

Renée Van Buren, Professor

Department of Biology, Utah Valley University Orem, UT 84085-5999
801-863-8479 (phone); 801-863-8064 (fax)
renee.vanburen@uvu.edu

Education

- Ph.D.** 1994. Arizona State University, Tempe AZ. Major: Botany.
Dissertation: A Morphological, ecological, and molecular comparison of the Autumn Buttercup to close congeners. Advisor: D. W. Clark.
- M.S.** 1991. Brigham Young University, Provo, UT Major: Botany.
Thesis: Electrophoretic and HPLC amino acid analysis of quinoa (*Chenopodium quinoa* Willd) seed proteins. Advisor: D. J. Fairbanks.
- B.S.** 1981. Brigham Young University, Provo, UT. Major: Botany.
Emphasis: Teaching Composite. Certified Utah Secondary Education.
- A.S.** 1976. Ricks College, Rexburg, ID. Major: Botany

Employment

- Professor:** Department of Biology, Utah Valley University, Orem, UT. 7/05-present.
Teaching assignments: Native trees and shrubs (BOT 4300); Introduction to Grasses (BOT 4500); Utah Flora (BOT 2100); Field Botany (BOT 2050); Honor's Biology (BIOL 101H); Ecology (BIOL 3700); Majors Biology (BIOL 2130); Conservation Biology (BIOL 3800); Environmental Biology (BIOL 2500); Non-majors Biology (BIOL 1010); Senior Seminar (BIOL 494R).
- Associate Professor:** Department of Biology, Utah Valley State College, Orem, UT 7/02-7/05.
- Assistant Professor:** Department of Biology, Utah Valley State College, Orem, UT. 9/95-6/02.
- Research Associate/Part-time Faculty:** Department of Botany and Range Science, Brigham Young University, Provo, UT, 4/93-97; endangered plant species biology. Supervisor Dr. K. T. Harper. Supported by various federal agency contracts. Adjunct faculty 1997-present.
- Adjunct Faculty:** Science Department. 1/95-4/95. Biology 101. Utah Valley State College, Orem, UT. 1/91-4/91.
- Graduate Research Assistant:** Department of Botany and Range Science, Brigham Young University, Provo, UT, 9/90-3/93; endangered plant species biology (contracts with Bureau of Land Management, U.S. Fish and Wildlife, and U.S. Forest Service). Supervisor-Dr. K. T. Harper. 9/89-12/89; Quinoa seed protein analysis. Supervisor-Dr. D. J. Fairbanks.
- Graduate Teaching Assistant:** Department of Botany and Range Science, Brigham Young University, Provo, UT. Plant Classification Lab, Genetics, Plant Biotechnology Lab, Honors Biology, Biology 100, Plant Physiology Lab
- Assistant Research Botanist:** Research and Development, Nature's Sunshine Products, Spanish Fork, UT, 2/88-9/89. Botanical monographs and chemical assay development.
- Biology Teacher:** Timpview High School, Provo, UT, 8/83-6/87. General Biology and Advanced Placement Biology. Dixon Middle School, Provo, UT, 8/82-6/83.

Eighth grade life science. Indian Hills Middle School, Draper, UT, 8/81-6/82.
Sixth grade life science and seventh grade physical science.

Administrative positions and assignments:

Director: Capitol Reef Field Station, Utah Valley University. 2008-2013
Department Chair: Department of Biology, Utah Valley University. 01/03-5/05
Director: Kimball T. Harper Botany Endowment, UVU. 2000-2016
Advisor: UVU Botany Club. 1995-2016
Associate Director: Pope Southwest Desert Institute, Utah Valley University. 2000-2002

Research emphasis: Native trees and shrubs of Utah; endangered and rare plants of Utah

