

CURRICULUM VITAE DAVID W. WOLFE

Professor Emeritus, School of Integrative Plant Science, Cornell University

<https://cals.cornell.edu/david-w-wolfe>

ACADEMIC TRAINING

Ph.D. Ecology, University of California, Davis, 1984
M.S. Vegetable Crops, University of California, Davis, 1981
B.S. Plant Science, University of California, Davis, 1975
Biological Sciences major, University of California, Irvine, 1970-73

FIELDS OF SPECIALIZATION

- Soil and water management, soil health, soil carbon assessment
- Climate change impacts, adaptation, mitigation, and solutions for agriculture and natural resources
- Science communication and policy on climate change and other environmental issues
- Food security and integrated landscape management

PROFESSIONAL APPOINTMENTS

1984-present	Professor (Emeritus 2021-present), Horticulture Section, School of Integrative Plant Science, Cornell University.
2015	Visiting Fellow (sabbatical), Dept. of Agricultural and Biological Engineering, University of Florida
2007	Adjunct Professor, College of Environmental and Resource Sciences, Zhejiang University, Hangzhou, China
1999	Adjunct Professor (sabbatical), Biochemistry Dept., Univ. Nevada, Reno
1991	Visiting Fellow (sabbatical), Dpto. de Agronomia, Universidad de Cordoba, Spain
1981-1984	Graduate Research Associate, Land, Air, Water Resources, University of California, Davis
1978-1981	Staff Research Associate II, Vegetable Crops Extension, University of California, Davis
1975-1977	Staff Research Associate I, Land, Air, Water Resources, West Side Field Station, University of California, Davis.

BIOSKETCH (Brief Career Overview)

Dr. David Wolfe is Professor Emeritus in the School of Integrative Plant Science (Horticulture Section) at Cornell University (<https://cals.cornell.edu/david-w-wolfe>). His research has focused primarily on soil health and water management, and climate change solutions for managed and natural ecosystems. Soon after joining the Cornell faculty in 1984, his projects expanded beyond a US focus, to also address environmental and food security challenges in East Africa and Asia. In addition to peer-reviewed research publications, Dr. Wolfe has maintained a significant outreach program focused on producing resources for farmers in the US and abroad. Other science communication efforts include news media interviews, writing commentary for the popular press, and an award-winning soil ecology book for general audiences, *Tales From the Underground: A Natural History of Subterranean Life*. Interactions with policy-makers include co-authoring the 2008 and 2014 National Climate Assessments sponsored by the U.S. Global Change Research Program, and providing oral and written testimony at state and national government hearings. Teaching contributions have included courses such as “Climate Change

and Food Security" and "Cropping Systems Ecology", and serving on the Curriculum Committee for the Environment & Sustainability major. Dr. Wolfe retired from Cornell in 2021. Recent community service includes: serving on the Board of Directors for the local non-profit Cayuga Lake Watershed Network (www.cayugalake.org) (2016-present); member of the Town of Lansing Conservation Advisory Council (2019-24); Tompkins County Environmental Management Council (2022-23); and Tompkins County Water Resource Council (2022-23).

SELECTED PROJECT LEADERSHIP (2010-present)

- 2017 - 2021: Co-Principal Investigator, New York Soil Health (www.newyorksoilhealth.org). Entire project funding from 2017 - 2021 = \$1.4 M from the NYS Environmental Protection Fund, administered through NYS Dept. of Ag. and Markets.
- 2011-2017: Lead Project Director, \$4.7 M USDA-NIFA/AFRI project (2011-2017): New tools and incentives for carbon, nitrogen, and greenhouse gas accounting and management in agroecosystems
- 2014, Lead author of the Northeast chapter for the U.S. Global Change Research Program National Climate Assessment (<http://nca2014.globalchange.gov/downloads>)
- 2011, Lead and coordinating author for the Ecosystems and Agriculture teams of a New York State (NYSERDA)-funded climate change assessment (ClimAID) focused on identifying key state vulnerabilities and adaptation strategies (www.nyserda.ny.gov/climaid).

RECENT COMMUNITY SERVICE (2016-present)

- **Board of Directors, Cayuga Lake Watershed Network** (2016-present)
- **Conservation Advisory Council**, Town of Lansing, NY (2019-2024)
- **Environmental Management Council**, Tompkins County, NY (2022-23)
- **Water Resources Council**, Tompkins County, NY (2022-23)

SELECTED AWARDS

Sign of Sustainability Award (2010), from the Sustainable Tompkins Board of Directors (www.sustainabletompkins.org), Tompkins County, for climate change research and outreach

Award for Outstanding Team Accomplishment in Extension/Outreach (2008) (Soil Health Program Work Team) from Cornell University, College of Agriculture and Life Sciences

2002 Outstanding Academic Title Award from the editors of *Choice: Current Reviews for Academic Libraries*, for the book: Wolfe, DW 2002. *Tales From the Underground: A Natural History of Subterranean Life*. Basic Books, Hachette Book Group, Boston, MA. (Subsequently translated and published in Spanish, Japanese, and Korean).

SELECTED PUBLICATIONS (Full list includes over 90 peer-reviewed journal articles and 16 book chapters, 2 books, hundreds of Extension pubs and technical reports, dozens of popular press articles and editorials.

Google Scholar Refereed publications data (as of Nov 2025): 9625 citations (3703 since 2020); *i10-index* (refereed pubs with more than 10 citations) = 64; *h-index* = 42)

Refereed Journals:

Raj Subhashni, Roodbar S, Brinkley C, Wolfe D. 2022. Food security and climate change: Differences in impacts and adaptation strategies for rural communities in the Global South and North. *Frontiers in Sustainable Food Systems*. 5:691191. doi: 10.3389/fsufs.2921.691191

Bezner-Kerr R, S Young, C Young, V Snatoso, M Magalasi, M Entz, E Lupafya, L Dakishoni, V Morrone, D Wolfe, S Snapp. 2019. Farming for change: Development of a farmer-engaged integrated agroecology, nutrition, climate change and social equity curriculum in Malawi and Tanzania. *Agriculture and Human Values* 36(3): 549-566.

Comstock J, S Sherpa, F Lin, R Ferguson, S Bailey, J Lehmann, J Beem-Miller, D Wolfe. 2019. Carbonate determination in soils by mid-IR spectroscopy with regional and continental scale models. *PLoS ONE* 14(2): e0210234. <https://doi.org/10.1371/journal.pone.0210235>.

