

Appendix II

California HSRG Biographies

California Hatchery Review Project

Appendix II – California HSRG Biographies

California HSRG Member Selection Process

The California HSRG was composed of 11 members, six of whom were affiliated with agencies in the California and five of whom were unaffiliated biologists. Initial California HSRG members were selected from a pool of candidates nominated by the American Fisheries Society and confirmed by the Policy Committee. Two additional members (one affiliated and one non-affiliated) were subsequently recommended to the Policy Committee and confirmed based on expertise with hatcheries in general and California programs in particular.

California HSRG Members

Carlos Garza

Southwest Fisheries Science Center-National Marine Fisheries Service
Department of Ocean Sciences, University of California, Santa Cruz

- B.A. in Biology, 1990, University of California, San Diego
- M.S. in Biology, 1991, University of California, San Diego
- Ph.D. in Integrative Biology, 1998, University of California, Berkeley

Dr. Garza is a Supervisory Research Geneticist and the Leader of the Molecular Ecology and Genetic Analysis Team in the Fisheries Ecology Division of the Southwest Fisheries Science Center and an Adjunct Professor in the Department of Ocean Sciences at the University of California, Santa Cruz. He has over 20 years' experience employing and developing new methods for analyzing DNA in natural populations of fish and wildlife and applying the resulting genetic data to questions in ecology, evolution, conservation and resource management. The research team that he established in 1999 includes NOAA staff scientists, UCSC postdoctoral researchers, laboratory technicians, graduate and undergraduate students working to provide biological inference for the management and conservation of marine and anadromous species inhabiting the California Current Large Marine Ecosystem and its associated terrestrial ecosystems. The team also performs basic research and develops methodology that is useful to a much broader audience.

Scott Hamelberg

U.S. Fish and Wildlife Service, Coleman National Fish Hatchery Complex, Anderson, CA

- B.S. in Bio-Physical Environmental Studies, 1983, Northland College, Ashland, Wisconsin

Scott Hamelberg has been part of U.S. Fish and Wildlife Service's Fisheries Program since 1983. Duty stations from 1983 to 1991 were located in the states of Wisconsin, Michigan (also detailed to New York State), Arizona, and Washington State. During that time, Mr. Hamelberg was involved in fish culture programs for brook, cutthroat, brown, rainbow, apache and lake trout, steelhead, kokanee and Chinook salmon and/or fish management programs such as the sea lamprey control program. Since 1991, he has been involved with Chinook salmon and steelhead management and propagation in the Central Valley of California and has held the Project Leader position at the U.S. Fish and Wildlife Service's Coleman National Fish Hatchery Complex since 2000.

David Hankin

Humboldt State University

- B.A. Biology, Reed College 1971
- PhD Fishery Science, Cornell University, 1978

For the past 34 years Dr. Hankin has been affiliated with Humboldt State University. He is a professor in the Fisheries Biology Department, teaching Population Dynamics, Fishery Management and Sampling Theory, and has held various administrative positions (department chair, marine lab director). His professional training and research has emphasized application of quantitative methods to development of fishery management policy. He has been actively involved in management of Chinook salmon fisheries and hatcheries since 1980, with a focus on the Klamath River system, and has had a keen interest in information generated from coded wire tag recovery data. Among other things, he was an early (circa 1980) proponent of constant fractional marking practices that allow estimation of the proportion of hatchery fish among adult returns; a consistent advocate of on-site release of hatchery fish to minimize undesirable straying of hatchery fish onto natural spawning grounds; and developed age-structured stock-recruitment models that showed that the maturation schedule of Chinook salmon stocks had an important influence on annual ocean fishery exploitation rates for MSY and stock collapse. More recently, he developed mathematical models showing that completely random mating of Chinook salmon in hatcheries can lead to unintentional selection for earlier age at maturity. Since 2001, he has served as one of the two US members of the Pacific Salmon Commission's Committee for Scientific Cooperation, a committee that provides objective scientific assistance regarding contentious and complex management issues.

Michael Lacy

Senior Biologist, California Department of Fish and Game

Michael Lacy obtained Bachelors and Masters Degrees in Biological Sciences and Conservation from California State University, Sacramento. He also did advanced work on reproductive-, population-, and conservation biology at the University of Florida. For the past 14 years, Mr. Lacy has worked for the California Department of Fish and Game (CDFG) applying conservation and population genetic principles to a variety of ESA and CESA-listing, recovery, and management activities.

