

Gary W. Roemer
Associate Professor
Department of Fish, Wildlife and Conservation Ecology
New Mexico State University
Las Cruces, New Mexico, 88003-8003
(575) 646 – 3394 (Office), (575) 646 – 1281 (Fax)
groemer@nmsu.edu
<http://web.nmsu.edu/~groemer/>

Positions Held

- 2008 – Present Adjunct Faculty, SW Center for Animal Health, Food Safety & Bio-Security, New Mexico State University
- 2007 – Present Associate Professor, Dept. of Fish, Wildlife & Conservation Ecology, New Mexico State University
- 2006 – Present Adjunct Faculty & Graduate Faculty Member, Dept. of Biology, New Mexico State University
- 2001 – 2007 Assistant Professor, Dept. of Fishery & Wildlife Sciences, New Mexico State University
- 1999 – 2000 Post-doctoral researcher/Lecturer, Dept. of Biology, UCLA, Advisor: Dr. Charles Taylor
- 1985 – 2000 Research Biologist, Institute for Wildlife Studies, Arcata, CA.

Education

- University of California, Los Angeles, CA, Ph.D., Biology (1999)
Dissertation title: *The Ecology and Conservation of the Island Fox*, Advisor: Dr. Robert K. Wayne
- Humboldt State University, Arcata, CA, M.S., Natural Resources, Wildlife Emphasis (1989)
Thesis title: *Comparative Metabolism in Allopatric Populations of the California Ground Squirrel: The Effects of Climate*
Advisor: Dr. Richard T. Golightly
- University of Wisconsin-Parkside, Kenosha, WI, B.S., Major: Life Science, Minor: Biochemistry (1982)

Awards

- 2006, Southwestern Association of Naturalists – George Miksch Sutton Award in Conservation Research for our paper Coonan, T.C. et al. 2005. *Southwestern Naturalist* 50(1):32-41.
- 2004-2005, Distinguished Research Award, College of Agriculture & Home Economics, New Mexico State University
- 1999, Robert C. Lasiewski Award for Outstanding Research Accomplishments in Organismic Biology, Received from the Department of Biology, UCLA for my Ph.D. research.

Grants and Contracts Awarded

Point Reyes National Seashore (Co-PI, 1988)	\$ 29,000
California Dept. of Fish and Game (Co-PI, 1989)	\$ 180,000
Genetic Resources Conservation Grant (1992)	\$ 2,000
National Park Service Cost-Share Program (1993 – 1995)	\$ 35,000
Theodore Roosevelt Memorial Fund (1993)	\$ 980
Sigma Xi Grants-in-Aid of Research (1993)	\$ 395
Organismic Biology Fund – UCLA (1993, 94 & 96)	\$ 1,363
National Geographic Society (1994)	\$ 25,000
Mildred Mathias Graduate Student Research Grant (1994 & 95)	\$ 3,985
UCLA Biology Departmental Fellowship (1994 & 95)	\$ 10,000
University Research Expeditions Program (1996)	\$ 12,935
Canon in the Parks (1997 & 98)	\$ 50,000
University-Wide Mosquito Research Program (1999)	\$ 12,000
Channel Islands National Park (2000)	\$ 40,733

