

CURRICULUM VITAE

NAME

Ruth Hufbauer

ADDRESS

Bioagricultural Sciences and Pest Management
College of Agricultural Sciences

Plant Sciences

PHONE

(970) 491-6945

EDUCATION

1999 Ph D, Cornell University

1991 BA, University of California, Berkeley

ACADEMIC POSITIONS

2017-2018 - Professor (College of Agricultural Sciences)

2016-2017 - Professor (College of Agricultural Sciences)

2015-2016 - Professor (College of Agricultural Sciences)

2014-2015 (College of Agricultural Sciences)

2012-2013 (College of Agricultural Sciences)

2011-2012 (College of Agricultural Sciences)

2010-2011 (College of Agricultural Sciences)

2009-2010 (College of Agricultural Sciences)

SABBATICALS

(2009-2010) INRA, France, This sabbatical was supported by Fulbright, and the French Department of Agriculture. I wrote papers, started several fruitful collaborations with French colleagues, and collected field data and samples. It was an invigorating and successful year.

(2016-2017) INRA, I collaborated with colleagues on the recently emerged pest of fruits, *Drosophila suzukii*. We ran experiments on host use, genetics of adaptation, and reconstructing routes of invasion using molecular and statistical tools.

I also wrote up a back-log of papers, and improved my R programming skills.

OTHER POSITIONS

2012 - Present Professor, BSPM, Colorado State University, Fort Collins, CO, United States.

2001 - Present Faculty Member, Graduate Degree Program in Ecology, Colorado State University, United States.

2006 - 2012 Associate Professor, BSPM, Colorado State University, Fort Collins, CO, United States.

2009 - 2010 Full Bright Scholar and INRA visiting scientist, Centre de Biologie et Gestion des Populations, Montpellier, France.

2000 - 2006 Assistant Professor, BSPM, Colorado State University, Fort Collins, CO, United States.

1999 - 2000 Post Doc, Cornell University.

PUBLISHED WORKS

Refereed Journal Articles

- Endriss, S. B., Alba, C., Norton, A. P., Pysek, P., Hufbauer, R. A. (2017). Breakdown of a geographic cline explains high performance of introduced populations of a weedy invader. *Journal of Ecology.*, Peer Reviewed/Refereed
- Fraimout, A., Debat, V., Fellous, S., Hufbauer, R. A., Foucaud, J., Pudlo, P., Marin, J.-M., Price, D. K., Cattell, J., Chen, X., Depra, M., Duyck, P. F., Guedot, C., Kenis, M., Kimura, M. T., Loeb, G., Loiseau, A., Martinez-Sanudo, I., Pascual, M., Richmond, M. P., Shearer, P., Singh, N., Tamura, K., Xuereb, A., Zhang, J., Estoup, A. (2017). Deciphering the Routes of invasion of *Drosophila suzukii* by Means of ABC Random Forest. *MOLECULAR BIOLOGY AND EVOLUTION*, 34(4), 980-996., Peer Reviewed/Refereed
- Szucs, M., Melbourne, B. A., Tuff, T. A., Weiss-Lehman, C., Hufbauer, R. A. (2017). Genetic and demographic founder effects have long-term fitness consequences for colonising populations. *ECOLOGY LETTERS*, 20(4), 436-444., Peer Reviewed/Refereed
- Rogalski, M. A., Gowler, C. D., Shaw, C. L., Hufbauer, R. A., Duffy, M. A. (2017). Human drivers of ecological and evolutionary dynamics in emerging and disappearing infectious disease systems. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 372(1712)., Peer Reviewed/Refereed
- Bitume, E. V., Bean, D., Amanda, S., Hufbauer, R. A. (2017). Hybridization affects life-history traits and host specificity in *Diorhabda* spp. *Biological Control.*, Peer Reviewed/Refereed
- Stewart, G. S.**, Morris, M. R., Genis, A. B., Szucs, M., Melbourne, B. A., Tavener, S. J., Hufbauer, R. A. (2017). The power of evolutionary rescue is constrained by genetic load. *Evolutionary Applications*, 10, 731--741., Peer Reviewed/Refereed
- Weiss-Lehman, C., Hufbauer, R. A., Melbourne, B. A. (2017). Rapid trait evolution drives increased speed and variance in experimental range expansions. *Nature Communications.*, Peer Reviewed/Refereed
- Hufbauer, R. A. (2017). In focus: Admixture is a driver rather than a passenger in experimental invasions. *Journal of Animal Ecology.*, Peer Reviewed/Refereed
- Lucy, F.E., Roy, H., Simpson, A., Carlton, J.T, Hanson, J. M., Magellan, K., Campbell, M. L., Costello, M. J., Pagad, S., Hewitt, C. L., McDonald, J., Cassey, P., Thomaz, S. M., Katsanevakis, S., Zenetos, A., Tricarico, E., Boggero, A., Groom, Q. J., Adriaens, T., Vanderhoeven, S., Torchin, M. E., Hufbauer, R. A., Fuller, P., Carman, M. R., Conn, D. B., Vitule, J. R. S., Canning-Clode, J., Galil, B. S., Ojaveer, H., Bailey, S. A., Therriault, T. W., Claudi, R., Gazda, A., Dick, J. T. A., Caffrey, J., Witt, A., Kenis, M., Lehtiniemi, M., Helmisaari, H., Panov, V. E. (2016). INVASIVESNET towards an International Association for Open

