

CV Julia Osterman

✉ julia.osterman@bioenv.gu.se | Date of birth: 25.07.1988 | Nationality: German

I am a researcher focused on pollination services of crops for food security. I have a passion for understanding how biodiversity contributes to human livelihoods and am determined to communicate my scientific results to the public.

RESEARCH AND WORK EXPERIENCE

- 01/23 – 12/24 **Post-Doc at the University of Gothenburg**, Department of Biological & Environmental Science, Sweden
- 12/21 – 12/22 **Post-Doc at the University of Freiburg**, Department of Nature Protection and Landscape Ecology, Germany
- 02/15 – 01/17 **Environmental Analyst** (part-time), Kaminisky Naturschutzplanung GmbH, Germany
- 2015 and 2018 Parental leave (24 months in total)

DEGREES

- 02/17 – 03/22 **Ph.D. in Biology**, Martin-Luther University Halle-Wittenberg, Germany, financed by Helmholtz Centre for Environmental Research GmbH. Thesis: The ecology of crop pollination and its integration into farm management to ensure sustainable and stable crop yields. Supervised by: Prof. Dr. Robert J. Paxton.
- 08/12 – 07/14 **Master of Science** Environmental Science – Soil, Water and Biodiversity, Swedish University of Agricultural Science (SLU), Uppsala, Sweden. Grade: 1.2, equivalent to A. Thesis: Neonicotinoids and honeybee health. Supervised by: Dr. Joachim de Miranda
- 10/09 – 07/12 **Bachelor of Science**, Environmental Science, Albert Ludwig-University Freiburg, Germany, Grade: 1.4, equivalent to A.

AWARDS AND GRANTS

- 11/22 **Award for an outstanding Ph.D. dissertation** in the field of ecology, Horst-Wiehe award by the Ecological Society of Germany, Austria and Switzerland (1 500 €)
- 04/22 Research Grant from the Wissenschaftliche Gesellschaft Freiburg im

	Breisgau (1 470 €)
11/21	Carl Tryggers Stiftelse ; Co-application with Dr. Anne D. Bjorkman for a Post-Doc stipend for two years (600 000 SEK)
02/20	Granted host for the DAAD RISE program
02/18	Grant for women in science , awarded by Martin-Luther University Halle-Wittenberg (3 000 €)
09/14	Best poster presentation, ICPPR conference award in Ghent
07/14	Helmut-Aurenz scholarship for financing a research project within Europe (1 000 €)
11/13	Best poster presentation, ELLS students' conference award, Vienna (300 €)
09/13 – 08/14	The German Scholarship, financed by the Karl Schlecht foundation (3 600 €)

PUBLICATION LIST

I have published eleven peer reviewed papers (an additional two under revision) in widely recognized journals, including five lead author publications and three senior author publications (* indicates I am the senior author of the publication, ** shared first authorship).

- Leclercq N., ... **Osterman J.**, *et al.* Global taxonomic, functional, and phylogenetic biogeography of bees in apple orchards. *Science of the Total Environment*, 901, 165933.
- Osterman J.**, Benton F., Hellström S., Luderer-Pflimpfl M., Pöpel-Eisenbrandt A.-K., Stoykova B., Theodorou P., Ulbricht Ch., Paxton R. J. (2023) Mason bees and honey bees synergistically enhance fruit set in sweet cherry orchards. *Ecology and Evolution*, 13, e10289.
- Hellström S., Strobl V., Straub L., Osterman W., Paxton R. J., **Osterman J.*** (2023) Beyond generalists: the Brassicaceae pollen specialist *Osmia brevicornis* as a prospective model organism when exploring pesticide risk to bees. *Environmental and Sustainability Indicators*, 18, 100239.
- Mazi S., Paxton R. J., **Osterman J.*** (2022) A subset of wild bees boots the pollination of pigeon pea (*Cajanus cajan*: Fabaceae), an important crop plant in Cameroon. *Journal of Apicultural Research*, 1-10.
- Osterman J.**, Landaverde-González P., Garrat M. P. D., Gee M., Mandelik Y., *et al.* (2021) On-farm experiences shape farmer knowledge, perceptions of pollinators and management practices. *Global Ecology and Conservation*, 32, e01949.
- Osterman J.**, Aizen M. A., Biesmeijer J. C., Bosch J., Howlett B. G., *et al.* (2021) Global trends in the management of a diversity of pollinator species. *Agriculture, Ecosystems & Environment*, 322, 107653.
- Osterman W., Cornejo F., **Osterman J.*** (2021). An Andean bear population hotspot in Northern Peru. *URSUS*, 32e12, 1-10.
- Osterman J.**, Theodorou P., Radzevičiūtė R., Schnitker P., Paxton R. J. (2021). Apple pollination is ensured by wild bees when honey bees are drawn away from orchards by a mass co-flowering crop, oilseed rape. *Agriculture, Ecosystem & Environment*, 315, 107383.
- Theodorou P., Herbst S., Kahnt B., Landaverde-González P., Baltz L., **Osterman J.**, Paxton R. J. (2020). How do bee and floral diversity co-vary within an urban ecosystem? The role of urban fragmentation. *Scientific reports*, 10, 21756.
- Osterman J.****, Wintermantel D.**, Locke B., Jonsson O., Semberg E., *et al.* (2019). Clothianidin seed-

