

Personal data:

- Born: 15.03.1975; Nationality: Danish/Norwegian
- Position: Research Professor (50%)/Associate Professor (50%)
- Group leader *Freshwater ecology group*
- Address: NTNU University Museum, Department of Natural History, Trondheim
- Phone – office: +47 735 92293; cell: +47 924 64314
- e-mail: jan.davidsen@ntnu.no Personal website: www.ntnu.edu/employees/jan.davidsen
- ORCID: 0000-0002-7253-2327; Research Gate: www.researchgate.net/profile/Jan_Davidsen

Education:

- **Ph.D. (Freshwater Ecology)**, Department of Arctic and Marine Biology, University of Tromsø, June 2010: *Effects of environmental factors on migratory behaviour of northern Atlantic salmon*
- **Cand. scient. (Freshwater biology)**, The Norwegian College of Fishery Science, University of Tromsø, May 2004: *Temporal and spatial migration patterns of Atlantic salmon (*Salmo salar* L.) smolt in the sub-Arctic River Tana*
- **Captain**, The Royal Danish Defence College, 2003

Fellowships and awards

- Scholarship recipient, University of Tromsø, August – September 2004
- PhD fellowship, RCN (NFR), University of Tromsø, 2006 – 2010
- Travel funding, Leiv Ericson award, RCN (NFR), May – August 2008
- Scholarship recipient, University of Tromsø, July – December 2010

Mobility

- University of British Columbia, Canada (2008, 3.5 months). Funding from RCN (NFR)
- Dalhousie and Carleton Universities, Canada (2018, 3.5 months). Funding from RCN (NFR)
- University of Glasgow, Scotland (2021-2022, 3.5 months). Funding from NTNU

Research activities:

- Research Professor (50%)/Associate Professor (50%), NTNU University Museum, 2019 –
- Adjunct of the Faculty of Graduate Studies, Dalhousie University, Halifax, Canada. 2016 – 2020
- Associate Professor (50%)/Research scientist (50%), NTNU University Museum, 2016 – 2019
- Research scientist (100 % research), NTNU University Museum, 2011 – 2016
- PhD-student, University of Tromsø, 2006 – 2010
- Scholarship recipient, University of Tromsø, August – September 2004 & July – December 2010
- Tutor in several courses in basic biology, University of Tromsø, 2003 – 2010

Organisational experience, participation in working groups and scientific networks:

- Appointed expert for the scientific group “Sea trout & the Norwegian traffic light system”, 2019
- Norwegian member of MC, EU Cost Action *European Tracking Network* (ETN), 2019 – 2023
- Fisheries Society of the British Isles, membership, 2021 –
- European Tracking Network (ETN), membership, 2019 –
- Norwegian delegate to ICES working group on sea trout (WKTRUTTA), 2013 –
- Ocean Tracking Network (OTN), membership, 2011 –
- Board member, NTNU University museum (faculty level), 2022-
- Board member, Department of Natural History, NTNU Museum, 2014 – 2017
- Board member ”Trondheim og omland fiskeadministrasjon (TOFA)”, 2014 – 2018
- Subject Editor (fish ecology), *Fauna Norvegica*, 2013 –
- Board member, Department of Aquatic Biology, UiT University of Tromsø, 2007-2009

Short-term courses after PhD:

- NTNU's Educational Program for research group leaders, 2020-2021, 100 h.
- NTNU's Educational Program for New Academic Staff (PEDUP), 2016-2017, 100 h.
- Academic Leadership, NTNU, 2011-2012, 100 h.

Organisation of scientific meetings

- *Workshop for European PhD students working with sea trout, Snåsa, Norway, 2018.*

Fieldwork experience:

Comprehensive experience with fieldwork from Norway (mainland), Scotland, Finland, Canada, Spitsbergen. Expedition leader to Jan Mayen (2 weeks, 2019), Greenland (5 x 3 weeks, 2012, 2021, 2022, 2023, 2014) and Kerguelen Islands (two months, 2018).

