

Emma Weeks

Assistant Research Scientist



Contact:

PO Box 110620
Building 970, Natural Area Dr.
Gainesville, FL 32611

(352) 273-3954
eniweeks@ufl.edu

Education

(100% Research)

- Ph.D., Medical Entomology, London School of Hygiene and Tropical Medicine, U.K., 2011. Biotechnology and Biological Sciences Research Council studentship with industrial funding from AgriSense BCS Ltd.
- M.Sc., Biology and Control of Disease Vectors, London School of Hygiene and Tropical Medicine, U.K., 2006.
- B.Sc., Zoology, University of Wales, Swansea, U.K., 2003.

Relevant Employment History

- Assistant Research Scientist, Entomology and Nematology Department, University of Florida, U.S.A., 2011-present.
- Research Technician, Rothamsted Research, U.K., 2007 (6 months).
- Trainee Laboratory Technician, Becton Dickinson Biosciences Ltd, U.K., 2003-2005.

Research

My research is focused on improving pest management through monitoring and non-chemical control methods, specifically behavioral manipulation with semiochemicals and control through entomopathogenic fungi. I am currently working in several arthropod systems including bed bugs, ticks, mosquitoes and muscid flies.

Teaching

- Committee member – M.S. non-thesis student (Sarah Chaney, 2014-present).
- Co-advisor – Undergraduate Honors student (Julie Baniszewski, 2012-2014).
- Committee member - M.S. student (Lucas Carnohan, 2011-2013).
- Guest lectures in seminar in Insect Chemical Ecology (ENY 6934) and Behavioral Ecology and Systematics of Insects (ENY 6454).
- Co-taught seminar in Insect Chemical Ecology (ENY 6934) - 2013.
- Technical writing group - assistant to Dr. P. Kaufman in his graduate student writing group.
- IFAS/CALS Teachers College (Sept-Nov 2011).
- Volunteer Teaching Assistant for MSc., Ph.D. and Diploma classes in Medical Entomology at London School of Hygiene and Tropical Medicine (2007-2011).
- Workshops in 'Basic Math for Scientists' at London School of Hygiene and Tropical Medicine (2007-2011).

Extension/Outreach

- Florida LAKEWATCH – presentations at annual meetings on integrated management of hydrilla.
- Florida State Fair – 2013 and 2014.
- Young Achievers Foundation Professional Outreach Day - 2012.
- Science Technology Engineering and Mathematics Ambassador for SETPOINT Hertfordshire, U.K., 2009-2011.
- Rothamsted Research Open Day 2010, Harpenden, U.K. Developed and displayed 'Who has been sleeping in your bed?' an exhibit to teach the public about indoor pests including bed bugs and dust mites.
- Pestival 2009: An insect themed festival, London, U.K. Helped to develop and display 'Why me?' an exhibit to explain why mosquitoes bite some people more than others.

Professional Activities

- Reviewer - PloS ONE, Insects, Bulletin of Entomological Research, Journal of Medical and Veterinary Entomology, Journal of Medical Entomology, American Journal of Tropical Medicine and Hygiene, Entomologia Experimentalis et Applicata, Biocontrol, Journal of Parasitology and Vector Biology.
- Reviewer – University of Kentucky R&D Excellence Awards - 2014.
- Reviewer – Canine Health Foundation Oak grants - 2013.
- Reviewer - Florida 21st Century Community Learning Centers Grant - 2012.
- Member - University of Florida, Presidential Committee for Property Management - 2012-present.
- Member - University of Florida, Presidential Committee for Lakes, Vegetation and Landscaping - 2012-present.
- Member – Natural Area Advisory Committee and Natural Area Teaching Laboratory Operations Committee - 2014.
- Member – American Mosquito Control Association – 2014-present.
- Member - Entomological Society of America - 2012-present.
- Member - Florida Entomological Society - 2012-present.
- Language editor - Central European Journal of Biology - 2008-present.
- Member - International Society of Chemical Ecology - 2007-present.
- Member - Royal Entomological Society - 2007-present.
- Member - Society of Experimental Biology - 2007-present.
- Member - Society of Chemistry in Industry - 2007-present.

Selected Honors and Awards

- Best oral presentation at ENTO'10 the annual meeting of the Royal Entomological Society, 2010.
- Regional winner of the Biotechnology Young Entrepreneurs Scheme (Biotech YES), 2009.
- Best oral presentation at ENTO'09 the annual meeting of the Royal Entomological Society, 2009.
- Best poster presentation at ENTO'08 the annual meeting of the Royal Entomological Society, 2008.
- Distinction award for M.Sc. Biology and Control of Disease Vectors, London School of Hygiene and Tropical Medicine, 2006.
- Ellis Wyn Knight Jones prize in Zoology for outstanding performance in an undergraduate degree, University of Wales, Swansea, 2003.

