# **Cheryl L. Barnes, PhD** (she | they) PI, Integrated Marine Fisheries Lab

Coastal Oregon Marine Experiment Station Department of Fisheries, Wildlife, and Conservation Sciences Hatfield Marine Science Center, Oregon State University 2030 SE Marine Science Dr | Newport, OR 97365



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<b>©</b> EDUCATION	
PhD, Fisheries – UNIVERSITY of ALASKA FAIRBANKS (UAF) College of Fisheries and Ocean Sciences, Juneau Campus	2019
MS, Marine Science – MOSS LANDING MARINE LABORATORIES (MLML) Degree awarded by San José State University (SJSU)	2015
BS, Biology – SAN DIEGO STATE UNIVERSITY (SDSU) Emphasis: Marine Biology	2006
PROFESSIONAL EXPERIENCE (2006 to present)	
OREGON STATE UNIVERSITY (OSU)	
Assistant Professor in Marine Fisheries	2023-P
SCIENTIFIC and STATISTICAL COMMITTEE (SSC), PACIFIC FISHERY MANAGEMENT ( Appointment, Oregon Department of Fish and Wildlife Representative Vice Chair, Groundfish Subcommittee Member, Ecosystem-based Management Subcommittee Member, Highly Migratory Species Subcommittee	COUNCIL 2023-P
COOPERATIVE INSTITUTE for CLIMATE, OCEAN, and ECOSYSTEM STUDIES (CICOES	o)
UNIVERSITY of WASHINGTON – Seattle, WA	
Research Scientist Postdoctoral Scholar	2022-2023 2020-2022
	2020-2022
SCALE BACK CONSULTING, LLC – Anchorage, AK Principal Investigator	2020-2023
UNIVERSITY of ALASKA FAIRBANKS – Juneau, AK	_0_0_0
Research Assistant	2015-2019
Teaching Assistant	2017
${\sf CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~Landing,~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~CA~COLLABORATIVE~FISHERIES~RESEARCH~PROGRAM~(CCFRP)-Moss~CA~CA~CA~CA~CA~CA~CA~CA~CA~CA~CA~CA~CA~$	
Lead Scientist	2011-2014
Volunteer Coordinator	2010-2011
Science Crew  CALIFORNIA SEA CRANIT San Diogo CA	2010
CALIFORNIA SEA GRANT – San Diego, CA Extension Program Representative	2010-2014
SAN DIEGO OCEANS FOUNDATION (SDOF) – San Diego, CA	2010 2011
Programs and Outreach Director	2008-2010
Marine Science Education Program Coordinator	2008
MWR: COMMANDER FLEET ACTIVITIES – Sasebo, Japan	
Head Lifeguard	2007-2008
Water Safety Instructor	2007-2008
Lifeguard	2006-2007

AWARDS AND HONORS	
Chapter Service Award, Alaska Chapter of the American Fisheries Society	2023
Diversity and Inclusion Service Award, Western Division of the American Fisheries Society	2021
Top 10 Most Downloaded Papers ^, Ecological Applications	2020
W.F. Thompson Award (Best Student Paper from 2018*), American Institute of Fishery Biologists	2019
Dean's Recognition Award – Outstanding Graduate Student, UAF	2019
First Place – Student Talk <sup>∞</sup> , Western Groundfish Conference	2018
Second Place – Student Poster†, Western Groundfish Conference	2016
Mirth Award, Western Groundfish Conference	2016
First Place – Student Poster <sup>§</sup> , Monterey Bay National Marine Sanctuary Symposium	2013
Dean's List – Honors Recognition, SDSU 200	04, 2006
TRAVEL SUPPORT	
Lowell Wakefield Fisheries Symposium 2015, 201	9, 2024
Alaska Chapter of the American Fisheries Society 2015, 201	7, 2018
Western Groundfish Conference 2012, 2014, 201	
Western Division of the American Fisheries Society	2017
CSU Council on Ocean Affairs, Science, and Technology	2014
International Flatfish Symposium	2014
Superscripts correspond to items in 'PUBLICATIONS' and 'PRESEN	NTATIONS'
GRANTS AND FELLOWSHIPS	
Magnuson-Stevens Act Implementation, NOAA Fisheries	
Pls: CL Barnes, PD Spencer, M Szymkowiak – <b>\$90,736</b>	2024
Climate and Fisheries Adaptation (CAFA) Program, NOAA Fisheries	
Alaska Climate Integrated Modeling (ACLIM) Project, Phase III – \$527,895	2024
Pls: KY Aydin, KK Holsman, CS Szuwalski, SP Wise; Collaborators: CL Barnes, JCP Reum	2024
Gulf of Alaska Climate Integrated Modeling (GOACLIM) Project, Phase II – \$230,130 Pls: CL Barnes, MD Bryan, MW Dorn, CR McGilliard, AE Punt; Collaborator: JCP Reum	2024
Pacific Fishery Management Council – \$40,056	2024
Alaska Regional Office and Alaska Fisheries Science Center, NOAA (co-Pl: JT Thorson) – <b>\$122,995</b>	2024
Branch Experiment Station Research Internship (College of Agr. Sciences, OSU) – \$7,500	2024
Alaska Regional Office, NOAA (co-Pls: J Pirtle, JT Thorson) – <b>\$104,121</b>	2023
Alaska Sea Grant Program Development Award (AK Chapter AFS) – \$8,850	2022
	21; 2022
	20-2022
	18-2019
···	17-2019
•	15-2019
SJSU Associated Students Advocacy Award; Graduate Equity Fellowship – \$500; \$3,000 2014; 20	13-2014
	13-2014
Clarence F. and Lyle V. Burmahln Scholarship – \$500	2013
Dr. Earl and Ethel Myers Oceanographic and Marine Biol. Trust Grant – \$1,500	2013
MLML Scholar Award (Michael Lee Environmental Foundation) – \$2,200	2013
Xiphias Martin Scholarship: John H. Martin Family – \$500	2013
Lucille and David Packard Foundation Research and Travel Grant – \$1,000	2013
CSU Council on Ocean Affairs, Science, and Technology Graduate Student Award – \$3,000	2013

