

Curriculum Vitae, Mikael Carlstein

Personal information

Ove Mikael Carlstein, born 05.01.1964, in Falun, Sweden. Three daughters born in 1989, 1990 and 1993. At present living in Mora (Sweden) together with my fiancé and steph daughter.

University degrees and additional courses

- 1984. University Certificate (U.C.) in Medical Laboratory Technology, Uppsala.
- 1990. Master of Science (M.Sc.) in Agriculture, Swedish University of Agricultural Sciences (SLU), Uppsala.
- 1996. Doctoral degree (Ph.D.) in Aquaculture with special reference to Fish Biology, Department of Aquaculture, SLU, Umeå
- 1998. PLP-course - practical project- work and management, Statens Naerings- og distriktsutviklingsfond, Wenell gruppen.
- 1998. Course in electric fishing and techniques for monitoring of freshwater mussels. Företagarnas Folkhögskola, Leksand
- 2002. Laboratory animal knowlegde, National Board of Fisheries (Freshwater Research Laboratory).
- 2017 - BAGA Diploma course on small sewage systems. Uppsala

Positions

- Laboratory technician, Swedish National Veterinary Institute (Fish Unit) during the periods: 01.03.1985 - 31.05.1985; 21.04.1986 - 22. 08. 1986; 03.07.1989 - 21.07.1989.
- Research assistant, Swedish University of Agricultural Sciences (Dept. of Aquaculture) 09.01.1991 - 15.01.1992.
- 16.01.1992 – 30.06.1993. and 01.06.1996-11.30.1996. Ph D-student, Swedish University of Agricultural Sciences /Dept. of Aquaculture. (In between the Ph D "positions" self supported by grants.)
- 01.12.1994 - 30.04.1995. Parental leave,
Researcher, Swedish University of Agricultural Sciences (Dept. of Aquaculture) 01.12.1996 - 28.02.1997.
- 01.03.1997 - 07.04.2010 Senior assistant master/Researcher at the Älvdalen Educational Centre/ the Fish Resource Group.
- Since 2010 and 2015 (until presently) owner of *F.A.S.T.*- Fiskeresursgruppen and FAST - 2 Hjortnäs AB, respectively.

Pedagogic experiences and degrees

- 1990 - 1996. Teacher at various courses (limnology, acidification, fish biology and rearing techniques) at the dept. of Aquaculture and externally.
- 12.03.1991 - 15.03.1991. Organizer and teacher at course in Aquaculture. Dept. of Aquaculture.
- 1995. Basic course in pedagogics. SLU.
- 1996. Pedagogic development project: "Use of researchers and Ph.D. students in education at the Department of Aquaculture". Financed by the Unit of Pedagogic development at the SLU.
- 2000. Pedagogic course for future associate professors. SLU
- 1997 - 2010. Teacher and responsible for development of various courses at the Älvdalen Educational centre, at the Entrepreneurs residential college for adult education and in education of private companies and associations.

Presentations as invited speaker

- Fish farming conference in Luleå, Sweden, March 3-5, 1992.
- Second Nordic Workshop on Atypical *Aeromonas salmonicida*, Turku Finland, September 16-19, 1993.
- Symposium on fish monitoring in the Water Framework Directive 7-9 May 2004, Silkeborg, Denmark.
- Nordic Association of Freshwater Fish Biologists (NOFF).
- Seven years of boat electrofishing in Sweden. NOFF annual workshop. October 4-6, 2005. Älvkarleby, Sweden.
- Effects of rearing technique and fish size on post-stocking feeding, growth and survival of European grayling (*Thymallus thymallus* L.). 1st international Conference on the Grayling organized by the Grayling Research Trust. University of York, England July 12-13, 2006.
- Abundance estimates of Salmon (*Salmo salar* L.) juveniles in two Swedish rivers by boat electrofishing. NOFF workshop, September 27-29, 2006. Seili, Finland.

