



DNMARK publications

August, 2015

Scientific dissemination

Papers, peer reviewed

- 1) Christen B, Kjeldsen C, Dalgaard T and Martin-Ortega J (2015) *Can Fuzzy Cognitive Mapping Help in Agricultural policy design and communication?* Land Use Policy 45 (64-75).
- 2) De Vries, W, J Kros, MA Dolman, Th V Vellinga, HC de Boer, MPW Sonneveld and J Bouma (2015) *Environmental impacts of innovative dairy farming systems aiming at improved internal nutrient cycling: a multi-scale assessment.* Science of the Total Environment 536: 432–442. DOI:10.1016/j.scitotenv.2015.07.079.
- 3) Kros J, MM Bakker, P Reidsma, A Kanellopoulos, S Jamal Alam and W de Vries (2015) *Impacts of agricultural changes in response to climate and socio economic change on nitrogen deposition in nature reserves.* Landscape ecology 30 871-885.
- 4) Leip A, G Billen, J Garnier, B Grizzetti, L Lassaletta, S Reis, D Simpson, MA Sutton, W. de Vries, F Weiss and H Westhoek (2015) *The Environmental Impact of European Livestock Production.* Environmental Research Letters (Accepted).
- 5) Reidsma P, MB Bakker, A Kanellopoulos, SJ Alam, W Paas, J Kros and W. de Vries (2015) *Sustainable agricultural development in a rural area in the Netherlands? Assessing impacts of climate and socio-economic change at farm and landscape level.* Agriculture, Ecosystems and Environment (Accepted).
- 6) Turner KG, Anderson S, Chang MG, Costanza R, Courville S, Dalgaard T, Dominati E, Kubiszewski I, Ogilvy S, Porfirio L, Ratna N, Sandhu H, Sutton PC, Svenning JC, Turner MG, Varennes YD, Voinov A, Wratten S (2015) *Towards an Integrated Assessment of Land Degradation and Restoration: Methods, Data, and Models.* Ecological Modelling (doi:10.1016/j.ecolmodel.2015.07.017)
- 7) Van Grinsven HJM, JW Erisman, W de Vries and H Westhoek (2015) *Potential of extensification of European agriculture for a more sustainable food system, focusing on nitrogen.* Environmental Research Letters 10 (2), 025002.
- 8) Vejre H, Vesterager JP, Andersen PS, Olafsson AS, Brandt J and Dalgaard T (2015) *Does cadastral division of area-based ecosystem services obstruct comprehensive management?* Special Issue: Indicators in models. Ecological Modelling 295 (2015) 176–187.
- 9) Wolf J, A Kanellopoulos, J Kros, H Webber, G Zhao, W Britz, GJ Reinds, F Ewert and W. de Vries (2015) *Combined analysis of climate, technological and price changes on future arable farming systems in Europe.* Agricultural Systems (Accepted).
- 10) Asai, M.; Langer, V.; Frederiksen, P. and Jacobsen, B.H. (2014) *Farmers perception of successful collaborative arrangements for manure exchange: A study in Denmark.* Agricultural Systems 06/2014; 128:55-65.
- 11) Dalgaard T, Hansen B, Hasler B, Hertel O, Hutchings N, Jacobsen BH, Jensen LS, Kronvang B, Olesen JE, Schjørring JK, Kristensen IS, Graversgaard M, Termansen M and Vejre H (2014) *Policies for agricultural nitrogen management - trends, challenges and prospects for improved efficiency in Denmark.* Environmental

- Research Letters, Environ. Res. Lett. 9 (2014) 115002 (16pp).
<http://dx.doi.org/10.1088/1748-9326/9/11/115002>.
- 12) Hutchings N, Nielsen O-K, Dalgaard T, Mikkelsen MH, Børgesen CD, Thomsen M, Ellermann T, Højberg AL, Mogensen L and Winther M (2014) *A nitrogen budget for Denmark; developments between 1990 and 2010, and prospects for the future*. Environmental Research Letters. Environ. Res. Lett. 9 (2014) 115012 (8pp). <http://dx.doi.org/10.1088/1748-9326/9/11/115012>.
 - 13) Kærgård N og Dalgaard T (2014) *Dansk landbrugs strukturudvikling siden 2. verdenskrig*. Landbohistorisk Tidsskrift 2014 1-2 p. 9-33. ISSN 1604-4878.
 - 14) Schullehner J and Hansen B (2014) Nitrate exposure from drinking water in Denmark over the last 35 years. *Environmental Research Letters*. 9 095001 <http://dx.doi.org/10.1088/1748-9326/9/9/095001>.
 - 15) Turner K, Odgaard MV, Bøcher P, Dalgaard T and Svenning JC (2014) *Bundling Ecosystem Services: Trade-offs and Synergies in a Cultural Landscape*. Landscape and Urban Planning 125 (2014) 89–104.
 - 16) De Vries W, Kros J, Kroeze C and Seitzinger SP (2013) *Assessing planetary and regional nitrogen boundaries related to food security and adverse environmental impacts*. Current Opinion in Environmental Sustainability 5:392–402.
 - 17) Erisman JW, Galloway J, Seitzinger S, Bleeker A, Dise NB, Petrescu R, Leach AM and de Vries W (2013) *Consequences of human modification of the global nitrogen cycle*. <http://dx.doi.org/10.1098/rstb.2013.0116>. Phil. Trans R. Soc. B 368: 20130116.
 - 18) Grinsven HJM, Holland M, Jacobsen BH, Klimont Z, Sutton MA and Williams, WJ (2013) *Costs and benefits of nitrogen for Europe and implications for mitigation*. Env. Science and Technology. Vol. 47, pp. 3571-3579.
 - 19) Kros J, Gies TJA, Voogd JC, Smidt R and de Vries W (2013) *Efficiency of agricultural measures to reduce nitrogen deposition on Natura 2000 sites*. Environmental Science & Policy, 32: 68-79.
 - 20) Sutton MA, Reis S, Riddick SN, Dragosits U, Nemitz E, Theobald MR, Tang YS, raban CF, Vieno M, Dore AJ, Mitchell RF, Wanless S, Daunt F, Fowler D, Blackall TD, Milford C, Flechard CR, Loubet B, Massad R, Cellier P, Coheur PF, Clarisse L, van Damme M, Ngadi Y, Clerbaux C, Skjoth CA, Geels C, Hertel O, Wickink Kruit RJ, Pinder RW, Bash JO, Walker JD, Simpson D, Horvath L, Misselbrook TH, Bleeker A, Dentener F and de Vries W (2013) *Toward a climate-dependent paradigm of ammonia emission & deposition*. Phil. Trans. R. Soc. B 368: 20130166. <http://dx.doi.org/10.1098/rstb.2013.0166>.