- Knowledge on Invasive Alien Species. *Management of Biological Invasions*, 7(2), 131–139., Peer Reviewed/Refereed
- Estoup, A., Ravnigné, V., Hufbauer, R. A., Vitalis, R., Gautier, M., Facon, B. (2016). Is There a Genetic Paradox of Biological Invasion? *Annual Review of Ecology, Evolution, and Systematics*, 47(1), 51–72. <http://dx.doi.org/10.1146/annurev-ecolsys-121415-032116>, Peer Reviewed/Refereed
- Tayeh, A., Hufbauer, R. A., Estoup, A., Ravnigne, V., Frachon, L., Facon, B. (2015). Biological invasion and biological control select for different life histories. *Nature Communications*, 6. <Go to ISI>://WOS:000357170300005, Peer Reviewed/Refereed
- Migeon, A., Auger, P., Hufbauer, R. A., Navajas, M. (2015). Genetic traits leading to invasion: plasticity in cold hardiness explains current distribution of an invasive agricultural pest, *Tetranychus evansi* (Acari: Tetranychidae). *Biological Invasions*, 17(8), 2275-2285. <Go to ISI>://WOS:000357460000007, Peer Reviewed/Refereed
- Barney, J. N., Tekiela, D. R., Barrios-Garcia, M. N., Dimarco, R. D., Hufbauer, R. A., Leipzig-Scott, P. C., Nunez, M. A., Pauchard, A., Pysek, P., Vitkova, M., Maxwell, B. D. (2015). Global Invader Impact Network (GIIN): toward standardized evaluation of the ecological impacts of invasive plants. *Ecology and Evolution*, 5(14), 2878-2889. <Go to ISI>://WOS:000358452700011, Peer Reviewed/Refereed
- Drew, J. A., Amatangelo, K. L., Hufbauer, R. A. (2015). Quantifying the Human Impacts on Papua New Guinea Reef Fish Communities across Space and Time. *Plos One*, 10(10). <Go to ISI>://WOS:000363183100161, Peer Reviewed/Refereed
- Hufbauer, R. A., Szucs, M., Kasyon, E., Youngberg, C., Koontz, M. J., Richards, C., Tuff, T., Melbourne, B. A. (2015). Reply to Wootton and Pfister: The search for general context should include synthesis with laboratory model systems. *Proceedings of the National Academy of Sciences of the United States of America*, 112(44), E5904-E5904. <Go to ISI>://WOS:000364164900002, Peer Reviewed/Refereed
- Hufbauer, R. A., Szucs, M., Kasyon, E., Youngberg, C., Koontz, M. J., Richards, C., Tuff, T., Melbourne, B. A. (2015). Three types of rescue can avert extinction in a changing environment. *Proceedings of the National Academy of Sciences of the United States of America*, 112(33), 10557-10562. <Go to ISI>://WOS:000359738300100, Peer Reviewed/Refereed
- Hufbauer, R. A., Wilbur, H., Alba, C., Norton, A. P. (2013). The effect of insect herbivory on the growth and fitness of introduced *Verbascum thapsus* L. *NeoBiota*, 19, 21., Peer Reviewed/Refereed
- (2012). A biogeographic comparison of *Verbascum thapsus* ecology reveals differences in performance, herbivory, and surrounding plant community. *Biological Invasions*, 14, 2505-2518., Peer Reviewed/Refereed
- (2012). Anthropogenically-induced adaptation to invade(AIAI: Contemporary adaptation to human-altered habitats within the native range can promote invasions. *Evolutionary Applications*, 5, 89-101., Peer Reviewed/Refereed
- (2012). Combining optimal defense theory and the evolutionary dilemma model to refine predictions regarding plant invasion. *Ecology*, 93, 1912-1921., Peer Reviewed/Refereed
- (2012). Evolution and biological control. *Evolutionary Applications*, 5, 410-423., Peer Reviewed/Refereed
- (2012). Hybridization and invasion: An experimental test with diffuse knapweed (*Centaurea diffusa* Lam). *Evolutionary Applications*, 5, 17-28., Peer Reviewed/Refereed

- (2012). Indirect effects of parasites on invasions. *Functional Ecology*, 26, 1262-1274., Peer Reviewed/Refereed
- (2012). Role of propagule pressure in colonization success: disentangling the relative importance of demographic, genetic and habitat effects. *Journal of Evolutionary Biology* (Submitted, in review, pending revisions)., Peer Reviewed/Refereed
- (2012). The biology of small introduced populations, with special reference to biological control. *Evolutionary Applications*, 5, 424-443., Peer Reviewed/Refereed
- (2012). Timing control efforts to limit seed set of common mullein (*Verbascum thapsus*). *Invasive Plant Science and Management*, 5, 390-394., Peer Reviewed/Refereed
- (2011). An Experimental Examination of the Role of Hybridization in the Invasion of Diffuse Knapweed (*Centaurea diffusa* Lam). *Evolutionary Applications* DOI:10.1111/j.1752-4571.2011.00203.x., Peer Reviewed/Refereed
- (2011). Anthropogenically-induced adaptation to invade (AIAI): Contemporary adaptation to human-altered habitats within the native range can promote invasions. *Evolutionary Applications* DOI:10.1111/j.1752-4571.2011.00211.x., Peer Reviewed/Refereed
- (2011). Applying molecular-based approaches to classical biological control of weeds. *Biological Control*, 58, 21-Jan., Peer Reviewed/Refereed
- (2011). Evolution of growth but not structural or chemical defense in *Verbascum thapsus* (common mullein) following introduction to North America. *Biological Invasions*, 13, 2379-2389., Peer Reviewed/Refereed
- (2011). Inbreeding depression is purged in the invasive insect *Harmonia axyridis*. *Current Biology*, 21, 4-Jan., Peer Reviewed/Refereed
- (2011). Open minded and open access: introducing NeoBiota, a new peer-reviewed journal of biological invasions. *NeoBiota*, 9, 12-Jan., Peer Reviewed/Refereed
- (2011). The benefits of pre-release population genetics: A case study using *Ceutorhynchus scrobicollis*, a candidate agent of garlic mustard, *Alliaria petiolata*. *Biological Control*, 56(65-75)., Peer Reviewed/Refereed
- (2011). Weak or strong invaders? A comparison of impact between the native and invaded ranges of mammals and birds alien to Europe. *Diversity and Distributions*, 17, 663-672., Peer Reviewed/Refereed
- (2010). Assessing genetic diversity of Canada thistle (*Cirsium arvense*) in North America with microsatellites. *Weed Science*, 58, 387- 394., Peer Reviewed/Refereed
- (2010). Hybridization and invasion: one of North America's most devastating invasive plants shows evidence for a history of hybridization. *Evolutionary Applications*, 3, 40-51., Peer Reviewed/Refereed
- (2009). PCR-RFLP assays for discerning three weevil stem feeders (*Ceutorhynchus* spp) (Col. Biocontrol). *Sci Techn*, 19, 999-1005., Peer Reviewed/Refereed
- (2009). The importance of analytical techniques in allelopathy studies with the reported allelochemical catechin as an example. *Biol Invasions*, 11, 325-332., Peer Reviewed/Refereed
- (2008). Biological invasions. *Curr Biol*, 18, R246-R247., Peer Reviewed/Refereed