Grants and Funding

- 2015 USDA NIFA Crop Protection and Pest Management grant: A sustainable IPM strategy for the invasive aquatic weed hydrilla. PI Weeks. 3 years. \$248,836.00.
- 2014 Canine Health Foundation Acorn grant: Development of a crack and crevice treatment as an alternative to conventional pesticide applications for the brown dog tick. PI Weeks. 12 months. \$12,960.00.
- 2013 Mosquito Research Foundation: Evaluation of methionine as a larvicide, and its potential for use in mosquito IPM. PI Weeks. 12 months. \$34,704.63.
- 2013 American Kennel Club Canine Health Foundation OAK grant program: Identification of semiochemicals for the prevention of tick-borne disease transmission in dogs. PI Weeks. 24 months. Total \$104,867.31.
- 2012 London School of Hygiene and Tropical Medicine Internal Funding: Semiochemicals of the bed bug, *Cimex lectularius*, for monitoring and control. PI Logan and Cameron. 12 months. Total \$11,267.50.
- 2011 Biotechnology and Biological Sciences Research Follow-on fund Pathfinder award (Author) BB/FOF/PF/21/10 Market analysis and scoping as well as Follow-on fund application preparation in respect of novel bed bug control solutions (€11,782).
- 2010 Ph.D. Extension project, funded by AgriSense BCS Ltd (industrial partner in PhD; €11,388.60).

Invited Presentations

- 2014 Student Symposium at Southeastern Branch Entomological Society of America Greenville, SC.
- 2014 Entomology seminar series. University of Florida.
- 2014 Biological Insect Control: Ready for a Breakthrough symposium at Entomological Society of America Portland, OR.
- 2013 Seminar series. Ross University, St Kitts and Nevis.
- 2012 Entomology seminar series. University of Florida.
- 2012 Medical entomology seminar series. CMAVE/ARS/USDA.
- 2011 Bed Bug Symposium at Entomological Society of America 2011. Reno, Nevada.
- 2011 Royal Entomological Society: Medical and Veterinary Special Interest Group Meeting. London, U.K. (was unable to attend, presentation given by Dr. J. Logan).
- 2010 London School of Hygiene and Tropical Medicine Vector Group Meeting. London, U.K.
- 2009 Meeting to celebrate the work of Prof. Clive Davies. London School of Hygiene and Tropical Medicine, U.K.
- 2009 4TH Integrative Physiology Conference, University of Aberdeen, U.K.
- 2008 Royal Entomological Society: Medical and Veterinary Special Interest Group Meeting. Newcastle University, U.K.

Presentation and Conference Participation

- 2014 80TH Annual Meeting of the American Mosquito Control Association, Seattle, WA. Oral Presentation: "Evaluation of methionine as a larvicide, and its potential for use in mosquito IPM".
- 2014 Southeastern Branch Entomological Society of America, Greenville, SC. Oral Presentation: "Evaluation of methionine as a larvicide, and its potential for use in mosquito IPM".
- 2014 - Extension Professionals Associations of Florida annual meeting, Panama City, FL. Oral Presentation: "On-site training on hydrilla IPM: How to reach diverse audiences"
- 2014 Entomological Society of America, Portland, OR. Poster Presentation: "Non-target organism acute toxicity testing of methionine, a novel mosquito larvicide".
- 2013 Tick-borne disease symposium. UF, Gainesville, FL. Poster presentation: "Brown dog tick research at UF".
- 2013 Tick-borne disease symposium. UF, Gainesville, FL. Poster presentation: "The use of crack and crevice dust treatments for brown dog tick management."
- 2012 Medical, Urban, and Veterinary Entomology section. Entomological Society of America Annual Meeting 2012, Knoxville, Tennessee. Oral presentation: "Sensitivity of the brown dog tick, *Rhipicephalus sanguineus*, to fungal pathogens".
- 2012 Medical, Urban, and Veterinary Entomology section. Entomological Society of America Annual Meeting 2012, Knoxville, Tennessee. Poster presentation: "Spectral sensitivity of a nocturnal mosquito, *Culex quinquefasciatus* (Say)".
- 2010 European Congress of Entomology, Budapest, Hungary. Oral presentation: 'The search for bed bug pheromones: a behavioural and electrophysiological study of the common bed bug, *Cimex lectularius*'.
- 2010 Royal Entomological Society: ENTO'10, University of Wales, Swansea, U.K. Oral presentation: 'The search for bed bug pheromones: a behavioural and electrophysiological study of the common bed bug, *Cimex lectularius*'.
- 2009 Royal Entomological Society: ENTO'09, University of Sheffield, U.K. Oral presentation: 'The search for bed bug pheromones: a behavioural and electrophysiological study of the common bed bug, *Cimex lectularius*'.
- 2009 Royal Entomological Society: Postgraduate Symposium, University of York, U.K. Oral presentation: 'The search for bed bug pheromones: a behavioural and electrophysiological study of the common bed bug, *Cimex lectularius*'.
- 2008 Royal Entomological Society: ENTO'08, University of Plymouth, U.K. Poster presentation: 'Chemical ecology of the bed bug, *Cimex lectularius* (Cimicidae)'.
- 2008 International Congress of Entomology, Durban, South Africa. Poster presentation: 'Chemical ecology of the bed bug, *Cimex lectularius* (Cimicidae).'
- 2008 Royal Entomological Society: Medical and Veterinary Special Interest Group Meeting, Newcastle University, U.K. Invited oral presentation: 'Chemical ecology of the bed bug, *Cimex lectularius* (Cimicidae)'.
- 2006 Royal Society of Tropical Medicine and Hygiene: Research in Progress, Liverpool School of Tropical Medicine, U.K. Poster presentation: 'Sampling triatomines in Guatemala'.

