

*Curriculum Vitae*  
**GARETH S. POWELL, PHD**

Entomology Section, Division of Plant Industry, Florida Department of Agriculture and Consumer  
Services 1911 SW 34<sup>th</sup> St, Gainesville, FL, 32608  
(317) 376-0881 • Gareth.Powell@fdacs.gov  
ORCID: 0000-0003-0847-2718

**CURRENT POSITION**

---

**Research Curator, Coleoptera & Odonata** Aug 2022 – present  
**Research Scientist I**  
Entomology Section, Division of Plant Industry, Florida Department of Agriculture and Consumer  
Services.

**EDUCATION**

---

<b>Ph.D. Biology</b>	<b>2021</b>	<b>Brigham Young University</b>
Dissertation: <i>Phylogeny and visual system evolution in Sap Beetles (Coleoptera: Cucujoidea: Nitidulidae)</i>		
<b>M.Sc. Entomology</b>	<b>2017</b>	<b>Purdue University</b>
Thesis: <i>Global phylogenetic framework and revised classification for the Carpophilinae (Coleoptera: Cucujoidea: Nitidulidae)</i>		
<b>B.Sc. Entomology</b>	<b>2012</b>	<b>Purdue University</b>
Capstone: <i>Comparison of Saproxylic Coleoptera in forest fragments on Golf Courses</i>		

**RELEVANT WORK EXPERIENCE**

---

**Postdoctoral Research Fellow.** Department of Biology, BYU: Dec 2021 – Aug 2022  
*Using Anchored Hybrid Enrichment data to elucidate the evolutionary history of Cucujoidea and assess the shifts in color visual systems associated with changes in feeding behavior.*

**PhD Candidate Graduate Research Assistant.** Department of Biology, BYU: 2019 – 2021

**Lab Manager.** Department of Biology, BYU: Jan 2019 – May 2021

**Graduate Teaching Assistant.** Department of Biology, BYU: 2018 – 2020

**Graduate Research Assistant.** Department of Biology, BYU: 2017 – 2019

**Graduate Research Assistant.** Entomology Systematics Lab, Purdue: Aug 2015 – May 2017

**Lab Technician.** Entomology Systematics Lab, Purdue: May 2015 – Aug 2015, Jan 2013 – Aug 2014

**Curatorial Assistant.** Purdue Entomological Research Collection: Aug 2013 – May 2015

**Lab Technician.** Insect Ecology Lab, Purdue: Jun 2012 – Jan 2013

**Insect Identifier.** Entomology Extension, Purdue: 2010 – 2013 (summers only)

**Bed Bug Research Assistant.** Urban Entomology Lab, Purdue: Feb 2012 – Sep 2012

**Nematology Field and Lab Technician.** Purdue: Mar 2011 – Aug 2011

**Crop Protection Lab Undergraduate Assistant.** Purdue: Aug 2009 – Jan 2010

**Undergraduate Assistant.** Purdue Entomological Research Collection: Jan 2009 – Aug 2010

**Turf Entomology Undergraduate Assistant.** Purdue: Aug 2008 – Jan 2009

## PROFESSIONAL AFFILIATIONS

---

**Collections Associate.** Field Museum of Natural History (FMNH) 2019 – present

**Research Associate.** Florida State Collection of Arthropods (FSCA) 2014 – 2022

**Research Associate.** Purdue Entomological Research Collection (PERC) 2017 – present

## PEER REVIEWED PUBLICATIONS

---

\*Student mentee coauthors are marked with an asterisk

### In Review/Accepted

43. Sharon Reed, David Dutkiewicz, Fiona Ross, Jennifer Llewellyn, Hannah Fraser, **Gareth S. Powell.** (in review). New records of Nitidulidae (Coleoptera) species in Canada, Ontario, and Manitoba. *Zookeys*.
42. **Gareth S. Powell**, Natalie A. Saxton, Alexandra G. Duffy, Stephen L. Cameron, Andrew R. Cline, Thomas C. McElrath, Matthew L. Gimmel, Jerald B. Johnson, Richard A.B. Leschen, Paul E. Skelley, Seth M. Bybee, Nicole L. Gunter. (in review). Repeated feeding guild evolution: the impact of competition on diversification. *Evolution*.
41. Natalie A. Saxton, Kyle E. Schnepf, **Gareth S. Powell.** (in review). Annotated catalogue of fossil Meloidae (Insecta: Coleoptera: Tenebrionioidea). *European Journal of Taxonomy*.
40. **Gareth S. Powell**, Brandon D. Pickett, Gavin J. Martin, Michael F. Whiting, Perry G. Ridge, and Seth M. Bybee. (accepted pending revisions). TANOS: Taxon jackknife for nodal stability with genomic data. *BMC Bioinformatics*.
39. Adam R. Salyer, Gary Bennett, and **Gareth S. Powell.** (in revision). Differential Non-nestmate Aggression Between Black Carpenter Ant, *Camponotus pennsylvanicus* (Hymenoptera: Formicidae) Colonies. *Annals of the Entomology Society of America*.
38. **Gareth S. Powell** and Lauren M. Weidner. (Accepted pending revisions). Forensically important Sap beetles (Coleoptera: Nitidulidae) of North America. *Journal of Forensic Entomology*.

