

Curriculum Vitae

Aaron S. David

Program Director of Plant Ecology & Assistant Research Biologist
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EDUCATION

Ph.D. University of Minnesota, Saint Paul, MN 2016

Ecology, Evolution, and Behavior

Ph.D. Minor: Risk Analysis for Introduced Species and Genotypes

B.A. Washington University, Saint Louis, MO 2009

Environmental Studies (Biology/Ecology) and Spanish (*Summa cum laude*)

PROFESSIONAL APPOINTMENTS

Program Director of Plant Ecology, Archbold Biological Station, Venus, FL 2021-present

Postdoctoral Research Ecologist, USDA-ARS Invasive Plant Research 2018-2021

Laboratory, Ft. Lauderdale, FL

Postdoctoral Associate, University of Miami, Coral Gables, FL 2016-2018

NSF Graduate Research Fellow, University of Minnesota, St Paul, MN 2013-2016

NSF Introduced Species and Genotypes Integrative Graduate Education and Research Trainee (IGERT), University of Minnesota, St Paul, MN 2010-2012

PUBLICATIONS

Refereed Publications

46. Herron SA, Charton KT, Crate SHJ, Smith SA, Koontz SM, Ward SG, Menges ES, **David AS**. Fire avoidance and long-term population decline in the endangered ground lichen *Cladonia perforata* within a pyrogenic habitat. *Amer J Bot.* Provisionally accepted.

45. Sit CY, Tran E, Sonnier G, Sheffer LP, Smith ME, **David AS**. 2025. Environmental stress shifts growth strategies of shrubs in the Florida scrub. *Castanea* 90: 67-79.
44. Triplett G, **David AS**. 2025. Stomatal distribution and post-fire recovery: Intra- and interspecific variation in plants of the pyrogenic Florida scrub. *American Journal of Botany*. DOI: 10.1002/ajb2.70050.
Special Issue: Understanding novel fire regimes using plant trait-based approaches
43. Bowen HJ, Peterson CL, Menges ES, **David AS**. 2025. Post-delisting dilemma: Long term success of *Chrysopsis floridana* introductions depends on continued fire management. *Conservation Science and Practice* 7: e13310. DOI:10.1111/csp2.13310.
42. Aquino-Thomas J, **David AS**, Lake EC, Dray Jr FA, Carmona Cortes A, Smith M. 2025. Vertical distribution of *Floracarus perrepae* (Acariformes: Eriophyidae) galls on the invasive fern *Lygodium microphyllum* (Schizaeales: Lygodiaceae) and a potential productivity - reproduction tradeoff. *American Fern Journal*: 115:1-16. DOI: 10.1640/0002-8444-115.1.1.
41. Bellis J, Albrecht M A, Maschinski J, Dalrymple SE, Keir MJ, Chambers T, Possley J, Adkins, ED, Parsons EW, Kunz M, Radcliffe C, Coffey E, Kaye TN, Peterson CL, **David AS**, Herron SA, Menges ES, Bell T, Coppoletta M., Elam C, McEachern K, Williamson PS, Boensch D, Bontrager M, Breeden C, Frade N, Gordon DR, Link SO, Littlefield T, Murray S, O'Dell R, Pavlovic NB, Reemts CM, Taylor DD, Titus JH, Titus PJ, Stanley TA, Heineman KD. 2025. The relative influence of geographic and environmental factors on rare plant translocation outcomes. *Journal of Applied Ecology*, 1-13. DOI: 10.1111/1365-2664.14855.
40. Wilson LG, **David AS**. 2024. Sandy roadsides as a shared habitat for endemic and exotic plant species of the Florida scrub. *Natural Areas Journal* 44:183-189. DOI: 10.3375/2162-4399-44.3.183.
39. Wheeler GS, Minter C, Palacios J., Halbritter D.A., **David AS**. 2024. Pruning Brazilian pepper trees to manage the biological control *Pseudophilothrips ichini* thrips. *Biological Control*. DOI: 10.1016/j.biocontrol.2024.105550.
38. **David AS**, Naccarato AM, Smith SA, Peterson CL, Pence VC, Crate SJH, Koontz SM, Dole HE, Menges ES. 2024. Evaluating long-term introduction success of the Florida scrub endemic *Crotalaria avonensis* (Fabaceae) using a decade of demographic data. *Restoration Ecology*: e14082. DOI: 10.1002/REC.14082.
37. Manrique V, Kraus E, Schaffer C, Diaz R, Kelm C, Poffenberger R, Rohrig E, Murray R, **David AS**, Smith M, Lake EC, Rayamajhi MB, Leidi J, Dray Jr, FA, Minter CR, Le Falchier E, Mass J, Hight S. 2023. Assessing the status of biological control of air

- potato (*Dioscorea bulbifera*) in the southeastern USA. *Biological Control Science and Technology*. DOI: 10.1080/09583157.2023.2294207.
36. Dosdall JD, **David AS**. Coexistence of two species of bracken (*Pteridium*) in a narrow but expanding zone of range overlap. *American Fern Journal* 113:237-248.
35. Segal E, **David AS**. Depauperate seed banks of two endemic scrub herbs in roadside habitat belie their population booms: Are robust roadside populations a conservation mirage? *Southeastern Naturalist* 22:519-529.
34. **David AS**, Hernandez DJ, Menges ES, Sclater VL, Afkhami ME, Searcy CA 2023. Heterogeneous landscape promotes distinct microbial communities in an imperiled scrub ecosystem. *Mycologia*. DOI: 10.1080/00275514.2023.2258268.
33. Revillini D, **David AS**, Reyes AL, Knecht LD, Vigo C, Allen P, Searcy CA, Afkhami ME. 2023. Press allelopathy disturbance selects a soil microbiome that mitigates plant performance. *New Phytologist*. DOI: 10.1111/nph.19249.
32. Abrahamson WG, Abrahamson CR, Koontz SM, Tran EH, Menges ES, **David AS**. 2023. What kills the virtually immortal palms of the Florida scrub? *American Journal of Botany* 110: e16234. DOI: 10.1002/ajb2.16234.
31. Searcy CA, Howell H, **David AS**, Rumelt RB, Clements SL. 2023. Patterns of non-native species introduction, spread, and ecological impact in South Florida, the world's most invaded ecoregion. *Annual Review in Ecology, Evolution, and Systematics*. DOI: 10.1146/annurev-ecolsys-110421-103104.
30. **David AS**, Lake EC. 2023. Biological control of vines: a review of past efforts, evaluation, and future directions. *Biological Control* 188:105257. DOI: 10.1016/j.biocontrol.2023.105257.
29. Nestle R, Palacios J, **David AS**, Read QD, Wheeler GS. 2023. The Brazilian peppertree biological control agent *Pseudophyllothrips ichini* (Thysanoptera: Phlaeothripidae) displays flexible feeding and damages both vegetative foliage and reproductive tissues. *Biological Control* 179:105159. DOI: 10.1016/j.biocontrol.2023.105159.
28. Dole HE, Menges ES, **David AS**. 2023. Insect herbivory following fire on *Lyonia fruticosa*, an ericaceous shrub of Florida scrub. *Florida Entomologist* 106(1): 10-15. DOI: 10.1653/024.106.0102.
27. Revillini D, **David AS**, Menges ES, Main KN, Afkhami ME, Searcy CA. 2022. Microbiome-mediated response to pulse fire disturbance outweighs the effects of fire legacy on plant performance. *New Phytologist*. DOI: 10.1111/nph.17689.