Point Mugu Naval Weapons Station – San Nicolas Island (2000)	\$ 30,000
T & E, Inc. (2002, 2004, 2005, 2006, 2007)	\$ 26,164
USFS Rocky Mountain Research Station (2002 – 2005)	\$ 55,000
International Arid Lands Consortium (Co-PI, 2002)	\$ 100,000
International Arid Lands Consortium (Co-PI, 2002)	\$ 99,000
New Mexico Dept. of Game & Fish (Co-PI, 2002)	\$ 260,200
Big Bend National Park (2002 – 2006)	\$ 58,000
Carlsbad Caverns National Park (2003 & 2004)	\$ 24,500
SW Regional GAP Analysis (Co-PI, 2004)	\$ 271,946
USGS Invasive Species Project at Big Bend NP (Co-PI, 2004 & 2005)	\$ 109,466
International Arid Lands Consortium (Co-PI, 2005)	\$ 100,000
Arizona Game & Fish Department (2005)	\$ 40,000
National Park Service – DSCESU (2006 – 2008)	\$ 46,728
Biosciences Cluster Award, New Mexico State University (Co-PI, 2005)	\$ 25,000
National Park Service – IRIMCO (2006 & 2007)	\$ 51,846
Wilburforce Foundation (2008, 2010)	\$ 50,000
NMSU Graduate Research Enhancement Grant (2008)	\$ 40,000
USDA – Natural Resource Initiative (Co-PI, 2008)	\$ 500,000
USDA – APHIS National Wildlife Health Center (2009-2010)	\$ 14,070
USDI – National Park Service (Co-PI – 2010)	\$ 78,613
USDI – National Park Service (2010)	\$ 80,000
USDI – Bureau of Land Management (Co-PI – 2010)	\$ 250,000
Total	\$2,704,923

Courses Taught

UCLA – Department of Organismic Biology, Ecology and Evolution

- Mammalogy (OBEE c115)
- Conservation Biology (OBEE 116)

NMSU – Department of Fish, Wildlife & Conservation Ecology

- Natural History of the Vertebrates (FWCE 330)
- Wildlife Law, Policy and Administration (WLSC 447/547 and FWCE 450/535)
- Techniques of Natural Resource Management (WLSC 355)
- Advanced Studies in Fishery and Wildlife Management (FWCE 359)
- Lake Ecology (WLSC 450)
- Tropical Field Ecology (FWCE 450/535: Including field trip to Belize)
- Undergraduate Seminar (WLSC 402)
 - "Trophic Dynamics in Aquatic and Terrestrial Communities" (2002)
 - "Wildlife Biology and Conservation Ecology in the Age of Genomics" (2006)
 - "Host-Pathogen Interactions and Wildlife Population Dynamics" (2007)
- Graduate Seminar (WLSC 515 and FWCE 515)
 - "The ESA and Conservation Conflicts in the 21st Century" (2004)
 - "Fragmentation and Corridor Ecology: Seeking Connections from Genes to Ecosystems" (2007)
 - "Information-Theory and Model Selection in Wildlife Science" (2010)

Courses Assisted

HSU – Wildlife Department

- BIOL 105 – Principles of Biology (2x)
- WLDF 311 – Wildlife Techniques
- WLDF 470 – Animal Energetics

UCLA – Department of Organismic Biology, Ecology and Evolution

- BIO 2 – Introductory Biology for Non-Science Majors (3x)
- BIO 5 – Introductory Biology
- BIO 5L – Introductory Biology Lab

- LS 3/4 – Molecular, Cell and Developmental Biology (2x)
- BIO 111 – Vertebrate Ecology and Evolution
- BIO 116 – Conservation Biology
- BIO 120 – Evolution
- BIO 129 – Behavioral Ecology (2x)
- BIO 132 – Field Biology Quarter (to Nicaragua)
- BIO 135 – Population Genetics

Graduate Student Mentorship

Completed

- Mr. Aaron Facka (M.Sc.) – "Vitality Important: The role of demography in assessing the current and future status of black-tailed prairie dogs" (August 2006: Aaron is currently pursuing a Ph.D. at North Carolina State University studying reintroduced fishers in northern California)
- Ms. Verity Mathis (M.Sc.) – "Inbreeding avoidance alters the environmental potential for polygamy in the banner-tailed kangaroo rat *Dipodomys spectabilis*" (August 2006: Verity is currently pursuing a Ph.D. at Louisiana State University)
- Mr. Martin Moses (M.Sc.) – "Elevated surface temperature negatively affects survival of banner-tailed kangaroo rats in the Chihuahuan Desert" (March 2010: Martin was hired as a full-time, private lands biologist for the Rocky Mountain Bird Observatory and the Natural Resources Conservation Service; he lives in Durango, CO)
- Mr. Robert Lonsinger (M.Sc.) – "Fine-scale genetic structure driven by habitat dependent selection in a mesocarnivore" (April 2010: Robert was hired as a full-time, regional non-game biologist for the Idaho Department of Fish & Game; he lives in Twin Falls, ID)