Wolfe DW, A DeGaetano, G Peck, M Carey, L Ziska, J Lea-Cox, A Kemanian, M Hoffmann, D Hollinger. 2018. Unique challenges and opportunities for Northeastern U.S. crop production in a changing climate. *Climatic Change* 146: 231-245

Sweet S, D Wolfe, A DeGaetano, R Benner. 2017. Anatomy of the 2016 drought in the Northeastern United States: Implications for agriculture and water resources in humid climates. *Agricultural and Forest Meteorology* 247: 571-581.

Sherpa S, D Wolfe. H van Es. 2016. Sampling and data analysis optimization for estimating soil organic carbon stocks in agroecosystems. *Soil Sci. Soc. Amer. J.* 80: 1377-1392.

Beem-Miller J, A Kong, S Ogle, D Wolfe. 2016. Sampling for soil carbon stock assessment in rocky agricultural soils. *Soil Sci. Soc. Amer. J.* 80: 1411-1423.

Kolech SA, D Halseth, K Perry, D Wolfe, D Douches, J Coombs, W De Jong. 2016. Genetic diversity and relationship of Ethiopian potato varieties to germplasm from North America, Europe, and the International Potato Center. *Am. J. Potato Res.* 93:609-619.

Wang J, C Wang, N Chen, Z Xiong, D Wolfe, J Zou. 2015. Response of rice to elevated CO₂ and its interaction with rising temperatures or nitrogen supply: a meta-analysis. *Climatic Change* 130: 529-543.

Kolech, Semagn-Asredie, D Halseth, W DeJong, K Perry, D Wolfe, F Megnisti Tirunch, S Schulz. 2015. Analysis of farmer's management of variety diversity and its implications on potato breeding strategy in Ethiopia. *Amer. J. Potato Research.* 92: 551-566.

Kolech, Semagn-Asredie, D Halseth, K Perry, W De Jong, F Megnisti Tirunch, D Wolfe. 2015. Identification of farmer priorities in potato production through participatory variety selection. *Amer. J. Potato Research* 92:648-661.

Dietzel R, D Wolfe, JE Thies. 2011. The influence of winter soil cover on nitrous oxide emissions from agricultural soil. *Soil Biology and Biochemistry* 43:1889-1901.

Lewis, D, S Bell, J Fay, K Bothi, L Gatere, M Kabilo, M Mukamba, E Matokwani, M Mushimbalume, CI Moraru, J Lehmann, J Lassoie, D Wolfe, D Lee, L Buck, AJ Travis. 2011. The COMACO model: using markets to link biodiversity conservation with sustainable improvements in livelihoods and food production. *Proceedings National Academy of Sciences* 108(34): 13957-13962.

Hatfield JL, KJ Boote, BA Kimball, RC Izaurralde, D Ort, A Thomson, DW Wolfe. 2011. Climate impacts on agriculture: implications for crop production. *Agronomy Journal* 103:351-370.

Douglass CH, LA Weston, D Wolfe. 2011. Phytotoxicity and potential allelopathy in pale (*Cynanchum rossicum*) and black (*C. nigrum*) swallowwort. *Invasive Plant Science and Management* 4(1): 133-141.

Idowu OJ, HM van Es, GS Abawi, DW Wolfe, RR Schindelbeck, BN Moebius-Clune, BK Guigino. 2009. Use of an integrative soil health test for evaluation of soil management practices. *Renewable Agriculture and Food Systems*.24(3):214-224.

Wolfe DW, L Ziska, C Petzoldt, A Seaman, L Chase, K Hayhoe. 2008. Projected change in climate thresholds in the Northeastern U.S.: Implications for crops, pests, livestock, and farmers. *Mitigation and Adaptation Strategies for Global Change* 13:555-575.

Idowu OJ, HM van Es, GS Abawi, DW Wolfe, JI Ball, BK Gugino, BN Moebius, R.R. Schindelbeck, A.V. Bilgili 2008. Farmer oriented assessment of soil quality using field, laboratory, and VNIR Spectroscopy Methods. *Plant and Soil* 307:243-253.

Moebius-Clune, B, HM van Es, OJ Idowu, RR Schindelbeck, DJ Moebius-Clune, DW Wolfe, GS Abawi, JE Thies, BK Gugino, R Lucey. 2008. Long-term tillage effects of harvesting maize stover and tillage on soil quality. *Soil Science Society of America Journal* 72(4): 960-969.

Schindelbeck, RR, H.M. van Es, G.S. Abawi, DW Wolfe, T L Whitlow, BK Gugino, OJ Idowu, and BN Moebius. 2008. Integrated assessment of soil quality for landscape and urban management. *Landscape and Urban Planning* 88:78-80..

Hayhoe, K, C Wake, T Huntington, L Luo, M Schwartz, J Sheffield, E Wood, B Anderson, J Bradbury, A Degaetano, T Troy, D Wolfe. 2007. Past and future changes in climate and hydrological indicators in the U.S. Northeast. *Climate Dynamics* 28:381-407.

Warren, DR, MS Weiss, DW Wolfe, B Friedlander, B Lewenstein. 2007. Lessons from science: communication training. *Science* 316:1122 (letter, not peer-reviewed).

Jifon, J.L. and D.W. Wolfe. 2005. High temperature-induced sink limitation alters growth and photosynthetic acclimation to elevated CO₂ in beans (*Phaseolus vulgaris* L.). *J. Amer. Soc. Hort. Sci.* 130(4): 515-520.

Wolfe, D.W., M.D. Schwartz, A.N. Lakso, Y. Otsuki, R.M. Pool, and N. Shaulis. 2005. Climate change and shifts in spring phenology of three horticultural woody perennials in the northeastern United States. *Internat. J. Biometeor* 49(5): 303-309.

Melkonian, J., D.W. Wolfe and T. Owens. 2005. Effects of elevated CO₂ on gas exchange and photochemical and nonphotochemical quenching at low temperature in tobacco plants varying in Rubisco activity. *Photosynthesis Res.* 83:63-74.

Melkonian, J., T.G. Owens, and D.W. Wolfe. 2004. Gas exchange and co-regulation of photochemical and nonphotochemical quenching in bean during chilling at ambient and elevated carbon dioxide. *Photosynthesis Research* 79:71-82.