26. Wheeler GS, Kendra PE, **David AS**, Lake EC, Sigmon J, Palacios J, Allen E. 2021. Community of Bark and Ambrosia beetles (Coleoptera: Curculionidae: Scolytinae and Platypodinae) infesting Brazilian peppertree treated with herbicide and the volatile tree response. *Environmental Entomology* 50(6):1311-1321. DOI:10.1093/ee/nvab096.
25. **David AS**, Carmona Cortes A, Wheeler GS, Lake EC. 2021. Localized induced defenses limit gall formation by eriophyid mite against invasive *Lygodium microphyllum* (Schizaeales: Lygodiaceae). *Environmental Entomology* 50(4):814-820. DOI: 10.1093/ee/nvab049.
24. Wheeler GS, **David AS**, Lake EC. 2021. Volatile chemistry, not phylogeny, predicts host range of a biological control agent of Old-World climbing fern. *Biological Control* 159:104636. DOI:10.1016/j.biocontrol.2021.104636.
23. **David AS**, Carmona Cortes A, Lake EC. 2021. Bottom-up factors determine local, but not regional, distribution of a biocontrol agent against invasive *Lygodium microphyllum*. *Biological Control* 159:104632. DOI:10.1016/j.biocontrol.2021.104632.
22. **David AS**, Glueckert JS, Enloe SF, Carmona Cortes A, Abdel-Kader AA, Lake EC. 2021. Eriophyid mite *Floracarus perrepae* readily colonizes recovering invasive vine *Lygodium microphyllum* following herbicide treatment. *BioControl* 66:573-584. DOI: 10.1007/s10526-021-10087-6.
21. Kazanski C, Cowles, Dymond S, Clark A, **David AS**, Jungers J, Kendig A, Riggs C, Trost J, Wei X. Water availability modifies effects of biodiversity and nitrogen addition on plant productivity in long-term experiments in a mesic grassland. *Ecological Applications* 31(6): e02363. DOI:10.1002/eap.2363.
20. Hernandez D, **David AS**, Menges ES, Searcy CA, Afkhami ME. 2021. Environmental stress destabilizes microbial networks. *The ISME Journal* 15:1722-1734. DOI:10.1038/s41396-020-00882-x.
19. Lake EC, **David AS**, Spencer TM, Wilhelm Jr VL, Barnett T, Abdel-Kader AA, Carmona Cortes A, Acuna A, Mattison ED, Minter CR. 2021. First drone releases of the biological control agent *Neomusotima conspurcatalis* on Old World climbing fern. *Biocontrol Science and Technology* 31(1): 97-106. DOI:10.1080/09583157.2020.1828280.
18. **David AS**, Sebesta N, Abdel-Kader AA, Lake EC. 2020. Colonization by biological control agents on post-fire regrowth of invasive *Lygodium microphyllum* (Lygodiaceae). *Environmental Entomology* 49(4): 796-802. DOI:10.1093/ee/nvaa076.

17. **David AS**, Thapa-Magar KB, Menges ES, Searcy CA, Afkhami ME. 2020. Do plant-microbe interactions support the Stress Gradient Hypothesis? *Ecology* 101(8). DOI:10.1002/ecy.3081.
16. **David AS**, Lake EC. 2020. Eriophyid mite *Floracarus perrepae* reduces climbing ability of the invasive vine *Lygodium microphyllum*. *Biological Control* 146. DOI:10.1016/j.biocontrol.2020.104271
15. Mothes CC, Clements SL, Hewavithana D, Howell HJ, **David AS**, Leventhal ND, Searcy CA. 2020. California's imperiled herpetofauna illustrate the importance of standardized methods for classifying extinction risk. *Conservation Biology* 34(3): 754-761. DOI:10.1111/cobi.13421.
14. **David AS**, Bell-Dereske LP, Emery SM, McCormick BM, Seabloom EW, Rudgers JA. 2019. Testing for loss of Epichloë and non-epichloid symbionts under altered rainfall regimes. *American Journal of Botany* 106(8):1081-1089. DOI:10.1002/ajb2.1340.
13. **David AS**, Jones IM, Lake EC. 2019. Wind speed predicts population dynamics of the eriophyid mite *Floracarus perrepae* on invasive Old World climbing fern (*Lygodium microphyllum*) in a shade house colony. *Experimental and Applied Acarology* 78(2):263-272. DOI:10.1007/s10493-019-00391-3.
12. **David AS**, Quintana-Ascencio PF, Menges ES, Thapa-Magar KB, Afkhami ME, Searcy CA. 2019. Soil microbes underlie population persistence of an endangered plant species. *The American Naturalist*. DOI:10.1086/704684.
11. Quintana-Ascencio PF, Koontz SM, Smith SA, Sclater VL, **David AS**, Menges ES. 2018. Predicting landscape-level distribution and abundance: Integrating demography, fire, elevation, and landscape habitat configuration. *Journal of Ecology* 106:2395-2408. DOI:10.1111/1365-2745.12985.
10. **David AS**, Thapa-Magar KB, Afkhami ME. 2018. Microbial Mitigation-Exacerbation Continuum: A novel framework for understanding microbiome effects on hosts in the face of stress. *Ecology* 99:517-523. DOI:10.1002/ecy.2153.
9. **David AS**, Seabloom EW, May G. 2017. Disentangling environmental and host sources of fungal endophyte communities in an experimental beachgrass study. *Molecular Ecology* 26:6157-6169. DOI:10.1111/mec.14354.
8. **David AS**, May G, Schmidt D, Seabloom EW. 2016. Beachgrass invasion in coastal dunes is mediated by soil microbes and lack of disturbance-dependence. *Ecosphere* 7. DOI:10.1002/ecs2.1527

