

EDWARD W. WEST, Ph.D.
WEST ECOSYSTEMS ANALYSIS, INC.
2515 BOMBADIL LANE
DAVIS, CA 95616

Current Position:

President and Owner: West Ecosystems Analysis, Inc. (Est. 2008)
(<http://www.westecosystems.com>)

Qualifications Summary

Specialization in ecological research, conservation and management of rare, threatened, and endangered wildlife and their habitats in California. Broad experience in Habitat Conservation Planning, Multi-species Conservation Planning, NEPA, CEQA and ESA and CWA 404 permitting compliance and EIR/EIS preparation. Principal responsibilities include project development and management, science lead for project design, implementation and completion, interagency consultation, staff management, and report and publication preparation and quality control.

Areas of Expertise: Lead scientist for complex ecosystem analysis projects, including modeling the dynamics of delta wetlands (Great Salt Lake), extant pollution impacts on restoration of tidal marshes in S.F. Bay, wind power development impact on birds and wildlife in the Altamont Pass Wind Resource Area and Great Basin mountains in Nevada. Specialization in environmental assessment and conservation of rare, threatened and endangered species, animal behavior, environmental physiology, wildlife management, bioacoustics (incl. bat acoustic surveys and anthropogenic noise impact analysis for bats, birds, amphibians and other wildlife).

California Department of Fish and Wildlife Scientific Collecting Permit #SC-2919 – for all bat species.

Education

Ph.D. Zoology, University of California Davis
Areas of specialization: Animal Ecology, Animal Behavior,
Environmental Physiology, Plant Ecology
M.Sc. Ecology, University of California Davis
B.Sc. Biology (*cum laude*), University of California Riverside

Employment History

President and Owner: West Ecosystems Analysis, Inc. 2011 - present
Senior Ecologist: BioResource Consultants, Davis, CA. 2008 - 2011
Senior Environmental Scientist: Jones & Stokes Inc. Sacramento California.
2000 – 2007.
Principal Scientist/Senior Biologist: Parsons Harland Bartholomew and

Associates, Sacramento, California 1997 - 2000
Lead Zoologist, Alaska Natural Heritage Program, The Nature Conservancy/
University of Alaska Anchorage. 1989-96
Environmental Scientist/Terrestrial Ecologist: Envirosphere Company,
Sacramento, California, and Anchorage, Alaska. (on-call) 1985-89
Wildlife Ecologist: Biosystems Analysis, Inc. Sausalito, California, (on-call)
1984-89
Ecological consultant: EIS, Inc. San Francisco, California. (on-call) 1982-87

Academic Appointments

Senior Research Associate: John Muir Institute of the Environment, UC Davis
2005 – 2006
Assistant Professor: Environment and Natural Resources Institute and Dept. of
Biological Sciences, University of Alaska, Anchorage 1994 – 96
Lecturer in Zoology: Dept. of Zoology, UC Davis 1985-89
Postdoctoral Research Associate: Dept. of Zoology, UC Davis 1983-84
Postdoctoral Researcher: UC Davis/U.S. Fish and Wildlife Service, Alaska
1980-82
Lecturer: Dept of Zoology, UC Davis 1978
Teaching Associate/Assistant: Dept. of Zoology, UC Davis, 1975-80

Awards

National Environmental Excellence Award for NEPA Excellence. National
Association of Environmental Professionals 2006.

Patents

R. J. Dooling, M.R. Leek and E. West. 2012. Method for modeling effects of
anthropogenic noise on an animal's perception of other sounds. U.S. Patent No.:
US 8,233,980 B2. July 17, 2012.

Experience

Project Management

- Over 30 years as natural resources environmental consultant.
- Developed, negotiated, and managed small to million dollar projects.
- Developed and managed complex schedules for multi-year/multi-disciplinary projects.
- Trained science staff in field research and monitoring methods and technical writing.
- Supervised Ph.D. team scientists and other technical staff.
- Developed innovative team programs to facilitate continued professional development of staff.
- Provided ongoing Quality Control for project development, implementation, analysis, and reports.