Thipyapong, P., J. Melkonian, D.W. Wolfe and J.C. Steffens. 2004. Suppression of polyphenol oxidases increases stress tolerance in tomato. *Plant Sci.* 167:693-703.

Jifon, J.L and D.W. Wolfe. 2002. Photosynthetic acclimation of *Phaseolus vulgaris* L. to elevated CO₂ is altered by growth response to nitrogen supply. *Global Change Biol.* 8(10):1018-1027.

Rangarajan, A., B. Ingall, M. Orfanes, and D.W. Wolfe. 2002. In-row spacing and cultivar affect ear yield and quality of early-planted sweet corn. *HortTechnology* 12(3): 410-415.

Oyanedel, E., D.W. Wolfe, A.J. Monforte, S.D. Tanksley, and T.G. Owens. 2001. Using *Lycopersicon hirsutum* as a source of cold tolerance in processing tomato breeding. *Acta Horticulturae* 542:387-391.

Oyanedel, E., D.W. Wolfe, T.G. Owens, A.J. Monforte, and S.D. Tanksley. 2000. Quantitative trait loci analysis of photoinhibition under chilling stress in tomato. *Acta Horticulturae* 521:227-232.

Luo, Y., J. Reynolds, Y. Wang and D. Wolfe. 1999. A search for predictive understanding of plant responses to elevated CO₂. *Global Change Biol.* 5:143-156.

Wolfe, D.W., R. Gifford, D. Hilbert, and Y. Luo. 1998. Integration of acclimation to elevated CO₂ at the whole-plant level. *Global Change Biol.* 4:879-893.

Wilks, D.S. and D.W. Wolfe. 1998. Optimal use and economic value of weather forecasts for lettuce irrigation in a humid climate. *Agric. and Forest Meteorology* 89:115-129.

Boese, S., D.W. Wolfe, J. Melkonian. 1997. Elevated CO₂ mitigates chilling-induced water stress and photosynthetic reduction during chilling. *Plant, Cell and Environ.* 20: 625-632.

Wilks, D.S, D.W. Wolfe, and S.J. Riha. 1995. Simple carbon assimilation response functions from atmospheric CO₂, daily temperature and shortwave radiation. *Global Change Biol.* 1:337-346.

Melkonian J. and D.W. Wolfe. 1995. Relative sensitivity of leaf expansion and stomatal conductance of cucumber to changes in soil and leaf water potentials. *Can. J. Plant Sci.* 75: 909-915.

Wolfe, D.W., D.T. Topoleski, N.A. Gundersheim, and B.A. Ingall. 1995. Growth and yield sensitivity of four vegetable crops to soil compaction. *J. Amer. Soc. Hort. Sci.* 120(6): 956-963.

Andrade, A.P., D.W. Wolfe, and E. Fereres. 1993. Leaf expansion, photosynthesis and water relations of sunflower plants grown on compacted soil. *Plant and Soil* 149: 175-184.

Melkonian, J., and D.W. Wolfe. 1993. An evaluation of hydraulic vs. non-hydraulic root signals controlling shoot response to soil water deficits in cucumber. *Acta Horticulturae* 335: 173-183.

Sadras, V.O., F.J. Villalobos, E. Fereres and D.W. Wolfe. 1993. Leaf responses to soil water deficits: comparative sensitivity of leaf expansion rate and leaf conductance in field-grown sunflower (*Helianthus annuus*, L.). *Plant and Soil* 153(2): 189-194.

Heather, D.W., J.B. Sieczka, M.H. Dickson, and D.W. Wolfe. 1992. Heat tolerance and holding ability in broccoli. *J. Amer. Soc. Hort. Sci.* 117(6): 887-892.

Lakitan, B., D.W. Wolfe, and R. Zobel. 1992. Flooding affects snap bean yield and genotypic variation in leaf gas exchange and root growth response. *J. Amer. Soc. Hort. Sci.* 117(5): 711-716.

Mutschler, M., D.W. Wolfe, E.D. Cobb, K. Yourstone. 1992. Tomato fruit quality and shelf life in hybrids heterozygous for the *alc* ripening mutant. *Hort. Sci.* 27(4): 352-355.

Wolfe, D.W. , M. O. Kelly. 1992. Photosynthesis of *Phaseolus vulgaris* (L.) in relation to leaf nitrogen and chlorophyll accumulation at low growth temperature. *Photosynthetica* 26(3): 475-478.

Ting, C.S., T.G. Owens, D.W. Wolfe. 1991. Seedling growth and chilling stress effects on photosynthesis in chilling-sensitive and chilling-tolerant cultivars of *Zea mays*. *J. Plant Physiol.* 137:559-564.

Wolfe, D. W. 1991. Low temperature effects on early vegetative growth, leaf gas exchange, and water potential of chilling-sensitive and chilling-tolerant crop species. *Annals of Bot.* 67(3): 205-212.

Lakitan, B., D.W. Wolfe. 1990. Effects of vapor pressure gradient on leaf gas exchange in flooded snap bean (*Phaseolus vulgaris* L.). *Indon. J. Trop. Agric.* 2(1):6-13.

Wolfe, D.W. 1990. The challenge: expanding the utilization of irrigation scheduling principles. IN: A. Alvino (ed.) *Scheduling of Irrigation for Vegetable Crops*. *Acta Horticulturae*. 278(2): 879-886.

Wolfe, D.W., C.A. Bache, D.J. Lisk. 1990. Analysis of dithiocarbamate and nickel residues in lettuce and peppers grown in soil containing photodegradable plastic mulch. *J. Food Safety*. 10(4): 281-286.

Albright, L., Wolfe, D.W., S. Novak. 1989. Modeling row cover effects on microclimate and yield. II. Thermal model and simulations. *J. Amer. Soc. Hort. Sci.* 114(4):569-577.

Wolfe, D.W., L. Albright, J. Wyland. 1989. Modeling row cover effects on microclimate and yield. I. Growth response of tomato and cucumber. *J. Amer. Soc. Hort. Sci.* 114(4):562-22

Wolfe, D.W., D.W. Henderson, T.C. Hsiao, and A. Alvino. 1988. Interactive water and nitrogen effects on senescence of maize. I. Leaf area duration, nitrogen distribution, and yield. *Agron. J.* 80(6):859-864.