Teaching experience:

- NTNU (2020-): Lectures and field course for the master course: "Freshwater Ecology"
- NTNU (2019): Course responsible for the PhD course: "Life history strategies and migratory behaviour in salmonids". 7.5 EC
- NTNU (2013-): Guest lectures for the master courses "Sustainable management of ecosystem services" and "Experts in teams"
- The University Centre in Svalbard (2013, 2015, 2017, 2019): Lectures, pc-lab and practical lab for master and PhD course "Bio-telemetry"
- University of Tromsø (2003-2010): Eight years of comprehensive teaching experience at bachelor and master courses in ecology and zoology (lectures, field courses and lab exercises)
- Norwegian Red Cross (1998-2010): Instructor in first aid and mountain rescue
- The Royal Danish Army (1996-2014): Instructor in several theoretic and practical disciplines

Postdoc, mentor:

S. H. Eldøy, NTNU (2020-2023): "*Running the gauntlet of pathogens and climate (PACE): impacts from infectious diseases on wild fish in the high north*"

Ph.D candidate supervision:

- M. E. L. Friis, NTNU (2023-202027): "*Human effects on populations of large-sized piscivorous brown trout (*Salmo trutta*) in lake Mjøsa*" (main supervisor)
- S. H. Eldøy, NTNU (2016-2020): "*The influence of physiology, life history and environmental conditions on the marine migration patterns of sea trout*" (main supervisor).
- X. Bordeleau, Dalhousie University, Canada (2015-2019): "*Diversity of migration strategies, marine habitat use patterns and physiological mechanisms in iteroparous anadromous salmonids across a wide range of environments*" (co-supervisor).

Graduate student supervision (details in own list of supervised students): $n = 30$ (25 as main supervisor)

Erasmus student supervision (details in own list of supervised students): $n = 1$

Refereeing and assessing:

I have acted as referee for the following peer-reviewed journals:

- *African Zoology, Aquatic Living Resources, Aquaculture Environment Interactions, Canadian Journal of Fisheries and Aquatic Sciences, Conservation Physiology, Ecology and Evolution, Environmental Biology of Fishes, Fisheries Management and Ecology, Hydrobiologia, Journal of Animal Ecology, Journal of Fish Biology, Marine Ecology Progress Series, Nature Communications, PLOS ONE*

Commissions of trust

I have acted as a panel member evaluation proposals to RCN (NFR) and as committee leader or member assessing applicants for posts as Associate Professor and Researcher (NTNU; UiT), PhD fellowships (NTNU; UiT), opponent at PhD defenses at University of Glasgow and NMBU and at master theses (University of Glasgow; UiT; NTNU). Further, I have acted as member of the Academic graduate committee for PhD student X. Bordeleau, Dalhousie University, Canada (2015-2019).

Experiences as project manager (PI on all projects; ~ 50 mill NOK, selected examples)

- *Mission Mjøsa – Water* (2023-2027): Key words: Fast growing trout, migrations and habitat use, environmental pollutants, acoustic telemetry, feeding ecology, Stable isotopes; citizen science. Budget: 8 000 000. Funded by NTNU, industry and management regime
- *Hellstranda - New Highway through an estuary* (2021-ongoing). Key words: deterioration of feeding areas in an estuary, Atlantic salmon, brown trout, acoustic telemetry, compensatory measures. Budget 5 000 000 NOK. Funded by Nye Veier AS
- *CHASES - Consequences of land-use change and human activity on anadromous salmonids and the ecosystem services that they provide* (2016-2020). Key words: deterioration of marine environmental conditions, sea trout, resident and seaward migrating individuals, pit tag, acoustic telemetry, physiology, laser ablation inductively coupled plasma mass spectrometry, ecosystem services. Budget 7 400 000 NOK. Funded by RCN
- *Marine migrations, habitat use and survival of sea trout and Arctic charr in four marine fjord systems with aqua culture* (2011-2025). Key words: anthropogenic impacts on salmonid life histories; sea trout, Arctic charr, trophic niche use, short and long term migrations, marine habitat use, spawning migrations, marine survival, sea lice, physiology, acoustic telemetry, underwater video, drift dive surveys, scale samples. Budget 25 000 000 NOK. Funded from several sources including industry and management regime
- *Migratory behaviour and habitat use of “Småblank” – a relict population of Atlantic salmon* (2014-2019). Key words: relict Atlantic salmon, short and long-term migrations, habitat use, spawning migrations, radio telemetry, acoustic telemetry, PIT tagging, population estimate. Budget 2 000 000 NOK. Funded by Industry
- *Sensitivity of fish to seismic sound, establishing impact distance on NCS* (2017-2018). Key words: Cod, saithe, seismic, air gun, play back experiment, sound propagation, heart rate, dataloggers, acoustic telemetry, pilot project. Budget 1 500 000 NOK. Funded by industry

