

Peter Compton Schulze

Professor of Biology & Environmental Science
Director, Center for Environmental Studies
Director, Sneed Prairie Restoration
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Education

1989	Ph.D.	Dartmouth College, Hanover, NH, USA	Biology
1984	M.S.	University of Wisconsin – Milwaukee, USA	Zoology
1980	B.A.	Lawrence University, Appleton, WI, USA	Biology

Employment

1994-	Austin College, full-time
	2020 - Director, Sneed Prairie Restoration
	2007 - Professor
	2000 - Director, Center for Environmental Studies
	1999-07 Associate Professor
	1994-99 Assistant Professor
1997-98	Texas Christian University, adjunct graduate faculty in biology
1994-96	US National Academy of Engineering, industrial ecology consultant
1993-94	US National Academy of Engineering, J. Herbert Hollomon Fellow
1990-93	Lehigh University, Research Associate (90-92), Research Scientist (92-93)
1989-90	Dartmouth College, Visiting Assistant Professor of Biology
1989-90	Harvard University, Teaching Assistant (Harvard title for temporary faculty with Ph.D.)
1988-89	US National Science Foundation grant BSR 8705480 to Dr. Carol Folt, Dartmouth College
1988	Colby-Sawyer College, Lecturer
1984-88	Dartmouth Fellowship
1981-84	University of Wisconsin-Milwaukee, teaching and research assistantships
1980-81	Baxter-Travenol Laboratories, Analytical Chemistry Technician

Honors and awards

2017-	US National Science Foundation proposal review panelist (Except years when I have conflicts)
2002-19	Editorial Board, <i>Freshwater Biology</i> , multiple successive appointments 2020 SJR ranking, 6/218 in aquatic science
2018	Austin College Excellence in Teaching and Campus Leadership Award
2012	Austin College CASE Professor of the Year nominee
2011	Austin College Roy F. Melugin Science Division Service Award (Since 2011, I have not permitted the relevant committee to consider me for divisional college awards)
2005	Austin College Science Division Outstanding Scholarship Award

- 2004 *Texas Monthly* magazine, *Best Classes at Austin College*
- 2001 Austin College Science Division Outstanding Scholarship Award
Volunteer of the Year, Perrin Elementary School, Sherman, Texas
- 1995-7 US National Research Council, Steering Committee, Board on Agriculture:
Environmental Implications of Wood as a Raw Material for Industrial Use.
(*Publication*: Board on Agriculture, 1997, *Wood in Our Future*. National
Academy Press. 127 p.)
- 1993 US National Academy of Engineering, J. Herbert Hollomon Fellow
- 1991 Elected to Sigma Xi, The Scientific Research Society
- 1990 Harvard University, Certificate of Distinction in Teaching
- 1984-8 Dartmouth College, Dartmouth Fellowship
- 1980 Lawrence University, Thomas Reid Scholarship (journalism)

Recognition of Austin College Environmental Studies Program

I am not solely responsible for these recognitions, but I have directed the key program for more than two decades.

- 2020 Texas Environmental Excellence Award – Education – Sneed Prairie Restoration
- 2019 Austin College ranked #2 nationally in college/university renewable energy use
per student. Analysis & recognition by Environment America.
- 2016 - Austin College US EPA green power partner.
- 2016 - Association for the Advancement of Sustainability in Higher Education
Sustainability Tracking Assessment & Reporting System (AASHE STARS)
Bronze recognition.
- 2014 - Austin College recognized by Princeton Review as a “green college.”
- 2013 - Austin College IDEA Center (science lab building) LEED Gold Certification.
- 2008 - Austin College signatory of & in compliance with American College and
University Presidents Climate Commitment (now Second Nature Carbon
Commitment), almost 60% Greenhouse gas emissions reduction since 2008.

