## CURRICULUM VITAE Richard H. Moore, Ph.D.

#### **CONTACT INFORMATION**

Dr. Richard H. Moore

Professor Emeritus, School of Environment and Natural Resources

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Cell 614-946-3782

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#### **EDUCATION**

<b>LD</b> CCITIO	· ·
1985	Ph.D. in Anthropology, University of Texas at Austin
	Dissertation Title: Land Tenure and Social Organization in a Rice-
	Growing Community in Tohoku, Japan
1976	B.S. in Education, Ohio State University, Columbus
1975	M.A. in Anthropology, Ohio State University, Columbus
1972	B.A. in Asian Studies, DePauw University, Greencastle, Indiana
ACADEMIC	POSITIONS
2016-present	Emeritus Academy Professor, The Ohio State University
2015-present	Emeritus Professor, School of Environment and Natural Resources,

# 2015-present Emeritus Professor, School of Environment and Natural Resources, Adjunct Emeritus Professor Department of Anthropology/OSU 2015-present Senior Fellow, National Council for Science and the Environment 2011-2015 Executive Director, Environmental Sciences Network, OSU 2013-2015 Associate Director, Office for Energy and the Environment 2010-2015 Professor, School of Environment and Natural Resources, OSU (70)

2010-2015	Professor, School of Environment and Natural Resources, OSU (70%
	Research, 30% Extension)

2010-2012	Assistant Director, School of Environment and Natural
	Resources

2009-2013	Director, Environmental Science Graduate Program
2007-2010	Professor of Rural Sociology, Department of Human & Community
	Resource Development, Ohio State University;

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1999 -2007	Associate Professor, Department of Human & Community Resource
	Development, Ohio State University; Faculty member: Environmental
	Sajanaas Graduata Pragram

	Sciences Graduate Frogram.
1991-1999	Ohio State University, Department of Anthropology, Associate Professor
1985-1991	Ohio State University, Department of Anthropology, Assistant Professor
1976-1991	Instructor, Department of Sociology and Anthropology, Southwest Texas

State University.

#### HONORS, KEYNOTE LECTURES, ELECTED POSITIONS

- 2019 Invited Speaker, 50<sup>th</sup> Anniversary of the Burning of the Cuyahoga River. Moonlight on the Marsh Lecture Series, Everglades Wetland Research Park, Florida Gulf Coast University.
- 2018 Invited Speaker, March for Science representing National Council for Science and the Environment, Washington, DC, (with AAAS CEO Rush Holt and Little Miss Flint)
- 2017-2018 Public Policy Award, American Anthropological Association
- 2016 USDA-NIFA Partnership Award for the grant "Climate Change, Mitigation, and Adaptation in Corn-based Cropping Systems Coordinated Agricultural Project" (https://www.sustainablecorn.org/).
- 2015 Senior Fellow, National Council for Science and the Environment
- 2015 OSU Emeritus Academy
- 2013 OARDC Multi-disciplinary Research Team Award
- 2013 Lead 21 Certification
- 2013Advisee Jed Stinner, OARDC Annual Conference Graduate MS Poster Competition, 1st Place
- 2013-2014 President, NC1190: Catalysts for Water Resources Protection and Restoration: Applied Social Science Research. (28 social science researchers)
- 2012-present Executive Committee, Council of Environmental Deans and Directors, National Council for Science and the Environment
- 2009-2011 President, Culture and Agriculture Section, American Anthropological Association
- 2009 Carnegie Foundation Award for Outreach and Engagement for the Sugar Creek Project
- 2008 Keynote speaker, Social Science Academy, USDA CSREES (January)
- 2008 Chair, OSU College of Food, Agriculture, and Environmental Sciences Tenure and Promotion Committee
- 2008 Holmes County SWCD Friend of Conservation Award. Holmes County Soil and Water Conservation District.
- 2007 OSU McGrath/Kellogg Award for Outreach and Engagement
- 2006 Invited Professor at the Japanese Ministry of Agriculture National Policy Institute
- 2006 Chair, OSU College of Food, Agriculture, and Environmental Sciences Faculty Council
- 2005 President, OSU Chapter, Gamma Sigma Delta (Honor Society for Agriculture)
- 2004 Invited Research Scholar, Japanese Ministry of Agriculture, National Institute for Agricultural Policy (November)
- 2003 Blue Ribbon Award from Ohio Citizen Action (as part of Agroecosystems Management Team of OSU)
- 2002 Gamma Sigma Delta (Honor Society for Agriculture) Extension Award
- 2002 2<sup>nd</sup> in Rural Sociological Society Poster Competition, Advisee Jason Parker receives Honorable Mention at the Rural Sociological Society Poster Competition and 2<sup>nd</sup> in OARDC graduate student poster competition
- 2002 Advisee Hiroaki Kawamura received the Leslie White Award, Central States Anthropological Society

- 1998 OSU Outstanding International Faculty Award presented by the OSU Office of International Education
- 1995 Chair, Curriculum Committee, College of Arts and Sciences, OSU
- 1973 Co-founder (with Bill Shurtleff and about 15 others), SoyCrafters of North America which became Soyfoods of North America (SANA) a few years later.

#### INTERNATIONAL INVITED LECTURES

- 2014 Speaker, Tohoku University (Japan) Conference on the Interface of Social Science and Neuroscience---the Adaptability of Regional Agriculture. (人文・社会科学と脳科学との連携に向けて
  - —農業の地域づくりへの適用を軸に—)February 20.
- 2011 Convener, WMO Kuwait Climate Declaration (Kuwait Declaration calls for Actions to Minimize Short- and Long-term Vulnerability of the West Asia and North Africa region to Climate Change)

  http://www.wmo.int/pages/mediacentre/news/kuwait\_en.html
- 2009 Keynote speaker, Food Safety Conference, Si'an, China (July)
- 2008 Speaker, Environmental Economics Conference, Tohoku U. Japan. (October)
- 2007 Keynote speaker, Japanese Ministry of Agriculture, National Institute for Agricultural Policy (November) and Saitama University
- 2006 French National Institute for Agricultural Research (INRA), Rennes, France.
- 2004 Japanese Ministry of Agriculture, National Institute for Agricultural Policy (November)
- 2003 Hokkaido University, Department of Agricultural Economics and College of Education. (September).
- 1988-1989 Visiting Professor at the National Research Institute for Agricultural Economics; Research Topic: "Joint Restudy of Toyohara Hamlet, Yamagata, Japan."

