Professional Résumé

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I. Present Positions:

Research Faculty, Department of Biology, University of New Mexico
Research Associate, Division of Arthropods and Division of Mammals,
Museum of Southwestern Biology, University of New Mexico
Volunteer Scientist, National Park Service, Valles Caldera National Preserve

II. Education:

Ph.D., Biology/Ecology, Utah State University, Logan	1982
M.S., Zoology, University of Georgia, Athens	1978
B.A., Biology, Colorado College, Colorado Springs	1974
Falls Church High School, Fairfax County, Virginia	1970

III. Employment History:

2015-2024: Chief, Science & Resource Stewardship Division,
Valles Caldera National Preserve, National Park Service
2003-2015: Director, Scientific Services Division,
Valles Caldera National Preserve, USDA
1989-present: Research Faculty, Department of Biology, University of New Mexico
1991-2003: Director, Sevilleta Research Field Station, University of New Mexico
1989-2003: Program Director/Senior Program Manager, Sevilleta Long-Term
Ecological Research Project, University of New Mexico
1984-1988: Assistant Professor, Research, Utah State University
1982-1984: Post-doctoral Associate, Department of Biology, Utah State University
1978-1982: Graduate Research/Teaching Assistant, Utah State University
1976-1978: Graduate Research Assistant, Ecology Center, University of Georgia
1975-1976: Emergency Medical Technician, Ambulance/ER, St. Mary's Hospital,
Athens, Georgia
1974-1975: Emergency Medical Technician/Rescue, Mountain-Valley Ambulance,
Colorado Springs, Colorado
1972, 1973 (summers): Clerk, United States Navy, Naval Air Systems Command,
Jet Propulsion Division, Arlington, Virginia
1969, 1970 (summers): Clerk, Central Intelligence Agency, Middle East/North
Africa Division, Langley, Virginia

IV. Scientific Interests:

Ecosystem management and forest/grassland/wetland restoration; fire ecology; fisheries and wildlife management; climatic influences on plant and animal populations; disturbance and successional processes; plant-animal interactions; predator-prey relationships of both vertebrates and invertebrates; tree masting; decomposition and nutrient cycling; ecology of zoonotic diseases.

V. Scientific Publications: (ORCID #0000-0002-2099-6824)

1. Reale, J. K., T. P. Archdeacon, R. González-Pinzón, B. M. Summers, M. V. Segura, E. A. Joseph, D.W. Pittenger, R. R. Parmenter, M. R. Grace, C. N. Dahm, and D. J. Van Horn. 2026. Wildfire variably impacted stream water quality and gross primary production in adjacent, similarly burned, montane watersheds. *Frontiers in Water*, 8:1779046. https://www.frontiersin.org/articles/10.3389/frwa.2026.1779046

2. Parmenter, R. R., T. J. Obermeit, B. P. Stout, S. M. Hall, O. B. Myers, and D. C. Lightfoot. 2026. Forest restoration thinning and burning treatments create habitat mosaics and facilitate succession of grasshopper and cricket communities (Orthoptera). *Forest Ecology and Management*, 607:123576. https://doi.org/10.1016/j.foreco.2026.123576

3. Peyton, M. A., S. R. Garrison, R. B. Passernig, M. M. Suazo and R. R. Parmenter. 2025. Early successional changes in coniferous forest small mammal communities following a high-severity summer wildfire in New Mexico, USA. *Ecosphere*, 2025; 16:e70280. https://doi.org/10.1002/ecs2.70280

4. Knudsen, J., R. R. Parmenter, T. Sumnicht, and R. M. Verble. 2024. High-severity wildfire alters ant (Hymenoptera: Formicidae) foraging assemblage structure in montane coniferous forests and grasslands in the Jemez Mountains, New Mexico, USA. *Conservation*, 4:830-846. https://doi.org/10.3390/conservation4040049

5. Nigro, K. M., J. H. Barton, D. Macias, V. B. Chaudhary, I. S. Pearse, D. M. Bell, A. Chen, N. L. Cleavitt, E. E. Crone, D. F. Greene, E. P. Holland, J. F. Johnstone, W. D. Koenig, N. J. Lyon, T. E. X. Miller, M. Schulze, R. S. Snell, J. K. Zimmerman, J. M. H. Knops, S. McNulty, R. R. Parmenter, M. A. Winterstein, R. I. Zlotin, J. M. LaMontagne, and M. D. Redmond. 2024. coMAST: Harmonized seed production data for woody plants across U.S. long term research sites. *Ecology*, 2024:e4463. https://doi.org/10.1002/ecy.4463

