Kenneth W. Zillig

1 Shields Avenue, Davis, California
kwzillig@ucdavis.edu

EDUCATION

Ph.D. Candidate, **University of California, Davis**, Davis, CA 95616 2015 – Present
Current GPA: 4.0/4.0

B.A. Biology, Magna Cum Laude, **Carleton College**, Northfield, MN 2009 – 2013
Cumulative GPA: 3.72/4.0

RESEARCH INTERESTS

- Interpopulation variation and thermal performance of threatened or endangered fish species
- Scaling bioenergetics and physiology beyond the organism to understand ecosystem dynamics
- Physiological responses of Antarctic fish to ocean warming and acidification

TEACHING EXPERIENCE

Teaching Assistant, University of California, Davis Winter 2016
Physiological Ecology of Wildlife (WFC 130)

Lab Instructor, University of California, Davis Fall 2016
Biology and Conservation of Fishes (WFC 120L)

Teaching Assistant, University of California, Davis Fall 2015, Spring 2016, Fall 2019
Wildlife Ecology and Conservation (WFC 010)

UNIVERSITY SERVICE

Chapter President June 2017 – June 2019
Society of Conservation Biology, Davis Chapter
University of California, Davis

- Ongoing project producing videos for middle school students on 'being a scientist', highlighting researchers from diverse backgrounds
- Coordinated the 18th Bay Area Conservation Biology Symposium with panel discussion on translating science
- Shared knowledge and enthusiasm for fish biology with elementary school students during UC Davis' Biodiversity Day

Treasury Officer Oct 2015 – Jun 2017
Society of Conservation Biology, Davis Chapter
University of California, Davis

- Organized a non-academic career panel to highlight career paths outside academia for graduate or undergraduate students interested in obtaining a Ph.D.
- Developed annual silent auction art fundraiser that highlights conservation artists from UC Davis

Graduate Student Peer Mentor Sept 2015 – June 2016
Graduate Student Peer Mentorship Program
University of California, Davis

Graduate Student Mentor Sept 2013 – Oct. 2015
Strategies for Ecology Education, Diversity and Sustainability (SEEDS)
University of California, Davis

AWARDS

Henry A. Jastro Research Fellowship – University of California, Davis. 2020
Horodas Grant – University of California, Davis. 2019
Henry A. Jastro Research Fellowship – University of California, Davis. 2018
Graduate Group in Ecology Fellowship – University of California, Davis. 2017
Henry A. Jastro Research Fellowship – University of California, Davis. 2017
Marin Rod & Gun Club Scholarship – University of California, Davis. 2016
Ecology Student Endowment Award – University of California, Davis. 2016
Awarded distinction on senior thesis: *Mother Nature in Australia with a Dry Spell: How Climate Change caused the Australian Megafauna Extinction Event.* 2013
Danish Intercultural Leadership Award – Danish Institute for Study Abroad. 2011
Eagle Scout, Boy Scouts of America Troop 78, Elmhurst, IL.

PUBLICATIONS

Zillig, K.W., Lusardi, R.A., Moyle, P., Fangue, N.A. Variation in Thermal Eco-physiology among West Coast Salmonids: Implications for Management. *In Review.*

Zillig, K.W., Cocherell, D.E., Baird, S.E., Nguyen, T.X., Poletto, J.B., Todgham, A.E., and Fangue, N.A. The effect of feed restriction and acclimation temperature on aerobic metabolism in green sturgeon, *Acipenser Medirostris. In prep.*

Dai, J.*, Degtyarev, D.*, Gao, J.*, Wang, A.*, Burman, S., **Zillig, K.**, & Ghosal, D. (2020). Design and Implementation of RAP - a Randomized Asynchronous Protocol for Data Aggregation in Wireless Sensor Networks. In 2020 International Conference on Computing, Networking and Communications (ICNC) pp. 980–986 Big Island, HI, USA: IEEE.

Hansen, M. J., Ligocki, I. Y., **Zillig, K. W.**, Steel, A. E., Todgham, A. E., & Fangue, N. A. (2020). Risk-Taking and Locomotion in Foraging Threespine Sticklebacks (Gasterosteus Aculeatus): The Effect of Nutritional Stress Is Dependent on Social Context. Behavioral Ecology and Sociobiology, 74, 12.

Zillig, K. W., Cocherell, D. E., & Fangue, N. A. (2020). *Interpopulation Variation among Juvenile Chinook Salmon from Californinia and Oregon*. San Francisco, CA: The United States Environmental Protection Agency Region 9 - Pacific Southwest Region.

Siefert, A., **Zillig, K.W.**, Friesen, M.L., and Strauss, S.Y. 2019. Mutualists stabilize coexistence of congeneric legumes. *American Naturalist.* 193:2 200-2012.

Zillig, K. W., Lusardi, R. A., & Fangue, N. A. (2018). *Variation in Thermal Eco-Physiology among California Salmonids: Implications for Management*. Sacramento, California: California State Water Resources Control Board. 39.

Siefert, A., **Zillig, K.W.**, Friesen, M.L., and Strauss, S.Y. 2018. Soil microbial communities alter conspecific and congeneric competition consistent with patterns of field coexistence in three *Trifolium* congeners. *Journal of Ecology* 106:5 1876–1891

* Undergraduate Author

SCIENTIFIC PRESENTATIONS

Zillig, K.W., Lusardi, R. A., Cocherell, D.E., and Fangue, N.A. 2020. Intraspecific variation in thermal physiology of West-Coast Chinook salmon. Ecological Society of America. Virtual Conference.

Zillig, K.W., Lusardi, R. A., Cocherell, D.E., and Fangue, N.A. 2019. Eco-physiological patterns in thermal performance among populations of Chinook salmon, *Oncorhynchus tshawytscha*. American Fisheries Society Conference. Reno, NV.

Zillig, K.W., Lusardi, R. A., Cocherell, D.E., and Fangue, N.A. 2018. Differences in thermal performance between populations of Chinook salmon, *Oncorhynchus tshawytscha*. Bay-Delta Science Conference, Sacramento, CA.

Zillig, K.W., Lusardi, R. A., Cocherell, D.E., and Fangue, N.A. 2018. Interpopulation variation in the thermal performance of Chinook salmon, *Oncorhynchus tshawytscha*. International Congress on the Biology of Fishes. Calgary, AB.

Zillig, K.W. 2013. Mother Nature in Australia with a Dry Spell: How Climate Change caused the Australian Megafauna Extinction Event. Senior Thesis Presentation, Carleton College. Northfield, MN

Zillig, K.W., Dai, Z., Xue-fei, H. and W. Overwijk. 2012. Addition of anti-VEGF shows no positive or negative synergistic effects against melanoma tumor when combined with covax vaccine. CPRIT Internship Program Presentation, MD Anderson Cancer Center. Houston, TX

POSTER PRESENTATIONS

Zillig, K.W., Todgham, A. E., Baird S.E., Nguyen T.X., Cocherell D.E., and N.A. Fangue. 2019. The effect of feed restriction and acclimation temperature on aerobic metabolism in green sturgeon, *Acipenser medirostris*. American Fisheries Society Conference. Reno, Nevada.

Zillig, K.W., Todgham, A. E., Baird S.E., Nguyen T.X., Cocherell D.E., and N.A. Fangue. 2018. The effect of feed restriction and acclimation temperature on aerobic metabolism in green sturgeon, *Acipenser medirostris*. Bay-Delta Conference. Sacramento, California.