Publications

Peer Reviewed Publications

- Baniszewski, J., E.N.I. Weeks, and J.P. Cuda. 2015. Impact of refrigeration on eggs of the hydrilla tip miner *Cricotopus lebetis* (Diptera: Chironomidae): larval hatch rate and subsequent development. *Journal of Aquatic Plant Management* (in press).
- Carnohan, L.P., P.E. Kaufman, S.A. Allan, S.A. Gezan, and E.N.I. Weeks. 2015. Evaluation of four bed bug traps for surveillance of the brown dog tick (Acari: Ixodidae). *Journal of Medical Entomology*, DOI:10.1093/jme/tju020.
- Weeks, E.N.I., C. Cordon-Rosales, C. Davies, S.A. Gezan, M. Yeo, and M.M. Cameron. 2013. Risk factors for domestic infestation by the Chagas disease vector, *Triatoma dimidiata* in Chiquimula, Guatemala. *Bulletin of Entomological Research*, 103(6): 634-643. doi; 10.1017/S000748531300014X.
- Weeks E.N.I., C. Davies, C. Cordon Rosales, M. Yeo, S.A. Gezan, G. Parra-Henao and M.M. Cameron. 2014. Community-based sampling methods for surveillance of the Chagas disease vector, *Triatoma dimidiata* (Hemiptera: Reduviidae, Triatominae). *Journal of Medical Entomology* 51(5): 1035-1042.
- Weeks, E.N.I., J.G. Logan, M.A. Birkett, J.A. Pickett, and M.M. Cameron. 2012. Tracking bed bugs (*Cimex lectularius*): A study of the effect of physiological and extrinsic factors on the response to bed bug-derived volatiles. *Journal of Experimental Biology* 216: 460-469.
- Weeks, E.N.I., Logan J G, Gezan S A, Woodcock C M, Birkett M A, Pickett J A & Cameron M M (2011) A bioassay for studying the behavioural responses of the common bed bug, *Cimex lectularius* (Hemiptera: Cimicidae) to bed bug-derived volatiles. *Bulletin of Entomological Research* 101 (1): 1-8.
- Weeks, E.N.I., Birkett M A, Cameron M M, Pickett J A & Logan J G (2010) Semiochemicals of the common bed bug, *Cimex lectularius* (Hemiptera: Cimicidae), and their potential for use in monitoring and control. *Pest Management Science*, DOI: 10.1002/ps.2024.
- Logan J G, Cook J I, Stanczyk N M, Weeks E N I, Welham S & Mordue A J (2010) To bite or not to bite! A questionnaire-based survey assessing why some people are bitten more than others by midges. *BMC Public Health*, DOI: 10.1186/1471-2458-10-275.

Extension Publications

- Gillett-Kaufman, J. L., V-U. Lietze, and E. N. I. Weeks. 2014 *Hydrilla Integrated Management Guide*. University of Florida/IFAS. 144 pp.
- Cuda, J. P., B.R. Coon, E. N. I. Weeks, J. L. Gilmore, and T. D. Center. 2014 (revision). *Hydrilla tip mining midge, Cricotopus lebetis*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/aquatic/hydrilla_tip_mining_midge.htm (http://entnemdept.ufl.edu/creatures/aquatic/hydrilla_tip_mining_midge.htm) .

