

**Address:** 3.01 David Attenborough Building  
University of Cambridge  
Cambridge, UK

**Email:** [fh361@cam.ac.uk](mailto:fh361@cam.ac.uk)  
[hua.fangyuan@gmail.com](mailto:hua.fangyuan@gmail.com)  
**Website:** [hwamei.weebly.com](http://hwamei.weebly.com)

## **PROFESSIONAL EXPERIENCES**

- Newton International Fellow, University of Cambridge March 2017 - Present  
Conservation Science Group, Department of Zoology  
Collaborating faculty: Andrew Balmford  
Key research project: The global biodiversity and carbon impacts of domestic land use change mediated through international commodity trade
- Associate Research Scholar, Sun Yat-sen University July 2016 - Present  
State Key Laboratory of BioControl, College of Ecology and Evolutionary Biology  
Collaborating faculty: Yang Liu, Hong Pang  
Key research project: Consequences of climate-driven phenological shifts on ecological communities
- Associate Research Scholar, Chinese Academy of Sciences February 2016 - Present  
Kunming Institute of Botany  
Collaborating faculty: Jianchu Xu  
Key research project: China's policy framework for native forest conservation
- Associate Research Scholar, Princeton University September 2016 - December 2016  
Program in Science, Technology, and Environmental Policy, Woodrow Wilson School  
Collaborating faculty: David S. Wilcove  
Key research project: China's policy framework for native forest conservation
- Postdoctoral Research Associate, Princeton University September 2013 - August 2016  
Program in Science, Technology, and Environmental Policy, Woodrow Wilson School  
Advisor: David S. Wilcove  
Key research project: Opportunities for biodiversity conservation outside the protected area system under contemporary land use change in China
- Visiting Scholar, Sun Yat-sen University August 2013  
Department of Ecology and Evolutionary Biology, School of Life Sciences  
Collaborating faculty: Yang Liu, Hong Pang  
Key research project: Consequences of climate-driven phenological shifts on ecological communities

## **EDUCATION**

- University of Florida, Ph.D. 2013  
Department of Wildlife Ecology and Conservation  
Advisor: Kathryn E. Sieving  
Dissertation: Trait-mediated effects of predation risk: How does it influence forest bird-habitat relationships?

Peking Union Medical College, M.Sc.	2006
Department of Biochemistry and Molecular Biology	
Advisor: Caimin Xu	
Thesis: The molecular mechanisms of selenite-induced NB4 leukemic cell apoptosis	
Beijing Normal University, B.Sc. (with distinction)	2003
Department of Biological Sciences	
Advisor: Xueyuan Xiao	
Thesis: The cell cycle progression mechanism of HeLa cells	

## GRANTS AND AWARDS

Newton International Fellowship, the British Royal Society, 2016	£99,000
Project: The global biodiversity and carbon impacts of China's reforestation programmes	
Open Collaboration Research Grant of Sun Yat-sen University, 2015	\$16,000
Project: Consequences of climate-driven phenological shifts on ecological communities	
Best Poster Award, International Ornithological Congress of Southeast Asia, Thailand, 2012	
Field Equipment Grant, IdeaWild, 2011	\$1,500
Project: Mist-netting and research staff training in Harapan Rainforest, Sumatra	
Future Conservationist Award, Conservation Leadership Programme, 2010	\$12,500
Project: Facilitating avian conservation in post-logging lowland rainforest of Sumatra	
Practitioner's Experience Grant, University of Florida, 2009	\$1,000
Project: Facilitating capacity building of the field staff of the Harapan Rainforest, Sumatra	
Research Grant, International Foundation for Sciences, 2009	\$11,830
Project: Testing the role of the "landscape of fear" as a potential mechanism mediating selective-logging induced ecological impacts on understory forest birds in the lowland rainforest of Sumatra	
Student Research Award, Animal Behavior Society, 2009 (highest award)	\$2,000
Project: Does selective logging result in a changed "landscape of fear" for the understory avian community in the lowland tropical rainforest of Sumatra?	
Student Membership Award, American Ornithological Union, 2009	
Field Research Grant, University of Florida, 2007	\$2,000
Project: Effects of landscape configuration change caused by habitat fragmentation on forest bird species participating in mixed-species flocks in the tropical lowland rainforest of Sumatra	