6. Journé, V., M. Bogdziewicz, B. Courbaud, G. Kunstler, T. Qiu, M.-C. A. Acuña, D. Ascoli, Y. Bergeron, D. Berveiller, T. Boivin, R. Bonal, T. Caignard, M. Cailleret, R. Calama, J. J. Camarero, C.-H. Chang-Yang, J. Chave, F. Chianucci, T. Curt, A. Cutini, A. Das, E. Daskalakou, H. Davi, N. Delpierre, S. Delzon, M. Dietze, S. D. Calderon, L. Dormont, J. M. Espelta, W. Farfan-Rios, M. Fenner, J. Franklin, C. Gehring, G. Gilbert, G. Gratzer, C. H. Greenberg, A. Guignabert, Q. Guo, A. Hacket-Pain, A. Hampe, Q. Han, M. E. Hanley, J. H. R. Lambers, J. Holík, K. Hoshizaki, I. Ibanez, J. F. Johnstone, J. M. H. Knops, R. K. Kobe, H. Kurokawa, J. Lageard, J. LaMontagne, M. Ledwon, F. Lefèvre, T. Leininger, J.-M. Limousin, J. Lutz, D. Macias, A. Marell, E. McIntire, E. V. Moran, R. Motta, J. Myers, T. A. Nagel, S. Naoe, M. Noguchi, J. Norghauer, M. Oguro, J.-M. Ourcival, R. Parmenter, I. Pearse, I. M. Pérez-Ramos, L. Piechnik, T. Podgórski, J. Poulsen, M. D. Redmond, C. D. Reid, P. Samonil, C. L. Scher, W. H. Schlesinger, B. Seget, S. Sharma, M. Shibata, M. Silman, M. Steele, N. Stephenson, J. Straub, S. Sutton, J. J. Swenson, M. Swift, P. A. Thomas, M. Uriarte, G. Vacchiano, A. Whipple, T. Whitham, S. J. Wright, K. Zhu, J. Zimmerman, M. Żywiec, and J. S. Clark. 2024. The relationship between maturation size and maximum tree size from tropical to boreal climates. *Ecology Letters*, http://dx.doi.org/10.1111/ele.14500

7. Parmenter, R. R., A. R. Grendys, D. W. Pittenger, and G. McCurdy. 2024. Effects of an annular solar eclipse on montane stream water quality in New Mexico, USA. *Freshwater Science*, 23:427-438. https://doi.org/10.1086/732799

8. Steffen, A., J. A. Civitello, R. A. Loehman and R. R. Parmenter. 2024. Drought, fire, and archaeology in the Jemez Mountains. *NPS Intermountain Park Science,* 2(1). https://www.nps.gov/articles/000/ips-drought-fire-archeology.htm

9. White, L. M., S. J. Gifford, G. Kaufman, E. Gese, M. A. Peyton, R. R. Parmenter, and J. W. Cain III. 2024. Seroprevalence, blood chemistry, and patterns of canine parvovirus, distemper virus, plague, and tularemia in free-ranging coyotes (*Canis latrans*) in northern New Mexico, USA. *Journal of Wildlife Diseases,* 60:14-25. https://doi.org/10.7589/JWD-D-22-00079

10. Brantley, E. M., A. G. Jones, A. M. Hodson, J. W. Brown, M. G. Pogue, M. Suazo, and R. R. Parmenter. 2023. Short-term effects of a high-severity summer wildfire on conifer forest moth (Lepidoptera) communities in New Mexico, USA. *Environmental Entomology,* 52(4):606-617. https://doi.org/10.1093/ee/nvad068

11. Gibson, K, D. A. Neher, N. C. Johnson, R. R. Parmenter, and A. J. Antoninka. 2023. Heavy logging machinery impacts soil physical properties more than nematode communities. *Forests*, 14, 1205. https://doi.org/10.3390/f14061205

12. Qui, T., M.-C. Aravena , D. Ascoli, Y. Bergeron, M. Bogdziewicz, R. Bonal, T. Boivin, T. Caignard, M. Cailleret, R. Calama, J. J. Camarero, C.-H. Chang-Yang, J. Chave, F. Chianucci, B. Courbaud, A. Cutini, A. Das, N. Delpierre, S. Delzon, M. Dietze, S. D. Calderon, L. Dormont, J. Espelta, T. Fahey, W. Farfan-Rios, J. Franklin, C. Gehring, G. Gilbert, G. Gratzer, C. Greenberg, A. Guignabert, Q. Guo, A. Hacket-Pain, A. Hampe, Q. Han, J. Holik, K. Hoshizaki, I. Ibañez, J. Johnstone, V. Journe, T. Kitzberger, J. Knops, G. Kunstler, J. Lageard, J. LaMontagne, F. Lefevre, T. Leininger, J.-M. Limousin, J. Lutz, D. Macias, A. Marell, E. McIntire, C. Moore, E. Moran, R. Motta, J. Myers, T. Nagel, M. Noguchi, R. Parmenter, P. Samonil, I. Pearse, I. Perez-Ramos, L. Piechnik, T. Podgorski, J. Poulsen, M. Redmond, C. Reid, K. Roman, F. Rodriguez-Sanchez, J. Sanguinetti, C. Scher, B. Seget, S. Sharma, M. Silman, M. Steele, N. Stephenson, J. Straub, S. Sutton, J. Swenson, M. Swift, P. Thomas, M. Uriarte, G. Vacchiano, A. Whipple, T. Whitham, A. Wion, S. Wright, K. Zhu, J. Zimmerman, M. Żywiec, and J. Clark. 2023. Masting is uncommon in trees that depend on mutualist dispersers in the context of global climate and fertility gradients. *Nature Plants,* 9:1044-1056. https://doi.org/10.1038/s41477-023-01446-5