- Successfully promoted company expertise and services at national and international science conferences and agency and client meetings.
- Developed and maintained liaisons and effective working relations with clients, regulatory agencies, non-governmental organizations (NGOs) and the public to facilitate open communication, cooperation and timeliness in project implementation.
- Developed environmental management international relations program (China, Taiwan) in collaboration with UC Davis' John Muir Institute of the Environment.
- Excellent writing and communication skills.

Conservation Planning and Regulatory Compliance

- Lead biologist for **Legacy Parkway Final EIS Re-evaluation and Supplemental EIS**. Analyzed impacts on highway to all wildlife associated with the Great Salt Lake Ecosystem. Developed GIS model for assessing impacts of highway on wetland wildlife and ecosystem function with changes in GSL lake level. (Award winning project 2006)
- Lead biologist for **East Contra Costa Habitat Conservation Plan** species impact assessment and GIS model analysis of special-status species habitat connectivity. (Award winning project 2007)
- Lead mammalogist for **Lower Colorado River Multispecies Habitat Conservation Plan** Biological Assessment covered species determination, impact assessment and conservation planning.
- Lead biologist for **California Coastal National Monument Long-Range Management Plan** (BLM) vertebrate species inventory assessment and documentation in support of resource management plan EIR/EIS. (Award winning project 2006).
- Lead wildlife biologist for ecological assessment of potential mitigation sites for **San Francisco International Airport runway expansion**. Project included biological inventory of special status species, identification of potential mitigation sites for tidal marsh restoration; ecological risk assessment of potential San Francisco Bay water contamination of threatened and endangered species and preparation of mitigation options plan for airport expansion involving wetlands in and around the airport.
- Technical specialist for **Napa County Baseline Report**. (Award winning project 2006).
- Technical specialist on **Napa Sonoma Salt Marsh Restoration Project Environmental Impact Statement /Environmental Impact Report (EIR/EIS)** (California Coastal Conservancy) ecological assessment of the benefits and potential impacts of tidal marsh restoration; ecological risk assessment of potential San Francisco Bay water contamination of threatened and endangered species; mitigation design and recommendations
- Technical scientist on success analysis of 20 yr wildlife mitigation for Chief Joseph Dam, Washington.
- Lead biologist for **Heavenly Ski Resort master Plan EIR/EIS** mitigation and monitoring program. Project included spotted owl and goshawk surveys, sensitive

plant surveys, transplanting more than 250 Tahoe *Draba*, plants and establishing seed plots.

- Lead wildlife biologist for **University of California, Davis Tahoe Environmental Research Center EIR/EIS**. Sensitive bird and amphibian surveys.

Wind Power Development

- Senior Ecologist, Acoustic bat surveys, satellite radio-transmitter monitoring of sage grouse, raptor and migratory bird monitoring, elk and deer monitoring BioResource Consultants, central Nevada wind project under development 2008-present.
- Lead Biologist for Altamont Pass Wind Resource Area Avian and Bat Mortality Monitoring Project.
- Lead Biologist for Hatchet Ridge Wind Project Environmental Impact Report.

Aerospace

- AKNHP zoologist for environmental assessment and baseline study of Kodiak Launch complex.

Water banking

- Lead biologist on surveys for and impact analysis for threatened and endangered wildlife **Madera Irrigation District Water Supply Enhancement Project**.

Noise Impacts on Wildlife

- Lead bioacoustics ecologist for Caltrans study on the effects of highway noise on bats.
- Lead biologist for **Legacy Parkway Final EIS Re-evaluation and Supplemental EIS**. Developed technical highway noise analysis protocol for impacts to wetland birds.
- Technical Review Team bioacoustics ecologist for Caltrans study on the effects of highway noise on birds.
- Developed methods for bioacoustic profiling wildlife to obtain unique acoustic profiles of species for indentifying species sensitive to noise impacts.
- Develop GIS spatial noise contour mapping impact analysis methods.

