

CURRICULUM VITAE

November 26th, 2016

Name and year of birth

Kari Tapani Heliövaara, Professor of Forest Zoology

Born December 30th, 1954, Helsinki. Finnish citizen.

Married (wife: Doctor of Dental Sciences, orthodontist, docent Arja Kaarina Heliövaara, née Kosunen; two sons: Harri Oliver, b. 1989; Lauri Joonas, b. 1992).

Languages: Finnish (mother tongue), English, Swedish (and German).

OFFICE:

Department of Forest Sciences

P.O. Box 27

FI-00014 University of Helsinki

Finland

Phone +358 9 191 58372, +358 500 459617

Fax +358 9 191 58463

email kari.heliovaara@helsinki.fi

<http://www.helsinki.fi/forestsciences/>

HOME:

Kuukiventie 9 C 17

FI-00840 Helsinki

Finland

Phone +358 9 698 1117

www.koti.mbnet.fi/karitap/

email kari.heliovaara@mbnet.fi

Degrees

Doctor of Agriculture and Forestry, 1984, degree awarded 24th May, 1984 by the Faculty of Agriculture and Forestry, University of Helsinki, Finland.

Thesis: Heliövaara, K. 1984. Ecology of the pine bark bug, *Aradus cinnamomeus* (Heteroptera, Aradidae). A forest entomological approach. Department of Agricultural and Forest Zoology, Reports 7, 38 p. + appendices. Faculty of Agriculture and Forestry, University of Helsinki.

Licentiate in Agriculture and Forestry, 1983, University of Helsinki.

M.Sc. in Agriculture and Forestry, 1982. Major I: Forest Entomology; Major II: Zoology. University of Helsinki.

M.Sc. in Biology, 1980. Major I: Zoology; Major II: Genetics. University of Helsinki.

Adjunct professorships

Docent of Applied Zoology, University of Helsinki, 1985-

Present employment relationship

Professor of Forest Zoology at the Department of Forest Sciences, University of Helsinki, Finland, 1994-

Helsingin yliopiston metsäeläintieteen professori 1994-

Most important posts

Acting Professor (vs. professori) at the Finnish Forest Research Institute in forest zoology, Department of Forest Protection, Vantaa, from September 1988 to December 1988 and from March 1991 to June 1991.

Research Specialist (Leading Researcher) (erikoistutkija) at the Finnish Forest Research Institute, Department of Forest Protection (= Department of Forest Ecology), Vantaa, October 1986-April 1994.

Research Scientist (tutkija) at the Finnish Forest Research Institute, Department of Forest Protection, Vantaa, from June 1986 to September 1986.

Research Scientist (tutkimusassistentti ja nuorempi tutkija) at the Finnish Academy. Department of Agricultural and Forest Zoology, University of Helsinki, from January 1981 to May 1986.

Research Assistant (tutkimusapulainen ja tutkimusassistentti) at the Finnish Forest Research Institute, Department of Forest Protection, Vantaa, from July 1978 to October 1981.

Supervised doctoral dissertations etc.

Supervised doctoral dissertations: Li Jing (Beijing Forestry University, China, 2012), Yuan Fei (Beijing Forestry University, China, 2010), Lena Huldén (2008), Jani Pellikka (2005), Mikko Peltonen (1999), Terhi Wermundsen (2010), Juha Siitonen (ongoing), Ingebor Menzler-Hokkanen (ongoing), Juha Honkaniemi (ongoing), Ari Nikula (ongoing), Juha Siitonen (ongoing).

Opponent or examiner of doctoral dissertations: Stephen Venn (University of Helsinki 2013), Henri Vanhanen (University of Joensuu, 2008), Gergely Várkonyi (University of Helsinki, 2003), Christian Nansen (University of Copenhagen, Denmark, 2000), Kirsi-Marja Korhonen (University of Helsinki 1987), Seppo Neuvonen (University of Turku 1986).

Examiner of professorships: University of California, USA (2000, 2010), Finnish Forest Research Institute (2004), University of Helsinki (2004), University of Oslo, Norway (2003).

Examiner of docent competence: Juha Heijari (University of East Finland 2012), Heli Viiri (University of East Finland 2011), Hannu Saarenmaa (University of Helsinki 1986).

Custos: Mia Vehkaoja (2016), Milla Niemi (2016), Sari Holopainen (2015), Terhi Wermundsen (2010), Minna Terho (2009), Lena Huldén (2008), Jani Pellikka (2005), Veli-Matti Väänänen (2001), Maarit Kytö (1999), Mikko Peltonen (1999), Sauli Härkönen (1998).

Examiner (opponent) of licentiate seminar: 4.