Professional affiliations

Association for Environmental Studies & Science
 Association for the Sciences of Limnology & Oceanography
 Ecological Society of America
 International Society of Limnology
 Sigma Xi
 Society for Conservation Biology
 Society for Ecological Restoration

Current courses

Evolution, Behavior, & Ecology (BIOL 115)
 Prairie Restoration (January Term 100AB)
 Conservation and Restoration Ecology (BIOL 259)
 Environmental Policy (ENVS 379)
 Environmental Solutions (ENVS 389)

Publications – book & edited books

- 2022 Schulze, P.C., *Obstacles to Environmental Progress: A US Perspective*. University College London Press (open access)
<https://www.uclpress.co.uk/collections/open-access/products/186377>
- 1999 Schulze, P.C. (editor), *Measures of Environmental Performance and Ecosystem Condition*. National Academies Press. Washington, D.C. 303 p. (now open access)
<https://www.nap.edu/catalog/5147/measures-of-environmental-performance-and-ecosystem-condition>
- 1996 Schulze, P.C. (editor) *Engineering Within Ecological Constraints*. National Academies Press. Washington, D.C. 213 p. (now open access)
<https://www.nap.edu/catalog/4919/engineering-within-ecological-constraints>
- 1992 Sprules, W.G., P.C. Schulze, & C.E. Williamson. (editors). *Advanced Techniques for in situ Studies of Zooplankton Abundance, Distribution, and Behavior*. *Archiv für Hydrobiologie / Advances in Limnology* 36, 140 p.
https://www.schweizerbart.de/publications/detail/isbn/9783510470372/Archiv_Ergebnisse_d_Limnol_Heft_36

Publications - peer-reviewed papers, book chapters, & theses

- In prep Schulze, P.C., Aventa, E., Tessier, V., Higgs, S., Utley, K., *High inter-replicate variation in experimental ecosystem management: the first 20 years of the Sneed Prairie restoration*
- 2011 Schulze, P.C. Evidence that fish structure the zooplankton communities of turbid lakes and reservoirs. *Freshwater Biology*, 56:352-365. doi:10.1111/j.1365-2427.2010.02503.x
- 2009 Schulze, P. C., K. J. Wilcox, A. Swift, and J. L. Beckert. Fast, easy measurements for assessing vital signs of tall grassland. *Ecological Indicators*, 9:445-454.
- 2006 Schulze, P.C., J.H. Gillespie, J.R. Womble, and A.F. Silen. The effect of suspended sediments on Lake Texoma *Daphnia*: field distributions and in situ incubations. *Freshwater Biology*, 51:1447-1457.
- 2003 Diggs, G. M. Jr. and P. C. Schulze. Soil-dependent fire frequency: a new hypothesis for the distribution of prairies and oak woodlands/savannas in North Central and East Texas. *Sida*, 20:1137-1151.
- 2002 Schulze, P.C. I = PBAT. *Ecological Economics*, 40:149-150.

- 2001 Schulze, P.C. and J. Mealy. Population growth, technology and tricky graphs. *American Scientist*, 89:209-211.
- 2000 Schulze, P.C., H.E. Zagarese, and C. E. Williamson. A simple flow-through system for *in situ* continuous culture of zooplankton. *Internationale Vereinigung für Theoretische und Angewandte Limnologie* (International Journal for Theoretical & Applied Limnology), 27:1915-1918.
- 1999 Schulze, P.C. & R. A. Frosch, Overview. Pp. 1-12 In: Schulze, P.C. (ed.), *Measures of Environmental Performance and Ecosystem Condition*. National Academy Press. Washington, D.C.
- 1996 Schulze, P.C., R.A. Frosch, & P.G. Risser. 1996. Overview and perspectives. Pp. 1-10 in: P.C. Schulze (ed.), *Engineering within Ecological Constraints*. National Academy Press. Washington, D.C.
- 1995 Schulze, P.C., C.E. Williamson, & B.R. Hargreaves. 1995. Evaluation of a remotely operated vehicle (ROV) as a tool for studying the distribution and abundance of zooplankton. *Journal of Plankton Research*, 17:1233-1243.
- 1995 Schulze, P.C., H.E. Zagarese, & C.E. Williamson. Competition between crustacean zooplankton in continuous cultures. *Limnology & Oceanography*, 40:33-45.
- 1994 Schulze, P.C., M. Leighton, & D.R. Peart. Enrichment planting in selectively logged rain forest: a combined ecological and economic analysis. *Ecological Applications*, 4:581-592.
- 1994 Schulze, P.C. Cost-benefit analysis and environmental policy. *Ecological Economics*, 9:197- 199.
- 1994 Williamson, C.E., H.E. Zagarese, P.C. Schulze, B.R. Hargreaves, & J. Seva. The impact of short-term exposure to UV-B radiation on zooplankton in north temperate lakes. *Journal of Plankton Research*, 16:205-218.
- 1993 Folt, C.L. & P.C. Schulze. Spatial patchiness, individual performance, and predator impacts. *Oikos*, 68:560-566.
- 1993 Folt, C.L., P.C. Schulze, & K. Baumgartner. Characterizing a zooplankton neighbourhood: small scale patterns of association and abundance. *Freshwater Biology*, 30:289-300.
- 1992 Schulze, P.C., J.R. Strickler, B.I. Bergström, M.S. Berman, P. Donaghay, S. Gallager, J.F. Haney, B.R. Hargreaves, U. Kils, G.-A. Paffenhöfer, S. Richman, H.A. Vanderploeg, W. Welsch, D. Wethey, & J. Yen. Video systems for in situ studies of zooplankton. *Archiv für Hydrobiologie / Advances in Limnology*, 36:1-21.