#### **Editorial Boards:**

Sustainability (ISSN 2071-1050; CODEN: SUSTDE) is an international, cross-disciplinary, scholarly and open access journal of environmental, cultural, economic, and social sustainability of human beings.

#### **Research Specializations**

- Sustainability, ecology, environmental sciences and studies
- Environmental services with specialty on water quality trading
- Water quality and nutrient management
- Social organization, land use, and land tenure
- Biocomplexity of social and natural farming systems
- Farming ecology
- Social systems in watershed contexts
- Geographic specialty: Japan, Amish, Ohio rural communities

#### **Synergistic Activities**

Dr. Moore is a Senior Fellow of the Global Council for Science and the Environment and the 2017-18 Public Policy Award recipient of the American Anthropological Association. He was

Executive Director of the OSU Environmental Sciences Network connecting 500 scientists and 5 colleges across the OSU campus and former director of the OSU Environmental Science Graduate Program. He is a co-founder of the Muskingum Watershed Soil and Water Conservation Districts Supervisors Board that coordinates the water quality trading of 21 counties within Ohio, and the leader of the OSU Sugar Creek/Muskingum watershed researchers group that has over 30 scientific researchers. In 2013 he served as president for the national research group called NC1190 Catalysts for Water Resources Protection and Restoration: Applied Social Science Research. He designed the USA's longest continuous water quality trading program called the Alpine Cheese Phosphorus Nutrient Trading Plan in consultation with the Holmes Soil and Water Conservation District (SWCD) and the Ohio Environmental Protection Agency (Ohio EPA) and testified about this at a Congressional hearing in 2014. He was also convenor of recommendations from the Kuwait Climate Conference in 2014.

#### **Books/Volumes**

- 2016 R.H. Moore, K. Lekies, D. Todey, W. Miller, D. Blockstein, T. Higgins, N. Nkongolo, L.J. Abendroth and L. W. Morton. 2016. Agri-Climate Education; Preparing the Next Generation. Technical Report Series: Observations and Recommendations of the Climate and Corn-based Cropping Systems Coordinated Agricultural Project. Iowa State University, Ames, IA. Vol 4 of 5. Sustainable Corn CAP Publication no. CSCAP-0196-2016. (https://www.sustainablecorn.org/doc/publications/Agri-Climate\_Education\_Preparing\_the\_Next\_Generation.pdf)
- 1990 R. Moore. *Japanese Agriculture: Patterns of Rural Development*, 337 pp., Westview Press, Frederick Praeger Publisher.

#### Reviews of above:

*American Anthropologist*(by William Kelly, Yale U.), Vol.93, No.3, Sept.1991. pp.763-764. *Rural Sociology* (by Raymond Jussaume, Washington State University) 1991, Vol.55 (3): 442. The book is currently on the recommended reading list at the University of Tokyo, Dept. of Agricultural Economics.

#### **Book Chapters**

- 2015 Oyamada, S., Hasebe, T.; Kitani, S.; **Moore, R.**; Fan, W.; Park, H. Diversity and Change of Views of Nature: Through an International Comparative Study. (自然観の多様性と変化—国際比較調査を通して—). In *Man's Fate and Transformation of Nature View* (自然観の変遷と人間の運命). Edited by F. Zakota. Sendai, Japan: Tohoku University Press.
- Toman, E. and **Moore, R.** Human dimensions of climate change adaptation: Factors that influence behaviours. In *Climate change and food security in West Asia and North Africa*. Mannava Sivakumar, Rattan Lal, Ramasamy Selvaraju, Ibrahim Hamdan, (Eds). Springer Publishing.
- 2013 **Moore, R.** Preserving Soybean Biodiversity in Japan: Reconsidering GMO, Pesticide-Free, Low Input, and Organic. In *Seeds of Resistance/Seeds of Hope: Place and Agency in the Conservation of Biodiversity*. (Edited by Virginia Nazarea, Robert Rhoades, and Paul Heald). University of Arizona Press.

- 2013 Hitzhusen, G.E.; Fick, G.W.; **Moore, R.** 2013. Chapter 12: Theological and Religious Approaches to Soil Stewardship. In *Principles of Sustainable Soil Management in Agroecosystems* Edited by Rattan Lal and Pp.285-302. CRC Press/Taylor & Francis Group, LLC.
- 2000 Moore, R., D.H. Stinner, D. Kline and E. Kline. Honoring Creation and Tending the Garden: Amish views of Biodiversity," in *Human Values of Biodiversity*, Darrell Posey and Graham Dutfield, Eds, Kristina Plenderleith (Ed. Chapter 7), Traditional Agriculture and Soil Management, Cultural and Spiritual Values of Biodiversity: A complementary contribution to the global biodiversity assessment (pp. 305-309). Special Volume for the UN Environmental Programme Global Assessment of Indigenous People. London: Intermediate Technologies.
- 1991 **Moore, R**. "Harvesting Japanese Rice Policy: Social Differentiation and Farming Strategies of Three Tohoku Villages," *Research in Economic Anthropology*, Volume 13:19-65. JAI Press.

