## EDUCATION

2014 -	University of Cambridge/Institute of Zoology, Zoological Society of London
2019	(ZSL) - PhD Zoology
	Supervisors: Dr. Rose Thorogood and Dr. John Ewen
	Thesis: Effects of early-life social experiences on learning and conservation in a
	threatened passerine
2011 - 2012	Royal Veterinary College/ZSL - MSc Wild Animal Biology (Merit)
	Supervisor: Prof. Tim Blackburn
	Thesis: Range size determinants in introduced passerine birds
2008 -	Aberystwyth University - BSc (Hons) Zoology (1st Class)
2011	<u>3rd year supervisor</u> : Dr. Rupert Marshall
	Dissertation: Social foraging and mechanisms of information transfer in guppies
	(Poecilia reticulata)

### **RESEARCH EXPERIENCE**

July 2021 -	Freelance scientific consultant (collaboration with ZSL)
present	<u>Collaborator</u> : Dr. John Ewen
	<u>Role:</u> Evaluate post-release monitoring approaches for tracking reintroduction outcomes in threatened hihi ( <i>Notiomystis cincta</i> ) to provide feedback for New
	Zealand government conservation group. Prepare report and research paper from results.
Feb 2021 –	Independent postdoctoral researcher (collaboration with ZSL)
May 2021	<u>Collaborator</u> : Dr. Patricia Brekke
	<u>Role:</u> Funded by personal Association for the Study of Animal Behaviour research grant to complete a project titled <i>"Uncovering the importance of genetics and</i> <i>environment for early-life sociality".</i> Used social network analysis to uncover social association patterns and compared these to genetic and breeding data.
Apr 2020 –	Royal Holloway, University of London – Postdoctoral research assistant
Apr 2020 – Jan 2021	<b>Royal Holloway, University of London – Postdoctoral research assistant</b> <u>Supervisor</u> : Prof. Elli Leadbeater
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Jan 2021	<u>Supervisor</u> : Prof. Elli Leadbeater <u>Role:</u> designed and conducted experiments investigating communication signals in foraging honeybees ( <i>Apis mellifera</i> ) as part of an ERC grant held by my supervisor. Analysed data and prepared research papers.
Jan 2021 Nov 2018 -	<u>Supervisor</u> : Prof. Elli Leadbeater <u>Role:</u> designed and conducted experiments investigating communication signals in foraging honeybees ( <i>Apis mellifera</i> ) as part of an ERC grant held by my supervisor. Analysed data and prepared research papers. <b>University of Cambridge - Postdoctoral research assistant</b>
Jan 2021 Nov 2018 -	<u>Supervisor</u> : Prof. Elli Leadbeater <u>Role:</u> designed and conducted experiments investigating communication signals in foraging honeybees ( <i>Apis mellifera</i> ) as part of an ERC grant held by my supervisor. Analysed data and prepared research papers. <b>University of Cambridge - Postdoctoral research assistant</b> <u>Supervisor</u> : Dr. Rose Thorogood
Jan 2021 Nov 2018 - Aug 2019	<u>Supervisor</u> : Prof. Elli Leadbeater <u>Role:</u> designed and conducted experiments investigating communication signals in foraging honeybees ( <i>Apis mellifera</i> ) as part of an ERC grant held by my supervisor. Analysed data and prepared research papers. <b>University of Cambridge - Postdoctoral research assistant</b> <u>Supervisor</u> : Dr. Rose Thorogood <u>Role</u> : prepared research papers from PhD thesis.
Jan 2021 Nov 2018 – Aug 2019 Jan 2013 –	<u>Supervisor</u> : Prof. Elli Leadbeater <u>Role</u> : designed and conducted experiments investigating communication signals in foraging honeybees ( <i>Apis mellifera</i> ) as part of an ERC grant held by my supervisor. Analysed data and prepared research papers. <b>University of Cambridge - Postdoctoral research assistant</b> <u>Supervisor</u> : Dr. Rose Thorogood <u>Role</u> : prepared research papers from PhD thesis. <b>Institute of Zoology, ZSL - Research internship</b>

## **TEACHING EXPERIENCE**

- Nov 2021 -<br/>presentUniversity of Chester Lecturer in Animal Behaviour (fixed-term)<br/>Role: prepare and deliver lectures and seminars for BSc and MSc modules;<br/>supervise student research projects; run third-year dissertation statistical support<br/>workshops; contribute to assessment management and marking, and tutoring.Nov 2021 -<br/>PresentDevelopment of the second seminary for BSc and MSc modules;<br/>supervise student research projects; run third-year dissertation statistical support<br/>workshops; contribute to assessment management and marking, and tutoring.
- Nov 2013 -<br/>presentRoyal Veterinary College/ZSL Group learning facilitator (casual contract)<br/>Role: assist groups of MSc students using Problem-Based Learning scenarios.<br/>Prepare and mark short- and long-format exam questions.

