**CURRICULUM VITAE**

**SCOTT D. COOPER**

**PERSONAL:** Birthdate: June 24, 1952

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**ADDRESS:** Dept. of Ecology, Evolution, and Marine Biology

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**EDUCATION:** B.S. 1974 University of Nebraska, Lincoln

 Ph.D. 1979 University of Wisconsin, Madison

**HONORS/AWARDS:**

University of California Junior Faculty Fellowships (1981-1982)

 Danforth Graduate Fellowship (1974-78)

 Marshall Scholarship for Graduate Study (alternate)

 Phi Beta Kappa

 Regent's Scholarship (1970-74)

 Dreier Scholarship

 Johnson Scholarship

 Senior Men’s Honorary (Innocent’s Society) – University of Nebraska

**PROFESSIONAL EXPERIENCE:**

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| 7/12 – present7/91-7/12 | Research Professor, UC Santa Barbara: Freshwater biology, stream ecology, watershed scienceProfessor, UC Santa Barbara; aquatic biology, stream ecology, limnology, ecological statistics, teaching assistant training, and tropical ecology |
| 1/03-7/08 | Associate Director, University of California Systemwide Education Abroad Program. Administer and provide oversight for study abroad programs at 120 institutions in 31 countries, and insure integration of study abroad programs into the academic curriculum of the University of California. 7/04-7/08, also Academic Dean, responsible for the academic oversight of EAP programs. |
| 7/00-4/03 | Campus Director, Education Abroad Program, University of California – Santa Barbara. Administer campus functions for international exchange programs. |
| 7/98-6/01 | Chair, Department of Ecology, Evolution, and Marine Biology, University of California - Santa Barbara. Administered an academic department containing approximately 30 faculty members. |
| 4/95-4/971/98-6/00 | Director, Natural Reserve System, UCSB. Responsible for the management of 6 reserves and field stations used for teaching, research, and public outreach. (Acting Director: 4/94 - 4/95) |
| 7/97-12/97 | Visiting Professor. University College Cork, Ireland. Research on biological interactions, disturbance, and scaling issues in freshwater systems. Sponsor: Dr. P. Giller. |
| 4/97-6/97 | Visiting Professor, Ecology Department, University of Lund, Sweden. University of California Education Abroad Program, Faculty Exchange Program. Research and teaching in limnology and animal ecology, review of exchange program. Hosts: Drs. L. Greenberg, C. Brönmark, L. Vought. |
| 7/85 - 6/91 | Associate Professor, UC Santa Barbara; aquatic biology, biological limnology. |
| 9/79 - 6/898/91 - present | Research Scientist. Studies of lakes, ponds, and streams including investigations of biological interactions and disturbances in chaparral, montane, and tropical streams and lakes; predator-prey interactions in zooplankton assemblages; impacts of fire, land use changes, and pollution on stream ecosystems; and the preservation and restoration of native salmonid stocks. Ecological studies on scaling issues, trophic cascades, spatial heterogeneity, and the use of meta-analysis.  |
| 7/89 - 6/91 | Research Scientist. Studies of ponds and streams in Kenya including investigations of the effects of predation and nutrients on the biota of small ponds and relationships between land use practices and the community structure of tropical streams. |
| 7/89 - 6/91 | Acting Associate Professor, Dept. of Zoology, University of Nairobi, freshwater ecology, general ecology, philosophy of science. |
| 7/89 - 6/91 | Director, University of California Education Abroad Program in Nairobi, Kenya. Directed the educational exchange program between the University of Nairobi and the University of California. |
| 5/87-8/87 | Visiting Scientist. British Museum of Natural History. British Library and Queen Mary's College (University of London), London; University of East Anglia, Norwich, U.K. Sponsors: Dr. P. Cranston (British Museum), Drs. A. Hildrew and A. Wallwork (Queen Mary's College), Dr. C. Townsend (Univ. of East Anglia). Work on the taxonomy of chironomids and aquatic oribatid mites. Review of predation experiments in freshwater systems. |
| 3/85, 9/96, 2/98 | Visiting Scientist. Smithsonian Tropical Research Institute, Balboa, Panama (3/85); Verdant Vale Research Station, Arima, Trinidad (9/96); Pacific Coast streams, Costa Rica (2/98). Ecology of Neotropical streams. |
| 7/79-7/85 | Assistant Professor, UC Santa Barbara; aquatic community ecology, stream ecology, biological limnology, world water problems, population biology |
| 9/78-5/796/76-8/76 | Teaching Assistant, University of Wisconsin, Madison; limnology, general zoology, zooplankton ecology, population biology |
| 1/78 | Visiting Scientist, Smithsonian Institute, Washington, D.C. Taxonomy of Conchostraca. |
| 10/77 & 7/78 | Research Assistant, R/V Eastward and R/V John DeWolf research cruises. North Atlantic near Cape Hatteras. |
| 6/77-9/77 | Research Assistant, Tahoe Research Group, UC Davis. Studies of the feeding behavior of *Mysis relicta*. |
| 9/74-9/79 | Research Scientist. Studies of the ecology of lakes and ponds in Wisconsin, with emphasis on invertebrate predators and zooplankton. |
| 6/74-8/74 | Natural Sciences Director, Camp Beech Cliff, Mt. Desert, Maine |
| 6/73-8/736/75-8/75 | Environmental Education Director and Group Leader, Youth Conservation Corps, Bureau of Reclamation, McCook, Nebraska |
| 9/72-5/731/74-5/74 | Teaching Assistant, University of Nebraska, Lincoln; genetics, general biology, general zoology |
| 5/72-8/72 | Research Assistant, Fisheries Research Division, Nebraska Game and Parks Commission, Lincoln, Nebraska |

**PROFESSIONAL SERVICE:**

Co-Convenor, Symposium on Chaparral Research. May 1985. Sponsored by the Water Resources Center, U.S. Forest Service, Calif. Dept. of Water Resources, Calif. Dept. of Forestry, and UCSB. (with E. Keller and J. DeVries)

Chairperson or Moderator. Presented or invited papers sessions on stream ecology (Ecological Society of America annual meeting, 1985), predator-prey interactions (North American Benthological Society annual meeting, 1988), the effects of biotic and abiotic factors on community structure (North American Benthological Society annual meeting, 1995), species interactions (North American Benthological Society annual meeting, 2000), and the effects of fire on aquatic ecosystems (Joint Aquatic Sciences Meeting, 2014). Poster session on zooplankton ecology (International Society of Limnology Congress, 1995).

Executive Committee, North American Benthological Society. 1987-88.

Associate Editor, Journal of the North American Benthological Society. June 1988 - February 1990, June 1992-Sept. 1994.

Chairperson and Rapporteur. Workshop on phosphorus cycles in terrestrial and aquatic ecosystems and their interaction with the cycles of other elements. Africa. Aquatic Session. Scientific Committee on Problems of the Environment of the International Council of Scientific Unions and the United Nations Environment Program. Nairobi, Kenya. March, 1991.

Invited Lecturer. Nordic College of Ecology course in experimental benthic ecology. University of Umeå, Sweden. March 1992.

Member, Ecology Advisory Panel. National Science Foundation. Four panels from Sept. 1993 - October 1996.

Member, STREON (NEON) Technical Advisory Committee. June 2013 – August 2015.

Co-organizer and co-chair. Integrative session 18 on The Effects of Fire on Freshwater Ecosystems. 2014 Joint Aquatic Sciences Meeting, Portland, Oregon. May 18-23, 2014. (with R. Bixby, University of New Mexico)

Participant: NSF LTER working group dealing with the effects of nutrient enrichment on stream ecosystems. 2013- present.

Planner, workshop organizer. The Stream Resiliency Research Coordination Network. Effects of nutrient enrichment, climate change, and biodiversity loss on stream ecosystems.

Co-organizer, co-editor (with R. Bixby, University of New Mexico). Special series in the journal Freshwater Science dealing with the effects of fire on freshwater ecosystems. Special issue slated for publication in Dec., 2015.

Reviewer: National Science Foundation, National Environmental Research Committee (UK), Indo-U.S. Science and Technology Forum, and Water Resources Center proposals. Numerous manuscripts for: Science, Ecology, Hydrobiologia, Discovery, AAAS Selected Symposium Series, Water Resources Center Contributions, Journal of Plankton Research, Journal of Freshwater Ecology, American Zoologist, Canadian Journal of Zoology, Environmental Biology of Fishes, Journal of the North American Benthological Society, Limnology and Oceanography, American Scientist, Freshwater Biology, Kenya Journal of Science and Technology, Australian Journal of Ecology, Archiv für Hydrobiologie, Oecologia, Oikos, Great Basin Naturalist, California Agriculture, Journal of Animal Ecology, Ecological Applications, River Research and Applications, Environmental Management, Climatic Change, Journal of Tropical Ecology, and miscellaneous book chapters.

External reviewer: Doctoral candidate, University of Waterloo, Canada.
 Doctoral candidate, University of Cape Town, South Africa.

 Doctoral candidate, University of California, Davis.

 Doctoral candidate, University of Tasmania, Australia

 Doctoral candidate, University of California, Santa Cruz

 Doctoral candidate, Australian National University, Australia

 Also, external reviewer for faculty promotion cases

 for other universities.

**PUBLICATIONS:**

 1980 Cooper, S. D., and C. R. Goldman. Opossum shrimp (*Mysis relicta*) predation on zooplankton. Can. J. Fish. Aquat. Sci. 37:909-919.

 1982 Cooper, S. D., and C. R. Goldman. Environmental factors affecting predation rates of *Mysis relicta*. Can. J. Fish. Aquat. Sci. 39:203-208.

 1982 Smith, D. W. and S.D. Cooper. Competition among Cladocera. Ecology 63:1004-1015.

 1982 Cooper, S.D., and D. W. Smith. Competition, predation, and the relative abundances of two species of *Daphnia*. J. Plankton Res. 4:859-879.

 1983 Dodson, S. I., and S. D. Cooper. Trophic relationships of the freshwater jellyfish, *Craspedacusta* *sowerbyi*. Limnol. Oceanogr. 28:345-351.