treatment has no detectable negative impact on honeybee colonies and their pathogens. *Nature Communications*, 10, 692.

Wintermantel D., Locke B., Andersson G. K. S., Semberg E., Forsgren E., **Osterman J.**, et al. (2018). Field-level clothianidin exposure affects bumblebees but generally not their pathogens. *Nature Communications*, 9, 5446.

PUBLICATIONS IN REVIEW

Willcox B., ... **Osterman J.**, et al. Emerging threats and opportunities to managed bee species in European agricultural systems – A Horizon Scan. (Under review in *Scientific Reports*)

Theodorou P., Osterman W. H. A., ... **Osterman J.**, Paxton R. J. European protected areas provide limited protection for bees and their pollination services. (Submitted to *Journal of Applied Ecology*)

Fijen T., Eeraerts M., **Osterman J.**, Beyer N., Hass A., Lundin O., Westphal C. Enhancing crop diversification for pollinator conservation. (Under review in *Frontiers in Ecology and the Environment*)

POPULAR SCIENCE ARTICLES

Osterman J., Wintermantel D., Klein A.-M. (2022). Welche Produkte Bienen gefährden. *BWagrar*, 32, pp. 16-17.

Osterman J., Wintermantel D., Klein A.-M. (2022). Verbot von Sulfoxaflor: Der Nachfolger von Neonicotinoiden ist auch gefährlich. *bienen&natur*, 8, pp. 34-36.

Osterman J. (2022). Hur går det för äppleträden om honungsbin föredrar raps? *Gadden*, 3, pp. 14-17.

Osterman J. & Paxton R. J. (2021). Honigbienen fliegen auf Raps, Apfelblüten haben das Nachsehen. *Besseres Obst*, 12, pp. 20-22.

Osterman J. & Paxton R. J. (2021). Honigbienen fliegen auf Raps, Apfelblüten haben das Nachsehen. *Obstbau*, 5, pp. 35-37.

Osterman J. & Baltz L. M. (2021). Wildbienenlehrpfad BUGA Erfurt 2021.

Baltz L. M., **Osterman J.**, Benton F., Theodorou P., Mrozek J., Paxton R. J. (2020). Was summt und brummt in deutschen Apfelanlagen. *Obstbau*, 12, pp. 694-698.

Osterman J. & Baltz L. M. (2020). Bienenschutz im Siedlungsbereich. *Stadt+Grün*, Okt., pp. 49-52.

Osterman J. & Wintermantel D. (2019). Weniger Hummel-Königinnen durch Clothianidin. *bienen&natur*, 5, pp. 18-19.

Rundlöf, M., **Osterman, J.**, Wintermantel, D. & De Miranda, J.R. (2019). Exponering av klotianidin underfältförhållande påverkar inte honungsbins eller humlors sjukdomsnivåer. *Gadden*, 3, pp. 12-13.

Schönfeld P. & **Goss J.** (2014). Straßenbaumarten und ihre Ansprüche an den pH-Wert. *PRO BAUM*, 2, pp. 11-14.