# PEER-REVIEWED PUBLICATIONS

#### Published, In Press, or Accepted

- Punt A, Tsou T-S, **Barnes C**, Melvin G, and Neilson J. 2024. Pacific sardine Stock Assessment Review (STAR) panel meeting report. Pacific Fishery Management Council. Portland, OR. 26 pp.
- Kerametsidis G, Thorson J, Rossi V, Álvarez-Berastegui D, **Barnes CL**, Certain G, Esteban A, García E, Jadaud A, Piñeiro S, Vivas M, and Hidalgo M. 2024. Cross-scale environmental impacts across persistent and dynamic aggregations within a complex population: implications for fisheries management. Can J Fish Aquat Sci. 81(3):268-284.
- Dick EJ, **Barnes C**, Coates J, Grunloh N, Monk M, and Rogers T. 2023. The status of Black Rockfish (*Sebastes melanops*) in U.S. waters off California in 2023. Pacific Fishery Management Council. Portland, OR. 367 pp.
- Siddon E (ed). 2023. Abelman A, Adams G, Anderson DM, Andrews AG II, Aydin K, Barbeaux S, **Barnes CL**, Barnett LAK, et al. 2022. Eastern Bering Sea Ecosystem Status Report. North Pacific Fishery Management Council. Anchorage, AK. 241 pp.
- Thorson JT, **Barnes CL**, Friedman ST, Morano JL, and Siple MC. 2023. Spatially varying coefficients can improve parsimony and descriptive power for species distribution models. Ecogr. e06510.
- **Barnes CL**, Essington TE, Pirtle JP, Rooper CN, Laman EA, Holsman KK, Aydin KY, and Thorson JT. 2022. Climate-informed models benefit hindcasting but present challenges when forecasting species-habitat associations. Ecogr. e06189.
- Brodie S, Smith JA, Muhling BA, Kaplan IC, Barnett LAK, Carroll G, Fiedler P, Bograd SJ, Hazen EL, Jacox MG, Andrews KS, **Barnes CL**, Crozier L, Fiechter J, Fredston A, Haltuch MA, Harvey CJ, Holmes E, Karp MA, Liu OR, Malick MJ, Buil MP, Richerson K, Rooper CN, Samhouri J, Seary R, Selden RL, Thompson AR, Thorson J, Tommasi D, Ward EJ, and Zabel R. 2022. Recommendations for quantifying and reducing uncertainty in projections of species distributions. Glob Change Biol. 28: 6586-6601.
- Dorn MW and **Barnes CL**. 2022. Time-varying predation as a modifier of constant natural mortality for Gulf of Alaska pollock. Fish Res. VSI Natural Mortality. 254(2022): 106291.
- Siddon E (ed). 2022. Abelman A, Adams G, Ahkinga O, Anderson D, Andrews A, Aydin K, Barbeaux S, **Barnes CL**, Barnett L, et al. 2022. Eastern Bering Sea Ecosystem Status Report. North Pacific Fishery Management Council. Anchorage, AK. 227 pp.
- Grüss A, Thorson JT, Stawitz CC, Reum JCP, Rohan SK, and **Barnes CL**. 2021. Synthesis of interannual variability in spatial demographic processes supports the strong influence of cold-pool extent on eastern Bering Sea walleye pollock (*Gadus chalcogrammus*). Progr Ocean. 194(2021): 102569.
- **Barnes CL**, Beaudreau AH, and Yamada RN. 2021. The role of size in trophic niche separation between two groundfish predators in Alaskan waters. Mar Coast Fish. 13:98–113.
- Siddon E (ed). 2021. Adams G, Anderson D, Andrews AG II, Aydin K, Barbeaux S, **Barnes CL**, Barnett L, et al. 2021. Eastern Bering Sea Ecosystem Status Report. North Pacific Fishery Management Council. Anchorage, AK. 249 pp.
- **Barnes CL**<sup>^</sup>, Beaudreau AH, Dorn MW, Holsman KK, and Mueter FJ. 2020. Development of a predation index to assess trophic stability in the Gulf of Alaska. Ecol Appl. 30(4):e02141.
- **Barnes CL\***, Beaudreau AH, Hunsicker ME, and Ciannelli L. 2018. Assessing the potential for competition between Pacific Halibut (*Hippoglossus stenolepis*) and Arrowtooth Flounder (*Atheresthes stomias*) in the Gulf of Alaska. PLoS ONE. 13(12):e0209402.