7. **David AS**, Quiram GL, Sirota J, Seabloom EW. 2016. Quantifying the associations between fungal endophytes and biocontrol-induced herbivory of invasive purple loosestrife (*Lythrum salicaria* L.). *Mycologia* 108:625-627. DOI: 10.3852/15-207.
6. **David AS**, Haridas S, LaButti K, Lim J, Lipzen A, Wang M, Barry K, Grigoriev IV, Spatafora JW, May G. 2016. Draft genome sequence of *Microdochium bolleyi*, a dark-septate fungal endophyte of beachgrass. *Genome Announcements* 4(2):e00270-16. DOI:10.1128/genomeA.00270-16.
5. **David AS**, Seabloom EW, May G. 2016. Plant host species and geographic distance affect the structure of aboveground fungal symbiont communities, and environmental filtering affects belowground communities in a coastal dune system. *Microbial Ecology* 71:912926. DOI: 10.1007/s00248-015-0712-6.
4. **David AS**, Zarnetske PL, Hacker SD, Ruggiero P, Biel RG, Seabloom EW. 2015. Invasive congeners differ in successional impacts across space and time. *PLoS ONE*. DOI: 10.1371/journal.pone.0117283.
3. **David AS**, Kaser JM, Morey AC, Roth AM, Andow DA. 2013. Release of genetically engineered insects: A framework to identify potential adverse ecological effects. *Ecology and Evolution* 3:4000-4015. DOI: 10.1002/ece3.737.
2. Asplen MK, Bruns E, **David AS**, Denison RF, Epstein B, Kaiser MC, Kaser JM, Lacroix C, Mohl E, Quiram G, Prescott K, Stanton-Geddes J, Vincent J, Wragg P, May G. 2012. Do trade-offs have explanatory power for the evolution of organismal interactions? *Evolution* 66:1297-1307. DOI: 10.1111/j.1558-5646.2012.01573.x.
1. **David AS**, Menges ES. 2011. Microhabitat preference of non-native natal grass (*Melinis repens*) constrains invasive spread in Florida scrub. *Biological Invasions* 13:2309-2322. DOI: 10.1007/s10530-011-0044-5.

Other Scientific Publications

5. **David AS**, Barve S, Boughton EH, Daskin JH, Swain HM. 2025. A field station's recipe for impactful science. *Frontiers in Ecology and the Environment* 23:e2833. DOI:10.1002/fee.2833.
4. Culley T, Cobo-Simon I, Baker R, **David AS**, Gitzendanner MA, Olson MS, Roy T, Weaver WN, Diggle P, Gross B. 2024. The development of BSA's comprehensive AI policy for its academic journals. *Plant Science Bulletin* 70:205-214.
3. Naccarato A, **David AS**. 2023. Saving one of the rarest plants of Florida's ancient islands: The conservation of Avon Park Harebells on the Lake Wales Ridge. *Palmetto* 39(4):4-8.

2. **David AS**, Lake EC. 2022. Old World Climbing Fern (*Lygodium microphyllum*): History and Ecology in North America. *In*: R.L. Winston, Ed. Biological Control of Weeds in North America. North American Invasive Species Management Association, Milwaukee, WI. NAISMABCW-2022-2-OLD WORLD CLIMBING FERN-P.
1. **David AS**, Lake EC. 2022. Old World Climbing Fern Biocontrol Agents: History and Ecology in North America. *In*: R.L. Winston, Ed. Biological Control of Weeds in North America. North American Invasive Species Management Association, Milwaukee, WI. NAISMA-BCW-2022-2-OLD WORLD CLIMBING FERN-A.

Manuscripts in review

David AS, Koontz SM, Herron SA, Orzell, S, Menges ES. Population trends, demography, and seed ecology of Florida scrub endemic *Chrysopsis highlandsensis* (Asteraceae: *Astereae*). *In revision at Castanea*.

Edwards CE, Bassuner B, **David AS**, Dell N, Foye CJ, Herron SA, Koontz S, Peterson C, Smith SA, Weekley CW, Williams B, Menges ES. Parentage analysis of reintroduced populations in the endangered, self-incompatible shrub *Pseudoziziphus celata* reveals disproportionate contributions of genotypes and asymmetry of parental role. *In revision at Annals of Botany*.

Learmouth R, Brearley FQ, Clark A, **David AS**, Fazlio F, deKlee I, Konrad D, Lemon L, Millen O, Pates N, Pieber L, Sherlock M, Simpson E, Ward S, White H, Pearse WD. Drivers of individual plant species contributions to β -diversity are scale-dependent. *In review at J Ecol*.

Fucich D, **David AS**, Rothermel BB, Staver AC. Engineering fire: The drivers of low fire intensity over gopher tortoise mounds in a Florida sandhill. *Submitted to Oikos*.

Li VW, Fowler JC, **David AS**, Strauss SY, Searcy CA, Afkhami ME. Climate variability undermines mutualism-driven increases in population persistence. *Submitted to Nat Ecol Evol*.

Manuscripts in preparation

Kennedy I, Herron SA, **David AS**. Characterization of *Eryngium cuneifolium* seed banks in natural and disturbed habitats. *Manuscript in prep for Castanea*.

Senese S, **David AS**. Allelopathy as a force of facilitation for habitat specialists. *Manuscript in prep*.

