# Quantitative Fisheries Ecologist

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# Education

Ph.D. Integrative Biology, Minor Statistics, Oregon State University, 2017

M.S. Fisheries Science, Oregon State University, 2012

B.S. Natural Sciences, University of Alaska Anchorage, 2006

# **Publications**

**Ohms, H.A.**, Jordan, C.E., Gitelman, A.I., Lytle, D.A. Quantifying partial migration with sex-ratio balancing. 2019. Canadian Journal of Zoology. 97: 352-361

**Ohms, H.A.**, Mohapatra, A., Lytle, D.A., De Leenheer, P. The evolutionary stability of partial migration under different forms of competition. 2019 Theoretical Ecology. 12(3): 347-363

De Leenheer, P., Mohapatra, A., **Ohms, H.A.**, Lytle, D.A., Cushing, J.M. 2017. The puzzle of partial migration: adaptive dynamics and evolutionary game theory perspectives. Journal of Theoretical Biology. 412: 172-185.

Mohapatra, A., Ohms, H.A., Lytle, D.A., De Leenheer, P. 2015. Population models with partial migration. Journal of Difference Equations and Applications 22: 316-329.

Sloat, M.R., Fraser, D.J., Dunham, J.B., Falke, J.A., Jordan, C.E., McMillan, J.R., **Ohms, H.A**. 2014. Ecological and evolutionary patterns of freshwater maturation in Pacific and Atlantic salmonines. Reviews in Fish Biology and Fisheries. 24: 689-707.

Ohms, H.A., Sloat, M.R., Reeves, G.H., Jordan, C.E., Dunham, J.B. 2013. Influence of sex, migration distance, and latitude on life history expression in steelhead and rainbow trout (*Oncorhynchus mykiss*). Canadian Journal of Fisheries and Aquatic Sciences 71: 70-80.

#### Computer Programs

Ant wrangler: R program to automate cleaning and organizing PIT tag data. Publicly available at: https://github.com/haleyohms/AntWrangler

### Select Technical Reports

Boughton, D.A., **Ohms, H.A.**, *et al.* 2020. 2019 Carmel Steelhead Fishery Report. NOAA Report Prepared for California American Water. pp 47.

Ohms, H.A. Chargualaf, D., Brooks, G., Hamilton, C., and Boughton, D.A. 2019. Interim Report for Steelhead Tagging Studies at Los Padres Reservoir, Spring 2019. NOAA Report Prepared for California American Water. pp 15.

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**Ohms, H.A.** and Boughton, D.A. 2019. 2018 Carmel Steelhead Fishery Report. NOAA Report Prepared for California American Water. pp 44.

Boughton, D.A. and **Ohms, H.A.** 2018. 2017 Carmel Steelhead Fishery Report. NOAA Report Prepared for California American Water. pp 44.

**Ohms, H.A.**, and Brekken, J. 2009. East Barrow gas field lake survey. Prepared for PetroTechnical Resources of Alaska, LLC. by OASIS Environmental, Inc. pp 32.

**Ohms, H.A.** 2008. Polar bear interaction management plan: a final revised plan for the Department of Defense, May 2008. Prepared for the 611th Air Support Group, 611th Civil Engineer Squadron/Environmental Flight, Elmendorf AFB, AK by OASIS Environmental, Inc. pp. 37.

# Grants, Awards, Fellowships

#### Grants

USDA Forest Service Cooperative Agreement, co-PI with D.A. Lytle, 2012, \$163,500

East Asia and Pacific Summer Institute Graduate Fellowship, Japan, National Science Foundation, 2012, \$15,000

### Awards, Fellowships

Zoology Office Research Fund, Oregon State University, 2017, \$500

Zoology Office Research Fund, Oregon State University, 2016, \$500

Oregon Lottery Graduate Scholarship, 2015, \$1530

Zoology Office Research Fund, Oregon State University, 2015, \$500

Dr. Hari S. and Dr. Renuka R. Sethi Graduate Scholarship, 2014, \$950

Best Student Paper, Oregon Chapter of the American Fisheries Society Annual Meeting, 2013

Flyfisher's Club of Oregon Scholarship, 2012, \$4,750

Sunriver Anglers Club Scholarship, 2012, \$2,000

Marty Day Scholarship, Washington County Fly Fishers, 2012, \$1,000

Oregon Council Federation of Fly Fishers Scholarship, 2012, \$1,500

Sunriver Anglers Club Scholarship, 2011, \$2,000

# Presentations

Guest Lectures and Invited Presentations

**Ohms, H.A.**. 2017. *Is life history adaptive or are steelhead and rainbow trout just playing games?* Seminar, NOAA Southwest Fisheries Science Center.

