CURRICULUM VITAE

Josef H. Görres

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PROFESSIONAL WORK EXPERIENCE AND EDUCATION

Current Position:

2012 - present Associate Professor (63% Teaching/32% Research, 5% Service)

Education 1979

1982

1991	M.S. Natural Resources Science, University of Rhode Island.
Previous Positi	ons:
2012 – presen	t Associate Professor, Plant and Soil Science, University of Vermont
2008 - 2012	Assistant Professor, University of Vermont
2004 - 2008	Co-Director of the URI SMILE Program, University of Rhode Island
2004 - 2008	Associate Research Professor, University of Rhode Island
2003 - 2004	Per-Course Instructor, University of Rhode Island
2002 - 2005	Co-Director/Evaluator for the Science and Literacy Integration Project, Rhode Island College
1999 - 2003	Associate Research Professor, University of Rhode Island

B.Sc. (honours) Physics. The Victoria University of Manchester

Ph.D. Paper Physics. University of Manchester Institute of Science and Technology

1997 - 2004	Co-Director of the NSF Guiding Education in Math and Science Network Local
	Systemic Change Initiative, University of Rhode Island
1994 - 1999	Assistant Research Professor, University of Rhode Island

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1993 Summer	Invited Higher Scientific Officer, Institute of Terrestrial Ecology, Bangor, UK

1992 - 1994	Lecturer, Natural Resources Science, University of Rhode Island	l

1991 - 1992	Higher Scientific Officer, Institute of Terrestrial Ecology (Now Institute of
	Hydrology and Ecology), Bangor, UK.

1990 Summer	Invited Research Fellow, Empire State Paper Research Institute, Syracuse, NY
1989 - 2004.	Consultant, Pulp and Paper Research Institute of Canada, Montréal, Canada

1984 - 1988	Wolfson Foundation Research Fellow, Department of Pharmacy, University of
	Manchester, UK

1983 - 1984	Postdoctoral Fellow, College of Environmental Science and Forestry, State
	University of New York, Syracuse, NY.

1982 – 1983 Research Assistant, Department of Paper Science, University of Manchester Institute of Science and Technology, Manchester, UK.

TEACHING AND OUTREACH

A. **UVM PLANT AND SOIL SCIENCE CLASSES (2008 – 2011)**

PSS 161	Fundamentals of Soil Science
PSS 162	Soil Fertility and Conservation
PSS 266	Soil Water Movement

В. URI NATURAL RESOURCES SCIENCE CLASSES (1992 – 2008)

URI 101	Traditions and Transitions
NRS 101	Introduction to Natural Resource Science,
NRS 212	Introduction to Soil Science
NRS 312	Introduction to Soil and Water Analysis
NRS 412	Soil Chemistry (Co-taught with Dr. Gamerdinger)
NRS 461	Hydrology and Water Management
NRS 450	Soils and Land Use
NRS 286	Introduction to Environmental Data Analysis and Presentation
NRS 451	Soil and Water Conservation Technology
NRS 440	Ecosystem Processes
NRS 491E	Research into the Spatial Variability of Soils
NRS 491B	Physical Processes in the Environment
NRS 492/498	Elementary Outdoor Science Adventure/SMILE
NRS 510	Soil – Water Relations (co-taught with Dr. Gold)
MTC594	Special problems in Biotechnology

C. URI EDUCATION DEPARTMENT WORKSHOP CLASSES (1999 – 2008)

EDC 691C	Teacher Leadership Training
EDC 692	Physics for Teachers
EDC 691	Mud Pie Science (Soil Science for teachers K − 6)
EDC 691	Science Across the Strands

D. **URI EXPERIENTIAL LEARNING CLASSES (1992 – 2008)**

NRS397	Internship in Natural Resources Science
NRS491,492	Special Projects in Natural Resources Science
NRS498,	Teaching Experience in Natural Resources Science
NRS497	Internship in Natural Resources Science

NRS591,592 Graduate special projects

E. **UVM EXPERIENTIAL LEARNING CLASSES- (2008 - 2011)**

PSS297,298	Graduate Independent Studies
PSS197,198	Undergraduate Independent Studies

CLASSES TAUGHT AT URI AND UVM CONTINUING EDUCATION F.

BGS391	Seminar in Natural Sciences, URI
PSS162	Soil Fertility and Management, UVM
PSS266	Soil Water Movement, UVM

Soil Science for Future Farmers at the UVM Farm Training Program

G. CONTRIBUTIONS TO GRADUATE LEARNING AT URI

Co-advisor to Jodie Lyons (M.S. Natural Resources Science, 1997)

Co-advisor to Mary Savin (Ph.D. Natural Resources Science, 1999)

Co-advisor to Helen Besedin (Ph.D. Resource Economics, 1994)

Co-advisor to Julian Conrad (M.S. Natural Resources Science, 1994)

Co-advisor to Christine Zollnik (M.S. Plant Science, 2004)

Member on numerous URI graduate committees at Natural Resources Science, Plant Sciences, Graduate School of Oceanography, Civil and Environmental Engineering, Environmental and Natural Resources Economics

H. CONTRIBUTIONS TO GRADUATE LEARNING AT UVM

Graduate Advisor

Ryan Dustin Scott Melnichuk, PhD 2016. <u>Earthworms In Vermont Forest Soils: A Study Of Nutrient, Carbon, Nitrogen And Native Plant Responses</u>

Bridget Jamison, MS 2013. The Evaluation of Raw Milk As A Pasture Biostimulant. Coadvised with Sidney Bosworth

Peter Austin, MS 2015. <u>An Evaluation Of Vermicompost As A Fast-Acting Nitrogen</u> Amendment To Mitigate Nitrogen Deficiencies In Organic Vegetable Production

Lindsey Ruhl. MS 2015. Micro-Topological Effects on Redox-Sensitive Nutrient Availability of Manganese, Iron, Sulfur, and ...

Dana Christel. 2017. The Use Of Bokashi As A Soil Fertility Amendment In Organic Spinach Cultivation

Rachel Mason. MS 2019. Modeling Agricultural Outcomes in a Warmer, Wetter Vermont. Co-advised with Scott Merrill.

Joseph V. Podhirny. MS candidate. Erodibility of a Vermont Clay Soil (projected to defend in October 2019).

Maryam Nouri-Aiin. PhD Candidate. Ecology of Invasive species of pheretimoid earthworms in Vermont: Identification, Population Structure, Reproductive rode, Ecology, Biocontrol. (Projected to defend in 2020)

Grace O'Neil. MS Candidate. Fertility of VT Community Garden Soils. (Projected to defend in 2020).

Jessica Rubin. MS Candidate. Mycoremedaition (Projected to defend in 2021)

Administrative Co-advisor/Committee Member

Lilian Calderwood. PhD 2015. <u>Top-down and bottom-up tools for integrated pest</u> management in Northeastern hop production (Heather Darby)

Ann Hazelrigg. PhD. 2015. The efficacy and non-target impacts of an organic disease management system containing biostimulants compared with two sulfur-based systems on four apple cultivars in Vermont (Lorraine Berkett)

Terence Bradshaw. PhD. 2015. <u>Comprehensive Assessment of Organic Apple Production in Vermont: Experience from Two Orchard Systems</u>, 2006-2013 (Lorraine Berkett)

Committee Member

Eamon Twohig. MS 2012. (Plant and Soil Science) <u>Evaluating Methane Emissions from Dairy Treatment Materials in a Cold Climate</u>

Meghan Knowles. MS 2015 (Plant and Soil Science). <u>Earthworm Presence in Northern Forests: Impact on Distribution of Soil Carbon within Aggregate Fractions</u>

Laura Klaiber. MS. 2016. <u>Edge-Of-Field Water And Phosphorus Losses In Surface And Subsurface Agricultural Runoff</u>

Dana Allan. MS 2017 (Plant and Soil Science). <u>Evaluating Alternative Technologies And Monitoring Methods For Water Quality In A Field Setting; Research On Effects On Phosphorous And Solids Removal From Cheese Factory Wash Water And Stormwater Runoff Treatment</u>

Agrin Davari. PhD 2018 (Plant and Soil Science). <u>Enhancing The Efficacy And Thermotolerance Of Selected Beauveria Bassiana Isolates For Management Of Sunn Pest, Eurygaster Integriceps, Using Electrofusion Techniques</u>

Nabil Nasseri. PhD. 2018 (Biology). <u>Investigating The Effects Of Ant-Hemipteran Mutualisms On The Invertebrate Community Structure And Their Host Plant, Honey Mesquite</u> (prosopis Glandulosa)

Erin Keller. MS 2018 (Biology). <u>Uncovering The Variable Life History Traits And Strategies Of The Gregarine Parasite, Monocystis Perplexa, In Its Invasive Earthworm Host, Amynthas Agrestis</u>

Paliza Shrestha. PhD 2017 (Plant and Soil Science) Water Quality Performance And Greenhouse Gas Flux Dynamics From Compost-Amended Bioretention Systems & Potential Trade-Offs Between Phytoremediation And Water Quality Stemming From Compost Amendments

Bennet LaFond. MS 2018 (Plant and Soil Science). <u>Can Urban And Peri-Urban Agriculture</u> <u>Create Food Sovereign Communities? Case Studies In Cuba And Burlington, Vt</u>

Keegan Griffith. MS 2019. (Plant and Soil Science). <u>Impact of a Winter Rye Cover Crop on Edge-of-Field Nutrient Losses and Corn Silage Production</u>

Adam Noel. PhD candidate (Rubinstein School). Soil Carbon Sequestration: Assessing the Abiotic and Biotic Factors Controlling Carbon Stabilization Belowground.

