Dylan Gerald-Everett Gomes

Marine Reserves Program, Oregon Department of Fish and Wildlife
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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)

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.

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. (*submitted*). Developing a species habitat-based modeling framework to optimize conservation and military readiness outcomes. *Ecological Modelling.*

Refereed journal articles - ORCID *Google Scholar*

Gomes D. G. E., Crozier L. G., Ruzicka J. J., Huff D. D., Stewart J. D. (2026). Widespread marine mammal and seabird reductions are unlikely to benefit salmon due to indirect ecosystem effects. *Science.*

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. (2026). Larval condition helps explain the recent anchovy boom in an extremely warm California Current Ecosystem. *ICES Journal of Marine Science*. 83 (7), fsag124.

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. (2026). The devil's in the details when using correlative and mechanistic species distribution models to inform multispecies and ecosystem model. *Canadian Journal of Fisheries and Aquatic Sciences*. 83, 1-27.

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. (2026). The Northern California Current on fire: consequences of a widespread and persistent anomalous pyrosome bloom. *Progress in Oceanography*, 103741.

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. (2026). The SORTEE Guidelines for Data and Code Quality Control in Ecology and Evolutionary Biology. *Peer Community Journal*. 6, e20.

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*. 20(5), e0323408. 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*. 19(1).

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). Data & Code

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). Data & Code

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). Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Data & Code

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. Altmetric Data & Code

Non-refereed reports

Buell, T., Heath, C., **Gomes, D.**, Lockhart, K., Marion, S., Rasmuson, L., Schmid, M., Sharpe, C., Terwilliger, M., Vestfals, C., and Whitman, A. (2026) Oregon's groundfish investigations in 2025. Groundfish Technical Committee Report. Oregon Department of Fish and Wildlife Marine Resources Program.

Morgan, C.A., Auth, T.D., Beckman, B.R., Burke, B.J., Crozier, L.G., Daly, E.A., Fitzpatrick, C.K., Forney, R.M., **Gomes, D.G.E.**, Huff, D.D., Jacobson, K.C., Miller, J.A., O'Malley, K.G., Wallace, A.A., and Zamon, J.E. (2026) Ocean Survival of Salmonids RME, 1/1/2025–12/31/2025, Bonneville Power Administration Annual Report, 1998-014-00, 82 pp.

Gomes, D. (2022) Non‐consumptive killing of a conspecific dragonfly. *Frontiers in Ecology and the Environment*. 20 (9), 530-530

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 in a noise playback experiment 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 for "Experimental river noise alters arthropod abundance" (see publications).

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

2024 Joint Base Lewis-McChord
Structured Decision Making: ESA-Listed Species and Military Readiness (co-led)

2023 USGS
R Carpentries Workshop, 3-day course (assisted)

2021 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-funded workshop, Grand Teton National 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

Marine Reserves of Oregon: Adaptive Management and Ecological Research
2/5/2026 ESM 483/583: Marine Conservation and Management, Portland State University, OR

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.)

2024	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

2022-2025 Reese Caparelli Ossining High School Science Research Program
The effects of traffic noise on birds
International Science and Engineering Fair, 2025
Regeneron Westchester Science & Engineering Fair, 2025 - **1st place**
International Genius Olympiad at RIT in Rochester, New York - **Invited**
Regeneron Westchester Science & Engineering Fair, 2024 - **2nd place; Bedford Audubon Award**
27th Annual Ossining Science Research Symposium, 2025
26th Annual Ossining Science Research Symposium, 2024
25th Annual Ossining Science Research Symposium, 2023 - **1st place**

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

2021 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

2017 NSF Gateway Scholars undergraduate student mentorship, Boise State University

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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

2023 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
Graduate Research Fellowship Program – $138,000
The effects of natural river noise on animal communities and food webs

2020 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 – $52,818 total

2023 Woods Hole Oceanographic Institution Travel Grant – $1,025
2022 American Fisheries Society Western Division Travel Grant – $500
2021 Energy, Salmon, Agriculture and Community Conference Student Scholarship –$10
2020 Idaho Statewide 3MT competition 3rd place – $250

2019	Boise State University Graduate College Scholar Dean's Award – $300
2017-2018	Boise State University Graduate Residential Scholars Housing Award – $26,000
2015	Smithsonian Tropical Research Institute Travel Grant – $833
2013	University of Montana Davidson Honors College Undergraduate Research Award
2013	University of Montana Bill Morrelles Memorial Scholarship for Biology – $400
2012-2014	Western Undergraduate Exchange (WUE) Scholarship – $23,000
2012	Morro Coast Audubon Society Nancy Vaughan Scholarship for Biology – $500
2012	Cuesta College – Pete Pedersen "Biology Student of the Year" Award