- Stemle LR, Rumelt RB, Clements SL, Afkhami ME, **David AS**, Searcy CA. Traits that facilitate invasion of native habitat. Manuscript in prep.
- Shimizu Y, Deyrup M, **David AS**. The structure of flower-visitor interactions in fire-mediated scrub ecosystem. Manuscript in prep.
- Tran E, Smith ME, Kaminsky L, Afkhami ME, Searcy CA, **David AS**. Fire-dependent infection by *Exobasidium ferrugineae* on *Lyonia fruticosa* in the Florida scrub. *Manuscript in prep for Mycologia*.
- Beugnon R, Cheneka B, Gril E...**David AS**... The Microclimate DataBase - turning the global SoilTemp project into an accessible archive for microclimate data. *Manuscript in prep for Scientific Data*.
- Vo VT, **David AS**. Pollination biology and mating system of the Highlands goldenaster *Chrysopsis highlandsensis* (Asteraceae: Astereae). *Manuscript in prep for Florida Entomologist*.
- Faulborn A, **David AS**, Walsh E, Luo J, Constantelos C, Oudemans P, Zhang N. *Thermofloridus*, a new genus of Eurotiomycetes associated with *Vaccinium myrsinites* from the Florida scrub ecosystem. *Manuscript in prep for Mycologia*.
- Revillini D, Mothes CC, Almeida BK, Charton KT, Koontz S, **David AS**, Afkhami ME, Searcy CA. The microbial landscape: Soil microbiome properties predict plant distributions. *Manuscript in prep*.

Government, Extension, & Technical Reports

- Herron SA, **David AS**. 2025. Rare Plant Survey and Habitat Assessment of the Hatchineha Ranch Conservation Bank. Final Report to the United States Fish and Wildlife Service. 15 pp.
- David AS**, Herron SA. 2025. Conservation research on state-listed endemic plants of Florida scrub and sandhill. Final report to Florida Department of Agricultural and Consumer Services. 93 pp.
- David AS**. 2025. Monitoring of Garrett's mint (*Dicerandra christmanii*) at the Lake Wales Ridge National Wildlife Refuge. Final Report to US Fish and Wildlife Service. 16 pp.
- Herron SA, **David AS**. 2024. Florida Statewide Endangered and Threatened Plant Conservation Program Final Report: Conservation research supporting the recovery of Florida ziziphus. 43 pp.

- Dosdall JD, **David AS**. 2024. Survey protocol for Garrett's mint at the Lake Wales Ridge National Wildlife Refuge. US Fish and Wildlife Service Regional Office 4. 38 pp.
- David AS**, Herron SA, Bowen HJ, Dosdall JD. 2024. Conservation research on state-listed endemic plants of Florida scrub and sandhill. Final report to Florida Department of Agricultural and Consumer Services. 94 pp.
- David AS**, Boughton EH, Sclater V. 2024. Developing UAV technology to improve brush management in Florida's grazing lands. Annual report to USDA-NRCS. 10 pp.
- David AS**, Herron SA. 2024. Biotic Inventories and Biodiversity Surveys on the Lake Wales Ridge Wildlife and Environmental Area. Final report to Florida Fish and Wildlife Conservation Commission. 17 pp.
- David AS**, Bowen H. 2023. Habitat Improvement at Archbold Biological Station for Listed Plants: Annual Report to USFWS Coastal Program. 22 pp.
- Herron SA, **David AS**. 2023. Florida Statewide Endangered and Threatened Plant Conservation Program Final Report: Conservation research supporting the recovery of Florida ziziphus. 39 pp.
- David AS**, Dosdall JD. 2023. Monitoring of select federally listed plant species found on Lake Wales Ridge National Wildlife Refuge, Sebring, Florida. Final report to U.S. Fish and Wildlife Service. 10 pp.
- David AS**, Herron SA, Naccarato AM, Bowen HJ, Dosdall JD. 2023. Conservation research on state-listed endemic plants of Florida scrub and sandhill. Final report to Florida Department of Agricultural and Consumer Services. 107 pp.
- David AS**, Herron SA. 2023. Biotic Inventories and Biodiversity Surveys on the Lake Wales Ridge Wildlife and Environmental Area. Final report to Florida Fish and Wildlife Conservation Commission. 31 pp.
- Herron SA, **David AS**. 2022. Florida Statewide Endangered and Threatened Plant Conservation Program Final Report: Conservation research supporting the recovery of Florida ziziphus. 56 pp.
- David AS**. 2022. Monitoring of select federally listed plant species found on Lake Wales Ridge National Wildlife Refuge, Sebring, Florida. Final report to U.S. Fish and Wildlife Service. 13 pp.
- David AS**, Herron SA, Dole H. 2022. Conservation research on state-listed endemic plants of Florida scrub and sandhill. Final report to Florida Department of Agricultural and Consumer Services. 108 pp.

- David AS**, Herron SA, Ward SG. 2022. Biotic Inventories and Biodiversity Surveys on the Lake Wales Ridge Wildlife and Environmental Area. Final report to Florida Fish and Wildlife Conservation Commission. 50 pp.
- David AS**, Menges ES, Koontz SM. 2021. Monitoring of select federally listed plant species found on Lake Wales Ridge National Wildlife Refuge, Sebring, Florida. Final report to U.S. Fish and Wildlife Service. 16 pp.
- Koontz SM, Menges ES, **David AS**. 2021. Conservation research and recovery of Florida ziziphus. Annual report to the Florida Forestry Service Plant Conservation Program. 65 pp.
- Menges ES, Koontz SM, Ward SG, **David AS**, Dole H, Siegle-Bates L. 2021. Conservation research on state-listed endemic plants of Florida scrub and sandhill. Final report to Florida Department of Agricultural and Consumer Services. 140 pp.
- Dray Jr. FA, Tipping P, Rayamajhi M, Lake E, Goode A, **David AS**, Halbritter D. 2020. Biological Control Program Comprehensive Everglades Restoration Plan.
- Dray Jr., FA, Tipping P, Rayamajhi M, Lake E, Goode A, **David AS**, Halbritter D. 2019. Biological Control Program Comprehensive Everglades Restoration Plan.
- Dray Jr. FA, Tipping P, Rayamajhi M, Lake E, Goode A, Halbritter D, **David AS**. 2018. Biological Control Program Comprehensive Everglades Restoration Plan.
- Lake EC, **David AS**, Smith MC, Jones IM, Tipping PW, Purcell M. 2018. Increasing herbivore impact on Old World climbing fern: assessing agent interactions, the effects of abiotic factors, and the potential for integrated weed management. Final Report to Florida Fish and Wildlife Conservation Commission.
- University of Minnesota College of Food Agriculture, and Natural Resource Sciences. 2016. Minnesota's Top 124 Terrestrial Invasive Plants and Pests: Priorities for Research.
Panel Member
- David AS**, Kaser JM, Morey AC, Roth AM, Andow DA. 2012. Potential adverse ecological effects and social consequences of releasing genetically engineered mosquitoes to control malaria. Report to the U.S. National Research Council.