Cheryl Sullivan. PhD. (Plant and Soil Science). Controlling Lyme Disease Ticks in Vermont

(working title).

Laura Klaiber. PhD. (Plant and Soil Science). No thesis title yet

I. University of Connecticut, Plant Science Department, 1994

PLSC375 Soil Physics

J. Curriculum Development Outside My URI Teaching Assignments

Retooling URI Physics 109 to be more student-centered (with Drs. Müller and Tamarro)

K. SYNERGISTIC TEACHING ACTIVITIES

1995 - 2008.	Science and Mathematics Investigative Learning Experiences (SMILE). Connecting University
	undergraduate students with 4 to 6 th graders from groups under-represented in Science and Technology
	fields. Professional development for elementary school teachers in the SMILE program. Development
	of computer science, environmental science and engineering curricula for grades 4 to 12. Facilitating an
	external evaluation of the SMILE Program. Development of curriculum for engineering and science
	challenges for 6 th to 12 th grade students.
1995 - 2007.	Co-Director: Guiding Education in Mathematics and Science –Network (GEMS-NET); professional
	development for teachers (K-8) and University scientists; educational materials coordinator; science kit
	mentor. Serving over 1500 teachers in Rhode Island.
2001 - 2003.	Faculty mentor for the NSF GK12 partnership: mentoring graduate students who reach out to secondary
	education classrooms.
2002 - 2005.	Evaluator/Co-Director for the Science and Literacy Integration Project (SLIP). Formative and
	summative assessments of SLIP institutes; coordination and observation of lesson study teams as
	"knowledgeable other", serving over 500 Rhode Island teachers from 20 districts.
2007 - 2008	Videography and evaluation (coding for science content) of science classrooms K – 8 for the NSF
	CAREERS program, documenting/evaluating the progress of science teaching practice in RI schools.
2007 - 2008	Science Mentor for US Department of Education Math and Science Partnership with Woonsocket
	Schools.
1995 - 2008	Over 2000 hours of professional development delivered as part of GEMS-NET, SMILE and SLIP.

RESEARCH PUBLICATIONS

A. PEER-REVIEWED JOURNAL ARTICLES, BOOK CHAPTERS OR CONFERENCE PROCEEDINGS

- 1. Mason, R., M.T. Niles, S.C. Merrill, J.H. Görres, J. Faulkner. 2019. Using Agricultural Models to Inform Policy: Discussion Points for Researchers and Policymakers. Submitted to Journal of Soil and water Conservation.
- 2. Mason, R. J. Görres, J. Faulkner, L. Doro, S.C. Merrill. 2019. Calibrating the APEX model: A step-by-step example. submitted to Applied Engineering in Agriculture.
- 3. Mason, R, S.C. Merrill, J. Görres, J. Faulkner, M.T. Niles. 2019. Agronomic and environmental performance of dairy farms in a warmer, wetter climate. Submitted to J. of Soil and Water Conservation.
- 4. Keller* E., Connolly*, S., Görres, J.H., J. Schall. Genetic diversity of an invasive earthworm, Lumbricus terrestris, at a long-term trading crossroad, the Champlain Valley of Vermont, USU. Biological Invasions. In review
- 5. Görres, J.H., C. Martin*, M. Nouri-Aiin, K. Belliturk. 2019. Physical Properties of Soils Altered by Invasive Pheretimoid Earthworms: does their Casting Layer Create Thermal Refuges? Soil Systems. 2019, 3(3), 52 https://doi.org/10.3390/soilsystems303005263.
- 6. Nouri-Aiin, M. and Görres, J.H., 2019. Earthworm cocoons: The cryptic side of invasive earthworm populations. Applied Soil Ecology, 141, pp.54-60.
- 7. Göçmez, S., Bellitürk, K., Görres, J.H., Turan, H.S., Üstündağ, Ö., Solmaz, Y. and Adiloğlu, A., 2019. The Effects of the Use of Vermicompost in Olive Tree Farming On Microbiological and Biochemical Characteristics of the Production Material. Erwerbs-Obstbau, pp.1-8.
- 8. Shrestha, P., Bellitürk, K. and Görres, J.H., 2019. Phytoremediation of Heavy Metal-Contaminated Soil by Switchgrass: A Comparative Study Utilizing Different Composts and Coir Fiber on Pollution Remediation, Plant Productivity, and Nutrient Leaching. International journal of environmental research and public health, 16(7), p.1261.
- 9. Amador, J.A., Görres, J.H., Loomis, G.W. and Lancellotti, B.V., 2018. Nitrogen Loading from Onsite Wastewater Treatment Systems in the Greater Narragansett Bay (Rhode Island, USA) Watershed: Magnitude and Reduction Strategies. Water, Air, & Soil Pol. 229 65-77
- 10. Moore, J.-D., Görres, J. & Reynolds, J. W. 2018. Exotic Asian pheretimoid earthworms (Amynthas spp., Metaphire spp.): Potential for colonisation of south-eastern Canada and effects on forest ecosystems. Environmental Reviews 26:113-120.
- 11. Görres, JH, Connelly* TA, Chang, C-H., Keller*, EL, Carpenter*, N, Schall, JJ. 2018. Winter hatching in New England populations of invasive pheretimoid earthworms Amynthas agrestis and Amynthas tokioensis: a limit on population growth, or aid in peripheral expansion? Biological Invasions 20: 1651-1655.
- 12. Keller, EL, Görres, JH, Schall, JJ. 2017. Genetic structure of two invasive earthworms, Amynthas agrestis and Amynthas tokioensis (Oligocaeta, Megascolecidae), and a molecular method for species identification. Megadrilogica 22: 140- 148.
- 13. Chih-Han Chang, Marie R. Johnston, Josef H. Görres, Andrea Dávalos, Damhnait McHugh, Katalin Szlavecz. 2017. Co-invasion of three Asian earthworms, Metaphire hilgendorfi, Amynthas agrestis and Amynthas tokioensis in the USA, Biological Invasions (in press)
- 14. Görres, JH, Bellitürk, K, Melnichuk, RDS. 2016. Temperature and moisture variables affecting the earthworms of genus Amynthas Kinberg, 1867 (Oligachaeta: Megascolecidae) in