 1983 Cooper, S. D. Selective predation on cladocerans by common pond insects. Can. J. Zool. 61:879-886.

 1983 Hemphill, N., and S. D. Cooper. The effect of physical disturbance on the relative abundances of two filter-feeding insects in a small stream. Oecologia 58:378-382.

 1984 Cooper, S. D., D. W. Winkler, and P. H. Lenz. The effect of grebe predation on a brine shrimp population. J. Anim. Ecology 53:51-64.

 1984 Cooper, S. D. The effects of trout on water striders in stream pools. Oecologia 63:376-379.

 1984 Hemphill, N., and S. D. Cooper. Differences in the community structure of stream pools containing or lacking trout. Verh. Internat. Verein. Limnol. 22:1858-1861.

 1984 Cooper, S. D. Prey preferences and interactions of predators from stream pools. Verh. Internat. Verein. Limnol. 22:1853-1857.

 1985 Melack, J. M., P. H. Lenz, and S. D. Cooper. The ecology of Mono Lake, California. Natl. Geogr. Soc. Res. Reports 20:461-470.

 1985 Cooper, S. D., D. W. Smith, and J. R. Bence. Prey selection by freshwater predators with different foraging strategies. Can. J. Fish. Aquat. Sci. 42:1720-1732.

 1986 Cooper, S. D., T. L. Dudley, and N. Hemphill. The biology of chaparral streams in Southern California. In: J. DeVries (ed.), Proceedings of the Chaparral Ecosystem Research Conference. Calif. Water Res. Center Contributions. Report No. 62:139-151.

 1986 Dudley, T. L., S. D. Cooper, and N. Hemphill. Effects of macroalgae on a stream invertebrate community. J. North Amer. Benth. Soc. 5:93-106.

 1986 Winkler, D. W., and S. D. Cooper. Ecology of migrant Black-necked Grebes (*Podiceps* *nigricollis*) at Mono Lake, California. Ibis 128:483-491.

 1986 Lenz, P. H., S. D. Cooper, J. M. Melack, and D. W. Winkler. Spatial and temporal distribution patterns of three trophic levels in a saline lake. J. Plankton Res. 8:1051-1064.

 1988 Cooper, S. D., and T. L. Dudley. The interpretation of "controlled" vs "natural" experiments in streams. Oikos 52:357-361.

 1988 Smith, D. W., S. D. Cooper and O. Sarnelle. Curvilinear density dependence and the design of field experiments on zooplankton competition. Ecology 69:868-870.

 1988 Cooper, S. D. The responses of aquatic insects and tadpoles to trout. Verh. Internat. Verein. Limnol. 23: 1698-1703.

 1988 Wiseman, S. W. and S. D. Cooper. The predatory effects of water striders on emerging insects. Verh. Internat. Verein. Limnol. 23: 2141-2144.

 1989 Hopkins, P. S., K. Kratz, and S. D. Cooper. Effects of an experimental acid pulse on invertebrates in a high altitude Sierra Nevada stream. Hydrobiologia 171:45-58.

 1989 Power, M.E., T.L. Dudley and S.D. Cooper. Grazing catfish, fishing birds, and attached algae in a Panamanian stream. Environ. Biol. Fish. 26:285-294.

 1990 Cooper, S.D., S.J. Walde and B.L. Peckarsky. Prey exchange rates and the impact of predators on prey populations in streams. Ecology 71:1503-1514.

 1990 Barmuta, L.A., S.D. Cooper, S.K. Hamilton, K.W. Kratz and J.M. Melack. Responses of zooplankton and zoobenthos to experimental acidification in a high-elevation lake (Sierra Nevada, California, U.S.A.). Freshwater Biol. 23:571-586.

 1990 Dudley, T., C.M. D’Antonio and S.D. Cooper. Mechanisms and consequences of interspecific competition between two stream insects. J. Anim. Ecol. 59:849-866.

 1993 Cooper, S.D. and L.A. Barmuta. Field experiments in biomonitoring. Pp. 399-441 (Chap. 11) In: D.M. Rosenberg and V.H. Resh. Freshwater biomonitoring and benthic invertebrates. Chapman and Hall, New York.

 1993 Wiseman, S.W., S.D. Cooper and T.L. Dudley. The effects of trout on epibenthic odonate naiads in stream pools. Freshwater Biology 30: 133-145.

 1993 Sarnelle, O., K.W. Kratz and S.D. Cooper. Effects of an invertebrate grazer on the spatial arrangement of a benthic microhabitat. Oecologia 96: 208-218.

 1994 Douglas, P.L., G.E. Forrester and S.D. Cooper. Effects of trout on the diel periodicity of drifting in baetid mayflies. Oecologia 98:48-56.

 1994 Kratz, K.W., S.D. Cooper and J.M. Melack. Effects of single and repeated experimental acid pulses on invertebrates in a high altitude Sierra Nevada stream. Freshwater Biology 32: 161-183.

 1996 Cooper, S.D. Rivers and streams. Pages 133 - 170 (Chapter 6) in: McClanahan, T.R. and T. P. Young (eds.) East African Ecosystems and their Conservation. Oxford University Press, New York.

 1997 Cooper, S.D., L. Barmuta, O. Sarnelle, K. Kratz, and S. Diehl. Quantifying spatial heterogeneity in streams. Journal of the North American Benthological Society 16: 174 -188.

 1997 Peckarsky, B.L., S.D. Cooper, and A.R. McIntosh. Extrapolating from individual behavior to populations and communities in streams. Journal of the North American Benthological Society 16: 375 - 390.

 1997 Nisbet, R.M., S. Diehl, W.G. Wilson, S.D. Cooper, D.D. Donalson, and K. Kratz. Primary-productivity gradients and short-term population dynamics in open systems. Ecological Monographs 67: 535-553.

 1997 Osenberg, C.W., O. Sarnelle, and S.D. Cooper. Effect size in ecological experiments: the application of biological models in meta-analysis. American Naturalist 150: 798-812.

 1998 Cooper, S.D., S. Diehl, K. Kratz, and O. Sarnelle. Implications of scale for patterns and processes in stream ecology. Australian Journal of Ecology 23: 27-40.

 1998 Cooper, S.D., K.M. Mavuti, S. Wiseman, O. Sarnelle, M. Gakungu, and N. Pacini. Effects of fish and phosphorus on small, turbid ponds in East Africa. Verh. Internat. Verein. Limnol. 26: 1543-1550.

 1998 Sarnelle, O., S.D. Cooper, S. Wiseman, and K.M. Mavuti. The relationship between nutrients and trophic-level biomass in turbid tropical ponds. Freshwater Biology 40: 65-75.

 1998 Bradford, D. F., S. D. Cooper, T. M. Jenkins, Jr., K. Kratz, O. Sarnelle, and A.D. Brown. Influences of natural acidity and introduced fish on faunal assemblages in California alpine lakes. Canadian Journal of Fisheries and Aquatic Science 55: 2478-2491.

 1999 Jenkins, T. M. Jr., S. Diehl, K. W. Kratz, and S. D. Cooper. Effects of population density on individual growth of brown trout in streams. Ecology 80: 941-956.

 1999 Osenberg, C.W., O. Sarnelle, S. D. Cooper, and R. D. Holt. Resolving ecological questions through meta-analysis: goals, metrics, and models. Ecology 80: 1105-1117.

 1999 Englund, G., O. Sarnelle, and S. D. Cooper. The importance of data-selection criteria: meta-analysis of stream predation experiments. Ecology 80: 1132-1141.

1. Diehl, S., S. D. Cooper, K. W. Kratz, R. M. Nisbet, S. K. Roll, S. W. Wiseman, and T. M. Jenkins, Jr. Effects of multiple, predator-induced behaviors on short-term producer-grazer dynamics in open systems. American Naturalist 156: 293-313.
2. Englund, G., S. D. Cooper, and O. Sarnelle. Application of a model of scale dependence to quantify scale domains in open predation experiments. Oikos 92: 501-514.

2001 Poff, N. L., P.L. Angermeier, S.D. Cooper, P.S. Lake, K.D. Fausch, K. O. Winemiller, L. A. K. Mertes, M. W. Oswood, J. Reynolds and F.J. Rahel. Fish diversity in streams and rivers. Pages 315-349 in F.S. Chapin III, O.E. Sala, and E. Huber-Sannwald (editors). Global biodiversity in a changing environment. Ecological studies, Vol. 152. Springer-Verlag, New York.

 2002 Benda, L.E., N.L. Poff, C. Tague, M.A. Palmer, J. Pizzuto, S. Cooper, E. Stanley, and G. Moglen. How to avoid train wrecks when using science in environmental problem solving. BioScience 52: 1127-1136

 2002 Borer, E. T., K. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, B. Halpern, E. W. Seabloom, and J. B. Shurin. Topological approaches to food web analyses: a few modifications may improve our insights. Oikos 99: 397-401

 2002 Shurin, J.B., E.T. Borer, E.W. Seabloom, K. Anderson, C.A. Blanchette, B. Broitman, S.D. Cooper, and B. Halpern. A cross-ecosystem comparison of the strength of trophic cascades. Ecology Letters 5: 785-791

 2003 Englund, G. and S.D. Cooper. Scale effects and extrapolation in ecological experiments. Advances in Ecological Research 33: 161-213.

2005 Roll, S.K., S. Diehl, and S.D. Cooper. Effects of grazer immigration and nutrient enrichment on an open algae-grazer system. Oikos 108: 386-400.

1. Borer, E. T., E. W. Seabloom, J. B. Shurin, K.E. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, and B.S. Halpern. What determines the strength of a trophic cascade? Ecology 86: 528-537.
2. Anderson, K.E., R.M. Nisbet, S. Diehl, and S.D. Cooper. Scaling population responses to spatial environmental variability in advection-dominated systems. Ecology Letters 8: 933-943.

 2005 Taulbee, W.K., S.D. Cooper, and J.M. Melack. Effects of nutrient enrichment on algal biomass across a natural light gradient. Archiv fur Hydrobiologie 164: 449-464.