### Published/In Press

37. **Gareth S. Powell**, Natalie A. Saxton, Yelena M. Pacheco\*, Kathrin F. Stanger-Hall, Gavin J. Martin, Dominik Kusy, Luiz F.L. Da Silveira, Ladislav Bocak, Marc A. Branham, Seth M. Bybee. 2022. Beetle bioluminescence outshines aerial predators. *Proceedings of the Royal Society B*, 289(1979): 20220821 1–9.
36. **Gareth S. Powell** and Seth M. Bybee. 2022. All the better to see flowers with: Can eye size be driven by feeding behavior? *Systematic Entomology*, <https://doi.org/10.1111/syen.12558>
35. Kyle E. Schnepf, R. Michael Brattain, and **Gareth S. Powell.** 2021. Survey of the beetles (Insecta: Coleoptera) in several natural areas across Indiana, U.S.A. *The Great Lakes Entomologist*, 54(3–4): 143–187.
34. Laura N. Sutherland\*, Kyle E. Schnepf, **Gareth S. Powell**, Seth M. Bybee. 2021. Phylogenetic placement of the Plesioclytini (Coleoptera: Cerambycidae: Cerambycinae). *Diversity*, 13(597): 1–8. (Diversity and Evolution of Coleoptera special collection).
33. Jhimik Dasgupta, Tarun Kumar Pal, **Gareth S. Powell.** 2021. Taxonomy of Carpophilinae (Coleoptera: Nitidulidae) from Tripura, India with a new species. *Annales Zoologici*, 71(3): 627–649.
32. Laura N. Sutherland\*, **Gareth S. Powell**, and Seth M. Bybee. 2021. Validating species distribution models to illuminate coastal fireflies in the South Pacific (Coleoptera: Lampyridae). *Scientific Reports*, 11(17397) 1–12.
31. Natalie A. Saxton\*, Erica M. Paxman\*, Abigail M. Dean\*, Colin R. Jensen\*, **Gareth S. Powell**, Seth M. Bybee. 2021. Factors influencing the distribution of endemic insects: *Vanuatubasis* (Odonata: Coenagrionidae) in the South Pacific with notes on natural history. *Insects*, 12(670): 1–11. (Ecology and Biology of Aquatic Insects special collection).

30. Camilla R. Sharkey, **Gareth S. Powell**, Seth M. Bybee. 2021. Opsin evolution in flower-visiting beetles. *Frontiers in Ecology and Evolution*, 9(676369) 1–9.
29. Lauren M. Weidner and **Gareth S. Powell**. 2021. Key to the forensically important beetle (Insecta: Coleoptera) families of North America. *The Journal of Forensic Science Education*, 3(1): 1–13.
28. Courtney L. DiLorenzo\*, **Gareth S. Powell**, Andrew R. Cline, and Joseph V. McHugh. 2021. Carpophiline-ID: An interactive matrix-based key to the carpophiline sap beetles (Coleoptera, Nitidulidae) of Eastern North America. *Zookeys*, 1028: 85–93.
27. **Gareth S. Powell** and Andrew R. Cline. 2021. The first Cillaeinae (Coleoptera: Nitidulidae: Cillaeinae) described from amber. *Annals Zoologici*, 71(1): 21–26.
26. **Gareth S. Powell** and Paul E. Skelley. 2021. Review of *Myceporthus* Skelley and Powell, 2018 (Coleoptera: Erotylidae). *Insect Systematics and Evolution*, 52(2021): 501–523.
25. **Gareth S. Powell** and Kyle E. Schnepf. 2020. Review of *Carpophilus* (*Ecnomorphus*) Motschulsky, 1858 (Coleoptera: Nitidulidae: Carpophilinae) in the West Indies. *Insecta Mundi*, 0840: 1–8. (Michael C. Thomas Festschrift Special Issue).
24. Natalie A. Saxton\*, **Gareth S. Powell**, and Seth M. Bybee. 2020. Prevalence of leg regeneration in damselflies reevaluated: A case study in Coenagrionidae. *Arthropod Structure and Development*, 59(100995): 1–6.
23. Gavin J. Martin and **Gareth S. Powell**. 2020. Type designations for fireflies (Coleoptera: Lampyridae) of the Biologia Centrali Americana Gorham, 1881 housed in the Natural History Museum, London. *Zootaxa*, 4808(2): 384–392.
22. **Gareth S. Powell**, Andrew R. Cline, Alexandra G. Duffy, and Jennifer M. Zaspel. 2020. Phylogeny and reclassification of Carpophilinae (Coleoptera: Nitidulidae), with insights into the origins of anthophily. *Zoological Journal of the Linnean Society*, 189(4): 1359–1369.
21. **Gareth S. Powell**. 2020. Four new species of *Carpophilus* Stephens (Coleoptera: Nitidulidae: Carpophilinae) from the New World. *The Coleopterists Bulletin*, 74(1): 175–180.
20. Rachael A. Hadden\*, Natalie A. Saxton\*, Peter S. Gerlach\*, Parker L. Nielson\*, Sam D. J. Brown, Seth M. Bybee, and **Gareth S. Powell**. 2020. Nitidulidae (Coleoptera: Cucujoidea) of Vanuatu. *Journal of Asia-Pacific Entomology*, 23: 470–476.
19. Natalie A. Saxton\*, **Gareth S. Powell**, Gavin J. Martin, and Seth M. Bybee. 2020. Two new species of coastal *Atyphella* Olliff (Lampyridae: Luciolinae). *Zootaxa*, 4722(3): 270–276.
18. Natalie A. Saxton\*, **Gareth S. Powell**, Stephen J. Serrano\*, Anna K. Monson\*, and Seth M. Bybee. 2019. Intertidal *Atyphella* Olliff Larvae (Lampyridae: Luciolinae) of Vanuatu. *Journal of Natural History*, 53(45–46): 2271–2280.
17. **Gareth S. Powell** and Maiya L. Hamilton\*. 2019. Notes on the *Carpophilus* Stephens (Coleoptera: Nitidulidae) of Australia, with a new species from Victoria. *Zootaxa*, 4701(2): 192–196.
16. Andrew R. Thompson, **Gareth S. Powell**, and Byron J. Adams. 2019. Provisional checklist of terrestrial heterotrophic protists from Antarctica. *Antarctic Science*, 31(6): 287–303.
15. Kyle E. Schnepf, Thomas C. McElrath, and **Gareth S. Powell**. 2019. The beetle fauna associated with the peduncle of *Sabal mexicana* (Arecaceae) in southern Texas. *Journal of Natural History*, 53(35–36): 2183–2193.
14. **Gareth S. Powell** and Gavin J. Martin. 2019. Type designations for sap beetles in the subfamily Carpophilinae Erichson (Coleoptera: Nitidulidae) housed in the Natural History Museum, London. *Zootaxa*, 4590(2): 297–300.
13. Jiichiro Yoshimoto, **Gareth S. Powell**, and Andrew R. Cline. 2018. Flower-inhabiting Carpophiline Sap Beetles (Coleoptera: Nitidulidae: Carpophilinae) in Guatemala. *The Coleopterists Bulletin*, 72(4): 762–767.
12. Paul E. Skelley and **Gareth S. Powell**. 2018. Necessary nomenclatural emendations for *Mycophorus* Lacordaire, 1842, and *Neomycotretus* Deelder, 1942, with the establishment of *Myceporthus* Skelley and Powell, n. gen. (Coleoptera: Erotylidae: Tritomini). *The Coleopterists Bulletin*, 72(2): 305–313.