Honors, awards and memberships

2013 Sabbatical leave (1 semester), Department of Biology, Utah Valley University
2012 Award of Excellence in the area of leadership, VP of Academic Affairs, UVU
2009 UVU Distinguished Faculty Award, Utah Valley University Foundation
2007 Best of State, State of Utah, Environmental Category
2007-08 Sabbatical leave (1 semester), Department of Biology, Utah Valley University
2004 Conservation Partnership Award, The Nature Conservancy, Utah chapter
2002-2003 Educator of the Year, Wolverine Achievement Award, UVSC
1999-2000 Excellence in Service Award, UVSC Service Learning
1999-2000 Distinguished Volunteer Service Award, Wolverine Achievement Award, UVSC
2000 (spring) State of Utah Campus Compact Service Recognition Award Recipient
1999 (fall) Teacher of the Semester nominee: UVSC athletic dept.
1999 (spring) Teacher of the Year nominee: UVSC
1999 NISOD Excellence Award: National Institute for Staff and Organizational Development
1998 Educator of the Year Nominee: Wolverine Achievement Awards
1997-98 Teacher of the Year Recipient: Utah Valley State College
1995-96, 1996-97; 1997-98 Teacher of the Year Nominee: UVSC
1997 (spring) Teacher of the Semester Recipient: Athletic Dept and Student Athletes, UVSC
1992-94 Botany Tuition Award: Arizona State University, Tempe, AZ
1991 College Tuition Award: Brigham Young University, Provo, UT
1976 Athletic Scholarship-Volleyball: Arizona State University, Tempe, AZ
1974 Carolyn Chipman Award for Excellence in Academics and Athletics: Provo High School, Provo, UT

Committee Activity

University:	2014	SVPA search committee member
	2010-2013	UVU Community and Continuing Education Community Advisory Board member
	2010	Associate VP for Academics search committee member
	1999-2000	Dean Search Committee member
	1998-1999	Co-chair "Build the Legacy": Faculty and Staff Campaign

	1997-2008	Calendar Committee member
	1997-2007	Affirmative Action/Equal Opportunity Representative
	1996-2003	Service Learning Committee member
College:	2003-2006	Scholarly Activities Committee member
	1996-2004	Development Committee member
Department:	2009-2016	Harper Botany Scholarship-committee chair
	1996-present	Various Faculty Search Committees
	2015-2017	Curriculum Committee (chair and member)

Faculty Senator, UVSC: 1999-2002

Board of Trustees: The Nature Conservancy, Utah Chapter. 2005-2007.

Student Research and Senior Thesis committees: Utah Valley University

Kody Rominger 2014-2017. “Phenology of *Astragalus holmgreniorum*”.

Matthew Wang 2014-2016. “Disturbance on *Astragalus holmgreniorum* sites”.

Megan Covert 2011-2013. “Vegetation patterns surrounding the Capitol Reef Field Station”.

Jennifer Summers 2011-2013. “Vegetation Communities of the Capitol Reef Field Station”. Committee chair.

Nicholas Alvaredo 2011-2013. “Vegetation Communities of the Capitol Reef Field Station”. Committee chair.

Dan Cloward 2008. “Reintroduction of *Ranunculus aestivalis* at the TNC Panguitch preserve”. Committee chair.

Jessie W. Breinholt 2007. “Population genetic structure of an endangered Utah endemic *Astragalus ampullarioides* (*Fabaceae*) (*Welsh*) *Welsh*”. Committee member.

Wendy Yates 2006. Seed bank studies of *Astragalus holmgreniorum*. Committee chair

Allyson Bench 2005. Soil seed bank of *Astragalus ampullarioides*, a Rare Endemic of Southern Utah. Committee chair.

Josh Simpson 2004. “The Effects of Native and Exotic Competitors on Growth and Survival of Seedlings of *Astragalus holmgreniorum*.” Committee chair.

Michael Kern. 2003 “Reintroduction of the Gray Wolf to Yellowstone National Park: The Effects the Gray Wolves have on the Ecosystem”. Committee member.

Donna Barnes 2002. “A Vegetative Survey of a Sphagnum lake in a Sub-alpine Forest of the Southeastern Uinta Mountains.” Committee member.

Thomas Will Vogan 2002. “The Ecological Impact of the Military”. Committee member

Rachel Harper 2002. “Hydrology of the UVSC Wetland.” Committee member.

Joy Clancy 2002. “Funding Opportunities for Utah Valley State College Wetlands Restoration Program”. Committee chair.

Graduate Student committees-non UVU:

2008-2013. Joshua Simpson-PhD. City University of New York, Lehman College, and New York Botanical Garden, Bronx, New York. Committee member.