Ecological Risk Analysis

- Lead wildlife biologist for study of the biotransport of perchlorate. *Scientific and Technical Report for Perchlorate Biotransport Investigation*. Prepared for Air Force Institute for Environment. April 2001.
- Lead ecologist for analysis of biotransport of antimony, arsenic, manganese, mercury and nickel in ephemeral drainage conveying excess mine water from gold mine, Humboldt County, Nevada. Parsons Engineering Science. 1999.
- Lead biologist for analysis of bay water contamination impact to endangered species resulting from recreation of tidal marshes in San Francisco Bay.

Ecosystem Modeling

- Lead biologist for **Legacy Parkway Final EIS Re-evaluation and Supplemental EIS**. Developed GIS model on effects on changes in Great Salt Lake levels on wildlife habitat loss and availability.

Wildlife Surveys and Monitoring

- Taught field research and survey techniques at University of California, Davis and University of Alaska.

- **Mammals**
 - **Bats** – conducted mist-netting and acoustic surveys for bats for numerous wind development, abandoned mine, bridges, and general survey projects throughout California, Washington, Nevada and Arizona, Alaska, British Columbia and Africa. Use both passive and active Pettersson/ANABAT/ Wildlife Acoustics and SONOBAT acoustic monitoring. Computer analysis of species calls signatures.
 - **Forest Carnivores** – conducted bait/camera station surveys of forest carnivores (pine marten, wolverine, black bear, long and short-tailed weasels, bobcat, Sierra red fox in the Tahoe Basin. Conduct snow tracking surveys for wolverine in Tahoe Lake Basin and Carson Wilderness.
 - **Large ungulates** – directed helicopter capture, satellite radiotransmitter-collaring and tracking of deer and elk in eastern Nevada.
 - **Arctic Fox** – conducted radio-telemetry studies of arctic fox movement and behavior on Kagalaska Island, Aleutian Islands, Alaska.
 - **Kit fox** – conducted numerous kit fox surveys throughout their range in California, including den searches, spotlighting, camera stations and track plate studies.
 - **Pikas** – conducted extensive studies on pika ecology, physiology, nutritional requirements, and behavior throughout California, Oregon, Washington, British Columbia, and Alaska. Analysis of climate change of pika long-term viability.
 - **Desert rodents** – conducted numerous live-trapping, mark-recapture studies of desert rodents throughout the Mojave, Colorado and Great Basin deserts.
- **Birds** - conducted numerous studies of birds and bird vocalization patterns throughout California, Nevada, Washington, British Columbia and Alaska.
 - **Sage Grouse** monitoring – GPS satellite radiotelemetry monitoring of sage grouse in eastern Nevada.
 - **Raptor and migratory bird** monitoring – mountains of Great Basin in eastern and northern Nevada, the Sierra Mountains and Altamont Pass, San Francisco Bay area, California.
 - **Bald Eagle** – conducted aircraft surveys for Bald eagles in southeast Alaska; cannon netted bald eagles, tagged and monitoring nesting and movement behavior of Bald eagles on Adak Island, Aleutian Islands, Alaska.
 - **Golden Eagle** – conducted helicopter surveys for golden eagles in eastern and northern Nevada.
 - **Spotted Owl and Goshawk** – conducted numerous protocol playback surveys for both species throughout the Sierra Nevada Mountains in California and Cascade Mountains of Washington.
- **Amphibians** – conducted numerous surveys for red-legged frogs and other listed and sensitive amphibians.
- **Reptiles** – conducted numerous surveys for blunt-nosed leopard lizard, giant garter snake and other listed and sensitive reptiles.

University Teaching and Research

John Muir Institute of the Environment, University of California, Davis.