Since 2003, Mr. Lacy has served as the Genetics Coordinator for Anadromous Salmonids at CDFG. He provides statewide coordination, oversight, and consultation for genetic research, monitoring, and recovery of listed salmonids. Mr. Lacy also coordinates HGMP development at California's Anadromous Hatcheries and assists in management of conservation hatcheries, reintroduction, recovery, and listed species hatchery programs. Mr. Lacy is also a coauthor of the California Coastal Monitoring Plan and leads the Department's Coastal Monitoring Plan Technical Team.

Dennis Lee

Supervising Fishery Biologist (Retired)

California Department of Fish and Game

- A.S. in Sciences, College of the Sequoias, Visalia, CA
- B.S. in Fisheries, Humboldt State University, Arcata, CA

Mr. Lee began working for the California Department of Fish and Game (CDFG) in 1970 at the Nimbus Salmon and Steelhead Hatchery and worked throughout Northern and Central California during his 35-year career with the state. Specific projects he worked on or supervised included Russian River

steelhead and coho salmon evaluations, North Coast timber harvest review, Central Valley and Sierra Nevada fisheries management, Klamath River salmon and steelhead studies, and statewide lake and reservoir management and wild trout programs. He helped coordinate the preparation and evaluation of inland angling regulations, and provided statewide coordination for CDFG's inland fisheries Sport Fish Restoration Act projects. Mr. Lee received the Department of Fish and Game Award of Recognition in 2000 for preparing the Department's Northern Pike Control Plan and the Director's Superior Achievement Award in 2005 for developing and implementing the Fisheries Information Sharing Host interactive computer system.

Mr. Lee is currently employed by the CDFG as a retired annuitant preparing Hatchery and Genetic Management Plans (HGMPs) for the Nimbus and Mokelumne River Fish Hatcheries winter steelhead and fall Chinook salmon programs; and by Cramer Fish Sciences as a Consulting Fishery Scientist preparing HGMPs for the Feather River Fish Hatchery steelhead and Chinook salmon programs.

Bernie May

Department of Animal Science
UC Davis, Davis, CA

- B.S. in Molecular Biology, 1973, University of Washington, Seattle, WA
- M.S. in Fisheries, 1975, University of Washington, Seattle, WA
- Ph.D. in Genetics, 1980, The Pennsylvania State University, State College, PA

Dr. May has been an Adjunct Professor and Director of the Genomic Variation Laboratory at UC Davis since 1995. He was Director of the Cornell Laboratory for Ecological and Evolutionary Genetics for the prior fourteen years. He has authored over 175 scientific publications using molecular genetic data to answer a broad suite of biological questions. Currently he and his graduate students work closely with biologists from a variety of state, federal, provincial, and tribal agencies on threatened and endangered fish species, seeking to maintain population health and integrity.

Michael Mohr

Mr. Mohr is a Supervisory Mathematical Statistician for the National Marine Fisheries Service, Southwest Fisheries Science Center, and a Research Fellow at the Institute of Marine Sciences, University of California, Santa Cruz. Mr. Mohr holds a Bachelor of Science degree in Fisheries Biology, a Bachelor of Arts degree in Mathematics, and a Master of Science degree in Fisheries from Humboldt State University. He has over 25 years of experience working on salmon assessment and management issues. His areas of expertise include population dynamics, statistics, stock assessment, and fisheries management. He has considerable experience developing statistical methods and estimators, applying sampling theory to resource management problems, and analysis of coded-wire tag data.

Mr. Mohr is Chief of Fisheries Investigations at the Center's Fisheries Ecology Division, and heads its Salmon Assessment Team. The Team has the lead responsibility for conducting salmon stock assessments in California, and for the development of salmon harvest models used by the Pacific Fishery Management Council to manage the ocean fisheries off California and Oregon. Their responsibilities include assessment of both listed and non-listed salmon and steelhead ESUs. Mr. Mohr was a member of the Pacific Fishery Management Council's Salmon Technical Team for over 10 years and has served on many scientific panels involving various salmon ESA, conservation, harvest, and management issues.

George Nandor

Pacific States Marine Fisheries Commission, Portland, OR

Mr. Nandor is the Program Manager of the Regional Mark Processing Center for the Pacific States Marine Fisheries Commission (PSMFC), responsible for maintaining the coded wire tag database (Regional Mark Information System) for all salmonid releases and recaptures on the United States' Pacific Coast. This includes coordinating and sharing coded wire tag data with Canada under the auspices of the Pacific Salmon Commission and the Pacific Salmon Treaty and membership as a U.S. representative on the Selective Fishery Evaluation Committee, co-chair of the Technical Committee on Data Sharing and co-chair of the Working Group on Data Standards. He also manages PSMFC's coded wire tag recovery program on the Columbia River, the marking and tagging operations in Idaho and other PSMFC employees stationed in Idaho, Washington and Oregon.