Superscripts correspond to items in 'AWARDS and HONORS'

# PEER-REVIEWED PUBLICATIONS, CONT'D

## Published, In Press, or Accepted, Cont'd

- **Barnes CL** and Starr RM. 2018. Reproductive tactics of California Halibut (*Paralichthys californicus*): combining spawning season, interspawning interval, and batch fecundity to estimate annual reproductive output for a multiple-batch spawning fish. CalCOFI Rep. 59:102–114.
- Lesyna KM and **Barnes CL** (corresponding author). 2016. Assessment of length- and age-at-maturity for California Halibut (*Paralichthys californicus*), including a histologically-based description of the reproductive cycle. Calif Fish Game. 102(3):79–99.
- **Barnes CL**, Starr RM, and Reilly PN. 2015. Growth, mortality, and reproductive seasonality of California Halibut (*Paralichthys californicus*): a biogeographic approach. CalCOFI Rep. 56:110–118.
- Starr RM, Wendt DE, **Barnes CL**, Marks CI, Malone D, Waltz G, Schmidt KT, Chiu J, Launer AL, Hall NC, and Yochum N. 2015. Variation in responses of fishes across multiple reserves within a network of marine protected areas in temperate waters. PLoS ONE. 10(3): e0118502.
- Starr RM, Cortés J, **Barnes CL**, Green K, and Breedy O. 2012. Characterization of deepwater invertebrates at Isla del Coco National Park and La Gemelas Seamount, Costa Rica. Int J Trop Biol. 60(3):303–319.

## In Revision, In Review, or Submitted

- Goodman MC, Reum JCP, **Barnes CL**, Punt AE, Ianelli JN, McHuron EA, De Leo GA, and Holsman KK. In revision. Spatial responses to pH, oxygen, and an oceanographic index increase the extent of projected range shifts in the Bering Sea. Fish and Fisheries. Forthcoming.
- Rovellini A, Punt AE, Dorn MW, Kaplan IC, Bryan MD, Adams GD, Aydin KY, Baker MR, **Barnes CL**, Ferriss BE, Fulton EA, Haltuch MA, Hermann AJ, Holsman KK, McGilliard C, McHuron EA, Morzaria-Luna HM, and Surma S. In review. Evaluating groundfish optimum yield in the Gulf of Alaska under climate stress. Ecol Appl. Forthcoming.

#### In Preparation

- **Barnes C**, Oken K, Sampson D, and Wetzel C. In prep. California halibut Stock Assessment Review (STAR) panel report. California Department of Fish and Wildlife. Sacramento, CA. Forthcoming.
- **Barnes CL**, MP Bargas, and Vernon H. In prep. Using information about population structure to optimized the spatial scale of groundfish stock assessments along the US West Coast. Forthcoming.
- Siple M, Nielsen J, Andrews A, Eisner L, Siddon E, Sullaway G, **Barnes CL**, Gann J, Harris J, Kimmel D, Mordy C, Pirtle J, Rogers L, Rohan S, and Yasumiishi E. In prep. Climate-driven prey fields for small pelagics in the Bering Sea. Forthcoming.
- **Barnes CL**, Reum JCP, McGilliard CR, Bryan MD, Dorn MW, and Punt AE. In prep. Blending ecological theory and simulation modeling to predict food web dynamics in an ever-changing marine ecosystem. Forthcoming.
- Holsman KK, **Barnes CL**, Laurel BJ, and Hurst TP. In prep. Climate change and marine heatwaves induce declines in fish energetics and growth. Forthcoming.
- **Barnes CL**, Waltz GT, Hamilton SL, Ruttenberg BI, Starr RM, and Brooks RO. In prep. Synchrony as a measure of resilience for temperate groundfish communities. Forthcoming.
- Gerson PE, **Barnes CL**, Thorson JT, Pirtle JP, Reum JCP, Miller JA, and Rogers LA. In prep. Predators as samplers: using food habits data to inform climate- and community-driven shifts in habitat use by federally-managed groundfish species. Forthcoming.
- Bargas MP, **Barnes CL**, Heppell SA, Rasmuson LK, and Cope JM. In prep. Biogeographic variation in black rockfish (*Sebastes melanops*) life history traits from California to Alaska. Forthcoming.