11. Kyle E. Schnepf and **Gareth S. Powell**. 2018. A new species of *Sandalus* Knoch (Coleoptera: Rhipiceridae) with an updated key to the species of the Eastern United States. *The Coleopterists Bulletin*, 72(2): 241–245.
10. Alexandra G. Duffy, **Gareth S. Powell**, Jennifer M. Zaspel, and Douglas S. Richmond. 2018. Billbug (Coleoptera: Dryophoridae: *Sphenophorus*) species composition, seasonal biology, and DNA-based life stage association in Indiana Turfgrass. *Journal of Economic Entomology*, 111(1): 304–313.
9. Eugenio H. Nearn and **Gareth S. Powell**. 2017. Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) types of the Museum of Comparative Zoology (MCZ), with a brief history of the Coleoptera collection. *Insecta Mundi*, 0562: 1–9.
8. **Gareth S. Powell** and Alexandra G. Duffy. 2017. New species of *Ctilodes* Murray (Coleoptera: Nitidulidae) from Southeast Asia, with a key to members of the genus. *Insecta Mundi*, 0554: 1–6.
7. **Gareth S. Powell** and Andrew R. Cline. 2017. Type designations and taxonomic remarks for Nearctic sap beetles in the subfamily Carpophilinae Erichson (Coleoptera: Nitidulidae). *Zootaxa*, 4268(2): 293–295.
6. **Gareth S. Powell**, R. Michael Brattain, and Jennifer M. Zaspel. 2017. The Beetles (Insecta: Coleoptera) Associated with the Plains Pocket Gopher, *Geomys bursarius*, Shaw (Mammalia: Rodentia: Geomyidae) in Indiana. *Annals of the Entomology Society of America*, 110(3): 269–275.
5. Julia L. Snyder, **Gareth S. Powell**, Robert S. Behring\*, Adam M. Alford, Megan E. McCarty\*, and Jennifer M. Zaspel. 2016. Distribution, phenology, and notes on the life history of *Calyptra canadensis* (Bethune) (Erebidae: Calpinae). *Journal of the Lepidopterists' Society*, 70(4): 253–258.
4. **Gareth S. Powell**, John T. Shukle, Douglas S. Richmond, and Jeffrey D. Holland. 2016. Comparison of Saproxylic Coleoptera in forest fragments on Golf Courses. *Crop, Forage, and Turfgrass Management*, 2(1): 1–8.
3. **Gareth S. Powell**, R. Michael Brattain, and Jeffrey D. Holland. 2015. Additional North American Distribution Records for the Genus *Pytho* Latreille (Coleoptera: Tenebrionoidea: Pythidae). *The Coleopterists Bulletin*, 69(4): 761–765.
2. Andrew R. Cline, **Gareth S. Powell**, and Paulo R. Audisio. 2015. Beetles (Coleoptera) of Peru: A Survey of the Families. Nitidulidae Latrielle, 1807. *Journal of the Kansas Entomological Society*, 88(2): 217–220.
1. **Gareth S. Powell**. 2015. A Checklist of the Sap Beetle (Coleoptera: Nitidulidae) Fauna of Indiana, with Notes on Effective Sap Beetle Trapping. *Insecta Mundi*, 0424: 1–9.

#### Book Chapters

44. Jiichiro Yoshimoto, **Gareth S. Powell**, Andrew R. Cline. (*in press*). Diversity and ecology of flower-associated sap beetles (Coleoptera: Nitidulidae) in Guatemalan dry forests. *Biodiversity of Guatemala Vol.III*.