Mr. Nandor also worked for the Oregon Department of Fish and Wildlife (ODFW) for 31 years. As the Assistant Fish Propagation Program Manager for the ODFW he was responsible for coordinating the hatchery production goals for State of Oregon operated hatcheries and guiding all phases of trout and salmon hatchery operations. Mr. Nandor joined the ODFW as a hatchery technician and operated and managed six salmonid hatcheries in Oregon. In 1995 he was the Oregon team member on the Integrated Hatchery Operations Team (IHOT) Audit Team and the writer of the revised IHOT Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin, Volume II-Oregon. He was also a team member of the ODFW Coastal Hatchery Review in 1999, and the ODFW State Funded Hatchery Evaluation in 2003, and the ODFW 2006 Hatchery Evaluation. George Nandor was the facilitator and lead writer of Oregon's Fish Hatchery Management Policy in 2003. He is the primary author of the Overview of the Coded Wire Tag Program in the Greater Pacific Region of North America (2009) manuscript. In addition, he has represented Oregon on the US v. OR, Production Advisory Committee and is an executive team member of the annual NW Fish Culture Conference. He has visited over 150 fish hatcheries in North America, Europe and Asia and is an expert on fish hatchery programs and operations on the Pacific Coast.

Kevin Niemela

U.S. Fish & Wildlife Service, Red Bluff, CA

- B.S. in Fish and Wildlife, 1992, University of Minnesota, Minneapolis-St. Paul, Minnesota
- M.S. in Fishery Resources, 1995, University of Idaho, Moscow, Idaho

Mr. Niemela has sixteen years of experience working with anadromous salmonid hatcheries in California. He is currently the leader of the Monitoring and Evaluation Programs at the U.S. Fish and Wildlife Service's Coleman and Livingston Stone National Fish Hatcheries, a position he has held since 2001. In this position, Mr. Niemela oversees all aspects of biological monitoring and evaluations associated with hatchery facilities and operations. Results of monitoring and research are routinely presented in technical documents, including scientific reports, NEPA documents, and ESA consultations. Based on findings of monitoring and research, Mr. Niemela works with the hatcheries to develop strategies to protect and enhance natural stocks while fulfilling the Federal government's obligations to mitigate for fishery impacts resulting from the construction and operation of Shasta Dam.

Reg Reisenbichler

Dr. Reisenbichler earned a B.S. degree in Zoology (minor in mathematics; 1972) and an M.S. in Fishery Biology (minor in statistics; 1976) at Oregon State University, and a Ph.D. in Fisheries Science (population dynamics, statistics) at University of Washington (1986). He worked as a management

biologist with U.S. Fish and Wildlife Service studying resident fish species in Wyoming and salmon and steelhead in northern California (1977-1980), and as a research fishery biologist for Oregon Department of Fish and Wildlife (1976-1977) and for U.S. Department of Interior (1981-2008). He designed and conducted studies in Alaska, Idaho, Oregon, and Washington to facilitate integration of artificial and natural production, determine the effect of marine -derived nutrients on salmon population productivity and trophic dynamics, evaluate the use of otolith microstructure and microchemistry to define estuary utilization by juvenile Chinook salmon and to estimate and explain spatial and temporal variation in estuary utilization, guide dam removal and document the effects of removal on salmonid populations and aquatic ecosystems, and describe and explain the spatial and temporal variation in distribution, abundance, and growth of forage and other fishes in Puget Sound. Ancillary duties included serving on various review teams for ESA, hatchery, and other issues. He retired from U.S. Geological Survey in 2008 and continues work on report preparation, volunteer field activities, and review teams.

Kimberly True

Kimberly True is the assistant project leader at the United States Fish and Wildlife Service (USFWS) California/Nevada Fish Health Center, co-located at the Coleman National Fish Hatchery. She has worked in fish health for over 24 years providing technical support, applied research and fish health inspections for federal hatcheries in Washington, California, and Nevada. Ms True's contributions to the field of fish health management include Chief Editor of the National Wild Fish Hatchery Survey (NWFHS) Laboratory Manual, and co-author of the USFWS Quality Assurance program. These publications were instrumental in developing similar manuals that were adopted by the American Fisheries Society (AFS) for inclusion in their fish health procedures "Bluebook". In addition, Ms. True provided leadership in the implementation of molecular diagnostic techniques throughout federal, as well, regional fish health laboratories. Her role included developing and conducting training workshops, providing assay controls for quality assurance, and leading national laboratory ring testing studies that demonstrated proficiency in fish health diagnostics.

Ms. True studied biochemistry and received her Bachelors of Science from The Evergreen State College, Olympia, Washington. She completed graduate course work in salmonid ecology and has been an AFS Fish Health inspector for over 15 years.