Superscripts correspond to items in 'AWARDS and HONORS'

#### **MENTORSHIP**

#### **Graduate Students**

- M. Bargas + (MS, IP)
- G. Christie (MS, IP)
- H. Delgado-Nordmann (MS, 2016)
- N. Fillman ^ (PhD, IP)
- P. Gerson<sup>+</sup> (MS, IP)
- J. Hansen + (PhD, IP)
- L. Horstmyer °(MS, IP)
- G. Hunt (MS, 2015)
- M. Monneedy ° (MS, IP)
- I. Nyameke ° (PhD, IP)

#### Research Assistants

- I. Antus (2009)
- H. Heath (2013-14)
- K. Ros (2010)
- S. Robinson (2011)
- A. Sloan (2014)

C. Hope (2010)

## **Undergraduate Students**

- M. Adams <sup>∇</sup> (2024) Z. Johanson (2016) A. Aines (2013) A. Kamber (2017) D. Anaya (2013) L. Knopp (2009) K. Askeland (2010) K. Kuhn (2008) M. Bargas (2017) J. Li (2020-21) K. Beck (2014) V. Light<sup>∇</sup> (2024)
- E. Bjork (2008) S. Link (2016)
- S. Briley (2008) S. Lockwood <sup>∇</sup> (2024-P) K. Brown (2016) S. Lomonico (2014)
- A. Chorazyczewski (2014) M. Mairz (2010)
- E. Cunningham <sup>∇</sup> (2024) R. McCollough (2013) T. Davies (2024-P) P. Muehlenbeck (2012)
- C. Doles (2013) R. Rand (2011-12) D. Duncan (2013) D. Rojano (2024-P)
- A. Feck (2009) M. Schmidt (2012) A. Gile (2015) E. Schurig (2013) N. Giraud (2009) S. Saadat (2010-11)
- P. Saengcharoentrakul (2020-21) C. Giordano (2014)
- G. Godfrey <sup>∇</sup> (2024-P) N. Siababa (2014) A. Hedger (2009) E. Stollmeyer (2013) E. Hetherington (2009) H. Vernon (2024-P) F. Holman (2022-P) H. Wayner (2016-17)
- C. Homer (2018) D. Weir (2009)

+ Faculty Advisor °Committee Member <sup>^</sup> Graduate Council Representative

<sup>∇</sup> supervised by graduate student

E TEACHING	
OREGON STATE UNIVERSITY	2024-P
Introduction to Fisheries Assessment (Graduate Course; eCampus)	
AMERICAN FISHERIES SOCIETY	2021
Spatiotemporal Analysis of Ecological Data (Conference Workshop)	
UNIVERSITY of ALASKA FAIRBANKS	
Making Ecological Inferences from Fisheries Data (Graduate Course; Guest Lecture)	2018
Field Methods in Marine Ecology and Fisheries (Undergraduate Course)	2017
UNIVERSITY of ALASKA SOUTHEAST: INTRO. to ALASKA FISHERIES – Juneau, AK Pacific Halibut Biology, Ecology, and Management (Undergraduate Course; Guest Lecture)	2016
	2013, 2012
SAN DIEGO OCEANS FOUNDATION	
<b>0</b>	2008-2010
REEF Survey Methods and Species Identifications (Community Science Training Program)	2008-2010
<b>PRESENTATIONS</b>	
68 NWFSC MONSTER JAM SEMINAR SERIES (Virtual)	2024
<ul> <li>Navigating uncertainty through stakeholder engagement and integrated approaches to fisheries science</li> </ul>	
<ul> <li>67 LOWELL WAKEFIELD FISHERIES SYMPOSIUM (Sitka, AK)</li> <li>— Working together to account for space in the form of baselines, barometers, and best-guesses</li> </ul>	2024
66 HATFIELD MARINE SCIENCE CENTER, OSU (Newport, OR)	2023
Navigating uncertainty through stakeholder engagement and integrated approaches to fisheries science	2029
65 WESTERN GROUNDFISH CONFERENCE (Juneau, AK)	2023
— Climate-informed models benefit hindcasting but present challenges for forecasting species-habitat associated to the control of the control	
<ul> <li>63-64 ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY (Fairbanks, AK)</li> <li>— Climate-informed models benefit hindcasting but present challenges for forecasting species habitat associations.</li> </ul>	2023
<ul> <li>Prospective students: new opportunities with the Integrated Marine Fisheries Lab at OSU</li> </ul>	lations
62 OREGON CHAPTER of the AMERICAN FISHERIES SOCIETY (Eugene, OR)	2023
<ul> <li>Prospective students: new opportunities with the Integrated Marine Fisheries Lab at OSU</li> </ul>	
60-61 WESTERN SOCIETY of NATURALISTS (Oxnard, CA)	2023
<ul> <li>Climate-informed models benefit hindcasting but present challenges for forecasting species-habitat assoc</li> <li>Prospective students: new opportunities with the Integrated Marine Fisheries Lab at OSU</li> </ul>	lations
<sup>59</sup> HATFIELD MARINE SCIENCE CENTER (Newport, OR)	
— Using collaborative fisheries science to strengthen ecological inferences in the North Pacific	
<ul> <li>58 ECOSYSTEM STUDIES of SUBARCTIC AND ARTIC SEAS (Seattle, WA)</li> <li>— Climate-informed models benefit hindcasting but present challenges for forecasting species-habitat associated.</li> </ul>	2022
57 ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY (Virtual)	2022
<ul> <li>Model complexity has contrasting effects for hindcasting and forecasting species responses to climate ch</li> </ul>	
<sup>56</sup> WESTERN SOCIETY of NATURALISTS (Virtual)	2021
<ul> <li>Model complexity has contrasting effects for hindcasting and forecasting species responses to climate ch</li> </ul>	o .
<ul> <li>55 CENTER for the ADVANCEMENT of POPULATION ASSESSMENT METHODOLOGY (Virtual)</li> <li>— Predation as a modifier of constant natural mortality for Gulf of Alaska pollock</li> </ul>	2021
54 ALASKA MARINE SCIENCE SYMPOSIUM (Anchorage, AK)	2020
— Development of a predation index to assess trophic stability in the Gulf of Alaska	2020
52-53 ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY (Sitka, AK)	2019
<ul> <li>— Assessing the potential for competition between Pacific Halibut and Arrowtooth Flounder in the Gulf of</li> <li>— Spatiotemporal variation in consumption of Walleye Pollock by major groundfish predators in the Gulf of</li> </ul>	