- (2008). Evidence for multiple introductions of *Centaurea stoebe micranthos* (spotted knapweed, Asteraceae) to North America. *Mol Ecol*, *17*, 4197-4208., Peer Reviewed/Refereed
- (2008). Frequent sexual reproduction and high intraspecific variation in *Salix arctica*. *J Geophys Res-Biogeosci*, *113*., Peer Reviewed/Refereed
- (2008). How do biological control and hybridization affect enemy escape? *Biol Control*, *46*, 358-370., Peer Reviewed/Refereed
- (2008). Inference of allelopathy is complicated by effects of activated carbon on plant growth. *New Phytol*, *178*, 412-423., Peer Reviewed/Refereed
- (2008). Multiple introductions of two invasive *Centaurea* taxa inferred from cpDNA haplotypes. *Divers Distrib*, *14*, 252-261., Peer Reviewed/Refereed
- (2008). When invasion increases population genetic structure. *Biol Invasions*, *10*, 561-572., Peer Reviewed/Refereed
- (2007). Direct and interactive effects of enemies and mutualists on plant performance. *Ecology*, *88*, 1021-1029., Peer Reviewed/Refereed
- (2007). Evaluating host use of an accidentally introduced herbivore on two invasive toadflaxes. *Biol Control*, *41*, 184-189., Peer Reviewed/Refereed
- MacKinnon, D. K., Hufbauer, R. A., Norton, A. P. (2007). Evaluating host use of an accidentally introduced herbivore on two invasive toadflaxes. *Biological Control*, *41*(2), 184-189., Peer Reviewed/Refereed
- (2007). Increased plant size in exotic populations. *Ecology*, *88*, 2758-2765., Peer Reviewed/Refereed
- (2006). A lack of evidence for an ecological role of the putative allelochemical (+/-)-catechin in spotted knapweed invasion success. *J Chem Ecol*, *32*, 2327-2331., Peer Reviewed/Refereed
- (2006). Biotic interactions and plant invasions. *Ecol Lett*, *9*, 726-740., Peer Reviewed/Refereed
- (2006). Nine polymorphic microsatellite markers in *Centaurea stoebe* L [subspecies *C-s stoebe* and *C-s micranthos* (S G Gmelin ex Gugler) Hayek] and *C-diffusa* Lam (Asteraceae). *Mol Ecol Notes*, *6*, 897-899., Peer Reviewed/Refereed
- (2005). Host-plant preference of *Brachypterolus pulicarius*, an inadvertently introduced biological control insect of toadflaxes. *Entomol Exp Appl*, *116*, 183-189., Peer Reviewed/Refereed
- MacKinnon, D. K., Hufbauer, R. A., Norton, A. P. (2005). Host-plant preference of *Brachypterolus pulicarius*, an inadvertently introduced biological control insect of toadflaxes. *Entomologia experimentalis et applicata*, *116*(3), 183-189., Peer Reviewed/Refereed
- (2005). Microevolution in biological control. *Biol Control*, *35*, 227-239., Peer Reviewed/Refereed
- (2005). New techniques and findings in the study of a candidate allelochemical implicated in invasion success. *Ecol Lett*, *8*, 1039-1047., Peer Reviewed/Refereed
- (2005). Pre- and post-introduction patterns in neutral genetic diversity in the leafy spurge gall midge, *Spurgia capitigena* (Bremi) (Diptera). *Biol Control*, *33*, 153-164., Peer Reviewed/Refereed

- Lloyd, C. J., Hufbauer, R. A., Jackson, A., Nissen, S. J., Norton, A. P. (2005). Pre-and post-introduction patterns in neutral genetic diversity in the leafy spurge gall midge, *Spurgia capitigena* (Diptera: Cecidomyiidae). *Biological Control*, 33(2), 153–164., Peer Reviewed/Refereed
- (2004). Microsatellite isolation from the gall midge *Spurgia capitigena* (Diptera). *Mol Ecol Notes*, 4, 605-607., Peer Reviewed/Refereed
- Lloyd, C. J., Norton, A. P., Hufbauer, R. A., Bogdanowicz, S. M., Nissen, S. J. (2004). Microsatellite isolation from the gall midge *Spurgia capitigena* (Diptera: Cecidomyiidae), a biological control agent of leafy spurge. *Molecular Ecology Notes*, 4(4), 605–607., Peer Reviewed/Refereed
- (2004). Observations of sagebrush gall morphology and emergence of *Rhopalomyia pomum* (Diptera). *West N Am Naturalist*, 64, 324-330., Peer Reviewed/Refereed
- (2004). Population genetics of invasions. *Weed Technol*, 18, 1522-1527., Peer Reviewed/Refereed
- (2004). The population genetics of a biological control introduction. *Mol Ecol*, 13, 337-348., Peer Reviewed/Refereed
- (2002). Aphid population dynamics. *Ecol Entomol*, 27, 25-32., Peer Reviewed/Refereed
- (2002). Enantiomeric-dependent phytotoxic and antimicrobial activity of (+/-)-catechin, A rhizosecreted racemic mixture from spotted knapweed. *Plant Physiol (Retracted article See vol 151, pg 967, 2009)*, 128, 1173-1179., Peer Reviewed/Refereed
- (2002). Evidence for nonadaptive evolution in parasitoid virulence following a biological control introduction. *Ecol Appl*, 12, 66-78., Peer Reviewed/Refereed
- (2001). Isolation and characterization of microsatellites in *Aphidius ervi* (Hymenoptera). *Mol Ecol Notes*, 1, 197-199., Peer Reviewed/Refereed

