

CURRICULUM VITAE

JAY A. DAVIS ENVIRONMENTAL SCIENTIST

San Francisco Estuary Institute
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Oakland, CA 94621

EDUCATION

- Ph.D. 1997 Ecology Graduate Group
University of California at Davis, Davis, CA
- Dissertation Concentrations and effects of organochlorine contaminants in double-crested cormorant embryos from San Francisco Bay
- M.E.M. 1986 School of the Environment
Duke University, Durham, NC
- Master's Project Ecological guidelines for the discharge of treated municipal wastewater into natural wetlands
- B.A. 1984 Northwestern University, Evanston, IL

PROFESSIONAL POSITIONS

Environmental Scientist: San Francisco Estuary Institute, Richmond, CA,
1986-1992, 1995-present.

Regional Monitoring Program design and interpretation, particularly relating to organic contaminants. Planning and implementing fish contamination monitoring. Co-authored Status and Trends Reports on Pollutants and on Dredging and Waterway Modification for the San Francisco Estuary Project.

Research Assistant: Center for Ecological Health Research, University of California, Davis, CA, 1992 - 1995.

Research on effects of dioxin-like compounds on double-crested cormorant embryos in San Francisco and Humboldt bays.

Environmental Scientist: North Carolina Division of Environmental Management, Raleigh, NC, 1985 - 1986.

Provided technological recommendations and guidelines for minimizing impacts of discharges of secondary-treated municipal wastewater into natural wetlands.

Research Assistant: School of the Environment, Duke University, Durham, NC, 1984 -1985.

PUBLICATIONS

Davis, J.A., J.N. Collins, D. Yee, S. Schwarzbach, and S.N. Luoma. Submitted. Issues in San Francisco Estuary tidal wetlands restoration: Potential for increased mercury accumulation in the Estuary food web. CALFED Science Journal.

Hoenicke, R., J.A. Davis, A. Gunther, T.E. Mumley, K. Abu-Saba, and K. Taberski. 2003. Effective application of monitoring information: The case of San Francisco Bay. *Environ. Mon. Assess.* 81: 15-25.

Davis, J.A., M.D. May, B.K. Greenfield, R. Fairey, C. Roberts, G. Ichikawa, M.S. Stoelting, J.S. Becker, and R.S. Tjeerdema. 2002. Contaminant concentrations in sport fish from San Francisco Bay, 1997. *Mar. Pollut. Bulletin.* 44: 1117-1129.

Thompson, B., R. Hoenicke, J.A. Davis, and A. Gunther. 2000. An overview of contaminant-related issues identified by monitoring in San Francisco Bay. *Environ. Mon. Assess.* 64(1): 409-419

Johnson, G.W., W.M. Jarman, C.E. Bacon, J.A. Davis, R. Ehrlich, and R.W. Risebrough. 2000. Unmixing polychlorinated biphenyl source fingerprints in surface waters of San Francisco Bay. *Environ. Sci. Technol.* 34(4): 552-559.

Gunther, A.J., J.A. Davis, D. Hardin, J. Gold, D. Bell, J. Crick, G. Scelfo, J. Sericano, M. Stephenson. 1999. Long term bioaccumulation monitoring with transplanted bivalves in San Francisco Bay. *Marine Pollution Bulletin* 38(3): 170-181.

Davis, J.A. 1997. Concentrations and Effects of Organochlorine Contaminants in Double-crested Cormorant Embryos from San Francisco Bay. Doctoral Dissertation, University of California, Davis, CA.

Jarman, W.M., G.W. Johnson, C.E. Bacon, J.A. Davis, R.W. Risebrough, and R. Ramer. 1997. Levels and patterns of polychlorinated biphenyls in water collected from the San Francisco Bay and Estuary, 1993-1995. *Fresenius J. Anal. Chem.* 359: 254-260.

Davis, J.A., D.M. Fry, and B.W. Wilson. 1997. Hepatic ethoxyresoufin-o-deethylase (EROD) activity and inducibility in wild populations of double-crested cormorants. *Environmental Toxicology and Chemistry* 16(7): 1441-1449.

Davis, J.A., D.M. Fry, and B.W. Wilson. 1996. Field application of fluorescence-based catalytic assays for measuring cytochrome P450 induction in birds. Chapter 13 in: *Biomarkers for Agrochemicals and Toxic Substances (ACS Symposium Series 643)*, Blancato, J.N, R.N. Brown, C.C. Dary, and M.A. Saleh (eds.). American Chemical Society, Washington, D.C.

