Dylan Gerald-Everett Gomes

Marine Reserves Program, Oregon Department of Fish and Wildlife dylan.g.gomes@odfw.oregon.gov dylan.ge.gomes@gmail.com https://dylangegomes.wixsite.com/home

EDUCATION

| 2021 | Ph.D. | Boise State University | Ecology, Evolution, and Behavior |
|------|-------|------------------------|--|
| 2014 | B.A. | University of Montana | Biology (Ecology and Organismal Biology) |
| 2012 | A.A. | Cuesta College | Liberal Arts (Mathematics and Science) |

PROFESSIONAL APPOINTMENTS

6/25/2025 – *present*, Quantitative Marine Ecologist
Marine Reserves Program, Oregon Department of Fish and Wildlife
Newport, Oregon, USA

7/16/2023 - 5/6/2025, Biologist

Forest and Rangeland Ecosystem Science Center, United States Geological Survey, Seattle, Washington, USA

- 3/1/2021 7/16/2023, Postdoctoral Research Associate
 - National Academy of Sciences NRC Research Associateship Program

NOAA National Marine Fisheries Service, Seattle, Washington, USA

- Northwest Fisheries Science Center
- Oregon State University, Newport, Oregon, USA
 - Department of Fisheries and Wildlife
 - Cooperative Institute for Marine Resources Studies
- 8/1/2018 2/28/2021, National Science Foundation Graduate Research Fellow (NSF-GRFP) Boise State University, Boise, Idaho, USA
- 8/1/2017 7/30/2018, PhD Student and Teaching Assistant Boise State University, Boise, Idaho, USA
- 9/1/2015 6/30/2016, Fulbright Research Scholar
 Max Planck Institute for Ornithology, Seewiesen, Germany
- 6/1/2014 5/31/2015, Laboratory Manager Smithsonian Tropical Research Institute (STRI), Gamboa, Panamá

PUBLICATIONS

Book chapters

Gomes D. G. E., Brumm H., and Horn A. (2025). Noise pollution and conservation. Encyclopedia of animal behavior, 1-9.

Submitted manuscripts (also advanced in prep, in review and pre-prints)

Pick, J. L., Ivimey Cook, E. R., Allen, B. J., Bachelot, B., Brand, J. A., Class, B., Dallas, T., D'Amelio, P. B., Fernández-Juricic, E., Guillemaud, T., **Gomes, D. G. E.**, John, C., Lequime, S., Nakagawa, S., O'Dea, R. E., Petitjean, Q., Sánchez-Tójar, A., Wilson, L. A. B. (*pre-print*). The SORTEE Guidelines for Data and Code Quality Control in Ecology and Evolutionary Biology

Robidas M. L., Swalethorp R., **Gomes D. G. E.**, Semmens B. X., Searcy S., Fiechter J., Seale M., Hinchliffe C., Fennie H. W., Muhling B., Thompson A. R. (*submitted*). Why Did Anchovy Boom In the Last Decade in the California Current Ecosystem In a Remarkably Warm Ocean? *ICES Journal of Marine Science*.

Brodeur R. D., **Gomes D. G. E.**, Draper D. L., Daly E. A., Zeman S. M., Galbraith M., Perry R. I., Ruzicka J. J., Robertson R. R. (*in prep*). The Northern California Current on fire: consequences of a widespread and persistent anomalous pyrosome bloom

Hernvann, P.-Y., Wildermuth, R. P., Tommasi, D., Bianchi, D., Bograd, S. J., Crozier, L., Fiechter, J., Frawley, T., Fulton, B., **Gomes, D.**, Guiet, J., Hazen, E. L., Hinchliffe, C., Jacox, M. G., Kaplan, I. C., Koenigstein, S., Lezama-Ochoa, N., Petrik, C. M., Ruzicka, J., Smith, J. A., Spence, M. A., Thompson, A. R., Vasbinder, K., & Wells, B. (*in prep*). One for all, all for one: Using an ensemble of climate-informed ecological models to characterize climate and ecosystem-driven uncertainty in the California Current.

- **Gomes D. G. E.,** Crozier L. G., Ruzicka J. J., Huff D. D., Stewart J. D. (*in review*). Massive reductions in marine mammals and seabirds will likely have negligible effects on salmon.
- I. C. Kaplan, E. L. Hazen, S. Koenigstein, N. L. Ochoa, M. H. Cruz, P. Hernvann, Owen R Liu, **D. G. E. Gomes**, S. I. Vásquez, C. Lujan, S. Green, M. R. Baker, R. Oliveros-Ramos, A. Rovellini, R. G. Asch, and B. Muhling. (*in review*). The devil's in the details when using correlative and mechanistic species distribution models to inform multispecies and ecosystem model. *Reviews in Fish Biology and Fisheries*.