Other Publications

David AS. 13 September 2023. "An introduction to introductions: Saving endangered species." *Highlands News-Sun*. [Link](#)

David AS. 6 July 2022. "Plant mating systems in the scrub." *Highlands News-Sun*. [Link](#)

David AS, Ward SG. 18 November 2021. "Inventorying the plants of Carter Creek." *Highlands News-Sun*. [Link](#)

David AS. 21 July 2021. "Biological control." *Highlands News-Sun*. [Link](#)

David AS. 2019. "Are fungi hidden drivers of plant distributions and population persistence?" *Inoculum Newsletter*. Mycological Society of America. [Link](#)

Published Datasets

Triplett, G. **David AS**. 2025. Stomatal Distribution and Post-fire Recovery: Intra- and Interspecific Variation in Plants of the Pyrogenic Florida Scrub, 2023-2024 ver 1. Environmental Data Initiative.
<https://doi.org/10.6073/pasta/e47c9581f78c1369779e41ba9c070131>.

David AS, Seabloom EW, May G. 2016. Data Files for Beachgrass Invasion and Root Associated Fungi Studies. DOI 10.13020/D6S88B.

David AS, Seabloom EW, May G. 2015. Fungal Endophytes of Pacific Northwest Beachgrasses Dataset. DOI 10.13020/D68G60.

FUNDING AND AWARDS

Grants

2025-2026. Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Conservation Research on State-listed Endemic Plants of Florida Scrub and Sandhill" (\$63,261.22). **David AS** (PI).

2025. Vaughn Jordan Foundation. Archbold Biological Station Research Intern in Plant Ecology. (\$14,423). **David AS** (PI).

2024-2025. National Science Foundation. (DEB 2505582). Collaborative Research: RAPID: Resistance and resilience of the microbial landscape following hurricane disturbance. (\$29,069). **David AS** (PI).

2024-2025. Florida Department of Agriculture and Consumer Services, Florida Forest Service. "Florida Statewide Endangered and Threatened Plant Conservation Program: Conservation research supporting the recovery of Florida ziziphus" (\$25,000). **David AS** (PI), Herron SA (CoPI).

- 2024-2025. Florida Department of Agriculture and Consumer Services, Division of Plant Industry. Conservation Research on State-listed Endemic Plants of Florida Scrub and Sandhill. (\$65,468.48). **David AS** (PI).
- 2020-2023. Florida Department of Agriculture and Consumer Services, Florida Forest Service. Florida Statewide Endangered and Threatened Plant Conservation Program: Conservation research supporting the recovery of Florida ziziphus. (\$60,000). **David AS** (PI), Herron SA (CoPI).
2024. Vaughn Jordan Foundation. Archbold Biological Station Research Intern in Plant Ecology. (\$14,423). **David AS** (PI).
- 2023-2025. USFWS. Garrett's mint monitoring. (\$38,675). **David AS** (PI).
- 2023-2026. National Science Foundation. (DBI 2231736). Research Infrastructure: An Integrated Laboratory Facility to Improve Research Capacity at Archbold Biological Station. (\$564,734). **David AS** (PI), Boughton EH (CoPI), Swain HM (CoPI).
- 2023-2024. Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Conservation Research on State-listed Endemic Plants of Florida Scrub and Sandhill" (\$61,055.81). **David AS** (PI).
- 2023-2026. USDA-NRCS, Conservation Innovation Grant. "Developing UAV technology to improve brush management in Florida's grazing lands" (\$241,036). **David AS** (PI), Boughton EH (CoPI), Sclater VL (CoPI).
- 2022-2023. USFWS. "Reintroduction, augmentation, and monitoring of select federally listed plant species found on Lake Wales Ridge National Wildlife Refuge" (\$13,356.20). **David AS** (PI).
2023. Vaughn Jordan Foundation. "Archbold Biological Station Research Intern in Plant Ecology" (\$13,838). **David AS** (PI).
- 2022-2027. USFWS Coastal Program. "Habitat Improvement at Archbold Biological Station for Listed Plants" (\$171,420). **David AS** (PI).
- 2022-2023. USFWS. "Chrysopsis floridana monitoring" Peterson, C (PI). Subcontract (\$3,500). **David AS** (PI).
2022. Vaughn Jordan Foundation. "Archbold Biological Station Research Intern in Plant Ecology" (\$12,299). **David AS** (PI).