2019	<b>University of Helsinki – MSc project supervisor</b> <u>Role</u> : one-to-one supervision of fieldwork in New Zealand and data analysis.
2015 - 2017	<b>University of Cambridge – BSc project supervisor</b> <u>Role</u> : gave one-to-one supervision of project design and data analysis for three undergraduate students
2016	<b>University of Cambridge – BSc residential ecology field course demonstrator</b> <u>Role</u> : assisted with field study design, implementation, and data analysis for approx. 30 third-year BSc students

### PUBLICATIONS

- Franks V.R., Ewen J.G., McCready M. & Thorogood R. (2020) Juvenile foraging behaviour changes with social environment. *Proc. R. Soc. B: Biological Sciences* 287:20201878. DOI: 10.1098/rspb.2020.1878
- Franks V.R., Ewen J.G., McCready M., Rowcliffe J.M., Smith D. & Thorogood R. (2020) Analysing age structure, residency and relatedness uncovers social network structure in aggregations of young birds. *Animal Behav.* 166:73-84. DOI: 10.1016/j.anbehav.2020.06.005
- Franks V.R., Andrews C.E., Ewen J.G., McCready M., Parker K.A. & Thorogood R. (2020) Changes in social groups across reintroductions and effects on post-release survival. *Anim. Conserv.* 23: 443-454. DOI: 10.1111/acv.12557 \* in the top 15 most downloaded papers for the journal in 2020
- Franks V.R., McCready M., Savage J.L. & Thorogood R. (2019) Time spent with parents varies with early-life condition, but does not predict survival or sociality of juvenile hihi. Front. Ecol. Evo. 7:322. DOI: 10.3389/fevo.2019.00322 \*invited contribution to special issue
- **Franks V.R.** & Thorogood, R. (2018) Older and wiser? Age differences in foraging and learning by an endangered passerine. *Behav. Processes* 148:1-9. DOI: 10.1016/j.beproc.2017.12.009
- Dyer E.E., Cassey P., Redding D.W., Collen B., **Franks V.**, Gaston K.J., Jones K.E., Kark S., Orme C.D. & Blackburn T.M. (2017) The global distribution and drivers of alien bird species richness. *PLoS Biol.* 15: e2000942. DOI: 10.1371/journal.pbio.2000942
- Dyer E.E., **Franks V.**, Cassey P., Collen B., Cope R.C., Jones K.E., Şekercioğlu Ç.H. & Blackburn T.M. (2016), A global analysis of the determinants of alien geographical range size in birds. *Global Ecol. Biogeogr.*, 25: 1346–1355. DOI:10.1111/geb.12496
- Franks V.R. & Marshall R.C. (2013) Mechanisms and extent of information transfer in socially foraging guppies, *Poecilia reticulata. Animal Behav.* 85:103-108. DOI: 10.1016/j.anbehav.2012.10.013

### Submitted manuscripts:

### † denotes equal contribution

Hasenjager M.J.<sup>†</sup>, **Franks V.R**<sup>†</sup>. & Leadbeater E. Dances drive collective behaviour: a review of honeybee signalling. *Behavioural Ecology & Sociobiology \*invited review* 

### In preparation:

- **Franks V.R.,** Thorogood R. & Brekke P. Intergenerational effects from spatial and genetic environment predict early-life social network structure.
- **Franks V.R.**, Hasenjager M.J., Vierbuchen M.V. & Leadbeater, E. Honeybee dance signals are elicited by both hive-internal and -external cues to regulate collective foraging effort.
- Hasenjager M.J., Hoppitt W., Cunningham-Eurich I., **Franks V.R.** & Leadbeater E. Coupled information networks drive honeybee collective foraging.

Other:

- **Franks V.R.,** Ewen J.G. & Thorogood R. (2018) Importance of social connections for winter survival of juvenile hihi *Notiomystis cincta* in New Zealand. *BOU-funded project report*
- **Franks V.R.** (2010) Social dynamics in a pride of captive Asiatic lions (*Panthera leo persica*) at Cotswold Wildlife Park. *RATEL (Journal of ABWAK)*, **26:** 22-27

## **GRANTS AND AWARDS**

- 2022 University of Chester Staff Conference Attendance Fund (£500): to attend European Conference on Behavioural Biology 2022 for talk entitled "Genetic and ecological drivers of early-life social structure in juvenile bird"
- 2020 Association for the Study of Animal Behaviour (ASAB) Research Grant (£9440): *"Uncovering the importance of genetics and environment for early-life sociality"* Poster prize at ASAB 2020 Winter Conference
- 2018 Runner-up poster prize at ECBB 2018, Liverpool Runner-up Pecha Kucha talk prize at Departmental Seminar Day, University of Cambridge Cambridge Philosophical Society Research Studentship Award (£1500)
- 2017 University of Cambridge Darwin College Travel Fund (£150)
- 2015 British Ornithologist's Union (BOU) Small Ornithological Research Grant (£1765): *"Importance of social connections for winter survival of juvenile hihi"*
- 2014 Cambridge Zoology Graduate Research Costs Fund (£1675) Department of Zoology, University of Cambridge Balfour PhD Studentship (fees and maintenance costs: £60 000)
- 2012 MSc Wild Animal Biology Course Prize highest aggregate marks
- 2011 Winner of Science, Engineering and Technology (SET) Awards Best Biology Student through a European-wide competition