#### **Articles**

- To be submitted to Sustainability in September.: Joannon, A., Moore, R., Lyon, S., and Miller, S. A Comparison of Two Modes of Dairy Farming Intensification on Water Quality in Adjacent Watersheds in Ohio, USA
- Submitted. Lyon, S., Miller, S., and Moore R. Impacts of a nutrient trading plan on stream water quality.
- 2020 Lekies, K. **Moore, R**. Promoting Transdisciplinary Learning Through a Summer Course on Climate, Water, and Agriculture. Natural Sciences Education Vol.49. 49: e20023. <a href="https://doi.org/10.1002/nse2.20023">https://doi.org/10.1002/nse2.20023</a>.
- Guo, Yanting; Mancl, Karen; **Moore, Richard**. Water Quality Trading Mechanism Enhances Willingness to Upgrade Rural Household Septic Systems in the Western Lake Erie Basin, Northwest Ohio. Journal of Environmental Health. Vol.82, No.6, p8-15. 8p.
- 2020 Nyhus,P. Parnell,R. Phillips,N. Moore, R. et al RE: Environmental Deans and Directors Call for NSF Climate Funding. Science: https://science.sciencemag.org/content/re-environmental-deans-and-directors-call-nsf-climate-funding.
- Taylor, R. Herms, D., Cardina, J. **Moore, R**. Climate change and pest management: Unanticipated consequences of trophic dislocation. Agronomy. Special issue: Climate Change in Agriculture: Impacts and Adaptations. http://www.mdpi.com/journal/agronomy/special issues/climate-agriculture.
- Obade, Vincent de Paul, **Moore Richard**. Synthesizing water quality indicators from standardized geospatial information to remedy water security challenges: A review. Environment International Vol 119 (October), pp.220-231.
- Irwin, E.; Campbell, J.; Wilson, R.; Faggian, A.; **Moore, R.** Human Adaptation and Food, Energy, and Water Systems. Journal of Environmental Studies and Sciences, Special Issue on The Food-Energy-Water Nexus. Vol.6 (1) March:1-13.
- 2014 Long, Scot and **Moore, R.** Amish Church District Fissioning and Watershed Boundaries among Holmes County, Ohio, Amish. Journal of Amish and Plain Anabaptist Studies. Vol.2 (2) 186-202. http://kb.osu.edu/dspace/handle/1811/63998.

- Obade, Vincent de Paul; Lal, Rattan, and **Richard Moore**. "Assessing the accuracy of soil and water quality characterization using remote sensing. *Water Resources Management Journal* 28 (14): 5091-5109. doi: 10.1007/s11269-014-0796-7
- Yurugi, T., Donnermeyer, J., **Moore, R.** Komyuniti (Kyodotai) wo shiten toshita Amerika Amishu to Nihon no Sonraku Shakai no Hikaku ni yoru Kyosatsu (Considerations on a Comparison of American Amish and Japanese Village Society Focusing on Community (Kyodotai). Shakai Undo (Social Movement) Vol.400 (2013.7): 46-51, Vol.400 (2013.8) 47-52 (2 parts).
- Moore, R. Reaching the Potential of Water-Quality Trading. In NAB24 Report: Water Sustainability in Agriculture. http://nabc.cals.cornell.edu/pubs/pubs\_reports.cfm. National Agricultural Biotechnology Council.https://hdl.handle.net/1813/51377.
- Joannon, Alexandre; **Moore, Richard**; Baudry, Jacques. A comparison of two modes of dairy farming intensification and their potential impact on water quality in two adjacent watersheds in Ohio, USA. *Conference Schedule Amish America: Plain Technology in a Cyber World*, Jun 2013, Columbus, United States. 17 p. (hal-01210081). https://prodinra.inra.fr/ft?id=2D8E68EA-93FB-4C21-9D5A-271CD96D519A.
- 2012 Moore, R. Food's Future: An Introduction and Message from the President. Culture, Agriculture, Food and Environment Vol.34 (2), pp.99-100.
- Weaver, M.; Parker, J.; and Moore, R. A Farmer Learning Circle: The Sugar Creek Partners, Ohio. Chapter 16, pp.197-212. In Morton, L. W. and S. Brown (2011) *Pathways for Getting to Better Water Quality: The Citizen Effect*. Springer.
- 2010 Herrman, K.; Bouchard, V.; Grenada, T.; **Moore, R.** The Effect of Riparian Land Use on Transport Hydrolics in Agricultural Streams Located in Northeast Ohio. Hydrological Processes. 24:1-12.
- J.S. Parker, R. Moore and M. Weaver. Developing Participatory Models of Watershed Management in the Sugar Creek Watershed (Ohio, USA). Water Alternatives. Vol. 1, no. 2: 82-100.
- J.S. Parker, **R. Moore** and M. Weaver. Land Tenure as a Variable in Community Based Watershed Projects: Some Lessons from the Sugar Creek Watershed, Wayne & Holmes County, Ohio. Society and Natural Resources. Vol. 9, no. 20: 815-833.
- 2009 **Moore, R.** Ecological Integration of the Social and Natural Sciences in the Sugar Creek Method, pp.21-40. In Bohlen, P. and House, G. Ed., Sustainable Agroecosystem Management. Taylor and Francis Group, CRC Press.
- 2009 **Moore, R.** Linking the Social and Natural Sciences in Water Quality Trading in Ohio. Tohoku Journal of Agricultural Research Vol.59 No.3-4:106-111, March.
- 2009 **Moore, R.** Yama no Kami Kou: The Mountain Goddess Fertility Association in Northeast Japan. In *Pika-Pika: The Flashing Firefly. Essays to Honour and Celebrate the Life of Pauline Hetland Walker (1938-2005)*. Edited by Anthony Walker. New Delhi, India: Hindustan Publishing Corporation. 277-294.
- 2009 荒井聡・リチャード H.モア (Arai, S.; Moore, R.)
  「アメリカ合衆国農業環境政策の成果と課題—オハイオ州シュガークリーク流域の事例を中心に—(Results of the US Agricultural Environmental Policy: A Focus on the Case of the Sugar Creek Watershed)『農業市場研究』18(1), 2009, 50-56.

