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# Education

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

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

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

Study Abroad, Universidad de Granada, Spain, 2004

# **Employment**

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

# **Publications**

**Ohms, H.A.**, Mohapatra, A., Lytle, D.A., De Leenheer, P. The evolutionary stability of partial migration under different forms of density-dependent competition. *In prep for American Naturalist*.

**Ohms, H.A.**, Mohapatra, A., Lytle, D.A., De Leenheer, P., Jordan, C.E. Evidence for frequency-dependent selection in female steelhead and rainbow trout. *In prep for Canadian Journal of Fisheries and Aquatic Science*.

**Ohms, H.A.**, Jordan, A.I., Lytle, D.A. Estimating the proportion of migrants and residents in partially migratory species using sex ratio balancing. *In prep for Oikos*.

Bloom, D., **Ohms, H.A.**, Braaten, J.D. On the Origins of Diadromy: A Conceptual and Empirical Evaluation of Alternative Hypotheses. *In prep for Proceedings of the Royal Society B*.

**Ohms, H.A.**. The evolutionary stability of partial migration. 2017. Ph.D. Dissertation. Oregon State University.

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* Published online of Oct 2015.

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.

**Ohms, H.A.** 2012. The influence of sex, migration distance, and latitude on expression of anadromy in *Oncorhynchus mykiss*. M.S. Thesis. Oregon State University.

### Technical Reports

**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.

Gangemi, J., **Ohms**, **H.A.**, and Trudgen, D. 2009. Investigation of hydrologic exchange between surface waters and the hyporehic zone for selected sections of streams 2002 and 2004. Prepared for PacRim Coal, LP by OASIS Environmental, Inc. pp 34.

O'Brien, J., Trudgen, D., Brekken, J., **Ohms, H.A.**, and Blanchard, A. 2009. Chuitna Coal Project winter freshwater fish habitat baseline report. Prepared for PacRim Coal, LP by OASIS Environmental, Inc. pp. 44.

**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 EngineerSquadron/Environmental Flight, Elmendorf AFB, AK by OASIS Environmental, Inc. pp. 37.

Brekken, J., and **Ohms, H.A.** 2008. Chuitna Coal Project infrastructure fish protection plan. Prepared for Mine Engineers, Inc. by OASIS Environmental, Inc. pp. 24.

Trudgen, D., Gangemi, J., Ives, S., Brekken, J., Ohms, H.A., and O'Brien, J. 2008. 2007 Chuitna Coal Project Freshwater Aquatic Biology Study Program. Prepared for PacRim Coal, LP by OASIS Environmental, Inc. pp. 274.

**Ohms, H.A.**, and Shock, C. 2007. Personal safety in polar bear country: an Air Force guide for arctic operations. Informational pamphlet. Prepared for the 611th Air Support Group, 611th Civil Engineer Squadron/Environmental Flight, Elmendorf AFB, AK by OASIS Environmental, Inc.

Cox, M., Coleman, T., Brekken, J., **Ohms, H.A.**, and Trudgen, D. 2007. Chuitna Coal Project aquatic resources mine reclamation plan. Prepared for Mine Engineers, Inc. by OASIS Environmental, Inc. pp. 62.

Trudgen, D., Gangemi, J., Ives, S., Brekken, J., **Ohms, H.A.**, Cunningham, M. 2007. 2006 Chuitna Coal Project freshwater aquatic biology study program. Prepared for PacRim Coal, LP by OASIS Environmental, Inc. pp. 206.

#### Guest Lectures and Invited Presentations

**Ohms, H.A.**, Mohapatra, A., De Leenheer P., Lytle, D.A., Jordan, C.E. 2017. *Lessons from steelhead and rainbow trout: DonâĂŹt 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.**, Mohapatra, A., Lytle, D.A., De Leenheer P. *Density dependence and spawning segregation lead to the evolutionary stability of partial migration in female steelhead and rainbow trout*.. 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.

# Awards and 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

East Asia and Pacific Summer Institute Graduate Fellowship, Japan, National Science Foundation, 2012, \$10,000 plus travel to Japan

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

# Teaching Experience

Co-instructor, Oregon State University. Life History Evolution Seminar. Fall 2015

Teaching assistant, Oregon State University. Aquatic Entomology Lab. Winter 2015, 2016

Teaching assistant, Oregon State University. Fundamentals of Biology Lab. Fall 2013

### Professional Service and Outreach

Journal Referee

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

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

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