- a hardwood forest in the Champlain Valley, Vermont, USA, Applied Soil Ecology, 104, 111-115
- 15. Richardson, JB, Görres, JH, Friedland, AJ. 2016. Forest floor decomposition, metal exchangeability, and metal bioaccumulation by exotic earthworms: Amynthas agrestis and Lumbricus rubellus. Environmental Science and Pollution Research 23:18253-18266.
- 16. Knowles, Meghan E, Ross, Donald S, Görres, Josef H. 2016. Effect of the endogeic earthworm Aporrectodea tuberculata on aggregation and carbon redistribution in uninvaded forest soil columns. Soil Biology and Biochemistry 100:192-200.
- 17. Richardson, JB, Renock, DJ, Görres, JH, Jackson, BP, Webb, SM, Friedland, AJ. 2016. Nutrient and pollutant metals within earthworm residues are immobilized in soil during decomposition. Soil Biology and Biochemistry, 101: 217-225.
- 18. Richardson, JB, Görres, JH, Jackson, BP, Friedland, AJ. 2015. Trace metals and metalloids in forest soils and exotic earthworms in northern New England, USA. Soil Biology and Biochemistry 85:190-198.
- 19. Reynolds, JW, Görres, JH, Knowles, ME. 2015. A checklist by counties of earthworms (Oligochaeta: Acanthodrilidae, Lumbricidae and Megascolecidae) in the states of Maine, New Hampshire and Vermont, USA. Megadrilogica 17:25-140.
- 20. Bellitürk, K., JH Görres, J. Kunkle*, RDS Melnichuk, 2015. Can commercial mulches be reservoirs of invasive earthworms? Promotion of ligninolytic enzyme activity and survival of Amynthas agrestis (Goto and Hatai, 1899), Applied Soil Ecology, 87: 27-31.
- 21. Belliturk K, Eç Şinik,. J.H. Görres and Ö. Karakaş. 2014. Evaluation of Aluminum Content of Acidic Topsoil in the Province of Edirne, Turkey.
- 22. Görres, JH., Bellitürk, K., Keller, E. 2014. Failure of an Amynthas agrestis (Goto & Hatai, 1899) (Oligochaeta: Megascolecidae) population to expand its range within a sugar maple (Acer saccharum) stand.",Megadrilogica,17:7-13.
- 23. Görres, J H; Melnichuk, RDS; Bellitürk, K. 2014. Mortality pattern relative to size variation within Amynthas agrestis (Goto & Hatai 1899) (Oligochaeta: Megascolecidae) populations in the Champlain Valley of Vermont, USA., Megadrilogica, 16,2-9.
- 24. Görres, J.H. and R.D.S. Melnichuk. 2012 Asian invasive earthworms in Vermont. Northeastern Naturalist 19:213-322.
- 25. Fetter, J.C., Brown, R.N., Görres, J.H., Lee C, and Amador, J.A. 2011. Nitrate and Phosphate Leaching Under Turfgrass Fertilized With A Squid-Based Organic Fertilizer. Water, Air and Soil Pollution. 223:1531-1541
- 26. Brown, R. and J.H. Görres. 2011. The Use of Soil Amendments to Improve Survival of Roadside Grasses. HortScience 46:1404-1410.
- 27. Jose Amador, David Potts, George Loomis, David Kalen, Erika Patenaude, Josef Görres. 2010. Improvement of Hydraulic and Water Quality Renovation Functions by Intermittent Aeration of Soil Treatment Areas in Onsite Wastewater Treatment Systems. Water 2: 886-903.
- 28. Görres, J.H. and J.A. Amador. 2010. Partitioning of habitable pore space in earthworm burrows. Journal of Nematology 42: 68-72.
- 29. Amador, J. A., D. A. Potts, E. L. Patenaude, and J. H. Görres. 2008. Effects of depth on domestic wastewater renovation in intermittently aerated leachfield mesocosms. ASCE Journal of Hydrologic Engineering 13: 729-734.

- 30. Amador, J.A., E. Nicosia, R.J. Hull, J. T. Bushoven, E. L. Patenaude, J. T. Bushoven. and J.H.Görres. 2007. Potential Nitrate Leaching Under Common Landscaping Plants. Water, Air and Soil Pollution. 185: 323-333.
- 31. Amador JA and Görres JH. 2007. Microbiological characterization of the structures built by earthworms and ants in an agricultural field. Soil Biology & Biochemistry 39 (8): 2070-2077.
- 32. Amador, J. A., J. H. Görres, and M. C. Savin. 2006. Effects of Lumbricus terrestris L. on nitrogen dynamics beyond the burrow. Applied Soil Ecology 33:61-66.
- 33. Amador, J. A., D. A. Potts, M. C. Savin, P. Tomlinson, J. H. Görres, and E. L. Nicosia. 2006. Mesocosm-scale evaluation of faunal and microbial communities of aerated and conventional septic system leachfield soils. Journal of Environmental Quality. 35:1160-1169
- 34. Amador, J. A., and J. H. Görres. 2005. Role of the anecic earthworm Lumbricus terrestris L. in the distribution of plant residue nitrogen in a corn (Zea mays) soil system. Applied Soil Ecology 30:203-214.
- 35. Amador, J. A., D. A. Potts, E. L. Nicosia, and J. H. Görres. 2005. Aeration to improve the water quality and hydraulic functions of septic system leachfields. Proceedings of the 13th Northwest On-Site Wastewater Treatment Short Course and Equipment Exhibition, Seattle, WA.
- 36. J. A. Amador and J.H. Görres. 2005. Role of soil water content in the carbon and nitrogen dynamics of Lumbricus terrestris L. burrow soil. Applied Soil Ecology 28: 15-22.
- 37. Görres, J.H. and J.A. Amador. Soil Biology: Spatial Patterns. In (Hillel, D., ed.) Encyclopedia of Soils in the Environment. Elsevier. 2004.
- 38. Potts, D. A., J. H. Görres, E. L. Nicosia, and J. A. Amador. 2004. Septic system leachfield aeration level: Effects on water quality parameters. Journal of Environmental Quality. 33: 1828-1838
- 39. Amador, J. A., and J. H. Görres. 2004. A Problem-Based Learning approach to teaching introductory soil science. Journal of Natural Resources and Life Sciences Education. 33:21-27
- 40. Browning, M.C., C. Dawson, S.R. Alm, J.H. Görres, and J.A. A,mador. 2004. Differential effects of byteric acid on nematodes from four trophic groups. Applied Soil Ecology 27: 47-54.
- 41. Savin, M. C., J. H. Görres, and J. A. Amador. 2004. Dynamics of soil microbial and microfaunal communities as influenced by macropores, litter incorporation, and the anecic earthworms Lumbricus terrestris (L.). Soil Science Society of America Journal 68:116-124.
- 42. Amador, J. A., J. H. Görres, and M. C. Savin. 2003. Carbon and nitrogen dynamics in Lumbricus terrestris (L.) burrow soil: Relationship to plant residues and macropores. Soil Science Society of America Journal 67: 1755-1762.
- 43. Görres, J.H., R. Amiri, D. McDonald. 2001. The specific pore volume of multi-planar webs. In: (C.F. Baker, ed.). The Science of Papermaking. Transactions of the 12th Fundamental Research Symposium held in Oxford, UK, 11/2001.
- 44. Görres, J. H., M. C. Savin, and J. A. Amador. 2001. Soil micropore structure and carbon mineralization in burrows and casts of an anecic earthworm (Lumbricus terrestris). Soil Biology & Biochemistry 33:1881-1887.
- 45. Savin, M. C., J. H. Görres, D. A. Neher, and J. A. Amador. 2001. Uncoupling of carbon and nitrogen mineralization: Role of microbivorous nematodes. Soil Biology & Biochemistry 33:1463-1472.