#### GRANTS AND FUNDING (Total Awarded \$53,930)

---

- 2022 \***under review**\* NSF DEB. *Phylogeny and systematics of Nitidulidae: Evolution of feeding behavior and visual systems*. (PIs: **G. Powell**; S. Bybee, P. Frandsen; \$990,386\* not included in total)
- 2022 Center for Systematic Entomology Peck Beetle Travel Grant. (PI: **G. Powell**, \$400)
- 2021 Species File Small Grant Extension, *Cucujoidea*  
(PIs: T. McElrath, M. Gimmel, **G. Powell**, \$3,000)
- 2020 Species File Small Grant Extension, *Cucujoidea*  
(PIs: T. McElrath, M. Gimmel, **G. Powell**, \$2000)
- 2020 Species File Small Grant, *Archostemata*, *Myxophaga*, *Dascilloidea*, *Rhinorhipoidea*, *Derodontoidea*, *Lymexyloidea*  
(PIs: M. Gimmel, A. Johnston, **G. Powell**, K. Schnepf, \$3,500)

- 2019 Species File Small Grant, *Cucujoidea*  
(PIs: T. McElrath, M. Gimmel, **G. Powell**, \$4,450)
- 2018 Redd Center Award, *Winter Active Coleoptera in the Sevier Desert*  
(PIs: M. Hansen & **G. Powell**, \$1,200)
- 2018 Society of Systematic Biologists Mini-ARTS grant, *Taxonomic contributions to Sap Beetles*  
(PI: **G. Powell**, \$1,800)
- 2018 Graduate Student Research Enhancement Award, Coleopterists Society, *Program Award*  
(PI: **G. Powell**, \$5,000)
- 2018 Roger & Victoria Sant Grant for the Education of a Sustainable Environment, *Adding some Flash to the known Fauna of Vanuatu*  
(PIs: S. Bybee & **G. Powell**, \$10,000)
- 2017 Mentoring Environment Grant (MEG): *Mentoring students in visual system evolution using sap beetles (Coleoptera: Nitidulidae)*  
(PIs: S. Bybee & **G. Powell**, \$20,000)
- 2015 Ernst Mayr Travel Grant, Museum of Comparative Zoology, Harvard University: *Revision of Nearctic Carpophilus Stephens (Coleoptera: Nitidulidae)*  
(PI: **G. Powell**, \$1,080)
- 2015 Center for Systematic Entomology Travel Grant: *Sap beetles (Coleoptera: Nitidulidae) of the Florida State Collection of Arthropods*  
(PI: **G. Powell**, \$500)
- 2013 Prairie Biotic Research Inc. Small Research Grant: *The Beetles Associated with the Plains Pocket Gopher in the Kankakee Sands*  
(PIs: **G. Powell** & M. Brattain, \$1,000)

## SELECTED PRESENTATIONS

---

### Invited Presentations (6)

- 2022 **Gareth S. Powell.** Overview of Current Coleoptera Research: presented to the Vietnamese Academy of Science and Technology (Hue City, Vietnam)
- 2018 **Gareth S. Powell.** Towards a Stable Classification for Carpophilinae (Coleoptera: Nitidulidae), with Revision of *Nitops* Murray: presented to the Coleopterists Society, (Vancouver, BC).
- 2018 **Gareth S. Powell** and Jennifer M. Zaspel. Small beetles in a big world: a framework for Nitidulidae taxonomy and systematics: presented to the Systematics, Evolution, and Biodiversity (SysEB) section, Entomological Society of America (ESA), (Vancouver, BC).
- 2016 **Gareth S. Powell.** Insect Biodiversity at the Purdue Entomology Department: presented to prospective undergraduate students, Purdue University.
- 2013 **Gareth S. Powell,** Kyle Schnepf, Mike Brattain. Coleoptera of the Muscatatuck National Wildlife Refuge: presented at the Southern Indiana Conservation Annual Meeting (Seymour, IN).
- 2013 **Gareth S. Powell.** Insect Trapping Methods: presented to Thomas Say Student Society.
- 2009 **Gareth S. Powell.** Insect Biodiversity and Success: presented to Shelbyville Middle/Senior High School Science Classes (Grades 6-10).

### Contributed Presentations (17) (\*won competition)

- 2021 **Gareth S. Powell.** Phylogeny and visual system evolution in sap beetles (Coleoptera: Cucujoidea: Nitidulidae). PhD Dissertation defense: presented to the Department of Biology, Brigham Young University (Provo, UT).