Senior Research Associate. Contributing scientist to the National Academies Transportation Research Board Task Force on Ecology and the International Conference on Ecology and Transportation. Visiting scholar at the Road Ecology Center (http://johnmuir.ucdavis.edu/road_ecology/). Founded Bioacoustics Working Group for the analysis of noise impacts on wildlife. Developed and taught graduate course in Acoustics Ecology.

The Nature Conservancy and Environment and Natural Resources Institute, University of Alaska, Anchorage.

Alaska Natural Heritage Program Zoologist. Developed and supervised research program on the ecological status of all rare, threatened, and endangered wildlife in Alaska. Developed comprehensive GIS-compatible computer database of the state, national, and world conservation status of species of ecological concern. Provided biological consulting services for the U.S. Forest Service, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency, Alaska Department of Fish and Game, and resource development companies, conservation organizations, and private citizens.

Department of Biology and Environment and Natural Resources Institute, University of Alaska, Anchorage.

Assistant Professor of Biology. Provided undergraduate instruction in mammalogy, ornithology, and animal behavior. Directed student research in avian bioacoustics. Conducted research on the bioacoustic effects of wind on the evolution of bird song structure in the Aleutian Islands. Developed protocol for ecological assessment of conservation status of rare, threatened, and endangered wildlife in Alaska. Conducted field research on the distribution and population status of bats in Alaska.

Department of Zoology, University of California, Davis.

Lecturer in Zoology. Responsible for the development and presentation of upper division and graduate courses in animal ecology, ornithology, mammalogy, and comparative anatomy.

Postdoctoral Researcher. Developed and directed field research program on the ecology and management of introduced arctic foxes on the Aleutian Islands in Alaska. Provided technical support for USFWS research projects on the population dynamics of Aleutian Island Bald Eagles and the biogeography of Asian and North American Green-winged Teal. Conducted research on the effects of insularization on the evolution of vocal communication in Aleutian Island Song Sparrows.

Professional Activities

Society/Board Positions

Western Bat Working Group 2012- present
Golden Eagle Working Group 2013 - present
Board of Directors, Plumshire Inc. Village Homes, Davis, 2001 - 2004
Board of Directors, Program Chair, Yolo Audubon Society, 1997-2000
Conservation Committee, The Wildlife Society, Western Section, 1999-2000
Management Committee, The Sierra Club, Solano Group, 1999-2000
Science Advisor, Pacific Flyway Center Planning Board, 1999-2000

Scientific Papers Presented

Bats of the Lake Tahoe Basin: Ecology and Management. Tahoe Regional Planning Agency. Invited lecture. South Lake Tahoe. California. December 18, 2013.

Pikas, bats and love songs: on the scope and limits of adaptive capacity in a changing world. Society for Conservation Biology, 2013 Bay Area Conservation Biology Symposium: Conservation in a changing world. May 4, 2013, UC Davis.

Adaptive Capacity of Pikas: Physiological and behavioral responses to changing microclimate. The Wildlife Society; California Pika Consortium. February 11, 2011, Riverside California.

Can Pikas Adapt to Climate Change? A 30-year perspective. California Pika Summit, Nov. 10. 2009. USDA-Forest Service Sierra Nevada Research Center, Davis, CA.

Conceptual and computational models of the effects of anthropogenic noise on birds. With R. J. Dooling and M.R. Leek. Proceeding of the Institute of Acoustics - Fifth International Conference on Bioacoustics. March 31 – April 2, 2009. Loughborough University, Leicestershire, UK.

Conceptual and computational Models of the Effects of Anthropogenic Noise on Birds: With R. J. Dooling and M. R. Leek. (Invited paper) 157th Meeting of the Acoustical Society of America. May 18-22, 2009. Hilton Portland and Executive Tower, Portland. Oregon.

Highway Noise and Wildlife: Defining the Road-Effect Zone. UC Davis Road Ecology Center Seminar Series: *Road Ecology, Integrating Transportation and the Natural Environment: Defining the Road-Effect Zone*. January 29, 2008. UC. Davis.