## PEER-REVIEWED PUBLICATIONS (†: MENTEE; \*: STUDENT COLLABORATOR)

### PUBLISHED:

**Hua F, Xu J, Wilcove DS.** Accepted. A new opportunity to recover native forests in China. Conservation Letters.

- Malone K, Powell A, **Hua F**, Sieving KE. Bluebird. Accepted. Bluebirds perceive prey switching by Cooper's hawks across an urban gradient and adjust reproductive effort. *Ecoscience*.
- Tingley MW, Harris JBC, **Hua F**, Wilcove DS, Yong DL. 2017. The pet trade's role in defaunation. *Science*, 356, 916.
- Burivalova Z, Lee TM, **Hua F**, Lee JTSH, Prawiradilaga DM, Wilcove DS. 2017. Understanding consumer preferences and demography in order to reduce the domestic trade in wild-caught birds. *Biological Conservation*.
- Harris JBC, Tingley MW, **Hua F**, Yong DL, Adeney JM, Lee TM, Marthy W, Pedhet S, Prawiradilaga DM, Sekercioglu CH, Winarni N, Wilcove DS. 2017. Measuring the impact of the pet trade on Indonesian birds. *Conservation Biology*. Doi: 10.1111/cobi.12729
- Burivalova Z, **Hua F**, Koh LP, Garcia C, Putz F. 2017. A critical comparison of conventional, certified, and community management of tropical forests for timber in terms of environmental, economic, and social variables. *Conservation Letters* 10:4-14.
- Hua F**, Yong DL, Janra MN, Fitri LM\*, Prawiradilaga D, Sieving KE. 2016. Functional traits determine heterospecific use of risk-related social information in forest birds of tropical Southeast Asia. *Ecology and Evolution* 6:8485-8494.
- Hua F**, Wang X\*, Zheng X\*, Fisher B, Wang L, Zhu J, Tang Y, Yu DW, Wilcove DS. 2016. Opportunities for biodiversity gains under the world's largest reforestation programme. *Nature Communications* 7:12717.
- Hua F**, Sieving KE. 2016. Understory avifauna exhibits altered mobbing behavior in tropical forest degraded by selective logging. *Oecologia* 182:743-754.
- Hua F**, Hu J, Liu Y, Giam X, Lee TM, Luo H, Wu J, Liang Q, Zhao J, Long X, Pang H, Wang B, Liang W, Zhang Z, Gao X, Zhu J. 2016. Community-wide changes in inter-taxonomic temporal co-occurrence resulting from phenological shifts. *Global Change Biology* 22:1746-1754.
- Hua F**, Sieving KE, Fletcher RJ Jr, Wright CA†. 2014. Increased perception of predation risk to adults and offspring alters avian reproductive strategy and performance. *Behavioral Ecology* 25:509-519.
- Hua F**, Fletcher RJ Jr, Sieving KE, Dorazio RM. 2013. Too risky to settle: Avian community structure changes in response to perceived predation risk on adults and offspring. *Proceedings of Royal Society B: Biological Sciences* 280:20130762.
- Hua F**, Marthy W, Lee D, Janra MN. 2011. Globally threatened Sunda Blue Flycatcher *Cyornis caerulatus*: Synthesis of global records and recent records from Sumatra. *Forktail* 27:83-85.
- Iqbal M, Mulyawati D, Fujita MS, **Hua F**, Zetra B. 2011. A breeding record of the Rufous-bellied Eagle *Lophotriorchis (Hieraetus) kienerii* in Sumatra. *Kukila* 15:28-32.
- Mulyawati D, **Hua F**, Zetra B. 2009. First Indonesian record of probable brood parasitism of Chestnut-winged Babbler *Stachyris erythroptera* by Asian Drongo-Cuckoo *Surniculus lugubris*. *Kukila* 14:51-53.

## **SUBMITTED:**

Zeng Z, Estes L, Chen A, Searchinger T, **Hua F**, Guan K, Wood E. Rapid highland forest loss in Southeast Asia during the early 21<sup>st</sup> century. *Nature Geoscience*. Under review.