- 2021 **Gareth S. Powell**, Natalie A. Saxton, Alexandra G. Duffy, Nicole L. Gunter, Seth M. Bybee. Repeated feeding guild evolution: the impact of competition on diversification in cucujoid beetles: presented at the Entomology Society of America Annual Meeting (Denver, CO).
- 2021 Natalie A. Saxton, **Gareth S. Powell**, Seth M. Bybee. Unraveling the historical biogeography of island damselflies (Odonata: Coenagrionidae: *Vanuatubasis*): presented at the Entomology Society of America Annual Meeting (Denver, CO).
- 2019 **Gareth S. Powell** and Seth M. Bybee. Do nitidulids have eyes bigger than their bellies? Morphological variation tied to feeding behavior: presented at the Entomology Society of America Annual Meeting (St. Louis, MO).
- 2019 Maiya Hamilton, **Gareth S. Powell**, Seth M. Bybee. If you are what you eat... what exactly are nitidulids?: presented at the Entomology Society of America Annual Meeting (St. Louis, MO).
- 2019 \*Colin R. Jensen, Natalie A. Saxton, Abigail M. Dean, **Gareth S. Powell**, and Seth M. Bybee. “Helikopter” models: ready for takeoff? Distribution of *Vanuatubasis* in Vanuatu: presented at the Entomology Society of America Annual Meeting (St. Louis, MO).
- 2019 Natalie A. Saxton, **Gareth S. Powell**, Milen G. Marinov, Abigail M. Dean, Seth M. Bybee. Hopping from “kreek” to “kreek” on the islands of Vanuatu: current understanding of *Vanuatubasis* Ober and Staniczek: presented at the International Conference of Odonatology
- 2018 **Gareth S. Powell**, Andrew R. Cline, Michael F. Whiting, and Seth M. Bybee. Phylogeny and evolution of feeding behaviors in sap beetles (Coleoptera: Cucujoidea: Nitidulidae): presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2018 Rachael Hadden, Amelia Johnson, **Gareth S. Powell**, and Seth Bybee. A summary of the adventive sap beetles (Coleoptera: Nitidulidae) in Vanuatu: small beetles with a large reach: presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2018 Teagan Mulford, Madison Lallatin, Benjamin Sasine, Erica Paxman, Anna Monson, **Gareth S. Powell**, and Seth Bybee. The naiads (nymphs) of *Vanuatubasis* (Odonata: Coenagrionidae): presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2018 Natalie Saxton, Kyler Johnson, Anna Monson, Stephen Serrano, **Gareth S. Powell**, Gavin Martin, and Seth Bybee. Taxonomy of *Atyphella aphrogeneia*, a marine firefly in Melanesia: presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2018 Parker Nielson, Talmage Brown, **Gareth S. Powell**, and Seth M. Bybee. Sap beetle (Coleoptera: Nitidulidae) ecology on the islands of Vanuatu: presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2017 **Gareth S. Powell**. Unraveling a monstrous mess within minuscule beetles (Coleoptera: Nitidulidae): presented to BYU Department of Biology (Provo, UT).
- 2017 **Gareth S. Powell**. Global phylogenetic framework and revised classification for the Carpophilinae (Coleoptera: Cucujoidea: Nitidulidae). Master’s thesis defense: presented to the Department of Entomology, Purdue University (West Lafayette, IN).
- 2016 **Gareth S. Powell**. Tales from the field: Vietnam 2016: Presented at the Wisconsin Entomological Society Fall Meeting (Madison, WI).
- 2016 **Gareth S. Powell**, Andrew R. Cline, Jennifer M. Zaspel. Preliminary phylogeny and revised classification of sap beetles in the Carpophilinae (Coleoptera: Nitidulidae): Presented at the XXV International Congress of Entomology (Orlando, FL).
- 2016 **Gareth S. Powell**, Julia L. Snyder, Timothy J. Anderson, Eugenio H. Nearn, Jennifer M. Zaspel. The Purdue Entomological Research Collection with comments on the Lepidoptera Holdings: Presented at the Annual Lepidopterists Society Meeting (Florissant, CO).
- 2015 Eugenio H. Nearn, Ian Swift, **Gareth S. Powell**, Jennifer M. Zaspel. Developing a long-term study in Costa Rica: presented at Entomology Collections Network Meeting (Minneapolis, MN).
- 2014 Eugenio H. Nearn, **Gareth S. Powell**, Jennifer M. Zaspel. Rehabilitation and Revitalization of the Purdue Entomological Research Collection: presented at Entomology Collections Network Meeting (Portland, OR).

- 2012 **Gareth S. Powell**. Beetle Communities in Fragmented Golf Course Habitats: presented at the Department of Entomology Undergraduate Capstone forum (Lafayette, IN).

Contributed Posters (7) (\*won competition)

- 2019 \*Laura N. Sutherland, Natalie A. Saxton, **Gareth S. Powell**, Seth M. Bybee. A glowing guide to *Atyphella* Olliff (Coleoptera: Lampyridae) in the South Pacific, presented at the Entomology Society of America Annual Meeting (St. Louis, MO).
- 2018 Natalie A. Saxton, **Gareth S. Powell**, Gavin J. Martin, Seth M. Bybee. Shedding a light on firefly diversity in Vanuatu: presented at the CURA undergraduate research conference (Provo, UT).
- 2018 \*Erica Paxman, Benjamin Sasine, Madison Lallatin, Teagan Mulford, **Gareth S. Powell**, and Seth Bybee. Finding "helicopters" (Odonata: Coenagrionidae) in Vanuatu: presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2018 \*Stephen Serrano, Anna Monson, Kyler Johnson, Natalie Saxton, **Gareth S. Powell**, and Seth Bybee. Where earth, fire, and water meet: A story of *Atyphella* (Coleoptera: Lampyridae) in Vanuatu: presented at the Entomology Society of America Annual Meeting (Vancouver, BC).
- 2017 \***Gareth S. Powell**, Andrew R. Cline, and Seth M. Bybee. A review of anthophily across sap beetles (Coleoptera: Cucujoidea: Nitidulidae): presented at the Entomology Society of America Annual Meeting (Denver, CO).
- 2017 **Gareth S. Powell** and Jennifer M. Zaspel. Taxonomic history of the subfamily Carpophilinae Erichson, 1843 (Cucujoidea: Nitidulidae): presented at the Entomology Society of America, North Central Branch Meeting (Indianapolis, IN).
- 2015 **Gareth S. Powell**, R. Michael Brattain, Jennifer M. Zaspel. Coleoptera Associated with the Plains Pocket Gopher in Indiana: presented at the Entomology Society of America Annual Meeting (Minneapolis, MN).