Noise Impacts on birds: Assessing “take” of endangered species. With R. J. Dooling, A. N. Popper and D. M. Buehler. Acoustical Society of America. 154th Meeting. New Orleans, Louisiana, 27 November – 1 December 2007.

- Bioacoustic Profiles: Evaluating potential masking of wildlife vocal communication by highway noise. International Conference on Ecology and Transportation. (TRB) August 29 – Sept. 2, 2005, San Diego.
- Wildlife and Highway Noise: Understanding and Mitigating Acoustic Ecological Selection. Transportation Research Board Conference: Collaboration: Improving Mobility and the Environment. Ecology and Transportation Subcommittee TRB ADC30T Task force on ecology. August 16 – 19, 2004. San Diego.
- Highways and Wildlife: Scale, Cumulative Impacts and Noise in a Dynamic Ecosystem. Road Ecology Winter Seminar Environmental Policy Issues and Linkages in Transportation Planning March 16, 2004. U.C. Davis.
- Mitigation and Restoration of Alpine Plants: A case Study of Tahoe Draba (*Draba asterophora* var. *asterophora*) at Heavenly Ski Resort, Lake Tahoe Basin. 5th Annual Tahoe Ecological Forum, 5 March 1999, South Lake Tahoe.
- Songs of Aleutian Island Song Sparrows: acoustic structure in a windy environment. 1998 North American Ornithological Conference. 6-12 April, St. Louis, Missouri.
- Proactive strategies for conserving biological diversity: An unprecedented opportunity in Alaska. 59th Wildlife and Natural Resources Conference, 18-23 March 1994, Anchorage, Alaska.
- The role of biodiversity in ecosystem management. Alaska Society of American Foresters, October 28, 1993, Anchorage, Alaska.
- Biodiversity conservation in Alaska: Why it is important? Alaska Department of Environmental Conservation, April, 1992, Anchorage Alaska.
- Geographic variation in songs of Aleutian Island Song Sparrows: 3 causal hypotheses examined. 2nd International Behavioral Ecology Conference, Vancouver, British Columbia. October 6-9, 1988.
- Singing behavior of the Sierran Pika. Pika (*Ochotona*) Symposium. 4th International Thereological Congress, 13-20 August 1985, Edmonton, Alberta, Canada.
- Limiting similarities between Arctic and Red foxes: considerations for biological control. Variation in Carnivore Societies Symposium. (Best paper award) 4th International Thereological Congress, 13-20 August 1985, Edmonton, Alberta, Canada.
- Biological control of Aleutian Island populations of introduced canids. 2nd Annual Carnivore and Furbearer Conference, Jan 11-12, 1981, University of Alaska, Fairbanks.
- Evolution of social behavior in pikas (*Ochotona princeps*). University of California, Davis Ecology Seminar Series. December 1980.