Supervised MSc theses: ca. 30.

Scientific expert positions

Editorial board memberships: Editor of Acta Entomologica Fennica (1988-1989).

Responsibility of main research projects:

Biodiversity and forest pest problems in Northeast China (BIOPROC, Academy of Finland and Ministry of Foreign Affairs, 2007-2010).

Assessing changes in species' distributions by means of spatial statistics - Finnish long-horn beetles as a case (Ministry of Environment 2005-2006).

Finnish elaterids and buprestids (2004-2014), a book project.

Long-horn beetles of Finland (2000-2004), a book project.

COST Action E-16: BAWBILT (bark and wood boring insects in living trees, 1998-2005).

Effects of forest management on the processes controlling biodiversity (Ministry of Agriculture and Forestry 1993-1997).

Air pollution and Finnish forest injury: mode and tempo in pest succession (Ministry of Environment 1987-1989).

Ecology of the pine bark bug (1981-1986) (Alfred Kordelin Foundation (1980), Research Foundation of Kemira Company (1982), Academy of Finland (1988)).

Memberships in scientific societies:

Finnish Society of Forestry, Entomological Society in Helsinki, Finnish Entomological Society, Finnish Lepidopterological Society, Finnish Mycological Society, Finnish Society of Nature Conservation, Finnish Ornithological Society, Helsinki Ornithological Society.

Invited author of the following articles:

- Heliövaara, K. 2000. Flat bugs (Aradidae). - In: Schaefer, C. W. & Panizzi, A. R. (eds.), *Heteroptera of economic importance*. Boca Raton, London, New York, Washington, D.C., CRC Press. p. 513-517.
- Heliövaara, K., Väisänen, R. & Simon, C. 1994. Evolutionary ecology of periodical insects. - *Trends in Ecology & Evolution* 9: 475-480.
- Heliövaara, K. & Väisänen, R. 1993. *Insects and Pollution*. - Textbook. CRC Press, Boca Raton, Ann Arbor, London, Tokyo, 393 pp.

Acting as a referee e.g. for the following journals:

Acta Forestalia Fennica, Agricultural and Forest Entomology, Annales Zoologici Fennici (regularly), Annals of the Entomological Society of America, Annales Botanici Fennici, Annales Entomologici Fennici (= Entomologica Fennica) (regularly), Annals of Forest Science (regularly), Archives of Insect Biochemistry and Physiology, Arthropod Plant Interactions (regularly), Biocontrol Science & Technology, Biological Conservation, Boreal Environment Research, Canadian Forestry of Research, Ecography, Ecological Bulletins, Ecological Entomology, Entomologia Experimentalis et Applicata, Environmental Entomology, Environmental Pollution (regularly), Environmental Science and Pollution Research, European Journal of Entomology, European Journal of Forest Pathology, Folia Forestalia, Forest Ecology and Management, Forest Science, Insect Conservation and Diversity, Journal of Applied Entomology, Journal of Biogeography, Journal of Insect Science, Metsätieteen Aikakauskirja, Microscope Research and Technique, Oikos, Oriental Insects, Plant and Soil, PlosOne, Research Letters in Ecology, SciTech, Silva Fennica (regularly), Suomen Riista.

Scientific positions of trust and administration

- Board member of alien species strategy, Ministry of Agriculture and Forestry (2009-).
- Member of the scientific board of Metsähallitus (2005-).
- Board member of plant protection strategy, Ministry of Agriculture and Forestry (2007-).
- Board member of Finnish School in Wildlife Biology, Conservation and Management (Luova graduate school, 1995-).
- Member of Department Administrative Board (1996-2001, 2005-2009).
- Member of the Administrative Board of Faculty of Agriculture and Forestry, University of Helsinki (1995-2000, 2005-2009).
- Department Head (Department of Applied Biology, University of Helsinki, 1996-2001, 2005-2007).
- Head of forestry students, University of Helsinki (2001-2003).
- Board member of Natural History Museum, University of Helsinki (1998-2006).
- Board member of Värriö Research Station (1997-2000).
- Leader of student selection, Faculty of Agriculture and Forestry, University of Helsinki (1995-2000).
- Board member of Plant Protection Society (Kasvinsuojeluseura, 1996-1999).
- Board member of the society of adjunct professors (dosenttiyhdistys) at the University of Helsinki (1987-1988).
- Board member of Helsinki Ornithological Society (Tringa, 1978-1983).

Foreign visits

- Invited expert of forest insect damage in northern China, 2002-2004, Jaakko Pöyry Consulting.
- Invited professor and lecturer at the Beijing Forestry University, China, 2004-2012.