- 46. Savin, M. C., J. H. Görres, D. Neher, and J. A. Amador. 2001. Biogeophysical factors influencing soil respiration and mineral nitrogen content in an old field soil. Soil Biology & Biochemistry 33:429-438
- 47. Görres, J.H., M.H. Stolt, J.A. Amador, C.P. Schulthess and P. A. Johnson. 2000. Soil pore manipulations to increase bioaccessible pore volume. Proceedings 32nd International Congress of the International Association of Hydrologists. Cape Town, Z.A. November, 2000.
- 48. Amador, J.A., Y. Wang, M.C. Savin and J.H. Görres. 2000. Fine-Scale Spatial Variability of Physical and Biological Soil Properties in Kingston, Rhode Island. Geoderma 98:83-94.
- 49. Neher, D.A. T.R. Weicht, M.C. Savin, J.H. Görres and J.A. Amador. 1999. Grazing in a porous environment. 2. Nematode community structure. Plant and Soil 212: 85-99.
- 50. Görres, J.H., M.C. Savin, D.A. Neher, T.R. Weicht and J.A. Amador. 1999. Grazing in a porous environment: 1. The Effect of soil pore structure on C and N mineralization. Plant and Soil 212: 75-83.
- 51. Lyons, J.B., J. H. Görres and J.A. Amador. 1998. Spatial and temporal variability of phosphorus retention in riparian forest soils and its relationship to soil properties. J Environ. Oual. 27:895-903.
- 52. Görres, J. H., M. DiChiaro*, J. Lyons*, and J.A. Amador.1998. Spatial and temporal patterns of soil biological activity in a forest and an old field. Soil Biology and Biochemistry 30:219-230.
- 53. J. Amador, A. Glucksman* J. Lyons* and J. H. Görres. 1997. Spatial Distribution of Phosphatase Activity within a Riparian Forest. Soil Science 162:808-825.
- 54. Görres, J. H., M. Savin, and J.A. Amador. 1997. Dynamics of carbon and nitrogen mineralization, microbial biomass, and nematode abundance within and outside the burrow walls of anecic earthworms (Lumbricus Terrestris). Soil Science 162:666-671.
- 55. Görres, J. H., R. Amiri, J.R. Wood and A. Karnis. 1996. Mechanical pulp fines and sheet structure. Journal of Pulp and Paper Science 23:J152-156.
- 56. Görres, J. H., R. Amiri, J.R. Wood, A. Karnis, 1996. The apparent density of sheets made from blends Tappi Journal 79:179-183.
- 57. Görres, J. H., R. Amiri, J.R. Wood, and A. Karnis.1995. The shear bond strength of mechanical pulp fibres. Journal of. Pulp and Paper Science 22:J161-J164
- 58. Görres, J. H. and A.J. Gold. 1995. Incorporating spatial variability into GIS to estimate nitrate leaching at the aquifer scale. Journal of Environmental. Quality 25:491-498.
- 59. Emmett, B.S.A., S.A. Brittain, S. Hughes, J. H. Görres, V. Kennedy, D. Norris, R. Rafael, B. Reynolds and P.A. Stevens. 1995. Nitrogen Additions at Aber Forest Wales: I. Response of throughfall and soil water chemistry. Forest Ecology and Management 71:45-59.
- 60. Amiri, R., J.R. Wood, A. Karnis and J. H. Görres. 1994. The apparent density of paper. Journal of Pulp and Paper Science 20: J142-J148.
- 61. McCann, A., A.J. Gold, K. Mallon and J. H. Görres. 1994. Water Conservation for Rhode Island lawns. Journal of the American Water Works Association. 86(4) 198-204.
- 62. Görres, J. H., R. Amiri, J.R. Wood and M. Grondin. 1993. Fibre collapse and sheet structure. Proceedings of the Fundamental Research Symposium, Oxford, U.K. 1993.
- 63. Emmett, B.S.A., B. Reynolds, P.A. Stevens, D.A. Norris, S. Hughes, J. H. Görres and I Lubrecht*. 1993. Nitrate leaching from a forested Welsh catchment Interactions between stand age and nitrogen deposition. Ambio 6:386-394.
- 64. Görres, J.H., and P. Luner. 1992. An apparent density model of paper. J. Pulp and Paper Sci. 18:J127-J131.

- 65. Görres, J.H. T. Cresson, and P. Luner. 1989. Modeling and simulation of flocculated formation. J. Pulp and Paper Sci. 15:355-359.
- 66. Görres, J.H., C.S. Sinclair and A. Tallentire. 1989. The interactive multi-planar model of sheet structure. Paperi ju Puu. 71: 54-61.
- 67. Görres, J.H., R Grant, T. Cresson and P. Luner. 1986. The effect of drainage on random formed papers: a simulation study. TAPPI J. 69:104-105.

* designates undergraduate researchers

B. PRESENTATIONS AT PROFESSIONAL MEETINGS

- 1. Nouri-Aiin, M. J.H. Görres, C. Keough*, J.J. Schall. 2019. Cost Effective CO1 method to identify pheretimoid cocoons, juveniles, and adults and investigate their population phenology. Annual Meeting of the Soil Science Society of America, November 12 -14, 2019, San Antonio Texas.
- 2. Görres, J.H. 2019. Alterations of Habitable Pore Space By Earthworms and Subsequent Effects on Soil Biogeochemistry. Annual Meeting of the Soil Science Society of America, November 12 -14, 2019, San Antonio Texas.
- 3. Nouri-Aiin, M., J.H. Görres. 2019. Phenology of Pheretimoid Earthworm Cocoons. International Soils Meeting, 1/6 -1/9/2019 San Diego, CA.
- 4. Görres, J.H., M. Nouri-Aiin. 2019. Invasive Jumping Worms, cocoons, climate change and expansion at the northern limit of their range. Annual Meeting of the Northeastern Natural History society, April 4, 2019, Hartford, CT.
- 5. Rubin, J., J.H. Görres, A. Ghalehegolabbehbahano, S. Hook, BergmT and Dorr, A. 2018. Mycroremediation for Watershed Restoration. Annual Meeting of the Society of Ecological Restoration, New England Chapter, October 11 -13, 2018, New Haven, CT.
- 6. . Ross D. S, J. GÖrres, M Knowles, C. Cogbill, S. Wilmot, J. Juillerat and C. Danks. 2016. Carbon Stocks in Vermont's Managed Forests: Complex Interaction of Soil Properties, Land-Use History and Earthworms. SSSA Annual Meetings, Phoenix, AZ, November 6-10, 2016.
- 7. Christel, D.M. J. Görres. 2016. The Use of Bokashi As a Soil Fertility Amendment in Organic Vegetable Production Systems in the Northeastern U.S. SSSA Annual Meetings, Phoenix, AZ, November 6 -10, 2016.
- 8. Görres, J., M. Skinner, B. Parker, L. Cisco N. Cunningham and C.Sullivan, Is Maple Regeneration Redcued by Asian Invasive Earthworms. NAMSC Annual Meeting October 28, 2016.
- 9. Bellitürk, K. J H. Görres, H. S. Turan, S. Göçmez, M. C. Bağdatlı, M. Eker, S.Aslan. 2015. Managing Agro-Wastes (Olive Pruning and Dairy Manure) for Nutrient Recovery Using Vermiculture. **ICOCEE CAPPADOCIA 2015**, Nevsehir, TURKEY, May 20-23, 2015. (C) To be sumbmitted to a peer review journal
- 10. Josef H. Görres, Rachel Gilker, Korkmaz Belliturk. 2015. Compaction Mitigation Potential of Biotillage and Subsurface Tillage in Dairy Pasture Soils. ICOCEE-2015 in Nevşehir City, Turkey on May 20 23, 2015.
- 11. Josef Görres. 2014. Amynthas Ante-Portas: Invasive Asiatic Earthworms in New England and Reasons to Monitor Vigilantly. Vermont Monitoring Cooperative Annual Meeting (December 11, 2014, Burlington Vermont).

- 12. Lindsey Ruhl and Josef H. Görres. 2014. Effects of Flooding on Soil Fertility at the Microtopographical Scale. SSSA Annual Meeting Long Beach. November 2-5, 2014
- 13. Korkmaz Belliturk and Josef H. Görres. 2014. The Evaluation of Olive Pruning Waste As a Vermicompost Feedstock. SSSA Annual Meeting Long Beach. November 2-5, 2014. (C)
- 14. Josef H. Görres, Korkmaz Belliturk, Ryan D.S. Melnichuk. 2014. Development and Life History Parameters of an Amynthas agrestis (Goto and Hatai, 1899) (Oligachaeta: Megascolecidae) Population in a Hardwood Forest in the Champlain Valley, Vermont, USA. International Society of Earthworm Ecology. Athens, Georgia.
- 15. Josef Görres and Sevim Turan. Blending Composted Urban and Rural Organic Wastes for Soil Fertility. GreInSus Conference, May 8 − 10, 2014, Izmir, Turkey.
- 16. Josef Görres Rachel Gilker and Jenn Colby. 2014 Benefits of Tillage Radish and Keyline Plowing for Pasture Management. Northeast Pasture Consortium Annual Conference & Meeting February 4 − 5, 2014.
- 17. Hüseyin Tecimen, Josef Görres and Ryan Melnichuk, Greenhouse Gas Emissions From Aggregates of a Mesocosm Soil Worked By Lumbricus Rubellus and Amynthas Agrestis. SSSA Annual Meetings in Tampa Florida November 3-7, 2013.
- 18. Ryan Melnichuk and Josef Görres. Influence of Earthworm Presence on Arisaema Triphyllum Corm Composition. SSSA Annual Meetings in Tampa Florida November 3-7, 2013.
- 19. Meghan Knowles, Donald Ross, Josef Görres. Earthworm Invasion in Northern Forests: Impact On Distribution of Soil Carbon Within Aggregate Fractions. SSSA Annual Meetings in Tampa Florida November 3-7, 2013.
- 20. Görres J.H. and R.D.S. Melnichuk. 2011. Invasive Earthworms in Vermont. Presentation to the Invertebrate Scientific Advisory Committee of the Endangered Species Committee, Waterbury State Office Complex, Waterbury, VT.
- 21. B. Jamison, J.H. Görres and M. Krawczyk. 2011. Addressing Pasture Compaction. 15th Annual Vermont Grazing Conference: Integrating Natural Systems and Business Strategies. 01/21/2011, Fairlee, Vermont.
- 22. Panel Member: Best Teaching Practices: Panels and Facilitated Discussions, hosted by Mary C. Savin. 2010 Annual Meeting of the Soil Science Society of America from 10/31-11/02/2010 in Long Beach, Ca.
- 23. Görres, J.H. 2007. The SMILE Program. American Power Conversion, Kingston, RI.
- 24. Görres, J.H. 2007. Interaction between Road Salt and Biosolids Amendments on Rhode Island Road Side Verges. Rhode Island Department of Transportation. Providence, Rhode Island.
- 25. Görres, J.H. 2006. Spatial variability of leaching in plots amended with anecic earthworms. University of Vermont, Soil and Plant Science Department, Burlington, Vermont.
- 26. Görres J.H. 2006. Evaluation of the SMILE Program, University of Rhode Island, Galanti Lounge.
- 27. Görres, J.H. and A. Veeger. 2005. Water Resources to Sustain Economic Development in RI. Amgen Corporation, West Warwick.
- 28. Görres, J.H. and A. Veeger. 2005. Developing Water resources in the Big River Management Area. Rhode Island Water Resources Board. Providence Rhode Island.
- 29. Görres, J.H. 2001. Nematodenverteilung in Bodenaggregaten. 5. Treffen der AG Freilebende Nematoden. Institut für Tierökologie. Universität Bielefeld, March 18 19, 2002.