Other papers

- 21) Dalgaard T (2015) *Den foranderlige arealanvendelse og en mulig ny guldalder for dansk landbrug?* Jubilæumsskrift. Landbruget og Forskningen. Tidsskrift for Landøkonomi nr. 1. 201. årgang. ISSN 0040-7119.
- 22) Graversgaard M, Gertz F, Wiborg IA, Kjeldsen C and Dalgaard T (2015) *Vandråd – et nybrud i dansk vandforvaltningstradition*. Vand og Jord, 22. årgang no. 1. February 2015, p.40-43.
- 23) Graversgaard M, Kjeldsen C and Dalgaard T (2015) *Vandråd – Dansk vandplanlægning i en ny retning*. Teknik og Miljø nr. 3. Marts

- 24) Olesen JE (2015). *Landmænd skal producere mere og grise mindre*. Teknik og Miljø, Stads- og Havneingeniøren #5, 21.
- 25) Olesen JE (2015). *Faldende proteinindhold i korn*. Grovvarenyt #26, 10-11.
- 26) Olesen JE (2015). *Faldende proteinindhold i korn*. Effektivt Landbrug 24 juni 2015, 7.
- 27) Dalgaard T (2014) *Fra Fjord til Foulum og Aarhus Universitet*. Tidsskrift for Landøkonomi. 200 år jubilæum temanummer.
- 28) Hansen B, Schullehner J and Sigsgaard T (2014) *Nitrat i drikkevandet og vores sundhed*. GeoViden no. 4 2014. p. 2. <http://geocenter.dk/xpdf/geoviden-4-2014.pdf>
- 29) Hansen B, Schullehner J and Dalgaard T (2014) *Beskyttelse af grundvandsressourcen*. GeoViden no. 4 2014. p. 8-9. <http://geocenter.dk/xpdf/geoviden-4-2014.pdf>
- 30) Hansen B, Thorling L, Schullehner J and Dalgaard T (2014) *Virker beskyttelsen af grundvandet?* GeoViden 4 2014. P. 10-11. <http://geocenter.dk/xpdf/geoviden-4-2014.pdf>.
- 31) Olesen JE (2014) *Udfordringer og løsninger for dansk landbrug i en global sammenhæng*. Vand & Jord 21, 174-177.
- 32) Olesen JE (2014) *Klimaændringer og grønne job*. Momentum 2014-3, 17-21.
- 33) Pedersen CA, Hansen B, Thorling L and Dalgaard T (2014) *Hvorfor stoppede stigningen i nitratindholdet i det nydannede grundvand før vandmiljøplanerne blev vedtaget?* Vand og Jord no. 4, p. 184-186.
- 34) Dalgaard T (2013) *Bæredygtig anvendelse af kvælstof kan give milliardindtægt*. Agrologisk nr. 2, Årgang 31. Februar 2013. s. 12-13.
- 35) Jacobsen BH og Kristensen ES (2013) *Normreduktion betyder højere omkostninger*. Agrologisk nr. 12, pp. 32-35.
- 36) Olesen JE (2013) *Hvordan kan udvaskningen og belastningen af vandmiljøet yderligere reduceres?* Agrologisk, 09.08.2013, s. 6-8.
- 37) Dalgaard T (2012) *N-restriksjoner i dansk landbrug – effekter på nitrogenbalanser og produktivitet*. Bioforsk-konferansen, Clarion Hotel Oslo Airport, Gardermoen, 6. - 7. februar 2012. Bioforsk Fokus 5(2) p. 467-470.
- 38) Hansen B, Thorling L, Sørensen B, Dalgaard T and Erlandsen M (2012) *Nitrattrends i dansk grundvand*. Vand og Jord, 19. årgang 2012, no. 1 p. 37-40.

Doctor and PhD thesis

- 39) Turner KC (2015) *Mapping and Modelling Ecosystem Services to Explore Characteristics of Socio-Ecological Systems*. Aarhus University, Department of Agroecology, Science and Technology. Submitted. ISBN 978-87-93176-94-2.

Scientific reports

- 40) Ingvild Lauvland Høie (2014) *The Danish Drainage Water Monitoring programme – An approach for addressing nitrogen losses in Northern Jutland, Denmark* Master's thesis, (Principal supervisor: Lars Stoumann Jensen, Co-supervisor: Kristoffer Piil, KCA, Aarhus), submitted September 4, 2014. Dept. of Plant and Environmental Sciences, University of Copenhagen, 96 pp.

