology Congress	Minneapolis, 11-16 th Aug
2016	16 th International Behavioural Ecology Congress	Exeter, 28 th Jul-3 rd Aug
2015	34 th International Ethological Conference	Cairns, 9 th –14 th Aug
2014	15 th International Behavioural Ecology Congress	New York, 31 st Jul-5 th Aug
2013	Zoology, Oxford University Induction Day PRS	Oxford, 8 th October
2013	EGL student conference	Oxford, 10 th -11 th Jan

Selected Media Involvement and Coverage

2019	Phys.org “Social influencers: What can we learn from animals?” https://phys.org/news/2019-12-social-animals.html
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- 2019 Cosmos Magazine “Socialites are not the primary behavioural influencers”
<https://cosmosmagazine.com/society/socialites-not-the-primary-behavioural-influencers>
- 2018 Audubon Magazine “The Surprising Connection Between Birds, Facebook, and Other Social Networks” <https://www.audubon.org/magazine/winter-2018/>
- 2018 Nature Asia “Personality is key for love birds”
<http://www.natureasia.com/en/research/highlight/12713/>
- 2018 Nature Podcast (Interview) ‘Bird Personalities’
<https://www.nature.com/articles/d41586-018-06935-8>
- 2018 New York Times: Wired to Be Besties – Vol. April 17, 2018, pD1, NY Times.
- 2017 National Geographic (Italy): “The Resilience of Great Tits” -
nationalgeographic.it/natura/animali/
- 2017 Science Daily: “Good grief! Losing a friend brings wild birds closer together” -
<https://www.sciencedaily.com/releases/2017/05/170517101214.htm>
- 2016 Scientific American: “The Great Tit chooses love over food” – Vol. 314, Issue 2, p13
- 2016 BBC Wildlife Magazine: “In the field: Food or love” – Vol. 34, Issue 2, p18.
- 2015 Science: “Birds would rather go hungry than leave their mate behind” -
news.sciencemag.org/plants-animals/2015/11/birds-would-rather-go-hungry-leave-their-mate-behind
- 2015 The Conversation: “Meet the wild animals who put their partners first”-
www.theconversation.com/meet-the-wild-animals-who-put-their-partners-first-just-dont-call-it-love-50618
- 2015 Radio Interviews: BBC Radio Oxford (12/11/15), BBC Radio Scotland (13/11/15)
- 2015 Radio Coverage: Radio 4 (13/11/15)
- 2015 Audubon: “Feathered Friends for Life - or Not” -
www.audubon.org/news/feathered-friends-life-or-not
- 2014 Radio Interview: BBC Radio Oxford (17/12/2014)
- 2013 BBC 1 Countryfile Interview “Tweet Networking” -
www.bbc.co.uk/programmes/b03kkc73

Professional Activities and Other Activities

- 2019 June Organiser: OXBER Conservation Behaviour Meeting (Berlin)
- 2019 June Project Leader: Modelling Collective Behaviour Workshop (Brooklyn, NYC)
- 2018 to present Editor at Avian Biology Research
- 2017 to present Governing Body Member (Merton College)
- 2015 to present Guest writer for online resources and blogs including The Conversation, Nature ‘Behind the Paper’ Blog, Academic Life Histories
- 2013 to present Reviewed >65 Manuscripts for 17 journals, and grants totaling >\$3.12mil
- 2012 to present Outreach activities: Primary School Ornithology Lessons, A Level Bird ringing demonstrations, Hill End Centre Nature Activities
- 2017 Interviewing undergraduates for Biological Sciences, University of Oxford
- 2013 UK Bird Ringing C Permit w/ Mist Net Endorsement
- 2012 Home Office Animal Welfare Personal License (Module 1-4)
- 2011 BTO Breeding Bird Volunteer Surveyor

Active Society Memberships: Association for the Study of Animal Behaviour, International Society for Behavioural Ecology, International Society for Conservation Biology, Conservation Culturomics Working Group, European Cooperation in Science and Technology (e-COST expert)

Past Society Memberships: Evolution, American Society of Naturalists, Comparative Cognition Society