13. Parmenter, R. R., and M. V. Losleben. 2023. Influence of mixed conifer forest thinning and prescribed fire on soil temperature and moisture dynamics in proximity to forest logs: A case study in New Mexico, USA. *Forests,* 14, 1117. https://doi.org/10.3390/f14061117

14. Bogdziewicz, M., M.-C. Aravena Acuña, R. Andrus, D. Ascoli, Y. Bergeron, D. Brveiller, T. Boivin, R. Bonal, T. Caignard, M. Cailleret, R. Calama, S. D. Calderon, J. J. Camarero, C.-H. Chang-Yang, J. Chave, F. Chianucci, N. L. Cleavitt, B. Courbaud, A. Cutini, T. Curt, A. J. Das, H. Davi, N. Delpierre, S. Delzon, M. Dietze, L. Dormont, W. Farfan-Rios, C. A. Gehring, G. S. Gilbert, G. Gratzer, C. H. Greenberg, A. Guignabert, Q. Guo, A. Hacket-Pain, A. Hampe, Q.

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15. Qui, T., R. Andrus, M.-C. Aravena, D. Ascoli, Y. Bergeron, R. Berretti, D. Berveiller, M. Bogdziewicz, T. Boivin, R. Bonal, D. C. Bragg, T. Caignard, R. Calama, J. J. Camarero, C.-H. Chang-Yang, N. L. Cleavitt, B. Courbaud, F. Courbet, T. Curt, A. J. Das, E. Daskalakou, H. Davi, N. Delpierre, S. Delzon, M. Dietze, S. D. Calderon, L. Dormont, J. Espelta, T. J. Fahey, W. Farfan-Rios, C. A. Gehring, G. S. Gilbert, G. Gratzer, C. H. Greenberg, Q. Guo, A. Hacket-Pain, A. Hampe, Q. Han, J. H. R. Lambers, K. Hoshizaki, I. Ibanez, J. F. Johnstone, V. Journe, D. Kabeya, C. L. Kilner, T. Kitzberger, J. M. H. Knops, R. K. Kobe, G. Kunstler, J. G. A. Lageard, J. M. LaMontagne, M. Ledwon, F. Lefevre, T. Leininger, J.-M. Limousin, J. A. Lutz, D. Macias, E. J. B. McIntire, C. M. Moore, E. Moran, R. Motta, J. A. Myers, T. A. Nagel, K. Noguchi, J.-M. Ourcival, R. Parmenter, I. S. Pearse, I. M. Perez-Ramos, L. Piechnik, J. Poulsen, R. Poulton-Kamakura, M. D. Redmond, C. D. Reid, K. C. Rodman, F. Rodriguez-Sanchez, J. D. Sanguinetti, C. L. Scher, W. H. Schlesinger, H. S. Van Marle, B. Seget, S. Sharma, M. Silman, M. A. Steele, N. L. Stephenson, J. N. Straub, I-F. Sun, Samantha Sutton, J, J. Swenson, M. Swift, P. A. Thomas, M. Uriarte, G. Vacchiano, T. T. Veblen, A. V. Whipple, T. G. Whitham, A. P. Wion, B. Wright, S. J. Wright, K. Zhu, J. K. Zimmerman, R, Zlotin, M, Zywiec, and J. S. Clark. 2022. Limits to reproduction and seed size-number trade-offs that shape forest dominance and future recovery. *Nature Communications,* 13:2381, https://doi.org/10.1038/s41467-022-30037-9

16. Journé, V., R. Andrus, M.-C. Aravena, D. Ascoli, R. Berretti, D. Berveiller, M. Bogdziewicz, T. Boivin, R. Bonal, T. Caignard, R. Calama, J. J. Camarero, C.-H. Chang-Yang, B. Courbaud, F. Courbet, T. Curt, A. J. Das, E. Daskalakou, H. Davi, N. Delpierre, S. Delzon, M. Dietze, S. D. Calderon, L. Dormont, J. M. Espelta, T. J. Fahey, W. Farfan-Rios, C. A. Gehring, G. S. Gilbert, G. Gratzer, C. H. Greenberg, Q. Guo, A. Hacket-Pain, A. Hampe, Q. Han, J. H. R. Lambers, K. Hoshizaki, I. Ibanez, J. F. Johnstone, D. Kabeya, R. Kays, T. Kitzberger, J. M. H. Knops, R. K. Kobe, G. Kunstler, J. G. A. Lageard, J. M. LaMontagne, T. Leininger, J.-M. Limousin, J. A. Lutz, D. Macias, E. J. B. McIntire, C. M. Moore, E. Moran, R. Motta, J. A. Myers, T. A. Nagel, K. Noguchi, J.-M. Ourcival, R. Parmenter, I. S. Pearse, I. M. Perez-Ramos, L. Piechnik, J. Poulsen, R. Poulton-Kamakura, T. Qiu, M. D. Redmond, C. D. Reid, K. C. Rodman, F. Rodriguez-Sanchez, J. D. Sanguinetti, C. L. Scher, H. Schmidt Van Marle, B. Seget, S. Sharma, M. Silman, M. A. Steele, N. L. Stephenson, J. N. Straub, J. J. Swenson, M. Swift, P. A. Thomas, M. Uriarte, G. Vacchiano, T. T. Veblen, A. V. Whipple, T. G. Whitham, B. Wright, S. J. Wright, K. Zhu, J. K. Zimmerman, R. Zlotin, M. Zywiec, and J. S. Clark. 2022. Globally, tree fecundity exceeds productivity gradients. *Ecology Letters,* 25:1471–1482. https://doi.org/10.1111/ele.14012