2009-2011. Allyson Searle-M.S. Department of Plant and Wildlife Sciences, Brigham Young University, Provo, Utah. Committee member.

Peer Reviewed Publications

Rominger, K. R., S. E. Meyer, **R. Van Buren**, and A. Searle. **2017**. Factors Affecting Phenological Patterns in the Warm Desert Spring Ephemeral *Astragalus holmgreniorum* Barneby (Fabaceae). In review *Plant Species Biology*.

Covert, M. C., E. A. Holt, and **R. Van Buren**. **2016**. Vegetation Patterns Associated with Abiotic Factors and Human Impacts at the Capitol Reef Field Station. *Southwestern Naturalist* 60(2).

Van Buren, R., J. C. Cooper, L. M. Shultz, and K. T. Harper. **2012**. Woody Plants of Utah: A Field Guide with Identification Keys to Native and Naturalized Trees, Shrubs, Cacti, and Vines. p 513. Utah State University Press, Logan Utah.

Breinholt, J. W., **R. Van Buren**, O. R. Kopp, and C. L. Stephen. **2009**. Population genetic structure of an endangered Utah endemic *Astragalus ampullarioides* (Fabaceae) (Welsh) Welsh. *American Journal of Botany* 96(3): 1-7.

Harper, K.T. and **R. Van Buren**. **2004**. Dynamics of a Dwarf Bear-Poppy (*Arctomecon humilis*) Population over a Sixteen-year Period. *Western North American Naturalist* 64(4): 482-491.

Van Buren, R., K. T. Harper. **2003**. Demographic and Environmental relations of two rare *Astragalus* species endemic to Washington Co., UT: *Astragalus ampullarioides* and *A. holmgreniorum*. *Western North American Naturalist* 63(2): 236-243.

Tolman, J., **R. Van Buren**, K.T. Harper. **2003**. Genetic analysis of the rare species, *Salix arizonica* (Salicaceae), and associated willows in Arizona and Utah. *Western North American Naturalist* 63(3): 273-282.

K.T. Harper, **R. Van Buren**, Z.T. Aanderud. **2001**. The influence of interplant distance and flower number on seed set in *Arctomecon humilis* Cov. (Papaveraceae). In: Southwestern Rare and Endangered Plants: Proceedings of the Third Conference, Sept. 2000, Flagstaff, AZ.

W. Rosler, J.G. Cooper, **R. Van Buren**, K.T. Harper. **2001**. Plant Diversity at Box-Death Hollow Wilderness Area, Garfield Co., UT. In: Proceedings by the Rocky Mountain Research Station, Forest Service, U.S. Department of Agriculture, Ogden, UT. Provo, UT. 2000.

McArthur, E. D., **R. Van Buren**, S. Sanderson, K.T. Harper. **1998**. Insight on the Contribution of RAPD to the Taxonomy of *Sphaeromeria*, *Artemisia*, and *Tanacetum* (Compositae, Anthemideae). *Great Basin Naturalist* 58(1): 1-11.

McArthur, E.D, J. Mudge, **R. Van Buren**, S. Sanderson, B. Babbel. **1998**. RAPD Analysis of *Artemisia* subgenus *Tridentate* species and hybrids. *Great Basin Naturalist* 58(1): 12-27.

Van Buren, R. and K. T. Harper. **1996.** Habitats of selected buttercups within the *Ranunculus occidentalis* complex (Ranunculaceae). *Madroño* 43(3): 369-383.

Van Buren, R. and K. T. Harper. **1996.** Genetic variation in *Arctomecon* (Papaveraceae) *Proceedings: Second Southwestern Rare and Endangered Plant Conference Flagstaff, AZ. Rocky Mountain Forest & Range Experimental Station.*

Harper K. T., **R. Van Buren**, and S. G. Kitchen. **1996.** Invasion of alien annuals and ecological consequences in salt desert shrublands of western Utah. In: Barrow, Jerry R.; McArthur, E. Durant; Sosebee, Ronald E.; Tausch, Robin J., comps. *Proceedings: symposium on shrubland ecosystem dynamics in a changing climate; 1995 May 23-25; Las Cruces, NM. Gen. Tech. Rep. INT-GTR-. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station.*

