

CURRENT STATUS

- NERC-funded Doctoral Candidate Department of Zoology, University of Cambridge, Cambridge, UK, 2015~
- Research Associate Nuffield Department of Population Health, University of Oxford, Oxford, UK, 2015~

PUBLICATIONS

2018

- Payne C L R (2018) Can edible insects really reduce our ecological footprint and save wild species? *Ecological Citizen* 2(1)
- Payne C (2018) Entomophagy: How giving up meat and eating bugs can help save the planet, *Independent*, 21st March 2018
- Payne C (2018) Edible insects: Do insects actually taste any good? *BBC World News*, 18th January 2018

2017

- Payne C L R and Itterbeeck J V I (2017) Ecosystem services from edible insects in agricultural systems: A review. *Insects*, 8(1):24
- Payne C L R and Evans J (2017) Nested Houses: Domestication dynamics of human-wasp relations in contemporary rural Japan. *Journal of Ethnobiology and Ethnomedicine*, 13:13

2016

- Payne, C. L. R., Dobermann, D., Forkes, A., House, J., Josephs, J., McBride, A., ... & Soares, S. (2016). Insects as food and feed: European perspectives on recent research and future priorities. *Journal of Insects as Food and Feed*.
- Müller, A., Evans, J., Payne, C. L. R., & Roberts, R. (2016). Entomophagy and Power. *Journal of Insects as Food and Feed*, 2(2), 121-136.
- Dunkel F and Payne C L R (2016) Chapter 1. Introduction to edible insects, in: Dossey A T, Morales-Ramos J and RojasG (Ed.) *Insects as a Sustainable Food Ingredient*, Elsevier
- Payne C L R (2016) *Insects as Food and Feed – an interdisciplinary workshop held in Oxford, December 2015*, Antenna.
- Payne C L R, Scarborough P, Cobiac L (2016) Do low-carbon emissions diets lead to higher nutritional quality and positive health outcomes? A systematic review of the literature. *Public Health Nutrition* doi:10.1017/S1368980016000495
- Payne C L R, Fruth B, Mato B, (2016) Entomophagy in the area surrounding LuiKotale, Salonga National Park, Democratic Republic of Congo, *African Study Monographs* 37(1):1-12
- Payne, C.L.R., Scarborough, P., Rayner, M., Nonaka, K. (2016) A systematic review of nutrient composition data available for twelve commercially available edible insects, and comparison with reference values, *Trends in Food Science & Technology* 47:69-77, doi: 10.1016/j.tifs.2015.10.012.

2015

- Payne, C L R, Scarborough, P, Rayner, M, Nonaka, K (2015) Are edible insects more or less 'healthy' than commonly consumed meats? A comparison using two nutrient profiling models developed to combat over- and undernutrition, *European Journal of Clinical Nutrition*, advance online publication 16 September 2015; doi: 10.1038/ejcn.2015.149
- Payne, C. L. R., Umemura, M., Dube, S., Azuma, A., Takenaka C., & Nonaka, K. (2015). The mineral composition of five insects as sold for human consumption in Southern Africa. *African Journal of Biotechnology* , 14(31), 2443-2448.
- Payne, C L R (2015) Perception and Practice of Entomophagy in Central Rural Japan, *The Transactions of the Asiatic Society of Japan*, fifth series, volume 7, 139-149
- Payne, C L R (2015) The 'domestication' of edible insects, *Seibutsukagaku (Journal of Biological Sciences)* 66(3):166-176 (In Japanese)
- Payne, C L R (2015) A report from the first international conference on entomophagy, *Seibutsukagaku (Journal of Biological Sciences)* 66(3):166-176 (In Japanese)

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EDUCATION

University of Cambridge
Cambridge, UK 2007-2009
Archaeology &
Anthropology MA Cantab.
Part I: Class I
Part IIA: Class I
Part IIB: Class I

Tokyo School of
the Japanese Language
Shibuya, Tokyo 2009-2010
Japanese Language
Proficiency Test N3: Pass

Rikkyo University
Ikebukuro, Tokyo 2013-
2015
Postgraduate non-degree
research student
(MEXT Government
scholarship)



NATIONALITY

British

2014

Charlotte L.R. Payne - Curriculum Vitae

PUBLICATIONS (Continued from previous page)

- Payne, C L R (2014) Wild harvesting declines as pesticides and imports rise: The collection and consumption of insects in contemporary rural Japan, *Journal of Insects as Food and Feed*
- Payne, C L R and Nonaka, K (2014) Erntefest Auf Japanisch: Wespen als Leckerbissen in fernost [Black wasps and giant hornets: A harvest feast in central Japan] *Bugs magazin* (In German)
- Webster, T H, McGrew, W C, Marchant, L F, Payne, C L R, and Hunt, K D (2014) Selective insectivory at Toro-Semliki, Uganda: Comparative analyses suggest no 'savanna' chimpanzee pattern *Journal of Human Evolution* 71:20-27