17. Gibson, K. S., N. C. Johnson, C. Laturno, R. R. Parmenter, and A. Antoninka. 2022. Abundance of mites, but not of collembolans or nematodes, is reduced by restoration of a *Pinus ponderosa* forest with thinning, mastication, and prescribed fire. *Forest, Trees and People,* 7:100190 https://doi.org/10.1016/j.tfp.2022.100190.

18. Sharma, S., R. Andrus, Y. Bergeron, M. Bogdziewicz, D. C. Bragg, D. Brockway, N. L. Cleavitt, B. Courbaud, A. J. Das, M. Dietze, T. J. Fahey, J. F. Franklin, G. S. Gilbert, C. H. Greenberg, Q. Guo, J. H. R. Lambers, I. Ibanez, J. Johnstone, R. Kays, C. L. Kilner, J. Knops, W. D. Koenig, G. Kunstler, J. M. LaMontagne, D. Macias, J. A. Myers, R. R. Parmenter, S. Pearse, R. Poulton-Kamakura, M. D. Redmond, C. D. Reid, K. C. Rodman, C. L. Scher, W. H. Schlesinger, M. Steele, N. L. Stephenson, J. J. Swenson, M. Swift, T. T. Veblen, A. V. Whipple, T. G. Whitham, A. P. Wion, C. W. Woodall, R. Zlotin and J. S. Clark. 2022. North American tree migration paced by climate in the West, lagging in the East. *Proceedings of the National Academy of Sciences*, 119 (3) e2116691118. https://www.pnas.org/content/119/3/e2116691118

19. Parmenter, R. R., and G. E. Glass. 2021. Hantavirus outbreaks in the American Southwest: Propagation and retraction of rodent and virus diffusion waves from sky-island refugia. *International Journal of Modern Physics B*, 2140052, http://dx.doi.org/10.1142/S021797922140052X

20. Clark, J. S., R. Andrus, M. Aubry-Kientz, Y. Bergeron, M. Bogdziewicz, D. C. Bragg, D. Brockway, N. L. Cleavitt, S. Cohen, B. Courbaud, R. Daley, A. J. Das, M. Dietze, T. J. Fahey, I. Fer, J. F. Franklin, C. A. Gehring, G. S. Gilbert, C. H. Greenberg, Q. Guo, J. H. R. Lambers, I. Ibanez, J. Johnstone, C. L. Kilner, J. Knops, W. D. Koenig, G. Kunstler, J. M. LaMontagne, K. L. Legg, J. Luongo, J. A. Lutz, D. Macias, E. J. B. McIntire, Y. Messaoud, C. M. Moore, E. Moran, J. A. Myers, O. B. Myers, C. Nunez, R. R. Parmenter, S. Pearse, R. Poulton-Kamakura, E. Ready, M. D. Redmond, C. D. Reid, K. C. Rodman, C. L. Scher, W. H. Schlesinger, A. M. Schwantes, E. Shanahan, S. Sharma, M. Steele, N. L. Stephenson, S. Sutton, J. J. Swenson, M. Swift, T. T. Veblen, A. V. Whipple, T. G. Whitham, A. P. Wion, K. Zhu, and R. Zlotin. 2021. Continent-wide tree fecundity driven by indirect climate effects. *Nature Communications*, 12:1242 (11 pp.). https://doi.org/10.1038/s41467-020-20836-3

21. Dewar, J. J., D. A. Falk, T. W. Swetnam, C. H. Baisan, C. D. Allen, R. R. Parmenter, E. Q. Margolis, and E. J. Taylor. 2021. Valleys of fire: Historical fire regimes of forest-grassland ecotones across the montane landscape of the Valles Caldera National Preserve, New Mexico, USA. *Landscape Ecology,* 36:331–352. https://doi.org/10.1007/s10980-020-01101-w