Publications and Reports

- West, E. W. (in prep). Acoustic signatures of echolocating bats in Lake Manyara National Park, Ngorongoro Conservation Area and Serengeti National Park, Tanzania, Africa.
- West, E. W. 2014. McLaughlin Reserve Truck Tire Artificial Bat Roost Bat Survey. Barrick Gold/Homestake Mines, Lower Lake, California. August 1, 2014. 7 pp.
- West, E. W. and J. Aliperti. 2014. Sulphur Creek Abandoned Mines Bat Assessment and Management Plan. Barrick Gold/Homestake Mines, Lower Lake, California. June 2014. 90 pp.
- West, E. W. and J. Aliperti. 2013. Washoe Meadows State Park 2013 Bat Survey and Ecological Status Assessment. California Department of Parks and Recreation. Tahoe City, California State Parks. 84 pp.
- West, E. W. 2012. Corona Mine and Twin Peaks Mine 2012 Fall Initial Bat Survey. Burleson Consulting, Sacramento, California October 2012. 50 pp.
- West, E. W. 2012. Bridge River Bat Use Area Assessment: A Rapid Bioacoustic Survey Evaluation. British Columbia Ministry of the Environment. Victoria, British Columbia, Canada. September 2012. 16. pp.
- West, E. W. 2011. (Contributing writer) to: G. C. Ledec, K. W. Rapp and R. G. Aiello Greening the Wind: Environmental and Social Considerations for Wind Power Development. The World Bank. Washington, D.C. 172 pp.
- R. J. Dooling, E. W. West and M.R. Leek. 2009. Conceptual and computational models of the effects of anthropogenic noise on birds. Proceeding of the Institute of Acoustics - Fifth International Conference on Bioacoustics. March 31 – April 2, 2009. Loughborough University, Liecestershire, UK.
- R. J. Dooling, E. W. West and M.R. Leek. 2009. Conceptual and computational models of the effects of anthropogenic noise on birds. (Invited paper) 157th Meeting of the Acoustical Society of America. May 18-22, 2009. Hilton Portland and Executive Tower, Portland. Oregon.
- West, E. W. 2008. Highway noise and wildlife: defining the road-effect zone. UC Davis Road Ecology Center Seminar Series: Road Ecology, Integrating Transportation and the Natural Environment: Defining the Road-Effect Zone. January 29, 2008. UC. Davis.
- West, E. W. 2007. Noise Impacts on birds: Assessing “take” of endangered species. With R. J. Dooling, A. N. Popper and D. M. Buehler. Acoustical Society of America. 154th Meeting. New Orleans, Louisiana, 27 November – 1 December 2007. (Abstract)
- West, E. W. 2005. Bioacoustic profiles: evaluating potential masking of wildlife vocal communication by highway noise. International Conference on Ecology and Transportation. (TRB) August 29 – Sept. 2, 2005, San Diego. (Abstract)
- West, E. W. 2004. Wildlife and highway noise: understanding and mitigating acoustic ecological selection. Transportation Research Board Conference: Collaboration: Improving Mobility and the Environment. Ecology and

- Transportation Subcommittee TRB ADC30T Task force on ecology.
August 16 – 19, 2004. San Diego.
- West, E. W. 2004. Highways and wildlife: scale, cumulative impacts and noise in a dynamic ecosystem. Road Ecology Winter Seminar Environmental Policy Issues and Linkages in Transportation Planning March 16, 2004. U.C. Davis.
- West, E.W. 1999. Surface activity and structure of a hydrothermally-heated maternity colony of the little brown bat, *Myotis lucifugus*, in Alaska. Canadian Field-Naturalist. Vol. 113, no. 3. Jul-Sep 1999.
- West, E. W 1998. Songs of Aleutian Island Song Sparrows: acoustic structure in a windy environment. 1998 North American Ornithological Conference. 6-12 April, St. Louis, Missouri.
- West, E. W. 1995a. Ecological status report on the Queen Charlotte goshawk, *Accipiter gentilis laingi*. Alaska Department of Fish and Game. 25 pp.
- West, E. W. 1995b. Birds and mammals. Pp. 37-67 in: Kodiak Island Space Launch complex, environmental assessment. Environment and Natural Resources Institute report for Alaska Aerospace Development Corporation.
- Schoen, J. W. and E. W. West. 1994a. Proactive strategies for conserving biological diversity: An unprecedented opportunity in Alaska. Proceedings from the 59th Wildlife and Natural Resources Conference, 18-23 March 1994., Anchorage, Alaska.
- West, E. W. 1994. Second record of the long-legged bat in Alaska. Northwest Naturalist. 74:56-57.
- Schoen, J. W. and E. W. West. 1994b. The Alaskan Opportunity. Pages 33-35 in Defenders of Wildlife, special issue, Can We Save Our Biggest Old-growth Rainforest? Spring 1994.
- West, E. W. 1993a. 1992 Keen's bat survey: Baker and Chichagof Islands, Southeast Alaska. Alaska Natural Heritage Program report to the U.S. Forest Service, Region 10, Juneau, Alaska.
- West, E. W. 1993b. Rare Vertebrate Species in the Chugach and Tongass National Forests, Alaska. Alaska Natural Heritage Program report for the U. S. Forest Service, Reg. 10, Juneau, Alaska. 254 p.
- West, E. W. 1993c. 1993 Keen's Bat survey: Misty Fjords, Duke Island, Prince of Wales Island, Dall Island. Report to the U.S. Forest Service, Region, 10 Juneau, Alaska. 14 p.
- West, E. W. 1992a. 1992 Montague Island Marmot survey: Zaikoff Bay. Report to U.S. Forest Service, Chugach National Forest, Cordova, Alaska. 12 p.
- West, E. W. 1992b. 1991 Keen's Bat Survey: Wrangell Island and lower Stikine River, Southeast Alaska. Alaska Natural Heritage Report to the U.S. Forest Service, Region 10, Juneau Alaska.
- West, E. W. 1991a. Status reports on selected mammals of ecological concern in Alaska. Alaska Natural Heritage Program for the U.S. Fish and Wildlife Service, Alaska Region, Anchorage. 120 p.
- West, E. W. 1991b. An annotated list of vertebrate species of ecological concern in Alaska. Alaska Natural Heritage Program for the U. S. Fish and Wildlife Service,