Wolfe, D. W., D. W. Henderson, T. C. Hsiao, and A. Alvino. 1988. Interactive water and nitrogen effects on senescence of maize. II. Photosynthetic decline and longevity of individual leaves. *Agron. J.* 80(6):865-870.

Wolfe, D.W., E. Fereres, R.E. Voss, 1983. Growth and yield response of two potato cultivars to various levels of applied water. *Irrig. Sci.* 3: 211-222.

Wolfe, D.W., W.L. Sims, 1982. Effects of osmoconditioning and fluid drilling of tomato seed on emergence rate and final yield. *Hort. Sci.* 17(6): 936-937.

Miller, R.J., D.E. Rolston, R.S. Rauschkolb, D.W. Wolfe. 1981. Labelled nitrogen uptake by drip-irrigated tomatoes. *Agron. J.* 73:265-270.

Books and Book Chapters:

Wolfe DW. 2019. *El Subsuelo: Una Historia Natural de la Vida Subterranea*. Seix Barral, Barcelona, Spain. [Revised edition of *Tales From the Underground*, Spanish translation by Javier Calvo, Prologue by Monica Fernandez-Aceytuno]. 350 pp.

Wolfe DW. 2013. Climate change solutions from the agronomy perspective. IN: Hillel D and C Rosenzweig (eds). *Handbook Climate Change and Agroecosystems: Global and Regional Aspects and Implications*. Chapter 2. Imperial College Press. London.

Wolfe DW. 2011. Gardening sustainably with a changing climate. IN: Christopher T (ed.) *The New American Landscape*. Timber Press. Portland, OR. Chap 6, pp. 125-140.

Wolfe DW, J Comstock, H Menninger, D Weinstein, K Sullivan, C Kraft, B Chabot, P Curtis, R Leichenko, P Vancura. 2011. Chap. 6: Ecosystems. IN: Rosenzweig C, W. Solecki, A DeGaetano et al. (eds.) *Responding to Climate Change in New York State*. pp. 163-216. New York Academy of Sciences. Blackwell Pub., Boston, MA.

Wolfe DW, J Comstock, A Lakso, L Chase, W Fry, C Petzoldt, R Leichenko, P Vancura. 2011. Chap. 7: Agriculture. IN: Rosenzweig C, W. Solecki, A DeGaetano et al. (eds.) *Responding to Climate Change in New York State*. pp. 217-254. New York Academy of Sciences. Blackwell Pub., Boston, MA.

Moebius-Clune B.N., O.J. Idowu, R.R. Schindelbeck, H.M. van Es, D.W. Wolfe, G.S. Abawi, B.K. Gugino. 2011. Developing standard protocols for soil quality monitoring and assessment. IN: Bationo A., B. Waswa, J.M. Okeyo, F. Maina, J.M. Kihara (eds.) *Innovations as Key to the Green Revolution in Africa: Exploring the Scientific Facts*. Springer. New York.

Wolfe DW 2006 Approaches to monitoring soil systems. IN: Uphoff, N. et al. (eds.) *Biological Approaches for Sustainable Soil Systems*. CRC Press, Boca Raton, FL. Chap. 47, pp. 671-681.

Wolfe, D.W. 2004, Japanese and Korean translations of *Tales From the Underground* were published in Japan (Seidosha Inc, Tokyo.) and South Korea (Puriwa Ipari Inc., Seoul).

Wolfe DW. 2002. *Tales From the Underground: A Natural History of Subterranean Life*. Basic Books (Hachette Book Group, Boston, MA). 221 pp..

Peet, M. and D.W. Wolfe. 2000. Crop ecosystem responses to climatic change: vegetable crops. IN: Reddy, K.R. and H.F. Hodges (eds.) *Climate Change and Global Crop Productivity*. CAB Internat., Wallingford, UK, chap. 10, pp. 213-243.

Crawford, R.M.M. and D.W. Wolfe. 1999. Temperature: cellular to whole plant and population responses. In: Luo, Y and H. Mooney (eds.) *Carbon Dioxide and Environmental Stress*. Academic Press, San Diego. Chap 3, pp. 61-106..

Wolfe, D.W., F. Azanza and J.A. Juvik. 1997. Sweet corn. IN: Wien, H.C. (ed.), *Physiology of Vegetable Crops*, CAB Internat., Wallingford, UK, chap. 13, pp. 461-479.

Wolfe, D.W. 1994. Physiological and growth responses to atmospheric carbon dioxide. IN: Pessarakli, M. (ed.) *Handbook of Plant and Crop Physiology*, Marcel Dekker, Inc., New York, pp. 223-242.

Wolfe, D.W. and J.D. Erickson. 1993. Carbon dioxide effects on plants: uncertainties and implications for modeling crop response to climate change. IN: Kaiser, H., and T. Drennen (eds.) *Agricultural Dimensions of Global Climate Change*. St. Lucie Press. Delray Beach, Florida, pp. 153-178.

Ting, C. S., T. G. Owens, and D. W. Wolfe. 1990. Chilling-induced alterations in the photosynthetic capacity of chilling-tolerant and chilling-sensitive cultivars of *Zea mays*. In B. Anderson (ed.), *Progress in Photosynthetic Research*. Martinus-Nijhoff.

Miller, R.J., D.W. Wolfe, 1978. Nitrogen inputs and outputs: a valley basin study. In D.R. Nielsen (ed), *Nitrogen in the Environment*. Vol. 1, pp. 163-172. Academic Press. New York.

Theses

Wolfe, DW. 1984. *Water and Nitrogen Effects on Leaf Senescence in Maize (Zea mays L.)*. Ph.D. Dissertation. University of California, Davis.

Wolfe, DW. 1981. *Effects of Different Levels of Applied Water on Crop Development and Yield of Potatoes (Solanum tuberosum L.)*. M.S. Thesis. University of California, Davis.

Selected Technical Reports:

Amsili JP, HM van Es, RR Schindelbeck, KSM Kurtz, D.W. Wolfe, G. Barshad. 2020. Characterization of Soil Health in New York State: Summary. New York Soil Health, www.newyorksoilhealth.org. Cornell University, Ithaca, NY. For pdf: bit.ly/NYSoilHealthCharacterizationSummary.

Wolfe DW (ed). 2019. *New York Soil Health Roadmap*. Cornell University New York Soil Health program funded through NYS Dept of Ag and Markets. Available as a pdf at www.newyorksoilhealth.org. [Also lead organizer of conference]

Wolfe DW. 2019. Written testimony for June 12, 2019 *US House Agric Committee Hearing on Climate Change Resilience and Mitigation*. U.S. House of Representatives, Washington D.C.