**Ohms**, **H.A.**, Mohapatra, A., De Leenheer P., Lytle, D.A., Jordan, C.E. 2017. *Lessons from steelhead and rainbow trout: Don't put all of your eggs in one basket*. Stream Team Seminar, Oregon State University.

**Ohms**, **H.A.** 2016. Feeding Ecology and the River Continuum Concept. Invited lecture for an aquatic entomology course at OSU.

**Ohms, H.A.** 2015. *Life History Evolution*. Invited lecture for an evolution course at Willamette University.

**Ohms, H.A.** 2015. *River Continuum Concept and Predator Avoidance*. Invited lecture for an aquatic entomology course at OSU.

Ohms, H.A. 2015. Feeding Ecology. Invited lecture for an aquatic entomology course at OSU.

**Ohms, H.A.**, Lytle, D.A., Jordan C.E. 2014. *Estimating Anadromy and Residency Using Sex Ratios*. Pacific Coast Steelhead Management Meeting.

**Ohms, H.A.**, Reeves GH, Jordan CE, Dunham JB. 2012. *The Influence of Sex and Migration Distance on the Expression of Anadromy in Oncorhynchus mykiss*. Pacific Coast Steelhead Management Meeting.

**Ohms, H.A.** 2012. Using Sex and Environmental Variables to Understand Life History Expression Oncorhynchus mykiss. Invited lecture for graduate fish ecology course at OSU.

**Ohms, H.A.** 2012. *How Sex Influences the Fish That Become Steelhead and Those That Become Rainbow Trout.* Invited presentation to the South Fork John Day Watershed Council.

**Ohms, H.A.**, Reeves G.H., Jordan C.E., Dunham JB. 2011. *The Influence of Migration Distance on the Expression of Anadromy in Male and Female Steelhead*. American Fisheries Society, Annual Meeting.

**Ohms, H.A.** 2011. *Using Smolt Sex Ratios to Understand Drivers of Anadromy and Residency in Oregon and Beyond.* Oregon Department of Fish and Wildlife Smolt Monitoring Project Workshop.

#### Contributed Presentations

**Ohms, H.A.**, Boughton, D.A. 2020 *California steelhead exhibited strong temporal synchrony over the past decade*. National Meeting American Fisheries Society.

**Ohms, H.A.**, Brooks, G., Boughton, D.A. 2019 *Dam that was a wild ride: Steelhead passage up, down, and around the Los Padres dam in California*. National Meeting American Fisheries Society.

**Ohms**, **H.A.**, Zimmerman, Z. 2017 Can younger smolts explain a population decline in Bristol Bay sockeye salmon?. Western Division American Fisheries Society.

**Ohms, H.A.**, Mohapatra, A., Lytle, D.A., De Leenheer P. 2017 *The evolutionary stability of partial migration under different forms of density dependence*. Ecological Society of America.

**Ohms, H.A.**, Mohapatra, A., Lytle, D.A., De Leenheer P. 2017 *Lessons from steelhead and rainbow trout: Don't put all of your eggs in one basket*. American Fisheries Society, Alaska Chapter.

**Ohms, H.A.**, Lytle, D.A., Gitelman, A.I., Jordan, C.E. 2015. *Estimating the proportion of migrants and residents in partially migratory fishes.* International charr symposium, Norway.

**Ohms, H.A.**, Lytle, D.A., De Leenheer, P., Jordan, C.E. 2014. *A Model for the Coexistence of Steelhead and Rainbow Trout*. Joint Aquatic Science Meeting.

**Ohms, H.A.**, Lytle, D.A., Jordan, C.E. 2013. *Is migration overrated? The role of fecundity, survival, and age on migratory behavior in steelhead and rainbow trout.* Poster presentation. Evolution Annual Meeting.

**Ohms, H.A.**, Reeves, G.H., Jordan, C.E., Dunham, J.B. 2013. *The Influence of Sex and Migration Distance on the Expression of Anadromy in Steelhead*. Oregon Chapter of the American Fisheries Society, Annual Meeting.