- 30. GEMS-NET Staff. 2002: A shadow inquiry. Integrating Inquiry into Engineering Programs, February 12 and February 14, 2002, Galanti Lounge University of Rhode Island
- 31. Görres, J.H. 2001. GEMS-NET: Case Study of Integrating Academic Scientists into Elementary Science Education Reform. Teacher-Scientist Alliance Institute. Invited talk, The American Physical Society, Washington, DC, January 2002.
- 32. Görres, J.H., R. Amiri, D. McDonald. 2001. The specific pore volume of multi-planar webs. In: (C.F. Baker, ed.). The Science of Papermaking. Transactions of the 12th Fundamental Research Symposium held in Oxford, UK, 11/2001.
- 33. GEMS-NET Staff. 2001. Forms of Inquiry. SORICO Retreat for Scientists and Teachers. Cape Cod, May 2001.
- 34. Görres, J.H., M.H. Stolt, J.A. Amador, C.P. Schulthess and P.A. Johnson. 2000. Soil pore manipulations to increase bioaccessible pore volume. 32nd International Congress of the International Association of Hydrologists. Cape Town, Z.A. November, 2000.
- 35. Görres, J.H. M.C. Savin, W. Rodriguez and J.A. Amador. 2000. WG im Regenwurmbau: Konsequenzen fur die N und C Mineralisierung. 4. Treffen der AG Freilebende Nematoden. Institut fur spezielle und allgemeine Biologie, Universität Giessen, Feb 2 and 3, 2000.
- 36. Görres, J.H., D.A. Neher, M.C. Savin, and J.A. Amador. 1999. Ein Grazing Modell mit Habitatstruktur unter dynamischen Bodenklimabedingungen. 3. Treffen der AG Freilebende Nematoden. Institut für Biologie der RWTH Aachen, February 1 and 2, 1999.
- 37. Görres, J. H., Savin.M., Neher, D., Amador, J.A. 1998: The effect of the interaction between grazing and soil structure on nutrient mineralization. Invited contribution to the 24th International Nematologist Conference, Dundee, Scotland, U.K. August 1998. (Invited speaker)
- 38. J.A. Amador and J.H. Görres. 1997. Toward a Flexible Indicator System for Soil Quality. Talk in the DEM lunchtime seminar series.
- 39. Görres. J.H. 1997. The Interactive Multi-Planar Model. Chemical Engineering Department, URI, April, 1997.
- 40. Görres J.H. 1996. The Big River Management Land Use Study. Presentation to the Water Resources Board September 1996.
- 41. Görres J.H. 1996. Interactive Multi-planar model in Research and Development. Union Camp Research Center, Princeton, NJ, December 1996.
- 42. Görres J.H. 1996. Interface between food web and soil nutrient models. ESA Workshop No.3: Nutrient Mineralization in Soil: Integration of Soil Ecology, Biogeophysics and Biogeochemistry. ESA Annual Meeting Providence, RI.
- 43. Görres J.H. 1996. Aggregation and Dispersion of Soil Biota. ESA Workshop No.3: Nutrient Mineralization in Soil: Integration of Soil Ecology, Biogeophysics and Biogeochemistry. ESA Annual Meeting Providence, RI.
- 44. Besedina, H., J.H. Görres, J. Opaluch, A.J. Gold. 1995. An integrated physico-economic model of ground water protection. NAREA. Burlington, Vermont, June 18-20,1995.
- 45. Kelly J., K. Stuart, and J.H. Görres. 1995. Effect on water quality of the interaction between BMPs and land use changes at the watershed scale. Southern New England Soil and Water Conservation Society Winter Meeting, Windsor Locks, CT.

- 46. Görres, J.H. 1993. Modeling nitrogen cycling at the Aber NITREX site. Annual NITREX meeting. Plas Menai, Wales, UK.
- 47. Görres, J.H. 1989. The interactive multi-planar model of paper structure. Seminar at PAPRICAN, Montreal, Canada.
- 48. Görres, J.H. and P. Luner. 1989. The apparent density of paper. Fall ESPRI Meeting, SUNY-ESF, Syracuse, NY.
- 49. Görres, J.H., C.S. Sinclair, and A. Tallentire. 1986. Paper Porosity and Basic Fibre Properties. In: Solid Mechanics advances in paper related industries. (R.W. Perkins, R.E. Mark and J.L. Thorpe, eds.) Proceedings of a National Science Foundation Workshop held at the Minnowbrook Conference Center, Syracuse University, August 13-15, 1986.
- 50. Görres, J.H. Kropholler, and P.Luner. 1985. Measuring Flocculation using image analysis. In Paper Making Raw Materials (ed. V. Punton). Transactions of the Eighth Fundamental Research Symposium, Oxford, UK.
- 51. Görres, J.H. 1985. Comparison of mercury intrusion porosimetry and liquid displacement porometry of paper webs. Coulter-Counter LTD User Group Seminar. Bedford, UK.
- 52. Görres, J.H. and P. Luner. 1983. Simulation of Paper Structure Using an Image Analysis System. 80th ESPRI- Meeting, SUNY-ESF, Syracuse, NY.
- 53. Görres, J.H. H. Kropholler and B. Clarke. 1981. Use of fast fourier analysis to characterize paper structure. In: The Role of Fundamental Research in Papermaking (ed. V. Punton). Transactions of the Seventh Fundamental Research Symposium, Cambridge, UK.

C. Papers in proceedings

- 1. Bellitürk, K., J.H. Görres, S.H. Turan, S. Göçmez, Y. Solmaz, Ö. Üstündağç Aç Adiloğlu. 2018. Use of Vermicompost in Olive Production. Conference: International Eurasian Congress on Natural Nutrition and Healthy Life, 12-15 July, 2018, Ankara, Turkey
- 2. Amador, J. A., D. A. Potts, E. L. Nicosia, and J. H. Görres. 2005. Aeration to improve the water quality and hydraulic functions of septic system leachfields. Proceedings of the 13th Northwest On-Site Wastewater Treatment Short Course and Equipment Exhibition, Seattle, WA.
- 3. Görres, J.H., R. Amiri, McDonald. 2001. The specific pore volume of multi-planar webs: The role of the short and long fibre fraction. In: (C.F. Baker, Ed.) The Science of Paper Making. FRC,
- 4. Görres, J.H., M.H. Stolt, J.A. Amador, C.P. Schulthess and P. A. Johnson. 2000. Soil pore manipulations to increase bioaccessible pore volume. Proceedings 32nd International Congress of the International Association of Hydrologists. Cape Town, Z.A. November, 2000.
- 5. Görres, J. H., R. Amiri, J. Wood and A. Karnis. 1995. Role of fines on paper structure. TAPPI Paper Physics Conference in Niagara Falls.
- 6. Görres, J. H., A.J. Gold, and J. Conrad. 1995. Incorporating spatial variability into GIS to estimate nitrate leaching at the aquifer scale. In: D.Corwin and R.J. Wagenet (ed.) Proceedings of the 1995 Bouyoucos conference. Applications of GIS to the modeling of nonpoint source pollution in the vadose zone. ASA-CSSA-SSSA. Riverside, CA. May 1-3 1995, pp177-191.
- 7. Görres, J. H., J.J. Opaluch, A.J. Gold and H. Besedina. 1995. Spatial modeling of N-leaching and the economics of aquifer protection. In: Clean Water- Clean Environment 21st century,