Moebius-Clune et al. 2016. Comprehensive Assessment of Soil Health—The Cornell Framework Manual. Edition 3.2. Cornell University, Ithaca, NY. Available as pdf at <https://soilhealth.cals.cornell.edu>

Horton R, G Yohe, D Wolfe, W Easterling, R Kates, M Ruth, E Sussman, A Whelchel. 2014. Northeast (Chapter 16). IN: Mellilo J, TC Richmond, G Yohe et al. (eds.). *Third National Climate Assessment*. U.S. Global Change Research Program. Washington, D.C.

Wolfe D, J Comstock, A Lakso, I Chase, W Fry, C Petzoldt, R Leichenko, P Vancura. 2011. Chapter 7: Agriculture. IN: Rosenzweig C, W Solecki, A DeGaetano, M O'Grady, S Hassol, P Grabhorn (eds). 2011. *Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation*. Technical Report. NYSERDA. Albany, NY. pp. 217-254

Wolfe DW, J Jones, A DeGaetano, J Antle. 2010. Grand Challenge 2: We must adapt to and mitigate the impacts of climate change on food, fiber, and fuel systems. IN: Association of Public Land Grant Universities. *A Science Roadmap for Food and Agriculture*, www.aplu.org.

Bento A., D Wolfe. 2009. *Creating a role for agriculture and forestry in emerging carbon markets*. Cornell Policy Brief (presented to House and Senate in November, 2009). 6. pp..

Wolfe DW, L Chase, C Petzoldt, A Seaman, L Ziska. 2007. Impacts on agriculture. IN: Frumhoff et al. (eds). 2007. *Confronting Climate Change in the U.S. Northeast*. Union of Concerned Scientists Publication. Cambridge, MA (www.northeastclimateimpacts.org).

Wolfe, D.W. (ed.) 2004. *Proceedings: Climate Change and Northeast Agriculture: Developing an Education Outreach Agenda*. Symposium held Nov 17, 2004, Cornell Coop. Ext., Ithaca, NY. 37 pp. [Also lead organizer of conference]

Wolfe, D.W. (ed.). 2003. *Proceedings: Impacts of Climate Change on Horticulture*. Amer. Soc. Hort. Sci. Symposium held in Providence, RI, Oct. 4, 2003. Dept. of Horticulture, Cornell University, Ithaca, NY 60 pp. [Also lead organizer of conference]

Wolfe, DW. 1998. Potential climate change impacts on New England Agriculture. IN: Moore, B.I and B. Rock (eds.) *New England Regional Climate Change Impacts Workshop Summary Report*. White House Office of Science and Technology Policy, Washington, D.C. pp. 145-149.

Wolfe, DW, LC Irland and I Fernandez. Natural Resources Sector Report. 1998. IN: Moore, B. and B. Rock (eds.) *New England Regional Climate Change Impacts Workshop Summary Report*. White House Office of Science and Technology Policy, Washington, D.C. pp. 49-54.

Wolfe, D.W. (ed.) 1996. *Proceedings: Plant Acclimation to Elevated CO₂ Symposium*, held at Lake Tahoe, CA, May 19-23, 1996, UN Global Change and Terrestrial Ecosystems (GCTE) and Cornell University, Ithaca, NY, 112 pp. [Also lead organizer of conference]

Wolfe, D.W., D.S. Wilks, S.J. Riha. 1994. Analysis of temperature effects on spatial and temporal variation of photosynthetic response to CO₂ using a photosynthesis model and regional climate data. *Proceedings, Global Change and Terrestrial Ecosystems (GCTE) Sci. Conf.*, May, 1994, Woods Hole, MA, p. 79.

Recent (2010 to present) Extension Publications (complete list includes >80 publications):

Mason C and D Wolfe. Nov 1, 2018. Survey of vegetable growers and other farmers in New York reveals costs and benefits of soil health practices. *VegEdge Newsletter* 14(24): 8-9. Cornell University. Ithaca, New York. <https://cvp.cce.cornell.edu/newsletter.php>.

Mason C and D Wolfe. Nov/Dec 2018. Survey of farmers in New York reveals challenges and opportunities in soil health. *What's Cropping Up?* 28(5): 79-89.
<https://scs.cals.cornell.edu/extension-outreach/whats-cropping-up/>

Sweet S and D Wolfe. March 2018. Anatomy of a wet year: Insights from New York Farmers. *Cornell Institute for Climate Smart Solutions (CICSS) Research and Policy Brief*. Issue 4. (Also appeared in *Veg Edge, Scaffolds, What's Cropping Up?*)

Sweet S and D Wolfe. March, 2017. Anatomy of a rare drought: Insights from New York farmers. *CICSS Research and Policy Brief*. Issue 3. Cornell Institute for Climate Smart Solutions. Cornell University. Ithaca, NY. <http://climateinstitute.cals.cornell.edu/cicca-publications/>

Wolfe DW, J Beem-Miller, L Chambliss, A Chatrchyan, H Menninger. 2011. *Farming Success in an Uncertain Climate*. Cornell Cooperative Extension Climate Change Program Work Team fact sheet. 4 pages. www.climatechange.cornell.edu

Wolfe DW, J Beem-Miller, A Chatrchyan, L Chambliss. 2011. *Farm Energy, Carbon, and Greenhouse Gases*. Cornell Cooperative Extension Climate Change Program Work Team fact sheet. 4 pages. www.climatechange.cornell.edu

DeGaetano A, A Chatrchyan, D Wolfe, J Beem-Miller, L Chambliss, H Menninger. 2011. *New York's Changing Climate*. Cornell Cooperative Extension Climate Change Program Work Team fact sheet. 4 pages. www.climatechange.cornell.edu

Selected Popular Press

Wolfe DW. April 2023. Vital Signs of Change in our Watershed: FEMA Flood Hazard Areas Expand as Risk Rises. *Cayuga Lake Watershed Network Newsletter*. 2023: Issue 1, 2. (www.cayugalake.org)

Wolfe DW. March 2022. The NYS Soil Health and Climate Resiliency Act: water quality, climate change, and the agriculture community. *Cayuga Lake Watershed Network Newsletter*. 2022: Issue 1. www.cayugalake.org.