TEACHING EXPERIENCE

---

Brigham Young University

*Co-director*, Vietnam Tropical Biodiversity, Spring 2022

*Lab Instructor*, BIO420: Evolution, Fall 2020

*Teaching Assistant*, BIO420: Evolution, Winter 2018, Spring 2019

*Lab Instructor/Teaching Assistant*, BIO441: Entomology, Spring 2018, Fall 2018

*Lab Instructor/Teaching Assistant*, BIO640: Phylogenetic Systematics, Fall 2019

*Teaching Assistant*, IAS201R: Vanuatu Study Abroad Preparation, Winter 2018, Winter 2019

*Guest Lecturer*, BIO441: Entomology (Coleoptera) Fall 2017, Fall 2019, Fall 2021

*Guest Lecturer*, BIO420: Evolution (Molecular phylogenetics and feeding behavior in beetles) Fall 2018

Purdue University

*Teaching Assistant*, ENTM506: Advanced Insect Systematics, Fall 2016

*Guest Lecturer*, ENTM506: Advanced Insect Systematics (Coleoptera) Fall 2015

Short courses/Workshops

*Teaching Assistant*, Entomology Collections Management Workshop (ECN), Summer 2017

*Co-instructor*, A Natural History Short Course: Using Entomology to Learn about Biological Collections, Carroll County Public Schools (Grades 3–6), Summer 2017

AWARDS AND HONORS

---

2019 BYU Graduate Student Society's Professional Presentation Award

2018 ESA SysEB Patch Award winner for outstanding research by a master's student

2018 Graduate Student Research Enhancement Program Awardee, The Coleopterists Society  
2017 Graduate Student Poster Competition, Entomology Society of America, SysEB section  
2016 Purdue Department of Entomology Outstanding Masters Student Award  
2010 B. & D. A. Weisburger Memorial Scholarship Recipient  
2010 Robert Oakes Memorial Scholarship Recipient  
2009 J. Edwin Sameth Memorial Scholarship Recipient  
2009 Laura H. Billman Scholarship Recipient  
2008 Bruce C. Douglass Memorial Scholarship Recipient  
2008 Joseph L. Plymate Scholarship Recipient  
2007 SCAP EarthWatch Scholar to Iceland

**MUSEUMS/COLLECTIONS STUDIED Totaling 158 days\***

---

\*Collections where a position was held were excluded from total days

A.J. Cook Museum, Michigan State University, East Lansing, MI, (ARC) 2015  
Andrew R. Cline Private Collection, Sacramento, CA (ARCC) 2014, 2018  
American Coleoptera Museum, San Antonio, TX (ACMT) 2014  
Arizona State University Insect Collection, Tempe, AZ (ASUHIC) 2015, 2019  
Audubon Society Insectarium, New Orleans, LA 2013  
Australian National Insect Collection, Canberra, Australia (ANIC) 2019  
Bernice Pauahi Bishop Museum, Honolulu, HI, (BPBM) 2021  
California State Collection of Arthropods, Sacramento, CA (CSCA) 2014, 2018  
Clemson University Arthropod Collection, Clemson, SC (CUAC) 2018  
Field Museum of Natural History, Chicago, IL (FMNH) 2009, 2011–2019  
Florida State Collection of Arthropods, Gainesville, FL (FSCA) 2014–2022  
Frost Entomological Museum, State College, PA (PSUC) 2017  
Illinois Natural History Survey, Champaign-Urbana, IL (INHS) 2015, 2016, 2019  
Kyle E. Schnepf Private Collection, Gainesville, FL (KESC) 2013–2020  
Mississippi Entomology Museum, Starkville, MS (MEM) 2014  
Milwaukee Public Museum, Milwaukee, WI (MPM) 2015, 2017  
Montana State University Collection, Bozeman, MT (MTUC) 2021  
\*Monte L. Bean Life Science Museum, BYU, Provo, UT (BYUC) 2017–2019  
Museum für Naturkunde, Berlin, Germany (MNHUB) 2019  
Muséum National d'Histoire Naturelle, Paris, France (MNHN) 2018  
Museum of Comparative Zoology, Cambridge, MA (MCZ) 2016  
Národní Muzeum, Prague, Czech Republic (NMPC) 2018  
Natural History Museum, London, United Kingdom (NHM) 2017, 2018, 2020  
Naturhistorisches Museum Basel, Basel, Switzerland (NHMB) 2018  
Naturkunde Museum Stuttgart, Stuttgart, Germany (SNMH) 2018  
New Zealand Arthropod Collection, Auckland, New Zealand (NZAC) 2018  
North Carolina State University Insect Museum, Raleigh, NC (NCSU) 2019  
Paolo Audisio Private Collection, Rome, Italy (PAIC) 2018  
\*Purdue Entomological Research Collection, West Lafayette, IN (PERC) 2009–2019  
R. Michael Brattain Private Collection, Lafayette, IN (RMBC) 2014  
Sapienza Rome University Insect Collection, Rome, Italy (SRIC) 2018  
Vietnam National Museum of Natural History, Hanoi, Vietnam (VNMN) 2016, 2022  
University of Central Florida Insect Collection, Orlando, FL (UCFC) 2019  
University of Minnesota Insect Collection, Minneapolis, MN (UMSP) 2015  
University of Wisconsin Research Collection, Madison, WI (WIRC) 2015, 2016  
University of Wisconsin Oshkosh Insect Collection, Oshkosh, WI (UWOIC) 2015  
United States National Museum of Natural History, Washington D.C. (USNM) 2016, 2017  
William B. Warner Private Collection, Phoenix, AZ (WBWC) 2015

