CURRICULUM VITAE

Name	Marie Trydeman Knudsen	
Education	2011	Ph.D. in environmental life cycle assessment (LCA) from University of Copenhagen.
	2002	M.Sc. (agric.) from the Royal Veterinary and Agricultural University.
Employment	2024-	Head of Section for Agricultural Systems and Sustainability, Dept. of Agroecology, Aarhus University
	2024-	Professor at Dept. of Agroecology, Aarhus University
	2019-	Member of the Danish Council on Climate Change (Klimarådet)
	2021-2024	Senior Researcher at Dept. of Agroecology, Aarhus University
	2015-2021	Researcher at Dept. of Agroecology, Aarhus University (tenure track)
	2011-2015	Postdoc at Dept. of Agroecology, Faculty of Science and Technology, Aarhus University.
	2006-2011	Ph.D.-student (maternity leave, twins: 2007-8)
	2009-2010	Research assistant at Dept. of Agricultural Systems, University of Aarhus
	2005	Environmental and agricultural adviser (Vesthimmerlands Landboforening)
	2004-2005	Research assistant/Information officer at ICROFS
	2002-2004	Research assistant at the Royal Veterinary and Agricultural University / Research Centre Risø.
Stays abroad	June 2014	Chalmers University (Energy and Environment), Sweden.
	March 2007	China Agricultural University, Beijing, China.
	October 2006	EMBRAPA (Meio Ambiente), Brazil.
	July 2004	University of Delaware and IFPRI, Washington DC, USA.
Selected research projects	**Current projects**	*MIXED (*Miljø- og klimaeffekter ved skovlandbrug og integ. landbrugssyst. i Europa) (EU, WP leader)
		*PATHWAYS (*Pathways for transitions to sustainability in livestock husbandry and food systems, EU)
		ECOLABEL (Klima- og miljømærkning af fødevarer) (Project leader)
		SustainFood (Moving towards sustainable and healthy organic foods and diets) (WP leader)
		HOPeS (Holistic organic poultry production to improve sustainability and welfare (WP leader)
		GrassTools (Tools for improving grassland production and delivering ecosystem services) (WP leader)
		OUTFIT (Outdoor sows in novel concepts to benefit the environment) (WP leader)
		BioSubstrate and BioSubstrate II (Biobaserede vækstsubstrater til planteproduktion) (WP leader)
	2011-2024	*SustainOrganic* (Climate friendly and SUSTAINable ORGANIC food and diets) (Project leader)
		SinProPack (Grass fiber-based paper for sustainable "to-go" packaging products) (WP leader)
		ClimateVeg (Improving CLIMATE and environ. profile of Danish organic VEGetables) (WP leader)
		ClimOptic (Climate optimized fertilization in organic cropping systems) (WP leader)
		Green VALLeys (Gröna bioraffinaderier för hållbar produktion av bioenergi från jordbruket) (Interreg)
		GREEN-EGG (Greening of organic egg production)
		SUPERGRASSPORK (Super organic pork on grass-protein) (WP leader)
		MULTIPLANT (Multifunctional perennial high-value crops in organic plant production) (WP leader)
		OATPRO (Engineering of oat proteins: Sustainable food development process, EU project)
		SOLID (Sustainable Organic and Low Input Dairying, EU project)
		Legumes Futures (EU project)
		CROPSYS (The effect of cropping systems on production and the environment)
	2006-2011	*Environmental assessment of imported organic products: focusing on orange juice from Brazil and soybeans from China* (Ph.D. project)
	2002-2005	*Organic Agriculture in a global perspective* (ICROFS project)
		INTERCROP (Intercropping of cereals and grain legumes in EU org. farming syst., EU project)
		Grain legumes and cereals – new methods of cultivation for a larger protein supply in org. agric.

Selected publications

In total 213 publications, including 70 peer reviewed papers, 7 peer-reviewed books or book chapters, 39 scientific reports, 34 popular science papers, 63 conference papers. The H-index is 34 and number of citations is 3254 in Scopus.

van der Werf, HMG, Knudsen MT, Cederberg C (2020) Towards better representation of organic agriculture in life cycle assessment. Nature Sustainability, p. 1-7. Online https://www.nature.com/articles/s41893-020-0489-6 **(262 citations)**

Knudsen MT, Preda T, Djomo SN, Peña N, Smith L, Padel S, Hörtenhuber S, Zollitsch W, Hermansen JE. (2019) The importance of including soil carbon changes, ecotoxicity and biodiversity impacts in environmental life cycle assessments of organic and conventional milk in Western Europe. Journal of Cl. Prod. 215: 433-443 **(71 citations)**.

Knudsen MT, Hermansen JE, Cederberg C, Herzog F, Vale J, Jeanneret P, Sarthou J-P, Friedel JK, Balázs K, Fjellstad W, Kainz M, Wolfram S, Dennis P (2017) Characterization factors for land use impacts on biodiversity in life cycle assessment based on direct measures of plant species richness in European farmland in the 'Temperate Broadleaf and Mixed Forest' biome. Science of the Tot. Env. 580: 358–366 **(50 citations)**

Knudsen MT, Meyer-Aurich A, Olesen JE, Chirinda N, Hermansen JE (2014) Carbon footprints of crops from organic and conventional arable crop rotations – using a life cycle assessment approach. Journal of Cleaner Production 64: 609-618 **(142 citations)**.

Petersen BM, Knudsen MT, Hermansen JE, Halberg N (2013) An approach to include soil carbon changes in life cycle assessments. Journal of Cleaner Production 52, 217-224 **(179 citations)**.