Wolfe DW. March 28, 2017. What Trump's climate change executive order means for the future of clean energy. *Fortune Magazine*. <http://www.fortune.com>.

Wolfe DW. January, 2017. Trump's Ag Secretary pick will affect every American. *Brookings Institute* (<http://www.brookings.org>).

Wolfe DW. Apr 4, 2016. Carbon farming is a zero-risk strategy for curbing climate change. *The Hill* (<http://thehill.com>). Contributing column.

Wolfe DW. Feb 2, 2016. Climate change perspectives from Indian country. *The Hill* (<http://thehill.com>). Contributing column.

Wolfe DW. Nov 2, 2015. Business leaders will bring politicians to the table on climate change. *The Hill* (<http://thehill.com>). Contributing column.

Wolfe DW. Oct, 2010. Journey to a future climate. *The New York State Conservationist*. pp. 24-27.

Wolfe, D.W. 2002. Nexus of the underground: A tale of mycorrhizae. *Arnoldia* [Quarterly journal of Harvard University's Arnold Arboretum] 61(3):2-11.

Wolfe, D.W. 2001. Out of thin air: how a special group of microbes tap into the atmospheres huge storehouse of nitrogen and make it available to the rest of us. *Natural History* 110(7): 44-53.

Wolfe, D.W. 2001. The empire underground. *The Wilson Quarterly* 25(2): 18-27.

Wolfe, D.W. 1995. The dirt on soil compaction. *Amer. Veg. Grower* 43(2): 30-33.

Wolfe, D.W. 1993. Be pro-environment and penny-wise. *Amer. Veg. Grower* 41(1): 25-28.

Wolfe, D.W. 1990. New triploid ("seedless") watermelons show promise. *Amer. Veg. Grower*. 38(12): 60-62

Wolfe, D.W. 1989. Follow the right irrigation cues. *Amer. Veg. Grower* 37(4):44-47.

Wolfe, D.W. 1989. Vegetables, Northeast: Sweet Corn. *Amer. Agriculturist*. January, p. 20..

Wolfe, D.W. 1988. Row Covers. *Amer. Agriculturalist*. February, p. 30.

Wolfe, D.W. 1987. Update on sweet corn hybrids. *Amer. Veg. Grower*. April pp. 75-78.

VIDEOS- SELECTED INVITED PRESENTATIONS (links to YouTube)

Wolfe, DW. 2017. "Gardening With a Mission: the Climate Change Challenge" Royal Horticulture Society, Annual John MacLeod Lecture 2017: <https://www.youtube.com/watch?v=yDnu9VcSoHo>

Wolfe, DW. 2013. "The Uniquely Human Illusion of Species Royalty: A Climate Change Perspective" Cornell University Dept of Natural Resources Seminar Series 2013:
<https://www.youtube.com/watch?v=6wA0vpPR6uc>

RECENT (2019-present) INVITED PRESENTATIONS (complete list >600)

Wolfe DW. 6-2-22. Gardening in a changing climate. Adirondacks Wild Center conference. (live zoom presentation).

Wolfe DW. 4-18-22. Connecting the dots: Healthy soil-water quality-climate resilience. Tompkins County Water Resources Council meeting. (live zoom presentation) 0.5 x 22=11.

Wolfe DW. 2-17-22. Connecting the dots: Healthy soil-healthy food-water quality-climate resilience. The Owasco Project Grower Meeting. Sponsored by Cayuga County SWCD and The Nature Conservancy. Lansing, NY. 0.5 x 24 = 12

Wolfe DW. 5-27-21. Climate change in the Cayuga Lake Watershed. Cayuga Lake Watershed Network Spring Community Conference Sessions. [live zoom and recorded webinar presentation].

Wolfe DW. 4-15-21. Frontiers in Soil Biology and Soil Health Management. Armenian Agriculture Professional Training Series. ICARE (Internat Centre for Agribusiness Res and Education) and Armenia National Agrarian University. [live zoom and recorded webinar presentation, with translation].

Wolfe DW. 3-19-21. Sustainable landscape management in a changing climate. Ithaca Native Landscape Symposium. American Society of Landscape Architects, NY Chapter. [live and recorded zoom presentation]

Wolfe DW. 3-1-21. Climate change vulnerabilities in the Finger Lakes, and what we can do about it. Wells College Sustainability Perspectives Seminar Series Wells College, Aurora, NY. [live zoom and recorded webinar presentation]

Wolfe DW. 11-20-20. NY Soil Health 2020 highlights and future plans. New York Soil Health Working Group. Organized by NY Soil Health (www.newyorksoilhealth.org). [live zoom]

Wolfe DW. 10-22-20. Soil health principles and function. Soil Health Specialist Training. New York Soil Health. (live Zoom presentation]

Wolfe DW. 4-23-20. NY Soil Health plans for 2020-21. NYS Soil Health Working Group meeting. [live Zoom presentation]

Wolfe DW. 2-5-20. New York soil health: Where do we go from here? Soil Health Roundtable. NY Senate and Assembly Agriculture and Environment Committees. Albany, NY.

Wolfe DW. 2-4-20. Soil Health Roadmap Priorities. USDA-NRCS Soil Health Committee Workshop. LaFayette, NY.

Rylander, H and D Wolfe. 1-17-20. Soil test results for deep compost treatments. AND Cover crop demo. Deep Compost Session, NOFA-NY Annual Conference. Syracuse, NY.

Rylander, H and D Wolfe. 1-16-20. Characterization of texture and cropping system effects on soil health assessment. AND Cover crop demo. Soil health session, NY Producers Expo. Cornell Cooperative Extension. Syracuse, NY.

Wolfe DW. 1-9-20. Frontiers in soil health practices and evaluation of economic and environmental benefits. Long Island Agriculture Forum. Cornell Cooperative Ext. Riverhead, NY.

Wolfe DW. 11-8-19. Sustainable gardening in a changing climate. Agriculture In-Service Training. Cornell University Cooperative Extension. Ithaca, NY.

Wolfe DW. 10-30-19. Agricultural management and greenhouse gases. Soil Health Training Series for Ag Professionals. Funded by USDA-SARE. Organized by Amer Farmland Trust and NY Soil Health. Hurley, NY.

Wolfe DW. 9-25-19. Soil health and climate change connections. 2019 Soil Health Workshop. Sponsored by Cornell Soil Health Lab and NY Soil Health. Ithaca, NY.