- 1992 Schulze, P.C., C.E. Williamson, & W.G. Sprules. Concluding remarks: A comparison of new devices for studying zooplankton in situ. *Archiv für Hydrobiologie / Advances in Limnology*, 36:135-140.
- 1990 Schulze, P.C. & C.L. Folt. Food resources, survivorship, and reproduction of the omnivorous calanoid copepod *Epischura lacustris*. *Ecology*, 71:2224-2240.
- 1989 Schulze, P.C. The effects of food resources and conspecifics on the foraging, survivorship, and reproduction of the omnivorous copepod *Epischura lacustris*. Ph.D. Dissertation. Dartmouth College. 164 p.
- 1989 Schulze, P.C. & C.L. Folt. Effects of conspecifics and phytoplankton on predation rates of the omnivorous copepods *Epischura lacustris* and *Epischura nordenskioldi*. *Limnology and Oceanography*, 34:444-450.
- 1987 Schulze, P.C. & A.S. Brooks. The possibility of predator avoidance by Lake Michigan zooplankton. *Hydrobiologia*, 146:47-56.
- 1984 Schulze, P.C. Influences upon the vertical distributions of Lake Michigan microcrustaceans. M.S. thesis. University of Wisconsin - Milwaukee. 112 p.

Publications not peer-reviewed

- 2020 *New Yorker* letter to the editor, 9 March, *This Green Earth*
- 2017 TEDx talk, *We Aren't Going to Mars*, 300,000+ views
https://www.youtube.com/watch?v=xo-jvH_Wlmk
- 2017 *Dallas Morning News* letter to editor, 10 June, climate change
- 2014 *Herald-Democrat* (Sherman, Texas), invited op-ed, 2 February, climate change, coauthors K. Kisselle & G. Diggs
- 2005 Beckert, J., L. Mahaffey, J. Fulton, and P. Schulze, *The Blackland Prairie of Texas: Lessons for Elementary Classes*. Copyright 2005, Austin College.
- 2004 Schulze, P.C. (author and producer). *The Blackland Prairie of Texas*. Copyright 2004. Austin College. (Video), <https://www.youtube.com/watch?v=pmY77u5koq4>
- 1997 *Toronto Globe & Mail*, letter to editor, 12 April, recycling
- 1996 20+ newspapers, including *Cleveland Plain Dealer*, *Memphis Commercial Appeal*, *Oakland Tribune*, *Fayetteville Observer*, total circulation of approximately 2 million. Op-ed article - ecological constraints in engineering (associated w/ 1996 book)
- 1993 *Morning Call*, Allentown, Pennsylvania, letter to editor, 7 July, landfill policies