Track record:

As of October 2024, I have 51 published and *in press* papers in peer-reviewed international journals or books. The first author of nine of the papers were students under my supervision, demonstrating that I am able to guide others in the dissemination of their scientific results in appropriate peer-review journals. I am first author on 16 and senior author (2. or last author) on 12 publications. Additionally, I have published 80 technical reports.

Peer-reviewed international publications and book chapters ($n = 51$; Google Scholar: h-index = 27; i10-index = 41; citations = 2012; Scopus: h-index = 21; citations = 1024)

1. Lennox, R.J., Eldøy, S.H., Schulze, A.D., Miller, K.M., Isaksen, T.E., **Davidsen, J.G.**, Nilsen, C.I., Dahlmo, L.S., Vollset, K.W. 2024. Application of conservation genomics to investigate the role of pathogens on the migration of sea-run brown trout (*Salmo trutta*). *Journal of Fish Diseases* **in press**
2. Lennox, R.J., Miller, K.M., Madhun, A., Schulze, A.D., Eldøy, S.H., Isaksen, T.E., Nilsen, R., Shea, D., Birnie-Gauvin, K., **Davidsen, J.G.**, Cooke, S.J., Vollset, K.W. 2024. The pathobiome of *Salmo trutta* from the North Sea to the Barents Sea. *Journal of Biogeography* **in press**
3. **Davidsen, J.G.**, Eldøy, S.H., Piper, A.T., Moccetti, C., Brodersen, J., Whoriskey, F. & Power, M. Marine migration, temperature use and feeding habits of Arctic charr (*Salvelinus alpinus* (L. 1758)) in SW Greenland (**First inn**)
4. Munkeby, J.O., **Davidsen, J.G.**, Havn, T.B., Ulvan, E.M., Næsje, T.F., Karlsen, D.H., Solem, Ø & Lennox, R.J. (2024). *The effect of surveillance fishing on migration distance of Atlantic Salmon during the spawning period*. *North American Journal of Fisheries Management* **44**, 870-879.
5. Özgül, A., Birnie-Gauvin, K., Abecasis, D., Alós, J., Aarestrup, K., Reubens, J., Bolland, J., Lök, A., Edwards, J. E., Pengal, P., Prchalová, M., Říha, M., Pickholtz, R., Vollset, K. W., Afonso, P., **Davidsen, J. G.**, Arlinghaus, R., Ünal, V.