Wolfe DW. 9-10-19. Introduction and Q&A panel for film “Dirt Rich”. Sponsored by City of Ithaca, Sustainable Tompkins and several other organizations. Cinemapolis Theater. Ithaca, NY

Wolfe DW. 6-12-19. **Oral testimony to U.S. House Agriculture Committee hearing** on climate change resilience and mitigation. [1 of 4 panel members, included written testimony (see Technical Reports)]. U.S. House of Representatives. Washington D.C.

Wolfe DW. 6-6-19. Transforming farm and ecosystem management for a changing climate. Confronting Climate Change: Impacts on Agriculture, Forests, Urban Landscapes. Westchester County Soil and Water Conservation District. White Plains, NY.

Wolfe DW. 5-23-19. The Future of Wine in the Finger Lakes (panel discussion). The Nature Conservancy. Ravine’s Winery, Geneva, NY.

Wolfe DW. New York Soil Health program. 4-16-19. WNY Soil Health Working Group Meeting, USDA-NRCS. Geneva, NY.

Wolfe DW. 3-20-19. The New York Soil Health Roadmap: Where do we go from here? Northern New York Soil Health Workshop. The Nature Conservancy. Queensbury, NY

Wolfe DW. 3-1-19. Challenges and opportunities for New York grape growers in a changing climate. Annual Business, Enology, and Viticulture Conference. Cornell Coop Ext., Rochester, NY.

Wolfe DW. 2-9-19. Climate change, food security, and human health. Black Bio-Medical and Technical Assoc (BBMTA), One Health Workshop. Ithaca, NY

RECENT (2019-present) NEWS MEDIA COLLABORATION (complete list > 175, including PBS NOVA, CNN, NPR, NY Times, etc.)

Joe Lamp'l (Joe Gardener Podcast). Oct 27, 2022. "Gardening Sustainably in a Changing Climate". [54 minute interview for national podcast program].

<https://joegardener.com/podcast/gardening-sustainably-changing-climate/>

Anna Canny. May 9, 2022. NY legislation addresses climate change through better farm soil health management. [nationally syndicated and archived radio interview] *Heritage Radio Network*. <https://heritageradiornetwork.org/episode/food-policy-tour-new-york>

Krystal Vasquez. Apr 25, 2022. How to climate-proof your garden. *Sierra Magazine*. (<https://www.sierraclub.org/sierra/how-climate-proof-your-garden>)

Blaine Friedlander. Feb 14, 2022. Cornell-inspired NY soil law buoys climate change resilience. *Cornell Chronicle*. <https://news.cornell.edu/stories/2022/02/cornell-inspired-ny-soil-law-buoys-climate-change-resilience>

Gifford, K. June 14, 2021. New York State Legislature Passes the Soil Health and Climate Resiliency Act. <https://blogs.cornell.edu/soilhealthinitiative/2021/06/14/new-york-state-legislature-passes-the-soil-health-and-climate-resiliency-act/#.YNM6EucpA2w>

Wolfe D with T Christopher. Nov 19, 2019 [Podcast]. Gardening in a Changing Climate. 30- min Podcast interview with Thomas Christopher. Growing Green.

www.thomaschristophergardens.com/podcasts/david-wolfe-gardening-in-a-changing-climate

Navarro, Marcus. May 26, 2020. Life's a Ditch: State Eyes New Beginning for Erie Canal. *Politico*. <https://www.politico.com/states/new-york/city-hall/story/2020/05/25/lifes-a-ditch-state-eyes-new-beginning-for-erie-canal-1286431>

Miguel, Luis. March 1, 2020. La prodigiosa vida del subsuelo. [The prodigious life of the underground]. *Muy Interesante* [Nationally distributed popular science magazine in Spain]. p. 89-95.

Maria-Robles, Jose. Nov 23, 2019. El mundo secreto bajo nuestros pies [The secret world beneath our feet]. *El Mundo*. [Nationally distributed Spanish newspaper]. p. 29.

Tyagi, Srishti. November 14, 2019. What if the world went vegan? *Cornell Daily Sun*. Ithaca, NY. <https://cornellsun.com/2019/11/13/what-if-the-world-went-vegan/>

Sit, Dave. September 14, 2019. Will our Rieslings survive? *Ithaca Times*.

https://www.ithaca.com/news/ithaca/will-our-rieslings-survive/article_14f63e72-d4ac-11e9-bffc-d3f41c1b36a3.html

Simpson, April. August 26, 2019. Creating healthy soil lessens the impact of drought and flooding. Will farmers support it? *Huffington Post*. https://www.huffpost.com/entry/soil-health-farmer-drought-flood-climate_b_5d60262ae4b0c4ac15d42f42

Mooney, Chris. 2019. Climate change impacts in the fastest warming state- New Jersey. *Washington Post*.

Dewitt, Karen and Sarah Gager. July 19, 2019. New York adopts the nation's most aggressive targets for reducing carbon emissions. *WSKG Public Radio*. [recorded interview and website article,

<https://wskg.org/news/new-york-adopts-the-nations-most-aggressive-targets-for-reducing-carbon-emissions/>

Loney, Dan. June 17, 2019. Impact of flooding and the trade war on the Midwest corn belt. *SiriusXM Business Radio*, Live interview hosted by Dan Loney and powered by the Wharton School, University of Pennsylvania. Knowledge@Wharton. 30 minutes.

Friedlander B. June 14, 2019. Wolfe offers ag fixes for ‘complex, severe’ climate change. *Cornell Chronicle*. <https://news.cornell.edu/stories/2019/06/wolfe-offers-ag-fixes-complex-severe-climate-change>

Held, Lisa. May 30, 2019. How New York State is growing carbon farming initiatives. *Edible Manhattan*. www.ediblemanhattan.com.

Moran, Greta. April 30, 2019. The next regeneration: New York wants to fight climate change through good farming. *Salon*. www.salon.com

Moran, Greta. April 30, 2019. The next regeneration: New York wants to fight climate change through good farming. [Cover story] *Grist*. <https://grist.org>

Mendoza-Moyers, Diego. March 19, 2019. Assemblywoman proposes carbon farming program. *Albany Times Union*. <https://www.timesunion.com/business/article/Assemblywoman-proposes-carbon-farming-pilot-13700428.php>

Gifford K. Feb 28, 2019. Roadmap points way to better soil health in New York. *Cornell Chronicle*. <https://news.cornell.edu/stories/2019/02/roadmap-points-way-better-soil-health-new-york>

TEACHING

eCornell CALS 281-284 (2024-present): Narrative and Creative Writing for Nonfiction Certificate. CALS 281-Creative Writing Techniques in Nonfiction; CALS 282-Editing and Revising for Impact; CALS 283-Constructing Influential Op-Eds; CALS 284- Developing a Publishable Personal Narrative.