Current

- Mr. Joseph Barnes (Ph.D.) – Assessing the impacts of wind energy development on resident and migratory Golden Eagles (Co-Advisor)
- Mr. Aaron Bueno Cabrera (Ph.D.) – A test of landscape connectivity across the U.S. – México border using carnivore phylogeography
- Mr. Andrea Campanella (Ph.D.) – Population biology and trophic ecology of small mammals across an ecotone (Co-Advisor)
- Mr. Quinn Robinson (M.Sc.) – Non-invasive survey of mesocarnivores on White Sands National Monument
- Mr. Ronald Treminio (M.Sc.) – Exploring migratory patterns of burrowing owls across the Great Plains using stable-isotope analysis (Co-Advisor)

Presentations

US-Mexico Field Coordinating Committee Meeting, Big Bend National Park, TX, November 2010
 WRP Border Committee, BLM Office, Las Cruces, October 2010
 Biology Departmental Seminar, New Mexico State University, Las Cruces, October 2010
 Sevilleta NWR Mini-Symposium, Socorro, NM July 2010
 Defenders of Wildlife, Carnivores 2009, Denver, CO, November 2009
 Conference of Animal Grantmakers, Scottsdale, AZ, November 2009
 Wild Felid Research and Management Association, Flagstaff, AZ, October 2009
 LTER-ARS All Scientists Meeting, Estes Park, CO, September 2009
 Ecological Society of America Annual Meeting, Albuquerque, NM, August 2009 (2 presentations)
 New Mexico Bovine Tuberculosis Research and Action Conference, Las Cruces NM, February 2009
 New Mexico Wilderness Alliance, Invited Speaker, Las Cruces, NM, February 2009
 NPS-CONAMP joint meeting, White Sands National Monument, NM, September 2008
 NSF-LTER Meeting, Albuquerque, NM July 2008
 The Wildlife Society Annual Meeting, Tucson, AZ September 2007
 American Society of Mammalogists, Albuquerque, NM June 2007 (3 graduate student presentations)
 International Association for Landscape Ecology, Tucson, AZ April 2007
 Southwestern Association of Naturalists, Texas, April 2007
 Rocky Mountain Biological Laboratory, Gothic, CO, August 2006
 Society for Conservation Biology 20th Annual Meeting, San Jose, CA June 2006
 San Clemente Island fox Workshop, San Diego, CA, January 2006

Southwest Carnivore Committee Conference, Tucson, AZ, December 2005
 American Association of Laboratory Animal Science, New Mexico State University, Las Cruces, NM, August 2005
 Society for Conservation Biology 19th Annual Meeting, Brasilia, Brazil, July 2005
 Black-footed Ferret Subcommittee Meeting, Fort Collins, Colorado, January 2005
 Department of Fisheries and Wildlife Science, University of Missouri, Columbia, December 2004
 IUCN/SSC Canid Specialists Group, Carnivores 2004, Santa Fe, NM, November 2004
 Academy for Learning in Retirement, Las Cruces, NM, September 2004
 Department of Biology, University of New Mexico, Albuquerque, September 2004
 USDA Jornada LTER 14th Annual Symposium, Las Cruces, NM, July 2004
 American Museum of Natural History, SW Biological Research Station, Portal AZ, June 2004
 Fishery and Wildlife Sciences Departmental Seminar, New Mexico State University, NM, October 2003
 California Conservation Science Program – The Nature Conservancy, Santa Barbara, CA, September 2003
 US Fish and Wildlife Service Seminar Series, Albuquerque, NM, July 2003
 Carnivores 2002, Defenders of Wildlife, Monterey, CA, November 2002
 Wildlife Biology Program, University of Montana, Missoula, October 2002
 Dept. of Zoology and Physiology, University of Wyoming, Laramie, September 2002
 Society for Conservation Biology 16th Annual Meeting, Canterbury, UK July 2002
 3rd International Conference, Stable Isotope Techniques in Ecology, Flagstaff, AZ, April 2002
 Biology Departmental Seminar, New Mexico State University, Las Cruces, March 2002
 IUCN Canid Specialists Group, Oxford University, UK, September 2001
 Carnivores 2000, Defenders of Wildlife, Denver, CO, November 2000
 Museum of Vertebrate Zoology, University of California, Berkeley, September 2000
 Society for Conservation Biology, 14th Annual Meeting, Missoula, MT, June 2000
 Biology Departmental Seminar, University of California, Los Angeles, June 2000
 Center for Environmental Analysis Seminar, California State University, Los Angeles, May 2000
 Loggerhead Shrike Symposium, Hubbs-Sea World Research Institute, San Diego, CA, November 1999
 Department of Biology, California State University, Long Beach, October 1999
 National Center for Ecological Analysis and Synthesis, Santa Barbara, CA, September 1998
 The Third Annual Wildlife Society Meeting, Portland, OR, October 1996
 The Fourth California Islands Symposium, Santa Barbara, CA, March 1994