Contributions to books, anthologies or reports

- 41) Dalgaard T, Brock S, Hansen B, Hasler B, Hertel O, Hutchings NJ, Jacobsen B, Jensen L S, Kjeldsen C, Kronvang B, Olesen JE, Schjørring JK, Sigsgaard T, Graversgaard M, Turner K, Vejre H, de Vries W and Wiborg IA (2015) *DNMARK: Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production*. Chapter accepted for the Book publication after the N2013 conference. Springer Verlag, Berlin. 12 p.
- 42) Sutton MA and Dalgaard T (2015) Foreword. In: Reis S, Howard CM, Sutton MA: *Costs of Ammonia Abatement and the Climate Co-Benefits*. Springer Verlag, Berlin. ISBN 978-94-017-9721-4. 280 p.
- 43) Sutton MA, Oenema O, Dalgaard T (2015, in press) Preface. In: Westhoek H, Lesschen JP, Rood T, Wagner S, Leip A, De Marco A, Murphy-Bokern D, Sutton MA and Oenema O. *Nitrogen on the Table: The influence of food choices on nitrogen emissions and the European environment*. ENA Special Report on Nitrogen and Food. The Food Climate Research Network, University of Oxford.
- 44) Oenema O, Sutton MA, Dalgaard T and Howard C (2014) Preface. In: Bittman S, Dedina M, Howard CM, Oenema O and Sutton M (eds.) *Options for Ammonia Mitigation. Guidance from the UNECE Task Force on Reactive Nitrogen*. P. v-vi. Centre for Ecology and Hydrology, The UK. ISBN 978-1-906698-46-1.
- 45) Dalgaard T, Kjeldsen C, Alrøe H and Noe E (2013) *Fremtidens Landbrug*. P. 161-187. In: Høiris (ed.) *Fremtidens*. Aarhus Universitetsforlag, Aarhus. 469 p. ISBN 978-87-7124-034-4. <http://da.unipress.dk/udgivelser/f/fremtiden/>
- 46) Oenema O, Bittman S, Dedina M, Howard CM, Sutton M, Hutchings N and Klemont Z (2014) *Nitrogen Management taking into account the whole Nitrogen Cycle*. Chapter 3 in: Bittman S, Dedina M, Howard CM, Oenema O and Sutton M (eds.) *Options for Ammonia Mitigation. Guidance from the UNECE Task Force on Reactive Nitrogen*. P. v-vi. Centre for Ecology and Hydrology, The UK. ISBN 978-1-906698-46-1.
- 47) Oenema O, Sutton MA, Dalgaard T and Howard C (2014) *Preface*. In: Bittman S, Dedina M, Howard CM, Oenema O and Sutton M (eds.) *Options for Ammonia Mitigation. Guidance from the UNECE Task Force on Reactive Nitrogen*. P. v-vi. Centre for Ecology and Hydrology, The UK. ISBN 978-1-906698-46-1.

Working papers or preprints

- 48) Hasler B, Hansen LB, Andersen HE & Konrad M (2015) *Modellering af omkostningseffektive reduktioner af kvælstoftilførslerne til Limfjorden: Dokumentation af model og resultater*. Notat. Aarhus University, DCE - Danish Centre for Environment and Energy.
- 49) Ørum JE og Jacobsen BH (2013) *Økonomisk konsekvens ved ændret kvælstofregulering – med udgangspunkt i Limfjorden*. Udredningsnotat 2013/6. Institut for Fødevarer- og Ressourceøkonomi (IFRO), KU.

Conference papers, peer reviewed

- 50) Dalgaard T, Vinther FP, Børgesen C and Hutchings N (2011) *Nitrogen utilization in farming systems: optimisation to minimise losses*. International Fertiliser Society Proceedings no. 703. ISSN 1466-1314, ISBN 978-0-85310-340-0. 24 p.

Conference papers, not peer reviewed

- 51) Andersen PS, Christensen AA, Draux H, Vejre H (2015, accepted) *Developing a GIS based model of changes in land use and Nitrogen flows - an interactive model for stakeholder involvement and decision-making*. Paper presentation for 9th IALE World Congress: Crossing Scales, Crossing Borders: Global Approaches to Complex Challenges. <http://www.ialeworldcongress.org/> July 5-10, 2015. Portland, Oregon.
- 52) Case S, Gómez-Muñoz B, Magid J, Jensen LS (2015) *Increasing thermal drying temperature of biosolids reduced nitrogen mineralisation and N₂O emissions*. Presentation for the RAMIRAN 2015: 16th International Conference Rural-Urban Symbiosis. Hamburg, Germany, 8-10 September 2015. <http://ramiran2015.de/>
- 53) Case S, Oelofse M, Oenema O, Hou Y, Jensen LS (2015) *Farmer attitudes and potential barriers to the use of new organic fertilisers*. Presentation for the RAMIRAN 2015: 16th International Conference Rural-Urban Symbiosis. Hamburg, Germany, 8-10 September 2015. <http://ramiran2015.de/>
- 54) Dalgaard T, Hansen B, Hasler B, Hertel O, Hutchings N, Jacobsen BH, Jensen LS, Kronvang B, Olesen JE, Schjørring JK, Kristensen IS, Graversgaard M, Termansen M and Vejre H (2015, submitted) *Policy effects, challenges and future solution scenarios for improved N management and N efficiency in Denmark*. Presentation for the 2nd International Interdisciplinary Conference on Land Use and Water Quality: Agricultural Production and the Environment. Vienna, Austria, 21-24 September 2015. <http://web.natur.cuni.cz/luwq2015/>.
- 55) Dalgaard T, Hansen B, Hasler B, Hertel O, Hutchings N, Jacobsen BH, Jensen LS, Kronvang B, Olesen JE, Schjørring JK, Kristensen IS, Graversgaard M, Termansen M and Vejre H (2015) *Trends, challenges and prospects for improved N management and N efficiency in Denmark*. Invited abstract presentation for the International workshop of nitrogen footprint update in Japan: Local reality and global connection. March 16-18 2015. Field Science Center for Northern Biosphere, Hokkaido University, Japan.
- 56) Gómez-Muñoz B, Magid J, Case S, Jensen LS (2015, submitted) *Effects of pig slurry acidification, separation techniques and pyrolysis on N and C mineralization and N₂O emissions after application to soil*. Presentation for the RAMIRAN 2015: 16th International Conference Rural-Urban Symbiosis. Hamburg, Germany, 8-10 September 2015. <http://ramiran2015.de/>
- 57) Graversgaard M, Kjeldsen C, Dalgaard T, Turner KG, Andersen PS, Aagaard A Christensen, Vejre H, Block Hansen L, Wiborg IA, Piil K and Brock S (2015) *Introducing the Participatory scenario Storyline and Visualisation method (PsSV) in 6 Danish landscape study areas*. Paper for the 9th IALE World Congress. July 5-10, 2015. Portland, Oregon USA. <http://www.ialeworldcongress.org/>
- 58) Graversgaard M, Kjeldsen C, Dalgaard T, Turner KG, Andersen PS, Aagaard A Christensen, Vejre H, Block Hansen L, Wiborg IA, Piil K and Brock S (2015) *Nitrogen management strategies- Introduction of a Participatory scenario Storyline and Visualisation method (PsSV)*. Abstract for the www.macsur.eu conference on Integrated Climate Risk Assessment in Agriculture and Food. University of Reading, UK. Wednesday 8th April to Thursday 9th April 2015.
- 59) Graversgaard M, Kjeldsen C, Dalgaard T, Turner KG, Andersen PS, Christensen AA, Vejre H, Hansen LB, Wiborg IA, Piil K and Brock S (2015) *Nitrogen*