- ASAE. Kansas City. II: 67-70.
- 8. Görres, J. H., A.J. Gold and J. Conrad. 1994. Modeling nitrate leaching at the aquifer scale using field enhanced GIS coverages. ASAE paper No. 94-3520.
- 9.. Bechdol, M.L., A.J. Gold and J.H. Görres. 1994. Modeling viral contamination from on-site wastewater disposal in coastal watersheds. In: E. Collins (ed.) On-site wastewater treatment: Proceedings of the 7th international symposium on individual and small community sewage systems. Atlanta, GA ASAE. 146-153
- 10. Görres, J.H., R. Amiri, J.R. Wood, and A. Karnis. March 1994. Mechanical pulp fines and sheet structure. TAPPI Paper Physics Seminar. Atlanta, GA.
- 11. Görres, J. H., R. Amiri, J.R. Wood and M. Grondin. 1993. Fibre collapse and sheet structure. Proceedings of the Fundamental Research Symposium, Oxford, U.K. 1993.
- 12. Görres, J.H., C.S. Sinclair, and A. Tallentire. 1992. Paper Porosity and Basic Fibre Properties. In: Solid Mechanics advances in paper related industries. (R.W. Perkins, R.E. Mark and J.L. Thorpe, eds.) Proceedings of a National Science Foundation Workshop held at the Minnowbrook Conference Center, Syracuse University, August 13-15, 1986.
- 13. Görres, J.H. Kropholler, and P. Luner. 1985. Measuring Flocculation using image analysis. In Paper Making Raw Materials (ed. V. Punton). Transactions of the Eighth Fundamental Research Symposium, Oxford, UK.
- 14. Görres, J.H. H. Kropholler and B. Clarke. 1981. Use of fast fourier analysis to characterize paper structure. In The Role of Fundamental Research in Papermaking(V. Punton, Ed.). Transactions of the Seventh Fundamental Research Symposium, Cambridge, UK.

D. BOOK CHAPTERS

- 1. Amador, J.A. and J.H. Görres. Soil Fauna. *In (Sylvia et al., eds.) Principles and Applications of Soil Microbiology*, 2nd Edition. Prentice Hall, 2004.
- 2. Görres, J.H. and J.A. Amador. *Soil Biology: Spatial Patterns. In (Hillel, D., ed.)* Encyclopedia of Soils in the Environment. Elsevier. 2004
- 3. Görres J.H. and J.A. Amador. Spatial Variability in Soils. 2nd Edition Encyclopedia of Environmental Science. 2019
- 4. Amador, J.A. and J.H. Görres. Soil Fauna. *In (Sylvia et al., eds.) Principles and Applications of Soil Microbiology, 3nd Edition.* Prentice Hall, 2020. In preparation.

E. INDUSTRIAL AND ACADEMIC REPORTS

- 1. Görres, J.H., P. Luner, and R. Grant. 1983. Simulation of Paper Structure Using an Image Analysis System. ESPRI- Research Report 80, SUNY-ESF, Syracuse, NY.
- 2. Görres, J.H. and P. Luner. 1989. The apparent Density of Paper. ESPRI- Research Report 91, SUNY-ESF, Syracuse, NY.
- 3. UN-ECE Workshop Participants. 1991. UN-ECE Programme on Integrated Monitoring of Air Pollution Effects on Ecosystems: Workshop on Linking Hydrochemical and Biological Models- Their Use for Assessment and Prediction. Aberdeen, Scotland 28-31 October 1991.
- 4. Emmett, B.A., A. Britain, J.H. Görres, S. Hughes, D. Norris, B. Reynolds and P. Stevens. 1992. Annual Report for 1992 of the Nitrogen Deposition Manipulation Study: 2. Nitrogen Critical Load Experiment. Institute of Terrestrial Ecology (Natural Environmental Research Council) Project T07072a5. Bangor, UK.
- 5. Amiri, R., J.H. Görres, M. Grondin and J.R. Wood. 1992. Fibre Collapse and Sheet Structure. Pulp and Paper Report PPR964. PAPRICAN. Montreal.¹
- 6. Görres, J. H., R. Amiri, J.R. Wood, and A. Karnis. March 1994. The apparent density of sheets made from mechanical pulp blends. Pulp and Paper Report 1062, PAPRICAN, Montreal.
- 7. Görres, J.H., R. Amiri, J.R. Wood, and A. Karnis. March 1994. The shear bond strength of mechanical pulp fibres. Pulp and Paper Report 1058. PAPRICAN, Montreal.
- 8. Görres, J.H., R. Amiri, J.R. Wood, and A. Karnis. 1995. Mechanical Pulp Fines and Sheet Structure. Pulp and Paper Report PPR1146. PAPRICAN, Montreal.
- 9. Görres, J.H., J.J. Opaluch, A.J.Gold, H. Besedina, and J. Conrad. 1995. Spatial Modeling of N-leaching and the economics of aquifer protection. Annual Progress Report to USDA-CSRS.
- 10. RI Water Resources Board: Land Use Committee. 1997. The Big River Management Area Land Use Study. (including a section recommending education and research as important uses of the BRMA).
- 11. R. Allem, R. Amiri, J.H. Görres, 2004. Analysis of Paper Pore Structure: Comparison of Sheet Pore Structure by SEM-Image Analysis, Mercury Porosimetry and Interactive Multi-Planar Paper Structure Model. Pulp and Paper Report, PAPRICAN, Montreal.

G.1 EXTENSION PUBLICATIONS, NEWSLETTER ARTICLES, SELECTED PRESS

- 1. J.H. Görres, Irrigation water management with gypsum blocks. Fact Sheet No 94-3. The Pawcatuck Watershed Project. April 1994
- **2.** J.H. Görres. 2002. Earthworm Watch: Are Earthworms threatening RI Ecosystems? RI Natural History Survey Newsletter. Spring 2002.
- **3.** University Of Rhode Island (2003, June 25). Alien Earthworms Changing Ecology Of Northeast Forests. *ScienceDaily* (quoted)
- **4.** University Of Rhode Island (2003, June 25). Alien Earthworms Changing Ecology Of Northeast Forests. *News Wire (quoted)*
- 5. Killer Worms (2004, June 10). *The Osgood Files*. CBS Radio Network. (quoted)
- 6. When Worms Turn (December 11, 2006). *Boston Globe* (quoted).
- 7. Why do earthworms surface after rain. (April 14, 2010). *Scientific American*. (quoted). http://www.scientificamerican.com/article.cfm?id=why-earthworms-surface-after-rain
- 8. Why do earthworms surface after rain. (April 14, 2010). Accuweather. http://www.accuweather.com/blogs/news/story/28916/why-do-earthworms-surface-afte.asp?partner=accuweather
- 9. The Dark Side of the Worm. Interview with Jane Lindholm at Vermont Public Radio. October 10, 2013. http://digital.vpr.net/post/dark-side-earthworms
- 10. A stunning interview with Josef H. Gorres about worms. http://solucangubresi.web.tr/ek-yazilar/a-stunning-interview-with-josef-h-gorres-about-the-worms.html.
- 11. Invasive Earthworm Factsheet for the Horticultural Trade. January 2014. http://www.uvm.edu/~entlab/Greenhouse%20IPM/Workshops/2014/InvasiveEarthworms.pdf
- 12. Earthworm Invasions. Article by Josh Brown.

 http://www.uvm.edu/~uvmpr/?Page=news&storyID=16443 subsequently published in several other news outlets.
- 13. The earthworm nobody wants to know. Judith King. Connecticut Horticultural Society. 56:3. Winter 2013. http://www.cthort.org/media/files/2013_Nov_Dec_Winter_Newsletter.pdf
- 14. Crazy snake worm' threatening forests, gardens across northeast (December 23, 2104). Westerly Sun, Rhode Island
- 15. "Crazy snake" Earthworms threaten Vermont Forests (December 19, 2014). Burlington Free Press. http://www.burlingtonfreepress.com/story/life/green-mountain/2014/12/19/exotic-crazy-snake-worm-threatens-new-england-forests/20639211/
- 16. Josef Görres, Rachel Gilker, Jenn Colby. 2014. Addressing Pasture Compaction. Factsheet. Center for Sustainable Agriculture. http://www.uvm.edu/sustainableagriculture/?Page=whatwedo/pasture/getting-started.php

Numerous articles and TV spots in local news markets cited work in science education reforms that I contributed to.