Professional Affiliations and Synergistic Activities

Member, AAAS, 2002-Present
 Associate Editor, *Animal Conservation*, 2008-2010
 Assigning Editor, *Conservation Biology*, 2008
 Scientific Advisory Board, Advanced Conservation Strategies, 2006-Present
 Scientific Advisory Committee, Defenders of Wildlife, Washington, D.C., 2004-2008
 Scientific Technical Advisory Committee, New Mexico River Otter Working Group, 2002-2006
 Coordinator, Island fox Working Group, IUCN-SSC Canid Specialist Group, 2001-2008
 Chairman, Wild Population Management Expertise Group, Island fox Recovery Team, USFWS, 2004-2006
 Invited Participant, Science Communication Training, Wilburforce Foundation, 2007
 Invited Participant, Gordon Research Conference, “The Metabolic Basis of Ecology”, 2004
 Invited Research Scientist, USDA – ARS and NSF Jornada Long-Term Ecological Research station, 2004-Present
 Elected Participant, NSF ADVANCE, ADVANCING Leaders Program, NMSU, 2004-2005
 Reviewer, NSF Division of Environmental Biology, Population and Evolution Processes Cluster, 2005-2007, 2010
 Reviewer, NSF Doctoral Dissertation Improvement Grants, Ecological & Evolutionary Physiology, 2004
 Session Moderator, Defenders of Wildlife Carnivores 2002 & 2004
 Co-organizer, New Mexico Bovine Tuberculosis Research and Action Conference, 2009
 Co-organizer, Workshop “MARK: A Gentle Introduction”, 2008
 Co-organizer, Workshop “The Role of Ecological History in North American Conservation Strategies”, 2004
 Co-Faculty Advisor, NMSU Student Chapter of The Wildlife Society, 2001-Present
 Faculty Advisor, NMSU Student Chapter of the New Mexico Wilderness Alliance, 2009-Present

Peer-Reviewed Publications (* denotes graduate student at time of publication)

*Facka, A. N., **G. W. Roemer**, V. Mathis*, M. Kam, & E. Geffen. 2010. Drought leads to collapse of black-tailed prairie dog populations reintroduced to the Chihuahuan Desert. *Journal of Wildlife Management* 74: 1752-1762.