Before 2014

- Scarborough, P, Payne, C L R, Agu, C G, Kaur, A, Mizdrak, A, Rayner, M, Halford, J C G, and Boyland, E (2013) How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set, *European Journal of Clinical Nutrition* (2013) 67, 815–820
- McGrew, W C, Marchant, L F, Payne, C L R, Webster, T H, and Hunt, K D (2010). Chimpanzees at Semliki ignore Oil Palms. *Pan Africa News* 17(2): 19-21.
- Payne, C L R, Webster, T H and Hunt, K D (2008) Coprophagy by the Semi-Habituated Chimpanzees of Semliki, Uganda, *Pan Africa News* 15(2)

In press / review / revision

- Payne C L R, Umemura M, Dube S, Azuma A, Takenaka C & Nonaka K (In prep) The mineral content of edible wasp (*Vespula flaviceps*) larvae differs by rearing practice and location, but not caste.
- Jucker, T., et al (In review) Revisiting the 100 priority questions for global biodiversity conservation: how far have we come and what should we focus on next?

SELECTED TALKS

- Payne, C L R, Evans, J., Müller, A., & Roberts, R (2016) The state of research on insects as food: A systematic review of the literature, *International Congress of Entomology, Orlando, Florida, USA*
- Payne C L R (2015) Are insects 'healthy'? A systematic review of the evidence. *Annual Meeting of the Japanese Society of Environmental Entomology and Zoology* (Invited seminar)
- Payne C L R (2015) Edible insects on supermarket shelves: The public health implications of one alternative protein source, *Departmental seminar, Nuffield Department of Population Health, University of Oxford* (Invited seminar)
- Payne C L R (2015) Profitable pests: The role of edible insects in traditional farming systems *Oxford Food Security Forum annual conference* (Oral presentation)
- Payne C L R (2014) Entomophagy in contemporary Japan: Imported insects compensate for a decline in wild foraging, *Insects to Feed the World conference, Wageningen University and FAO (organisers)* (Oral presentation)
- Payne C L R (2014) Wild harvesting and food security: A case study on edible wasp and hornet collection in rural Japan *Oxford Food Security Forum annual conference* (Oral presentation)
- Payne C L R (2014) Is there a future for wasp husbandry? Celebrating the wasp harvest in central rural Japan, *Sustainable use of edible insects for human consumption, CIAS Joint Research Seminar* (Invited seminar)
- Payne C L R and Nonaka K (2014) Cooperative hunting for wasps, opportunistic collection of grasshoppers: The behavioural ecology of insect consumption in rural Japan, *AAPA Annual meeting, Calgary* (Oral presentation)

RESEARCH PROJECTS

2017-18

- *Can the edible shea caterpillar be reared in an enclosed system?* University of Cambridge, UK; Rothamsted Research, UK; University of Ouagadougou, Burkina Faso

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RESEARCH PROJECTS (continued from previous page)

- *Insects and People of the South Indian Ocean (ISPIO)*, Madagascar Biodiversity Center, Antananarivo

2016

- *Environmental, social and economic impacts of edible caterpillars*, University of Cambridge, UK, University of Ouagadougou, Burkina Faso

2015

- *Is it possible to achieve a diet that is both healthy and sustainable? A systematic review*. Univ. of Oxford, UK
- *Modeling the nutritional value of insects vs traditional livestock*. University of Oxford, UK

2014

- *The nutrient content of selected species of edible insects: A systematic review*. University of Oxford, UK
- *The nutritional composition of edible insects consumed in Northeastern Zimbabwe*. Makoni, Zimbabwe

2013

- *Insects as part of the traditional diet in rural central Japan*. Gifu, Japan. 2013
- *Entomophagy in Bandundu province, DRC*. DR Congo. 2013

Earlier work

- *Comparison of nutrient profiling models for regulating television advertising*. University of Oxford, UK 2012
- *Managing and visualizing high throughput phenotype data for disease modeling*. MRC Harwell, UK 2012
- *Impact of the DFP on Gender and Empowerment*. (Employed) researcher. Hubli, Karnataka, India 2011
- *Human-wildlife conflict in Yakushima, Japan*. (Funded) independent researcher. Yakushima, Japan 2011
- *Genetics and ecology of chimpanzees and elephants*. (Employed) research assistant. Kibale, Uganda 2009
- *Semliki chimpanzee research and habituation project*. (Funded) research assistant. Toro-Semliki, Uganda 2008
- *Triadic conflict in captive bonobos*. (Funded) research assistant. Planckendael Zoo, Belgium 2007

GRANTS & AWARDS FOR RESEARCH ACTIVITIES

- Public Engagement Starter fund £1079 (Dec 2017)
- Bedford Fund + Fieldwork fund £3350 (May 2017)
- Experiment.com crowdfunding \$3100 (March 2017)
- Barilla Center for Food and Nutrition €8000 (December 2016)
- NERC DTP Scholarship £10000+ (Oct 2015 – March 2019)
- Vice Chancellor's Award (Oct 2015 – March 2019)
- GB Sasakawa Foundation Small Grant £1800 (November 2014)
- Daiwa Foundation Small Grant £3000 (June 2014)
- MEXT government scholarship £19000 (April 2012)
- Daiwa scholarship £23000 (August 2008)
- King's Scholar £150 (August 2008)
- Rylands Prize £150 (August 2008)
- Durham Fund £500 (June 2008)
- Bedford Fund £600 (June 2008)
- Anthony Wilkin Fund £100 (June 2008)
- Bartle Frere Award £240 (June 2008)
- Rylands Prize £150 (August 2007)
- Harmer Prize £75 (August 2007)
- Durham Fund £500 (June 2007)
- Bedford Fund + Worts Scholar £850 (March 2007)