- management strategies- Introduction of a Participatory scenario Storyline and Visualisation method (PsSV)*. Paper for the MACSUR Conference 2015. Integrated Climate Risk Assessment in Agriculture & Food. University of Reading Wednesday 8th – Thursday 9th April 2015.
- 60) Graversgaard M, Kjeldsen C, Dalgaard T, Turner KG, Andersen PS, Christensen AAa, Vejre H, Hansen LB, Wiborg IA, Piil K and Brock S (2015) *Introducing the Participatory scenario Storyline and Visualisation method (PsSV), in 6 Danish landscape study areas*. Paper presentation for 9th IALE World Congress: Crossing Scales, Crossing Borders: Global Approaches to Complex Challenges. <http://www.ialeworldcongress.org/> July 5-10, 2015. Portland, Oregon.
- 61) Graversgaard M, Kjeldsen C, Dalgaard T, Wiborg IA and Gertz F (2015, subhmitted) *Better governance- Implementation strategies and stakeholder involvement traditions in the EU Water Framework Directive*. Presentation for the 2nd International Interdisciplinary Conference on Land Use and Water Quality: Agricultural Production and the Environment. Vienna, Austria, 21-24 September 2015. <http://web.natur.cuni.cz/luwq2015/>.
- 62) Hansen, B, Schullehner J, Thorling L, Dalgaard T and Erlandsen M (2015, submitted) *Long term trends in nitrate in Danish groundwater and drinking water*. Presentation for the 2nd International Interdisciplinary Conference on Land Use and Water Quality: Agricultural Production and the Environment. Vienna, Austria, 21-24 September 2015. <http://web.natur.cuni.cz/luwq2015/>
- 63) Kejser, A (2015) *European Attitudes to Water Pricing: Recovery of Environmental and Resource Costs*. Paper presentation at EAERE conference June 24-27 2015 (European Association of Environmental and Resource Economists) <http://www.eaere2015.org/>. Helsinki, Finland
- 64) Kejser A (2015) *European Attitudes to Water Pricing: Internalising Environmental and Resource Costs*. Paper presentation. Det Miljøøkonomiske Råds konference August 2015
- 65) Vejre H, Dalgaard T *et al.* (2015) *Spatial components in the Danish Nitrogen Policy, models and effects*. Synthesis paper for the 9th IALE World Congress. July 5-10, 2015. Portland, Oregon USA. <http://www.ialeworldcongress.org/>
- 66) Boegh E, Houborg R, Bienkowski J, Braban, CF, Dalgaard T, van Dijk, N, Dragosits U, Holmes E, Magliulo V, Schelde K, Di Tommasi P, Vitale V, Theobald M, Cellier P and Sutton M (2014) *Remote sensing of LAI, chlorophyll and leaf nitrogen pools of crop- and grasslands in five European landscapes*. Poster for the GV2M conference on Global Vegetation Monitoring and Modeling. 3rd - 7th February 2014. Palais des Papes, Avignon, France.
- 67) Brock S og Christiansen TH (2014): *Eating at School. Examining the nutritional approach to healthy eating in school by means of positioning theory*. Social Theory and Health.
- 68) Case S. D. C., Gómez-Muñoz B, Magid J and Jensen L. S. (2014) *Effect of drying temperature on nitrogen mineralisation and soil N2O emissions following addition of thermally-dried sludges*. Poster presentation for the 18th Nitrogen Workshop, Lisbon, Portugal, 30 June – 3 July 2014.
- 69) Dalgaard T (2014) *Gevinster ved en mere målrettet kvælstofudnyttelse. I: Plantekongres 2014: Sammendrag af indlæg*. Aarhus Universitet, Københavns Universitet og Videnscentret for Landbrug. Session 82, Gevinster ved målrettet