- 2009 Inwood, Shoshanah M., Jeff S. Sharp, Deb Stinner, and **Richard Moore**. 2009. Restaurants, chefs and local foods: insights drawn from application of a diffusion of innovation framework. *Agriculture and Human Values*. Vol. 26, no. 3.: 177-191. (IF: 1.123)
- 2008 Herrman, K., Bouchard, V. L., and **Moore, R. H.** Factors that affect denitrification in agricultural headwater streams in Northeast Ohio, USA. Hydrobiologia, 598:305-314.
- Herrman, K., Bouchard, V. L., and **Moore, R. H.** An assessment of nitrogen removal from headwater streams in an agricultural watershed, Northeast Ohio, USA. Limnology and Oceanography, 53(6): 2573-2582.
- 2008 Parker, J. S., Moore, R. H., and Weaver, M. Land Tenure as a Variable in Community Based Watershed Projects: Some Lessons from the Sugar Creek Watershed, Wayne & Holmes County, Ohio. Society & Natural Resources, 20:9, 815 - 833.
- 2008 **Moore, R. H.**, Weaver, M., and Parker, J. 2008. Agricultural Sustainability, Water Pollution, and Governmental Regulations: Lessons from the Sugar Creek Farmers in Ohio. Culture & Agriculture 30 (1-2):3-16.
- 2008 Parker, J. and **Moore, R.** Conservation Use and Quality of Life in a Rural Community: An Extension of Goldschmidt's Findings. Southern Rural Sociology, 23(1), 2008, pp. 235-265.
- Vadrevu K., Cardina, J.; Hitzhusen, F.; Bayoh, I.; Moore, R.; Parker, J.; Stinner, B.; Stinner, D.; and Hoy, C. "Case Study Of An Integrated Framework For Quantifying Agroecosystem Health "Ecosystems. February. 1432-9840. (DOI 10.1007/s1 0021-007-9122- z). Springer Publishing.
- 2007 Kitani, S., Hasebe T., Nomura N. and Moore, R. An Analysis of Non-exchangeable Values of Rural Environments—Based on Attitudes towards Indonesian Sightseeing Resources. Studies in Regional Science Vol.17 (2):599-615.
- 2007 Moore, Richard Haisuiken Torihiki no Riyou ni yoru Kankyou Hozengata Nougyou no Suishin (ue): Bei Ohaioshu Touhokubu Shugaa Kuriiku Suikei de no Takumi (The Use of Trading Discharge Rights to Promote Agricultural Conservation of the Environment (Part 1): The Experiment in the Sugar Creek Watershed of Northeast Ohio in the U.S. Nourin Keizai (Agricultural Forestry Economics) No.9848:2-8. Tokyo: Jiji Tsushinsha.
- 2007 Parker, J., **Moore R.,** and Weaver, M. "Land Tenure as a Variable in Community-based Watershed Projects: Some Lessons from the Sugar Creek Watershed, Wayne & Holmes County, Ohio." Society and Natural Resources 20(9)815-833.
- 2005 Kitani, N., Hasebe, T., and Moore, R. Effects of Image Formation of Rural Lifescape on Subconsciousness and Willingness to Protect Rural Farming Villages. *Japanese Journal of Rural Economics*. Vol. 7: 100-113.
- 2005 Moore, R. The Policy of Sustainable and Organic Agriculture in the USDA.in Japanese. *Policy Regarding Food, Agriculture, and the Environment: Latest Survey Research Reports.* Vol. 1, no. November: 67-82.
- 2005 Prasad, K., Stinner, B. R., Ortiz, A., and McCartney, D. Moore, R. H. Exploring The Relationship Between Hydrologic Parameters And Nutrient Loads Using

- Digital Elevation Model and GIS A Case Study From Sugarcreek Headwaters, Ohio, USA. *Environmental Monitoring and Assessment*. Vol. 110: 141-169.
- 2005 Kitani, N., Hasebe, T., and **Moore, R**. Effects of Image Formation of Rural Lifescape on Sconsciousness and Willingness to Protect Rural Farming Villages. *Japanese Journal of Rural Economics* Vol.7, pp.100-113.
- 2005 **Moore. R.** Amerika Nomusho no Yuki Jizokugata Nogyo ni kan shite no Seisaku: Ohaio kara no Tenbo. (The Policy of Sustainable and Organic Agriculture in the USDA.—in Japanese).In *Policy Regarding Food, Agriculture, and the Environment: Latest Survey Research Reports*. Japanese Ministry of Agriculture, Institute for Agricultural Policy, Rural Sociology Section. Nov. (Vol.1) pp. 67-82.
- 2005 Prasad, K., Stinner, B. R., Ortiz, A., and McCartney, D. Moore, R. H. Exploring The Relationship Between Hydrologic Parameters And Nutrient Loads Using Digital Elevation Model and GIS - A Case Study From Sugarcreek Headwaters, Ohio, USA. Environmental Monitoring and Assessment. Volume 110, No.1. pp.141-169. Kluwer Academic Publishers.
- 2004 **Richard Moore.** Changing Patterns of Japanese Rice Agriculture. Special Issue on "Teaching about Asia Through Rice". *Education About Asia*. Winter.pp.10-14
- Arai, S., and **Moore, R. H**. Characteristics and Trends of Organic Agriculture in the U.S. Midwest. (Amerika Chuseibu ni Okeru Yuki Nogyo no Unko to Tokucho). In Japanese. Journal of Rural Economics Special Issue. (The Agricultural Economics Society of Japan).
- 2004 (accepted and in the process of revision) Hoy, C. W., Prasad, K., **Moore, R. H.**, Hitzhusen, F. J., Cardina, J., Stinner, D. H., Ibayoh, I., and Parker, J. S. 2003. Quantifying agroecosystem health at the landscape scale with combined biophysical and socioeconomic data. Submitted to *Agriculture, Ecosystems and Environment*.
- 2003 Prasad, K. V., Stinner, B. R., Stinner, D. H., Cardina, J., Moore, R. H., Gupta, P. K., Tsuruta, H., Tanabe, K., Badarinath, K., and Hoy, C. W. 2003. Trends in food production and nitrous oxide emissions from the agriculture sector in India: environmental implications. *Regional Environmental Change*. pp. 154 161.
- 2003 Prasad, K. V., Badarinath, K., Tsuruta, H., Sudo, S., Yonemura, S., Cardina, J., Stinner, B. R., Moore, R. H., Stinner, D. H., and Hoy, C. W. 2003. Implications Of Land Use Changes On Carbon Dynamics and Sequestration Evaluation From Forestry Datasets, India. 2003. *The Environmentalist*. 23,175-187.
- 2003 Stinner, B. R., Prasad, K., and **Moore, R. H**. 2003. Modeling Land Use Changes and Carbon Dynamics from Transition Probabilities A Case Study from Forestry Sector In India. *Advances in Space Research*.
- 2002 Consideration of Value-Added Landscape from the Viewpoint of Sustainability (*Jizoku-teki Seitaiken Hozen no Shiten yori Fukakachi-fukei wo Kangaeru*) by **Richard Moore**. *Agricultural Survey and Research (Norin Tokei Tyosa*) 52:50-61. February 2002.
- 2002 Prasad, V. Stinner, B. R., Stinner, D. H., Cardina, J. **Moore, R. H.**, Gupta, P. Tsuruta, H. Tanabe, K. Badarinath, K. Hoy, C. W., 2002. Trends in Food Production and Nitrous Oxide Emissions From the Agriculture Sector in India:

- Environmental Implications. *Regional Environmental Change*. DOI 10.1007/s10113-002-0055-y (On-line publication http://link.springer.de/link/service/journals/10113/02/00055/).
- V Krishnaprasad, J Cardina, B Stinner, K Badarinath, R Moore, R Stinner, C Hoy. Modeling Carbon Flows Ffrom Land Use Change Aand Forestry Datasets Using Transition Probabilities-A Case Study From India. 34th COSPAR Scientific Assembly 34.290.
- Allaire, F., Stinner B., Stinner D., Hartzler J., **Moore R.**, Hoy, C., Dorsey J., Hitzhusen F. and Weaver, M. (2001) Learning Sustainable Development with a Farm Enterprise and Its Community. Journal of Sustainable Agriculture Volume 19, Number 1: pp.65-84. Food Products Press.
- 1999 **Moore, R** Landscapes and Environmental Improvement: A Revisit to Nakada Township in Myyagi Prefecture (Lifusukepu to Kankyo Kaizen Magagiken Nakadachou he no Saibo). Norin Tokei Chosa. Journal of Agricultural Statistical Survey (in Japanese) pp. 42-46.
- 1999 Stinner, D., **Moore, R**, Stinner, B, Hitzhusen, F. Integrating Quality of Life, Economic and Environmental Issues: An Agroecosystem Analysis of Amish Farming. In U. of Nebraska-Lincoln Institute of Agriculture and Natural Resources (ed.) Small Farming Systems for the Midwest and Reintegrating Agriculture and Community in the Midwest, Extension and Education Materials for Sustainable Agriculture Volume 10. pp.39-45. University of Nebraska-Lincoln Institute of Agriculture and Natural Resources.
- 1994 **Moore, R.** "Japanese Wet Rice Economy," *Encyclopedia of Social History*, Garland Publishing Company. Sustainability and the Amish: Chasing Butterflies? <u>Culture and Agriculture</u> Winter 1995/1996 No.53:24-25.
- Moore, R. "Mura Tsukuri Kokusai Koryu Kenkyukai (International Research Conference on Japanese Village Revitalization). In addition to my contribution of several pages in the proceedings, a republishing of my 1990 article is included in this volume of the monograph series sponsored by the Rural Revitalization for the 21st Century, 80 pages (in Japanese).
- 1993 **Moore, R.** "Resistance to Japanese Rice Policy at the Hachirogata Model Farm Project," *Political Geography* Vol.12 (3):278-296.
- 1990 **Moore, R.** "Tochiriyo no Tenkai to Shakai Kankei" (Social Relations and the Development of Land Use). *Nogyo to Keizai* Vol.56, No.1 (January):73-79.
- Moore, R. "Miyagi-ken Nakada-cho Bunsanteki Shokibo Tochi Shoyu No Genin: Kenkyu Hoho" ("The Reasons for Fragmented Small-scale Land Holdings in Nakada Township, Miyagi Prefecture, Japan: Research Methodology," *Nogyo Keizai Kenkyushi* (Journal of Agricultural Economics Research) No. 4: Tohoku University.

### **Technical Reports and Proceedings**

Moore, Richard, The Role of Water Quality Trading in Achieving Clean Water Objectives. Written Testimony. US Congress House of Representatives Transportation Committee on Water Resources. Hearing on Water Quality Trading, March 25, 2014. In The Role of Water Quality Trading in Achieving Clean Water Objectives published by the United States Congress.

- https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=101952.https://docs.house.gov/meetings/PW/PW02/20140325/101952/HHRG-113-PW02-Wstate-MooreR-20140325.pdf
  http://transportation.house.gov/calendar/eventsingle.aspx?EventID=373351.
- Oyamada, Shin; Hasebe, T.; Kitani S. Park, S.; Fan, W.; **Moore, R.**, Changes and Range of Variation of Views of Nature--An International Comparative Survey (自然観の多様性と変化--国際比較調査を通して). Proceedings of the 17th Academic Conference of the Japanese Society of Environmental Symbiosis (日本環境共生学会).
- 2013 **Moore, Richard** Richard Moore. Muskingum Water Quality Trading Management Plan (HUC 05040000) Phase 1: Tuscarawas Watershed (HUC 05040001). Ohio EPA. Approved Plan for 21 counties in SE Ohio.
- 2012 S Kumar, J Witter, R Lal, Y Xie, R Moore, J Bonta. Simulation of Runoff Losses From Watersheds Managed Under Diverse Land Management. ASA, CSSA and SSSA Annual Meetings (Cincinnati, OH-Oct. 21-Oct. 24, 2012).
- 2012 **Moore, Richard**, Sohngen B., Xie Y., Winden, M. Ohio Basin Upper Scioto Watershed (HUC05060001) Water Quality Trading Feasibility Study Agreement No.WS-00E73601-0 (RF60018631). Final Report to the USEPA.
- 2005 Moore, Richard, McCartney D., Williams, L., Wood, M., Christner, J., Anderson, P., Kwolek, J., Ramseyer, R., Ankrom, S., Miklos, D. Grant, L., Hudgins, D., Long, S., Parker, J., Prasad, K., Stinner, B. A Plan to Reduce Phosphorus Loading and Improve Stream Ecological Function in the Middle Fork and Adjoining Watersheds of the Sugar Creek Watershed: Joint Recommendations for the Alpine Cheese Phosphorus Nutrient Trading Plan. Alpine Cheese Company NDPES Permit (OH0007960) to Ohio EPA. Ohio EPA. 49 pages. December.
- 2005 **Moore, R.** Challenges and Potential for Exporting U.S. Transitional Organic Soybeans to the Japanese Consumer Cooperatives. In *Transitioning to Organic Agriculture: Ecology, Economics, and Marketing*. Proceedings and Abstracts. The Organic Agriculture Consortium. Aug. 29-31. OARDC.
- 2005 Inwood, S., Stinner, D., **Moore, R.**, Sharp, J. Building Capacity for Local and Organic Foods in Ohio. In *Transitioning to Organic Agriculture: Ecology, Economics, and Marketing*. Proceedings and Abstracts. The Organic Agriculture Consortium. Aug. 29-31. OARDC.
- 2002 Prasad,K. Badarinath,K. Tsuruta,H. Sudo,S. Yonemura,S. Cardina,J. Stinner,B. Moore,R. H., Stinner,D. H., Hoy,C. W., 2002. Carbon Flux From Land Use Change And Forestry Sector In India: Inventory And Modeling Aspects. Ecological Society of America. IGES / NIES Workshop on GHG Inventories for Asia-Pacific Region, January, 17-18, 2002, Shonan Village Center, Hayama, Kanagawa, Japan.
- 2002 Moore, R., Stinner,B. R., Goebel,P. C., Parker,J. S., Hudgins,D. M., McCartney,D. A., Weaver,M. Social Creek Social Indicators: Tapping Subheadwater TMDL Potential in the Headwaters of the Ohio River. Proceedings of EMAP (Environmental Measurement and Assessment Program—USEPA) Symposium 2002: The Condition of Our Nation's Streams and Rivers from the Mountains to the Coast. Kansas City, MO, May 8th