- & Lennox, R. J. (2024). Tracking Aquatic Animals for Fisheries Management in European Waters. *Fisheries Management and Ecology*, **early view**
6. **Davidsen, J. G.**, Halvorsen, A. E., Eldøy, S. H., Thorstad, E. B. & Vøllestad, L. A. (2023). Brown trout (*Salmo trutta* L. 1758) and Arctic charr [*Salvelinus alpinus* (L. 1758)] display different marine behaviour and feeding strategies in sympatry. *Journal of Fish Biology* **102**, 1129–1140.
 7. Speed, J. D. M., Evankow, A. M., Petersen, T. K., Ranke, P. S., Nilsen, N. H., Turner, G., Aagaard, K., Bakken, T., **Davidsen, J. G.**, Dunshea, G., Finstad, A. G., Hassel, K., Husby, M., Hårsaker, K., Koksvik, J. I., Prestø, T., & Vange, V. (2022). A regionally coherent ecological fingerprint of climate change, evidenced from natural history collections. *Ecology and Evolution*, **12**, e9471. <https://doi.org/10.1002/ece3.9471>
 8. **Davidsen, J. G.**, Bordeleau, X., Eldøy, S. H., Whoriskey, F., Power, M., Crossin, G. T., C., B. & Gaudin, P. (2021) Marine habitat use and feeding ecology of introduced anadromous brown trout at the colonization front of the sub-Antarctic Kerguelen archipelago. *Scientific reports*. **11**, 1–13
 9. Rikardsen, A. H., Righton, D., Strøm, J. F., Thorstad, E. B., Gargan, P., Sheehan, T., Økland, F., Chittenden, C. M., Hedger, R., Næsje, T. F., Renkawitz, M., Sturlaugsson, J., Javierre, P. C., Baktoft, H., **Davidsen, J. G.**, Halttunen, E., Wright, S., Finstad, B & Aarestrup, K. (2021). Redefining the oceanic distribution of Atlantic salmon. *Scientific Reports*. **11**, 1–12
 10. Birnie-Gauvin, K., Bordeleau, X., Cooke, S., **Davidsen, J. G.**, Eldøy, S. Eliason, E. J., Moore, A. & Aarestrup, K. (2021). Life-history strategies in salmonids: the role of physiology and its consequences. *Biological Reviews*. **96**, 2304–2320
 11. Eldøy, S. H., X. Bordeleau, M. J. Lawrence, E. B. Thorstad, A. Finstad, F. Whoriskey, G. T. Crossin, S. J. Cooke, K. Aarestrup, L. Rønning, A. Sjørnsen & **J. G. Davidsen**. (2021). The effects off nutritional state, sex and body size on the marine migration behaviour of sea trout. *Marine Ecology Progress Series*. **665**, 185–200
 12. Finstad, B., Sandvik, A. D., Ugedal, O., Vollset, K. W., Karlsen, Ø., **Davidsen, J.G.**, Sægrov, H. & Lennox, R. J. (2021). Development of a risk assessment for sea trout in coastal areas exploited for aquaculture. *Aquaculture Environment Interactions*. **13**, 133–144
 13. Larsen, E., Lyså, A., Höskuldsson, Á., **Davidsen, J. G.**, Nadeau, M.J., Power, M., Tassis, G. and Wastegård, S. (2021). A dated volcano-tectonic deformation event in Jan Mayen causing landlocking of Arctic charr. *Journal of Quaternary Science*. **36**, 180–190
 14. Vollset, K. W., Lennox, R., **Davidsen, J. G.**, Eldøy, S. H., Isaksen, T. E., Madhun, A., Karlsson, S. & Miller, K. M. (2021). Wild salmonids are running the gauntlet of pathogens and climate as fish farms expand northwards. *ICES Journal of Marine Science*. **78**, 388–401.
 15. Eldøy, S. H., **Davidsen, J.G.**, Vignon, M. & Power, M. (2020). The Biology and feeding Ecology of Arctic charr in the Kerguelen Islands. *Journal of Fish Biology*. **98**, 526–536.
 16. Eldøy, S. H., Ryan, D., Roche, W., Thorstad, E. B., Næsje, T. F., Sjørnsen, A. D., Gargan, P. & **Davidsen, J. G.** (2020). Changes in growth and migration patterns of sea trout before and after the introduction of Atlantic salmon farming. *ICES Journal of Marine Science*. **77**, 2623–2634.
 17. Lennox, R. J., Eldøy, S. H., Vollset, K. W., Miller, K. M., Isaksen, T. E., Barlaup, B. T. & **Davidsen, J. G.** (2020). How pathogens affect the marine habitat use and migration of sea trout (*Salmo trutta*) in two Norwegian fjord systems. *Journal of fish diseases*. **43**, 729–746.
 18. **Davidsen, J. G.**, Eikås, L., Hedger, R. D., Rønning, L., Sjørnsen, A. D., Thorstad, E. B., Berg, O. K., Bremset, G., Karlsson, S. & Sundt-Hansen, L. E. (2020). Migration and habitat use of the relict Atlantic salmon *Salmo salar* småblank. *Hydrobiologia*. **847**, 2295–2306.
 19. **Davidsen, J. G.**, Power, M., Knudsen, R., Sjørnsen, A., Kjærstad, G., Rønning, L & Arnekleiv, J. V. (2020). Marine trophic niche-use and life history diversity among Arctic charr *Salvelinus alpinus* in southwestern Greenland. *Journal of fish biology*. **96**, 681–692.
 20. Eldøy, S. H., Bordeleau, X., Crossin, G. T. & **Davidsen, J. G.** (2019). Individual repeatability in marine migratory behaviour: A multi-population assessment of anadromous brown trout tracked through consecutive feeding migrations. *Frontiers in Ecology and Evolution* **7**, 1–12
 21. Lennox, R., Paukert, C., Aarestrup, K., Auger-Methe, M., Baumgartner, L., Birnie-Gauvin, K., Bøe, K., Brink, K., Brownscombe, J., Chen, Y., **Davidsen, J. G.**, Eliason, E., Filous, A., Gillanders, B., Helland, I., Horodysky, A., Januchowski-Hartley, S. R., Lowerre-Barbieri, S. K., Lucas, M., Martins, E., Murchie, K., Pompeu, P., Power, M., Raghavan, R., Rahel, F., Secor, D., Thiem, J., Thorstad, E. B., Ueda, H., Whoriskey, F. G. & Cooke, S. J. (2019). 100 pressing questions on the future of global fish migration science, conservation, and policy. *Frontiers in Ecology and Evolution*. **7**, 1–16
 22. Nevoux, M., Finstad, B., **Davidsen, J. G.**, Finlay, R., Josset, Q., Poole, R., Höjesjö, J., Aarestrup, K., Persson, L., Tolvanen, O. & Jonsson, B. (2019). Environmental influences on life history strategies in partially anadromous brown trout (*Salmo trutta*, Salmonidae). *Fish and Fisheries*. **20**, 1051–1082
 23. **Davidsen, J. G.**, Dong, H., Linné, M., Andersson, M. H., Piper, A., Prystay, T. S., Hvam, E. B., Thorstad, E. B., Whoriskey, F., Cooke, S. J., Sjørnsen, A. D., Rønning, L., Netland, T. C. & Hawkins, A. D. (2019). Effects of sound exposure from a seismic airgun on heart rate, acceleration and swimming depth in Atlantic cod and saithe. *Conservation Physiology*. **7**, 1–19
 24. Liu, Y., Bailey, J.L. & **Davidsen, J.G.** (2019) Social-cultural ecosystem services of sea trout recreational fishing in Norway. *Frontiers in Marine Science*. **6**, 1–13