Dapp, D. R., **Gomes, D. G. E.**, Peterson, J. T., Beck, C. G., Zuchowski, T. A., Jones, S. O., Lynch, J. J., Leque, T. C., Applestein, C. V., Callahan, S. E., Austin, K. J., Smith, G. R., Sealey, L. R., Wefferling, L. T., Kostecka, J. P., Park, K. W., Adams, M. A., & Benjamin, J. R. (*in prep*). Developing a species habitat-based modeling framework to optimize conservation and military readiness outcomes. *Plos ONE (target)*.

Refereed journal articles - ORCID Google Scholar

- Wells, B. K., Huff, D. D., Quinn, T. P., Santora, J. A., **Gomes, D. G. E.**, Vasbinder, K., Barnas, K. A., Burke, B. J., Courtney, M. B., Crozier, L. G., Fiechter, J., Friedland, K. D., Hayes, S. A., Hunsicker, M. E., Juanes, F., Mantua, N. J., Michel, C. J., Phillips, E. M., Sanderson, B. L., Satterthwaite, W. H., Seitz, A. C., Sheehan, T. F., Stewart, J. D., & Trudel, M. (2025). When, Where, and Why Salmon Become Vulnerable to Predation. *ICES Journal of Marine Science*. 82(9): fsaf162.
- **Gomes D. G. E.,** Benjamin J. R., Clemens B. J., Lampman R., Dunham J. B. (2025). New technology for an ancient fish: A lamprey life cycle modeling tool with an R Shiny application. *PLOS ONE*. Shiny app: https://rconnect.usgs.gov/LampreyLCM/
- J. L. Sedlock, M. L. P. Almazan, B. A. R. Hadi, **D. G. E. Gomes**, and J. R. Barber. (2025). Dispersing rice-associated arthropods ignore a phantom ultrasonic insect chorus. *The Open Agriculture Journal*.
- Crozier L. G., **Gomes D. G. E.**, Huff D. D. (2025). Climate change and marine food webs: navigating structural uncertainty using qualitative network analysis with insights for salmon survival. *Global Change Biology*. 31:e70143
- Gould E., Fraser H. S., Parker T. H., Nakagawa S., Griffith S. C., Vesk P. A, Fidler F., Hamilton D. G., ..., **Gomes D. G. E.**, ... [294 unlisted authors] (2025). Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *BMC Biology*. 23(35).
- **Gomes D. G. E.** (2025). How will we prepare for an uncertain future? The value of open data and code for unborn generations facing climate change. *Proceedings of the Royal Society B: Biological Sciences*. 292(2040), 20241515.
- M. Lagisz, K. R. Bairos-Novak, A. R. Martinig, M. Bertram, A. Mizuno, S. S. Sabet, M. Paquet, M. S. Santana, E. Thoré, N. Trubanová, J. Rutkowska, J. A. Orr, E. Takola, Y. Yang, P. Pottier, **D. G. E. Gomes**, Y.-C. Chan, Z. Xian, C. O. Akogwu, S. M. Drobniak, S. Nakagawa. (2025). Priced out of belonging? Insufficient concessions on membership fees across international societies in ecology and evolution. *Proceedings of the Royal Society B: Biological Sciences*. 292:20241430.