- 2001 Bird, Elizabeth, with Deborah Stinner and **Richard Moore**. Amish Farming Systems and Communities Case Study, Consortium for Sustainable Agriculture Research and Education (CSARE). UW-Madison.
- 2000 Bird, Elizabeth, with Deborah Stinner and **Richard Moore**. Integrative Analysis of Systems Research Case Studies: Case 3 SARE Amish Study;"Inquiry in Action: Learning partnerships for sustainable agriculture and food systems"Consortium for Sustainable Agriculture Research and Education (CSARE). UW-Madison.
- Moore, R. and M. Kitagawa. The Construction of an Interactive Game Featuring Amish Agricultural Management. (Amishu Nogyou Keiei no Intarakutibu Gamu no Sengaku in Japanese). In T. Hasebe (Research Team Representative) Joint Research Project on the Evaluation of Rural Landscape using Multimedia. (Maruchi Media wo Katsuyou shita Nouson Keikan no Hyoka ni Kan suru Kyodo Kenkyuu). Final Research Report #08044021 on the International Academic Research (Joint Research) for the 199601998 Grant by the Japanese Ministry of Education and Science.
- 1999 Stinner, D., **Moore, R.**, Stinner, B., Hitzhusen, F. Integrating Quality of Life, Economic and Environmental Issues: An Agroecosystem Analysis of Amish Farming. Pp. 39-45. In U. of Nebraska-Lincoln Institute of Agriculture and Natural Resources (eds.) Small Farming Systems for the Midwest and Reintegrating Agriculture and Community in the Midwest, Extension and Educational Materials for Sustainable Agriculture Volume 10. Univ. of Nebraska-Lincoln Institute of Agriculture and natural Resources.
- 1999 Kitagawa, M. and **R. Moore**. Amish On-Line Project. ACCAD Technical Report,OSU-ACCAD-4/99-TR2.
- Moore, R. and M. Kitagawa. The Construction of an Interactive Game Featuring Amish Agricultural Management. (Amishu Nogyou Keiei no Intarakutibu Gamu no Selgaku in Japanese). In T. Hasebe (Research Team Representative) Joint Research Project on the Evaluation of Rural Landscape using Multimedia. (Maruchi Media wo Katsuyou shita Nouson Keikan no Hyoka ni Kan suru Kyodo Kenkyuu). Final Research Report #08044021 on the International Academic Research (Joint Research) for the 199601998 Grant by the Japanese Ministry of Education and Science.
- 1999 **Moore, R.**, Lifescape and Environmental Improvement: A Revisit to Nakada Township in Miyagi Prefecture (Lifusukepu to Kankyo Kaizen–Miyagiken Nakadachou he no Saibo). Norin Tokei Chosa. Journal of Agricultural Statistical Survey (in Japanese).pp.42-46.
- 1998 Kitagawa, M. and **R. Moore**. 1998. Onrain-gamu ni yoru Amishu no Nogyoo Seikatsu Kankyoo no Simyureshon (An On-line Simulation of Amish Farming and Lifestyle Environment) pp. 93-94 in "Comparative Study on Agro-Environmental Remediation and Landscape Evaluation." Faculty of Agriculture, Tohoku University.
- 1998 **Moore, R.**, Amerika ni okeru Jizokugata Nogyo (American Sustainable Agriculture( pp. 24-42) in "Comparative Study of Agro-Environmental Remediation and Landscape Evaluation". Faculty of Agriculture, Tohoku University.

Moore, R. "Maruchi Media wo Katsuyoo shita Nosonkeikan no Hyooka ni Kansuru Kyodokenkyuu" (Joint Research on the Evaluation of Rural Landscape through Multimedia). Japanese Ministry of Education and Science Grant #08044021. Project PI: Tadashi Hasebe, International Team Leader: R. Moore. Report published by the Dept. of Agricultural Economics, Tohoku University.

#### **Essays**

2019 **Moore, Richard**. 50th Anniversary of the Burning of the Cuyahoga: How Ohio Improved Two of its Most Impaired Watersheds. National Council for Science and the Environment invited essay. <a href="https://www.ncseglobal.org/ncse-essays/50th-anniversary-burning-cuyahoga-how-ohio-improved-two-its-most-impaired-watersheds">https://www.ncseglobal.org/ncse-essays/50th-anniversary-burning-cuyahoga-how-ohio-improved-two-its-most-impaired-watersheds</a>.