## FIELDWORK (Extensive Insect Trapping/Surveys) Totaling 532 days

---

### International – 204 days

- 2022 **Vietnam** (Bach Ma, Cuc Phuong, Bidoup, Phia Ouc)
- 2022 **Peru** (Finca Los Piedres, Madre de Dios)
- 2019 **Vanuatu** (Ambrym, Efate, Maewo, Malekula, Pentecost, Tanna)
- 2019 **Gabon** (Crystal Mountain National Park; Ivindo National Park; Lope National Park)
- 2018 **Vanuatu** (Efate, Erromango, Gaua, Malekula, Santo, Tanna)
- 2016 **Vietnam** (Ba Vi National Park; Cuc Phuong National Park; Mau Son National Park)
- 2014 **UK** (Porthmadog, Wales; Derbyshire, England)
- 2012 **Costa Rica** (CATIE, Turrialba; Chirripo Mts.; Cahuita)
- 2011 **UK** Derbyshire, England
- 2012 **UK** Derbyshire, England
- 2007 **Iceland** Skaftafell National Park (geologic and glacial surveys)

### Domestic – 328 days

Alabama (William B. Bankhead National Forest), Arizona (Coronado National Forest), Florida (Archbold Biological Research Station, Blackwater River State Forest, Florida Keys), Georgia (Brasstown Bald), Hawaii (Oahu), Idaho, Indiana (Brown County State Park, Indiana Dunes State Park, Kankakee Sands, Muscatatuck National Wildlife Refuge, Pitman's Cave, Ross Hills Park, Shades State Park, Symbiosis Nature Preserve), Kentucky (Horse Cave), Mississippi, Nevada, Oregon, Tennessee (University of Tennessee Research Center), Texas (Davis Mountains, Rio Grande Valley), Utah (Little Sahara Recreation Area, Lytle Ranch, Provo Canyon, Scenic Nebo Byway), Virginia, West Virginia, Wisconsin

## WORKSHOPS ATTENDED

---

- 2021 North American Tenebrionidae Identification and Classification Workshop: by Patrice Bouchard, Marcin J. Kaminski, Paloma Mas-Peinado, Aaron D. Smith, Warren E. Steiner, Jr.
- 2017 Entomology Collections Management Workshop at the Milwaukee Public Museum and the Field Museum of Natural History: by David Furth, Crystal Maier, Floyd Shockley, Jennifer Zaspel
- 2013 *Specify* Collection Specimen Database Management Workshop at Purdue University: by Andy Bentley

## ONLINE PUBLICATIONS/TOOLS

---

- Courtney L. Brissey, **Gareth S. Powell**, Andrew R. Cline, Joseph V. McHugh. Carpopiline-ID. (2018). <https://site.caes.uga.edu/carpophiline-id/>
- Gareth S. Powell** and Andrew R. Cline. Checklist to the Nitidulidae. *Catalogo Taxonomico da Fauna do Brasil*. (2015). <http://fauna.jbrj.gov.br/fauna/listaBrasil/>

## MEDIA COVERAGE

---

- 2022 Why fireflies first started to glow during flight. McKenzie Prillamen. *Nature*. <https://doi.org/10.1038/d41586-022-01966-8>
- 2021 Adult fireflies started glowing for sex, not to avoid predators. Zach Savitsky. *Science*. doi:10.1126/science.acz9845
- 2020 At MSU, a 153-year-old insect collection is being used to solve modern problems. Rachel Osborn. *Lansing State Journal*. <https://www.lansingstatejournal.com/story/life/2020/08/07/msu-stone-age-beetles-rare-butterflies-and-skinned-caterpillars/3301223001/>
- 2018 Midwestern billbugs: Seasonal biology and life-stage association. Teresa Carson. *Golf Course Management Magazine*. <https://www.gcmonline.com/course/environment/news/>

2014 Robot will help Purdue digitize its collection of 2-million Insects. Kristin Lalavenda. *WBAA News*. <https://www.wbaa.org/general-news/2014-12-05/robot-will-help-purdue-digitize-its-collection-of-2-million-insects>

## PROFESSIONAL SOCIETIES

---

2014–present Center for Systematic Entomology (CSE)  
2008–present (The) Coleopterists Society  
2014–present Entomology Collections Network (ECN)  
2014–present Entomology Society of America (ESA)  
2017–present Society of Systematic Biologists (SSB)  
2016–2019 (The) Lepidopterists Society  
2017–2019 (The) Linnean Society of London  
2018–2019 Society for the Study of Evolution (SSE)  
2008–2012 Thomas Say Student Society  
2015–2018 Wisconsin Entomological Society (WES)

## PROFESSIONAL SERVICE

---

### Review Editor

2017–2020 *Insecta Mundi: Coleoptera*  
2019–2020 *Proceedings of the Entomological Society of Washington: Coleoptera*