Davis, J.A., A.J. Gunther, and J.M. O'Connor. 1992. Priority pollutant loads from effluent discharges to the San Francisco Estuary. *Water Environment Research* 64(2): 134-140.

Richardson, C.J. and J.A. Davis. 1987. Natural and artificial wetland ecosystems - ecological opportunities and limitations. In: *Aquatic Plants for Water Treatment and Resource Recovery*, K.R. Reddy and W.H. Smith (eds.). University of Florida, Gainesville, FL.

TECHNICAL REPORTS

Davis, J.A., B.K. Greenfield, G. Ichikawa, and M. Stephenson. 2002. Draft report: Mercury in Spot Fish from the Delta Region. San Francisco Estuary Institute, Oakland, CA. <http://loer.tamug.tamu.edu/calFed/Reports/Final/Task%202A%20-%20Text%20and%20Figures.pdf>

Davis, J.A. 2002. The Long Term Fate of PCBs in San Francisco Bay. RMP Technical Report 66. San Francisco Estuary Institute, Oakland, CA.

Davis, J.A., K. Abu Saba, and A.J. Gunther. 2000. Technical Report of the Sources, Pathways, and Loadings Workgroup. San Francisco Estuary Institute, Richmond, CA.

Davis, J.A., M.D. May, G. Ichikawa, D. Crane. 2000. Contaminant Concentrations in Fish from the Sacramento-San Joaquin Delta and Lower San Joaquin River, 1998. San Francisco Estuary Institute, Richmond, CA.

Davis, J.A., L. McKee, J. Leatherbarrow, and T. Daum. 2000. Contaminant Loads from Stormwater to Coastal Waters in the San Francisco Bay Region: Comparison to Other Pathways and Recommended Approach for Future Evaluation. San Francisco Estuary Institute, Richmond, CA.

Davis, J.A. 2000. Chlorinated Hydrocarbons in the San Francisco Estuary and its Watershed. Draft Chapter xx in Spies, R.B. (ed.). *Contaminants and Toxicity in the Sacramento-San Joaquin Delta, Its Catchment, and the San Francisco Estuary – A CALFED White Paper*. Applied Marine Sciences, Livermore, CA.

Davis, J.A., J.N. Collins, D. Yee, S. Schwarzbach, and S.N. Luoma. 2000. Mercury and Tidal Wetland Restoration. Draft Chapter 6 in Brown, L. (ed.). *DRAFT CALFED Whitepaper on: Ecological Processes in Tidal Wetlands of the Sacramento-San Joaquin Estuary and Their Implications for Proposed Restoration Efforts of the Ecosystem Restoration Program*.