- Corsini M., Cole H. J., **Gomes D. G. E.,** Fristrup K. M., Barber J. R. (2025). Red lighting partially mitigates the cost of light pollution for arthropods. *Oecologica*. 207(1), 26.
- Crozier L. G., **Gomes D. G. E.**, Axel G. (2024). Will salmon disappear in a warming world? Climanosco Research Articles 4, 18 Nov 2024, https://doi.org/10.37207/CRA.4.1
- Gomes D. G. E., Ruzicka J. J., Crozier L. G., Huff D. D., Brodeur R. D., Stewart J. D. (2024). Marine heatwaves disrupt ecosystem structure and function via altered food webs and energy flux. *Nature Communications*. 15(1988). <u>Data & Code</u>
- **Gomes D. G. E.**, Ruzicka J. J., Crozier L. G., Huff D. D., Phillips E. M., Hernvann P.-Y., Morgan C. A., Brodeur R. D., Zamon J. E., Daly E. A., Bizzarro J., Fisher J. L., Auth T. D. (2024). An updated end-to-end ecosystem model of the Northern California Current reflecting ecosystem changes due to recent marine heat waves. *PLOS ONE*. 19(e0280366). <u>Data & Code</u>
- Braga P. H. P., Hébert K., Hudgins E. J., Scott E. R., Edwards B., Sánchez-Reyes L. L., Grainger M. J., Foroughirad V., Hilleman F., Binley A. D., Brookson C. B., Gaynor K. M., Sabet S. S., Güncan A., Weierbach H., **Gomes D. G. E.**, Crystal-Ornelas R. (2023). Not just for programmers: How GitHub can accelerate collaborative and reproducible research in ecology and evolution. *Methods in Ecology and Evolution*. 00: 1-17.
- -Top 6 most downloaded in Methods in Ecology and Evolution (2022-2023)
- Arrington, D. A., Harris R. J., Layman C. A., **Gomes D. G. E.** (2023). Leveraging Green Infrastructure for Efficient Treatment of Reclaimed Water. *Science of the Total Environment (STOTEN)*. Data & Code
- Cole H. J., **Gomes D. G. E.**, Barber J. R. (2022). EcoCountHelper: an R package and analytical pipeline for the analysis of ecological count data using GLMMs, and a case study of bats in Grand Teton National Park. *PeerJ.* 10(e14509). <u>Data & Code</u>
- **Gomes D. G. E.**, Pottier P., Crystal-Ornelas R., Hudgins E. J., Foroughirad V., Sánchez-Reyes L. L., Turba R., Martinez P. A., Moreau D., Bertram M., Smout C., Gaynor K. M. (2022). Why don't we share data and code? Perceived barriers and benefits to public archiving practices. *Proceedings of the Royal Society B.* 289: 20221113.
- Reed V., Toth C. A., Wardle R., **Gomes D. G. E.,** Barber J. R., Francis C. D. (2022). Experimentally broadcast ocean surf and river noise alters birdsong structure. *PeerJ.* 10(e13297) 1-24.
- **Gomes D. G. E.** (2022). Should I use fixed effects or random effects when I have fewer than five levels of a grouping factor in a mixed-effects model? *PeerJ.* 10(e12794) 1-16. <u>Data & Code</u>
- Sweet K. A., Sweet B. P., **Gomes D. G. E.**, Francis C. D., Barber J. R. (2021). Natural and anthropogenic noise increase vigilance behaviors in song sparrows (*Melospiza melodia*). *Behavioral Ecology*. 33(1), 288-297. <u>Data & Code</u>

- Takoukam A. K., **Gomes D. G. E.**, Beck C. A., Keith-Diagne L. W., Hunter M. E., Francis-Floyd R., Bonde R. K. (2021). Diet composition of the African manatee: spatial and temporal variation within the Sanaga River Watershed, Cameroon. *Ecology and Evolution*. 11(22), 15833-15845. Data & Code
- Sedlock J., **Gomes D. G. E.,** Rubin J., Woody S., Hadi B., Barber J. R. (2021). A phantom ultrasonic insect chorus repels low-flying bats, but most are undeterred. *Functional Ecology*. 35(12), 2743-2752. Data & Code PDF
- Takoukam A. K., **Gomes D. G. E.**, Hoyer M. V., Keith-Diagne L. W., Bonde R. K., Francis-Floyd R. (2021). African manatee (*Trichechus senegalensis*) habitat suitability at Lake Ossa, Cameroon, using trophic state models and predictions of submerged aquatic vegetation. *Ecology and Evolution*. 11(21), 15212-15224. <u>Data & Code</u>
- Gomes D. G. E., Toth C. A., Bateman C. C., Francis C. D., Kawahara A. Y., Barber J. R. (2021). Experimental river noise alters arthropod abundance. *Oikos*. 130(11), 2001-2014. <u>Data & Code</u>
- Reed V., Toth C. A., Wardle R., **Gomes D. G. E.,** Barber J. R., Francis C. D. (2021). Natural Noise Affects Conspecific Signal Detection and Territorial Defense Behaviors in Songbirds. *Behavioral Ecology.* 32(5), 993-1003. <u>Data & Code</u>
- Gomes D. G. E., Toth C. A., Cole H. J., Francis C. D., Barber J. R. (2021). Phantom rivers filter birds and bats by acoustic niche. *Nature Communications*. 12(3029), 1-8. <u>Data & Code</u>
- **Gomes D. G. E.,** Francis C. D., Barber J. R. (2021). Using Past to Understand Present: Coping with Natural and Anthropogenic Noise. *BioScience*. 71(3), 223-234.
- Gomes D. G. E., Hesselberg T., Barber J. R. (2021). Phantom river noise alters orb-weaving spider abundance, web size, and prey capture. *Functional Ecology*. 35(3), 717-726. <u>Data & Code</u>
- **Gomes D. G. E.,** Goerlitz H. (2020). Individual differences show that only some bats can cope with noise-induced masking and distraction. *PeerJ.* 8(e10551), 1-27. <u>Data & Code</u>
- **Gomes D. G. E.,** Giulliana A., Barber J. R. (2020). Time of night and moonlight structure vertical space use by insectivorous bats in a Neotropical rainforest: an acoustic monitoring study. *PeerJ.* 8(e10591), 1-19. <u>Data & Code</u>
- Levenhagen M., Miller Z., Petrelli A., Ferguson L., Shr Y. H., **Gomes D. G. E.**, Taff D., White C., Fristrup K., Monz C., McClure C., Newman P., Francis C., Barber J. (2020) Ecosystem services enhanced through soundscape management link people and wildlife. *People and Nature*. 3(1), 176-189. <u>Data & Code</u>
- **Gomes D. G. E.** (2020). Orb-weaving spiders are fewer but larger and catch more prey in lit bridge panels from a natural artificial light experiment. *PeerJ.* 8(e8808), 1-15. <u>Data & Code</u>