Non-Refereed Journal Articles

- Vahsen, M., Shea, K., Hovis, C. L., Teller, B. J., Hufbauer, R. A. (2018). Prior adaptation, diversity, and introduction frequency mediate the positive relationship between propagule pressure and establishment success. *Biological Invasions.*, Not Peer Reviewed/Refereed
- Szucs, M., Vahsen, M., Hoover, C., Weiss-Lehman, C., Melbourne, B. A., Hufbauer, R. A. (2018). Rapid evolution facilitates the growth and spread of colonizing populations. *Proceedings of the National Academy of Sciences.*, Not Peer Reviewed/Refereed
- Fettig, C. E., Hufbauer, R. A. (2017). Reproductive strategy, performance, and population dynamics of the introduced weed Black Henbane (*Hyoscyamus niger*). *WEED SCIENCE*, 65(1), 83-96., Not Peer Reviewed/Refereed
- Hufbauer, R. A., Fettig, C. E. (2014). Introduced N. American black henbane (*Hyoscyamus niger*) populations are biennial. *Invasive Plant Science and Management.*, Not Peer Reviewed/Refereed
- Turner, K. G., Hufbauer, R. A., Rieseberg, L. H. (2014). Rapid evolution of an invasive weed. *New Phytologist.* *New Phytologist.*, Not Peer Reviewed/Refereed
- Colautti, R. I., Franks, S. J., Hufbauer, R. A., Kotanen, P. M., p. 4. m. (2014). The Global Garlic Mustard Field Survey: challenges and opportunities of a unique, large-scale collaboration for invasion biology. *Neobiota.*,

Not Peer Reviewed/Refereed

- Szűcs, M., Melbourne, B. A., Tuff, T., Hufbauer, R. A. (2014). The roles of demography and genetics in the early stages of colonization. *Proceedings. Biological sciences / The Royal Society*, 281(1792)., Not Peer Reviewed/Refereed
- Alba, C., Bowers, M. D., Blumenthal, D., Hufbauer, R. A. (2014). Chemical and mechanical defenses vary among maternal lines and leaf ages in *Verbascum thapsus* L. (Scrophulariaceae) and reduce palatability to a generalist insect. *PLoS one*, 9(7), e104889., Not Peer Reviewed/Refereed
- Parker, J. D., Torchin, M. E., Hufbauer, R. A., Authors, M. O. (2013). Do invasive species perform better in their new ranges? *Ecology*, 94, 985-994., Not Peer Reviewed/Refereed
- Zelikova, T. J., Hufbauer, R. A., Reed, S. C., Wertin, T., Fettig, C., Belnap, J. (2013). Eco-evolutionary responses of *Bromus tectorum* to climate change: Implications for biological invasions. *Ecology and Evolution*, 3, 1374-1387., Not Peer Reviewed/Refereed
- Kumschick, S., Hufbauer, R. A., Alba, C., Blumenthal, D. M. (2013). Evolution of fast-growing and more resistant phenotypes in introduced common mullein (*Verbascum thapsus*). *Journal of Ecology*, 101, 378-387., Not Peer Reviewed/Refereed
- Tayeh, A., Estoup, A., Hufbauer, R. A., p. 5. o. (2013). Investigating the genetic load of an emblematic invasive species: The case of the invasive harlequin ladybird *Harmonia axyridis*. *Ecology and Evolution*, 3, 864-871., Not Peer Reviewed/Refereed
- Gaskin, J. D., Hufbauer, R. A., Bogdanowicz, S. M. (2013). Microsatellite markers for Russian olive (*Elaeagnus angustifolia*; Elaeagnaceae). *Applications in Plant Sciences*, 1., Not Peer Reviewed/Refereed
- Hufbauer, R. A., Rutschmann, A., Serrate, B., Vermeil de Conchard, H., Facon, B. (2013). Role of propagule pressure in colonization success: disentangling the relative importance of demographic, genetic and habitat effects. *Journal of Evolutionary Biology*, 26, 1691-1699., Not Peer Reviewed/Refereed

Non-Refereed Proceedings or Transactions

- MacKinnon, D., Hufbauer, R. A., Norton, A. P. (2002). Preference of a biological control agent of toadflaxes. *The 2002 ESA Annual Meeting and Exhibition.:* The 2002 ESA Annual Meeting and Exhibition., Not Peer Reviewed/Refereed

Abstract

- Hufbauer, R. A., Norton, A. P., MacKinnon, D. (2001). *Population structure of an introduced beetle on its host plants, Linaria dalmatica and L. vulgaris.*: Entomological Society of America Annual Meeting., Not Peer Reviewed/Refereed

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

- 2017, "Eco-evolutionary dynamics of small populations in novel habitats: extinction or persistence?", Department seminar series, University of Minnesota.
- 2017, "Is evolution a driver or passenger of biological invasions?", Department seminar series, Centre pour le biologie et gestion des populations. INRA, France.
- 2017, "Small populations in novel habitats: extinction risk, genetic load and adaptation.", Department seminar

series, CIRAD.

