Kenneth W. Zillig

1 Shields Avenue, Davis, California

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**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, DavisWinter 2016

Physiological Ecology of Wildlife (WFC 130)

**Lab Instructor,** University of California, DavisFall 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 Califorinia 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

**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.

Bell, H.\*, **Zillig K.W.**, Cocherell D.E., Steel A.E., Todgham A.E., Fangue N.A. How ​does prior thermal experience affect subsequent thermal tolerance in Chinook salmon?” ​American Fisheries Society/The Wildlife Society Joint 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.

Bell, H.\*, **Zillig K.W.**, Cocherell D.E., Steel A.E., Todgham A.E., Fangue N.A. “Thermal ​acclimation and heat hardening’s effect on thermal tolerance in Chinook salmon ​populations from California and Oregon.” Salmonid Restoration Federation, Santa Rosa, California.

\* Undergraduate Author