- kvælstofregulering. S. 338-340. ISBN 978-87-92869-86-9.
- 70) Drouet JL, Duret S, Maury O, Olesen JE, Durand P, Salmon-Monviola J, Hutchings N, Dalgaard T, Theobald MR, Dragosits U, Sutton MA, Cellier P (2014) *Effect of landscape structure and nitrogen management on nitrogen flows and balances at the landscape scale..* Éclaire meeting: Integrating impacts of air pollution and climate change on ecosystems. Budapest Hungary Oct 1-2, 2014. 1 p.
- 71) Gómez-Muñoz B, Magid J, Case S, Jensen LS (2014) *Effect of acidification and separation techniques in different fractions of pig slurry on N mineralization and N₂O emissions.* Oral communication for the ReUseWaste Workshop, Instituto Superior de Agronomia, Lisbon, Portugal, 3rd July.
- 72) Grunert K, Brock S, Brunsø K, Christiansen T, Edelenboss M, Kastberg H, Krogager S, Mielby L og Poulsen K (2014) *Cool snacks: A cross-disciplinary approach to healthier snacks for adolescents.* Trends in Food Science and Technology
- 73) Hansen B, Thorling L, Dalgaard T and Erlandsen M (2014) *Nitrate trend analyses in Danish Groundwater – evaluation of the effect of regulation of intensive agriculture.* Paper presentation for the International Association of Hydrogeologists IAH, the Moroccan Chapter - 41st IAH International Congress "Groundwater : Challenges and Strategies". IAH2014. Marrakech, Marokko, September, 15-19, 2014.
- 74) Hansen B, Thorling L and Dalgaard T (2014) *Effekten af de seneste 30 års nitratindsats for drikkevandsbeskyttelse.* I: Plantekongres 2014: Sammendrag af indlæg. Aarhus Universitet, Københavns Universitet og Videnscentret for Landbrug. Session 85, Er vores drikkevand godt nok? S. 358-360. ISBN 978-87-92869-86-9.
- 75) Hasler B, Hansen LB, Konrad M og Termansen M (2014) *Nye økonomiske incitamenter til lokalt samarbejde.* I: Plantekongres 2014: Sammendrag af indlæg. Aarhus Universitet, Københavns Universitet og Videnscentret for Landbrug. Session 87: Lokal involvering i udvikling af nye miljøtiltag.
- 76) Jacobsen BH (2013) *Site specific regulation of nitrogen.* Abstrakt og præsentation. Miljøøkonomiske Råds Konference Skodsborg 26.08
- 77) Thorling L, Hansen B, Dalgaard T and Erlandsen M (2013) *Trend reversal of nitrate concentrations in groundwater.* Paper for the Irish Group of the International Association of Hydrogeologists (IAH) conference 23-24 April 2013. <http://www.iah-ireland.org/current/conference2013.html>. 8 p.
- 78) Dalgaard T, Olesen JE and Schjørring JK (2013) *The implementation of policies for sustainable management of reactive nitrogen in Denmark – a success story with needs for improvement.* Paper abstract no. 46. 6th International Nitrogen Conference (N2013). Theme 9: Implementing Nr management policies. Kampala, Uganda, 18-22 November 2013. <http://n2013.org/>.
- 79) Dalgaard T, Brock S, Hansen B, Hasler B, Hertel O, Hutchings N, Jacobsen B, Kjeldsen C, Kronvang B, Olesen JE, Schjørring JK, Sigsgaard T, Stoumann Jensen L, Vejre H, de Vries W and Wiborg IA (2013) *DNMARK: Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production.* Poster abstract no. 47. 6th International Nitrogen Conference (N2013). Theme 11: Regional and global nitrogen assessment. Kampala, Uganda, 18-22 November 2013. <http://n2013.org/>.
- 80) Dalgaard T, Brock S, Hansen B, Hasler B, Hertel O, Hutchings N, Jacobsen B,

- Kjeldsen C, Kronvang B, Olesen JE, Schjørring JK, Sigsgaard T, Stoumann Jensen L, Vejre H, de Vries W and Wiborg IA (2013) *DNMARK: Danish Nitrogen Mitigation Assessment: Research and Know-how for a sustainable, low-Nitrogen food production*. Poster presentation for the Science for the Environment Conference <http://dce-conference.au.dk/>. Aarhus University, October 3-4, 2013. Theme 11: Resource Efficiency.
- 81) Hansen B, Thorling L, Sørensen B, Dalgaard T, Erlandsen M (2013) *Regional analysis of groundwater nitrate trends and nitrogen surplus in agriculture in Denmark by use of groundwater dating*. Poster for the International Interdisciplinary Conference on Land Use and Water Quality – reducing effects of Agriculture (<http://www.luwq2013.nl>). The Hague, The Netherlands, 10-13 June 2013.
- 82) Kronvang B, Blicher-Mathiesen G, Windolf J & Grant R (2013) *A Hindcast and Forecast of Management of Agricultural Nutrient Losses in Denmark: a Change in Paradigm*. Invited presentation at AGU Fall meeting, Dec. 09-13, 2013 San Francisco, USA.
- 83) Turner KG, Bøcher PK, Kjeldsen C, Svenning JC and Dalgaard T (2013) *The socio-ecological scales of ecosystem service bundles in Denmark*. Proceedings from the 2nd International Conference: Science for the Environment. Aarhus University, DCE – Danish Centre for Environment and Energy. ISBN: 978-87-7156-028-2. Aarhus University, October 3-4, 2013. Theme 16.1 on “Ecosystem Services”, p. 91. http://dce-conference.au.dk/fileadmin/dce-conference.au.dk/Abstract_Book_Final.pdf.
- 84) Hansen B, Dalgaard T, Thorling L, Sørensen B and Erlandsen M (2013) *How does the Danish Groundwater Monitoring Programme support statistical consistent nitrate trend analyses in groundwater?* Geophysical Research Abstracts. Vol. 15, EGU2013-7672-1, 2013. EGU General Assembly 2013.
- 85) Hansen B, Thorling L, Troldborg L, Windolf J, Blicher-Mathiesen G, Kronvang B and Dalgaard T (2013) *Estimation of time lag in groundwater and surface water N response*. Paper presentation for the International Interdisciplinary Conference on Land Use and Water Quality – reducing effects of Agriculture (<http://www.luwq2013.nl>). The Hague, The Netherlands, 10-13 June 2013.
- 86) Turner KG, Bøcher PK, Kjeldsen C, Svenning JC and Dalgaard T (2013) *Ecosystem service bundles in Denmark: the effects of different management scales*. 6th Annual International Conference for Ecosystem Service Partnership, Aug 26-31 2013, Bali, Indonesia.