Supervision of students

- Intra- and inter specific competition between European grayling and Brown trout. Graduate thesis (20p), Erik Olofsson, Univ. of Umeå. 1994.
- Post-stocking behaviour of European grayling and Brown trout. Graduate thesis of Stefan Thorfve, Univ. of Umeå. 1994.
- Competence elevation within Aquaculture for trout and grayling in Sweden and Finland. Part of FAO project for Bosnia and war invalids to establish a fish farm in Bosanska Krupa, Bosnia and Herzegovina. 2000.
- Quantification of Brown trout (*Salmo trutta*) and European grayling (*Thymallus thymallus*) populations in a part of the River Unnån, Orsa municipality. C-arbete (10p) Anders Bruks, Department of Applied Natural Sciences, Mid Sweden University, Härnösand. 2002.
- Comparison of snorkelling and boat electric fishing combined with mark-recapture as techniques for abundance estimates of European grayling (*Thymallus thymallus*) in River Ljusnan. Johan Andreasson, Examensarbete (20p). Dept of Limnology, Univ. of Uppsala. 2005.
- Abundance of European grayling (*Thymallus thymallus* L.) in four boreal Swedish rivers and effect of habitat improvements. Overseas work placement at the Fish Resource Group. Laurent LAFFERE.
- University Francois Rabelais de Tours. March--August 2006.

Commissions of trust

- 1993 - 1998 founder and chairman of the; "Stop the acidification foundation".
- 1999. Vice chairman and active part in foundation of the Swedish fishing tourism industry organisation.
- 1996 – 2006. representative of land owners in matters considering compensation for losses in the fishery due to water regulations within the court case; "Trängslets samlingsmål (VA 40/74)".
"Director" of the big band Renhornen during 1994 & 1995. (Top gig - the Nobel party prom 1996)
- 2002 - 2010 Founder and chairman of the "Lake Siljan Trout Recovery Foundation".
- 2019 - Fish expert within the NGO - Maritime Association of the Adriatic Sea. Bosnia and Herzegovina

Grants

- 1991. Kungliga skogs och lantbruksakademien. Research grant.
- 1991. Lantbruksvetenskapliga fakultetens resebidrag. Grant for travel.
- 1991. Stina och Richard Högbergs fond. Research grant.
- 1992. Anders Walls stipendium inom jordbruksområdet. Personal grant for "Spirit, energy and creativity within the aquaculture area worthy of imitation".
- 1993. Stiftelsen Oscar och Lili Lamms minne, grant for Ph D-studies.
- 1993. Stina och Richard Högbergs fond. Research grant.
- 1993. "Jubileumsdonationen" från Knut och Alice Wallenbergs stiftelse. Grant for travel.
- 1994 ,1995 & 1996. Grants for visiting assistant supervisor in non-nordic country from the Swedish Univ. of Agric. Sci.

Publications

- Carlstein, M., 1990. Produktion och omsättning av akvatiska organismer vid närsaltstillförsel i näringsfattiga vatten. Rapport nr. 5, 44 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Thuvander, A. & Carlstein, M., 1991. Sublethal exposure of rainbow trout (*Oncorhynchus mykiss*) to polychlorinated biphenyls: effect on the humoral immune response to *Vibrio anguillarum*. Fish & Shellfish Immunology 1, 77-86
- Carlstein M., 1991. Biology and rearing of the European grayling (*Thymallus thymallus*). Introductory research essay no. 3. Swedish University of Agricultural Sciences, Department of Aquaculture. S-901 83 Umeå, Sweden pp. 25.
- Carlstein, M., 1991. Fleromättade fettsyror hos laxfiskar och deras betydelse för människan. Kompendium nr. 5, 25 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., 1992. Startutfodring av harr - En jämförelse av olika foder. Fiskodlingskonferens i Luleå 3-5 mars. Bilaga 9 (15).