- Davis, J.A. and J. Yoon. 1999. Technical Report of the Chlorinated Hydrocarbon Workgroup. San Francisco Estuary Institute, Richmond, CA.
- San Francisco Estuary Institute. 1999. Contaminant Concentrations in Fish from San Francisco Bay, 1997. San Francisco Estuary Institute, Richmond, CA.
- San Francisco Estuary Institute. 1999. 1997 Annual Report: San Francisco Estuary Regional Monitoring Program for Trace Substances. San Francisco Estuary Institute, Richmond, CA.
- San Francisco Estuary Institute. 1998. 1996 Annual Report: San Francisco Estuary Regional Monitoring Program for Trace Substances. San Francisco Estuary Institute, Richmond, CA.
- Gunther, A.J. and J.A. Davis. 1998. An evaluation of bioaccumulation monitoring with transplanted bivalves in the RMP. In 1996 Regional Monitoring Program Annual Report, pp. 187-200. San Francisco Estuary Institute, Richmond, CA.
- Davis, J.A. R. Hoenicke, R.W. Risebrough, W.M. Jarman, C.A. Bacon, J. Vedder, and J.L. Sericano. 1997. PCB intercalibration exercise with Regional Monitoring Program water sample extracts. In 1996 Regional Monitoring Program Annual Report, pp. 234-239. San Francisco Estuary Institute, Richmond, CA.
- San Francisco Estuary Institute. 1997. 1995 Annual Report: San Francisco Estuary Regional Monitoring Program for Trace Substances. San Francisco Estuary Institute, Richmond, CA.
- Jarman, W.M. and J.A. Davis. 1997. Observations on trace organic concentrations in RMP water samples. In 1995 Regional Monitoring Program Annual Report, pp. 67-77. San Francisco Estuary Institute, Richmond, CA.
- Hoenicke, R., J. Davis, B. Thompson, and J. Haskins. 1997. Bioaccumulation of contaminants by transplanted bivalves in the San Francisco Estuary: A summary of status and trends with emphasis on Local Effects Monitoring Programs. In 1995 Regional Monitoring Program Annual Report, pp. 171-175. San Francisco Estuary Institute, Richmond, CA.
- Hoenicke, R., J.A. Davis, B.E. Thompson, and J. Haskins. 1996. Bioaccumulation of contaminants by transplanted bivalves in the San Francisco Estuary: status and trends. SFEI Report to the Bay Area Dischargers Association. 80 pp.
- San Francisco Estuary Institute. 1996. 1994 Annual Report: San Francisco Estuary Regional Monitoring Program for Trace Substances. San Francisco Estuary Institute, Richmond, CA.
- Bailey, H.C., S. Clark, and J.A. Davis. 1995. The Effects of Toxic Contaminants in Waters of the San Francisco Bay and Delta. Prepared for Bay/Delta Oversight Council, Sacramento, CA. 125 pp.
- Davis, J.A. (editor). 1992. Proceedings of a Workshop on Chronic Toxicity Identification Evaluations in the San Francisco Bay Region. Aquatic Habitat Institute, Richmond, CA.
- Davis, J.A., J.M. O'Connor, and B. Thompson. 1992. Bioaccumulation of contaminants by bivalve molluscs in the vicinity of municipal wastewater discharges to San Francisco Bay: Wet season results, 1991/1992. Aquatic Habitat Institute, Richmond, CA.
- Davis, J.A., A.J. Gunther, J.M. O'Connor, B.J. Richardson, R.B. Spies, E. Wyatt, and E. Larson. 1991. Status and Trends Report on Pollutants in the San Francisco Estuary. San Francisco Estuary Project, Oakland, CA.
- O'Connor, J.M., A.R. Flegal, R.B. Spies, and J.A. Davis. 1991. Quality Assurance in Environmental Analysis Applied to the San Francisco Estuary. San Francisco Estuary Project, Oakland, CA.
- Gunther, A.J., J.A. Davis, J.M. O'Connor, and P.S. Williams. 1990. Status and Trends Report on Dredging and Waterway Modification in the San Francisco Estuary. San Francisco Estuary Project, Oakland, CA.

Davis, J.A. 1988. An Inventory of Priority Datasets Relating to the San Francisco Estuary. Aquatic Habitat Institute, Richmond, CA.

Gunther, A.J., J.A. Davis, and D.J.H. Phillips. 1987. An Assessment of the Loading of Toxic Contaminants to the San Francisco Bay-Delta. Aquatic Habitat Institute, Richmond, CA.

Davis, J.A. 1986. Ecological guidelines for the use of natural wetlands for municipal wastewater management in North Carolina. Division of Environmental Management, North Carolina Department of Natural Resources and Community Development, Raleigh, NC.

SYMPOSIA

Davis, J.A. and K. Taberski. 2002. Monitoring Water Quality in San Francisco Bay: Lessons Learned After Ten Years of Regional Monitoring. Presented at the Understanding Surface Water Monitoring Requirements, Sacramento, CA.

Davis, J.A. 2002. The Long Term Fate of PCBs in San Francisco Bay. Presented at the SETAC Annual Meeting, Salt Lake City, UT.

Greenfield, B.K. and J.A. Davis. 2002. A Mass Balance Model for the Fate of PAHs in the San Francisco Estuary. Presented at the SETAC Annual Meeting, Salt Lake City, UT.

Yee, D., J.E. Leatherbarrow, J.A. Davis, G. Brooks, and D. Hoover. 2002. PCB Loads from Wastewater Effluent Discharged in the San Francisco Estuary. Poster presented at the SETAC Annual Meeting, Salt Lake City, UT.

Davis, J.A. and K. Taberski. 2002. Monitoring Water Quality in San Francisco Bay: Lessons Learned After Ten Years of Regional Monitoring. Presented at the Conference on California and the World Ocean '02, Santa Barbara, CA.

Davis, J.A. 2002. The Long Term Fate of PCBs in San Francisco Bay. Presented at the NorCal SETAC Annual Meeting, Davis, CA.