COMMUNITY INVOLVEMENT

Coordinator

Insects as Food and Feed Workshop, Oxford Martin School, December 2015 (symposium, 55 participants)
Food and sustainability in Japan and the UK, Ena, Japan, May 2015 (symposium, 30+ participants)

Reviewer

Journal of Food Science
International Journal of Food Science and Technology
Journal of Insects as Food and Feed
Journal of Applied Life Sciences International
African Journal of Food Science

Television/Radio

April 2017, "Are edible caterpillars the future of sustainable protein?", CrowdScience, BBC World Service
June 2015, That's Oxford, regional TV channel; BBC Oxford, regional radio
November 2013 NHK Asaichi, national television, morning programme
November 2013 Chukyo TV, regional television, evening programme

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Newspaper features/interviews

April 2017, "Caterpillar farms: Growing the food of the future?" BBC News, international
June 2015 Oxford Mail, regional newspaper
May – September 2014 Kamome Books, online magazine, 4 instalments
July 2014 Chunichi shinbun, national newspaper
March 2014 Asahi shinbun Globe supplement, national newspaper

Outreach

St Matthews' School, Cambridge, edible insects workshop, 2016
'Bug Banquet' educational workshop on edible insects, Green Man Festival, 2015
'Look down' educational workshop on edible insects, Tandem festival, 2015

Volunteer

Conversations with the elderly, Ena City volunteering network, Ena, Japan, 2013-2015
Gatehouse Centre for the homeless, Volunteer, Oxford, UK, 2012
Hands on Tokyo, Volunteer (old peoples' home; orphanage), Tokyo, Japan, 2010
Jimmy's Nightshelter Voluntary Assistant, Footcare for the Homeless, Cambridge, UK, 2006-2009

TEACHING EXPERIENCE

- Theory and Practice in Biological Anthropology, University of Cambridge 2017-18 (TA, Supervisor)
- Human Behavioural Ecology and Social Networks, University of Cambridge, 2017 (Supervisor)
- Statistics in Biological Anthropology, University of Cambridge, UK 2016 (Supervisor)
- Research methods (to MA students) Hubli, India 2012 (Lecturer)
- Statistics in Biochemistry, University of Oxford, UK 2012 (Lecturer)

EMPLOYMENT

- 2015 Department of Population Health, University of Oxford, Researcher Oxford, UK
- 2012-13 LuiKotale Bonobo Project, Habituation assistant Democratic Republic of Congo
- 2011-12 Medical Research Council Graduate Intern, Bioinformatics group Harwell, Oxon, UK
- 2011 Deshpande Centre for Social Entrepreneurship, Junior Fellow Hubli, Karnataka, India
- 2009-10 Kobokan Community Centre (Social welfare NGO) Tokyo, Japan

SELECTED PUBLIC INVITED PRESENTATIONS

- October 2017, What's stopping your diet from being more sustainable? Cambridge Festival of Ideas
- May 2015 NIAS group, Tsukuba University, research presentation
- February 2015 Chuken Service, Nagoya honten, research presentation (for new employees)
- February 2015 Edible insects and health, 2 presenters, 40+ attendees (Ena, Japan)
- February 2015 Edible insects workshop, 10 participants (Nagoya, Japan)
- December 2014 Asiatic Society of Japan Young Scholars Event, presentation, 50+ attendees
- November 2014 Central Japanese Forester's Union, presentation, 35 attendees
- November 2014 Enaka insect cuisine event and lecture, 16 participants
- September 2014 Family 'wasp experience' event, presentation on wasp ecology, 26 participants
- August 2014 Ena city library, presentation on global entomophagy, 50+ attendees
- July 2014 Kobokan community centre, research presentation
- April 2013 Institute of Advanced Media Arts and Sciences (IAMAS), invited lecture on entomophagy
- February 2013 Japan Vesputa Society national summit, lecture on edible wasp culture in global perspective
- February 2013 Iwamura community centre, workshop on edible insects, 15 participants
- January 2013 Kasugai secondary school, presentation on personal experiences during research
- January 2013 Akechi Lions club, lecture on research into entomophagy
- December 2013 Ena city Lions club, lecture on research into entomophagy
- November 2013 Enaka, insect cuisine event and lecture, 26 participants

ADDITIONAL TRAINING COURSES & AWARDS

- Effective Supervision, University of Cambridge
- Systematic Reviews and Meta-analysis, University of East Anglia/NERC
- Insect taxonomy, Oxford Natural History Museum/NERC
- Wilderness Medical Training
- Multivariate statistics using R
- Computer programming using Java
- Computer Programming using Perl
- Millenium Volunteer Award
- Manual Handling and First Aid
- Essential Care Skills
- Disability Awareness Training
- Guiding the Visually Impaired.

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