## **PRE-2009 (AS A MOLECULAR BIOLOGIST):**

Han B, Wei W, **Hua F**, *et al.* 2007. Requirement for ERK activity in sodium selenite-induced apoptosis of acute promyelocytic leukemia-derived NB4 cells. *Journal of Biochemistry and Molecular Biology* 40:196-204.

**Hua F**, Xu C, Pan H. 2006. Roles of lipid raft in infectious diseases. *Basic and Clinical Medicine* 26:546-550.

Cao T, **Hua F**, Xu C, *et al.* 2006. Distinct effects of different concentrations of sodium selenite on apoptosis, cell cycle, and gene expression profile in acute promyelocytic leukemia-derived NB4 cells. *Annals of Hematology* 85:434-442.

Zeng S, Lu K, **Hua F**, *et al.* 2005. Song complexity is associated with the volume of brain song control nuclei in ten oscine species. *Acta Zoologica Sinica* 51:68-75.

Zeng S, Lu K, **Hua F**, *et al.* 2004. Cluster analysis of song complexity and volumes of song control nuclei among ten oscine species. *Zoological Research* 25:515-522.

## **TECHNICAL REPORTS AND PUBLIC OUTREACH**

**Hua F**. 2017. Large-scale reforestation as a case of ecological rehabilitation – the case of China’s Grain-for-Green Program. *SER Newsletter*, April issue. Invited contribution.

**Hua F**, Janra MN, Aadrean. 2013. Facilitating avian conservation in post-logging lowland rainforest of Sumatra, Indonesia. Final project report submitted to the Conservation Leadership Programme (Project ID 0242810).

**Hua F**. 2011. Does selective logging result in a changed “landscape of fear” for the understory avian community in the lowland tropical rainforest of Sumatra? Final project report submitted to the Bukit Barisan Selatan National Park, Lampung Province, Indonesia.

## **SELECTED PRESENTATIONS**

**Hua F**, Wang X, Zheng X, *et al.* 2016. Opportunities for biodiversity gains under the world’s largest reforestation program: assessing China’s Grain-for-Green Program. Oral presentation, Joint Conference of the Association of Tropical Biology and Conservation Asia Chapter and the Society of Conservation Biology Asia Chapter, Singapore.

**Hua F**, Wang X, Zheng X, *et al.* 2016. Opportunities for biodiversity gains under the world’s largest reforestation program: assessing China’s Grain-for-Green Program. Invited talk, Smithsonian Conservation Biology Institute, Washington D.C., U.S.A.

**Hua F**, Wang X, Zheng X, *et al.* 2015. Opportunities for biodiversity gains under the world’s largest reforestation program: assessing China’s Grain-for-Green Program. Invited talk, University of Vermont, Burlington, VT, U.S.A.

**Hua F**, Hu J, Liu Y, *et al.* 2015. Climate-driven phenological shifts change community assembly. Oral presentation, International Conference on Phenology, Kusadasi, Turkey.

- Hua F, Sieving KE. 2015.** Fear in the forest: Understory avifauna exhibits altered risk perception in degraded tropical forest. Oral presentation, Conference of the Association of Tropical Biology and Conservation Asia Chapter, Phnom Penh, Cambodia.
- Hua F, Wilcove DS. 2015.** Gains and losses for biodiversity in the large-scale reforestation under China's Grain-for-Green Program: Regional insights from Southwest China. Invited talk, South China Institute of Endangered Animals, Guangzhou, Guangdong, China.
- Hua F. 2014.** Fear in the forest: Understory avifauna exhibits altered risk perception in degraded tropical forest. Invited talk, Chengdu Institute of Biology, Chinese Academy of Sciences, Chengdu, Sichuan, China.
- Hua F. 2013.** The landscape of fear: How does non-consumptive effect of predation risk influence forest bird-habitat relationships? Invited talk, College of Life Sciences, Sun Yat-sen University, Guangzhou, Guangdong, China.
- Hua F. 2013.** The landscape of fear: How does non-consumptive effect of predation risk influence forest bird-habitat relationships? Seminar, Department of Wildlife Ecology and Conservation, University of Florida.
- Hua F, Liu Y. 2012.** Avian mobbing response toward the collared owlet can be predicted from species functional traits: insights from two tropical montane forests. Poster presentation, International Ornithological Congress of Southeast Asia, Phang Nga, Thailand.
- Hua F, Fletcher RJ Jr, Sieving KE, Dorazio RM. 2012.** Too scared to settle: Predation risk shapes breeding bird community in ways predictable from risk type, and species' life history traits. Oral presentation, Annual Conference of the Ecological Society of America, Portland, OR, U.S.A.
- Hua F. 2011.** Supporting stronger guardians for the "Forest of Hope": Capacity building project for the forest patrol staff of Harapan Rainforest in Sumatra, Indonesia. Seminar, Program of Tropical Conservation and Development, University of Florida.
- Hua F, Silva-Rodríguez EA, Frechette J, Sieving KE. 2008.** An experimental test of forest birds mobbing response under simulated predation risk. Oral presentation, Annual Conference of Wildlife Society, Miami, FL, U.S.A.