- 1991 *Wall Street Journal*, letter to editor, 7 January, free markets and conservation
- 1991 Schulze, P.C. Incorporation of environmental damages into cost-benefit analyses: an introduction. *Bulletin of the Ecological Society of America*. 72:15-19.
- 1988 Folt, C.L. & P.C. Schulze. Spatial distribution and zooplankton behavior. *Bulletin of Marine Science*. 43:847 (Abstract)

Reviewer for

Current

U.S. National Science Foundation (panelist) 2021, 2020, 2019, 2017

Past

Journals

Archiv für Hydrobiologie 2007, 1999, 98
Bulletin of Marine Science 1992, 87
Conservation Ecology 2003
Diversity and Distributions 2011
Ecological Economics 2006-05, 2002, 2001, 1999-95, 93, 92
Ecology 1997-91
Ecology Letters 2002
Freshwater Biology 2002-2019, 1992
Hydrobiologia 2017, 2014, 2009, 1996
International Review of Hydrobiology 2012
J. Air & Waste Management Association 1999
Limnology & Oceanography 1995, 93
Marine & Freshwater Behaviour & Physiology 1995
National Research Council Board on Agriculture 1997
PLOS One 2013
Southwestern Naturalist 1998

Funding agencies & foundations

CDRF Global 2009, 2006
 US Civ. Res. & Development Foundation 2008, 2006
 US Environmental Protection Agency 2005
 Israel Science Foundation 1996
 US National Science Foundation 1995, 1992
 Flora & Fauna International 1996

University graduate program external reviewer

U. Texas-Arlington, Env. Science & Eng. dept 2003

Book Publishers

Westview 2017
 Prentice-Hall Environmental Science 2005

Graduate thesis committees

Weston Nowlin, M.S., Texas Christian University (degree awarded 1998)
 Gabriella Grad, Ph.D., Lehigh University (degree awarded 1997)

Grants and gifts (*denotes coauthor or contributor, otherwise lead or sole author or solicitor)

- 2018 Oliver Dewey Mayor Foundation gift for Sneed Prairie schoolchild field trips (\$4,500)
- 2014- Private annual gift to Center for Environmental Studies (\$20,000/year)
- 2011 Dixon Water Foundation \$24,000 Sneed project & internships (w/ Dara McCoy)
- 2011 Constellation Energy Ecostar Grant \$4,951 (Sneed project) (w/ Dara McCoy)
- 2011 Margaret A. Cargill Foundation, \$383,612 (addition to previous Cargill gift)
- 2009 Margaret A. Cargill Foundation, \$50,000 (w/ Dara McCoy)
- 2006 US EPA, \$9,880, Sneed Prairie field trips
Whitesboro Rotary Club, \$929 toward construction of Sneed Pavilion
- 2005 Grayson County Rotary Club, \$2,500 toward construction of Sneed Pavilion
Whitesboro Rotary Club, \$825 toward construction of Sneed Pavilion
- 2004 Denison Rotary Club, \$5,000 toward construction of Sneed Pavilion
Grayson County Rotary Club, \$2,500 toward construction of Sneed Pavilion
National Fish and Wildlife Foundation, \$27,774, Field trips and prairie restoration
Magnolia Trust, \$3,000, Sneed Pavilion rainwater catchment system
Sherman Rotary Club, \$5,000 toward construction of Sneed Pavilion
Texas Parks and Wildlife, \$16,672, Prairie restoration field trips for schoolchildren
USFWS, \$920, extension to private lands agreement of 2001
- 2002 *Robert & Ruby Priddy Charitable Trust, environmental studies program, \$480,000
Meadows Foundation, land use and water quality in north central Texas, \$138,000
- 2001 US EPA, prairie restoration and environmental education, \$22,000
Texas Parks and Wildlife Department, environmental education, \$16,000
US Fish and Wildlife Service, prairie restoration, \$3,000
- 2000 US Fish and Wildlife Service, prairie restoration, \$3,000
- 1999 Wray Trust, support for prairie restoration, \$1,000
- 1998 Texas Natural Resources Conservation Commission, municipal recycling, \$13,000 (for City of Sherman)
- 1997 Proposal to anonymous donor, Austin College research boat, \$20,000
- 1991 US National Science Foundation grant # DIR-9110434, principal investigator, \$5,000
- 1985 Sigma Xi Grant in Support of Research, \$300