- 2022-2023. Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Conservation Research on State-listed Endemic Plants of Florida Scrub and Sandhill" (\$65,597.09). **David AS** (PI), Ward SG (CoPI).
- 2021-2022. USFWS. "Reintroduction, augmentation, and monitoring of select federally listed plant species found on Lake Wales Ridge National Wildlife Refuge" (\$8,334). **David AS** (PI).
- 2021-2022. Florida Department of Agriculture and Consumer Services, Division of Plant Industry "Conservation Research on State-listed Endemic Plants of Florida Scrub and Sandhill" (\$65,157.21). **David AS** (PI).
- 2021-22. USFWS. "Chrysopsis floridana monitoring" Peterson, C (PI). Subcontract (\$4,190.76). **David AS** (PI).
- 2021-22. National Science Foundation, Research Experience for Post-Baccalaureate Students (\$59,794). Afkhami ME (PI), Searcy CA (CoPI).
Contributed research ideas and writing, and co-mentored the student
- 2019-2020. US Department of Agriculture Innovation Fund (6629-22000-011-00D).
"Identification, Evaluation, and Implementation of Biological Control Agents for Invasive Weeds of Southeastern Ecosystems" (\$23,000). Lake EC (PI), Goode AC (CoPI), Dray Jr. FA (CoPI), **David AS** (CoPI).
- 2019-2023. National Science Foundation (DEB 1922521): "Microbial landscapes: Are microorganisms hidden drivers of species distributions?" (\$851,244). Afkhami ME (PI), Searcy CA (CoPI).
Contributed research ideas, experimental designs, and writing
- 2019-2022. Southwest Florida Water Management District. Development, rearing, release, and monitoring of biological control agents targeting Old World climbing fern. (\$240,000). Lake EC (PI), **David AS** (CoPI).
- 2019-2020. Florida Fish and Wildlife Conservation Commission. Integrating biological control into management of Old World climbing fern. (\$56,280.19). Lake EC (PI), **David AS** (CoPI).
- 2013-2016. National Science Foundation Graduate Research Fellowship (00039202). Lab in a leaf: A hierarchical framework for community assembly of endosymbionts. (\$134,000). **David AS** (PI).

Awards and Fellowships

2024 Emerging Leader Award, Botanical Society of America

- 2017** Forest Fungal Ecology Postdoctoral Research Award, Mycological Society of America (\$5000)
- 2015** Council of Graduate Students Travel Award, Univ. of Minnesota (\$900)
Ecology, Evolution, and Behavior Travel Grant, Univ. of Minnesota (\$1000)
- 2014** Mentor Student Travel Award, Mycological Society of America (\$500)
Ecology, Evolution, and Behavior Research Award, Univ. of Minnesota (\$2000)
Ecology, Evolution, and Behavior Travel Grant, Univ. of Minnesota (\$993)
Dayton Bell Museum Fund Fellowship, Bell Museum of Natural History, Univ. of Minnesota (\$1200)
- 2013** Ecology, Evolution, and Behavior Travel Grant, Univ. of Minnesota (\$1040)
Mentor Student Travel Award, Mycological Society of America (\$500)
Myron P. Backus Graduate Fellowship, Mycological Society of America (\$1000)
Dayton Bell Museum Fund Fellowship, Bell Museum of Natural History, Univ. of Minnesota (\$1500)
- 2012** Ben Woo Fellowship, Puget Sound Mycological Society (\$2000)
Ecology, Evolution, and Behavior Travel Grant, Univ. of Minnesota (\$270)
Council of Graduate Students Travel Award, Univ. of Minnesota (\$800)
Florence Rothman Fellowship, Univ. of Minnesota (\$1000)
Life Sciences Summer Undergraduate Research Program, Introduced Species and Genotypes IGERT, Univ. of Minnesota (\$4500 stipend and \$4000 living expenses to undergraduate) – awarded to mentor undergraduate
- 2011** Florence Rothman Fellowship, Univ. of Minnesota (\$1000)
Life Sciences Summer Undergraduate Research Program, Introduced Species and Genotypes IGERT, Univ. of Minnesota (\$4000 stipend and living expenses to undergraduate) – awarded to mentor undergraduate, with G. Quiram
- 2010** Plant Population Ecology Section Travel Award, Ecological Society of America Meeting (\$500)
- 2009** Environmental Studies Excellence in the Natural Sciences Award, Washington University (\$100)
- 2007** Howard Hughes Medical Institute Summer Undergraduate Research Fellow, Washington Univ. (\$3750)
Environmental Studies Research Grant, Washington Univ. (\$2500)

PRESENTATIONS

Invited Presentations

David AS. 2025 (upcoming). Botany, Palm Springs, CA.

David AS, Koontz S, Herron SA, Vo VT, Orzell S, Menges ES. 2025. *Rare Plant Task Force Annual Meeting*, Virtual Meeting.

David AS, Koontz S, Herron SA, Menges ES. 2025. *Archbold Research Symposium*. Venus, FL.

David AS, Herron SA, Bowen HB, Menges ES. 2024. *Botany*. Grand Rapids, MI..

- David AS**, Aquino-Thomas J, Carmona Cortes A, Crees L, Read Q, Smith M, Lake EC. 2024. *National Forum on Biological Control*. Annapolis, MD.
- David AS**, Herron SA, Bowen HJ, Dosdall JD. 2024. *Archbold Research Symposium*. Venus, FL.
- David AS**. 2023. Bok Tower Gardens, Lake Wales, FL.
- David AS**. 2023. Florida Native Plant Society Broward County Chapter, Virtual Presentation.
- David AS**. 2023. *Archbold Research Symposium*. Venus, FL.
- David AS**. 2022. Florida Native Plant Society Heartland Chapter, Lake Wales, FL.
- David AS**, Herron SA, Dole H. 2022. *Archbold Research Symposium*. Venus, FL.
- David AS**. 2021. Dept. of Biology, University of Central Florida, Orlando, FL.
- David AS**. 2021. Dept. of Plant Pathology, University of Florida, Gainesville, FL.
- David AS**, Carmona Cortes A, Lake, EC. 2021. *Florida Fish and Wildlife Conservation Commission Annual Meeting*, Virtual Presentation.
- David AS**. 2020. Florida Native Plant Society Broward County Chapter, Virtual Presentation.
- David AS**. 2020. USDA-ARS AgriCULTURE Seminar Series. Virtual Presentation.
- David AS**. 2020. *Southwest Florida Cooperative Invasive Species Management Area Meeting*, Fort Myers, FL.
- David AS**. 2020. Dept. of Biology, Lynn University, Boca Raton, FL.
- David AS**. 2019. Florida Native Plant Society Broward County Chapter, Fort Lauderdale, FL.
- David AS**. 2019. *Florida Entomological Society Meeting*, Organized Symposium, Jupiter, FL.
- David AS**. 2019. *Everglades Cooperative Invasive Species Management Area Meeting*, Davie, FL.
- David AS**. 2019. Greater Everglades Ecosystem Restoration Conference, Organized Symposium, Coral Springs, FL.
- David AS**, Lake, EC. 2019. *Florida Fish and Wildlife Conservation Commission Annual Meeting*, Orlando, FL.
- David AS**. 2018. Dept. of Biology, Broward College, Davie, FL.
- David AS**. 2017. Dept. of Biology, Univ. of Miami, Coral Gables, FL.
- David AS**, Searcy CA, Quintana-Ascencio PF, Afkhami ME. 2017. Ecological Society of America, Portland, OR. Organized Oral Session Presentation.
- David AS**. 2017. Dept. of Biology, Georgia Southern Univ., Statesboro, GA.
- David AS**. 2016. Dept. of Biology, Univ. of Miami, Coral Gables, FL.
- David AS**. 2015. Dept. of Ecology, Evolution, and Behavior, Univ. of Minnesota, Saint Paul, MN.
- David AS**. 2013. *"Introduced Microbes: For better or for worse" Symposium*, Univ. of Minnesota, Saint Paul, MN.
- David AS**. 2013. Puget Sound Mycology Society, Seattle, WA.
- David AS**. 2009. Archbold Biological Station, Venus, FL.