#### **Panels Organized**

2019 **Moore, Richard.** 50th Anniversary of the Burning of the Cuyahoga. 2019 Annual Conference of the National Council for Science and the Environment. (Note: This panel consisted of hands-on Cuyahoga Watershed leaders from different sectors.)

2017-2019 Ohio NCSE Student Sustainability Leadership Conferences. I coordinated the universities in Ohio that are members of the National Council for Science and the Environment (NCSE) to have a unified conference hosted by a different university each year. The conferences have been hosted by U. of Dayton, Oberlin, and U. of Findlay.

#### Grants (PI and Co-PI \$30+ million, Lead PI \$7+ million)

- 2012-2018 Renewal of the Alpine Nutrient Trading Plan. OSU service contract \$40,000/year. Project began in 2007 with two renewals of 5 year permit.
- 2011-2016 "Climate change, mitigation, and adaptation in corn-based cropping systems", USDA AFRI. \$20 million (lead PI for OSU subcontract of \$3,000,000 with Rattan Lal, Warren Dick, and Kristi Lekies). 02/01/2011-1/31/2016.
- 2007-2014"Linking watershed research and GK-12 education within an ecosystem context." NSF GK-12 Program. \$2,958,177. Principal Investigator. Additional OSU project sustainability commitment of 4 students per year tuition funded by Graduate School and stipends by the participating departments ended June 30, 2015.
- 2009 2014 "Designing Effective Land Management for the 21st Century Ohio River Basin: Managing the Carbon and Nutrient Cycles to Maintain and Restore Water Quality and Quantity. OSU Climate, Water, and Carbon Targeted Investment in Excellence Program." Climate, Water, and Carbon, T.I.E. \$1,300,000.00. Co-PI.
- 2009-2013 "Impact of organic animal production systems on water quality and quantity in Ohio-an integrated research, extension and education program." CSREES' Organic Agriculture Research and Extension Initiative. \$659,527.00. Co-PI. 09/01/2009 08/31/2013.
- 2012-2015 Quantifying the spatial location of small-scale land management changes in large watersheds using hydrological modeling. Rattan Lal, Jon Witter, USDA NIFA. \$499,895. 04/15/2012 04/14/2015.

- 2008 –2013 "Watershed Scale Evaluations In a Tri-State Region of the water quality benefits of self-forming and two-stage channel systems." NRI. \$640,000.00. Andy Ward Lead PI.Co-PI.
- 2009 2011 "Ohio Basin Upper Scioto Watershed (HUC 05060001) Water Quality Trading Feasibility Study." USEPA. \$199,000.00. Principal Investigator.
- 2009-2012. Designing effective land management policies for the 21st century Ohio River Basin: Managing the carbon and nutrient cycles to maintain and restore water quantity and quality. The Ohio State University, Targeted Investment in Excellence (TIE) Climate, Water, and Carbon (CWC) Program. Investigators: C. Goebel, E. Irwin, R. Moore, and R. Wilson. \$1,299,911.00.
- 2007 2011 "Upper sugar creek watershed, Ohio: a model watershed for study of pathogen origin, fate and transport." USDA. \$399,953.00. Co-Investigator.
- 2007 2011 "Integrating social and biological sciences to enhance adoption of vegetable safety behaviors from farm to table." USDA. \$2,500,000.00. Co-Investigator.
- 2007 Implications of climate change for agricultural pest management. OARDC Interdisciplinary Seed Proposal. 5/1/2007-4/30/2009. \$99,895.
- A Plan to Reduce Phosphorus Loading and Improve Stream Ecological Function in the Middle Fork and Adjoining Watersheds of the Sugar Creek Watershed: Joint Recommendations for the Alpine Cheese Phosphorus Nutrient Trading Plan. Alpine Cheese Company NPDES Permit Application to Ohio EPA. Moore, Richard, D. McCartney, Williams, L., Wood, M., Christner, J., Anderson, P., Kwolek, J., Ramseyer, R., Ankrom, S., Miklos, D. Grant, L., Hudgins, D., Long, S., Parker, J., Prasad, K., Stinner, B. \$800,000 plan (total) of which \$300,000 went to Sugar Creek Research.
- The Ohio pilot program a farm based assessment for pesticide drift potential and opportunities for drift mitigation. EPA. R.Downer, F. Hall, T. Blaine, R. Moore. \$70,265.10/1/2005-9/30/2007.
- Landscape scale disturbances in an agroecosystem: impacts on aquatic and riparian environments in the Sugar Creek Watershed, Ohio. USDA CSREES. L. Williams, P.C. Goebel, V. Bouchard, R.H. Moore, D.H. Stinner, M.G. Williams, and D. McCartney, \$590,000.
- 2005 Expanding local participation in conservation programs: Examining factors affecting conservation adoption among Old Order Amish in the Sugar Creek Watershed. USDA SARE. R. Moore, J. Parker. Grant for graduate student research. \$10,000.
- Evaluation of Innovative Conservation Measures in a Phosphorus Nutrient
   Trading Program in the Sugar Creek Watershed of Ohio (Alpine Cheese),
   OARDC ATECH Matching Grants Program (PI's Moore, R, Stinner, B, Williams,
   L., Ramseyer, R.)\$100,000.
- Impact of economics-driven land use decisions on watershed health. NSF Biocomplexity Planning Grant Program. (Lead PIs: R. Moore and B. Stinner (deceased); C. Goebel, D. Stinner, R. Taylor. \$99,900).
- 2003 Improving Water Quality and Fostering a Community Vision and Action Through Participatory Farmer Groups in the Sugar Creek Headwaters, EPA 319 grant, (Lead PI: R. Moore, co-pi's B. Stinner, P.C. Goebel, L. Brown), \$475,479.