22. Summers, B. M., D. J. Van Horn, R. González-Pinzón, R. J. Bixby, M. R. Grace, L. R. Sherson, L. J. Crossey, M. C. Stone, R. R. Parmenter, T. S. Compton, and C. N. Dahm. 2020. Long-term data reveal highly variable metabolism and transitions in trophic status in a montane stream. *Freshwater Science,* 39:241-255. https://doi.org/10.1086/708659

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24. Frey, J. K., E. A. Beever, C. D. Hathcock, R. R. Parmenter, and M. L. Westover. 2019. Discovery of the yellow-bellied marmot (*Marmota flaviventris*) in the Jemez Mountains, New Mexico: examining competing hypotheses for range extension. *Western North American Naturalist,* 73:285-294. https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=2519&context=wnan

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27. Conver, J. L., D. A. Falk, S. R. Yool, and R. R. Parmenter. 2018. Modeling fire pathways in montane grassland-forest ecotones. *Fire Ecology,* 14:17-32. https://fireecology.springeropen.com/articles/10.4996/fireecology.140117031

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VI. Professional Service:

1. Ecological Society of America:
   (A) Associate Editor-in-Chief (Animal Ecology Track), "*ECOSPHERE*", 2015-present.
   (B) Subject Matter Editor, "*ECOSPHERE*", 2010-present.
   (C) Associate Editor, "*Frontiers in Ecology and the Environment*", 2007-present.
   (D) Member, ESA Rapid Response Team, 2012-2016.
   (E) Future Meetings Committee, 1999-2001.
   (F) Local Program Chairman, ESA National Meeting in Albuquerque, August, 1997.
   (G) ESA Officers Nominations Committee Member, 1995.
   (H) Chairman, Long-Term Studies Section, 1993-1995.

2. American Society of Mammalogists:
   (A) Committee member for Animal Care and Use in Research, 1997-1999.

3. National Science Foundation:
   (A) Advisor/reviewer to the National Ecological Observing Network (NEON) for Operations Review Panel, 2012-2016.

(B) Review committee member for NEON small mammal and zoonotic disease program, 2013.
(C) Advisor/consultant to NEON for Network Planning and Fundamental Surveillance Unit (FSU) design and development, 2007-2008.
(D) Chairman, Workshop IV for Development of Biodiversity Observing Network (BON), 1999 (transformed into NEON after 2005).
(E) NSF Ecology of Infectious Diseases Program, Review Panel Member, 2004-2006.
(F) NSF Ecology Program, Review Panel Member. 1998-2000.
(G) NSF Ecosystems Program, Review Panel Member. 1993-1996.
(H) NSF Proposal Reviewer for (1) Oceanography Program, (2) Field Stations and Marine Biological Laboratories Program, (3) Population/Systematics Program, (4) Science & Technology Centers, (5) Geosciences Program.

4. Department of Agriculture:
   (A) Proposal Reviewer, USDA Ecosystems Research Program.
   (B) Committee Member, USDA Forest Service, Southwest Grazing and Assessment Committee, Mammals Section, 2001.

5. Community Service:
   (A) Advisory Board Member, Rio Grande Water Fund (2014-2024).
   (B) Advisory Board Member, Southwestern Indian Polytechnic Institute (Bureau of Indian Education), Natural Resources Program (2014-2024).
   (C) Member, Jemez Mountains Salamander Working Team (2014-2024).

6. Manuscript reviewer for the following scientific journals:
   American Journal of Tropical Medicine and Hygiene
   American Midland Naturalist
   Annales Zoologici Fennici
   Arid Land Research and Management
   Biodiversity and Conservation
   Biology and Fertility of Soils
   BioScience
   Coleopterists Bulletin
   Copeia
   Ecography
   Ecohealth
   Ecologia Austral
   Ecology
   Ecology Letters
   Ecological Applications
   Ecosphere
   Ecosystems
   Entomologica Fennica
   Environmental Entomology
   Environmental Management
   European Journal of Wildlife Research
   Forest Ecology and Management

Frontiers in Ecology and the Environment
Invasive Plant Science and Management
Journal of Applied Ecology
Journal of Arid Environments
Journal of Herpetology
Journal of Mammalogy
Journal of the North American Benthological Society
Journal of Rangeland Ecology and Management
Journal of Tropical Ecology
Journal of Wildlife Management
Nature - Education
Oecologia
Oikos
Pedobiologia
Plant Ecology
PLOS ONE (Biology)
Polar Biology
Prairie Naturalist
Proceedings of the Kansas Entomological Society
Proceedings of the National Academy of Sciences
Restoration Ecology
Southwestern Naturalist
Texas Journal of Science
Trends in Ecology & Evolution (TREE)
Western North American Naturalist