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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

2023 The Pacific Lamprey Information Exchange **(Invited Speaker)**,
An open-source Pacific lamprey life-cycle modeling tool in R shiny

2023 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 Office of the Chief Information Officer IT Community **(Invited Speaker)**,
NOAA Fisheries, U.S. Department of Commerce
Preparing for our future: Data accessibility challenges and solutions

2023 5th 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 62nd Fulbright Berlin Seminar, Berlin, Germany
Urban noise and animals: bats as acoustic specialists

2015 25th International Bioacoustics Council (IBAC), Murnau, Germany
Multimodal foraging in clutter and noise by a frog-eating bat

Departmental / Institutional Presentations

2026 Nearshore Ecology Program Meeting – Hatfield Marine Science Center, Newport, OR
Exploring patterns of biodiversity in Oregon's marine reserves

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

Outreach Presentations

2026 Monterey Bay Aquarium Research Institute Satellite Workshop, Eugene, Oregon
Ecological research in Oregon's marine reserves

2020 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

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POSTER PRESENTATIONS (only presented first-author posters); * = undergraduate mentee

2025 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

2024 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

2024 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

2023 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

2019 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**

2019 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

2018 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

Auzier B., **Gomes D.**, Brand J. 2026. What does a Data Editor actually do? Notes from the Proceedings B Senior Data Editor team. *The Royal Society Blog.* https://royalsociety.org/blog/2026/11/what-does-a-data-editor-actually-do/

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

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SELECTED RESEARCH MEDIA ATTENTION

2024. Marine heatwaves in the north Pacific Ocean. Broadcast in China and reached over 10 million viewers. *Hunan TV*.

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. Pickle-shaped sea creatures popping up along the NW coast, why it's important. *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. Blobby creatures washed up on West Coast beaches during marine warming, sucking up energy. *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. Creating a Phantom River: Experimental Broadcast of Whitewater River Noise Drives

Bats and Birds Away. *Sci Tech Daily*.

2020. Orb-weaving spiders catch light, sound and snacks on Boise Greenbelt bridges. *Boise State News*.

2020. Artificial light a boon for spiders. 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

OUTREACH EVENTS (see Presentations above for Outreach Presentations)

2026	Marine Science Day, Hatfield Marine Science Center, Newport, OR
2025	Marine Area Designations, a Guided Walk with Seven Capes Bird Alliance

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

2026	Western Groundfish Conference – Alternate Symposium, Newport, OR
2021, 2022	California Cooperative Oceanic Fisheries Investigations (CalCOFI) Conference
2021–2025	Society for Open, Reliable, and Transparent Ecology and Evolution (SORTEE)
2021	Energy, Salmon, Agriculture, and Community - Andrus Center for Public Policy
2021	Conference on the winter ecology of Pacific salmon
2020	Half-Earth Day - E. O. Wilson Biodiversity Foundation, virtual
2019	Half-Earth Day - E. O. Wilson Biodiversity Foundation, UC Berkeley, CA

RESEARCH CRUISES (not including day trips)

2026	NOAA Northern California Current Survey — R/V Shimada 15 days; midwater nighttime trawl; organism ID, measure, collection; seabird and mammal observations
2023	NOAA Juvenile Salmon and Ocean Ecosystem May Survey — F/V Frosti 6 days; surface trawl; fish & invert ID, measure, collection; fish bleeding (IGF-1)
2022	NOAA Juvenile Salmon and Ocean Ecosystem June Survey — F/V Frosti 8 days; surface trawl; fish & invert ID, measure, collection; seabird observations
2022	NOAA Pre-recruit Rockfish Survey — R/V Shimada 11 days; midwater nighttime trawl; organism ID, measure, collection; mammal obs.

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); 84 submissions handled (updated: 11/11/2026).

Peer review

Proceedings of the Royal Society B (3), Scientific Reports (3), Nature Communications (1), Journal of Applied Ecology (3), Oceanography (1), PeerJ Computer Science (1), PLOS One (2), Current Opinion in Insect Science (1), Ethology (1), Acta Ethologica (1), Acta Oecologica (1), Med (1), Diversity (1), WIREs Water (1), Internal Reviewer at: NOAA Fisheries (1), ODFW (1), and the USGS (1).