Planned publications

Submitted papers

- 87) Andersen PS, Vejre H, Dalgaard T and Brandt J (2015) *Farm functionality changes in relation to changes in agricultural policies*. Land Use Policy (submitted).
- 88) Andersen SS and Graversgaard M (2015) *The Meat Dogma Blogging Project: exploring nitrogen mitigation in Denmark*. Appetite (submitted)
- 89) Odgaard MV, Dalgaard T, Bøcher PK and Svenning JC (2015) *Anthropogenic landscape dynamics - a perspective on how geophysical constraints and sociotechnical conditions shape human land-use*. Landscape Ecology (submitted).

- 90) Shibata H, Galloway JN, Leach AM, Cattaneo LR, Cattell LN, Erisman JW, Gu B, Liang X, Hayashi K, Ma L, Dalgaard T, Graversgaard M, Chen D, Nansai K, Shindo J, Matsubae K, Oita A, Su M-S, Mishima S-I, Bleeker A (2015) *Nitrogen footprints: Regional realities and global connections for reducing anthropogenic nitrogen losses to the environment* AMBIO (under submission)
- 91) Turner KG, Odgaard MV, Bøcher PK, Svenning JC, Dalgaard T et al. (2015) *Reconstructing Wetlands: Catchment Selection by Ecosystem. Ecological Indicators* (draft manuscript for submission)
- 92) van Grinsven HJM, Willems J, Jacobsen B, Dalgaard T, Jensen T, Westhoek HW, Kristensen IS (2015) *Why Danish pig farms have far more land and pigs than Dutch farms? Implications for feed supply, manure recycling and production costs.* Agricultural Systems (submitted).

Other research dissemination (newspapers, tv, books...)

- 93) Dalgaard T (2015) Invited speaker for *The International workshop of nitrogen footprint: Local reality and global connection*. March 16-18 2015. Field Science Center for Northern Biosphere, Hokkaido University, Japan. Presentation on: Trends, challenges and prospects for improved N management and N efficiency in Denmark.
- 94) Dalgaard T (2015) Invited expert for The US Environmental Defense Fund (www.EDF.org) expert workshop on nitrogen management, Washington DC, USA, September 29-30 2015. "A Nitrogen budget approach to reducing N losses in commodity cropping systems: Scientific basis and policy implications". EDF Offices, Suite 600, 1875 Connecticut Avenue N.W., Washington, D.C. 20009.
- 95) Dalgaard T (2015) Invited panelist for *The European Commission workshop on "Structural realities in EU agriculture: Does farm size matter?"* Milan, 20 October 2015. Hotel Domina/EXPO EU Pavilion.
- 96) Nationalt Center for Fødevarer og Jordbrugs nyhedsbrev, Fødevarer og Jordbrug Nyhedsbrev Uge 10 (2015) *Kødets lyst og den sunde fornuft*. Artikel bearbejdet af af Kristensen H på <http://dca.au.dk/aktuelt/nyheder/vis/artikel/koedets-lyster-og-den-sunde-fornuft/>
- 97) Pedersen B (2015) *Er dit kødforbrug bestemt af myter?* Indlæg d. 04.02.15 www.dnmark.org, Bodil Pedersen, SEGES. <http://dnmark.org/?p=2126>
- 98) Poulsen JB (2015) *Kvælstoftransport i Hagens Møllebæk*. Indlæg d. 19.02.15 www.dnmark.org, Jane Bang Poulsen, Institut for Bioscience ved Aarhus Universitet. <http://dnmark.org/?p=2139>.
- 99) Wiborg IA og Vadsholt P (2015) *Nye ideer til vækst i landområder*. Pressemeddelelse, SEGES og Varde Kommune den 5/3 2015.
- 100) Dalgaard T (2014) *Danish DNMARK research alliance – Insights from Denmark. Invited conference presentation: The Resource Efficiency in Practice – Closing mineral Cycles final conference*. Brussels Nov 18, 2014. http://mineral-cycles.eu/sites/default/files/Dalgaard_Tommy.pdf#overlay-context=user/2
- 101) Dalgaard T (2014) Video Abstract: *Policies for agricultural nitrogen management - trends, challenges and prospects for improved efficiency in Denmark*. Environ. Res. Lett. 9 (2014) 115002 (see <http://iopscience.iop.org/1748-9326/9/11/115002/article>). Download via <http://brightcove.vo.llnwd.net/v1/uds/pd/105920850001/201411/2949/105920>

850001_3874571972001_abstract-video-9509565183399518ff2fc08e9c5f7caf-converted.mp4.