## **INSTITUTIONS WITH ONGOING COLLABORATIONS**

China: Beijing Normal University; Chinese Academy of Sciences; Sichuan University; Sun Yat-sen University

Indonesia: Andalas University; Burung Indonesia; Wildlife Conservation Society

United Kingdom: University of Cambridge; University of Sheffield

United States: Princeton University; University of Florida; University of Vermont

## **GRADUATE COURSES TAKEN**

Basic ecological sciences: Behavioral Ecology; Community Ecology; Conservation Biology; Landscape Ecology; Tropical Ecology; Wildlife Conservation and Agriculture

Applied conservation sciences: Forest Ecology and Economics; Community Forest

Management; Conservation Planning

Applied and quantitative techniques: Advanced Statistics; Categorical Data Analysis;  
Ecological Modeling; GIS Techniques; Population Modeling; Research Design in Wildlife  
Ecology and Conservation

## TEACHING EXPERIENCES

Hierarchical modeling of animal populations, workshop for graduate students, Department of Ecology and Evolutionary Biology, Princeton University (2016), co-instructor

Wildlife Techniques, University of Florida (2013), teaching assistant

Avian Field Research Techniques, University of Florida (2013, 2012, 2009, 2007), teaching assistant

Research Design in Wildlife Conservation Biology, Peradeniya University (Sri Lanka; 2012), co-instructor

Animal Behavior and Conservation, University of Florida (2011), teaching assistant

Natural Resource Management, University of Florida (2009), teaching assistant

Environmental Science, University of Florida (2007), teaching assistant

## MENTORING EXPERIENCES

Undergraduate research project, Sun Yat-sen University, 2017; Zhenming Yang  
Project: Response of greenish warbler (*Phylloscopus trochiloides*) in Qilian Mountain to songs of different subspecies

Senior Bachelor's Thesis, Princeton University, 2016-2017; Amanda Chang  
Thesis: Impacts of selective logging on avian community composition in the lowland rainforest of Sumatra, Indonesia

Senior Bachelor's Thesis, Princeton University, 2015-2016; Alex Gow  
Thesis: Recovery of the terrestrial vertebrate community in the regenerating forest landscapes of Costa Rica

Senior Bachelor's Thesis, Princeton University, 2015-2016; Byron Sanborn  
Thesis: Landscape of fear and the anti-predator behavior of decorating crabs

Senior Bachelor's Thesis, Princeton University, 2015-2016; Maxson Jarecki  
Thesis: The acoustic ecology of common loon *Gavia immer*

Senior Honors Thesis, University of Florida, 2010; Chloe A. Wright  
Thesis: Response of Eastern bluebird *Sialia sialis* to increased perception of predation risk

## ACADEMIC SERVICES

Reviewer for:

Animal Cognition  
Avian Research

Behavioral Ecology  
Biological Conservation  
Conservation Letters  
Ecography  
Endangered Species Research  
Ethology  
Forest Ecology and Management  
International Journal of Environment and Pollution  
Journal of Applied Ecology  
Oikos  
Peerage of Science  
Science of the Total Environment  
Wildlife Society Bulletin