Davis, J.A. 2002. New Directions for the RMP: An Overview. Presented at the RMP Annual Meeting. Oakland, CA.

Davis, J.A. 2001. PCBs in the San Francisco Estuary: Achievements, Trends, and the Future. Poster presented at 2001 State of the Estuary Conference, San Francisco, CA.

Yee, D., J. Leatherbarrow, and J.A. Davis. 2001. Measurement of trace organic contaminants in municipal wastewater effluent. Poster presented at 2001 State of the Estuary Conference, San Francisco, CA.

Davis, J.A., B.K. Greenfield, G. Ichikawa, M. Stephenson, and W. Jarman. 2001. Mercury contamination of northern California fish: spatial and temporal patterns. Poster presented at Ecological Society of America 2001 Annual Meeting, Madison, WI.

Davis, J.A., B.K. Greenfield, C. Roberts, R. Fahey, G. Ichikawa, M. Stephenson, and D. Crane. 2001. Persistent contaminants of human health concern in sport fish from the Central Valley and San Francisco Bay. Presented at NorCal SETAC Annual Meeting, Santa Cruz, CA.

Greenfield, B.K., J.A. Davis, G. Ichikawa, M. Stephenson, W. Jarman. 2001. Mercury contamination of northern California fish: Spatial and temporal patterns. Presented at NorCal SETAC Annual Meeting, Santa Cruz, CA.

Yee, D., J. Leatherbarrow, and J.A. Davis. 2001. Measurement of trace organic contaminants in municipal wastewater effluent. Presented at NorCal SETAC Annual Meeting, Santa Cruz, CA.

Yee, D., J.A. Davis, J.N. Collins, S. Schwarzbach, S.N. Luoma. 2000. Mercury, tidal wetlands, and CALFED. Presented at the CALFED Science Conference, Sacramento, CA.

Davis, J.A., M.D. May, G. Ichikawa, and D. Crane. 2000. Persistent Contaminants of Human Health Concern in Sportfish from the Delta, the San Joaquin River, and the Sacramento River. Presented at the CALFED Science Conference, Sacramento, CA.

Davis, J.A., M.D. May, G. Ichikawa, and D. Crane. 2000. Persistent Contaminants of Human Health Concern in Sportfish from the Delta and the Sacramento River: Results of 1998 Sampling. Presented at NorCal SETAC Annual Meeting, Concord, CA.

Davis, J.A., M.D. May, G. Ichikawa, and D. Crane. 2000. Persistent Contaminants of Human Health Concern in Sportfish from the Delta and the Sacramento River: Results of 1998 Sampling. Presented at IEP Annual Meeting, Asilomar, CA.

Schladow, G., T. Young, I. Werner, B. Thompson, J.A. Davis, and N. Nur. 2000. Coastal Intensive Site Network: San Pablo Bay. Presented at IEP Annual Meeting, Asilomar, CA.

Davis, J.A. 2000. Sources, Pathways, and Loadings of Contaminants to the Bay. Presented at the RMP Annual Meeting, Oakland, CA.

Davis, J.A. and J.H. Yoon. 1999. A PCB mass budget for San Francisco Bay. Presented at SETAC 1999 Annual Meeting, Philadelphia, PA.

Davis, J.A., M. May, S.E. Wainwright, R. Fairey, C. Roberts, G. Ichikawa, R. Tjeerdema, M. Stoelting, J. Becker, M. Petreas, and K. Taberski. 1999. Persistent Toxic Chemicals in Fish from San Francisco Bay, the Sacramento-San Joaquin Delta, and the Sacramento River. Presented at Northern California SETAC 1999 Annual Meeting, Concord, CA.

Davis, J.A., M. May, S.E. Wainwright, R. Fairey, C. Roberts, G. Ichikawa, R. Tjeerdema, M. Stoelting, J. Becker, M. Petreas, and K. Taberski. 1999. Persistent toxic chemicals of human health concern in fish from San Francisco Bay and the Sacramento River, CA. Presented at 4th Biennial State of the Estuary Conference, San Francisco, CA.

Davis, J.A., M. May, S.E. Wainwright, R. Fairey, C. Roberts, G. Ichikawa, R. Tjeerdema, M. Stoelting, J. Becker, M. Petreas, and K. Taberski. 1999. Persistent Toxic Chemicals in Fish from San Francisco Bay, the Sacramento-San Joaquin Delta, and the Sacramento River. Presented at Interagency Ecological Program Annual Meeting, Asilomar, CA.