- 102) Effektivt Landbrug, tirsdag 16. december 2014, sektion 1, side 4: *AU-forsker leder FN task force*.
- 103) GrovareNyt (2014) *Dansk forsker skal lede FN task force om bæredygtig anvendelse af kvælstof*. Nr. 51-52 – 19/12 2014 - side 3.
- 104) Nationalt Center for Fødevarer og Jordbrugs nyhedsbrev, Fødevarer og Jordbrug; Uge 51 (2014) *AU-forsker leder FN task force* (<http://dca.au.dk/aktuelt/nyheder/vis/artikel/au-forsker-leder-fn-task-force/>), og på engelsk: January 2015: *Aarhus University scientist to lead UN task force* (<http://dca.au.dk/en/current-news/news/show/artikel/au-forsker-leder-fn-task-force/>).
- 105) Ingeniøren (08.12.2014) *Kortlægning: 70.000 danskere drikker vand med for meget nitrat*. <http://ing.dk/artikel/kortlaegning-70000-danskere-drikker-vand-med-meget-nitrat-172765>
- 106) Ingeniøren (15.12.2014) *Professor: Nitrat i drikkevand øger 70.000 danskeres risiko for kræft*. <http://ing.dk/artikel/professor-nitrat-i-drikkevand-oeger-70000-danskeres-risiko-kræft-172939>
- 107) Landbrugsavisen (09.12.2014) *Geus-forskere: Mere nitrat i små drikkevandsboringer*. <http://landbrugsavisen.dk/mark/geus-forskere-mere-nitrat-i-sm%C3%A5-drikkevandsboringer>
- 108) Pedersen B (2014) *Bæredygtige løsninger – også for mennesker*. Indlæg d. 03.10.14 <http://dnmark.org/?p=1706>
- 109) Det Strategiske Forskningsråd (2014) *Recirkulering: Forskning skal sikre kvælstofbalancen. Smartere brug af eksisterende viden*. Strategisk Forskning 2004-2013. Tommy Dalgaard blev interviewet til Det Strategiske Forskningsråds årsskrift 2013/2014 "Strategisk Forskning 2004-2013" af Anna Munck Laybourn, DSF. Det Strategiske Forskningsråd. <http://ufm.dk/publikationer/2014/strategisk-forskning-2004-2014>. ISSN 1903-0061. s. 28-29.
- 110) Effektivt Landbrug (2014) *Hent milliarder ved bæredygtig brug af kvælstof*. Tommy Dalgaard blev interviewet af Kaj Lund Sørensen resulterede i en artikel i Magasinet Effektivt Landbrug 28/1 2014 side 7 (http://dnmark.org/wp-content/uploads/2014/01/DNMARK_EffektivtLandbrug2013_0128.pdf).
- 111) Strategiskforskning.dk (2014) *Beskrivelse af DNMARK alliancen*: [http://www.strategiskforskning.dk/projects/detail?search=dnmark&contact_name=&company=All&category=All&programme=All&project_type=All&start\[value\]\[date\]=&end\[value\]\[date\]=&status=All&page=0](http://www.strategiskforskning.dk/projects/detail?search=dnmark&contact_name=&company=All&category=All&programme=All&project_type=All&start[value][date]=&end[value][date]=&status=All&page=0). En samling af information om 450 forskningsprojekter, -centre og -alliancer, som er støttet af Det Strategiske Forskningsråd.
- 112) Vestergaard C (2014) *Værdier og lokal stolthed skal styrke landbrugsproduktionen ved Lammefjorden*. Indlæg d. 17.11.14 www.dnmark.org, Camilla Vestergaard, SEGES. <http://dnmark.org/?p=2027>
- 113) Vestergaard C (2014) *Fremtidig involvering af interessenter i vandplanlægningen*. Indlæg d. 14.10.14 www.dnmark.org, Camilla Vestergaard, SEGES. <http://dnmark.org/?p=1971>
- 114) Dansk Landskabsøkologisk Forening (2013) *Måltrettet miljøregulering i landbrugslandskabet - Årsseminaret 2013*. Bla. med DNMARK indlæg af Henrik