- Collins, P. W., B. C. Latta & **G. W. Roemer**. 2009. Does the order of invasive species removal matter? The case of the eagle and the pig. *PLoS One* 4(9): e7005.doi: 10.1371/journal.pone.0007005.
- Bakker, V.J., D. Doak, **G.W. Roemer**, D. Garcelon, T. Coonan, S. A. Morrison, C. Lynch, K. Ralls & R. Shaw. 2009. Incorporating ecological drivers and uncertainty into a demographic population viability analysis for the island fox. *Ecological Monographs* 79: 77-108.
- Roemer, G. W.**, M. E. Gompper & B. Van Valkenburgh. 2009. The ecological role of the mammalian mesocarnivore. *BioScience* 59: 165-173.
- *Schweizer, R., **G. W. Roemer**, J. Pollinger & R. K. Wayne. 2009. Characterization of 15 tetranucleotide microsatellite markers in the ringtail (*Bassariscus astutus*). *Molecular Ecology Resources* 9: 210-212.
- *Northcott, J., M. C. Andersen, **G. W. Roemer**, E. L. Fredrickson, M. DeMers & J. Truett. 2008. Spatial analysis of effects of mowing and burning on colony expansion in reintroduced *Cynomys ludovicianus* (Black-tailed prairie dog). *Restoration Ecology* 16(3): 495-502.
- *Facka, A. N., P. L. Ford, & **G. W. Roemer**. 2008. A novel approach for assessing density and range-wide abundance of prairie dogs. *Journal of Mammalogy* 89(2): 356-364.
- *Knowlton, J., C. J. Donlan, **G. W. Roemer**, A. Samaniego-Herrera, B. S. Keitt, B. Wood, A. Aguirre-Muñoz, K. R. Faulkner & B. R. Tershey. 2007. Non-native mammal eradications and the status of insular mammals on the California Channel Islands, U.S.A. and Pacific Baja California Islands, México. *Southwestern Naturalist* 52:528-540.
- Angulo, E., **G. W. Roemer**, L. Berec, J. Gascoigne & F. Courchamp. 2007. Double Allee effects and extinction in the island fox. *Conservation Biology* 21(4): 1082-1091.
- Donlan, C.J., J. Berger, C. E. Bock, J. H. Bock, D. A. Burney, J. A. Estes, D. Foreman, P. S. Martin, **G. W. Roemer**, F. A. Smith, M. E. Soulé & H. W. Greene. 2006. Pleistocene rewilding: An optimistic agenda for 21st Century conservation. *American Naturalist* 168(5): 660-681.
- *Caut, S., **G. W. Roemer**, C. J. Donlan & F. Courchamp. 2006. Coupling stable isotopes with bioenergetics to estimate interspecific interactions. *Ecological Applications* 16: 1893-1900.
- Roemer, G. W.** & C. J. Donlan. 2005. Biology, policy and law in endangered species conservation: II. A case history in adaptive management of the island fox on Santa Catalina Island, California. *Endangered Species UPDATE* 22:144-156.
- Donlan, C. J., H. W. Greene, J. Berger, C. E. Bock, J. H. Bock, D. A. Burney, J. A. Estes, D. Foreman, P. S. Martin, **G. W. Roemer**, F. A. Smith, & M. E. Soulé. 2005. Re-wilding North America. *Nature* 436:913-914.
- Coonan, T. J., C. A. Schwemm, **G. W. Roemer**, D. K. Garcelon & L. Munson. 2005. Decline of an island fox subspecies to near extinction. *Southwestern Naturalist* 50(1):32-41.
- Andersen, M. C., B. Martin, & **G. W. Roemer**. 2004. Use of matrix population models to estimate the efficacy of euthanasia versus trap-neuter-return for management of free-roaming cats. *Journal of the American Veterinary Medical Association* 225(12):1871-1876.
- Roemer, G. W.**, R. Woodroffe & F. Courchamp. 2004. Predators and prey in the Channel Islands – Response to Dratch *et al.* and Helgen. *Science* 305:778.
- Roemer, G. W.** & C. J. Donlan. 2004. Biology, policy and law in endangered species conservation: I. The case history of the island fox on the northern Channel Islands. *Endangered Species UPDATE* 21(1):23-31.

*Aguilar, A. **G. Roemer**, S. Debenham, M. Binns, D. Garcelon, & R. K. Wayne. 2004. High MHC diversity maintained by balancing selection in an otherwise genetically monomorphic mammal. *Proceedings of the National Academy of Sciences, USA* 101:3490-3494.