Symbols correspond to items in 'AWARDS and HONORS'

<b>PRESENTATIONS</b> , CONT'D	
<sup>51</sup> PICES (Victoria, BC)	2019
— Ecological interactions among groundfish species in the Gulf of Alaska	
<ul> <li>FOLLOCK CONSERVATION COOPERATIVE RESEARCH CENTER (Anchorage, AK)</li> <li>Ecological interactions among groundfish species in the Gulf of Alaska</li> </ul>	2019
<sup>49</sup> RASMUSON FISHERIES RESEARCH CENTER (Anchorage, AK)	2019
— Ecological interactions among groundfish species in the Gulf of Alaska	
48 LOWELL WAKEFIELD FISHERIES SYMPOSIUM (Anchorage, AK)	2019
<ul> <li>Comparative resource use by two groundfish species in nearshore SE Alaska</li> <li>ALASKA FISHERIES SCIENCE CENTER, NOAA: GROUNDFISH SEMINAR (Seattle, WA)</li> </ul>	2018
— Ecological interactions among major groundfish species in the Gulf of Alaska	2010
<sup>46</sup> WESTERN DIVISION of the AMERICAN FISHERIES SOCIETY (Anchorage, AK)	2018
— Assessing the potential for competition between P. Halibut and Arrowtooth Flounder in the Gulf of Alaska	
<ul> <li>45 INTERNATIONAL PACIFIC HALIBUT COMMISSION SEMINAR SERIES (Seattle, WA)</li> <li>— Assessing the potential for competition between P. Halibut and Arrowtooth Flounder in the Gulf of Alaska</li> </ul>	2018
<ul> <li>44 POLLOCK CONSERVATION COOPERATIVE RESEARCH CENTER (Anchorage, AK)</li> <li>— Ecological interactions among groundfish species in the Gulf of Alaska</li> </ul>	2018
<sup>43</sup> RASMUSON FISHERIES RESEARCH CENTER (Anchorage, AK)	2018
— Ecological interactions among groundfish species in the Gulf of Alaska	2010
<sup>42</sup> UNIVERSITY of ALASKA FAIRBANKS: AQUATIC FOOD WEB ECOLOGY (Juneau, AK)	2018
Making ecological inferences from fisheries data	
<sup>41</sup> WESTERN GROUNDFISH CONFERENCE (Monterey, CA)	2018
— A comparative assessment of resource use by P. Halibut and Arrowtooth Flounder throughout the Gulf of Alaska $^{\infty}$	
40 WESTERN SOCIETY of NATURALISTS (Tacoma, WA)	2018
— The potential for competition between Pacific Halibut and Arrowtooth Flounder in the Gulf of Alaska	2010
<sup>39</sup> ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY (Fairbanks, AK)	2017
<ul> <li>A comparative assessment of resource use by P. Halibut and Arrowtooth Flounder throughout the Gulf of Alasl</li> </ul>	
<ul> <li>WESTERN DIV. of the AMERICAN FISHERIES SOCIETY: STUDENT COLLOQUIUM (McCall, ID)</li> <li>A comparative assessment of resource use by two groundfish species from nearshore waters of SE Alaska</li> </ul>	2017
<sup>37</sup> ALASKA MARINE SCIENCE SYMPOSIUM (Anchorage, AK)	2017
— Calculating an index of predation to improve the stock assessment for Walleye Pollock in the Gulf of Alaska	
<ul> <li>POLLOCK CONSERVATION COOPERATIVE RESEARCH CENTER (Anchorage, AK)</li> <li>Ecological interactions among groundfish species in the Gulf of Alaska</li> </ul>	2017
35 ALASKA MARINE SCIENCE SYMPOSIUM (Anchorage, AK)	2016
— Calculating an index of predation to improve the stock assessment for Walleye Pollock in the Gulf of Alaska	
33-34 POLLOCK CONSERVATION COOPERATIVE RESEARCH CENTER (Anchorage, AK)	2016
<ul> <li>Developing an index of predation to improve the assessment of Walleye Pollock in the Gulf of Alaska</li> <li>Ecological interactions among groundfish species in the Gulf of Alaska</li> </ul>	
<sup>32</sup> UNIVERSITY of ALASKA SOUTHEAST (Juneau, AK)	2016
<ul> <li>Introduction to AK Fisheries Seminar: Pacific Halibut biology, ecology, management</li> </ul>	
30-31 WESTERN GROUNDFISH CONFERENCE (Newport, OR)	2016
<ul> <li>Growth, mortality, and reproductive seasonality of California Halibut: a biogeographic approach</li> <li>Calculating an index of predation to improve the stock assessment for Walleye Pollock in the Gulf of Alaska †</li> </ul>	
<sup>29</sup> WESTERN SOCIETY of NATURALISTS (Monterey, CA)	2016
<ul> <li>A comparative assessment of resource use by Pacific Halibut and Arrowtooth Flounder from nearshore waters of Southeast Alaska: results from a small-scale field study</li> </ul>	
<sup>28</sup> ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY: STUDENT SYMPOSIUM (Juneau, AK)	2015
— Growth, mortality, and reproductive seasonality of California Halibut: a biogeographic approach	2013
Symbols correspond to items in 'AWARDS and H	ONORS'