2006Busse, L.B., J.C. Simpson, and S.D. Cooper. Relationships among nutrients, algae, and land use in urbanized southern California streams. Canadian Journal of Fisheries and Aquatic Science 63: 2621-2638.

 2009 Herbst, D.B., E.L. Silldorff, and S.D. Cooper. The influence of introduced trout on the benthic communities of paired headwater streams in the Sierra Nevada of California. Freshwater Biology 54: 1324-1342.

 2010 Herbst, D.B. and S.D. Cooper. Before and after the deluge: rain-on-snow flooding effects on aquatic invertebrate communities of small streams in the Sierra Nevada, California. Journal of the North American Benthological Society 29: 1354-1366.

 2012 Klose, K. and S.D. Cooper. Contrasting effects of an invasive crayfish (*Procamburus clarkii*) on two temperate stream communities. Freshwater Biology 57: 526-540.

2012 Klose, K., S.D. Cooper, A.D. Leydecker, and J. Kreitler. Relationships among catchment land use and concentrations of nutrients, algae, and dissolved oxygen in a southern California river.Freshwater Science 31: 908-927.

2012 Alagona, P.S., S. D. Cooper, M. Capelli, M. Stoecker, and P. H. Beedle. A history of steelhead and rainbow trout (*Oncorhynchus mykiss*) in the Santa Ynez River watershed, Santa Barbara County, California. Bulletin of the Southern California Academy of Sciences 111: 163-222.

2013 Klose, K. and S.D. Cooper. Complex impacts of an invasive omnivore and native consumers on stream communities in California and Hawaii. Oecologia 171: 945-960.

2013 Verkaik, I., M. Rieradevall, S. D. Cooper, J. M. Melack, T. L. Dudleyand N. Prat. Fire as a disturbance in Mediterranean climate streams. Hydrobiologia 719: 353-382.

2013 Cooper, S.D., P.S. Lake, S. Sabater, J.M. Melack, and J.L. Sabo. The effects of land use changes on streams and rivers in Mediterranean climates. Hydrobiologia 719: 383-425.

2015 Bennett, D.M., T. L. Dudley. S. D. Cooper, and S. S. Sweet. Ecology of the invasive New Zealand mud snail, *Potamopyrgus antipodarum* (Hydrobiidae), in a mediterranean-climate stream system. Hydrobiologia 746: 375-399.

2015 Cooper, S. D., H. M. Page, S. W. Wiseman, K. Klose, D. Bennett, T. Even, S. Sadro, C. E. Nelson, and T. L. Dudley. Physicochemical and biological responses of streams to wildfire severity in riparian zones. Freshwater Biology 60: 2600-2619. (doi:10.1111/fwb.12523)

2015 Bixby, R. J., S. D. Cooper, R. E. Gresswell, L. E. Brown, C. N. Dahm, and K. A. Dwire. Fire effects on aquatic ecosystems: an assessment of the current state-of-the-science. Freshwater Science 34: 1340-1350. (doi: 10.1086/684073)

2015 Klose, K., S. D. Cooper, and D. M. Bennett. Effects of wildfire on stream algal abundance, community structure, and nutrient limitation. Freshwater Science 34: 1494-1509. (doi: 10.1086/683431)

**IN PRESS:**

Power, M.E., S. J. Kupferberg, S. D. Cooper, and M. L. Deas. Rivers. Chapter 33 in H. Mooney and E. Zavaleta. Ecosystems of California – A source book. University of California Press, Berkeley, CA.

Lorda, J., R. F. Hechinger, S. D. Cooper, A. M. Kuris, and K. D. Lafferty. Intraguild predation by shore crabs affects mortality, behavior, growth, and densities of California horn snails. Ecosphere.

**IN REVIEW:**

Utz, R. M., S. D. Cooper, K. B. Gido, and J. R. Stewart. Exclusion of fish and invertebrates from benthic patches across water conductivity levels using high-frequency (10 Hz) pulses and adjustable electrical settings. Freshwater Science.

Albertson, L.K., L.S. Sklar, S.D. Cooper, and B.J. Cardinale. Influence of aquatic macroinvertebrates on stream sediment movement persists at the field scale. Ecosphere.

Page, H. M., S. D. Cooper, S. W. Wiseman, D. Bennett, K. Klose, S. Sadro, C. E. Nelson, and T. Even. Comparisons of stable isotope (C, H, N) signatures in revealing organic matter sources and trophic relationships in headwater streams. Freshwater Science.

**IN REVISION FOR RESUBMISSION:**

Cooper, S. D. and N. Hemphill. The effects of trout on faunal assemblages in stream pools. Ecology.

**MANUSCRIPTS IN PREPARATION:**

Brinkman, J., S.D. Cooper, and D.B. Herbst. Associations between land use patterns and riparian and stream communities in southern California.

Busse, L. B., T. Rennebarth, U. Raeder, and S. D. Cooper. Benthic diatoms as bioindicators in a Southern California marsh

Even, T. and S.D. Cooper. The effects of a gradient of prey immigration rates on predator-prey interactions in stream channels.

**TECHNICAL REPORTS:**

1984 Cooper, S. D. and N. Hemphill. Upper Mission Creek and Rattlesnake Creek Aquatic Resources with an Impact Assessment of a Proposed Flood Control Project and Mitigation Recommendations. Report prepared for the U.S. Fish and Wildlife Service. 23 pp.

1985 Howald, A., P. Collins, S. Cooper, W. Ferren, Jr., P. Lehman, K. Saterson, and K. Steele. Union Oil Project/Exxon Project Shamrock and Central Santa Maria Basin Area Study EIS/EIR. Technical Appendix F: Terrestrial and Freshwater Biology. Prepared for County of Santa Barbara, U.S. Minerals Management Service, California State Lands Commission, California Coastal Commission and California Office of Offshore Development. Submitted by Arthur D. Little, Inc. 365 pp.

1986 Howald, A., P. Collins, S. Cooper, P. Lehman, G. Reyes-French and K. Steele. Exxon Lompoc Pipeline Project, Supplemental EIR. Technical Appendix B, Vol. 2: Terrestrial and freshwater biology. Prepared for County of Santa Barbara, SBC #86-EIR-2. Submitted by Arthur D. Little, Inc. 197 pp.

1987 Melack, J.M., S.D. Cooper and R.W. Holmes. Chemical and biological survey of lakes and streams located in the Emerald Lake watershed (Sequoia National Park) of the Sierra Nevada. Final Report, Calif. Air Resources Board. Contract A3-096-32. 345 pp.

1988 Cooper, S.D., T.M. Jenkins, Jr. and C. Soiseth. Integrated watershed study: An investigation of fish and amphibian populations in the vicinity of the Emerald Lake Basin, Sequoia National Park. Final Report, Calif. Air Resources Board. Contract A4-122-32. 95 pp.

1988 Cooper, S.D., K. Kratz, R.W. Holmes and J.M. Melack. An integrated watershed study: An investigation of the biota in the Emerald Lake system and stream channel experiments. Final Report, California Air Resources Board. Contract A5-139-32. 75 pp.

1989 Melack, J.M., S.D. Cooper, and T.M. Jenkins Jr. Chemical and biological characteristics of Emerald Lake and the streams in its watershed, and the responses of the lake and streams to acidic deposition. Final Report, California Air Resources Board. Contract A6-184-32. 463pp.

1989 Melack, J.M., S. Hamilton, J. Sickman and S. Cooper. Effects of atmospheric deposition on ecosystems in Sequoia National Park: Ecological impacts on aquatic habitats. Prepared for the U.S. National Park Service, Cooperative Agreement Order No. 8006-2-0002.

1991 Philbrick, R., A. Reynolds, W. Ferren, P. Collins, S. Cooper, T. Dudley, S. Wiseman, C. Winter, M. Swanson, P. Williams, L. Wilcoxon, G. Taylor and R. Collins. Final program environmental impact report for Santa Barbara County flood control routine maintenance activities. Prepared for County of Santa Barbara, 90-EIR-7.

1991 Kratz, K.W., T.M. Jenkins and S.D. Cooper. Part V. Zoological resources: Aquatic biota. In: Ferren, W.R. Jr and F.W. Davis (PIs). Biotic inventory and ecosystem characterization for Fish Slough, Inyo and Mono Counties, California. Prepared for the Dept. of Fish and Game, State of California, Agency Award No. FG-83890.

 1994 Bradford, D. F., S.D. Cooper, A. D. Brown, T. M. Jenkins, Jr., K. Kratz, and O. Sarnelle. Distribution of aquatic animals relative to naturally acidic waters in the Sierra Nevada. Final report for California Air Resources Board, Contract No. A132-173. 164 pp.

 1994 Jenkins, T. M. Jr., R. A. Knapp, K. W. Kratz, and S. D. Cooper. Aquatic biota in the Sierra Nevada: Current status and potential effects of acid deposition on populations. Final report for California Air Resources Board, Contract No. A932-138. 150 pp.

 1996 Cooper, S. D., K. W. Kratz, G. Forrester, and S. Wiseman. The impact of runoff from asphaltic products on stream communities in California. Final report for the California Department of Transportation, Project 65V892. 112 pp.

 1997 Wiseman, S. W. and S. D. Cooper. Evaluating the effectiveness of creating vernal pools: A comparative study of the aquatic fauna of vernal pools at Ellwood Mesa, Del Playa Road, and Del Sol Reserve. A report to the Isla Vista Recreation and Park District.

 1999 Bolser, R. C. and S. D. Cooper. The aquatic fauna of created, restored,

 and natural vernal pools at Del Sol Reserve, Del Playa Road, and Ellwood Mesa: Results of 1997-98 monitoring. A report to the Isla Vista Recreation and Park District.

 2001 Cooper, S. D. and D. B. Herbst. Report on the first phase of the Kings River experimental watershed study: Survey examining the use of stream invertebrates in monitoring forest management practices. Report to the U.S.D.A. Forest Service, Pacific Southwest Research Station, Fresno, CA.