Aileen Smith Memorial Prize - best performance in undergraduate field work

- 2009 Sarah Jane Cross Memorial Prize best performance in first-year BSc Zoology
- 2008 Aberystwyth University three-year Excellence Bursary

# CONFERENCE PRESENTATIONS AND INVITED SEMINARS

2020 ASAB Winter Conference, online
 Foraging behaviour alters with social environment in a juvenile songbird (Poster)
 Invited seminar, Palmero University
 Effect of early-life social experiences on learning and conservation in a threatened passerine
 Invited seminar, Emporia State University
 Effect of early-life social experiences on learning and conservation in a threatened
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Effect of early-life social experiences on learning and conservation in a threatened passerine

Animal Behaviour Live Conference, online

Social group changes across reintroductions and effects on survival (Talk)

2019 **ZSL Annual Science Conference, Institute of Zoology** Friends with benefits? Changes in social groups across reintroductions *(Talk)* 

2018 **Behaviour for Conservation International Symposium, Institute of Zoology** Are social groups important for reintroductions? (*Poster*) 9th European Conference for Behavioural Biology, Liverpool John Moore University Are social groups important for reintroductions? (*Poster*)
5th European Congress of Conservation Biology, Jyväskylä Is group familiarity important in conservation translocations? (*Talk*)
Department of Zoology Seminar Day, University of Cambridge Copy parents or follow friends? (*Pecha Kucha talk*)
35th International Ethological Conference/ASAB Summer Conference, Estoril Copy parents or follow friends? Juvenile foraging changes with social environment (*Talk*)

- 2016 **16<sup>th</sup> Congress of the International Society for Behavioural Ecology, Exeter University** Older and wiser? Young songbirds are slower learners than adults (*Poster*)
- 2015ASAB Summer Conference, University of LincolnSocial behaviour and learning in young hihi (Notiomystis cincta) (Poster)
- 2012 Institute of Zoology Annual Research Conference, London
   Range size determinants in introduced passerine birds (Invited speaker)
   ASAB Easter Conference, Aberystwyth University
   Brains or daring: Mechanisms and extent of information transfer in fish shoals (Talk)

# OUTREACH

2017

2022	"Can understanding animal personalities help us to improve conservation?": speaker at online live event organised by ZSL. The event has since had >2000 views on YouTube.
2021	
2021	"Hihi Science Event 2021": speaker at a live online public event (>200 attendees)
2020	"Hihi Science Evening": co-organiser and host for an online public event (>200
	attendees)
2019	"Hihi Conservation" stand at Zoology Live! event at Museum of Zoology, Cambridge
	"Friends with benefits? Are groups important for conservation translocations" talk
	to general public at Hihi Recovery Group outreach event
2018	"The social lives of young hihi" talk to volunteer group
2016	"How hihi learn" talk to general public at Hihi Recovery Group outreach event
2012	BBC Radio Wales Science Café interview on social learning in guppies
General	Written articles for member-only magazines, and research blog websites
	Skype interviews with secondary school and undergraduate students
	skype met views with secondary sensor and undergraduate statents

# OTHER SKILLS AND EXPERIENCE

Training	Mental Health First Aid half-day course (MHFA England) University of Chester Safeguarding course
IT	Proficient use of word processing, data managing, referencing, and statistical software programmes (Microsoft Office suite: Word/Excel/PowerPoint, R, Mendeley, Program MARK, ESRI ArcGIS, QGIS, Minitab)
Reviewing	Reviewed for Biological Reviews, Animal Behaviour, Behavioural Ecology, Global Ecology and Biogeography, Journal of Avian Biology, PeerJ, Wilson Journal of Ornithology, IBIS
Professional membership	The Association for the Study of Animal Behaviour, British Ornithologist's Union, British Ecological Society, Hihi Recovery Group
Representation & leadership	Zoology Department Graduate Representative (2015-2016) Lead organiser for Zoology Department Christmas Parties (2014 & 2015) Vice-captain for Darwin College Boat Club, Cambridge (2015-2016)

Communication Officer for Darwin College Student Association, Cambridge (2016)

SecondaryA-Levels: 5 B-C; GCSEs: 12 A\* or A (including Maths, English, Double Science)educationAsset Languages Grade 2 Mandarin

### REFEREES

- **Prof. Andrew Lawrence,** Associate Dean and Head of Biological Sciences; address: Department of Biological Sciences, University of Chester, Parkgate Road, Chester CH1 4BJ; email: a.lawrence@chester.ac.uk
- **Dr. John Ewen,** Senior Research Fellow; address: Institute of Zoology, Zoological Society of London, Regent's Park, London NW1 4RY; email: john.ewen@ioz.ac.uk
- **Prof. Elli Leadbeater,** Professor of Ecology & Evolution; address: Centre for Ecology, Evolution and Behaviour, Department of Biological Sciences, Royal Holloway, University of London, Egham, Surrey TW20 0EX; email: elli.leadbeater@rhul.ac.uk