- Carlstein, M., 1993. Natural food and artificial, dry starter diets: effects on growth and survival in intensively reared European Grayling. *Aquaculture International* 1, 112-123.
- Carlstein, M., Jansson E., Ljungberg, O. & Svensson K.M., 1993. Bakteriell infektion vid sårjukdom hos harr. Rapport nr. 14, 5 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., 1993. Rotenon - Användning i fiskevård och dess biokemiska verkan. Rapport nr. 6, 10 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., 1994. Tillväxt och överlevnad hos harr vid odling i olika tätheter. Rapport nr. 16, 5 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., 1994. Märkning av harr med coded wire-märken och fettfene-klippning. Rapport nr.12, 8 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., Jansson E., Ljungberg, O. & Svensson K.M., 1994. Bakteriell infektion vid sårjukdom hos harr. Rapport nr.14, 5 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M., 1995. Growth and survival of European Grayling reared at different stocking densities. Short communication, *Aquaculture International* 3, 260-264.
- Carlstein, M., 1995. Effekt av vattenkvalitet och temperatur på överlevnad och tillväxt hos harr påverkad av sjukdomen infektiös dermatit. Rapport nr.17, 8 sid. Vattenbruksinstitutionen, Sveriges lantbruksuniversitet, 901 83 Umeå.
- Carlstein, M. & Eriksson L.-O., 1996. Post-stocking dispersal of European Grayling, *Thymallus thymallus* (L.), in a semi-natural experimental stream. *Fisheries Management and Ecology* 3, 143-155.
- Carlstein, M., Jansson E. & Ljungberg, O. 1996. *Aeromonas salmonicida* subsp. *achromogenes* infection in European Grayling (*Thymallus thymallus*): Identification of aetiological agent and studies of mortality under rearing conditions. Paper III in Doctoral thesis, Agraria 7. Swedish University of Agricultural Sciences, 15 pp.
- Carlstein, M., 1997. Effects of rearing technique and fish size on post stocking feeding, growth and survival of European Grayling, *Thymallus thymallus* (L.). *Fisheries Management and Ecology* 4, 391-404.
- Thorfve, S & Carlstein, M., 1998. Post-stocking behaviour of hatchery-reared European grayling, *Thymallus thymallus* (L.), and brown trout *Salmo trutta* (L.), in a semi-natural stream. *Fisheries Management and Ecology* 5, 147-159.
- Ahlgren, G., Carlstein M. & Gustafsson, I.-B., 1999. Effects of natural and commercial diets on the fatty acid content of European grayling. *Journal of Fish Biology* 55, 1142-1155.
- Koskinen, M.T., Ranta, E., Piironen, J. Veselov, A., Titov, T.O., Haugen, T.O., Nilsson, J. Carlstein, M. & Primmer, C.R., 2000. Genetic lineages and postglacial colonization of grayling (*Thymallus thymallus*, Salmonidae) in Europe, as revealed by mitochondrial DNA analyses. *Molecular Ecology* 9, 1609-1624.
- Bergquist, B., Axenrot T., Carlstein M. & Degerman S. 2007. Fiskundersökningar i stora vattendrag. Utveckling av kvantitativ metodik med båtelfiske och hydroakustiska metoder – ett pilotprojekt. *Finfo* 2007:10, 49 sidor.
- Carlstein, M., Bruks A. & Boberg J. 2001. Beståndsuppskattningar av harr i Ljusnan och Svågan genom båtelfiske och fångst-återfångstmetodik. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 15 sidor.
- Carlstein, M., Bruks A. & Boberg J. 2002. Beståndsuppskattningar av harr i Ljusnan och Voxnan genom båtelfiske och fångst-återfångstmetodik. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 12 sidor.
- Carlstein, M., Bruks A. & Boberg J. 2003. Beståndsuppskattningar av harr i Ljusnan och Voxnan genom båtelfiske och fångst-återfångstmetodik. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 12 sidor.
- Carlstein, M., Bruks A. & Boberg J. 2004. Förstudie avseende produktionshöjande åtgärder för harr i Mellanljusnan. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 16 sidor.