Gomes D. G. E., Halfwerk W., Taylor R. C., Ryan M. J., Page R. A. (2017). Multimodal weighting differences by bats and their prey: probing natural selection pressures on sexually selected traits. *Animal Behaviour.* 134, 99-102. Data & Code

Gomes D. G. E., Page R. A., Geipel I., Taylor R. C., Ryan M. J., Halfwerk W. (2016). Bats perceptually weight prey cues across sensory systems when hunting in noise. *Science*. 353, 1277-1280. <u>Altmetric Data & Code</u>

TEACHING EXPERIENCE

Instructor (not of record)

Spring 2020 Boise State University, Independent study

Undergraduate mentorship in two independent research projects:

- i) The effects of noise and light on urban orb-weaving spiders
- ii) How natural river noise affects flower visitation rates by insects

Fall 2019 Boise State University, Special Topics: Undergraduate Research Experience

Course-based undergraduate research experience. Five students learned experimental design and how to select sampling methods, insect identification, and analysis methods including statistics and an introduction to metabarcoding.

Spring 2019 University of Florida, Supervised Research in Entomology

Undergraduate research methods course including insect identification.

Teaching assistant

Fall 2018 Boise State University, Entomology

Spring 2018 Boise State University, Evolution

Fall 2017 Boise State University, General Biology I (two sections)

Cells, genetics, development, evolution, and ecology

Workshops led or assisted

Joint Base Lewis-McChord

Structured Decision Making: ESA-Listed Species and Military Readiness (co-led)

2023 USGS

R Carpentries Workshop, 3-day course (assisted)

Society for Open, Reliable, and Transparent Ecology and Evolution Conference

Why do we not share data and code? (led)

2021 Science Communication (EEB 604), Boise State University

Giving a successful 3 Minute Thesis talk (3MT) (led)

| 2018 | NSF. | -fund | led | workshop, | Grand | Teton | Nati | ional l | Park |
|------|------|-------|-----|-----------|-------|-------|------|---------|------|
| | | | | | | | | | |

Acoustics in ecology, 3-day course (assisted)

2018 Boise State University R User Group

Tidying data with the 'dplyr' package in R (led)

2015 University of Copenhagen, Denmark, Graduate Field Course in Panamá

Observer biases in video scoring and acoustic processing, 3-day course (led)

Guest lecturer

Understanding predator-prey dynamics in an ecosystem context 10/10/2025 Biology and Conservation of Marine Mammals, undergraduate and graduate students, Oregon State University, Newport, OR

Bat acoustic ecology and sampling methods

Graduate Field Studies, multiple occasions, Smithsonian Tropical Research Institute, Panama

5/11/2015 University of Copenhagen, Denmark

3/16/2015 Yale University

1/19/2015 University of Illinois at Urbana-Champaign (NSF-IGERT)

6/11/2014 Arizona State University

6/10/2014 Cape Henry Collegiate School

Tutor

2012-2014 Biology tutor, Office For Student Success, University of Montana

MENTORING EXPERIENCE (inquire for details); * = mentored but was not main advisor

Graduate student mentorship (M.S.)

| | 1 , | |
|--------------|-------------------|-------------------------|
| 2024-present | Clare Throm* | Boise State University |
| Fall 2022 | Michelle Robidas* | University of San Diego |
| 2018-2021 | Kate Sweet* | Boise State University |
| 2017-2021 | Hunter Cole* | Boise State University |

Undergraduate student mentorship

| Summer 2024 | Skyler Williams | Smith College (remote internship) |
|--------------|-----------------|--|
| 2023-present | Eligh Aron | Oregon State University |
| 2020-2023 | Clare Throm | Boise State University |
| Summer 2023 | Geffen Bendavid | St. John's College (NOAA-College Internship) |
| Summer 2023 | Joe Cunningham | St. John's College (NOAA-College Internship) |
| Summer 2023 | Tierna Matecha | Smith College (NOAA-College Internship) |
| Summer 2021 | Shannon Murphy* | NOAA Hollings Scholar |

| 2019-2020 | Colton Herzog | Boise State University |
|-------------|------------------|------------------------|
| 2020-2021 | Raheem Mohamed | Boise State University |
| Summer 2019 | Andreas Pavlakos | University of Florida |
| Summer 2019 | Vivek Atit | University of Florida |
| Summer 2018 | Connor Burgin | Boise State University |
| Summer 2018 | William Prum | Boise State University |
| Summer 2017 | Blair Boyt | Boise State University |
| Summer 2017 | Nicholas Carlson | Boise State University |