Courchamp, F., R. Woodroffe & **G. Roemer**. 2003. Removing protected populations to save endangered species. *Science* 302:1532.

Roemer, G. W. & R. K. Wayne. 2003. Conservation in conflict: The tale of two endangered species. *Conservation Biology* 17(5):1251-1260.

Roemer, G. W., C. J. Donlan* & F. Courchamp. 2002. Golden eagles, feral pigs and insular carnivores: How exotic species turn native predators into prey. *Proceedings of the National Academy of Sciences, USA* 99: 791-796.

Roemer, G. W., T. J. Coonan, D. K. Garcelon, J. Bascompte, & L. Laughrin. 2001. Feral pigs facilitate hyperpredation by golden eagles and indirectly cause the decline of the island fox. *Animal Conservation* 4: 307-318.

Roemer, G. W., D. A. Smith*, D. K. Garcelon, & R. K. Wayne. 2001. Behavioural ecology of the island fox. *Journal of Zoology* 255: 1-14.

Roemer, G. W., T. J. Coonan, D. K. Garcelon, C. H. Starbird & J. W. McCall. 2000. Spatial and temporal variation in the seroprevalence of canine heartworm antigen in the island fox. *Journal of Wildlife Diseases* 36(4):723-728.

Goldstein, D.B, **G.W. Roemer**, D.A. Smith*, D.E. Reich, A. Bergman, & R.K. Wayne. 1999. The use of microsatellite variation to infer patterns of migration, population structure and demographic history: An evaluation of methods in a natural model system. *Genetics* 151:797-801.

Garcelon, D.K., **G.W. Roemer**, R.B. Philips* & T.J. Coonan. 1999. Food provisioning by island foxes, *Urocyon littoralis*, to conspecifics caught in traps. *Southwestern Naturalist* 44(1):83-86.

Proceedings, Book Chapters and Other Publications

Ford, P. L., M. C. Andersen, E. L. Fredrickson, J. Truett, & **G. W. Roemer**. 2007. Effects of fire and mowing on expansion of re-established black-tailed prairie dog colonies in Chihuahuan Desert Grassland. In: Narog, M.G., ed. *Proceedings of the 2002 Fire Conference on Managing fire and fuels in the remaining wildlands and open spaces of the southwestern United States*. Gen. Tech. Rep. PSW-189, Albany, CA: Pacific Southwest Research Station, USDA Forest Service, 7 pp.

Donlan, C. J., P. S. Martin, & **G. W. Roemer**. 2007. Lessons from land: Present and past signs of ecological decay and the overture to the Earth's 6th mass extinction. Pages 14-26 In J. A. Estes, D.P. DeMaster, D.F. Doak, T.M. Williams & R.L. Brownell, Jr., Eds. *Whales, Whaling and Ocean Ecosystems*. University of California Press. Berkeley.

Roemer, G. W., T. J. Coonan, L. Munson & R. K. Wayne. 2004. The Island fox. Pages 97-105 In: C. Sillero-Zubiri, M. Hoffman and D. W. Macdonald, eds. *Canids: Foxes, wolves, jackals and dogs. Status survey and conservation action plan, 2nd edition*. IUCN/SSC Canid Specialists Group, The World Conservation Union. Gland, Switzerland.

Roemer, G. W. 2004. Evolution, behavioural ecology, and conservation of island foxes. Pages 173 – 183 in D. W. Macdonald and C. Sillero-Zubiri, eds. *The Biology and Conservation of Wild Canids*, Oxford University Press, 432 pp.

Coonan, T. J., C. A. Schwemm, **G. W. Roemer**, & G. Austin. 2000. Population decline of island foxes (*Urocyon littoralis*) on San Miguel Island. Pages 289-297 in D. R. Browne, K. L. Mitchell, and H. W. Chaney, eds. *Proceedings of the Fifth Channel Islands Symposium*. U.S. Department of the Interior, Minerals Management Service, Pacific OCS Region, Camarillo, California.