- 2017, "Small populations in novel habitats: extinction risk, genetic load and adaptation", Departmental seminar series, Université Libre de Bruxelles.
- 2017, "Rapid adaptive and spatial evolution drive range expansion of colonizing populations", Ecological Society of America Annual Meeting, (Presenter) Vahsen, M.
- 2017, "Rapid adaptive evolution drives population size and invasion speed", Entomological Society of America Annual Meeting, (Presenter) Hufbauer, R. A.
- 2017, "Rôle de l'évolution dans la prolifération des espèces.", French National Academy of Agricultural Sciences., French National Academy of Agricultural Sciences.
- 2017, "Diversity and inclusion in academia", Special seminar, University of Minnesota.
- August 2017, "Predicting the next high-impact insect invasion", John Wesley Powell Center for Analysis and Synthesis Seminar Series, Powell Center, (Presenter) Mech, A.
- 2016, "Diversifying academia (white) women and underrepresented minorities", Cohort 2 of the Institute for Inclusive Excellence, Colorado State University.
- 2016, "Small populations in novel habitats: extinction risk, inbreeding depression, and adaptation", Departmental Seminar Series, Dept. of Entomology, Washington State University.
- 2016, "The paradox of invasions: how do they do it?", E Paul Catts Memorial Public Lecture, Washington State University.
- 2016, "Diversifying academia: (white) women and underrepresented minorities.", Invited seminar, Department of Biology, Colorado State University.
- 2016, "Diversity in academia where we are, why it matters, and some paths forward.", Invited seminar, Department of Soil and Crop Sciences, Colorado State University.
- 2016, "The almost flipped classroom", Master Teacher Workshop, Colorado State University.
- 2016, "Eco-evolutionary dynamics of small populations in novel habitats", Seminars in Ecology and Evolution, CNRS, France.
- 2016, "Ignite: Diversity", SoGES Biodiversity group Ignite talks, SoGES, Colorado State University.
- October 13, 2016, "Does leaf morphology differ between native and introduced populations of common mullein?", 2016 Murray Honors Special Research Poster Session, Colorado State University.
- September 21, 2016, "Do native and introduced populations differ in how they defend their leaves?", Bioagricultural Sciences and Pest Management Department Seminar, Department of Bioagricultural Sciences and Pest Management, Colorado State University.
- September 17, 2016, "Do native and introduced populations differ in how they defend their leaves?", Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBS).
- April 18, 2016, "Does leaf morphology differ between native and introduced populations of common mullein?", Celebrating Undergraduate Research and Creativity (CURC) Showcase, Colorado State University.

February 24, 2016, "Plant invasions as a novel approach for testing plant defense theory", 22nd Front Range Student Ecology Symposium (FRSES), Colorado State University.

February 3, 2016, "Creating a sustainable food future in the face of increasing environmental stress", College of Agricultural Sciences Research Seminar Series.

December 2015, "Small populations in novel habitats: extinction risk, inbreeding depression and adaptation", INRA.

November 2015, "Plant plasticity in response to insect herbivory differs between native and introduced populations of *Verbascum thapsus*", 2015 Annual Meeting of the Entomological Society of America, Entomological Society of America, (Presenter) Endriss, S. B.

November 2015, "Are there predictable differences in how plants defend their leaves?", Graduate Student Showcase, Colorado State University.

October 2015, "Diversifying Academia", BSPM Departmental Seminar Series, BSPM.

September 2015, "The roles of multiple components of propagule pressure in predicting invasion success", 13th International Conference, Ecology and Management of Alien Plant Invasions.

August 2015, "Floral plasticity in response to herbivory differs between native and introduced plant populations", 2015 Annual Meeting of the Ecological Society of America, Ecological Society of America, (Presenter) Endriss, S. B., peer-reviewed/refereed.

August 2015, "A continent-scale field survey of a global plant invader", Ecological Society of America Annual Meeting, (Presenter) Hufbauer, R. A.

August 13, 2015, "Parsing propagule pressure: The effects of multiple aspects of propagule pressure on the success of an invasive species", Ecological Society of America Annual Meeting, Baltimore Convention Center.

August 12, 2015, "Both direct and indirect effects of human population pressure structure Papua New Guinea coral reef fish communities", Ecological Society of America Annual Meeting, Baltimore Convention Center.

August 12, 2015, "The demographic legacy of founding events revealed by fitting population models to experimental data on growth rates and spread", Ecological Society of America Annual Meeting, Baltimore Convention Center.

August 11, 2015, "Founder effects have long-term fitness effects on colonizing populations", Ecological Society of America Annual Meeting, Baltimore Convention Center.

May 5, 2015, "Hitting moving restoration targets: Using plant traits and geographic origin to predict population-level climate (CO₂ and temperature) responses", Forest and Rangeland Stewardship Departmental Seminar, Colorado State University.

April 2015, "Rescuing populations from extinction using migration: insights from a model system", University of Wyoming.

February 25, 2015, "Floral attractiveness differs between native and introduced *Verbascum thapsus* populations", Graduate Student Showcase, Colorado State University.

December 2014, "The Global Invasions Research Coordination Network", Cary Institute Workshop on Grassroots Networks, Cary Institute, New York.

2014, "Rescuing populations from extinction using migration: insights from a model system", departmental seminar series, Denver University, Denver University.

September 2014, "Roles of demography and genetics in the founding of new populations", Global Garlic Mustard Field Survey Meeting, NSF Research Coordination Network, Detroit, MI.

September 2014, "Rescuing populations from extinction using migration: insights from a model system", Guild of Rocky Mountain Ecologist and Evolutionary Biologists, Pingree Park, CO.