High school student mentorship

2022-present Reese Caparelli Ossining High School Science Research Program

General mentoring

| 2022 | Invited guest, Ecology Graduate Student Group, Boise State University |
|------|---|
| | Career path seminar: career trajectory in science and general Q&A |

- 2022 Stats-hour invited guest, Department of Biological Sciences, Boise State University Random vs fixed effects with few levels of a random effect
- NSF research experience for undergraduates, Hatfield Marine Science Center Personal career trajectory in science and general Q&A
- 2021 Ecology Graduate Student Group, Boise State University Forum on publishing: from funding to reproducibility
- 2020 Institute for STEM & Diversity Initiatives, Boise State University Career trajectories, getting into research, and my PhD project
- NSF Gateway Scholars undergraduate student mentorship, Boise State University

GRANTS, AWARDS, AND SCHOLARSHIPS

Research funding – \$493,783 total awarded

| 2023 | National Science Foundation [awarded, but declined] |
|------|---|
| | Ocean Sciences Postdoctoral Research Fellowships (OCE-PRF) – \$167,800 |
| | Noise cascades: Evaluating the ecosystem impacts of anthropogenic sound |

- NOAA Fisheries Ocean Acoustic Program \$75,000 Incorporating the effects of ocean noise into food-web modeling
- 2022 National Academy of Sciences
 NRC Research Associateship \$61,000
 The impacts of climate change on endangered salmon via ecosystem modeling
- 2018-2021 National Science Foundation

| 2020 | Graduate Research Fellowship Program – \$138,000 The effects of natural river noise on animal communities and food webs American Arachnological Society Research Grant – \$900 Do orb-weaving spiders exploit artificial light at night? | | | |
|--|--|--|--|--|
| 2020 | Colorado Mountain Club Foundation Fellowship Research Grant – \$750 Spider survival and reproduction in a noisy world | | | |
| 2020 | Boise State University Redfield Graduate Fellowship – \$3,000 The effects of anthropogenic and natural noise on urban spiders | | | |
| 2015-2016 | U.S. Fulbright Program Research Grant – \$46,000 The Effects of Automobile Traffic Noise on Foraging Bats | | | |
| Other awards and funding – \$52.808 total | | | | |
| Other awar | ds and funding – \$52,808 total | | | |
| Other awar 2023 | rds and funding – \$52,808 total Woods Hole Oceanographic Institution Travel Grant – \$1,025 | | | |
| | | | | |
| 2023 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship | | | |
| 2023 2022 2021 2020 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 | | | |
| 2023 2022 2021 2020 2019 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 | | | |
| 2023 2022 2021 2020 2019 2017-2018 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 | | | |
| 2023 2022 2021 2020 2019 2017-2018 2015 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 Smithsonian Tropical Research Institute Travel Grant – \$833 | | | |
| 2023 2022 2021 2020 2019 2017-2018 2015 2013 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 Smithsonian Tropical Research Institute Travel Grant – \$833 University of Montana Davidson Honors College Undergraduate Research Award | | | |
| 2023 2022 2021 2020 2019 2017-2018 2015 2013 2013 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 Smithsonian Tropical Research Institute Travel Grant – \$833 University of Montana Davidson Honors College Undergraduate Research Award University of Montana Bill Morrelles Memorial Scholarship for Biology – \$400 | | | |
| 2023 2022 2021 2020 2019 2017-2018 2015 2013 2013 2012-2014 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 Smithsonian Tropical Research Institute Travel Grant – \$833 University of Montana Davidson Honors College Undergraduate Research Award University of Montana Bill Morrelles Memorial Scholarship for Biology – \$400 Western Undergraduate Exchange (WUE) Scholarship – \$23,000 | | | |
| 2023 2022 2021 2020 2019 2017-2018 2015 2013 2013 | Woods Hole Oceanographic Institution Travel Grant – \$1,025 American Fisheries Society Western Division Travel Grant – \$500 Energy, Salmon, Agriculture and Community Conference Student Scholarship Idaho Statewide 3MT competition 3 rd place – \$250 Boise State University Graduate College Scholar Dean's Award – \$300 Boise State University Graduate Residential Scholars Housing Award – \$26,000 Smithsonian Tropical Research Institute Travel Grant – \$833 University of Montana Davidson Honors College Undergraduate Research Award University of Montana Bill Morrelles Memorial Scholarship for Biology – \$400 | | | |

ORAL PRESENTATIONS

Conference / Invited Presentations

- 2024 The University of Alaska Fairbanks (**Invited Speaker**)