PLSCI 3600 (2013-2020) Climate Change and Food Security

PLSCI/COMM 3090 (2018, 2019) Experiential Writing in the Yucatan: Environment and Cultural Issues

HORT 1160 (2008-2012) Nature Writing

HORT 460 (2000-2010) Cropping Systems Ecology

BIOEE 771 (2007) Science Communication

HORT 615 (1988-2008) Quantitative Methods in Agric Research

HORT 465 (1987-2000) Vegetable Varieties and Their Evaluation

GRADUATE ADVISING

Theses and Dissertations (serving as Major Advisor)

Sherpa, Sonam. 2019. *Infrared Spectroscopy for Soil Carbon Accounting and Soil Quality Assessment*. Ph.D. Dissertation. Cornell University. Ithaca, NY.

Beem-Miller, Jeff. 2017. *Soil Carbon Assessment: Confronting Climate Change on the Farm*. M.S. Thesis. Cornell University. Ithaca, NY.

Sherpa, Sonam. 2014. *Sampling Optimization for Soil Carbon Assessment in Complex Agroecosystems of the Northeastern United States*. M.S. Thesis. Cornell University. Ithaca, NY.

Bosco, Samuel. 2011. *Soil Carbon Variability and Assessment in a Corn Cropping System in the United States and in Zambia*. M.S. Thesis. Cornell University. Ithaca, NY.

Rich, Justin. 2008. *Winter Nitrogen Cycling in Agroecosystems as Affected by Snow Cover and Cover Crop*. M.S. Thesis. Cornell University.

Douglas, Cameron. 2008. *The Roles of Allelopathy, Morphology and Genetic Diversity in the Invasion of Swallow-wort Species in New York State*. M.S. Thesis. Cornell University.

Pierce, Nathan. 2002. *Genotype and Nitrogen Source Modify Photosynthesis, Nitrogen Allocation, and Growth Response of Phasesolus vulgaris L. Grown at Elevated Atmospheric Carbon Dioxide*. M.S. Thesis. Cornell University.

Oyanedel Eduardo, 2000. *Quantitative Trait Loci Analysis of Chilling Tolerance in Tomato*. Ph.D. Dissertation. Cornell University.

Jifon John. 1999. *Photosynthetic Acclimation to Long-Term CO₂-Enrichment in Phaseolus vulgaris L. Is Modified by Intraspecific Variation and Environmental Stress*. Ph.D. Dissertation. Cornell University.

Melkonian, Jeffrey. 1994. *Plant Water Relations, Biomass Partitioning, and Root Growth of Cucumber in Response to Soil Water Deficits*. Ph.D. Dissertation. Cornell University.

Topoleski, Daniel. 1993. *A Comparison of Four Vegetable Crops for Their Growth Response to Soil Compaction Under Field Conditions*. MPS Project Report. Cornell University.

Minja, Ruth. 1993. *Evaluation of Techniques to Control Tomato Late Blight in Tanzania*. M.S. Thesis. Cornell University.

Heather, Douglas. 1992. *Effects of Temperature, Soil Crusting and Growth Regulators on Harvest Concentration and Post-Harvest Quality of Broccoli*. M.S. Thesis. Cornell University.

Ting, Claire. 1989. *The Effects of Low Temperature and Chilling Stress on Growth and Photosynthesis of Maize*. M.S. Thesis. Cornell University.

Lakitan Benyamin. 1989. *Morphological and Some Physiological Responses of Bean (Phaseolus vulgaris L.) to Flooding*. Ph.D. Dissertation. Cornell University

Theses and Dissertations (serving as Minor Member of Grad Committee)

Raj, Subhashni. 2017. Ph.D. Urban and Regional Planning, University of Buffalo

Young, Carrie. 2017. Ph.D. Communication, Cornell University

Ma, Fangfang. 2017. Ph.D. Horticulture, Cornell University

Hetherington, Amy Lee. 2016. Ph.D. Natural Resources, Cornell University

Kolech, Semagn. 2015. Ph.D. Horticulture, Cornell University

Hart, John. Ph.D. 2015. Ph.D. Plant Breeding, Cornell University

Moebius-Clune, Daniel. 2012. Ph.D. Plant Pathology, Cornell University

Graham, Christopher. 2012. Ph.D. Soil and Crop Science, Cornell University

Leinfelder, Michelle. 2010. Ph.D. Horticulture, Cornell University

Dietzel, Ranae. 2009. M.S. Soil and Crop Science, Cornell University

Otsuki, Yuka. 2009. M.P.S. Education, Cornell University

Davidson, Sarah. 2007. Ph.D. Plant Biology, Cornell University

Maul, Jude. 2007. Ph.D. Horticulture, Cornell University

Goldschmeid, Pablo. 2006. Ph.D. Horticulture, Cornell University

Acuna-Maldonado, Laura. 2005. Ph.D. Horticulture. Cornell University

Martin-Rainey, Katy. 2003. Ph.D. Plant Breeding. Cornell University

Nyankago, Richard. 2003. Ph.D. Vegetable Crops, Cornell University

Thompson, Helen. 1997. M.S. Ornamental Horticulture, Cornell University

Stavinsky, Julie. 1996. M.S. Entomology, Cornell University

Karunatilake, Udaya. 1996. Ph.D. Soil, Crop, Atmospheric Science, Cornell University

Lee Po-Ching, D. 1994. M.S. Vegetable Crops, Cornell University

Matthews, Laura. 1992. M.S. Soil, Crop, Atmospheric Science, Cornell University

Drost, Daniel. 1991. Ph.D. Vegetable Crops, Cornell University

Smith, Ann. 1990. M.S. Floriculture and Ornamental Horticulture, Cornell University
Franjul, Cesar. 1989. M.S. Plant Breeding, Cornell University
Maynard, Elizabeth. 1988. M.S. Vegetable Crops, Cornell University
Wallace, R. 1987. Vegetable Crops, Cornell University