 2003 Herbst, D.B., E.L. Silldorff, and S.D. Cooper. The influence of introduced trout on native aquatic invertebrate communities in a paired watershed study of High Sierran streams. University of California Water Resources Center. Technical Completion Report, Project Number W-930. Paper herbst. (On-line at <http://repositories.cdlib.org/wrc/tcr/herbst>). Also, submitted to The Nature Conservancy – Ecosystem Research Program. Grant Award # HO-CSD-050600-CA.

2003 Busse, L., J. Simpson, S. Cooper, K. Kramer, and E. Stein. A survey of algae and nutrients in the Malibu Creek watershed. Southern California Coastal Watershed Research Project. Technical Report 412.

 2008 Melack, J.M., S.D. Cooper, B. Goodridge, S. Coombs, C. Nelson, S. Wiseman, and T. Even. Development of a stream monitoring program for Santa Rosa Island, Channel Islands National Park, California. National Park Service, Contract J8C07050020.

 2009 Klose, K., S.D. Cooper, and A. Leydecker. An assessment of numeric algal and nutrient targets for Ventura River Watershed Nutrient Total Maximum Daily Loads (TMDLs). Los Angeles Regional Water Quality Control Board. State Water Resources Control Board Contract 07-112-140. 154 pp.

 2011 Alagona, P., S. D. Cooper, M. Stoecker, and P. Beedle. Documenting the historic distribution of steelhead and rainbow trout (*Oncorhynchus mykiss*) in the Santa Ynez River Watershed, Santa Barbara County, California. Final report prepared for the Southwest Regional Office, National Marine Fisheries Service. Long Beach, CA.

**BOOK REVIEWS:**

1987 Cooper, S.D. Review of Kerfoot, W.C. and A. Sih. 1987. Predation: Direct and Indirect Impacts on Aquatic Communities. Univ. Press of New England, Hanover. vii + 386. J. Anim. Ecol. 57:321-322.

1987 Lesack, L.F.W. and S.D. Cooper. Review of Welcomme, R.L. 1985. River Fisheries. FAO Fisheries Technical Paper 262, Rome. ix + 330 pp. J. North Am. Benth. Soc. 6:217-219.

**ADDITIONAL PAPERS RESULTING FROM WORK COMPLETED IN MY LABORATORY:**

1985 Smith, D.W. Biological control of excessive phytoplankton growth and

the enhancement of aquacultural production. Can. J. Fish. Aquat. Sci. 42:1940-1945.

1986 Smith, D.W. The feeding ecology of silver carp. In: R. Day and T.L. Richards, eds., Proc. 2nd Int. Conf. Warm Water Aquaculture - Finfish. Laie, Hawaii, 1985.

1988 Smith, D.W. and R.H. Piedrahita. The relation between phytoplankton and dissolved oxygen in fish ponds. Aquaculture 68:249-265.

1988 Smith, D.W. Phytoplankton and catfish culture: A review. Aquaculture 74:167-189.

1988 Dudley, T.L. The roles of plant complexity and epiphyton in colonization of macrophytes by stream insects. Verh. Internat. Verein. Limnol. 23:1153-1158.

1989 Smith, D.W. The feeding selectivity of Silver Carp, *Hypopthalmichthys molitrix* Val. J. Fish Biology 34:819-828.

1991 Dudley, T.L. and C.M. D'Antonio. The effects of substrate texture, grazing and disturbance on macroalgal establishment in stream riffles. Ecology 72:297-309.

1991 Knapp, R.A. and T.L. Dudley. Growth and longevity of golden trout ( *Salmo aguabonita*) in native streams. Calif. Fish Game 76:161-173.

1991 Smith, D.W. Mechanistic simulation modeling of phytoplankton-oxygen dynamics in aquaculture ponds. In: Brune and Tomasso (eds.) International Symposium on Water Quality in Aquaculture, 436-455, 1991.

1992 Sarnelle, O. Nutrient enrichment and grazer effects on phytoplankton in lakes. Ecology 73:551-560.

1992 Dudley, T.L. Beneficial effects of herbivores on stream macroalgae via epiphyte removal. Oikos 65:121-127.

1992 Soiseth, C.R. The pH and acid neutralizing capacity of ponds containing *Pseudacris regilla* larvae in an alpine basin of the Sierra Nevada. Calif. Fish and Game 78:11-19.

1992 Sarnelle, O. Contrasting effects of *Daphnia* on ratios of nitrogen to phosphorus in a eutrophic, hard-water lake. Limnol. Oceanogr. 37:1527-1542.

1993 Sarnelle, O. Herbivore effects on phytoplankton succession in a eutrophic lake. Ecol. Monogr. 63:129-149.

1993 Smith, D.W. Sewage treatment with complementary filter feeders: A new method to control excessive suspended solids and nutrients. Water Environment Research 65: 650-654.

1994 Smith. D.W. Comment : Algal control by silver carp. The Progressive Fish Culturist 56: 65-76.

1994 Sarnelle, O. Inferring process from pattern: trophic level abundances and imbedded interactions in lakes. Ecology 75: 1835-1841.

1996 Kratz, K.W. Effects of stoneflies on local prey populations: mechanisms of impact across prey density. Ecology 75: 1573-1585.

1996 Sarnelle, O. Predicting the outcome of trophic manipulation in lakes - a comment on Harris (1994). Freshwater Biology 35: 339 - 342.

1997 Sarnelle, O. *Daphnia* effects on microzooplankton: comparison of enclosure and whole-lake responses. Ecology 78: 913 - 928.

1. Sarnelle, O. Zooplankton effects on vertical particulate flux: Testable

models and experimental results. Limnology and Oceanography 4: 357-

370.

1. Barbee, N.C. Grazing insects reduce algal biomass in a neotropical stream.

Hydrobiologia 532: 153-165.

2011 Klose, K. Snail responses to cues produced by an invasive decapod predator. Invertebrate Biology 130: 226-235.

**ABSTRACTS, PAPERS, POSTERS, WORKSHOPS:**

1978 Insect and turbellarian predation on fairy shrimps. 26th Annual Meeting of the North American Benthological Society, Winnipeg, Manitoba, Canada.

 1979 (With D. W. Smith) Predation, competition, and seasonal succession in cladoceran assemblages. Annual Meeting of the Ecological Society of America, Stillwater, Oklahoma.

1980 (With D. W. Smith) Competition, predation, and the relative abundances of two *Daphnia* species. Third Winter Meeting, American Society of Limnology and Oceanography. Seattle, Washington.

1980 (with G. Ribi) Density-dependent feeding in *Daphnia*.. Third Winter Mtg. Amer. Soc. of Limnology and Oceanography. Seattle, WA.

1982 (with D. Winkler and P. Lenz) The effect of grebe predation on the *Artemia* population in Mono Lake. Mono Lake Symposium, Santa Barbara, California.

1983 (with N. Hemphill) The effects of trout on stream pool communities. North American Benthological Society, 31st Annual Meeting, LaCrosse, Wisconsin.

1983 (with N. Hemphill) Differences in the community structure of stream pools containing or lacking trout. 22nd Congress of the International Society of Limnology, Lyon, France.

1983 Prey preferences and interactions of predators from stream pools. 22nd Congress of the International Society of Limnology, Lyon, France.

1984 (with N. Hemphill and T. Dudley) The effects of colonial algae on stream insects. North Amer. Benth. Soc. 32nd Annual Meeting, Raleigh, N.C.

1984 Stochastic vs. deterministic communities: Problems of interpretation and scale. Invited talk at Symposium, North Amer. Benth. Soc., Raleigh, N.C.

1984 (with D. W. Smith, J. R. Bence) Prey preferences of predators with different foraging strategies. Amer. Soc. of Limnology and Oceanography, Vancouver, B.C.

1984 Chaparral watershed studies. Invited talk at the Hubbard Brook Experimental Forest Annual Meeting, West Thornton, N.H.

1985,86 Aquatic biota studies in Sequoia National Park. National Park Service/State of California Air Resources Board Acid Deposition Research Meeting, Three Rivers, CA.

1985 (with N. Hemphill and T. Dudley) The biology of chaparral streams in Southern California. Chaparral Ecosystems Research Meeting, Santa Barbara, CA.

1985 (with T. Dudley) Behavioral mechanisms of competition between stream insects. Ecological Society of America Annual Meeting, Minneapolis, MN.

1985 Mechanisms for the effects of trout on stream pool assemblages. Ecological Society of America Annual Meeting, Minneapolis, MN.

1985 (with N. Hemphill) Biological interactions and the structure of faunal assemblages in stream pools. North American Benthological Society Annual Meeting, Corvallis, OR.

1986 (with K. Kratz, P. Hopkins, H. Hardenbergh) The effects of acidification on the benthos of High Sierra lakes and streams. North American Benthological Society Annual Meeting, Lawrence, Kansas.

1986 (with N. Hemphill) The effects of an invertebrate predator on stream pool community structure. North American Benthological Society Annual Meeting, Lawrence, Kansas.

1987 Cooper, S. D. The responses of aquatic insects and tadpoles to trout. 23rd Conference of the International Society for Limnology, Hamilton, New Zealand.

1987 Wiseman, S. W. and S. D. Cooper. The effects of water striders (*Gerris* *remigis*) on emerging insects. 23rd Conference of the International Society for Limnology, Hamilton, New Zealand.

1988 Cooper, S.D. and S. Walde. Scale, exchange rates, and statistical inference in the design of predation experiments. North American Benthological Society Annual Meeting, Tuscaloosa, Alabama.

1988 Cooper, S.D., T. Dudley and M.R. Shaw. Effects of interstitial and cryptic predators on stream pool assemblages. North American Benthological Society Annual Meeting, Tuscaloosa, Alabama.

1988 Kratz, K., M. Williams and S.D. Cooper. The effects of acid pulses on macroinvertebrates in a High Sierra stream. North American Benthological Society Annual Meeting, Tuscaloosa, Alabama.