Visiting expert under the scientific and technical cooperation between the USA and Finland at the following Institutes:

USDA/FS, Durham, New Hampshire (1989); USDA/FS, Delaware, Ohio (1989); USDA/FS and University of California, Riverside, California (1989 and 1991); North Carolina State University, Raleigh, North Carolina (1991); University of Michigan, School of Natural Resources, Ann Arbor, Michigan (1991); Pesticide Research Center and Michigan State University, East Lansing, Michigan (1991), 3 months altogether.

Invited speaker in the following international scientific meetings and seminars:

Forest Certification, Ministry of Agriculture and Forestry, Beijing, China, March 20-22, 2005 (session chair).
Europe's cold regions: scenarios for animal responses to global change, April 24-27, 1998, Abisko, Sweden (session chair).
Entomology Seminar, February 28, 1997, University of California, Riverside, CA, USA.
IUFRO XX World Congress. Air pollution, plant stress, and herbivory in forests, August 6-12, 1995, Tampere, Finland.
Entomology Seminar, April 1997, University of Agriculture, Uppsala, Sweden.
The Boreal Forests of the World - Ecology, Biodiversity and Sustainable Use. Invertebrate fauna of boreal forests, Aspects of biodiversity and vulnerability. International Scientists' Seminar, September 30-October 2, 1992, Jokkmokk, Sweden.

Participation e.g. in the following international scientific meetings:

EU COST Action FP1401 GLOBAL WARNING, A global network of nurseries as early warning system against alien tree pests, 2014-2018.
EU COST Action: FP1002 PERMIT, Pathway Evaluation and pest Risk Management In Transport, 2011-2014.
World Congress of EnviroBio-2011 (WCEB-2011), "Healthier, Safer, and Environment Friendly", October 19-22, 2011, World Exposition Center, Dalian, China (session chair, member of scientific advisory board).
International Conference on the Efforts in Response to Forest-Related Natural Disasters. April 12-14, 2010, Beijing, China (session chair).
International Workshop on the Biological Control of Invasive Species of Forests, Chinese Academy of Sciences, Beijing, P. R. China, September 2007.
13th Symposium on Insect - Plant Relationships (SIP 13), Uppsala, Sweden, July - August 2007.
Invasive Alien Species (IAS), Beijing, China 2004.
Innovations in Higher Education (INNO), August 30-September 2, 2000, Helsinki, Finland.
XXV Nordic-Baltic Congress of Entomology, June 27-July 2, 2000, Melsomvik, Norway (session chair).
Working group of forest entomology, annually arranged in one of the Nordic Countries (1980-1993).
XX International Congress of Entomology, August 25-31, 1996, Florence, Italy.
IUFRO XX World Congress, 6-12 August 1995, Tampere, Finland.
Measuring and Monitoring Forest Biological Diversity: The International Network of Biodiversity Plots, International Symposium, May 23-25, 1995, Washington D.C., USA.
Boreal Forests of the World, International Meeting, September 1994, Anchorage, Alaska, USA.
International Seminar on Counteractions against Acidification in Forest Ecosystems, March 3-4, 1994, Oslo, Norway.
IUFRO Working Parties S2.07-05 and S2.07-06, Integrated Control of Scolytid Bark Beetles, Population Dynamics of Forest Insects, 1994, Maui, Hawaii, USA.
SNS Multiple Use Group Meeting and Excursion in Vejle, Denmark, 23-25 May, 1993,
The Effect of Management on the Ecological Diversity of Boreal Forests, International Workshop, March 29-31, 1993, Lammi Biological Station, Finland.
Individuals, Populations, Patterns, September 7-10, 1992, Norwich, UK.
XIX International Congress of Entomology, June 28-July 4, 1992, Beijing, China.
First European Symposium of Terrestrial Ecosystems: Forests and Woodlands, May 20-24, 1991, Florence, Italy.
Population Dynamics of Forest Insects, NERC Institute of Terrestrial Ecology, September 4-7, 1989, Edinburgh, Scotland.
Acidic Deposition and Forest Decline. An International Symposium, Rochester, October 20-21, 1988, Rochester, New York, USA.
Air Pollution and Forest Decline. 14th International Meeting for Specialists in Air Pollution Effects on Forest Ecosystems, IUFRO Project Group P2.05, October 2-8, 1988, Interlaken, Switzerland.
International Symposium of Pine-Herbivore Interaction, April 27-29, 1987, Tvärminne Zoological Station, Finland.

Scientific acknowledgements and awards

Prize of Innovation and Prize of Invention, University of Helsinki 2008, malaria research.
The best lepidopterological publication in Finland in 1991.