 Quantitative ecology: from predator-prey to ecosystem dynamics
- 2024 Eastern Pacific Marine One Health Coalition (Invited Workshop Presenter), Predator conflicts with fisheries and other protected species
- The Pacific Lamprey Information Exchange (Invited Speaker),
 An open-source Pacific lamprey life-cycle modeling tool in R shiny
- The Royal Society Ecology and Evolution Seminar Series (Invited Speaker), Why don't we share data and code? Perceived barriers and benefits to public archiving practices https://doi.org/10.52843/cassyni.dqbw1v

| 2023 | NOAA Fisheries, U.S. Department of Commerce Preparing for our future: Data accessibility challenges and solutions |
|--------|---|
| 2023 | 5 th International "Effects of Climate Change on the World's Ocean" – Bergen, Norway What will we leave our future? Data accessibility challenges and solutions Outstanding Oral Presentation Award https://doi.org/10.52843/cassyni.ygbbh2 |
| 2023 | Lees-McRae College (Invited Speaker), Banner Elk, North Carolina, USA How noise affects wildlife and species interactions |
| 2022 | American Fisheries Society (AFS) - National meeting, Spokane, Washington, USA Integrating information in ecosystem models and a call for open science https://doi.org/10.52843/cassyni.dptj0l |
| 2022 | The Wildlife Society (TWS) - Idaho Chapter meeting, virtual Should I use fixed effects or random effects with few levels of a grouping factor? https://doi.org/10.52843/cassyni.hsb7k8 |
| 2021 | Ecological Society of America (ESA) - Vital Connections in Ecology, virtual Experimental river noise alters bird and bat abundance, activity, and foraging behavior |
| 2020 | American Arachnological Society (AAS) annual conference, virtual The effects of river noise on orb-weaving spiders https://doi.org/10.52843/cassyni.qjbpvs |
| 2020 | Idaho Statewide 3 Minute Thesis competition (3rd place), Boise, Idaho, USA Phantom Rivers: a landscape-scale natural noise playback experiment |
| 2017 | Central Coast Biological Society (Invited Speaker), San Luis Obispo, California, USA Sensory disturbances: bats foraging in noisy conditions |
| 2016 | 62 nd Fulbright Berlin Seminar, Berlin, Germany Urban noise and animals: bats as acoustic specialists |
| 2015 | 25 th International Bioacoustics Council (IBAC), Murnau, Germany Multimodal foraging in clutter and noise by a frog-eating bat |
| Donart | mantal / Institutional Presentations |

Departmental / Institutional Presentations

- 2025 USGS Northwest-Pacific Islands Regional Summit Skamania Lodge, Stevenson, WA Integrated human-environment systems decision-support models.
- 2023 Marine Mammal Institute Monthly Meeting Oregon State University, Newport, OR Pacific salmon and marine heatwaves: An end-to-end ecosystem modelling approach

| 2023 | NWFSC Climate Network – NOAA Fisheries, virtual Understanding the effects of marine heatwaves with an end-to-end ecosystem model |
|----------------|--|
| 2021 | Hatfield Marine Science Center Seminar - Oregon State University, virtual How river noise influences wildlife; connecting the food web with ecosystem models https://doi.org/10.52843/cassyni.df053m |
| 2021 | PhD Dissertation Defense - Boise State University, virtual How wildlife respond to natural noise https://doi.org/10.52843/cassyni.blm6mq |
| 2020 | 3 Minute Thesis competition, Boise State University, Boise, ID, USA Phantom Rivers: a landscape-scale natural noise playback experiment |
| 2019 | McGuire Center Group Meeting - University of Florida, Linking predator-prey communities within a landscape-scale noise playback experiment |
| 2018 | Graduate Student Symposium, Boise State University, Boise, ID, USA Linking predator-prey communities within a landscape-scale noise playback experiment |
| 2015 | Smithsonian Tropical Research Institute Fellows Symposium, Panama City, Panama Multimodal foraging of a gleaning bat in noise |
| 2014 | University of Montana Conference on Undergraduate Research, Missoula, MT The origin of novel morphologies: a case study of a rhinoceros beetle |
| Outrea 2020 | ch Presentations Idaho State Legislators Boise State University President's Dinner (Invited Speaker) The effects of natural soundscapes on animal communities |
| 2019 | Lewis and Clark Elementary School (2nd grade), Missoula, Montana Studying how soundscapes affect ecosystems |
| 2019 | Craters of the Moon National Monument, National Park Service, Idaho Natural Sounds & Night Skies: how noise & light pollution affect people & wildlife |
| 2017 | Redwood Grotto of the National Speleological Society (Invited Speaker), California White-nose syndrome, human noise, and artificial lights: issues in bat conservation |
| 2017 | Cloverdale High School (A.P. Environmental Studies), California What it means to be a scientist; intro to studying sensory ecology |