**Ohms, H.A.**, Reeves, G.H., Jordan, C.E., Dunham, J.B. 2012. *The Influence of Sex and Migration Distance on the Expression of Anadromy in Steelhead*. Oregon Chapter of the American Fisheries Society, Annual Meeting.

**Ohms, H.A.** 2011. *The influence of life history tradeoffs on partial migration in Oncorhynchus mykiss.* Research Advances in Fisheries, Wildlife, and Ecology Symposium, Oregon State University.

O'Brien, J., Trudgen, D., Brekken, J., **Ohms, H.A.**, Blanchard, A. 2008. Winter habitat use and seasonal movements of juvenile coho salmon and Dolly Varden marked with visual implant elastomer (VIE) tags in a tributary of the Chuitna River, western Cook inlet region, Alaska. Alaska Chapter of the American Fisheries Society, Annual Meeting.

**Ohms, H.A.**, Sullivan, P.F, Chimner, R.A., Arnes, S.J.T., Cahoon, S.M.P., and Welker, J.M. 2006. *Temperature and microtopography interact to control CO*<sub>2</sub> *exchange in a high Arctic fen.* Poster presentation. 13th Annual ITEX Tundra Workshop.

# **Employment**

University of California Santa Cruz, Institute of Marine Sciences, Assistant Project Scientist, 2018current

Ocean Associates (NOAA contractor), Fisheries Biologist/Ecologist, 2017

Oregon State University, Department of Integrative Biology, Graduate Research and Teaching Assistant, 2013-2017

Oregon State University, Department of Fisheries and Wildlife, Graduate Research Assistant, 2010-2012

OASIS Environmental, Biologist, 2006-2010

U.S. Fish and Wildlife Service, Fisheries Technician, 2008

University of Alaska Anchorage, Undergraduate Research Assistant, 2005-2006

Alaska Department of Fish and Game, Field Technician, 2003 and 2004

# Teaching

Co-Instructor, Oregon State University. Life-History Evolution Graduate Seminar. Fall 2015 Teaching Assistant, Oregon State University. Aquatic Entomology Laboratory. Winters 2015, 2016

Teaching Assistant, Oregon State University. Fundamentals of Biology Laboratory. Fall 2013

# Professional Service and Outreach

# Journal Referee

Proceedings of the Royal Society B

PLOS ONE

Transactions of the American Fisheries Society

North American Journal of Fisheries Management

**Environmental Biology of Fishes** 

#### Member

American Fisheries Society, Oregon and Alaska Chapters

Society of Freshwater Science

Society for the Study of Evolution

**Ecological Society of America** 

# Departmental Service

Member of Biology Graduate Student Symposium Planning Committee, 2014-2015

Co-president of Zoology Graduate Student Association, 2013-2014

Student Chair of Tenure Review Committee for Dr. Epps, 2012

Member of Fisheries and Wildlife Departmental Seminar Committee, 2011-2012

Social Coordinator for Fisheries and Wildlife Graduate Student Association, 2010-2011

# Professional Service

Assistant teacher, *Intro to R workshop*, Oregon Chapter of the American Fisheries Society Annual Meeting, 2014

Volunteer, student-mentor mixer at Oregon Chapter of the American Fisheries Society Annual Meeting, 2013

Moderator, Beyond the Adipose Fin: Non-Game Native Species Oregon Chapter of the American Fisheries Society Annual Meeting, 2012

Volunteer, Student-mentor mixer, Oregon Chapter of the American Fisheries Society Annual Meeting, 2012

#### Outreach

Science booth at UC Berkeley Hastings Reserve open house, 2019

Presentation to Carmel River Steelheaders Association about on-going steelhead tagging project in the Carmel River, 2019

Interview on KSBW about Steelhead returns to Carmel (https://www.ksbw.com/article/steelhead-numbers-are-up-in-the-carmel-river/27485932), 2019

Field trip leader for California Academy of Sciences high school students at Hastings Reserve, 2019

Discussion leader for University of Chicago graduate student field trip at Hastings Reserve, 2019

Interview on Inspiration Dissemination Radio Program, KVBR 88.7, 2013

Featured in Terra Magazine. Fisher of Rivers, 2012

Teacher and coordinator, Johnson Lake Salmon Celebration, Soldotna, Alaska, 2008

Last updated: October 16, 2020