Workshop Presentations

- David AS.** 2021. NSF Macrosystems International Workshop Series: How does sharing genetic sequence data impact biodiversity science and conservation? Virtual Workshop. *Opening remarks and Panel Discussion Moderator.*
- David AS.** 2021. *Palm Beach County Master Gardeners, Virtual Workshop.*
- David AS.** 2020. *University of Florida Aquatic Short Course, Virtual Workshop.*
- David AS.** 2018. *Southeastern Ecology and Evolution Conference.* Univ. of Miami, Coral Gables, FL. *Invasive Species Workshop.*
- David AS.** 2018. *Florida Lake Management Society Annual Symposium.* Fort Lauderdale, FL, *University of Florida Biological Control Workshop.*

Contributed Presentations

- David AS,** Sclater V, Schumacher A, Boughton EH. 2025. *Ecological Society of America,* Baltimore, MD.
- David AS.** 2025. *Center for Plant Conservation National Meeting,* St Louis, MO.
- David AS,** Koontz S, Herron SA, Orzell S, Menges ES. 2025. *Florida Native Plant Society Annual Meeting,* Gainesville, FL.
- David AS.** 2024. *Center for Plant Conservation National Meeting,* San Diego, CA.
- David AS,** Naccarato AM, Smith SA, Menges ES. 2023. *Ecological Society of America,* Portland, OR.
- David AS,** Naccarato AM, Smith SA, Menges ES. 2023. *Florida Native Plant Society Meeting,* Virtual Meeting.
- David AS,** Hernandez DJ, Menges ES, Sclater VL, Searcy CA, Afkhami ME. 2022. *Ecological Society of America,* Montreal, QC .
- David AS,** Hernandez DJ, Menges ES, Sclater VL, Searcy CA, Afkhami ME. 2022. *Mycological Society of America,* Gainesville, FL.
- David AS,** Kennedy S, Dole H, Koontz S, Ward SG, Menges ES. 2022. *Rare Plant Task Force Annual Meeting,* Virtual Meeting.
- David AS,** Lake, EC. 2020. *Entomological Society of America,* Virtual Meeting.
- David AS,** Lake, EC. 2020. *North American Invasive Species Management Association,* Virtual Meeting.
- David AS,** Lake, EC. 2019. *Florida Exotic Pest Plant Council,* Daytona, FL.
- David AS,** Lake, EC. 2018. *Entomological Society of America,* Vancouver, BC.
- David AS.** 2018. *Tropical Botany Conference,* Coral Gables, FL.
- David AS.** 2017. *Florida Native Plant Society Meeting,* River Ranch, FL.
- David AS,** Bell-Dereske L, Emery SM, McCormick B, Seabloom EW, Rudgers JA. 2016. *Ecological Society of America,* Fort Lauderdale, FL.
- David AS,** Seabloom EW, May G. 2015. *Ecological Society of America,* Baltimore, MD.
- David AS,** Seabloom EW, May G. 2015. *Mycological Society of America,* Edmonton, AB.
- David AS.** 2015. *Natural Resources Association of Graduate Students Symposium,* St Paul, MN. **Awarded 'Best Presentation'*
- David AS,** May G, Seabloom EW. 2014. *Ecological Society of America,* Sacramento, CA.

David AS, May G, Seabloom EW. 2014. *Mycological Society of America*, East Lansing, MI.
David AS, Seabloom EW, May G. 2013. *Mycological Society of America*, Austin, TX.
David AS, May G, Seabloom EW. 2013. *Ecological Society of America*, Minneapolis, MN.
David AS, Emery SM, Rudgers JA, May G, Seabloom EW. 2012. *Ecological Society of America*, Portland, OR.
David AS, Zarnetske PL, Seabloom EW, Hacker SD. 2011. *Ecological Society of America*, Austin, TX.
David AS, Menges ES. 2010. *Ecological Society of America*, Pittsburgh, PA.
David AS, Griffin NW, Knight TM. 2009. *Evolution*, University of Idaho.

TEACHING

Field Courses	Lectures and field session in Plant Ecology at Archbold Biological Station (Bangor University, 2023)
Teaching Assistant	General Biology (BIOL 1009), Univ. of Minnesota (2014) <i>Taught two laboratory sections focusing on basic biology lab techniques</i> Ecology (EEB 3408W), Univ. of Minnesota (2013) <i>Taught two laboratory sections on basic biology lab techniques</i>
Guest Lecturer	Ecology, University of Miami (2017) Statistics, University of Miami (2017) Conservation, University of Miami (2017) Ecology, Univ. of Minnesota (2014)

PROFESSIONAL SERVICE AND OUTREACH

Students and laboratory personnel supervised

I have supervised or mentored >50 students and laboratory personnel ranging from high school, undergraduate, Masters, and Ph.D. level in the field, laboratory and other activities.