I PRESENTATIONS, CONT'D  I PRESENTATIONS, C	
<ul> <li>26-27 ALASKA CHAPTER of the AMERICAN FISHERIES SOCIETY (Homer, AK)</li> <li>— Effects of demography, trophic interactions, and the environment on major groundfish species in the Gulf of Alaska</li> <li>— Exploring environmental and demographic drivers of resource overlap among Pacific Halibut, Arrowtooth</li> </ul>	2015
Flounder, and Walleye Pollock in the Gulf of Alaska <sup>25</sup> LOWELL WAKEFIELD FISHERIES SYMPOSIUM (Anchorage, AK)  — Growth, mortality, and reproductive seasonality of California Halibut	2015
<ul> <li><sup>23-24</sup> CA COLLABORATIVE FISHERIES RESEARCH PROGRAM (Half Moon Bay &amp; Moss Landing, CA)</li> <li>— Research objectives, data collection, analyses, and project results</li> <li>— MPA monitoring and other project results from 2013</li> </ul>	2014
<ul> <li>INTERNATIONAL FLATFISH SYMPOSIUM (Cle Elum, WA)</li> <li>— Age, growth, and reproductive potential of California Halibut</li> </ul>	2014
<ul> <li>MARINE: OCEANS COLLOQUIUM (Moss Landing, CA)</li> <li>Reproductive biology of California Halibut: results from the Central Coast</li> </ul>	2014
<ul> <li>MONTEREY BAY NAT'L MARINE SANCTUARY SYMP: SANCTUARY CURRENTS (Seaside, CA)</li> <li>Reproductive biology of California Halibut: results from the Central Coast</li> </ul>	2014
<ul> <li>MOSS LANDING MARINE LABORATORIES, OPEN HOUSE (Moss Landing, CA)</li> <li>Flatfish fecundity: evaluating the reproductive nature of a prolific spawner in and around Monterey Bay</li> </ul>	2014
<ul> <li>MPA COLLABORATIVE NETWORK (Monterey, CA)</li> <li>— Key findings from monitoring Monterey Bay's marine protected areas</li> </ul>	2014
<ul> <li>16-17 WESTERN GROUNDFISH CONFERENCE (Victoria, BC)</li> <li>— MPA monitoring: more than just the latest and greatest in marine conservation trends</li> <li>— Reproductive biology of California Halibut: results from the Central Coast</li> </ul>	2014
<ul> <li>WESTERN SOCIETY of NATURALISTS (Tacoma, WA)</li> <li>Reproductive biology of California Halibut: evidence from the Central Coast</li> </ul>	2014
<ul> <li>13-14 CA COLLABORATIVE FISHERIES RESEARCH PROGRAM (Half Moon Bay &amp; Moss Landing, CA)</li> <li>— Research objectives, data collection, analyses, and project results</li> <li>— MPA monitoring and other project results from 2012</li> </ul>	2013
<ul> <li>CALIFORNIA DEPARTMENT of FISH and WILDLIFE (Belmont, CA)</li> <li>The California Collaborative Fisheries Research Program: objectives, results, and interpretations</li> </ul>	2013
11 MONTEREY BAY NAT'L MARINE SANCTUARY SYMP: SANCTUARY CURRENTS (Seaside, CA)  — Reproductive characteristics of California Halibut off central California	2013
<ul> <li>MOSS LANDING MARINE LABORATORIES, OPEN HOUSE (Moss Landing, CA)</li> <li>— Spawning characteristics of California Halibut in Monterey Bay</li> </ul>	2013
<ul> <li>*WESTERN SOCIETY of NATURALISTS (Oxnard, CA)</li> <li>— Reproductive biology of California Halibut: evidence from the Central Coast</li> </ul>	2013
6-7 CA COLLABORATIVE FISHERIES RESEARCH PROGRAM (Half Moon Bay & Moss Landing, CA)  — Research objectives, data collection, analyses, and project results  — MPA monitoring and other project results from 2011	2012
<sup>5</sup> EXPANDING YOUR HORIZONS NETWORK (Monterey, CA)  — Fishing for our future: fisheries biology and resource management	2012
<sup>4</sup> MONTEREY BAY NAT'L MARINE SANCTUARY SYMP: SANCTUARY CURRENTS (Seaside, CA)  — Collaborative fisheries research: a transition from data-poor to data-rich management	2012
<sup>3</sup> MOSS LANDING MARINE LABORATORIES, OPEN HOUSE (Moss Landing, CA)  — Fishing for science: the California Collaborative Fisheries Research Program	2012
<sup>2</sup> WESTERN GROUNDFISH CONFERENCE (Seattle, WA)  — Collaborative fisheries research: a transition from data-poor to data-rich management	2012
<sup>1</sup> SAN DIEGO BAY SYMPOSIUM (San Diego, CA)  — SDOF's White Seabass Restoration Project and its relevance to San Diego Bay	2009