VII. Graduate student advisory committees, University of New Mexico:

Justin P. Dodd (Ph.D., Earth & Planetary Sciences)
Gerardo S. Azpiri (Ph.D., Biology)
Ana Davidson (Ph.D., Biology)
Robert Dello-Russo (Ph.D., Anthropology)
Sandra Brantley (Ph.D., Biology)
Charles Buxbaum (Ph.D., Biology)
Timothy Haarmann (Ph.D., Biology)
Yvonne McClellan (Ph.D., Biology)
Stephen Dwyer (Ph.D., Civil Engineering)
Steven Huckett (M.S., Biology)
Todd Thompson (M.S., Biology)
Michael Friggens (M.S., Biology)
Joslyn Garcia (M.S., Biology)
Jon Dunnum (M.S., Biology)
Kari Schmidt (M.S., Anthropology)
David Tinnin (M.S., Biology)
Luis Felipe Gonzales (M.S., Physics & Astronomy)
Martina Suazo (M.S., Biology)
Ryan Kelly (M.S., Water Resources)

Samantha Cordova (M.S., Biology)
Angela Gregory (Ph.D., Civil Engineering [Hydrology])
Sasha Escamilla (M.S., Biology)
Samantha Brodley (M.S., Biology)

Other universities:

Megan Friggens (Ph.D., Forestry Science, Northern Arizona University, Flagstaff)
Suzanne Gifford (M.S., Dept. Wildland Resources, Utah State University, Logan)
Lance Bernal (M.S., Dept. Natural Resources Management, Texas Tech University, Lubbock)
Josh Conver (M.S., School of Natural Resources & Environment, University of Arizona)
Mark Peyton (M.S., Dept. Natural Resources Management, Texas Tech University, Lubbock)
Monica Juarez (M.S., Environmental Sciences, University of Texas, San Antonio)
Andrea Russie (M.S., Environmental Sciences, University of Texas, San Antonio)
Michael Wine (Ph.D., Hydrology, New Mexico Tech University, Socorro)
Sharon Smythe (Ph.D., Dept. Natural Resources Management, Texas Tech University, Lubbock)
Kremer, Lauren (M.S., Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces)
Kara Gibson (Ph.D., School of Forestry, Northern Arizona University)
Leah White (M.S., Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces)
Colton Padilla (M.S., Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces)
Matthew Keeling (M.S., Dept. of Fish, Wildlife, and Conservation Ecology, New Mexico State University, Las Cruces)

VIII. Funded Research Grants (listed by funding agency):

A. NATIONAL SCIENCE FOUNDATION:

1. Ecological drivers of rodent-borne disease outbreaks: Trophic cascades and dispersal waves. 2003-2009. Amount: $1,746,268. Principal Investigators: Robert R. Parmenter, Terry L. Yates, V. M. Kenkre, Gregory Glass, James Mills, Darin Carrol, Kenneth Gage, and Michael Kosoy.

2. SGER: Invasion and establishment dynamics of West Nile Virus in the Rio Grande Valley of New Mexico, Colorado and Texas. 2003-2004. Amount: $49,999. Principal Investigators: Robert R. Parmenter, Gregory E. Glass, Rudy Bueno, and V. M. Kenkre.

3. Sevilleta LTER III: Long Term Ecological Research in a Biome Transition Zone. 2000-2006. Amount: $4,200,000. Principal Investigators: Clifford N. Dahm, James R. Gosz, Robert R. Parmenter, William T. Pockman, Blair O. Wolf, and Terry L. Yates.

4. Sevilleta LTER II: Biome-level constraints on population, community, and ecosystem responses to climate fluctuations. 1994-2000. Amount: $3,780,000. Principal Investigators: Bruce T. Milne, James H. Brown, James W. Brunt, Clifford N. Dahm, Donald W. Duszynski, Ann S. Evans, David C. Lightfoot, Robert R. Parmenter, Paul M. Rich, Caleton S. White and Terry L. Yates.

5. Sevilleta LTER Supplement Grant Proposals (Equipment, REU, Schoolyard LTER):
   Supplement to Sevilleta Long Term Ecological Research. 1989-1990. Amount: $60,000.
   Supplement to Sevilleta Long Term Ecological Research. 1990-1991. Amount: $66,000.
   Supplement to Sevilleta Long Term Ecological Research. 1991-1992. Amount: $69,500.
   Supplement to Sevilleta Long Term Ecological Research. 1992-1993. Amount: $74,955.
   Supplement to Sevilleta Long Term Ecological Research. 1993-1994. Amount: $74,913.
   Supplement to Sevilleta Long Term Ecological Research. 1994-1995. Amount: $75,000.
   Supplement to Sevilleta Long Term Ecological Research. 1995-1996. Amount: $20,000.
   Supplement to Sevilleta Long Term Ecological Research. 1996-1997. Amount: $20,000.
   Supplement to Sevilleta Long Term Ecological Research. 1997-1998. Amount: $15,000.
   Supplement to Sevilleta Long Term Ecological Research. 1998-1999. Amount: $113,960.
   Supplement to Sevilleta Long Term Ecological Research. 1999-2000. Amount: $99,994.
   Supplement to Sevilleta Long Term Ecological Research. 2000-2001. Amount: $55,000.
   Supplement to Sevilleta Long Term Ecological Research. 2001-2002. Amount: $51,968.
   Intellectual Connectivity Supplement to Sevilleta LTER. 1999. Amount: $235,186.

