

Curriculum Vitae – Stefán Óli Steingrímsson

Stefán Ó. Steingrímsson, Associate Professor,

Holar University (HU), Hólum í Hjaltadal, 551 Sauðárkrókur, Iceland

Tel: +354-894-9598, E-mail: stefan@holar.is

Date of Birth: 14. August, 1968

EDUCATION

2004 Ph. D. in Biology, Concordia University (CU), Montreal, Canada

1997 M.Sc. in Biology, Concordia University (CU), Montreal, Canada

1992 B.S. in Biology, University of Iceland, Reykjavík, Iceland

WORK EXPERIENCE

Academic:

2003- Researcher / Professor, Aquaculture and Fish Biology, HU

1994-1996, 1998: Teaching assistant - CU

1993-1994, 1997: Instructor / Research Associate – HU, Iceland

1992, 1997: Research Assistant, Dept. of Biology, University of Iceland

Teaching experience (Contribution per course is rated from 0-100%)

2003 – 2019

Diploma /B.S. in Aquaculture, HU: General Biology (6ECTS, 100%),

Introduction to aquaculture (6ECTS, 20%); Environ. issues in Aquaculture (6ECTS, 100%); Scientific methods (6ECTS, 100%); Discussions in Aquaculture (6ECTS, 50%); Mariculture (6ECTS, 5%)

B.A. in Rural Tourism, HU: Natural history of Iceland (6ECTS, 50%)

B.S. in Equine Studies HU: B.S. course (10ECTS, 25%);

B.S. course at the Univ. of Iceland: Animal Behaviour (8ECTS, 20%), Field course in Ecology (7.5 ECTS, 20%)

B.S. course at the Univ. of Akureyri: Ecology (6ECTS, 15-25%)

B.S. course at the Icelandic Agricultural University: Freshwater ecology (4ECTS, 20%)

M.S. in Aquatic Biology HU: Methods of scientific research (6ECTS, 100%) (then 10ECTS, 75%); Seminar in Aquatic Biology (6ECTS).

M.S. in Biology, Univ. of Iceland: M.Sc. Course in Biology (reading course), (10ECTS, 100%).

U.N. Univ, Fisheries training programme. 10 lect. on Environ. issues in Aquac.
1994 – 1998: TA for 3 courses at CU: BIOL 201, BIOL 226, & BIOL 227.
1993 – 1994: HUC: General Biology, Fish biology, and Aquaculture (50%)

Graduate student supervision:

- 2018- M.Sc. Benjamin I. Andrews, at the Dept. of Aquaculture and Fish Biology, HU.
Topic: Comparison of diel activity in three sympatric species of stream salmonids. **Co-supervised** with Tommi Linnansaari at the Univ. of New Brunswick.
- 2017- M.Sc. Michael Galloway, at the Dept. of Aquaculture and Fish Biology, HU
Topic: Metabolic rate as a predictor of diel activity in Arctic charr. **Supervisor**
- 2017- M.Sc. Krystal L. Mannion, at the Dept. of Aquaculture and Fish Biology, HUC
Topic: Effect of food availability on diel activity in stream-dwelling Arctic charr, **Supervisor**
- 2012-2016 Ph.D. Nicolas Larranaga, at the Faculty of Life and Environmental Sciences, Univ. of Iceland. Topic: Ecological correlates of diel activity in Arctic charr, *Salvelinus alpinus*. **Supervisor.**
- 2012-2014: M.Sc. Amy Fingerle, at the Dept. of Aquaculture and Fish Biology, HU.
Thesis (90ECTS): Effect of population density on diel activity and growth in stream-dwelling Arctic charr, *Salvelinus alpinus*. **Supervisor**
- 2012-2013: M.Sc. Sarah J. Kennedy, at the Univ. Centre of the Westfjords, accredited by the University of Akureyri. Thesis (45 ECTS): The effect of water temperature on the feeding behaviour of Arctic char (*Salvelinus alpinus*) in a natural stream: Potential effects of climate change. **Supervisor**
- 2006-2009: M.Sc., Guðmundur S. Gunnarsson, at the Dept. of Biology, Univ. of Iceland. Thesis (90 ECTS): Territorial and foraging behaviour of juvenile salmonids in Icelandic streams. **Supervisor**
- 2004-2008: M.Sc., Tyler D. Tunney, at the Dept. of Biology, Univ. of Iceland. Thesis (90 ECTS): Foraging mode of wild salmonids in Icelandic streams. **Supervisor**
- 2004-2013: Supervision of 8 summer students (Icelandic Student Innovation Fund).