25. Arnekleiv, J. V., **Davidsen, J. G.**, Sheehan, T. F., Lehnert, S. J., Bradbury, I. R., Rønning, L., Sjørnsen, A. D., Kjørstad, G., Lubinski, B. A. & Nilssen, K. J. (2018). Demographic and genetic description of Greenland's only indigenous Atlantic salmon (*Salmo salar*) population. *Journal of Fish Biology*, **94**, 154-164.
26. Bordeleau, X., **Davidsen, J.G.**, Eldøy, S.H., Sjørnsen, A.D., Whoriskey, F.G., and Crossin, G.T. 2018. Nutritional correlates of spatio-temporal variations in the marine habitat use of brown trout, *Salmo trutta*, veteran migrants. *Canadian Journal of Fisheries and Aquatic Sciences*, **75**, 1744-1754.
27. **Davidsen, J.G.**, Knudsen, R., Power, M., Næsje, T.F., Sjørnsen, A.D., Rønning, L., Hårsaker, K., and Arnekleiv, J.V. 2017. Trophic niche similarity among sea trout *Salmo trutta* in Central Norway investigated by three different time-integrated trophic tracers. *Journal of Aquatic Biology* **26**, 217-227.
28. Eldøy, S. H., **Davidsen, J. G.**, Thorstad, E. B., Whoriskey, F., Aarestrup, K., Næsje, T. F., Rønning, L., Sjørnsen, A. D., Rikardsen, A. H. & Arnekleiv, J. V. (2017). Marine depth use of sea trout *Salmo trutta* in fjord areas of Central Norway. *Journal of Fish Biology*, **91**, 1268-1283.
29. Aldvén, D. & **Davidsen, J. G.** (2017). Marine migrations of sea trout (*Salmo trutta*). In *Sea Trout: Science & Management. Proceedings of the 2nd International Sea Trout Symposium, October 2015, Dundalk, Ireland* (Harris, G. S., ed.), 267-276.
30. Höjesjö, J., Aldvén, D., **Davidsen, J. G.**, Pedersen, S. & Degerman, E. (2017). Perspectives on sea trout stocks in Sweden, Denmark & Norway: monitoring, threats and management. In *Sea Trout: Science & Management. Proceedings of the 2nd International Sea Trout Symposium, October 2015, Dundalk, Ireland* (Harris, G. S., ed.), 442-457.
31. Bailey, J. L., Liu, Y. & **Davidsen, J. G.** (2017). Bridging the Gap between Fisheries Science and Society: Exploring Fisheries Science as a Social Activity. *ICES Journal of Marine Science*, **74**, 598-611
32. Vollset, K. W., Mahlum, S. K., **Davidsen, J. G.**, Skoglund, H. & Barlaup, B. T. (2016). Interaction between migration behaviour and estuarine mortality in cultivated Atlantic salmon *Salmo salar* smolts. *Journal of Fish Biology*, **89**, 1974-1990
33. Flaten, A. C., **Davidsen, J. G.**, Thorstad, E. B., Whoriskey, F., Rønning, L., Sjørnsen, A. D., Rikardsen, A. H. & Arnekleiv, J. A. (2016). The first months at sea - migration and habitat use of sea trout *Salmo trutta* post-smolts *Journal of Fish Biology*, **89**, 1624-1640.
34. Eldøy, S. H., **Davidsen, J. G.**, Thorstad, E. B., Whoriskey, F., Aarestrup, K., Næsje, T. F., Rønning, L., Sjørnsen, A. D., Rikardsen, A. H. & Arnekleiv, J. A. (2015). Marine migration and habitat use of anadromous brown trout *Salmo trutta*. *Canadian Journal of Fisheries and Aquatic Sciences* **72**, 1366 - 1378
35. **Davidsen, J. G.**, Daverdin, M., Sjørnsen, A. D., Rønning, L., Arnekleiv, J. V. & Koksvik, J. I. (2014). Does reduced feeding prior to release improve the marine migration of hatchery brown trout *Salmo trutta* L. smolts? *Journal of Fish Biology*, **85**, 1992-2002