6. Ecosystem Recovery Following Three Centuries of Livestock Grazing in Central New Mexico. 1992-1994. Amount: $25,245. Principal Investigators: R. R. Parmenter and J. R. Gosz.

7. Research Experiences for Undergraduates: Establishment of an REU Site with the Sevilleta LTER Program. 1991-1992. Amount: $49,600. Principal Investigators: J. R. Gosz and R. R. Parmenter.

8. Research Experiences for Undergraduates: Establishment of an REU Site with the Sevilleta LTER Program. 1992-94. Amount: $151,800. Principal Investigators: R. R. Parmenter, J. R. Gosz, A. S. Evans.

9. Research Experiences for Undergraduates: The REU Site Program with the Sevilleta LTER Program. 1995-98. Amount: $150,000. Principal Investigators: A. Evans, U. Shepard, and R. R. Parmenter.

10. Research Experiences for Undergraduates: The REU Site Program with the Sevilleta LTER Program. 1999-02. Amount: $120,000. Principal Investigators: R. R. Parmenter and J. R. Gosz.

11. Scientific Research Experiences for Minority Undergraduates in the Sevilleta LTER Program: Career Enhancement and Training in Environmental Biology. 1993-98. Amount: $245,000. Principal Investigators: R. R. Parmenter and J. W. Brunt.

12. Academic Research Infrastructure: Renovation and Replacement of Research and Research-Training Facilities in the Department of Biology, University of New Mexico. 1997.

Amount: $960,000. UNM Cost-share: $2,300,000. Principal Investigators: T. L. Yates, R. R. Parmenter and H. Snell.

13. Undergraduate Mentorships in Environmental Biology (UMEB): Career Enhancement for Undergraduates in Environmental Biology. 2001-2005. Amount: $400,000. Principal Investigators: R. R. Parmenter and W. Gannon.

14. Small mammal – vegetation interactions in an alpine tundra ecosystem (Niwot Ridge): Rodent impacts on tundra plants and arthropods during episodes of food and shelter shortages. 1989-1991. Amount: $50,491. Principal Investigators: James A. MacMahon and Robert R. Parmenter.

15. A Study of Ecosystem Development of Newly Perturbed Sites on Mount St. Helens. 1984-1987. Amount: $734,996. Principal Investigators: Lawrence C. Bliss, Roger Del Moral, Fiorenzo C. Ugolini, John Edwards, Jerry Franklin, Eldon H. Franz (U. Washington), with Robert R. Parmenter and James A. MacMahon on subcontract to Utah State University for small mammal research.

NSF Field Station and Marine Laboratories facility development grants for the Sevilleta Research Field Station:

1. The Sevilleta Field Station: Development of a Regional Research Center in New Mexico. 1991. Amount: $140,000. UNM Cost-share: $560,000.

2. The Sevilleta Field Station: Laboratory Equipment for Ecological Research. 1992. Amount: $119,834. UNM Cost-share: $60,000.

3. The Sevilleta Field Station: Construction of a Desert-Plant Lath House and a Shop/Storage Building. 1993. Amount: $74,820. UNM Cost-share: $25,000.

4. The Sevilleta Field Station: Construction of a Library/Computer Center and Expansion of Housing for Visiting Researchers. 1994. Amount: $175,000. UNM Cost-share: $700,000.

5. The Sevilleta Field Station: Enhancements to Computation, Information, and Transportation. 1995. Amount: $123,120. UNM Cost-share: $61,560.

6. The Sevilleta Field Research Station: Expansion of Research and Educational Facilities for Multi-Organizational Environmental Programs. 1999. Amount: $150,888 (NSF) + $125,000 (TNC); Total = $275,888.

7. The Sevilleta Research Field Station: Development of a Long-Term Sample Processing Laboratory and Storage Facility. 2001-2003. Amount: $79,562. UNM Cost-share: $20,000.

8. The Sevilleta Research Field Station: Development of water resources and a wireless cloud for remote data acquisition. 2003-2005. Amount: $74,000. UNM Cost-share: $25,000.

B. NATIONAL PARK SERVICE:

1. Resilient Landscapes: Valles Caldera Resilient Landscapes Collaborative (Department of Interior, Office of Wildland Fire). 2015-2024. Amount: $11,330,000. Project leader: R. R. Parmenter.

2. The El Malpais National Monument: Survey of Biological Resources. 1992-1994. Amount: $90,000. Principal Investigators: R. R. Parmenter, J. R. Gosz, D. Bleakley, D. C. Lightfoot.

3. The Bandelier National Monument: Long-term Ecological Measurements of Biological Resources. 1992-1996. Amount: $17,264. Principal Investigators: R. R. Parmenter and D. C. Lightfoot.

4. The Pecos National Historical Park: A Survey of Vertebrate and Invertebrate Fauna. 1992-1994. Amount: $55,641. Principal Investigators: R. R. Parmenter and D. C. Lightfoot.