Research:

1994- Behavioural ecology of freshwater fishes (HU; CU): The main focus of my research at CU and HU has been the behavioural ecology of stream salmonids.

The study topics range from territoriality, foraging mode, diel activity, habitat use and dispersal, to estimating the impact of these behaviours at the population level.

2003-2007 Aquaculture of marine fishes (HU) I developed several research projects relating to aquaculture of marine fish. I mostly focused on foraging, growth, survival and cannibalism among juvenile Atlantic cod.

1993-1994, 1997: Aquaculture of Arctic charr (HU): I set up, maintained, and analysed data for several aquaculture experiments on behaviour, population differences, life history, maternal effects and physiology.

1992, 1997: Feeding ecology of brown trout: (University of Iceland): I sampled invertebrates and fish, collected and analysed stomach samples, and estimated growth rates of the study fish. I analysed the data and wrote up the results.

Grants:

2018: Experimental comparison of space use in three species of stream-dwelling salmonids. Energy Research Fund/Landsvirkjun. 2.0 million ISK. Project leader

2016-2018: Diel activity in Arctic charr: Phenotypic and ecological determinants. Project grant - RANNIS. Value: Approx. 14 million ISK/year. Project leader

2016: Diel activity and space at high and low water flow in competing Arctic charr and brown trout. Energy Research Fund/Landsvirkjun. 2.0 million ISK. Project leader.

2015: The effect of extended high and low-flow habitat conditions on diel activity and growth in stream salmonids. Energy Research Fund/Landsvirkjun. 2.1 million ISK. Project leader.

2015: Fluctuations in water flow: Effects on the behaviour and growth of juvenile Arctic charr in streams. The Conservation fund of Pálmi Jónsson (Náttúruverndarsjóður Pálma Jónssonar). 0.5 million ISK. Project leader.

2014: Fluctuations in water flow: Effects on diel activity, foraging and growth in juvenile salmonids. Energy Research Fund/Landsvirkjun. 2.45 million ISK. Project leader.

2012-2014: Diel activity in stream-dwelling Arctic charr. Project grant - RANNIS. Value: Approx. 6 million ISK/year. Project leader

2009: Equipment grant issued by RANNIS, The Icelandic Centre for Research to buy PIT-tag equipment for salmonids. Value: 2 million ISK. Primary applicant.

- 2009: Influence of feeding frequency and density on juvenile Atlantic cod. AVS, Value 1.9 million Icelandic kr. Project leader.
- 2009: Influence of cannibalism on the behavior and growth of juvenile cod. Verkefnasjóður sjávarútvegsins. Value: 1.5 million ISK. Project leader.
- 2005-2007: Territoriality and foraging mode in YOY stream-salmonids. Project grant - RANNIS. Value: 1.5 million ISK/year. Project leader.
- 2006: An equipment grant issued by RANNIS for buying electrofishing equipment. Value: 350 thousand ISK. Primary applicant.
- 2005: An equipment grant issued by RANNIS for buy equipment for ecological research at HUC. Value: 1 million ISK. Primary applicant.
- 2004 – 2010: 8 grants from the Student Innovation fund. Total value: 2 million ISK.