Committee service

- BSA Financial Advisory Committee (2025-2028)
- ESA Cooper Award Subcommittee (2023-present)
- BSA Ad-hoc Committee for AI and Publications (2023-2024)
- North American Invasive Species Management Association (NAISMA), Classical Biocontrol Committee Member (2020-2024)
- ESA Emerging Ecological Issues Committee (2022-2024)
- Secretary, Univ. of Minnesota Mycology Club (2015-2016)
- Nominations Committee Member, Mycological Society of America (2014-2016)
- President of Ecology, Evolution, and Behavior Graduate Program (2011-2012, 2014-2015)
- Executive Committee of IGERT Invasive Species and Genotypes (2011-2012)

Expert consulting service

- Office of Everglades Restoration Initiative, Invasive Species Prioritization Tool Workshop (2024)
- Polk County, FL Environmental Lands Program, Technical Advisory Group (2024)
- USFWS Species Status Assessment of *Hypericum edisonianum*, Expert Team (2021-2023)
- USFWS and NatureServe development of OneRange map for *Nolina brittoniana*, Expert reviewer (2022-2023)

Symposia and working group organized

Florida Ziziphus Recovery Team Meeting, Archbold Biological Station, Venus, FL, 2025.
Co-organizer S.A. Herron.

Botany, Colloquium, Grand Rapids, MI, 2024. "Fire's role in plant conservation and restoration." Co-organizer S.A. Herron.

Florida Ziziphus Recovery Team Meeting, Archbold Biological Station, Venus, FL, 2023.
Co-organizer S.A. Herron.

Ecological Society of America, Organized Oral Session, Portland, OR, 2017. "Does it scale? Linking plant-microbe mutualisms to population, community, and ecosystem dynamics." Co-organizer M. E. Afkhami.

University of Minnesota, 2013. "Introduced Microbes: For better or for worse." Funding provided by the NSF Introduced Species and Genotypes IGERT. Co-organizers J. Eckberg and A.E. Kendig.

Editorial service

American Journal of Botany Associate Editor (2023-present)

Reviewer for manuscripts and proposals

Completed 49 reviews of manuscripts for the following journals: *American Journal of Botany*, *AoB Plants*, *Biological Control*, *BioScience* (2), *Castanea* (2), *Ecology* (3), *Ecology and Evolution* (2), *Ecosphere*, *Estuaries & Coasts*, *Florida Scientist*, *Frontiers in Ecology and the Environment*, *Functional Ecology*, *Fungal Ecology* (2), *Journal of Applied Ecology*, *Journal of Ecology* (4), *Journal of Marine Science and Engineering*, *Management of Biological Invasions*, *Microbial Ecology*, *Molecular Ecology* (4), *Mycologia* (2), *Natural Areas Journal*, *New Phytologist* (2), *Phytobiomes*, *Plant Ecology* (2), *Proceedings of the Royal B*, *Oikos* (2), *PeerJ*, *PLoS ONE* (2), *Scientific Reports*, *Soil Biology and Biochemistry*, *Symbiosis*, *Theory in Biosciences*, *Antonie van Leeuwenhoek Journal of Microbiology*

Panelist reviewer: NSF-DBI (2024), NSF-DEB (2025)

Ad-hoc reviewer: NSF-DEB (2023)

Conference sessions and abstracts: Ecological Society of America meeting (2023),
Mycological Society of America meeting (2023)

Professional societies and organizations

Ecological Society of America, Plant Population Ecology Subsection (2010-present)
Mycological Society of America (2013-present)
Botanical Society of America (2023-present)
Southern Appalachian Biological Society (2025-present)
North American Invasive Species Management Association (2020-present)
Center for Plant Conservation (CPC) Professional Member (2023-present)
Natural Areas Association (2024-25)
Florida Native Plant Society (2018-present)
Phi Beta Kappa (2009)
Sigma Xi (2009)

Programming (select events)

2025 Public Event on local flora
2024 Public Event on herbarium collection
2024 Darwin Day public event
2023 Public Event on herbarium collection
2023 Rare Plant Conference Field Trip of Archbold
2023 Scrub tour with Florida Native Plant Society Broward Chapter
2021-24 Archbold Scrub Camp
2022 National Geographic Photo Camp
2022 BioBlitz – University of Florida DeLuca
2019 Florida Native Plant Society – *Led plant walk through natural areas*
2019 University of Florida 4-H Bug Camp – *Led insect-related activities for children ages 7-11*
2019 Career Day, Bethlehem Junior Academy
2018 BioBlitz Wild Vizcaya
2015 Cedar Creek Eco-Extravaganza – *Mentored group of middle school students to develop a research question, collect data, and present their results*
2015 Saturday with a Scientist at Univ. of Minnesota Bell Museum. *“Misunderstood Molds, Fantastic Fungi, and Sensitive Lichens”*
2011-2014 Teaching Smart Lesson Planner – *taught science lessons to 3rd grade classroom*

Educational materials

2015 Flash Fungi – *Educational flashcards for learning mushroom identification, available at*
<http://mycology.cfans.umn.edu/id-cards/>

Volunteering

2019-2020 Broward County 4-H Fair Judge
2019 Dr. Von D. Mizell-Eula Johnson State Park – *planted native trees and shrubs*
2016-2017 The Patch Dania Beach Community Garden Volunteer
2015 U.S. National Park Service Volunteer – *Assisted with planting of native prairie species and invasive species removals*
2013-2015 Anoka-Hennepin District STEM Fair Judge
2011-2014 Univ. of Minnesota Insect Fair Judge

MEDIA COVERAGE

2024 “Found only in Tampa Bay, a rare flower is no longer endangered. Is that good?”
Tampa Bay Times, 17 April 2024.

2020 “Natural Stress Relievers: Biology researchers explore how soil microbes help plants thrive in stressful conditions.” *Univ. of Miami*, July 2020. Available at <https://news.miami.edu/as/stories/2020/07/florida-scrub-research.html>

2015 Student Award Spotlight. *Inoculum* 66(4), July 2015. Available at <http://msafungi.org/inoculum/>

2013 New Approach to Identify Possible Ecological Effects of Releasing Genetically Engineered Insects. *Science Daily*, 18 November 2013

2013 Researchers develop new approach to identify possible ecological effects of releasing genetically engineered insects. *Univ. of Minnesota News Release, EurekAlert*, 18 November 2013

CERTIFICATIONS

- Remote Pilot License (FAA)
- Applicator License (State of Florida)
- Class E Driver’s License (State of Florida)
- S-130/S-190/L-180 Basic Wildland Firefighter Training (Univ of Florida)