36. **Davidsen, J. G.**, Daverdin, M., Arnekleiv, J. V., Rønning, L., Sjørnsen, A. D. & Koksvik, J. I. (2014). Riverine and near coastal migration performance of hatchery brown trout *Salmo trutta*. *Journal of Fish Biology*, **85**, 586-96.
37. Jensen, J. L. A., Rikardsen, A. H., Thorstad, E. B., Suhr, A. H., **Davidsen, J. G.** & Primicerio, R. (2014). Water temperatures influence the marine area use of *Salvelinus alpinus* and *Salmo trutta*. *Journal of Fish Biology* **84**, 1640-1653.
38. Halttunen, E.; Jensen, J.; Næsje, T.; **Davidsen, J. G.**; Thorstad, E. B.; Chittenden, C.; Hamel, S.; Primicerio, R.; Rikardsen, A. H. (2013) State-dependent migratory timing of post-spawned Atlantic salmon (*Salmo salar*). *Canadian Journal of Fisheries and Aquatic Sciences*, **70**, 1063-1071.
39. **Davidsen, J. G.**; Rikardsen, A. H.; Thorstad, E. B.; Halttunen, E.; Mitamura, H.; Præbel, K.; Skardhamar, J.; Næsje, T. (2013) Homing behaviour of Atlantic salmon (*Salmo salar*) during final phase of marine migration and river entry. *Canadian Journal of Fisheries and Aquatic Sciences*, **70**, 794-802.
40. **Davidsen, J. G.**; Thorstad, E. B.; Baktoft, H.; Aune, S.; Økland, F.; Rikardsen, A. H. (2013) Can sea trout *Salmo trutta* compromise successful eradication of Gyrodactylus salaris by hiding from CFT-Legumin (rotenone) treatments? *Journal of Fish Biology*, **82**, 1411-1418.
41. Chittenden, C. M., Rikardsen, A. H., Skilbrei, O, **Davidsen, J. G.**, Halttunen, E. & McKinley, R. S. (2011) An effective method for the recapture of escaped farmed salmon. *Aquaculture Environment Interactions*, **1**, 215-224.
42. **Davidsen, J. G.**, Finstad, B., Økland, F., Thorstad, E. B., Mo, T.A. & Rikardsen, A. H. (2011) Early marine migration of European silver eel *Anguilla anguilla* in northern Norway. *Journal of Fish Biology*, **78**, 1390-1404.
43. Plantalech Manel-la, N., Chittenden, C. M., Økland, F., Thorstad, E. B., **Davidsen, J. G.**, Sivertsgård, R., McKinley, R. S. & Finstad, B. (2011). Does river of origin influence the early marine migratory performance of Atlantic salmon? *Journal of Fish Biology*, **78**, 624-634
44. Strand, J. E., **Davidsen, J. G.**, Jørgensen, E. H. & Rikardsen, A. H. (2011). Seaward migrating Atlantic salmon smolts with low levels of gill Na⁺, K⁺ -ATPase activity; is sea entry delayed? *Environmental Biology of Fishes*, **90**, 317-321.
45. Chittenden, C. M., Biagi, C., **Davidsen, J. G.**, Davidsen, A. G., Kondo, H., McKnight, A., Pedersen, O.-P., Raven, P., Rikardsen, A. H., Shrimpton, J. M., Zuehlke, B., McKinley, R. S. & Devlin, R. H. (2010). Genetic versus rearing-environment effects on phenotype: hatchery and natural rearing effects on hatchery- and wild-born Coho salmon. *PLoS ONE*, **5**(8): e12261.
46. **Davidsen, J. G.**, Rikardsen, A. H., Halttunen, E., Thorstad, E. B., Økland, F., Letcher, B. H., Skardhamar, J. & Næsje, T. F. (2009). Migratory behaviour and survival rates of wild northern Atlantic salmon (*Salmo salar*) post-smolts: effects of environmental factors. *Journal of Fish Biology* **75**, 1700-1718.
47. Halttunen, E., Rikardsen, A. H., **Davidsen, J. G.**, Thorstad, E. B. & Dempson, J. B. (2009). Survival, migration speed and swimming depth of Atlantic salmon kelts during sea entry and fjord migration. In *Tagging and tracking of Marine*