- Alaska Region, Anchorage. 122 p.
- West, E. W. 1988. Geographic variation in songs of Aleutian Island Song Sparrows: 3 causal hypotheses examined. 2nd International Behavioral Ecology Conference, Vancouver, British Columbia. October 6-9, 1988.
- West, E. W. 1987a. Food habits of Aleutian Island Arctic Foxes. *Murrelet* 68:33-38.
- West, E. W. 1987b. A reconnaissance survey for San Joaquin Kit foxes (*Vulpes macrotis mutica*) on the Tule Elk Reserve, Kern county, California. U. C. Dept. of Botany/ Calif. Parks and Recreation.
- West, E. W. 1986. Limiting similarities between Arctic and Red Foxes: Considerations for biological control. International Union for the Conservation of Nature and Natural Resources; Canid Conservation Group dossier, Oxford, England.
- West, E. W. 1985a. Singing behavior of the Sierran Pika. Abstract. Pika workshop. 4th International Thereological Congress, Edmonton, Alberta, Canada.
- West, E. W. 1985b. Limiting similarities between Arctic and Red foxes: considerations for biological control. Abstract. Carnivore Social Organization Symposium. 4th International Thereological Congress, Edmonton, Alberta, Canada.
- Garcia, J., W. Spencer, D. Hays, E. W. West. 1984. Mt. Baker Environmental Geothermal Report. BioSystems Analysis Inc. for the City of Seattle, Washington. 285 pp.
- West, E. W. and R. L. Rudd 1983. Biological Control of Aleutian Island Arctic Foxes: A Preliminary strategy. *Int. J. Stud. Anim. Prob.* 4(4): 305-311.
- West, E. W. 1983. Ecological determinants of social organization in the pika (*Ochotona princeps*). *American Zoologist* 23(45) #355.
- Newman, J., G. Peterson, and E. W. West. 1982. Wetland Study, Bethel, Alaska. Final Report. Environmental Science and Engineering Inc., Anchorage, Alaska.
- West, E. W., K. L. West, and R. L. Rudd 1982. Biological control of Aleutian Island Arctic foxes. Summary report, Research contract between the University of California, Davis, and the U. S. Fish and Wildlife Service, Anchorage, Alaska. 162 pp.
- West, E. W. 1981. Biological control of Aleutian Island populations of introduced canids. Abstract. 2nd Annual Carnivore and Furbearer Conference, Jan 11-12, Fairbanks, Alaska.
- West, E.W. 1980. Adaptive patterns in behavior of the Sierran Pika (*Ochotona princeps*). Ph.D. Dissertation. University of California Davis.