G.2 OUTREACH TALKS

- 1. Best Practices in the Horticultural Industry. North Branch Nature Center, October 5, 2019 (with M. Nouri-Aiin)
- 2. What is new in Snake Wormology. Hardy Plant Club. March 19, 2019

- 3. Vermicomposting and invasive earthworms. University of Connecticut Worm Day. October 20, 2018
- 4. Invasive 'Snake Worm' Seminar. University of New Hampshire Extension. Urban Forestry Center. July 26,2018
- 5. Not your Grandparents Worms. University of Rhode Island. September 14, 2018
- 6. Thermophilic versus vermicomposting versus bokashi. University of Rhode Island. September 14, 2018
- 7. Crazy snake worms. North Branch Nature Center, Montpelier, VT, September 13, 2018.
- 8. Community Compost Training: How to avoid spreading the crazy snake worm. North Branch Nature Center, Montpelier, VT April 21, 2018
- 9. Invasive Snake Worms (Amynthas agrestis) Agents of Change. 8th Main Invasive Species Network Annual Meeting, March, 16, 2018 (with M. Nouri-Aiin)
- 10. Snake Worm Presentation. Montpelier Tree Board. February 1, 2018
- 11. Snake Worms not your grandparents' earthworm: How Japanese Earthworms Change Vermont Forests. Burlington Garden Club, April 25, 2017
- 12. Amynthas invasive earthworm species (Crazy Snake Worms) in forests in Vermont. Annual Meeting of the Green Mountain Division of the Society of American Foresters. Lake Morey Resort. February 17, 2017
- 13. Invasive earthworms in our gardens and woodlands. Hardy Plant Club. February 25, 2017.
- 14. Pheretimoid Amynthas Earthworms: the Second Wave of Forest Invasion. NAMSC Annual Meeting October 28, 2016 (M. Skinner, B. Parker, L. Cisco N. Cunningham and C.Sullivan).
- 15. Vermicomposting and invasive earthworms. University of Connecticut Worm Day. October 19, 2016
- 16. New Research on the Crazy Snake Worms. Hardy Plant Club, July 9, 2016
- 17. Vermicomposting and invasive earthworms. University of Connecticut Worm Day. October 23, 2015
- 18. Vermicomposting and invasive earthworms. University of Connecticut Worm Day. October 12, 2014.
- 19. NSRC Webinar for Forest Professionals on Invasive Earthworms. March 24, 2014.
- 20. New Hampshire Extension Service. Earthworms Agents of Change. Master Gardener Refresher Course. Rockingham County Nursing Home, Brentwood, NH. March 10, 2014...
- 21. New Hampshire Extension Service. Earthworms Agents of Change. Master Gardener Refresher Course. Merrimack County Extension Service Office, Boscawen, NH. March 4, 2014.
- 22. Josef Görres, Rachel Gilker and Jenn Colby. 2014 Benefits of Tillage Radish and Keyline Plowing for Pasture Management. Northeast Pasture Consortium Annual Conference & Meeting February 4 23. IPM Workshop for Greenhouse Growers in VT. Crazy Snake Worm a New Threat. Gardener's Supply. January 6, 2014.
- 24. Vermicomposting and invasive earthworms. University of Connecticut Worm Day. October 12, 2013.

H. SUCCESSFUL RESEARCH AND EDUCATION GRANTS (Career Total: \$4,333,511)

- 1. A.J. Gold, W.R. Wright and J.H. Görres. 1994. Modeling the effect of Best Management Practices on pollutant loads on Aquidneck Island. USDA-SCS \$15,000
- 2. J.H. Görres, J.J. Opaluch, A.J. Gold. 1994. Spatial modeling of N-leaching and the economics

- of aquifer protection. USDA-NRI \$136,000
- 3. M. Wallace and J. H. Görres. 1995. Big River Management Area Land Use Study. Water Resources Board. \$10,000
- 4. J. H. Görres and J.A. Amador. 1995. Phosphorus sources and sinks in forested buffers. USGS-URI Water Resources Center \$10,000
- 5. J.A. Amador and J. H. Görres. 1996. Riparian wetland forest soils and sinks and sources of phosphorus. USGS-URI Water Resources Center \$8,036
- 6. J. H. Görres, J. Amador, S. Alm, P. Groffman and D. Neher. 1996. Interaction of pore size distribution, soil fauna and C and N mineralization. USDA-NRI \$212,000
- 7. B. Young and J. H. Görres. 1996. GEMS-NET II. Eisenhower Grant, RIDE \$35,000
- 8. M. Knisely, B. Young and J.H. Görres. 1997. The Kites/GEMS-NET Connection. NSF \$49,984
- 9. B. Young, J.H. Görres, B. Sullivan, and R. Pockalny. 1997. GEMS-NET II. Eisenhower Grant, RIDE, \$44,500
- 10. J.A. Amador and J.H. Görres. 1997. Mercury Porosimetry for Soil Ecological and Natural Resources Research. USDA-NRI \$25,000, URI Match \$25,000
- 11. B. Young, J.H. Görres, B. Sullivan-Watts, R. Pockalny and B. Fitzsimmons. 1998. GEMS-NET a local systemic change initiative. NSF \$1,300,000
- 12. J.A. Amador, J.H. Görres and M.C. Savin. 1998. Interaction of soil fauna, soil structure, and nutrient cycling in earthworm burrows U.S.D.A. NRI \$206,00
- 13. J.H. Görres. 1999. Inquiry centered learning in NRS. URI foundation \$4,750
- 14. J.H. Görres, J.A. Amador and T. A Husband. 1999. U.S.D.A. NRI Equipment Grant: Image Analysis in CELS. \$50,000, URI Match \$63,000
- 15. J.H. Görres 2002. Effect of Exotic Earthworms on Forested Ecosystems in Rhode Island Watersheds. RI Agricultural Experiment Station. \$40000.
- 16. B. Young, J. Görres, B. Sullivan-Watts, R. Pockalny and B. Fitzsimmons. 2003. GEMS-NET a local systemic change initiative: Bridging Grant. NSF \$120,000
- J. Görres. 2004. Do Anecic Earthworms Cause Nitrogen Losses from Field Plots Planted to Corn. USDA-NRI. \$75,000
- 18. J. Görres, C. Englander and G. Lizano. 2004. Evaluation of the Science and Mathematics Investigative Learning Experience Program. Nellie Mae Educational Foundation. \$38,000.
- 19. M. Lawrence and J. Görres. 2004. Science and Literacy Integration Project. RIDE. \$96,000
- 20. M..Lawrence and J. Görres. 2004. Science and Literacy Integration Project. Regional Alliance at TERC. \$10,000.
- 21. J. Amador, J. Görres, D. Potts, E. Nicosia. 2004. Evaluation of Leachfield Aeration Technology for Improvement of Water Quality and Hydraulic Functions in Onsite Wastewater Treatment Systems. \$232,000 CICEET
- 22. A. Veeger and J. Görres. 2005. Amendment to the Land Use Study for the Big River Management Area. \$50,000 Rhode Island Water Resources Board.
- 23. C. Englander, J. Görres, G. Lizano. 2007. The SMILE program. Amgen Foundation \$40,000. 24. C. Englander, J. Görres. 2007. The SMILE Program. American Power Conversion. \$20,000
- 25. R. Brown and J. Görres. 2007. Effect of salt on road side plantings. Road Island Department of transportation. \$74,000
- 26. J. Görres, G. Paquette, J. Pino and C. Longo. 2007. The Amgen Bruce Wallace Biotechnology Laboratory Program. Delivering molecular and biotechnology labs to high school students. The Amgen Foundation. \$249,000.
- 27. C. Englander, J. Görres and T. Dougan. 2007. The SMILE Program. Amgen Foundation.