Roemer, G.W., D.K. Garcelon, T.J. Coonan, & C. Schwemm. 1994. The use of capture-recapture methods for estimating, monitoring, and conserving island fox populations. Pages 387-400 in W.L. Halvorsen and G.J. Maender, eds. *The Fourth California Islands Symposium: update on the status of resources*. Santa Barbara Museum of Natural History, Santa Barbara, California.

Garcelon, D. K., & **G. W. Roemer**. 1990. The reintroduction of bald eagles on Santa Catalina Island. Pages 63-68 in P.J. Bryant and J. Remington, eds. Endangered Wildlife and Habitats in Southern California. Memoirs of the Natural History Foundation of Orange County, Volume 3. Newport Beach, California.

Garcelon, D. K., & **G. W. Roemer**, Editors. 1988. Proceedings of the International Symposium on Raptor Reintroduction, 1985. Institute for Wildlife Studies, Arcata, California. 148 pp.

Selected Technical Reports

Roemer, G. W., B. G. Dickson, B. H. McRae, J. M. Rundall, K. Menke, F. Winslow, B. M. Truett. & J. A. Cook. 2009. A Test of Landscape Connectivity across the Sky Islands Region using Large Carnivores as Model Organisms. Final report to the Wilburforce Foundation. 45pp.

Lonsinger, R. C. & **G. W. Roemer**. 2009. The development of habitat and corridor suitability models as a test of landscape connectivity within the Chihuahuan Desert Network. Final report to Guadalupe Mountains and Carlsbad Caverns National Parks. 15 pp.

Moses, M. R., J. K. Frey, **G. W. Roemer** & E. Geffen. 2008. Keystone indicator: A tool for semidesert grassland conservation. Final report to International Arid Lands Consortium, Project # 05R-16. 39 pp.

Facka, A. N., R. C. Lonsinger & **G. W. Roemer**. 2008. Estimates of population size of Gunnison's prairie dogs in the Aubrey Valley, Arizona based on a new monitoring approach. Final report to the Arizona Game and Fish Department. 26 pp.

Roemer, G. W., D. Auerbach, K. E. Young, T. S. Schrader & M. A. Andersen. 2007. Exotic animal management plan: Final Environmental Assessment, Big Bend National Park, Texas. New Mexico State University, Las Cruces, NM. 135 pp.

Young, K. E., T. S. Schrader, K. G. Boykin, C. Caldwell & **G. W. Roemer**. 2007. Early Detection of Invasive Species in Big Bend National Park: Remote Sensing and GIS Strategies. New Mexico Cooperative Fish and Wildlife Research Unit, Las Cruces, NM. 103 pp. + Appendices.

Newsom, C. & **G. W. Roemer**. 2004. Carlsbad Caverns Herpetofauna Inventory: Year 2, Summer 2004. Annual Report, Carlsbad Caverns National Park, NM.

Woolman, M. & **G. W. Roemer**. 2003. Carlsbad Caverns Herpetological Inventory Year 1, Summer 2003. Annual Report, Carlsbad Caverns National Park, NM.

Manuscripts Submitted

Moses, M. R., J. K. Frey & **G. W. Roemer**. *In review*. Elevated surface temperature depresses survival of banner-tailed kangaroo rats: Will climate change cook a desert icon? Submitted to *Oecologia*.

Manuscripts in Preparation

Lonsinger, R. C., R. Schweizer, J. Pollinger, R. K. Wayne & **G. W. Roemer**. Fine scale genetic structure driven by habitat-dependent selection in a mesocarnivore. To be submitted to *Molecular Ecology*.

Mathis, V., J. Maldonado, A. N. Facka & **G. W. Roemer**. The importance of considering ecological and genetic heterogeneity in the mating efforts of a philopatric mammal. To be submitted to *Molecular Ecology*.

Roemer, G. W., M. Kam, A. N. Facka, L. Koren & E. Geffen. The influence of water and energy on the success of reintroduced populations of the black-tailed prairie dog. To be submitted to *Functional Ecology*.