Harper K. T., **R. Van Buren**, B. Douglas, and V. Armstrong. **1995.** Quantifying the persistence of individual populations of rare plants in southwestern Utah. *Proceedings: Second Southwestern Rare and Endangered Plant Conference Flagstaff, AZ. Published by the Rocky Mountain Forest & Range Experimental Station.*

Van Buren, R., K. T. Harper, W. R. Andersen, D. J. Stanton, S. Seyoum, J. L. England. **1994.** Evaluating the relationship of autumn buttercup (*Ranunculus acriformis* var. *aestivalis*) to some close congeners using random amplified polymorphic DNA. *American Journal of Botany* 81(4): 514-519.

Reviews, posters, presentations, and abstracts.

Covert, M., E. Holt, **R. Van Buren**. 2013. Vegetation Patterns associated with abiotic factors and human impact at the Capitol Reef Field Station. UCUR. Poster presentation.

Summers, J., N. Alvaredo, **R. Van Buren**. 2010. Vegetation of Capitol Reef Field Station. UCUR. Poster presentation. Weber State University, UT

Searle, A., W. Yates, **R. Van Buren**. 2008 -UCUR. Poster presentation, Utah Valley University, Orem, Utah.

Brailsford D., **R. Van Buren**. 2008 -UCUR. Poster presentation, Utah Valley University, Orem, Utah.

K.T. Harper and **R. Van Buren**. 2004. Leaders of “Vegetation of the Uinta Mountains” Fieldtrip, Botany 2004, National Conference, Snowbird, Utah, August, 2004.

Van Buren, R. and K.T. Harper. 2000. Presentation. Status Report for two endemic and rare species of *Astragalus* (*A. holmgreniorum* and *A. ampullarioides*). Third Southwestern rare and endangered plant conference Flagstaff, AZ, Sept. 25-28, 2000.

Van Buren, R. and V. Armstrong. 1998. Presentation. Status of Two Endemic *Astragalus* of Southern Utah. Red Butte Native Plant Conference. Midway Utah. 19-21 Nov. 1998.

Van Buren, R. and K. H. Hart. 1996. Book review: Wild Plants of the Pueblo Province. *Great Basin Naturalist*.

- Van Buren, R.** and K. T. Harper. 1995. Presentation. Genetic variation in *Arctomecon* (Papaveraceae). Second Southwestern Rare and Endangered Plant Conference Flagstaff, AZ, Sept. 1995.
- Van Buren, R.** and K. T. Harper. 1995. Poster. Genetic Variation among populations of *Arctomecon* (Papaveraceae). AIBS, San Diego, CA. August.
- Harper K. T. and **R. Van Buren**. 1994. Poster. Relationships of selected taxa within the genus *Erigeron* as determined by RAPD analysis. AIBS, Knoxville TN.
- Harper K. T. and **R. Van Buren**. 1994. Presentation. Conditions under which soil cyanobacteria and cyanolichens enhance availability of essential elements to associated seed plants. AIBS, Knoxville, TN.
- Van Buren, R.**, K. T. Harper, W. R. Andersen, J. L. England. 1992. Poster. Evaluating the relationship of autumn buttercup to some close congeners using random amplified polymorphic DNA. V International Symposium, International Organization of Plant Biosystematists. June 11-15, 1992, St. Louis, Missouri, USA.
- Van Buren, R.**, D. J. Fairbanks, L. R. Robison, and K. W. Burgerner. 1990. Abstract. Electrophoretic and amino acid analysis of quinoa seed proteins. Agron. Abs.
- Burgerner, K. W., L. R. Robison, D. J. Fairbanks, and **R. Van Buren**. 1990. Abstract. An evaluation of quinoa seed accessions for mineral, protein, and amino acid content. Agron. Abs.

Proposal and manuscript peer reviews:

- Shultz B. et al. 2003. Manuscript review: Evaluating the Geographic Distribution of Herbarium Collections in Utah from the Atlas of the Vascular Plants of Utah. Western North American Naturalist.
- Williams F. and R. Johnson. 2003. Proposal evaluation. Germination Studies of Native Plants for Overcoming Seed Dormancy and Germination Barriers. Submitted to BYU-FMC Agriculture Research and Education Fund.