Symbols correspond to items in 'AWARDS and HONORS'

#### Bulletin of the Southern California Academy of Sciences ICES Journal of Marine Science Journal of Applied Ecology **Ecography Ecosphere** Journal of Fish Biology Exxon Valdez Oil Spill Trustee Council Marine Environmental Research Fisheries Research **PLoS ONE** Fishery Bulletin SCIENTIFIC and STATISTICAL COMMITTEE, PACIFIC FISHERY MANAGEMENT COUNCIL Stock Assessment Review (STAR) Panel, California Halibut 2024 Stock Assessment Review (STAR) Panel, Pacific Sardine 2024 Stock Assessment Team (STAT), CA Black Rockfish 2023 **OREGON STATE UNIVERSITY** Department of Fisheries, Wildlife, and Conservation Sciences **Graduate Committee** 2023-P Search Committee, Assistant Professor in Aquaculture 2024-P Search Committee, Assistant Professor in Ichthyology 2023-P Hatfield Marine Science Center Marine Science Day; Markham Scholarship Selection Committee 2023; 2024 INTERNATIONAL FLATFISH SYMPOSIUM Steering Committee 2023-P AMERICAN FISHERIES SOCIETY, ALASKA CHAPTER Professional Mentor; Peer Mentor 2021-P; 2020 Diversity, Equity, and Inclusion Committee (Chair) 2018-P Annual Meeting Planning Committee 2017-2023 Program, Awards (co-Chair), and Entertainment Committees 2018-2019 Student Representative, Executive Committee 2015-2017 AMERICAN FISHERIES SOCIETY, WESTERN DIVISION Diversity and Inclusion Committee 2018-2024 Annual Meeting Planning Committee 2021 **NEWPORT PRIDE** Planning Committee and Founding Board of Directors 2022-2023 **AMERICAN FISHERIES SOCIETY** Diversity, Equity, and Inclusion Committee 2021-2023 WESTERN GROUNDFISH CONFERENCE Steering Committee 2019-2023 WESTERN SOCIETY of NATURALISTS (WSN) Diversity, Equity, and Inclusion Committee 2018-2022 SKYPE a SCIENTIST, Volunteer 2018-2022 ALASKA FISHERIES SCIENCE CENTER (AFSC, NOAA), Gender Equity Working Group 2021 SOUTHEAST ALASKA LGBTQIA+ ALLIANCE Board Member; Volunteer 2018-2019; 2015-2019

