

PUBLICATIONS
1 January–31 December 2010

- Alin, S. R., R. A. Feely, A. G. Dickson, J. M. Hernandez-Ayon, L. W. Juranek, M. D. Ohman, and R. Goericke. 2010. Predictive relationships for pH and carbonate saturation in the southern California Current System using oxygen and temperature data. American Geophysical Union, Fall Meeting 2010.
- Baker, K., E. Weber, and J. A. Koslow. 2010. CalCOFI information management and data delivery. PICES Conference. Portland, OR.
- Bjorkstedt, E., R. Goericke, S. McClatchie, E. Weber, W. Watson, N. Lo, B. Peterson, B. Emmett, J. Peterson, R. Durazo, G. Gaxiola-Castro, F. Chavez, J. T. Pennington, C. A. Collins, J. Field, S. Ralston, K. Sakuma, S. Bograd, F. Schwing, Y. Xue, W. Sydeman, S. A. Thompson, J. A. Santora, J. Largier, C. Halle, S. Morgan, S. Y. Kim, K. Merkens, J. Hildebrand and L. Munger. 2010. State of the California Current 2009–2010: Regional variation persists through transition from La Niña to El Niño (and back). Calif. Coop. Oceanic Fish. Invest. Rep., 51: 39–69.
- Bograd, S. J., C. G. Castro, F. Chavez, C. A. Collins, V. Combes, E. Lorenzo, and M. D. Ohman. 2010. The California Undercurrent, 1949–2008. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Bograd, S. J., W. J. Sydeman, J. Barlow, A. Booth, R. D. Brodeur, J. Calambokidis, F. Chavez, W. R. Crawford, E. Di Lorenzo, R. Durazo, R. Emmett, J. Field, G. Gaxiola-Castro, W. Gilly, R. Goericke, J. Hildebrand, J. E. Irvine, M. Kahru, J. A. Koslow, B. Lavaniegos, M. Lowry, D. L. Mackas, M. Manzano-Sarabia, S. M. McKinnell, B. G. Mitchell, L. Munger, R. I. Perry, W. T. Peterson, S. Ralston, J. Schweigert, A. Sunstov, R. Tanasichuk, A. C. Thomas, and F. Whitney. 2010. Status and trends of the California Current region, 2003–2008, pp 106–141. In: S. M. McKinnell & M. J. Dagg (eds.) Marine Ecosystems of the North Pacific Ocean 2003–2008. PICES Special Publication Number 4.
- Boyce, D. G., M. R. Lewis, and B. Worm. 2010. Global phytoplankton decline over the past century. Nature, 466, 591–596.
- Bucklin, A., S. Nishida, S. B. Schnack-Schiel, P. H. Wiebe, D. Lindsay, R. J. Machida, and N. J. Copley. 2010. A Census of Zooplankton of the Global Ocean. In: E. A. D. McIntyre (ed.) Life in the Worlds Oceans: Diversity, Distribution and Abundance. Oxford: Wiley Blackwell Publ. Ltd.
- Campbell, G. S., K. Merkens and J. Hildebrand. 2010. California Cooperative Fisheries Investigation (CalCOFI) Cruises 2009–2010 in Marine Mammal Monitoring for the U.S. Navy's Hawaii Range Complex and Southern California Range Complex. Annual Report 2010. Department of the Navy, U.S. Pacific Fleet: 569–573.
- Campbell, G. S., K. Merkens and J. Hildebrand. 2010. California Cooperative Fisheries Investigation (CalCOFI) Cruises 2009–2010 in Marine Mammal Acoustic Monitoring and Habitat Investigation, Southern California Offshore Region 2010. Naval Postgraduate School Technical Report No. NPS-OC-10.
- Cartamil, D., N. C. Wegner, D. Kacev, N. Ben-adret, S. Kohin, and J. B. Graham. 2010. Movement patterns and nursery habitat of the juvenile thresher shark *Alopias vulpinus* in the Southern California Bight. Mar. Ecol. Prog. Ser. 404: 249–258.
- Carter, M. and Z. Yin. 2010. Patterns of chlorophyll variability and phytoplankton community composition off southern California and the influence of macroscale and regional oceanographic processes. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Chekalyuk, A. M. and M. Hafez. 2010. Advanced Laser Fluorometry (ALF): New Technology, Field Observations and Findings. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Chenillat, F., P. C. Riviere, E. Lorenzo, S. J. Bograd, and M. D. Ohman. 2010. Low-frequency transport dynamics in the California Current. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Crone, P. R., K. T. Hill, J. D. McDaniel, and K. Lynn. 2011. Pacific mackerel (*Scomber japonicus*) stock assessment for USA management in the 2011–12 fishing year. Pacific Fishery Management Council, Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220, USA. 100 p.
- Davis, R. E. 2010. On the coastal-upwelling overturning cell. Journal of Marine Research 68: 369–385.
- Davison, P., A. Lara-Lopez, and J. A. Koslow. 2010. Challenges in the application of acoustic survey methods to a complex aquatic community: the deep scattering layer of the California Current. CalCOFI Conference. La Jolla, CA.
- Décima, M., M. R. Landry, and R. R. Rykaczewski. 2010. Broad scale patterns in mesozooplankton biomass and grazing in the eastern equatorial Pacific. Deep Sea Research Part II: Topical Studies in Oceanography, 58, 387–399.