Davis, J.A., M. May, S.E. Wainwright, R. Fairey, C. Roberts, G. Ichikawa, R. Tjeerdema, M. Stoelting, J. Becker, M. Petreas, M. Mok, M. McKinney, and K. Taberski. 1999. Persistent toxic chemicals in fish from San Francisco Bay and the Sacramento River, CA. Presented at American Chemical Society 1999 Annual Meeting, Anaheim, CA.

Davis, J.A., M. May, S.E. Wainwright, R. Fairey, C. Roberts, G. Ichikawa, R. Tjeerdema, M. Stoelting, J. Becker, M. Petreas, M. Mok, M. McKinney, and K. Taberski. 1999. Toxic Contaminants of Human Health Concern in San Francisco Bay Fish: Mercury, PCBs, Organochlorine Pesticides, and Dioxins. Presented at SETAC 1998 Annual Meeting, Charlotte, NC.

Davis, J.A., G. Scelfo, and W.M. Jarman. 1998. Spatial and Seasonal Patterns in Contaminant Concentrations in Waters of San Francisco Bay. Presented at Annual Meeting of the Northern California Chapter of the Society of Environmental Toxicology and Chemistry, Reno, NV.

Davis, J.A., D.M. Fry, R.M. Higashi, and L.A. Preston. 1997. Polychlorinated biphenyls (PCBs): Concentrations, metabolism, and relation to biochemical and morphological parameters in double-crested cormorants (*Phalacrocorax auritus*) in California. Presented at 18th Annual Meeting of the Society of Environmental Toxicology and Chemistry, San Francisco, CA.

Davis, J.A., R. Hoenicke, R.W. Risebrough, W.M. Jarman, C.E. Bacon, J. Vedder, and J. Sericano. 1997. PCB congener data are advantageous, but proceed with caution. Presented at 18th Annual Meeting of the Society of Environmental Toxicology and Chemistry, San Francisco, CA.

Johnson, G.W., W.M. Jarman, R. Ehrlich, and J.A. Davis. 1997. A source/degradation model for polychlorinated biphenyls in San Francisco Bay and Estuary: April, 1995. Presented at 18th Annual Meeting of the Society of Environmental Toxicology and Chemistry, San Francisco, CA.

Jarman, W.M., C.E. Bacon, J.A. Davis, R.W. Risebrough, R. Ramer, and A.J. Gunther. 1997. Levels of polychlorinated biphenyls in water collected from the San Francisco Bay and Estuary, 1993-1995. Presented at 18th Annual Meeting of the Society of Environmental Toxicology and Chemistry, San Francisco, CA.

Davis, J.A., W.M. Jarman, J.W. Newman, T.L. Wade, J.L. Sericano, and M.D. Stephenson. 1996. PCB contamination in the San Francisco Estuary. Presented at the Sixth Annual Meeting of the Northern California Chapter of the Society of Environmental Toxicology and Chemistry, Sacramento, CA.

Tenbrook, P.L., R. Hoenicke, and J.A. Davis. 1996. Bioaccumulation of contaminants along outfall transects and reference sites in the San Francisco Estuary. Presented at the Sixth Annual Meeting of the Northern California Chapter of the Society of Environmental Toxicology and Chemistry, Sacramento, CA.

Davis, J.A. and D.M.Fry. 1995. Field candling to assess viability and developmental stage of wild bird embryos: a highly useful tool in studies of pollutant effects on reproduction. Presented at 16th Annual Meeting of the Society of Environmental Toxicology and Chemistry, Vancouver, British Columbia.

Davis, J.A., D.M. Fry, and B.W. Wilson. 1994. EROD induction in microsomes and primary hepatocyte cultures prepared from individual double-crested cormorant embryo livers. Presented at 15th Annual Meeting of the Society of Environmental Toxicology and Chemistry, Denver, CO.

Davis, J.A. 1991. Effluent discharges of toxicants to the San Francisco Estuary. Presented at 11th International Estuarine Research Conference, San Francisco, CA.

Dodd, R.C., J.A. Davis, and M. Kerr. 1986. The use of wetlands for wastewater management: an update. Presented at 1986 Triangle Conference on Environmental Technology, University of North Carolina, Chapel Hill, NC.

PROFESSIONAL SOCIETIES

Society of Environmental Toxicology and Chemistry
American Chemical Society