Administration:

- 2019 - On the board of directors for Holar University
- 2018 - Confidant for the State University Professors' Union at HU.
- 2017 Head of the department of aquaculture and fish biology at HU, January-May in the absence of Bjarni K. Kristjánsson
- 2014 - Member of committee on collaboration between HU and Univ. of Iceland
- 2011 - Member of the advisory committee on genetically modified organisms.
- 2011 - 2013 Board member – The Icelandic Salmon Center in Blönduós, Iceland.
- 2008 - Member of the Graduate Studies committee at HU
- 2008 - 2018 On the Progression Assessment Committee/stigamatsnefnd at HU
- 2008 Member of the Academic Affairs Committee at HU for one semester as a substitute for Bjarni Kr. Kristjánsson.
- 2006-2010 Representative of HU, along with Helgi Thorarensen and Bjarni Kr. Kristjánsson in the AquaTnet project, an EU-funded project directed towards increasing cooperation in education in the field of aquaculture within Europe.
- 2005-2009 Member of the PR committee at HU
- 2004 Head of the Department of Aquaculture and Fish Biology at HU for the autumn term, a shared responsibility with Einar Svavarsson and Bjarni Kr. Kristjánsson, in the absence of Dr. Helgi Thorarensen.
- 2004-2008 General participation in administration of the Dept of Aquaculture and Fish Biology. Before HU formally became a university a considerable part of my work was devoted to developing a new curriculum and new courses.

1997 Supervisor of the freshwater aquarium at Holar College for one summer.

PUBLICATIONS

Thesis:

- 2004: Ph. D. thesis at the Dept. of Biology, CU: “Patterns, predictors and consequences of space use in young-of-the-year Atlantic salmon (*Salmo salar*)”.
- 1996: M.Sc. thesis at the Dept. of Biology, CU: “The allometry of territory size and metabolic rate as predictors of self-thinning in young-of-the-year Atlantic salmon (*Salmo salar*)”.

Refereed publications:

- Larranaga N., Valdimarsson S.K., Linnansaari T. & Steingrímsson S.Ó. (2018) Diel activity and foraging mode of juvenile Arctic charr in fluctuating water flow. *Riv. Res. Appl.* 34: 348–356.
- Grant J.W.A, Weir L.K. & Steingrímsson S.Ó. (2017) Territory size decreases minimally with increasing food abundance in stream salmonids: Implications for population regulation. *J. Anim. Ecol.* 86: 1308–1316.
- Fingerle A., Larranaga N. & Steingrímsson S.Ó. (2016) Density-dependent diel activity in stream-dwelling Arctic charr *Salvelinus alpinus*. *Ecology and Evolution*, 6(12): 3965-3976.
- Larranaga N. & Steingrímsson S.Ó. 2015. Shelter availability alters diel activity and space use in a stream fish. *Behav. Ecol.* 26: 578-586. doi:10.1093/beheco/aru234
- Steingrímsson S.Ó., Tunney T.D. & Gunnarsson, G.S. 2015. Fæðu- og óðalsatferli ungra laxfiska í íslenskum ám. *Náttúrufræðingurinn*. 85 (1-2): 28-36.
- Tunney T.D. & Steingrímsson S.Ó. 2012. Foraging mode variation in three stream-dwelling salmonid fishes. *Ecol. Freshw. Fish*, 21: 570-580.
- Gunnarsson G.S. & Steingrímsson S.Ó. 2011. Contrasting patterns of territoriality and foraging mode in two stream-dwelling salmonids, Arctic char (*Salvelinus alpinus*) and brown trout (*Salmo trutta*). *Can. J. Fish. Aquat. Sci.* 68: 2090-2100.
- Steingrímsson S.Ó. & Grant J.W.A. 2011. Shape of single and multiple central-place territories in a stream-dwelling fish. *Ethology*, 117: 1170-1177.