September 21, 2014, "Does a shift from specialist to generalist herbivory drive evolution of North American populations of *Verbascum thapsus*?", Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBs), Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBs), (Presenter) Endriss, S. B., Bellvue, CO.

August 2014, "THE INITIAL AND LONG-TERM CONSEQUENCES OF MULTIPLE INTRODUCTIONS FOR COLONIZING INDIVIDUALS", Ecological Society of America, (Presenter) Koontz, M., Sacramento, CA.

August 13, 2014, "The role of different enemy regimes in the evolution of North American versus European *Verbascum thapsus*", Ecological Society of America Annual Meeting, Ecological Society of America, (Presenter) Endriss, S. B., Sacramento CA.

May 22, 2014, "Are differences between populations of *Verbascum thapsus* explained by a shift from specialist to generalist herbivores?. Poster presentation", 4th International Symposium on Weeds and Invasive Plants, (Presenter) Endriss, S. B., Montpellier, France.

May 22, 2014, "Leaf traits associated with rapid resource acquisition and growth are greater in native than introduced genotypes of an invasive weed", 4th International Symposium on Weeds and Invasive Plants, (Presenter) Alba, C., Montpellier, France.

February 2014, "Rescuing populations from extinction using genetic and demographic inputs: insights from a model system", departmental seminar series, Toronto, CA.

February 19, 2014, "Does the relative composition of specialist versus generalist enemies drive evolution? A reciprocal common garden experiment using *Verbascum thapsus*", Front Range Student Ecology Symposium, Colorado State University, (Presenter) Endriss, S. B., Fort Collins.

2013, "The role of rescue effects in invasion and biological control", Entomological Society of America, Austin, TX.

September 2013, "Genetic, demographic, and evolutionary rescue", departmental seminar series, University of Arkansas, Fayetteville.

April 2013, "Founding a new population: a how-to-guide", Ignite Biodiversity, SOGES, Fort Collins, CO.

2012, "Fettig, C. and Hufbauer, R. 2012. Biology and management of black henbane: Is it a threat? Annual meeting of the Colorado Weed Managers Association, December 5, 2012. Grand Junction, CO.

[Oral presentation, not judged]".

2012, "Fettig, C. and Hufbauer, R. 2012. Life history, reproductive strategy, and population dynamics of black henbane (*Hyoscyamus niger*), a toxic plant introduced to North America. Ecological Society of America Annual Meeting, August 6, 2012. Portland, OR.", peer-reviewed/refereed.

2012, "Hufbauer, RA. Evolutionary ecology and biological control. BSPM Stakeholder Meeting".

2012, "Turner, KG, Freville H, Hufbauer RA, Rieseberg LH. Invasive weed demonstrates phenotypic differentiation between ranges in multiple common gardens.", peer-reviewed/refereed.

2011, "Are invaders different: comparing performance metrics among some of the world's worst invaders in their home and away range. JD Parker, M Torchin, RA Hufbauer. Ecological Society of America Annual Meeting."

2011, "Comparing early seedling growth of *Centaurea stoebe* from European (native), western North American and eastern North American seed sources. E Lowry, J Gurevitch, K Wojtas, RA Hufbauer, R. Sforza. Ecological Society of America Annual Meeting."

2011, "Inbreeding depression and the purging of deleterious alleles: Consequences for population founding and biological invasions. RA Hufbauer, B Facon, A Estoup, M Szücs. University of Colorado, Boulder, Department of Biology."

2011, "Inbreeding, outbreeding and biological invasions. RA Hufbauer. University of California, Davis."

2011, "Phenotypic variation in an invasive weed across multiple common gardens. KG Turner, RA Hufbauer, LH Rieseberg. Ecological Society of America Annual Meeting."

2011, "The consequences of inbreeding and propagule size for the founding of populations. RA Hufbauer, M Szucs, B

Facon. International Symposium on the Biological Control of Weeds, 2011."

2011, "The roles of genetics and demography in the success of classical biological. RA Hufbauer, X Fauverge, E Vercken, and T Malausa. Entomological Society of America, Symposium on Evolution and Biological control."

2011, "The usefulness of biogeographic comparisons for prioritizing experimental work on plant invasions: an example with *Verbascum thapsus* (common mullein). CA Alba, RA Hufbauer. Ecological Society of America Annual Meeting."

2011, "Weak or strong invaders? A comparison of impact between the native and invaded ranges of mammals and birds alien to Europe. S Kumschick, CA Alba, RA Hufbauer, W Nentwig. Ecological Society of America Annual Meeting."

2010, "Alba CM and Hufbauer RA. A biogeographic comparison of the ecology of *Verbascum thapsus* (common mullein) with particular emphasis on patterns of herbivore attack. Denver Museum of Natural History Research Symposium"

2010, "Alba CM and Hufbauer RA. Ontogenetic change in herbivore defenses in the introduced weed *Verbascum thapsus*. Poster presentation (3rd Place Winner), Front Range Student Ecology Symposium. February.", peer-reviewed/refereed.

2010, "Alba CM and Hufbauer RA. Ontogenetic variation in herbivore defenses of the introduced weed *Verbascum thapsus* (common mullein). Ecological Society of America Annual Meeting. August."

2010, "Alba CM and Hufbauer RA. The evolutionary ecology of *Verbascum thapsus* (common mullein) invasion in North America. Global Invasions Network Annual Meeting, Panama City, Panama. October".

2010, "Alba CM and Hufbauer RA. *Verbascum thapsus* invasion: Is there evidence for

enemy release? CAB International, Delémont Switzerland".

2010, "Hufbauer RA and AC Blair. A tale of two knapweeds on two continents: hybridization, invasion, and plant-insect interactions. Bern Switzerland."

2010, "Hufbauer RA, AC Blair. Hybridization, invasion, and biological control : a tale of two knapweeds. INRA, Sophia, France. April."