- Habeck, D. H., J. P. Cuda, and E. N. I. Weeks. 2014 (revision). Waterlily leafcutter, *Elophila oblitalis*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/beneficial/leps/waterlily_leafcutter.htm (http://entnemdept.ufl.edu/creatures/beneficial/leps/waterlily_leafcutter.htm) .
- Weeks E. N. I., J. P. Cuda, and M. J. Grodowitz. 2014. Hydrilla stem weevil, *Bagous hydrillae*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/BENEFICIAL/Bagous_hydrillae.htm (http://entnemdept.ufl.edu/creatures/BENEFICIAL/Bagous_hydrillae.htm) .
- Weeks E. N. I., and J.E. Hill. 2014. Grass carp, *Ctenopharyngodon idella*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/BENEFICIAL/MISC/Ctenopharyngodon_idella.htm (http://entnemdept.ufl.edu/creatures/BENEFICIAL/MISC/Ctenopharyngodon_idella.htm) .
- Weeks E. N. I., J. P. Cuda and J. Russell. 2014. Hydrilla leaf mining flies, *Hydrellia* spp. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/BENEFICIAL/hydrilla_leafmining_flies.html (http://entnemdept.ufl.edu/creatures/BENEFICIAL/hydrilla_leafmining_flies.html) .
- Baniszewski J., E. N. I. Weeks, and J. P. Cuda. 2014. Hydrilla leaf cutter moth, *Parapoynx diminutalis*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/BENEFICIAL/Parapoynx_diminutalis.htm (http://entnemdept.ufl.edu/creatures/BENEFICIAL/Parapoynx_diminutalis.htm) .
- Coon B. R., N. E. Harns, M. J. Grodowitz, E. N. I. Weeks, and J. P. Cuda. 2014. *Hydrellia* fly parasitic wasp, *Trichopria columbiana*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/MISC/WASPS/Trichopria_columbiana.htm (http://entnemdept.ufl.edu/creatures/MISC/WASPS/Trichopria_columbiana.htm) .
- Weeks E. N. I. 2014. Hydrilla tuber weevil, *Bagous affinis*. UF/IFAS Entomology and Nematology Featured Creatures. Available at http://entnemdept.ufl.edu/creatures/BENEFICIAL/Bagous_affinis.htm (http://entnemdept.ufl.edu/creatures/BENEFICIAL/Bagous_affinis.htm) .
- Kaufman, P. E., and E. N. I. Weeks. 2013. Cattle grub management. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IN-979/ENY-290. Available at <http://edis.ifas.ufl.edu/in979> (<http://edis.ifas.ufl.edu/in979>) .
- Kaufman, P. E., and E. N. I. Weeks. 2013 (revision). Forced-use dust bags for management of external parasites. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IG-135/ENY-281. Available at <http://edis.ifas.ufl.edu/ig135> (<http://edis.ifas.ufl.edu/ig135>) .
- Kaufman, P. E., and E. N. I. Weeks. 2013 (revision). Pesticide safety around animals. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IG-128/ENY-272. Available at <http://edis.ifas.ufl.edu/ig128> (<http://edis.ifas.ufl.edu/ig128>) .

Kaufman, P. E., and E. N. I. Weeks. 2012. Horn Fly Management. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IN-952/ENY-288. Available at <http://edis.ifas.ufl.edu/in952> (<http://edis.ifas.ufl.edu/in952>) .

Weeks, E. N. I., and P. E. Kaufman. 2012 Mange in Companion Animals. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IN-953/ENY-289. Available at <http://edis.ifas.ufl.edu/in953> (<http://edis.ifas.ufl.edu/in953>) .

Kaufman, P. E., and E. N. I. Weeks 2012 (revision). Stable Fly (Dog Fly) Control. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IG-133/ENY-267. Available at <http://edis.ifas.ufl.edu/ig133> (<http://edis.ifas.ufl.edu/ig133>) .

Weeks, E. N. I., and P. E. Kaufman. 2012 (revision). Self-Treatment Methods for Livestock – Backrubbers. University of Florida EDIS- Electronic Data Information Source. Extension Publication No. IG-134/ENY-279. Available at <http://edis.ifas.ufl.edu/ig134> (<http://edis.ifas.ufl.edu/ig134>) .

Non-Peer Reviewed Publications

Weeks, E.N.I. (2010) Meeting Report: ENTO'10. Antenna: Bulletin of the Royal Entomological Society Summer 2010 34 (3): 134-136.

Weeks, E.N.I. (2010) Meeting Report: ENTO'09 RES National Meeting including Postgraduate Writing and Publishing day and the symposium on Insect Infection and Immunity: Evolution, ecology and Mechanisms. Antenna: Bulletin of the Royal Entomological Society Spring 2010 34 (2): 82-88.