- Vejre ([En landskabsøkologisk modellering af stofstrømme med udgangspunkt i forskellige landskabstyper](#)), Irene Wiborg ([Eksempler på lokal regulering af næringsstoffer i landskabet](#)), Tommy Dalgaard ([Landmandens muligheder for opfyldelse af differentierede målsætninger](#)) samt Berit Hasler og Lene Block Hansen ([Virkemidler ved en landskabsdifferentieret regulering af udvaskning fra landbruget](#)). Se også: <http://dnmark.org/?p=405> og <http://www.landskabsoekologi.dk/node/43>.
- 115) DNMARK (2013a) *Nye idéer til bæredygtig anvendelse af kvælstof*. Folder: http://dnmark.org/wp-content/uploads/2013/12/DNMARK_Web.pdf. 8 p.
- 116) DNMARK.org (2013b) *Innovative solutions for a sustainable management of nitrogen in agriculture*. Folder available at: http://dnmark.org/wp-content/uploads/2013/12/DNMARK_UK_tryk.pdf. 8 p.
- 117) Olesen JE and Jespersen J (2013) *Udfordringer løses ikke af fordums landbrug*. Politiken. Debat 8 juli 2013, s. 8.
- 118) Ingeniøren den 4/12 2012 (<http://ing.dk/artikel/134592-unik-kortlaegning-af-kvaelstof-skal-mindske-udslip-af-drivhusgasser>). Interview resulterede i artikel af journalist Sanne Wittrup, tirsdag 04. dec 2012 kl. 05:29.
- 119) Maskinbladet 1. februar 2013, 1. sektion, side 17: *Bæredygtig anvendelse af kvælstof kan give milliardindtægt*.
- 120) Danmarks Radio, P1 (2012) pressens middagsradioavis, P1 den 4/12 2012: *Vandplaner er ulovlige* (<http://www.dr.dk/P1/radioavisen/>). Interview med Journalist Helge Røjle.
- 121) Danmarks Radio P4 (2012) *Foulum-forskere håber at kunne forbedre udnyttelsen af kvælstof*. P4 Midt og Vest den 4/12 2012: Interview med Journalist Helge Røjle. (Lyt til indslag: [Kvælstof](#). <http://www.dr.dk/P4/Vest/Nyheder/MidtVest/2012/12/03/183029.htm>).
- 122) Radio 24syv (2012) Globus udsendelse om fødevarer, der blev sendt fra AU Campus, Stakladen. Fokus på fødevarereproduktionens globale udfordringer og dansk landbrugs særlige styrkepositioner indenfor landbrug og fødevarereproduktion. 22/11 2012. Hør: <http://arkiv.radio24syv.dk/video/7355389/globus-22-11-2012> samt <http://www.radio24syv.dk/programmer/globus/>
- 123) Maskinbladet 4. december 2012: *30 millioner til forskning i kvælstof*
- 124) Viborg Stifts Folkeblad (2012) *Glæde over millionbevillinger til Foulum-forskere*. 03/12 2012, Side 16. Af Jakob Thorup Thomsen
- 125) Jord og Viden 2012 nr. 11. Interview med redaktør Marianne Thinggaard resulterede i artiklen: *Masser af projektkroner til AU*.
- 126) Nationalt Center for Fødevarer og Jordbrugs nyhedsbrev, Fødevarer og Jordbrug 30/11 (2012) *Forskere viser vejen til bæredygtig anvendelse af kvælstof* (<http://dca.au.dk/aktuelt/nyheder/vis/artikel/forskere-viser-vejen-til-baeredygtig-anvendelse-af-kvaelstof/>), og på engelsk den 4/12 2012: *Researchers show the way to sustainable utilisation of nitrogen* (<http://dca.au.dk/en/currently/news/show/artikel/forskere-viser-vejen-til-baeredygtig-anvendelse-af-kvaelstof/>).
- 127) Nationalt Center for Fødevarer og Jordbrugs nyhedsbrev, Fødevarer og Jordbrug Uge 21 (2012): "Kvælstof fra fødevarereproduktionen kan reduceres": <http://dca.au.dk/aktuelt/nyheder/vis/artikel/kvaelstof-fra->

[foedevareproduktionen-kan-reduceres/](#).

- 128) GrovareNyt (2012) Forskere sætter ny fokus på kvælstof - Forskere ved Aarhus Universitet udvikler modeller, der kan teste effektiviteten af diverse tiltag, der skal nedsætte landbrugets tab af kvælstof. Nr. 21 – 25/5 2012 - side 13.
- 129) Nationen (2012) Interview with journalist Bjarne Bekkeheien Aase from the Norwegian Agriculture paper Nationen, after an invited presentation for the BIOFORSK conference Feb 8, 2012.

Advisory services and education

- 130) Aagaard A (2015) *Nyt program regner på effekt af sædskifter og virkemidler*. Indlæg 20/5 2015 <http://dnmark.org/?p=2291>
- 131) Hansen T (2015) *Fokus på yderområder er strategisk rigtigt*. Indlæg d. 23.02.15 af Thyge Hansen, SEGES, <http://dnmark.org/?p=2160>
- 132) Pedersen B (2015) På udkig efter nyt måleudstyr til en målrettet indsats. <http://dnmark.org/?p=2281>
- 133) Graversgaard M (2015) Vandråd – et nybrud i dansk vandforvaltning. <http://dnmark.org/?p=2269>
- 134) Landbrugsinfo (2013) Arrangementer om planteproduktion - møder, kurser m.m. 08.03.13 LandbrugsInfo. https://www.landbrugsinfo.dk/Planteavl/Sider/pl_arrangementer.aspx.
- 135) Landbrugsinfo (2014) *Specialestuderende sætter lup på det nordjyske drænvand*. Nyhed 5-11-2014, v. Bodil Pedersen, Videnscenter for Landbrug (https://www.landbrugsinfo.dk/Planteavl/Goedskning/Naeringsstoffer/Kvaelstof-N/Kvaelstofudvaskning/Sider/specialestuderende-lup-draenvand_pl_14_1950.aspx).
- 136) Landbrugsinfo (2014) *Workshop om fremtidens landbrug og natur*. https://www.landbrugsinfo.dk/Miljoe/Sider/pl_miljoe_dnmk_workshop.aspx

In total, the newsfeed list at <http://dnmark.org/> until now include a list of more than 45 entries. Moreover, the DNMARK participants contributed to a series of oral presentations during meetings with farmers and other relevant stakeholders, locally, nationally, and internationally.

Especially, the agriculture and food production related educations at Aarhus and Copenhagen University have gained from results and practical examples from the DNMARK research components. This include input to MSc thesis and other project topics - see for example Dalgaard (2015) below, and Høie (2014) above (reference no. 40). Moreover, the DNMARK study sites are used as excursion sites, for example during the Agroecology BSc course at Aarhus University. Finally, the DNMARK results are used in broader public education, like the following public blog:

- 137) Andersen SS (2015) Contribution to the Cork Environmental Forum website blog entries in: 'Meaty Matters'; about the Meat Dogma Blogging Project <http://www.cef.ie/category/blog-meaty-matters-anecdotes-and-opinions-about-eating-less-meat/page/3/>.
- 138) Dalgaard T (2015, eds.) *Master Thesis Projects. Topics within Agroecology. AgroEnvironmental Management and Agrobiolgy MSc Programmes 2015-2016*. Aarhus University, Department of Agroecology. http://agro.au.dk/fileadmin/DJF/Agro/Dokumenter/MScThesis_TopicsAgroecology_2015-2016.pdf. April 2015. 74 p.