2010, "Hufbauer, RA. My sabbatical year in France - inbreeding, invasions, and incredible wine. BSPM Seminar Series. November."

2010, "Wilbur, H, Hufbauer, RA, and Alba, CM The effect of insect herbivory on the performance of the non-native plant common mullein (*Verbascum thapsus*). Western Society of Weed Scientists, March 8-11, 2010.", peer-reviewed/refereed.

OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD

(December 2014 - December 2015). Faculty Internship, "Institute for Inclusive Excellence," Colorado State University, United States. Approximate Number of Hours Spent Per Year: 50.

(May 2015). Professional Meeting, "National Conference on Race and Ethnicity in Higher Education," Washington, DC, United States. Approximate Number of Hours Spent Per Year: 40.

(October 25, 2014 - October 27, 2014). Workshop, "FastTrack Leadership Intensive," FastTrack Leadership, Chapel Hill, North Carolina, United States. Approximate Number of Hours Spent Per Year: 32.

TEACHING:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Enrollment</u>
2017	Fall	ECOL799 - Dissertation	87	27
2017	Fall	BSPM500 - Foundations of Bioagricultural Sciences	2	8
2017	Fall	ECOL592 - Interdisciplinary Seminar in Ecology	11	11
2017	Spring	ECOL799 - Dissertation	86	23
2017	Spring	ECOL699 - Thesis	36	8
2016	Fall	ECOL799 - Dissertation	18	17
2016	Fall	ECOL699 - Thesis	18	9
2016	Spring	ECOL799 - Dissertation	18	21
2016	Spring	LIFE320 - Ecology	3	118
2016	Spring	LIFE320 - Ecology - Honors	3	8
2016	Spring	BZ496 - Group Study—Biology	3	0
2015	Fall	ECOL799 - Dissertation	18	26
2015	Fall	BSPM581A1 - Fundamentals of Bioag Sciences and Pest Mgmt	2	9

2015	Spring	ECOL799 - Dissertation	18	22
2015	Spring	LIFE320 - Ecology	3	131
2015	Spring	LIFE320 - Ecology - Honors	3	8
2015	Spring	NSCI496 - Group Study-Natural Sciences	3	8
2015	Spring	ECOL592 - Interdisciplinary Seminar in Ecology	3	11
2015	Spring	NSCI487 - Internship-Natural Sciences	6	1
2014	Fall	BSPM581A1 - Fundamentals of Bioag Sciences and Pest Mgmt	2	12
2014	Fall	ECOL698 - Research	18	63
2014	Spring	ECOL799 - Dissertation	18	29
2014	Spring	BSPM495 - Independent Study	3	5
2014	Spring	ECOL592 - Interdisciplinary Seminar in Ecology	3	16
2014	Spring	ECOL698 - Research	18	46
2013	Fall	BSPM592 - BSPM Foundations	2	7
2013	Fall	ECOL799 - Dissertation	18	27
2013	Fall	ECOL592 - Interdisciplinary Seminar in Ecology	3	12
2013	Fall	ECOL592 - Natural Selection	1	15
2013	Fall	ECOL698 - Research	18	55
2013	Fall	BSPM592 - Seminar BSPM Foundations	3	7
2013	Fall	ECOL699 - Thesis	18	13
2013	Summer	LIFE320 - Ecology	3	30
2013	Summer	BSPM495 - Independent Study	3	1
2013	Spring	LIFE320 - Ecology	3	129
2013	Spring	LIFE320 - Ecology - Honors	3	15
2013	Spring	BSPM495 - Independent Study	3	9
2013	Spring	BSPM698 - Research	18	9
2013	Spring	BSPM798 - Research	18	8
2012	Fall	BSPM495 - Independent Study	3	6
2012	Fall	ECOL698 - Research	18	55
2012	Fall	BSPM592 - Seminar BSPM Foundations	3	11
2012	Summer	LIFE320 - Ecology	3	15
2012	Spring	LIFE320 - Ecology	3	126
2012	Spring	LIFE320 - Ecology - Honors	3	9
2012	Spring	BSPM698 - Research	18	10
2012	Spring	BSPM584 - Supervised College Teaching	3	1
2011	Fall	ECOL592 - Interdisciplinary Seminar in Ecology	3	12
2011	Fall	BSPM698 - Research	18	9
2011	Fall	ECOL698 - Research	18	45
2011	Spring	ECOL571 - Advanced Topics in Ecology	3	24
2011	Spring	ECOL571 - Advanced Topics in Ecology	3	26
2011	Spring	ECOL799 - Dissertation	18	12
2011	Spring	LIFE320 - Ecology	3	108
2011	Spring	LIFE320 - Ecology - Honors	3	5
2011	Spring	BSPM698 - Research	18	12
2010	Fall	ECOL799 - Dissertation	18	18
2010	Fall	BSPM698 - Research	18	18
2010	Fall	ECOL698 - Research	18	41
2010	Spring	ECOL799 - Dissertation	18	14
2010	Spring	BSPM798 - Research	18	10
2010	Spring	ECOL698 - Research	18	27
2009	Fall	ECOL799 - Dissertation	18	15
2009	Fall	ECOL698 - Research	18	42
2009	Spring	ECOL799 - Dissertation	18	16

2009	Spring	LIFE320 - Ecology	3	97
2009	Spring	LIFE320 - Ecology - Honors	3	7
2008	Fall	ECOL799 - Dissertation	18	12
2008	Fall	ECOL698 - Research	18	34
2008	Spring	BSPM380A1 - Invasion Biology	3	8
2008	Spring	BSPM380A1 - Invasion Biology-Recitation	0	8
2008	Spring	BSPM798 - Research	18	10
2008	Spring	ECOL698 - Research	18	27
2007	Fall	BSPM798 - Research	18	8
2007	Fall	ECOL698 - Research	18	24
2007	Fall	BSPM784 - Supervised College Teaching	3	2