1988 Sickman, J.O., S.D. Cooper and J.M. Melack. Planktonic responses to acidification and nutrient additions in Emerald Lake, California. Fifty-second Meeting of the American Society of Limnology and Oceanography, June.

1988 Cooper, S.D., T.L. Dudley and N. Hemphill. Complex interactions among taxa in stream pools. (Invited paper for symposium on complex interactions in benthic and littoral communities). Ecological Society of America Annual Meeting, Davis, California.

1988 Cooper, S.D., K. Kratz, J.O. Sickman, S. Hamilton and J.M. Melack. Effects of acidification on the biota of High Sierra lakes and streams. (Invited paper for symposium on ecosystem research for acid deposition effects: Emerald Lake Watershed, Sequoia National Park). Ecological Society of America Annual Meeting, Davis, California.

1989 Cooper, S.D., T.L. Dudley and M.R. Shaw. Stream mesocosm experiments: building blocks for determining community effects of predators? North American Benthological Society 37th Annual Meeting, Guelph, Canada.

1990 Cooper, S.D., T.L. Dudley and A. Sih. Interactions among trout and neustonic insects. 24th Conference of the International Society for Limnology, Munich, Germany, August.

1992 Soiseth, C.R., S.W. Wiseman and S.D. Cooper. Faunal assemblages in vernal pools: Evaluating the effectiveness of restoration efforts. Symposium on restoration and creation of wetlands in coastal, central, and southern California. 73rd Annual Meeting, Pacific Division, AAAS, Santa Barbara.

1993 Cooper, S.D., K.W. Kratz and S.W. Wiseman. The effects of stonefly predators on lower trophic levels in large stream channels. 41st Annual Meeting, North American Benthological Society, Calgary, Canada.

1995 Cooper, S.D. Evaluation of acid deposition effects on Sierra Nevada aquatic invertebrates and fish. Atmospheric Acidity Protection Program, Assessment Workshop, California Air Resources Board. Costa Mesa, California, January.

1995 Cooper, S.D., K. Kratz, T. Jenkins, Jr., S. Diehl, R. Nisbet, and S. Wiseman. The influence of scale on predator impacts on lower trophic levels. (Invited paper for a special session on "Testing the influence of environmental heterogeneity on patterns and processes in streams"). 43rd Annual Meeting, North American Benthological Society, Keystone Resort, Colorado, May-June.

1995 Diehl, S., K. Kratz, S. Roll, S.D. Cooper, and T. Jenkins, Jr. Effects of trout density on grazing invertebrates and benthic algae in a high altitude stream. American Society of Limnology and Oceanography, Annual Meeting, Reno, Nevada, June.

1995 Cooper, S.D., K.M. Mavuti, S. Wiseman, O. Sarnelle, M. Ngiri, and N. Pacini. Effects of fish and phosphorous on small, turbid ponds in East Africa. 26th Congress of the International Association of Theoretical and Applied Limnology. São Paulo, Brazil, July.

1995 Osenberg, C.W., O. Sarnelle, and S.D. Cooper. Meta-analysis, effect size, and biological models: examples from predator-prey studies. 80th Annual Meeting, Ecological Society of America. Snowbird, Utah, July-August.

1995 Cooper, S.D. Tales of scales: Space and time in stream ecology. 1. Space. Invited paper for a Symposium on Environmental Science entitled "New Concepts in Stream Ecology: An Integrative Approach." Sponsored by Savannah River Ecology Laboratory, New Ellenton, South Carolina, October.

1995 Cooper, S.D. Implications of scale and spatial heterogeneity for consumer-resource interactions in streams. Invited paper. Symposium on spatial and temporal scaling of ecological processes in freshwater systems. Sponsored by the Co-operative Research Centre for Freshwater Ecology. Monash University, Clayton, Victoria, Australia, December.

1996 Cooper, S.D., K. Kratz, S. Diehl, S. Roll, and S. Wiseman. Effects of predators on the spatial heterogeneity of lower trophic levels in streams. 44th Annual Meeting, North American Benthological Society, Kalispell, Montana. June.

1996 Diehl, S., S.D. Cooper, K. Kratz, T. Jenkins, Jr., Sheila Wiseman, and S. Roll. Effects of trout and stoneflies on grazing mayflies and benthic algae in a high altitude stream. 44th Annual Meeting, North American Benthological Society, Kalispell, Montana. June.

1996 Roll, S., S. Diehl, and S.D. Cooper. Effects of a nutrient gradient on one and two-trophic level systems in an alpine stream. 44th Annual Meeting, North American Benthological Society, Kalispell, Montana. June.

1996-97 Osenberg, C. et al. Meta-analysis, interaction strength and effect size: application of biological models to the synthesis of experimental data. National Center for Ecological Analysis and Synthesis, Workshop and Working Group. July, January.

1997 Griffiths, R., S. Cooper, and K. Mavuti. The macroinvertebrate fauna of streams in the Lake Naivasha basin, Kenya. 45th Annual Meeting, North American Benthological Society, San Marcos, Texas. May.

1997 Osenberg, C.W., O. Sarnelle, S.D. Cooper, and J. Downing. Comparative ecology: Quantitative synthesis of experimental results. Annual Meeting, Ecological Society of America, Albuquerque, New Mexico. August.

1999 Cooper, S.D. Space, complex interactions, contingency, and appropriate models in stream systems. Invited keynote address, Third Nordic Benthological Meeting, Jyväskylä, Finland. September.

2000 Cooper, S.D., S. Diehl, and S.W. Wiseman. The effects of predatory stoneflies and trout on a stream community. 48th Annual Meeting, North American Benthological Society. Keystone Resort, Colorado. May-June.

2000 Anderson, K.E., R.M. Nisbet, and S.D. Cooper. Modeling the effects of spatial heterogeneity of resource subsidies on stream food webs. Annual Meeting, Ecological Society of America, Snowbird, Utah. August.

2000 Taulbee, W.K., S.D. Cooper, and J.M. Melack. Spatial variability of light co-limitation within a nitrogen limited, Eastern Sierra, California stream. 48th Annual Meeting, North American Benthological Society. Keystone Resort, Colorado. May-June.

2001 Silldorff, E.L., D.B. Herbst, and S.D. Cooper. The role of exotic trout in structuring stream invertebrate communities. 49th Annual Meeting, North American Benthological Society. La Crosse, Wisconsin. June.

2002 Busse, L.B. and S.D. Cooper. The effects of nutrients and grazers on periphyton in Mission Creek, California. 50th Annual Meeting, North American Benthological Society. Pittsburgh, Pennsylvania. May-June.

2003 Borer, E., E. Seabloom, J. Shurin, K. Anderson, C. Blanchette, B. Broitman, S. Cooper, and B. Halpern. Within- and among-system differences in the strength of trophic cascades: Methodology or biology? 88th Annual Meeting, Ecological Society of America, Savannah, Georgia. August.

2004 Herbst, D.B., E.L. Silldorff, and S.D. Cooper. The influence of introduced trout on native aquatic invertebrate communities in a paired watershed study of streams in Yosemite National Park. 52nd Annual Meeting, North American Benthological Society. Vancouver, British Columbia,. June.

2004 Shurin, J.B., E.T. Borer, E.W. Seabloom, K. Anderson, C.A. Blanchette, B. Broitman, S.D. Cooper, and B.S. Halpern. 52nd Annual Meeting, North American Benthological Society. Vancouver, British Columbia,. June.

2008 **Melack, J. M., B. Goodridge, S. D. Cooper, and S. W. Wiseman.**Hydrochemical and biological conditions in streams on Santa Rosa Island. 7th California Islands Symposium, Oxnard, CA. February.

2009 Herbst, D.B., S.D. Cooper, and C. Hunsaker. Kings River Experimental Watershed Study: Premanipulation data for evaluating stream invertebrate responses to controlled burns and selective logging in entire catchments. California Aquatic Bioassessment Workshop Meeting, Davis, CA. October.

2010 Herbst, D. B and S.D. Cooper. Before and after the deluge: Rain-on-snow flooding effects on aquatic invertebrate communities of small streams in the Sierra Nevada, California. Joint Annual Meeting of the North American Benthological Society and the American Society for Limnology and Oceanography, Santa Fe, NM

2010 Zhang, Y., S.D. Cooper, and G. Englund. State-dependent emergent predation effects: Trade-offs in risk reduction and risk enhancement. Joint Annual Meeting of the North American Benthological Society and the American Society for Limnology and Oceanography, Santa Fe, NM

2010 Bennett, D.M., T. D. Dudley, S. Cooper, R. Hechinger, and J. Lorda. Ecology and potential for controlling the New Zealand Mudsnail in Southern California. **State of the Bay (SotB) Conference.** Loyola Marymount University, Los Angeles. Jan 13, 2010

2010Bennett, D.M., T. D. Dudley, and S. Cooper. **Experimental and monitoring studies of the invasive snail** Potamopyrgus antipodarum **in Southern California streams.** Joint meeting of The American Malacological Society and The Western Society of Malacologists, San Diego, June 2010

2010 Cooper, S., D. Bennett, J. Brinkman, L. Busse, T. Dudley, T. Even, K. Klose, C. Nelson, S. Sadro, J. Simpson, and S. Wiseman. Studies of stream biology in the SBC LTER. 2010 SBC LTER Annual Conference, Santa Barbara.

2011 Cooper, S., D. Bennett, B. Bookhagen, J. Choate, C. D’Antonio, T. Even, B. Goodridge, E. Hannan, M. Hanshaw, L. Jennings, K. Klose, J. Melack, C. Nelson, S. Peterson, D. Roberts, K. Roth, S. Sadro, C. Shields, J. Schimel, C. Tague, V. Vincent, and S. Wiseman. Influence of fire on coastal watersheds. Presentation to SBC LTER Graduate Seminar, Santa Barbara.

2011 Bennett, D.M.,T. D. Dudley, and S. Cooper (2011) *Potamopyrgus antipodarum* from Piru Creek in Southern California. 6th National New Zealand Mudsnail Conference, University of Idaho, Moscow, Idaho. March 15-16, 2011

2011 Cooper, S.D. The aquatic biology of vernal pools. Cheadle Center for Biodiversity and Ecological Restoration Seminar, University of California, Santa Barbara, CA.