- \$40,000.
- 28. C. Englander, J. Görres and T. Dougan. 2007. The SMILE Engineering Challenge Weekend: Building Bridges. URI Transportation Center. \$15,000.
- 29. C. Englander, J. Görres and T. Dougan. 2007. NOAA Ocean Exploration Program. \$149,991.
- 30. J. Görres. 2008. Effect of earthworms on organic matter in different aggregate size fractions. Hatch. \$60,000
- 31. R. Gilker, J. Görres, A. Matthews. 2009. USDA-CIG. Low Carbon Dairy for the Northeast. \$162,000
- 32. A. Drizo, J. Görres. 2009. USDA-CIG. Phosphorus and *E.Coli* Reduction from Silage Leachate via Innovative Steel Slag Filtration \$165,000
- 33. Drizo, J. Görres 2010. USDA- Solid Waste Management Grant. Evaluation of Current Landfill Conditions in Vermont Rural Communities and Providing Training to Help Landfill Operators Reduce Threats to Water Resources. \$174,000
- 34. Ross, D.S., J.H. Görres and others. 2011. Earthworm and Land-Use Legacy Effects on Belowground Carbon in the Managed Northern Forest. NSRC \$79,000.
- 35. Görres, J.H. and P. Austin. 2012. Vermicompost as a fast acting nitrogen amendment to mitigate nitrogen deficiencies in organic vegetable production. USDA-NESARE Partnership Grant. \$14,583
- 36. B. Jamison, J. Görres. 2011. Sustainable Agriculture Research and Education (SARE) Graduate Student Grant. Investigating the Effects of Forage Radish as Vertical Mulch on Soil-Water Properties and Forage Quality in Dairy Pasture. \$10,433
- 37. L. Ruhl and J. Görres. 2012. Mitigating and preventing flood-related soil quality degradation using cover crop blends. SARE Graduate student Grant. \$14,982
- 38. J. Görres and L. Ruhl. 2012. Mitigating fertility effects of flooding with variable rate amendment. SARE Partnership Grant. \$14,999
- 39. Görres, J.H. Environmental and Soil Impacts of Pasture Management Tools (Northeast Pasture Consortium) October 1, 2012 September 30, 2015. USDA-Hatch Multi-State Grant \$64,343.
- 40. J. Faulkner, Görres, JH, Colby J. and J. Alves. 2014. Demonstrating Effects of Compaction Best Management Practices on Soil Properties and Water Movement. USDA-NRCS, Conservation Innovation Grant. \$174,000
- 41. Görres, J.H.. 2014. Erosivity of Vergennes Clay Soil. Natural Resource Conservation Service, USDA. \$60,000
- 42. D.M. Christel and Görres, J.H. 2015. Exploring the use of bokashi as a soil fertility amendment in Northeast vegetable production systems. SARE Graduate Student Grant \$15,000
- 43. Görres, J.H. II. Integrity and functioning of forested buffer strips and saturation of hardwood forests after earthworm invasions during climate change. USDA-NIFA-Hatch. October 1, 2015 to September 30, 2018. \$45,000
- 44. Görres, J.H. Developing DNA microsatellites for invasive earthworm identification and tracking. June 2015- March 2016. \$10,000
- 45. Görres, J.H. and M. Nouri-Aiin. 2017. Controlling invasive Asiatic earthworms in horticulture to limit their spread to critical forest cosystems. Eppley Foundation for Research. \$32,000.
- 46. Görres, J.H. and M. Nouri-Aiin. 2019. Best Horticultural Practices to Prevent Pheretimoid Dispersion through the Horticultural Trade. Vermont Specialty Crop Block Grant. \$23,000

44. Görres, J.H. and J. Rubin. 2019. Mycoremediation of Phosphorus in Agricultural Runoff Using Mycorrhizal Plant Associations SARE Partnership Grant. \$29,980

I. Press Coverage of my Research Work

- 1. Berkshire Eagle, October 8, 2019. Be-a-Better-Gardener: Are earthworms good for the garden? Depends on the Worm. https://www.berkshireeagle.com/stories/thomas-christopher-be-a-better-gardener-are-earthworms-good-for-the-garden-depends-on-the-worm,581556
- 2. RI EcoNews. September 23, 2019. Invasive Snake Worms Have Jumped Into Rhode Island. https://www.ecori.org/natural-resources/2019/9/20/invasive-snake-worms-have-jumped-into-rhode-island?fbclid=IwAR0KifcZ16G659UTV8cOnrh3MGsju-IVWZJzQEhCr5MjD_QEZnNNYvSw9ZU
- 3. NEPR Interview. August 6, 2019. No broadcast yet.
- 4. WCAX interview on 6:30 News, June 27, 2019
- 5. Boston Public Radio -89.7 WGBH, The Curiosity Desk, May 8, 2019, Wait. Common Nightcrawlers Are An Invasive Species?
- 6. Interview with Julia Jones for an article on earthworms in The Atlantic 7/11/2019, not published yet.
- 7. WESU FM Interview for Growing Greener program. 7/10/2019
- 8. Burlington free Press. December 12,2018. Exotic crazy snake worms threaten New England forests. https://www.burlingtonfreepress.com/story/life/green-mountain/2014/12/19/exotic-crazy-snake-worm-threatens-new-england-forests/20639211/
- 9. Boston Globe. April 24, 2018. Crazy snake worms are not on the plane but they may well be in New England gardens. https://www.bostonglobe.com/metro/2018/04/25/crazy-snake-worms-are-not-plane-but-they-may-well-new-england-gardens/99fnSIX8Bo4HzNbnAEGAyM/story.html
- 10. West Lebanon News. April 15, 2018. http://westlebanonvalleynews.nh.newsmemory.com/publink.php?shareid=4a9a0955a
- 11. Upper Valley News. April 14, 2018. Snake Worms Wriggle Into Region Valley News: https://www.vnews.com/Jumping-worms-in-the-Upper-Valley-16802036
- 12. Vermont Public Radio. October 2013. The Dark Side of the Worm. Interview with Jane Lindholm. http://digital.vpr.net/post/dark-side-earthworms
- 13. Accuweather. April 14, 2010Why do earthworms surface after rain? (April 14, 2010). http://www.accuweather.com/blogs/news/story/28916/why-do-earthworms-surface-afte.asp?partner=accuweather
- 14. Scientific American. April 14, 2010. Why do earthworms surface after rain? http://www.scientificamerican.com/article.cfm?id=why-earthworms-surface-after-rain
- 15. Boston Globe. December 11, 2006. When Worms Turns.
- 16. CBS Radio Network Killer Worms. June 10, 2004. The Osgood Files.
- 17. News Wire. University of Rhode Island. June 25 2003. Alien Earthworms Changing Ecology of Northeast Forests.

SERVICE

- 1. Serving on the following committees at the University of Vermont
 - a. Hort Farm Advisory Committee (2008 2017)
 - b. Plant and Soil Science Graduate Affairs Committee (2008 present)
 - c. Seminar committee (2010 2012)
- 2. Member of Faculty Senate (2018 present)
- 3. Graduate Student Coordinator for the Plant and Soil Science Committee (2009 present).
- 4. Participated in the planning of the 2009 Joint Meeting of the Society of Nematologists and Soil Ecology Science in Burlington, VT. (2009)
- 5. Co-authored the Plant and Soil Science Five Year Strategic Plan. (2011)
- 6. Reviewer for the following Journals:
 - Journal of Soil and Water Conservation
 - Journal of Environmental Quality
 - Soil Biology and Biochemistry
 - Pedobiologia
 - Megadrilogia
 - Soil Science
 - Biological invasions
 - Journal of Pulp and Paper Science
 - TAPPI
 - Journal of Environmental Monitoring and Assessment
 - Environmental Science and Technology
- 7. Ad-hoc reviewer for the NSF BIO-DEB, and the following NRI Panels: Ecosystem, Soil Processes.
- 8. Ad-hoc reviewer for the National Environmental Research Council, Canada.
- 9. External reviewer for a faculty promotion at Indiana State University (2006.)
- 10. Panel Member USDA-SBIR Competitive Grant Competition (2010).
- 11. Review Panel Member for performance standards for the SSSA Fundamental and Professional Soil Science Certifications (2011)
- 12. Hosting UVM exams for CSSA Professional and Fundamental Soil Science Certifications (2009 present).
- 13. Evaluator of the URI Bruce Wallace Biotechnology Laboratory Program. 2009 2009
- 14. Review Pane Member, Sustainable Agriculture, Research and Education Partnership Grants (2013 2016)