- Animals with Electronic Devices, Reviews: Methods and Technologies in Fish Biology and Fisheries* 9 (Nielsen, J. L., Arrizabalaga, H., Fragoso, N., Hobday, A., Lutcavage, M. & Sibert, J., eds.), pp. 35-49. Dordrecht: Springer.
48. Plantalech Manel-la, N., Thorstad, E. B., **Davidsen, J. G.**, Økland, F., Sivertsgård, R., McKinley, R. S. & Finstad, B. (2009). Vertical movements of Atlantic salmon post-smolts relative to measures of salinity and water temperature during the first phase of the marine migration. *Fisheries Management and Ecology* **16**, 147-154.
 49. **Davidsen, J. G.**, Plantalech Manel-la, N., Økland, F., Diserud, O. H., Thorstad, E. B., Finstad, B., Sivertsgård, R., McKinley, R. S. & Rikardsen, A. H. (2008). Changes in swimming depths of Atlantic salmon *Salmo salar* post-smolts relative to light intensity. *Journal of Fish Biology* **73**, 1065-1074.
 50. Orell, P., Erkinaro, J., Svenning, M. A., **Davidsen, J. G.** & Niemelä, E. (2007). Synchrony in the downstream migration of smolts and upstream migration of adult Atlantic salmon in the subarctic River Utsjoki. *Journal of Fish Biology* **71**, 1735-1750.
 51. **Davidsen, J.**, Svenning, M. A., Orell, P., Yoccoz, N., Dempson, J. B., Niemelä, E., Klemetsen, A., Lamberg, A. & Erkinaro, J. (2005). Spatial and temporal migration of wild Atlantic salmon smolts determined from a video camera array in the sub-Arctic River Tana. *Fisheries Research* **74**, 210-222.