2011 Cooper, S.D., D. Bennett, T. Dudley, T. Even, K. Klose, C. Nelson, S. Sadro, and S. Wiseman. The effects of wildfire on stream ecosystems in southern California. The 12th International Mediterranean Ecosystems Conference (MEDECOS XII). UCLA, Los Angeles, CA. Sept. 6-9, 2011.

2012 Cooper, S.D., K. Klose, S. Wiseman, D. Bennett, H. Page, T. Even, C. Nelson, and S. Sadro. The effects of wildfire on stream ecosystems in Southern California (poster). Long-Term Ecological Research, All Scientists Meeting, 2012. Estes Park, CO. Sept. 9 – 13, 2012.

2012 Reed, D., S. Holbrook, J. Melack, D. Siegel, M. Brzezinski, S. Cooper, J. Dugan, A. Guerrini, H. Lenihan, R. Miller, M. O’Brien, H. Page, R. Schmitt, and L. Washburn. Santa Barbara Coastal Long-term Ecological Research (poster). 2012 International Long-Term Ecological Research Network Meeting. Lisbon, Portugal. Sept. 17 – 21, 2012.

2012 Cooper, S.D., K. Klose, S. Wiseman, D. Bennett, H. Page, T. Even, C. Nelson, and S. Sadro. The effects of wildfire on stream ecosystems in Southern California (poster). 2012 International Long-Term Ecological Research Network Meeting. Lisbon, Portugal. Sept. 17 – 21, 2012.

2012 Cooper, S., S. Wiseman, K. Klose, H. M. Page, D. Bennett, T. Even, C. Nelson, S. Sadro, and T. Dudley. Fire and flood effects on top-down and bottom-up interactions in streams. 2012 Santa Barbara Channel Long-Term Ecological Research Program, Annual Meeting. UCSB, Santa Barbara, CA. Sept. 25, 2012.

2013 Cooper, S.D. 2013. Meta-analysis in stream ecology. NSF LTER working group on the effects of nutrient enrichment on stream ecosystems. Boulder, CO. April 3 – 5, 2013.

2013 Cooper, S.D., K. Klose, S. Wiseman, H.M. Page, D. Bennett, T. Even, C. Nelson, S. Sadro, and T. Dudley. 2013. The effects of wildfire on top-down and bottom-up interactions in streams. 2013 Annual Meetings of the Society for Freshwater Science, Jacksonville, Florida. May 19 – 23, 2013.

2014 Cooper, S.D., S.H. Peterson, B. Bookhagen, D. Roberts, S.W. Wiseman, K. Klose, D. Bennett, H.M. Page, T. Even, S. Sadro, C.E. Nelson, and T.L. Dudley. Wildfire impacts from watersheds to stream food webs. 2014 Joint Aquatic Sciences Meeting, Portland, Oregon. May 18-23, 2014.

I also presented invited lectures at the University of California-Berkeley, Cornell University, University of Pennsylvania, San Diego State University, McGill University, Idaho State University, Arizona State University, University of East Anglia, University of Toronto - Erindale, University of Toronto - Toronto, University of Maryland, Pepperdine University, University of Lund, University of Umeå, University College Cork, and University of Jyväskylä.

**EXTRAMURAL GRANTS:**

Principal or Co-principal Investigator :

1982-83 UC Appropriate Technology Program. Biological control of nuisance algae and enhancement of aquacultural productivity. (with D. Smith) $5,000.

1983-85 Water Resources Center. Evaluation of the use of aquatic invertebrates for assessing the effects of livestock grazing on stream systems. $50,000.

1983-85 National Science Foundation. Predators in stream pools: Effects on community structure and fitness. $40,000.

1984-86 California Air Resources Board. Chemical and biological survey of lakes and streams located in the Emerald Lake Watershed (Sequoia National Park) of the Sierra Nevada. $426,913. (with J. Melack and R. Holmes)

1985-87 California Air Resources Board. Integrated watershed study: An investigation of fish and amphibian populations in the vicinity of the Emerald Lake Basin, Sequoia National Park. $160,781.

1985-86 Water Resources Center. The ecology of chaparral streams. $4,000.

1986-87 California Air Resources Board. An Integrated Watershed Study: An Investigation of the Biota in the Emerald Lake System (Sequoia National Park)and Stream Channel Experiments. (with J.M. Melack and R.W. Holmes) $141,040.

1986-88 National Science Foundation. Direct and Indirect Effects of Biological Interactions in Streams. (with T. Dudley) $100,000.

1987-89 California Air Resources Board. An Integrated Watershed Study: Biological and Chemical Characteristics of Emerald Lake and Streams and their Responses to Acidic Deposition. (with J.M. Melack and T.M. Jenkins) $370,000.

1989-91 National Science Foundation. Experimental stream system at the Sierra Nevada Aquatic Research Laboratory (SNARL). (with D. Dawson and J.M. Melack) $175,000 (also $177,137 in matching funds from the University of California and various governmental agencies and private firms).

1991-92 Water Resources Center. Calibration of the Experimental Stream Facility at the Sierra Nervada Aquatic Research Laboratory. $2,000.

1992-93 California Air Resources Board. Distribution of Aquatic Animals Relative to Naturally Acidic Waters in the Sierra Nevada (with A. Brown). $37,412.

1992-93 California Air Resources Board. Aquatic Biota in the Sierra Nevada: Current Status and Potential Effects of Acid Deposition on Populations (with R. Knapp). $52,861.

1992-94 National Science Foundation. Scale, Exchange Rates, and the Impact of Predators on Prey Populations in Streams. $200,000.

1994-97 California Department of Transportation. The Impact of Runoff from Asphaltic Products on Stream Communities in California – Species Distributions, Fish, and Mollusk Tissue Concentrations (with K. Kratz and G. Forrester). $147,818.

1994-97 National Science Foundation. Effects of consumers on spatial heterogeneity in their resources in streams. $300,000.

1996-98 National Science Foundation. Database center at the Sierra Nevada Aquatic Research Laboratory (SNARL). (with D. Dawson and J. M. Melack). $100,000. (Also, $93,764 in matching funds from UC).

1998-00 National Science Foundation. FSML: Telecommunication links for the Santa Cruz Island Reserve. (with L. Laughrin, S. Holbrook, and L. Mertes). $57,104. (Also, $14,276 in matching funds from UC).

1999-03 U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. Research Joint Venture Agreement: Design of aquatic invertebrate research for watersheds in the Kings River Sustainable Forest Ecosystems Project. (with D. Herbst). $34,000. (Long-term, ongoing co-operative agreement).

1999-02 University of California, Water Resources Center. The influence of introduced trout on the diversity and structure of native aquatic invertebrate communities in High Sierran streams. (Co-PI with D. Herbst). $53,000 awarded.

2000-05 National Science Foundation. Long Term Ecological Research Program. LTER: Land/ocean interactions and the dynamics of kelp forest ecosystems. (PI: D. Reed, Other Co-PIs: J. Melack, S.J. Holbrook, S.D. Gaines). $4,200,000.

2000-02 The Nature Conservancy’s Ecosystem Research Program. The influence of introduced trout on the diversity and structure of native aquatic invertebrate communities in High Sierran streams. (Co-PI with D. Herbst). $143,708.

2001-03 Southern California Coastal Water Research Project Authority. Nuisance algae in Malibu Creek. $49,600.

2005-10 U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. Research Joint Venture Agreement: Aquatic invertebrate research for Kings River experimental watershed (PI: D. Herbst). $120,000. (Long-term, ongoing co-operative agreement).

2005-08 U.S. National Park Service. Development of a stream monitoring program for Santa Rosa Island, Channel Islands National Park. $30,000. (Co-PI: J. Melack)

 2008-09 California State Water Resources Control Board. Development of nutrient and algae TMDLs for segments of the Ventura River and its tributaries. (Co-PI: K. Klose). $100,000.

 2010 National Science Foundation. RAPID: Fires in coastal California: Watershed and ecological responses to an acute environmental disturbance. $150,000. (PI: J. Melack, Co-PIs: B. Bookhagen, S. Cooper, C. D’Antonio, C. Tague)

 2010-11 NOAA/National Marine Fisheries Service, Southwest Region. Documenting the historic distribution of steelhead and rainbow trout (Oncorhynchus mykiss) in the Santa Ynez River, Santa Barbara County, California. $18,000 (Co-PIs: S. Cooper and P. Alagona)

 2012-16 U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. Research Joint Venture Agreement: Aquatic invertebrate research for experimental watersheds in the Kings River system (PI: D. Herbst). $170,000. (Long-term, ongoing co-operative agreement).

Associate Investigator, Participant, or Working Group Member:

1980-81 National Geographic Society. The ecology of Mono Lake. (to J. Melack) $7,500.

1982-84 Cooperative Park Service Unit. Long-term research on the effects of acid deposition on the ecosystems of Sequoia National Park: Ecological impacts on aquatic habitats. (to J. Melack).

1989-90 California Department of Fish and Game. Inventory of resources of Fish Slough. (to W. Ferren and F. Davis) $93,819.

1994-99 National Science Foundation. Dynamics of spatially-structured ecological systems. BIO Research Training Group Program and Graduate Research Traineeships. (to W. Murdoch) $1,891,202.

1995-00 National Science Foundation. CEAS: Center for Ecological Analysis and Synthesis. (to W. Murdoch and M. Goodchild) $10,000,000.

1996-97 National Center for Ecological Analysis and Synthesis. Meta-analysis, interaction strength and effect size: application of biological models to the synthesis of experimental data. (to C. Osenberg).

1996-97 National Center for Ecological Analysis and Synthesis. Scenarios of future biodiversity: causes, patterns, and consequences. (to F. S. Chapin, O. Sala, and A. Janetos).

1999-01 National Center for Ecological Analysis and Synthesis. Freshwater and environmental change – the consequences of altered hydrological regimes. (to R. J. Naiman)

2009-10 National Center for Ecological Analysis and Synthesis, Luce Fellowship Program. Investigating the impact of integrating social variables into water quality research: A review and meta-analysis. (to A. Hove et al.)