- Why Did Anchovy Boom in the Last Decade in the California Current Ecosystem in a Remarkably Warm Ocean? M. Robidas, R. Swalethorp, **D. Gomes**, B. Semmens, S. Searcy, J. Fiechter, M. Seale, C. Hinchliffe, W. Fennie, B. Muhling, and A. Thompson. 24th Annual Trinational Sardine and Small Pelagic Forum
- The Northern California Current on fire: consequences of a widespread and persistent anomalous pyrosome bloom.
 - R. D. Brodeur, K. R. Sutherland, K. S. Bernard, L. E. Lilly, E. A. Daly, **D. G. E. Gomes**, S. M. Zeman, M. Galbraith, R. I. Perry, D. L. Draper, J. J. Ruzicka, E. P. Bjorkstedt, and R. R. Robertson.
 - ICES-PICES 7th International Zooplankton Production Symposium Tasmania, Australia
- Widespread marine predator culls will not recover salmon populations
 L. Crozier, **D. Gomes**, J. Ruzicka, D. Huff, J. Stewart.
 PICES (The North Pacific Marine Science Organization) Honolulu, HI, USA
- End-to-end ecosystem modelling: marine heat waves and endangered Chinook salmon
 D. Gomes, L. Crozier, J. Ruzicka, D. Huff, and J. Stewart
 Effects of Climate Change on the World's Ocean (ECCWO5) Bergen, Norway
- 2020 Using R in a large-scale noise playback experiment **D. Gomes** & J. R. Barber.
 Boise State University, Research Computing Days
- Phantom Rivers: how whitewater river noise alters predator-prey communities
 D. Gomes, C. Toth, A. Kawahara, C. D. Francis, J. R. Barber.
 Boise State University, Graduate Student Showcase Dean's award
- Whitewater acoustics
 J. Anderson, T. Ronan, H. D. Ortiz, **D. Gomes**, J. Barber, J. Johnson, J. McNamara. 100th American Geophysical Union (AGU)
- 2019 How does noise affect arthropod communities
 A. Pavlakos*, V. Atit*, A. Kawahara, J. Barber, C. Bateman, **D. Gomes**University of Florida, Undergraduate Research Symposium
- Linking predator-prey communities within a landscape-scale noise playback experiment
 D. Gomes, C. Toth, A. Kawahara, C. D. Francis, J. R. Barber.
 Boise State University, Graduate Student Symposium

LAY COMMUNICATIONS

Northwest Fisheries Science Center Collaboration. 2024. Marine Heatwaves Reshape the

Northern California Current Ecosystem. *NOAA Fisheries Feature Story*. https://www.fisheries.noaa.gov/feature-story/marine-heatwaves-reshape-northern-california-current-ecosystem

- **Gomes D. G. E.** 2022. Non-consumptive killing of a conspecific dragonfly. *Frontiers in Ecology and the Environment: EcoPics.* https://doi.org/10.1002/fee.2571
- Gomes D. G. E. 2021. Experimental river noise alters bird and bat abundance and behavior across a landscape. *Nature Ecology and Evolution Community*. https://natureecoevocommunity.nature.com
- **Gomes D. G. E.** 2021. How the acoustic environment shapes spider abundance and behaviour. *Functional Ecologists blog.* https://functionalecologists.com/2021/01/26/dylan-gomes
- **Gomes D. G. E.** 2018. Human Noise Bothers Outdoor Visitors. What About Wildlife? *Bay Nature Magazine*. https://baynature.org/2018/11/07/human-noise
- **Gomes D. G. E.** 2018. Eavesdropping Bats Make Frogs Pay A Price For Recycling Air When Calling. *Science Trends*. https://sciencetrends.com/eavesdropping-bats
- **Gomes D. G. E.** 2018. Some Animals Can Cope With Noise, While Others Cannot. *Science Trends*. https://sciencetrends.com/noise

SELECTED RESEARCH MEDIA ATTENTION

- 2024. For a Green Future podcast interview with Joe DeMare on marine heatwaves.
- 2024. How the presence of weird, gelatinous creatures on the Oregon Coast led to discoveries about marine heat waves. *KGW Television*.
- 2024. <u>Pickle-shaped sea creatures popping up along the NW coast, why it's important.</u> *Northwest Public Broadcasting.*
- 2024. OSU, NOAA study finds marine heat waves disrupt the ocean's food web in the northeast Pacific. KTVZ News.
- 2024. In Hot Water: An OSU Study Shows Marine Heatwaves Are Hurting Oceans. KLCC Radio.
- 2024. <u>Blobby creatures washed up on West Coast beaches during marine warming, sucking up energy.</u> *The Seattle Times*.
- 2021. As 'phantom rivers' roar, birds and bats change their hunting habits, Science News.