International conference presentations (n=14; only examples are shown):

1. Davidsen, et al. (2023). Can detailed knowledge about sea trout's marine feeding migration improve coastal zone planning?. 6. International Conference on Fish Telemetry, France (oral)
2. **Davidsen, et al.**, (2022). Intraspecific variation in anadromous brown trout migrations, INTECOL 2022, Geneva, Schweiz (Oral, invited)
3. **Davidsen, et al.**, (2019). Under pressure – the importance of estuaries for brown trout. 5th international conference on fish telemetry, Arendal, Norway (Oral).
4. **Davidsen, et al.**, (2018). Consequences of land-use change on anadromous brown trout and the ecosystem services that they provide. *American Fisheries Society annual meeting*. Atlantic city, USA (Oral, invited)
5. **Davidsen, et al.**, (2018). Under pressure – the importance of estuaries for brown trout. *American Fisheries Society annual meeting*. Atlantic city, USA (Oral, invited)
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7. **Davidsen, et al.**, (2015). On the age, growth, sexual maturity and feeding habits of the Arctic charr (*Salvelinus alpinus*) in three watercourses in southwestern Greenland. *8th International Charr Symposium*. Tromsø, Norway (Poster)
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9. **Davidsen, et al.**, (2011). Migratory behaviour of European silver eels (*Anguilla anguilla*) in a North-Norwegian fjord. *1st international Conference on Fish Telemetry*. Sapporo, Japan (Oral).
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Popular science publications (6; only examples are shown):

1. Flaten, A. C., Rønning, L., **Davidsen, J. G.** (2015). Spionerer på sjørret. *Dagens næringsliv*. Feature article, 01.05.2015
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3. Rikardsen, A. H., **Davidsen, J. G.**, Halttunen, E., Jensen, J. & Gjelland, K. Ø. (2008). Datateknologi avslører fiskens hemmeligheter! *Ottar* **273**, 45-51.

All scientific presentations (n=69). The full list can be found here:

https://wo.cristin.no/as/WebObjects/cristin.woa/wa/fres?action=sok&etternavn=Davidsen&fornavn=Jan+Grimsrud&sted=194311000&erNorsk=1&erNordisk=1&erNasjonal=1&erInternasjonal=1&erUkjent=1&visParametre=1&ukat=VIT_FOREDRAG&sort=alfabetisk&bs=50

Technical reports (83, full list can be found here):

<https://wo.cristin.no/as/WebObjects/cristin.woa/wa/fres?action=sok&etternavn=Davidsen&fornavn=Jan+Grimsrud&erNorsk=1&erNordisk=1&erNasjonal=1&erInternasjonal=1&erUkjent=1&visParametre=1&ukat=RAPPORT&sort=ar&bs=50>

Some examples of technical reports:

Davidsen, Jan Grimsrud; Sjursen, Aslak Darre; Rønning, Lars; Davidsen, Anette Sophie Grimsrud; Eldøy, Sindre Håvarstein; Daverdin, Marc; Kjærstad, Gaute. Utbygging av ny E6 ved Hellstranda – kartlegging av områdebruk til sjørret og laks, samt forslag til kompensering

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Davidsen, J.G., Husby, M. & Foldvik, A. 2020. Konsekvenser for sjøørret, villaks og fugl ved utfylling av deler av elveosen til Stjørdalselva. Kunnskapsoppsummering og foreløpige forslag til avbøtende og kompenserende tiltak. - NTNU Vitenskapsmuseet naturhistorisk notat 2020-11: 36 s.

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Arnekleiv, J.A., Sjørnsen, A.D., **Davidsen, J.G.,** Daverdin, M., J.I., K. & Rønning, L. 2017. Fiskebiologiske undersøkelser i lakseførende del av Nidelva, Trondheim, 2011-2016. - NTNU Vitenskapsmuseet naturhistorisk rapport 2017-5: 1-89 s.

Arnekleiv, J.V., Sjørnsen, A.D., Rønning, L., **Davidsen, J.G.** & Gjelland, K.Ø. 2015. Fiskebiologiske undersøkelser i Gjevilvatnet, Oppdal kommune, 2014. - NTNU Vitenskapsmuseet naturhistorisk rapport 2015-6: 62 s.