2012-18 National Science Foundation. Long Term Ecological Research Program. LTER: Land/ocean interactions and the dynamics of kelp forest ecosystems (SBC III). (PI: D. Reed, Co-PIs: S.J. Holbrook, J. Melack, D. Siegel). $5,880,000.

2013- National Science Foundation, Long Term Ecological Research Program. LTER working group on the effects of nutrient enrichment on stream ecosystems.

**TEACHING EXPERIENCE:**

**University of California, Santa Barbara**

Biology 4 HS Freshman Seminar

Biology 21 Topics in Ecology: Water and Life

Biology 24 Aquatic Ecology for Non-Majors

INT 94 ND College Freshman Seminar

Biology 145C ( EEMB142A) Aquatic Communities

Biology 145CL (EEMB 142AL) Field/ Lab Work in Aquat. Comm. Ecol.

 EEMB 142C Environment Processes in Oceans and Lakes

 EEMB 142CL Methods in Aquatic Biology

Biology (EEMB) 148/248 Ecology of Running Water

Biology 148L/248L Stream Ecology Laboratory

Biology 154/254 Biological Limnology

Biology (EEMB) 159/259 Tropical Ecology

EEMB 167 Applied Freshwater Ecology

Biology (EEMB) 98/99/198/192/199 Independent Study – Undergraduate Research

Biology (EEMB) 193 Internship

Biology (EEMB) 501/502 Teaching Assistant Training

EEMB 509 EECORE: Course for new graduate students

Biology 595P Seminar in Population/ Community Ecology

Biology (EEMB) 194Q/595Q Seminar in Aquatic Biology

Biology (EEMB) 596/597/598/599 Graduate Research; Exam Preparation

Environmental Studies 192 Environmental Studies Internship

Environmental Studies 197 Senior Thesis

**University of Nairobi**

Zoology 103 Tutorials in General Ecology

Zoology 300 Tutorials in the Philosophy of Science

Zoology 301 Freshwater Ecology

Zoology 443 MSc Course in Hydrobiology

**PRESENTATIONS ON TEACHING OR INTERNATIONAL EDUCATION:**

Panel chairperson. Panel: The Role of EAP Returnees in the Life of the Campus. Conference on Internationalization. University of California – Santa Barbara. April 1995.

Panel member. Academics and articulation. Education Abroad Program Systemwide, Fall Conference. University of California – Santa Barbara. September 1995.

Speaker. Programs in undergraduate research at the University of California – Santa Barbara. 44th Annual Meeting, North American Benthological Society, Kalispell, Montana. June 1996.

Speaker. Academic integration of study abroad programs at the University of California. International Conference on Study Abroad Curriculum Integration. University of Minnesota, Minneapolis. April, 2004. (with D. Dutschke, W. Lacy, A. Pinterits, and P. Schiffman)

Invited presenter. International education exchange for leadership, development, and security. Summer Meeting of the Commission on International Programs, National Association of State Universities and Land Grant Colleges. Costa Mesa, CA. July 2004.

Invited panel member. Undergraduate student research and education abroad: A partnership in learning. FORUM-sponsored session at the annual conference of NAFSA: Association of International Educators. Montreal, Quebec. May 2006.

Invited panel member. Developing and providing student research possibilities on study abroad programs. NAFSA: Association of International Educators. Minneapolis, Minnesota. May, 2007.

**PUBLICATIONS ON INTERNATIONAL EDUCATION**:

Cooper, S.D., C. Zwicke, P. Schiffman, A. Pinterits, L. York, and M. Knutson. 2005. The integration of education abroad programs into the curriculum of the University of California. Pages 42 – 46 in: L. Anderson (ed.) Internationalizing Undergraduate Education: Integrating Study Abroad into the Curriculum*.* University of Minnesota, Minneapolis, MN.

**POSTDOCTORAL ASSOCIATES:**

Ribi, George (University of Zurich). March – September 1980. Density-dependent feeding in Cladocerans.

Power, Mary (University of Washington). March 1985. Ecology of Panamanian streams.

Jenkins, Thomas (UCLA). June 1985 – June 1988. Ecology of fish and amphibians in High Sierra lakes and streams.

Barmuta, Leon (Monash University). February 1988 – March 1989. Effects of acid deposition on lakes and streams in the High Sierra.

Knapp, Roland (UCSB). May 1992 – December 1994. Responses of early life history stages of trout to acid inputs.

Sarnelle, Orlando (UCSB). June 1992 – July 1997. Plant-grazer interactions in the plankton of a eutrophic lake.

Forrester, Graham (University of New Hampshire). February 1993 – December 1995. Fixed and flexible responses of mayfly nymphs to trout.

Diehl, Sebastian (University of Umeå). May 1994 – Oct. 1996. Trophic chain interactions in stream systems.

Englund, Göran (University of Umeå). May 1997 – December 1997. Prey exchange rates and the effects of predators on prey populations.

Kratz, Kim (UCSB). June 1997 – August 1997. Predator-prey interactions in stream systems.

Zhang, Yixin (University of Umeå). January 1999 – April 2000. Complex interactions among multiple odonate species.

Busse, Lilian (University of Berlin). April 1999 – December 2001. Effects of nutrients and grazers on the structure of algal communities in streams.

Klose, Kristie (University of California, Santa Barbara). May 2008 – July 2012. Effects of land use patterns and sewage inputs on nutrients, algal biomass, and dissolved oxygen levels in a southern California river. Effects of fire and trout on stream communities in southern California.

Bennett, Danuta. Sept. 2008 to Sept. 2015. (Adam Mickiewicz University, Poznan, Poland).The invasion biology of the New Zealand mud snail in southern California. Effects of fire and trout on stream communities in southern California.

**THESES AND DISSERTATIONS DIRECTED:**

**University of California, Santa Barbara**

Hopkins, Pamela S., M.A., January 1987. Invertebrate drift and the effects of an acid pulse on invertebrates in high altitude Sierra Nevada streams.

Smith, Daniel W., Ph.D., December 1987. Biological control of excessive phytoplankton and enhancement of aquacultural production.

Dudley, Tom L. Ph.D. August 1989. Interactions among algae, invertebrates and the physical environment in stream riffle communities.

Soiseth, Chad, M.A. June 1992. Autecology of young-of-the-year brook trout (*Salvelinus fontinalis*) in the Emerald Lake system (Sierra Nevada, California).

Sarnelle, Orlando, Ph.D. June 1992. Plant-herbivore interactions in the pelagic zone of lakes.

Douglas, Paul L., M.A., December 1995. Habitat relationships of oversummering rainbow trout (*Oncorhynchus mykiss*) in the Santa Ynez River drainage.

Sarr, Daniel, M.A., December 1995. Grazing, graminoids and hysteresis: Investigating relationships between livestock production, riparian communities, and ecosystem recovery in the southern Sierra Nevada, California.

Carpanzano, Cindy M., M.A., December 1996. Distributions and habitat associations of different age classes and mitochondrial genotypes of *Oncorhynchus mykiss* in streams in southern California.

Klose, Kristie A., M.A., March, 1997. The effect of *Daphnia pulicaria* on the abundance and vertical distribution of zooplankton and phytoplankton in Zaca Lake.

Kratz, Kim, Ph.D., June, 1997. Predator-prey interactions in the benthos of high altitude streams.

Perez, Beatriz, M.A., June, 1997. M.A., Plan II (by examination).

Roll, Sandra K., M.A., March, 1998. The effects of a gradient of nutrient additions on levels of primary producers and consumers in Convict Creek, California.

Beaumord, Antonio C., Ph.D., August, 2000. The ecology and ecomorphology of fish assemblages of the Parana-Paraguay River basin in Brazil. (Co-supervisor with J. Melack).

Barbee, Nicole, Ph.D, June 2002. The effects of gobies, decapods, and insect grazers on Neotropical stream systems.

Silldorff, Erik, Ph.D, August 2003. Stream invertebrate responses to trout introductions: results from large-scale studies in the central Sierra Nevada and Yosemite National Park.

Taulbee, Keith, Ph.D. August, 2004. Effects of light and nutrients on algae and invertebrate grazers in streams. (Co-supervisor with J. Melack).

Even, Thomas, Ph.D. September, 2004. The impacts of multiple predators on invertebrate prey populations in streams.

Simpson, Juliet, Ph.D. December, 2006. Factors affecting the distribution of algae and vascular plants in chaparral streams and their roles in nutrient spiralling (Co-supervisor with J. Schimel and J. Melack).

Brinkman, Jeff. M.A. August, 2007. Influences of human disturbance and natural physical and chemical variables on biological community structure in streams of southern coastal Santa Barbara County, California, and an index of biological integrity.

Klose, Kristie. Ph.D. Sept., 2007. The effects of exotic decapods on stream communities in Hawaii and southern California.

Nelson, Craig R. Ph.D. March, 2008. The phenology, biogeography, and metabolism of bacteria in high-elevation lakes of the Sierra Nevada, California. (Co-supervisor with J. Melack).

Albertson, Lindsey. Ph.D. December, 2013. The effects of net-spinning caddisfly diversity on substrata stabilization in streams.

**THESES AND DISSERTATIONS SUPERVISED:**

**University of Nairobi**

First advisor.

Githunguri, E.W. MSc. Ecological impact of urban sewage and waste water on the Nairobi-Athi River.

Second advisor.

Lusweti, M. MSc. The composition, abundance, and seasonality of zooplankton in a lacustrine environment, Nairobi Dam, Kenya.

**CONSULTING:**

Henningson, Durham, and Richardson, Inc. 1980. MX Missile Project: Environmental Impact Analysis. Identification of freshwater vertebrates and invertebrates from the Great Basin.

U.S. Fish and Wildlife Service. 1984. Environmental Impact Assessment of Proposed Flood Control Project. Environmental impact assessment of proposed Corps of Engineers flood control dams on streams in Santa Barbara County. Included field surveys, collection and identification of freshwater organisms, environmental impact analyses, and mitigation recommendations.