PROFESSIONAL SERVICE AND OUTREACH ACTIVITIES

PEER REVIEWER

PROFESSIONAL SERVICE AND OUTREACH ACTIVITIES, CONT'D	
UNIVERSITY of ALASKA FAIRBANKS	
Search Committee, Assistant Professor in Quantitative Fisheries	2018-2019
Graduate Academic and Advising Committee Professional Development Workshop Organizer	2017-2019 2018
SITKA SOUND SCIENCE CENTER	2010
Scientist in the Schools Volunteer	2018
PARTNERSHIP for INTERDISCIPLINARY STUDIES of COASTAL OCEANS	2010
Volunteer	2013-2014, 2018
TEACHER ENHANCEMENT PROGRAM	2010 2011, 2010
Marine Science Educator	2013
WATSONVILLE AREA TEENS CONSERVING HABITATS PROGRAM	
Science Mentor	2012-2013
EXPANDING YOUR HORIZONS NETWORK	
Young Women in Science Volunteer	2011-2013
MONTEREY BAY AQUARIUM	
DSCVR Young Women in Science Mentor	2011, 2013
SAN DIEGO STATE UNIVERSITY	
Graduate Research Assistant	2010
SAN DIEGO SCIENCE and ENGINEERING FAIR, Professional Society Judge	2009-2010
SAN DIEGO COASTKEEPER	
Outreach and Community Event Intern	2005-2006
UNDERGRADUATE RESOURCE OPPORTUNITIES CENTER CSU MONTEREY BAY	2014
Mentor	2014

■ SELECT ASSOCIATIONS, CERTIFICATIONS, AND TRAININGS	
500 QUEER SCIENTISTS, Member	2017-P
ALASKA CLIMATE INTEGRATED MODELING (ACLIM) PROJECT	
Principal Investigator	2020-P
ALASKA MARINE SAFETY EDUCATION ASSOCIATION	
Cold Water Survival; Skiff Operator	2015, 2017
AMERICAN ACADEMY of UNDERWATER SCIENCES, Scientific Diver; Member	2010-P
AMERICAN ASSOCIATION for the ADVANCEMENT of SCIENCE, Member	2016-P
AMERICAN FISHERIES SOCIETY, Member	2015-P
AMERICAN INSTITUTE of FISHERY RESEARCH BIOLOGISTS, Member	2019-P
AMERICAN RED CROSS – CPR, AED, First Aid, and Administering Emergency C	
Lifeguard and Water Safety Instructor; Fundamentals of Instructor Training	2006-2008
AMERICAN STATISTICAL ASSOCIATION, Member	2019-P
CA DEPARTMENT of BOATING and WATERWAYS, Boating Education Certificat	
CA OCEAN SCIENCE TRUST, CA Citizen Science Initiative	2014
COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)	
Working with the IACUC; Field and Lab Animal Researchers	2015-P
ECOLOGICAL SOCIETY of AMERICA, Member	2019-P
EPSCoR, Mindful Leadership: Creating a Diverse and Inclusive UA Workshop	2018
EQUAL EMPLOYMENT OPPORTUNITY COMM., Beyond the Binary Workshop	p 2021
GULF of ALASKA CLIMATE INTEGRATED MODELING (GOACLIM) PROJECT	2022 B
Principal Investigator	2022-P
MORALE, WELFARE, and RECREATION, COMM. FLEET ACT, Power Boat Oper	
MPA COLLABORATIVE NETWORK, Member	2011-2014
NATIONAL ASSOCIATION of UNDERWATER INSTRUCTORS  Master SCUBA Diver; Nitrox Diver	2010
NATIONAL CENTER for FACULTY DIVERSITY and DEVELOPMENT	
Faculty Success Program	2023
NATIONAL CENTER for ECOLOGICAL ANALYSIS and SYNTHESIS (NCEAS)	
Reproducible Research Techniques for Synthesis Workshop	2019
NATIONAL COUNCIL for BEHAVIORAL HEALTH, Mental Health First Aid USA	
NOAA PRIDE EMPLOYEE RESOURCE GROUP, Member	2020-2023
oSTEM, Member	2019-P
PROFESSIONAL ASSOCIATION of DIVING INSTRUCTORS	
Open Water, Advanced Open Water, Rescue Diver; Dive Master	2006, 2007, 2009; 2010
REEF CHECK CALIFORNIA	2010
Uniform Point Contact, Algae, Invertebrate, and Fish Surveyor	2010
REEF ENVIRONMENTAL EDUCATION FOUNDATION (REEF)	2009
Marine Algal, Invertebrate, and Expert Fish Surveyor  SACNAS, Member: Creating More Inclusive Spaces in STEM Workshop	2008
SACNAS, Member; Creating More Inclusive Spaces in STEM Workshop  TRIMBLE Intermediate Mapping and CIS Certificate.	2022-P; 2021 2011
TRIMBLE, Intermediate Mapping and GIS Certificate UNITED STATES COAST GUARD, Small Vessel Operator	2015
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WESTERN SOCIETY of NATURALISTS, Member	2010-P