- 2021. A Boise State study fooled animals into thinking a raging river was near. Many disappeared. The Idaho Statesman.
- 2021. <u>Creating a Phantom River: Experimental Broadcast of Whitewater River Noise Drives Bats and Birds Away</u>. *Sci Tech Daily*.
- 2020. Orb-weaving spiders catch light, sound and snacks on Boise Greenbelt bridges. Boise State News.
- 2020. <u>Artificial light a boon for spiders.</u> Ecological Society of America (ESA) *Frontiers in Ecology and the Environment dispatch*.
- 2016. How Human Noise Forces Animals to Change Lifestyles. Scientific American.
- 2016. Bats Use Second Sense to Hunt Prey in Noisy Environments. Smithsonian Insider.
- 2016. When it's too noisy for bats to listen for their prey, they use echolocation to hunt instead. Los Angeles Times.
- 2016. When Humans Make Too Much Noise, Bats Just Change How They Hunt. Popular Mechanics.
- 2016. Bats are adapting their hunting strategies to the noise of our cities. The Verge.
- 2016. How do bats handle unnatural noise? Smithsonian Tropical Research Institute News.

WORKSHOP PARTICIPANT

| 2025 | Building relationships with Tribes, USGS NWPI Regional Summit |
|------------------|--|
| 2024 | Salmon Predator Workshop, NOAA Fisheries |
| 2023 | Ocean Ecology Research Directions, NOAA Fisheries |
| 2022 | NSF-funded Bayesian 10-day course; Colorado State University |
| | - led by Dr. Tom Hobbs, Dr. Mevin Hooten, Dr. Bailey Fosdick |
| 2022 | Indigenous Data Sovereignty, American Fisheries Society conference |
| 2022 | Fitting Spatial and Spatiotemporal Models with sdmTMB, NOAA |
| 2022 | Free & Open Source Software for Acoustics, NOAA Fisheries |
| 2021 | Puget Sound Salmonid Scenario Planning, NOAA Fisheries |
| 2021 | Promoting GitHub in EcoEvo Research, SORTEE |
| 2021 | Data Science Boot Camp, Center for Advanced Energy Studies |
| 2021 | Web apps (RShiny and PyFlask), Visualization, Machine Learning |
| 2021 | Decision support tools, NOAA Fisheries |
| 2021 | Anthropogenic sound, Association for the Study of Animal Behaviour |
| 2021 | Ecosystem modeling, NOAA Fisheries |
| 2018, 2020, 2021 | R software carpentry, Research Computing Days, BSU |

| 2020 | Python software carpentry, Research Computing Days, BSU |
|------|--|
| 2015 | Introduction to R, Max Planck Institute for Ornithology |
| 2014 | Introduction to R, Smithsonian Tropical Research Institute |

ADDIT. CONFERENCES ATTENDED (but did not present; see conference presentations)

| California Cooperative Oceanic Fisheries Investigations (CalCOFI) Conference |
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| Society for Open, Reliable, and Transparent Ecology and Evolution (SORTEE) |
| Energy, Salmon, Agriculture, and Community - Andrus Center for Public Policy |
| Conference on the winter ecology of Pacific salmon |
| Half-Earth Day - E. O. Wilson Biodiversity Foundation, virtual |
| Half-Earth Day - E. O. Wilson Biodiversity Foundation, UC Berkeley, CA |
| |

SERVICE / SOCIETY INVOLVEMENT

Professional societies

| 2021-present | Society for Open, Reliable, and Transparent Ecology and Evolution (SORTEE) |
|--------------|--|
| | 2022-2023, member of the Equity, Diversity, and Inclusion Committee |
| | 2022-2023, member of the Advocacy Committee |
| 2021-2023 | American Fisheries Society |
| 2021-2022 | The Wildlife Society |
| 2021-2022 | Oregon & Idaho Chapters |
| 2021-2022 | Ecological Society of America |
| 2021-2022 | Entomological Society of America |
| 2020-2021 | American Arachnological Society |
| 2017-2020 | American Association for the Advancement of Science (AAAS) |

Group involvement

| 2017-present | Stack Overflow contributor |
|--------------|---|
| 2021-2023 | R user group, NOAA National Marine Fisheries Service |
| 2017-2021 | R user group, Boise State University (BSU) |
| 2018-2021 | Ecology, Evolution, and Behavior Graduate Student Group (BSU) |
| | 2018-2019, Vice President and co-founder |
| 2012-2013 | Student-Faculty Evaluation Committee – University of Montana |

Data Editor

Proceedings of the Royal Society B

2025-present (Senior Data Editor); 2024–2025 (Data Editor); 41 submissions handled (updated: 10/20/2025).

Peer review

Proceedings of the Royal Society B (3), Scientific Reports (3), Journal of Applied Ecology (3),

Oceanography (1), PeerJ Computer Science (1), PLOS One (1), Current Opinion in Insect Science (1), Ethology (1), Acta Ethologica (1), Acta Oecologica (1), Diversity (1), WIREs Water (1), Internal Reviewer at NOAA Fisheries (1) and the USGS (1).