OUTREACH

- Press release: [Pollination by more than one bee species improves cherry harvest](#) (14.09.2023)
- Several stakeholder summaries for the [PoshBee](#) project
- Soapbox Science in Göteborg (04.05.2022)
- Press release: [Insekten: Wie Landwirte beim Artenschutz besser einbezogen werden können](#) (16.12.2021)
- Radio guest on MDR THÜRINGEN with Billy Wulff (29.08.21)

- Press release: Gefährdete Brillenbären in Peru: Forschende finden Paddington Bär (23.08.2021)
- Radio guest on MDR THÜRINGEN with Nadine Witt (14.05.2021)
- Press release: Honigbienen fliegen auf Raps, Apfelblüten haben das Nachsehen (05.05.2021)
- Co-developed an educational trail for the German garden show in Erfurt about bee ecology and conservation
- Interviewed for the newspaper MZ about pollination in sweet cherry orchards
- Press release: Feldversuch mit Neonicotinoiden: Honigbienen sind deutlich robuster als Hummeln (19.04.2019)
- Contribution to the blog "Agrardebatten" of the University of Göttingen, Germany
- Invited speaker for the annual fruit grower conference in Erfurt, Germany (17.01.2019)
- Goss, J.: Hummeln - unterschätze Bestäuber im Garten. MDR Garten. Broadcasted on TV (07.06.2015)

CONFERENCES

05/23	Y20 Consultation Summit, Srirangar, India: Climate change, disaster risk reduction & making sustainability – a way of life. Invited panelist.
12/22	BECC annual meeting, Falkenberg, Sweden: The effect of the European bee-eater <i>Merops apiaster</i> on plant-pollinator interactions and pollination services. Poster.
11/22	Seminar on meadow diversity and promotion of insects, Landesanstalt für Landwirtschaft und Gartenbau, Quedlinburg, Germany: Blühende Lebensräume für Wildbienen – Ein wichtiger Grundstein zur Erhaltung der Artenvielfalt. Invited talk.
11/22	EcologyMetz2022, International Conference on Ecological Sciences & Evolution – Metz: Co-flowering crops: Implications for pollinator conservation and pollination services on farms. Invited talk.
10/21	Scandinavian Association for Pollination Ecology (SCAPE): On-farm experience shape farmer knowledge and perception of pollinators and farmer decision-making. Talk.
11/20	Scandinavian Association for Pollination Ecology (SCAPE), online: Enhancing mason bee populations for sweet cherry pollination. Talk.
10/19	Ecosystem Service Partnership (ESP) world conference, Hannover, Germany: Managing the ecosystem service of pollination in agro-ecosystems. Talk.
09/14	12 th international symposium of the ICP-PR bee protection group, Ghent, Belgium: Does field level clothianidin influence the prevalence and loads of honeybee (<i>Apis mellifera</i>) parasites and pathogens? Poster.
11/13	ELLS annual conference and scientific student conference, Vienna, Austria: Biodiversity aspects of different biomass crops - is miscanthus better than rape? Poster.

STUDENT SUPERVISION

- Nicholas Rasschaerts (2023) M.Sc. thesis. Title: „Do restoration practices adequately support pollinator needs in Butte, Montana?“, Co-supervision, Montana Technological University
- Jessika Tangel (2023) M.Sc. thesis. Title: „Effects of the bee eater (*Merops apiaster*) on flower-visiting insect communities at the Kaiserstuhl“ Main supervisor, University of Freiburg
- Friederike Arendt (2023) M.Sc. thesis. Title: „Effects of *Merops apiaster* L. on plant-pollinator

interaction and potential consequences for pollination services” Main supervisor, University of Freiburg

- Bilyana Stoykova (2021) M.Sc. thesis. Title: „Study on apricot flower visitors (*Prunus armeniaca* L.) in Saxony-Anhalt, Germany” Co-supervision, Martin-Luther University Halle-Wittenberg
- Melissa Lee (2020) M.Sc. thesis. Title: „Valuation of ecosystem services: An ecological assessment of pollination services with focus on sweet cherry trees” Co-supervision, Martin-Luther University Halle-Wittenberg

OTHER

Peer reviewer for: Agricultural and Forest Entomology; Agriculture, Ecosystem & Environment; Biodiversity & Conservation; Basic and Applied Ecology; Global Ecology and Conservation; Journal of Applied Ecology; Plant, Soil & Environment; Journal of Applied Entomology; Journal of Pollination Ecology; Functional Ecology; Oecologia.

Scientific advisory board for Journal of Applied Entomology

Examiner of one B.Sc. defense (Martin-Luther University Halle-Wittenberg, Germany)

Initiator and Coordinator of the “Success Team”, a local monthly workshop for Ph.D. students to discuss how to progress research and collaborations from 2019 till 2021 at the Martin-Luther University Halle-Wittenberg, Germany.

Membership: British Ecological Society (since 2022), Gothenburg Global Biodiversity Centre (since 2022), Gesellschaft für Ökologie (since 2022), NGO Yunkawasi (since 2017), BECC -Biodiversity and Ecosystem services in a Changing Climate (since 2022)