5. Ecosystem Recovery After Fire in a Mixed-Conifer Forest: The Arthropod Fauna of Bandelier National Monument. 1993-1994. Amount: $8,500. Principal Investigators: R. R. Parmenter and D. C. Lightfoot.

6. The Petroglyphs National Monument: Survey of Biological Resources. 1994-1996. Amount: $33,908. Principal Investigators: R. R. Parmenter, D. C. Lightfoot, and D. Bleakley.

7. Capulin Volcano National Monument: Survey of Listed Species. 1995-1998. Amount: $12,372. Principal Investigators: R. R. Parmenter and D. C. Lightfoot.

C. BUREAU OF LAND MANAGEMENT:

1. Joint Fire Science Program: Fire Regimes of Montane Grasslands of the Valles Caldera National Preserve, New Mexico. 2006-2011. Amount: $244,989. Principal Investigators: D. Falk, T. Swetnam, C. Allen, and R. Parmenter.

D. USDA FOREST SERVICE:

1. The Southwest Jemez Mountains Collaborative Forest Landscape Restoration Project (CFLRP). 2010-2019. Amount: $35,000,000, + $35,000,000 cost-share from Valles Caldera National Preserve and USDA Santa Fe National Forest. R. Parmenter as Team Leader for Science and Monitoring during the 10-year restoration project.

2. Application of daily MODIS remote sensing imagery to grassland fuels management in northern New Mexico. 2007-2008. Amount: $13,500, + $10,110 cost-share = $24,610. Principal Investigators: R. Parmenter and K. Benedict.

3. Responses of Wild Turkey (*Meleagris gallopavo*) to forest thinning and prescribed fire in northern New Mexico. 2007-2008. Amount: $21,740, + $52,187 cost-share = $73,927. Principal Investigator: R. Parmenter.

4. Ecosystem responses to prescribed fire and elk/cattle grazing in an upland watershed of the Middle Rio Grande Basin: Valles Caldera National Preserve. 2005-2008. Amount: $199,495 + $211,450 cost share = $410,945. Principal Investigators: R. Parmenter, C. Allen, C. Caldwell, R. DuBey, P. Ford, G. Jacobi, D. Moore, B. Pendleton, R. Pendleton, A. Steffen, J. Tsatsaros, C White.

5. Arthropod Community Development on the Mount St. Helens Volcano, 1980-1990: The ground-dwelling beetle fauna. 1990-1991. Amount: $2,700. CA-PNW90-695. Principal Investigator: R. R. Parmenter.

E. FEDERAL CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC):

1. The dynamics of small mammal populations and *Bartonella* infection in New Mexico. 2001-2003. Amount: $61,570. Principal Investigator: R. R. Parmenter. IPA for Mr. David Tinnin.

F. DEPARTMENT OF ENERGY: LOS ALAMOS NATIONAL LABORATORY:

1. Application of SPLASH hydrology model to soils in arid environments. 2002. Amount: $12,480. Principal Investigators: R. R. Parmenter and S. Martens.

G. DEPARTMENT OF ENERGY: SANDIA NATIONAL LABORATORY:

1. Scientific Research Experiences for Minority Undergraduates in the Sevilleta LTER Program: Career Enhancement and Training in Environmental Biology. 1993-98. Amount: $80,000 (Funds matched NSF Grant listed above).

H. DEPARTMENT OF DEFENSE, U.S. AIR FORCE:

1. Grassland Biodiversity After 50 Years of Livestock Exclusion on Kirtland Air Force Base. 1993-1994. Amount: $50,000. Principal Investigator: R. R. Parmenter.

2. An Ecosystem Survey of the Air Force Melrose Range, New Mexico: Floral and Faunal Biodiversity. 1993-1994. Amount: $60,000. Principal Investigator: R. R. Parmenter.

3. Development of a Geographical Information System for Cannon Air Force Base, Clovis, New Mexico. 1994-1996. Amount: $220,000. Principal Investigator: R. R. Parmenter.

I. DEPARTMENT OF DEFENSE, U.S. ARMY:

1. A Survey of Vegetation and Small Mammal Communities on the Dugway Proving Grounds, Utah. 1989. Amount: $15,000. Principal Investigators: R. R. Parmenter and N. E. West.

J. DEPARTMENT OF TRANSPORTATION:

1. Alternative Transportation Planning for Public Access and Use in the Valles Caldera National Preserve, New Mexico: Strategic Planning of a Low Volume Motorized Transportation System. Federal Transit Authority, Alternative Transportation in Parks and Public Lands Program (ATPPL # DTFT60-09-X-00016). 2009-2011. Amount: $200,000. Project Leader: R. R. Parmenter.

2. Implementation of a Solar-powered Public Transportation System for Backcountry Visitation in the Valles Caldera National Preserve, New Mexico. Federal Transit Authority, Paul S. Sarbanes Transit in the Parks Program. 2012-2019. Amount: $545,000. Project Leader: R. R. Parmenter.