College service

Program directorships & committee chairs

- 2020- Director, Sneed Prairie Restoration (new title, project director since 1997)
- 2019- Chair, Environmental Sustainability Implementation Subcommittee
- 2013-4 Chair, Executive Committee of the Faculty
- 2011- Chair, Environmental Sustainability Advisory Committee
- 2008-10 Chair, Presidents Climate Commitment Advisory Committee
- 2000- Director, Center for Environmental Studies
- 2000- Chair, Center for Environmental Studies Steering Committee
- 1999-2001 Chair, Watson Fellowship Committee
- 1998 Acting Director, Center for Environmental Studies (spring semester)

Committees

Current

- 2023-4 Faculty Hearing Committee
- 2019- Environmental Sustainability Implementation Committee
- 2017- Sigma Xi/USRA Committee
- 2015- Public Health Advisory Committee
- 2011- Environmental Sustainability Advisory Committee
- 2000- Center for Environmental Studies Steering Committee

Prior

- 2019-20 Faculty Hearing Committee
- 2018 Vice President for Academic Affairs & Dean of Faculty search committee
- 2015-6 Faculty Grievance Committee
- 2015-6 Institutional Animal Care and Use Committee
- 2015 Classical and Modern Languages Self Study Committee
- 2011-2014 Executive Committee of the Faculty
- 2009-10 Faculty Hearing Committee
- 2004-06 Healthy Campus Committee
- 2002-07 Lilly Project Steering Committee
- 2001-07 Science Building Design Team
- 2004-05 Faculty Hearing Committee
- 1999-2001 Curriculum Review Steering Committee
- 1998-2000 Curriculum Committee
- 1996-8 Student Conduct Council
- 1995-01 Watson Fellowship Committee

Advisor to Students & Student Group (besides routine advisory assignments)

- 2018-20 Coach for student TEDx speaker
- 2006 - Amnesty International
- 2004 - Alpha Delta Chi sorority (volunteer work at prairie restoration 1997-present)

Community Service

UN Online Ecosystem Restoration Course Invited Facilitator

- 2022 Facilitators fielded questions from the 16,000 registered course participants worldwide during several months of fall, 2022.
<https://www.learningfornature.org/en/courses/ecosystem-restoration-2022/#learndash-course-content>

Grand Central Station Dining Car (soup kitchen & food bank) <http://grandcentralsherman.com/>

- 2019-22 Capital Campaign Co-Chair
- 2018- Board of Directors
- 2016- Volunteer

Sherman Independent School District

- 2015-17 Athletic Booster Club Board
- 2010-14 ACES (after school enrichment program) Advisory Committee
- 2008 Sherman Education Foundation Advisory Board
- 2008 Texas Essential Knowledge & Skills Science committee, Piner Middle School
- 2006-08 Perrin Elementary School parent representative, District Site Based Committee

Youth soccer coach

- 2010-14 Coach for one competitive team per season (through spring 2014)
- 2000-10 Coach and Assistant Coach for two recreational or competitive teams per season (spring & fall)

Grayson County Agricultural Extension (“AgriLife”) Service

- 2009-2011 Grayson County AgriLife Natural Resource Committee (Chair 2009-2010)

City of Sherman

- 2008 Comprehensive Plan Advisory Committee
- 1996-2000 Keep Sherman Beautiful Commission

North Texas Job Corps Center, McKinney, TX

- 2006-08 Academic Advisory Council

Belden Street Montessori School

- 1999-2005 Board President
- 1998-2005 Board Member

Texoma Council of Governments

- 1999-2002 Natural Resources Advisory Committee
- 1996-8 Steering Committee, Household hazardous waste collection
- 1995-8 Texoma Environmental Advisory Committee
- 1996 Steering Committee, Texoma Teachers' Institute for Environmental Education