- 2002 (Year 2) Improving Livestock and Grain Farms' Contribution to Environmental Quality Through Headwaters Learning Communities. USDA SARE grant, (Lead PI: R. Moore), \$49,532 including OARDC match.
- 2001 (Year 1)Improving Livestock and Grain Farms' Contribution to Environmental Quality Through Headwaters Learning Communities. USDA SARE grant, (Lead PI: R. Moore), \$49,532 including OARDC match.
- 2001 Landscape Pattern Indicators of Agroecosystem Health, OARDC Research Grant (Co-pi's: Casey Hoy, Richard Moore, John Cardina, Fred Hitzhusen), \$75,695.
- 2000-2003 Revitalizing Small and Mid-Sized Farms: Organic Research, Education and Extension, USDA Initiative for Future Agriculture and Food Systems, (4 Universities Consortium with OSU as lead institution coordinated by AMP and OFFER). Co-author of 1 of 3 objectives. \$1.8 million.
- Apple Creek and Little Chippewa Watersheds Participatory Headwaters Project Environmental Policy Initiative (EPI) and Agroecosystems Management Program (AMP), R. Moore and Mark Weaver, co-pi's, \$16,000.
- 1998-2000 "An On-line Agroecosystem Database for Multimedia Teaching Agricultural and Cultural Diversity in Holmes County, Ohio" Midori DeLeon, Richard Moore, Debbie Stinner co-pi's Battelle Endowment for Technology and Human Affairs. \$41,875.
- 1996 Kellogg Endowed Chair and Program Proposal, OSU Agroecosystems
  Management Team, Tom Payne, P.I.. \$1.6 million (matched) from the Kellogg
  Foundation to the OSU College of Food, Agriculture and Environmental
  Sciences.
- 1996-1998 Ministry of Education, Japan "Multimedia Simulation of Landscape Design of Five Field Sites", 3 year \$236,000. (with 11 other researchers through Tohoku University, T. Hasebe,PI).
- 1996-1998 USDA SARE Grant #95-COOP-1-2002 (OSURF Project No.731668) "Integrating Quality of Life, Economic, and Environmental Issues: Agroecosystem Analysis of Amish Farming", co-pi Deborah Stinner, OARDC, \$40,000.
- 1989 Japan Foundation Professional Research Fellowship, 6-15-89 to 9-15-89 \$10,000.
- 1987-1988 University Seed Grant, The Ohio State University "Computer Data Base on Rural Social Organization In Nakada Township, Japan" \$12,000.
- 1981-1983 Japan Foundation Dissertation Research Grant. \$20,000.
- 1979 Japan Foundation Interdisciplinary Library Grant for Southwest Texas State University \$2500.

#### Webcasts/Podcasts/On-line Presentations and Posters:

2019 Coupling Carbon Sequestration with Nitrogen and Phosphorus to Synergize Water Quality Trading in the Muskingum Watershed of Ohio. Research to Action: The Science of Drawdown. Penn State University. Sept. 16-18. <a href="https://drawdown.psu.edu/poster/coupling-carbon-sequestration-nitrogen-and-phosphorus-synergize-water-quality-trading">https://drawdown.psu.edu/poster/coupling-carbon-sequestration-nitrogen-and-phosphorus-synergize-water-quality-trading</a>.

#### **Project Drawdown Lightening Talks.**

<u>https://drawdown.psu.edu/event/lightning-talks</u>. My talk starts at minute 15:55.

2019 The Sugar Creek Method of Research and Farmer Team Building to Achieve Improved Water Quality. Water for Agriculture Series. USDA Agriculture and Food Research Initiative (AFRI). <a href="https://psu.zoom.us/rec/share/5sdTAeysyntLbtKT-">https://psu.zoom.us/rec/share/5sdTAeysyntLbtKT-</a>
<a href="mailto:EmxKQ5MMfnT6a8hyRP-ftbnk">EmxKQ5MMfnT6a8hyRP-ftbnk</a> AZDX54XVKr 73TNqkTlZ.

2016 Interview with Dr. Richard H. Moore on the Inseparability of Human and Natural Systems. Ecobeneficial. <a href="http://www.ecobeneficial.com/audio/interview-dr-richard-h-moore-inseparability-human-natural-systems/">http://www.ecobeneficial.com/audio/interview-dr-richard-h-moore-inseparability-human-natural-systems/</a>.

2014 Oral Testimony in Congressional Hearing "The Role of Water Quality Trading in Achieving Clean Water Objectives. US Congress House of Representatives Transportation Committee on Water Resources. Hearing on Water Quality Trading, March 25. <a href="https://www.youtube.com/watch?v=O7Tya88wxb8">https://www.youtube.com/watch?v=O7Tya88wxb8</a>.

The Potential of Water Quality Trading for Lake Erie and the Great Lakes. Stone Lab, OSU. August 7. https://www.youtube.com/watch?v=0pvQ7Knp\_ZQ

2014 Creating Economic Development through Water Quality Trading for Marion. Science Café. Feb. 10. <a href="https://www.youtube.com/watch?v=igMYysb5JBg">https://www.youtube.com/watch?v=igMYysb5JBg</a>

2014 We the People: Social Science Applications in Water Resource Management. <a href="https://www.youtube.com/watch?v=oeJSnc9pdyk">https://www.youtube.com/watch?v=oeJSnc9pdyk</a>. Webinar 3. North Central Region Water Network.

2014 Alpine Cheese Trading Program. Fox P Trading Program Webinar Series. June 27. https://www.youtube.com/watch?v=RPbyEXUDiOk.

2008 Community-Based Water Quality Trading: The Potential for Columbus, Ohio. <a href="http://www.envtn.org/water-quality-trading/publications/Moore">http://www.envtn.org/water-quality-trading/publications/Moore</a> - OSU\_WQT\_Scioto.pdf

#### **Thesis and Dissertation Advisor**

Yanting Guo (Ph.D. 2018), Jedediah Stinner (Ph.D.2016), Yina Xie (Ph.D. 2013), Xiaoping Wei (Ph.D. 2012), Yang Xing (Ph.D. 2012), Danae Wolfe (M.S. 2011), Matt Mariola, (Ph.D. 2009), Heather Fair (M.S. 2008), Jason Parker (Ph.D. 2006), Scot Long (Ph.D. 2003), Hiroaki Kawamura (Ph.D. 2002), Erica Swarts (Ph.D. 2002), Cynthia Smith (Ph.D. 1998), Nobuko Imai Thurn (Ph.D. 1995), Scott Schnell (Ph.D. 1993).