### Journal Referee (15)

AAPP Physical, Mathematical, and Natural Sciences, *Acta Entomologica Musei Nationalis Pragae*, *Ecology and Evolution*, *Insecta Mundi*, *Insects*, *Journal of Asia-Pacific Entomology*, *Oriental Insects*, *PNAS*, *Proceedings of the Entomological Society of Washington*, *Revista Brasileira de Entomologia*, *Revista Peruana de Biologia*, *The Coleopterists Bulletin*, *The Great Lakes Entomologist*, *The Pan-Pacific Entomologist*, *Zoological Journal of the Linnean Society*, *Zookeys*, *Zoologischer Anzeiger*, *Zootaxa*

### Conference duties

2021 SysEB Graduate Student Poster Competition Judge, Entomological Society of America Annual Meeting, Denver, CO.  
2019 SysEB Undergraduate Student Poster Competition Judge, Entomological Society of America Annual Meeting, St. Louis, MO.  
2017 Co-organized and proctored the Triplehorn Insect Curation Challenge at the North Central Branch, Entomology Society of America Annual Meeting (Indianapolis, IN)  
2015 Field trip coordinator, Lepidopterists' Society Annual Meeting (Lafayette, IN)

## DEPARTMENTAL SERVICE

---

2019–2021 Wet Lab Manager for the Department of Biology, BYU  
2018 Student representative for the 7-year review for the Department of Biology, BYU  
2016 Student representative for Purdue Entomology Education and Outreach Committee  
2015–2016 Student representative for Purdue Entomology Recruitment Committee  
2015 Entomology Graduate Organization Seminar and Symposium Chair  
2009–2011 Undergraduate Student Organization Treasurer (Thomas Say Society)

## COMMUNITY OUTREACH

---

2018	Organized a meeting of Utah Coleopterists hosted at the Monte L. Bean Museum
2017	Presented molecular lab techniques with hands on exercises to Provo Boy Scout troop (~12 people)
2017	Field trip coordinator, BIO 441 Entomology Class, BYU
2017	Presented on water quality and macroinvertebrates to 3 <sup>rd</sup> – 6 <sup>th</sup> grade (~ 60 students)
2016	Co-presented workshop on insect collecting and preparation to 4-H county meeting
2016	Aided in organization and execution of Department of Entomology “Day on Campus” recruitment event, assisted in department tours and presentation to students
2014–2015	Field assistant/instructor for ENTM 506 class trip to Univ. of TN research station, Knoxville
2015, 2017	Team leader for Milwaukee BioBlitz for public outreach and data collection (Coleoptera)
2015	Organizer for PERC “Labelpalooza” outreach event
2013–2016	Estimated 45 departmental tours (focus on Purdue Entomological Research Collection) for young children, prospective undergraduate and graduate students, members of the public, administration, and visiting academics
2013–2016	Proctor and co-creator for State CDE Entomology exams
2013	Presenter at Connor Prairie Halloween event
2012–2017	4-H State Fair Insect Collection Judge
2012	Kankakee Sands, IN BioBlitz participant
2011–2015	Aided in determinations for several Indiana Academy of Science BioBlitz events
2006–2009	Aquatic Macro Invertebrate Surveys for the USGS, Shelby and Rush County, Indiana

## MENTORING/TRAINING

---

(Resulted in \*co-authored publication, ^co-authored presentation, #successful grant)

### Brigham Young University – Undergraduate Students

Russell Anderson, Spring 2018-Spring 2020	Amelia Johnson, Spring 2018
#Ellecyn Brimley, Spring 2020-Fall 2022	^*Kyler Johnson, Spring 2018-Summer 2022
^Madison Brown, Spring 2018-Fall 2018	#Abigail Magland, Fall 2021-Fall 2022
^Talmage Brown, Spring 2018	^*Anna Monson, Spring 2018- Fall 2018
*^Abigail Dean, Spring 2019-Spring 2020	^Teagan Mulford, Spring 2018- Fall 2018
*Peter Gerlach, Spring 2019-Fall 2019	^*Erica Paxman, Spring 2018- Fall 2019
^Lily Gregson, Summer 2022	^*Stephen Serrano, Spring 2018
^*Rachael Hadden, Spring 2018- Fall 2019	*^#Laura Sutherland, Spring 2019-Spring 2020
^*Maiya Hamilton, Spring 2019-Fall 2019	*Rachel Sutherland, Spring 2021-Fall 2022
#Morgan Hansen, Spring 2019	^*Parker Neilson, Spring 2018- Fall 2018
*^#Colin Jenson, Spring 2019-Fall 2019	

### Brigham Young University – Graduate Students

^Daniel Ferguson, Spring 2019-Fall 2020	K. Viswajyothi, Fall 2019-Fall 2020
^*#Natalie Saxton, Spring 2018-Spring 2021	

### Brigham Young University – Postgraduate

^Thai Pham, Ph.D., Fall 2019-Fall 2020
--

### Purdue University – Undergraduate Students

*#Robert Behring, Fall 2016	Taylor Nelson, Fall 2015-Fall 2016
-----------------------------	------------------------------------

Purdue University – Graduate Student

Carol Moreno Santos, Fall 2016-Spring 2017

\*Adam Salyer, Spring 2017-Fall 2017

\*^Julia Snyder, Fall 2014-Fall 2016

Julie Speelman, Spring 2015