Guest Lectures:

<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	<u># of Guest Lectures</u>	<u>Delivery Mode</u>
2016	Spring	Seminar in Animal Reproduction and Biotechnology	1	Face to Face
2014	Spring	Life Science-LIFE320 - Ecology	1	Face to Face
2014	Spring	Life Science-LIFE320 - Ecology	1	Face to Face

Evidence of Teaching Effectiveness (Annual Input)

Student Course Surveys

Fall 2014, BSPM 581A1–Fundamentals of Bioag Sciences and Pest Mgmt
[Jahn Courtney and Hufbauer Ruth BSPM 580A1 FA14-1.docx](#)

Other Evidence

Fall 2017, BSPM 500–Foundations of Bioagricultural Sciences

Fall 2017, ECOL 592–Interdisciplinary Seminar in Ecology

Fall 2013, BSPM 592–BSPM Foundations

Fall 2013, ECOL 592–Natural Selection

Spring 2013, LIFE 320–Ecology

Fall 2012, BSPM 592–Seminar BSPM Foundations

Tenure and Promotion Evidence of Teaching Effectiveness (Tenure and Promotion Input)

Development of New Courses

Development of New Teaching Techniques

Integration of Service Learning

Conference/Workshop Assessments

2016 - I led a master teacher workshop, which I entitled: The Almost Flipped Classroom

Participation in Professional Development Activities Related to Teaching

Training on use of the symposium

I regularly attend the master teacher workshops

As noted elsewhere, I participated in the Institute for Inclusive Excellence teacher training.

Professional Consultation Related to Teaching

Other Evidence

EXTENSION/ENGAGEMENT ACTIVITIES/ACCOMPLISHMENTS

Presentation

Arthropods. Youth, Fort Collins, CO. Number of times program was made: 2. Total number of participants: 12. Percent Responsible: 100%. 2014.

COMMITTEES

Committee on Faculty Governance, (August 2017 - Present).

Standing Committee on the Status of Women Faculty, (December 2016 - Present).

GDPE Research Grant Proposal review committee, (September 2017 - October 2017).

Graduate Degree Program in Ecology Academic Committee, (2013 - 2016).

Graduate Women In Science, Colorado State Chapter, (2015).

Faculty Honors Council, (October 2012 - September 2015).

Graduate Degree Program in Ecology, Small Grants Committee, (2014).

Women in Ag, (January 2018 - Present).

CAS Diversity Catalyst Team, (October 2017 - Present).

Taskforce on Increasing Graduate Student Diversity, (October 2015 - August 2017).

AES Deputy Director Search Committee, (2012 - 2013).

Executive Committee, (August 2017 - Present).

Education Committee, (2015 - 2016).

Executive Committee, (2014 - 2016).

Strategic Vision Committee, (October 2015 - May 2016).

Education Committee, (2013 - 2014).

Plant Evolutionary Genetics search committee, (2013).

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Ecological Society of America. (2011 - Present).

Society for the study of evolution (SSE). (2010 - Present).

Entomological Society of America. (1999 - Present).

European Society of Evolutionary Biology. (2010).

Colorado Arts and Sciences Magazine.

The People Behind the Science.

Science.

Science Magazine.

Science Daily.

Program Organizer, First International Congress of Biological Control. (2017 - Present).

Reviewer, Ad Hoc Reviewer, Manuscript reviewer - multiple journals. (2000 - Present).

Session Chair, Society for the Study of Evolution, American Society of Naturalists, European Society for Evolutionary Biology Joint Meeting, Montpellier. (2017 - 2018).

Reviewer, Grant Panel, National Science Foundation. (2017).

Reviewer, Grant Panel, NSF Graduate Research Fellowship. (2016).

Reviewer, Ad Hoc Reviewer, USDA AFRI. (2016).

Editor, Associate Editor, Ecological Applications. (2010 - 2016).

Member, INRA Dissertation Jury, Sophia-Antipolis. (2015).

Reviewer, Ad Hoc Reviewer, Deutsche Forschungsgemeinschaft, Halle. (2014).

Reviewer, Grant Panel, Fulbright Foundation. (2014).

Reviewer, Grant Panel, USDA NIFA Biotechnology Risk Assessment Research. (2014).

Reviewer, Grant Panel, USDA NIFA Integrated Pest Information Platform for Extension and Education (iPiPE). (2014).

Reviewer, Grant Panel, USDA NIFA Integrated Pest Information Platform for Extension and Education (iPiPE). (2014).

Editor, Associate Editor, Invasive Plant Science and Management. (2010 - 2014).

Reviewer, Ad Hoc Reviewer, NSF Division of Environmental Sciences. (2010 - 2013).

Colorado Weed Managers Association. (2012).

Member, European Society of Evolutionary Biology. (2010).

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH

Academic, University of Wyoming, Laramie, Wyoming, United States. (April 2015 - December 2015).

Recommender, Peer Community in Ecology. (2018 - Present).

Managing Board and Recommender, Peer Community in Evolutionary Biology. (2017 - Present).

guest speaker at a meeting, Graduate Women in Science, National Organization. (2015).

Panel Leader, USDA ARS Crop Protection and Quarantine, Biological control. (2015).

Leader, Global Invasions Research Coordination Network. (April 2005 - October 2014).

coordinating with an educational organization, Butterfly Pavillion, Colorado. (2017 - 2018).

volunteer, Advanced Math Program, Poudre Schools, Fort Collins, Colorado. (2012 - 2016).

volunteer, Bennett Elementary, Fort Collins, Colorado. (2015).

Hearts in Hand Childhood Education Center. (2012 - 2014).

Rivendell School. (2011 - 2013).

Rivendell School. (2010).