Penfield and Smith. 1984-85. Descriptive Biology of the Andree Clark Bird Refuge. Identification of aquatic invertebrates. (with D. Smith).

Arthur D. Little, Inc. 1984-85. Union Oil Project/Central Santa Maria Basin Area Study EIS/EIR. Environmental impact analyses of freshwater resources affected by the proposed Union Oil Project in northern Santa Barbara County. Included field surveys, collection and identification of freshwater organisms, environmental impact analyses, and mitigation recommendations. (See Technical Reports).

Arthur D. Little, Inc. 1985-86. Exxon Lompoc Pipeline Project EIR. Environmental impact analyses of freshwater resources affected by the proposed Exxon Lompoc Pipeline Project in northern Santa Barbara County. Review of field surveys, environmental impact analyses, and mitigation recommendations. (See Technical Reports).

Ralph Philbrick. 1988-89. Santa Barbara County Flood Control Evaluation. Environmental impact analyses of Santa Barbara County flood control practices. (see Technical Reports).

Blasland, Bouck, and Lee. 2002. General Electric - Ecological Risk Services for the Housatonic River Site. Statistical analysis of benthic invertebrate data collected by the EPA from the Housatonic River, MA.

**UNIVERSITY AND COMMUNITY SERVICE:**

Speaker, UCSB Speaker's Bureau. 1981-1986. Lectures to civic and school groups on water issues.

Analyst. Helped prepare testimony for California State Assembly Hearings on the future of Mono Lake. 1981. (with J.M. Melack).

Written Testimony to County of Santa Barbara Agricultural Commissioner. Gypsy moth spraying program hearings. February 1982.

Consultant (unpaid) to Mono Lake Committee on A.B. 2884. Mono Lake Research Bill. 1981-82.

Consultant (unpaid) to Los Angeles Dept. of Water and Power. Mono Lake Research Program. 1982.

Bird Ecology Panel, Mono Lake Symposium. Sponsored by U.S. Fish and Wildlife Service, Los Angeles Dept. of Water and Power, Santa Barbara Museum of Natural History, and UCSB. May 1982.

Invited Lecturer: Workshop on the Status of Santa Barbara Coastal Watersheds. Sponsored by the California Coastal Commission and the Citizen's Planning Association. March 1983.

Consultant (unpaid), Santa Barbara County District Attorney. Preparation of expert testimony regarding stream alteration violation. 1984.

Consultant (unpaid), California Coastal Commission. Analyses of environmental impacts of proposed water diversion in Santa Barbara County. 1983-85.

Reviewer. Reviewed draft impact section of EIR for ARCO Coal Oil Point Project. For UCSB. 1985.

City of Santa Barbara Mission Creek Task Force. Analyses of flood control alternatives for lower Mission Creek. 1987-1989.

Analyst. Helped prepare testimony presented to Santa Barbara County Board of Supervisors by UCSB Chancellor on ARCO Coal Oil Point Project. 1987.

Testimony on aquatic effects of acid deposition. California Senate Committee on Natural Resources and Wildlife. Interim hearing on acid deposition: Effects on air quality, health, and environment. December 1987.

Panel moderator and speaker. Watershed Wildlife and Habitat Panel. Symposium on Public Trust and the River: A Discussion of Santa Ynez River Natural Resources. Santa Barbara Museum of Natural History. Sponsored by numerous community and environmental organizations. March 1995.

Invited Speaker. The UC Natural Reserves. Southwestern Herpetologists Society, Tri-Counties Chapter. Santa Barbara Museum of Natural History. September, 1995.

Unpaid consultant. City of Santa Barbara and Environmental Defense Center. Channel modification and habitat restoration in lower Mission Creek: Efforts to protect and restore endangered aquatic species. 2002-2003.

Scientific reviewer. National Oceanic and Atmospheric Administration (National Marine Fisheries Service) Technical Memorandum on Steelhead of the South-central /Southern California Coast: Population Characteristics for Recovery Planning. Southwest Fisheries Center, Fisheries Ecology Division. August, 2006.

Trainer. Arroyo Hondo, Sedgwick, and CCBER Docents at the Arroyo Hondo Preserve. Trained docents in stream ecology, stream invertebrate identifications, biomonitoring exercises. January, 2007.

Participating scientist. BioBlitz Santa Barbara. Sponsored by the Santa Barbara Botanic Garden. Developed inventory of stream invertebrates in Mission Creek, prepared public outreach displays on stream organisms, discussed conservation issues with the public. May, 2007.

Participating scientist. BioBlitz of Santa Monica Mountains National Recreation Area. Co-sponsored by the National Geographic Society and the National Park Service. Led public field trips dealing with stream ecology and biodiversity, developed inventory of stream invertebrate taxa. May, 2008.

Consultant or advisor (unpaid). Environmental Defense Center. Stream or river environmental issues. Sept. 2008 to present.

Consultant, advisor, or speaker. City of Santa Barbara Creeks Division, County of Santa Barbara Clean Water Program, County of Santa Barbara Public Works Department. Advice or talks on environmental issues affecting watersheds, streams, and estuaries.

Invited lecturer. SBC LTER Math Science Partnership summer teacher workshop. The ecology of streams. 2012, 2013.

Invited lecturer, workshop organizer, and field trip leader. Gold Creek annual meeting (2012) or instructor training workshop (2013). Stream ecology, stream biomonitoring. Los Angeles Community Colleges’ natural science instructors.

Advisor. California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Forest Service, City of Santa Barbara, and Environmental Defense Center. Stream environmental issues, monitoring and management of southern California steelhead populations. 2012 – present.

Invited lecturer. Carpinteria Creek Watershed Coalition. The ecology of coastal streams in southern California. Dec. 12, 2013.

Attendee. 32nd Annual Salmonid Restoration Conference. March 19-22, 2014, Santa Barbara, CA.

Attendee: Salmonid Restoration Federation, Steelhead Summit. October 21-22, 2014. Ventura, CA.

Participant: UCSB Fire Researcher Roundtable. 2014.

Member: Santa Barbara Audubon Society’s Science and Conservation Committee. 2014 to present.

Member: Goleta Slough Management Committee. 2014 to present.

Member: California Department of Fish and Wildlife’s Peer Review Committee for the Fisheries Restoration Grant Program. 2015 to present.

Commenter: Written or oral comments: Goleta Planning Commission, Goleta City Council, City of Santa Barbara Planning Commission, County of Santa Barbara Planning Commission and Board of Supervisors about housing development, creek setbacks, airport expansion plans, protection of chaparral.

Member, Chair, Director, Dean. Administrative, advisory, or service committees or administrative positions for the University of California, including systemwide, campus, and departmental committees or administrative positions dealing with the UC reserves and field stations, international education, budget and space, seminars, resources, research, the undergraduate curriculum, public outreach, corporate relations, personnel searches, freshmen orientation, Scholar's Day, Environmental Studies, enrollment management, UCSB operations and planning, faculty advancement, and departmental and President’s Office administration.

 Examples:

 Natural Reserve System (NRS):

 Member, UC Systemwide Mildred Mathias research award committee

 Member, UC Systemwide Director Search Committee

 Chair, UCSB NRS Advisory Committee

 Director, UCSB's NRS office (six years)

 Member, UC Systemwide NRS Advisory Committee

 UC Education Abroad Program (EAP) and International Education:

 Director, EAP Study Center in Nairobi, Kenya

 Chair, UCSB's Academic Senate Committee for EAP

 Member, UC Senate: Systemwide UC Education Abroad Program Committee

 Member, EAP Student and Study Center Director Selection Committees

 Member, EAP Campus Center Steering Committee

 Member, Academic Senate ad hoc Committee on the Review of EAP

 Liaison Officer for Biology, EAP Campus Office

 Member, UCSB Committee for Internationalization

 Faculty Exchange Fellow, EAP, Lund University

 Reviewer, EAP programs in the marine sciences

 Director, UCSB's EAP Office

 Member, Executive Committee, Global and International Studies Program

 Chair, EAP Council of Campus Directors

 Co-chair, working group on water and the environment. UC-American

 Universities in Cairo and Beirut

 Chair, Faculty Site Visit Team to the National University of Singapore

 Reviewer, Site visits to Australian universities offering EAP programs in

 biology (Queensland, Tasmania, James Cook Univ.)

 Member, Planning Committee, EAP Annual Conference

 Member, Search Committee, EAP Chief Administrative Officer

 Member of the UC Systemwide EAP Advisory Committee for Biology

 Member, EAP Director's Administrative Advisory Committee

 Co-Chair, UCSB Task Force on International Programs

 Associate Director and Academic Dean, UC Systemwide Office for EAP

 Co-chair: EAP Strategic Planning Group

 Chair: EAP Committee on Academic Integration

 Co-chair: EAP Study Center Director Task Force

 Member: EAP Study Center Director Orientation Committee; UOEAP Management Council; Senior Leaders and Regional Meeting Groups; Publications and Web Site Groups; Academic Integration Assessment Committee; Research and Internship Task Force

 Member: Many EAP Program Management Teams and Faculty Advisory Committees

 UOEAP Liaison: Senate’s Committee on International Education (UCIE), Council of EAP Campus Directors

 Overseer: EAP Agreements with Partner Institutions; UCIE Formal Reviews of EAP Programs; Regional, Reciprocity, IT, Research, and Academic Integration Teams

 Evaluator, troubleshooter: Site visits to EAP Programs in Japan, Ghana, South Africa, the Netherlands, United Kingdom, and Spain

Other substantial service:

 Chair, UC Systemwide Review Committee, Wildland Resources Center

 Co-Chair, Long-Term Planning Objectives Subcommittee, UCSB’s Academic Planning Committee

 Chair, UCSB’s Department of Ecology Evolution, and Marine Biology

 Chair of the Chancellor’s North Campus Advisory Group

 Co-Chair of the Chancellor’s Highway 217 Review Committee

 Member, UCSB Senate Committee on Academic Personnel