- Carlstein, M., Bruks A., Boberg J. & Andersson T. 2005. Beståndsuppskattningar av harr i Ljusnan 2005 genom båtelfiske och fångst-återfångstmetodik. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 13 sidor.
- Carlstein, M., Bruks A., Boberg J. & Andersson T. 2006. Resultat från båtelfisken utförda ovan och nedan centralfisket vid Säs i Österdalälven 22 - 23/11 - 2006.
- Carlstein, M., Bruks A. & Boberg J. 2009. Projekt Stekpanneharr - Slutrapport för studier under åren 2005-2009. Intern rapport. Fiskeresursgruppen, Älvdalens Utbildningscentrum. 23 sidor.
- Hellström, G., Palm D., Brodin T., Rivinoja P. & Carlstein M. 2019. Effects of boulder addition on European grayling (*Thymallus thymallus*) in a channelized river in Sweden. Journal of Freshwater Ecology 34 Issue-1, 559-573.

Congress abstracts

- Thuvander, A. & Carlstein, M., 1989. Exposure of rainbow trout (*Salmo gairdneri*) to Clophen A 50: Effects on the immune system. Nordic symposium on organic environmental chemicals 11.-14.9.1989. University of Joensuu, Faculty of mathematics and natural sciences, Report series n:o 29, p.81
- Carlstein, M., Jansson E., Ljungberg, O. & Svensson K.M. 1990. Ulcerative disease of grayling (*Thymallus thymallus* L.) infected with *Aeromonas salmonicida* var. *achromogenes*. International scientific conference; Bacterial diseases of fish, 26-29th June, University of Stirling, Scotland.
- Carlstein, M. & Gullberg K. 2003. Population studies of European grayling (*Thymallus thymallus* L.) in two regulated Swedish rivers. Poster at the second international symposium on the management of large rivers for fisheries. 11—14 February, Phnom Penh, Cambodia.
- Carlstein, M., Axenrot T., Bergquist B. & Degerman, E. 2005. Developments in electrofishing and hydro-acoustic techniques from boat for studies of fish in large Swedish rivers. The seventh Mekong River Commission technical symposium on Mekong fisheries. November 15-16, University of Ubon Ratchathani, Thailand.
- Carlstein, M. & Bruks, A. 2006. Abundance estimates of European grayling (*Thymallus thymallus* L.) in two regulated boreal rivers in Sweden. 1 st international Conference on the Grayling organized by the Grayling Research Trust. University of York, England July 12-13.
- Carlstein, M., Axenrot T., Bergquist B. & Degerman, E. 2006. Developments in electrofishing and hydro-acoustic techniques from boat for studies of fish in large Swedish rivers. 1 st international Conference on the Grayling organized by the Grayling Research Trust. University of York, England July 12-13.

Entrepreneurial activities

- Project leader: Interregional EU-project SkanLand-fiske 1997—2000; Projekt Vattenbruksutveckling (Project Aquaculture development) EU Mål-1 (1997-1999). Competence development within Leader II Dalarna (1999). Projekt Sportfisketurism-entreprenören (Project Sport fishing tourism entrepreneurs) i Gävleborgs län (2005). Siljansforsprojektet förstudie (2008). Ansvarig för framtagande av underlag för jaktturism inom ramen för projekt Miljöhousesyn Sigill AB/ LRF. 2009 m fl.
- During 1996 – 1998 I did vaccination trials on European grayling and was part of a inter-nordic project financed by the Nordic Council of Ministers aimed to develop vaccines against Atypical *Aeromonas* infections in European grayling and Arctic charr. Co-workers: Christian Syvertsen, Alpharma AS, (Norway), Sinikka Pelkkonen EELA, Kuopio Regional Laboratory and Päivi Pyökkö, Luke, Joensuu (Finland).
- Running private businesses since 1992 within fish- and water management consultancy, tourism, unaccompanied refugee children, house construction and rentals.
- Since 2003 holder of a patent for a principle of a protective garment against predator attacks on animals and humans.

Miscellaneous

- Hockey referee (1980—1986)
- Health care instructor during military service, T3 Sollefteå (1985)
- Fulfilled the Vasaloppet cross country ski race in 1997, 98, 99, 00 and 02
- Diving certificate PADI Open Water Diver (2003)
- Ship officer degree, class VIII (2009)
- Responsible director, experimental leader and veterinarian for laboratory animal issues in connection with electric fishing. Swedish Board of Agriculture (2014 – ongoing)