- Steingrímsson S.O. & Grant J.W.A. 2011. Determinants of multiple central-place territory use in young-of-the-year wild Atlantic salmon (*Salmo salar*). *Behav. Ecol. Sociobiol.* 65: 275-286.
- Steingrímsson S.O. & Grant J.W.A. (2008). Multiple central-place territories in wild young-of-the-year Atlantic salmon (*Salmo salar*). *J. Anim. Ecol.* 77: 448-457.
- Girard I., Grant J.W.A. & Steingrímsson S.Ó. (2004). Foraging, growth and loss rate of young-of-the-year Atlantic salmon (*Salmo salar*) in relation to habitat use in Catamaran Brook, New Brunswick. *Can. J. Fish. Aquat. Sci.* 61: 2339-2349.
- Gíslason G.M. & Steingrímsson S.Ó. (2004) Seasonal and spatial variation in the diet of brown trout (*Salmo trutta* L.) in the River Laxá, North-East Iceland. *Aquat. Ecol.* 38: 263-270. (Note: equal authors, order determined by a flip of a coin.)
- Steingrímsson S.Ó. & Grant J.W.A. (2003). Patterns and correlates of movement and site fidelity in individually tagged young-of-the-year Atlantic salmon (*Salmo salar*). *Can. J. Fish. Aquat. Sci.* 60: 193-202.
- Gíslason G.M., Steingrímsson S.Ó. & Gudbergsson G. (2002). Stock size and movements of landlocked brown trout (*Salmo trutta* L.) In the subarctic river Laxá, North-East Iceland. *Verh. Internat. Verein. Limnol.* 28: 1567-1571.
- Steingrímsson S.Ó. & Gíslason G.M. (2002). Body size, diet and growth of landlocked brown trout, *Salmo trutta*, in the subarctic river Laxá, North-East Iceland. *Environ. Biol. Fishes* 63: 417-426.
- Steingrímsson S.Ó. & Grant J.W.A. 1999. Allometry of territory size and metabolic rate as predictors of self-thinning in young-of-the-year Atlantic salmon. *J. Anim. Ecol.* 68: 17-26.
- Grant J.W.A., Steingrímsson, S.Ó., Keeley E.R. & Cunjak R.A. 1998. Implications of territory size for the measurement and prediction of salmonid abundance in streams. 55 (Suppl 1): 181-190.

Reports and extended abstracts:

- Gunnarsson G.S. & Steingrímsson S.Ó. (2009). Territorial behavior in juvenile Arctic charr and brown trout in Icelandic rivers. *Fræðaðing landbúnaðarins* (Conference proceedings of the Icelandic agricultural conference), 6, 166-169. (in Icelandic).
- Steingrímsson S.Ó. (2008) Rivers in Skagafjörður: Ecological classification and biota. Conference proceedings of “The nature of Skagafjörður”, a conference held in Sauðárkrókur on 12. April 2008. NNV-2008-002: 47-50 (in Icelandic).

Steingrímsson S.Ó. & Tunney T.D. (2007). Feeding behaviour and habitat selection of salmonids in Icelandic rivers. Fræðaðing landbúnaðarins (Conference proceedings of the Icelandic agricultural conference), 4. 216-219. (in Icelandic).

Steingrímsson S.Ó. og Skúlason S. (1995). The effect of density and other environmental factors on size distributions in rearing tanks in Arctic charr and other salmonids. Hólar 002-95, 14p (A report in Icelandic).

Citations on google scholar:

<https://scholar.google.is/citations?hl=en&user=508bLNMAAAAJ>

ORAL/POSTER PRESENTATIONS

I have been involved in 46 oral presentations at international and local conferences (27 times as the speaker, 19 times as a coauthor). I have also given 9 invited seminars at universities in Iceland and Canada, as well as several less formal lectures. Also, I have presented 8 scientific posters at international conferences.

STUDENT AWARDS

2000: The Garnet Strong Graduate Scholarship, CU. Value \$3.000

1998 – 2000: CU Graduate Fellowship. Value \$3.600 per term, 7 terms.

1998 – 2000: CU International Tuition Fee Remission, 7 terms.

1994 - 1996; 1998: Teaching assistantship, Department of Biology, CU.