- Décima, M., M. D. Ohman, and A. De Robertis. 2010. Body size dependence of euphausiid spatial patchiness. Limnology and Oceanography 55: 777–788.
- Dickson, A. 2010. Ocean Acidification Impacts on Shellfish Workshop: Findings and Recommendations. Ocean Acidification Effects on Shellfish Workshop: Findings and Recommendations. Costa Mesa, CA: California Sea Grant College Program.
- Dotson, R. C., D. A. Griffith, D. L. King, and R. L. Emmett. 2010. Evaluation of a Marine Mammal Excluder Device (MMED) for a Nordic 264 Midwater Rope Trawl. NOAA-TM-NMFS-SWFSC-455.
- Edwards, M., G. Beaugrand, G. C. Hays, J. A. Koslow, and A. J. Richardson. 2010. Multi-decadal oceanic ecological datasets and their application in marine policy and management. Trends in Ecology & Evolution, 25, 602–610.
- Feely, R. A., R. Wanninkhof, J. Stein, M. F. Sigler, E. Jewett, F. Arzayus, and D. K. Gledhill. 2010. NOAA Ocean and Great Lakes Acidification Research Plan.
- Fuchs, H. L. and P. J. S. Franks. 2010. Plankton community properties determined by nutrients and size-selective feeding. Marine Ecology Progress Series, 413, 1–15.
- Gangopadhyay, A., P. F. Lermusiaux, L. Rosenfeld, A. R. Robinson, L. Calado, H. S. Kim, W. G. Leslie, and J. Haley, J. (Submitted) The California Current System: A multiscale overview and the development of a Feature-Oriented Regional Modeling System (FORMS). Dynamics of Atmospheres and Oceans, 65.
- Gilbert, D., N. N. Rabalais, R. J. Diaz, and J. Zhang. 2010. Evidence for greater oxygen decline rates in the coastal ocean than in the open ocean. Biogeosciences, 7, 2283–2296.
- Goebel, N. L., C. A. Edwards, J. P. Zehr, and M. J. Follows. 2010. An emergent community ecosystem model applied to the California Current System. Journal of Marine Systems [J. Mar. Syst.], 83, 221–241.
- Goetze, E. and M. D. Ohman. 2010. Integrated molecular and morphological biogeography of the calanoid copepod family Eucalanidae Deep Sea Research Part II: Topical Studies in Oceanography, 57, 2110–2129.
- Gorsky, G., M. D. Ohman, M. Picheral, S. Gasparini, L. Stemmann, J. B. Romagnan, A. Cawood, S. Pesant, C. García-Comas, and F. Prejger. 2010. Digital zooplankton image analysis using the ZooScan integrated system. Journal of Plankton Research, 32, 285–303.
- Heberer, C., S. A. Albers, D. Bernal, S. Kohin, B. DiFiore, and C. A. Sepulveda. 2010. Insights into catch-and-release survivorship and stress-induced blood biochemistry of common thresher sharks (*Alopias vulpinus*) captured in the southern California recreational fishery. Fish. Res. 106: 495–500.
- Herguera, J. C., T. Herbert, M. Kashgarian, and C. Charles. 2010. Intermediate and deep water mass distribution in the Pacific during the Last Glacial Maximum inferred from oxygen and carbon stable isotopes. Quaternary Science Reviews 29: 1228–1245.
- Hill, K. T., N. C. H. Lo, B. J. Macewicz, P. R. Crone, and R. Felix-Uraga. 2010. Assessment of the Pacific sardine resource in 2010 for U. S. management in 2011. U. S. Dep. Commer., NOAA Tech. Memo. NMFS-SWFSC-469. 137 p.
- Hinger, E. N., G. M. Santos, E. R. M. Druffel, and S. Griffin. 2010. Carbon isotope measurements of surface seawater from a time-series site off southern California. Radiocarbon, 52, 69–89.
- Hsieh, C., H. Kim, W. Watson, E. Lorenzo, E. and G. Sugihara. 2010. Climate-driven changes in abundance and distribution of larvae of oceanic fishes in the Southern California region. Proceedings from the 2010 AGU Western Pacific Geophysics Meeting. Taipei, Taiwan.

- Jarvis, E.T., C. Linardich, and C.F.Valle. 2010. Spawning-related movements of barred sand bass, *Paralabrax nebulifer*, in southern California: Interpretations from two decades of historical tag and recapture data. So. Cal. Acad. of Sci. Bull. 109:123–143.
- Jiao, Y., L. Rogers-Bennett, I. Taniguchi, J. Butler and P. Crone 2010. Incorporating temporal variation in the individual growth of red abalone (*Haliotis rufescens*) using hierarchical Bayesian growth models. Can. J. Fish. Aquat. Sci. 67:730–742.
- Karl, D.M. (2010) Oceanic ecosystem time-series programs. Oceanography, 23, 104–125.
- Karpov, K.A., M. Bergen, J.J. Geibel, P.M. Law, C. FValle, and D. Fox. 2010. Prospective (a priori) power analysis for detecting changes in density when sampling with strip transects. Cal. Fish and Game 96:69–81.
- Koslow, J.A. and C. Allen. 2010. The influence of the ocean environment on the abundance of market squid (*Doryteuthis opalescens*) paralarvae in the Southern California Bight. CalCOFI Conference. La Jolla, CA.
- Koslow, J.A., K. Brander, M. Fogarty, and F. Schwing. (In press). Integration of ocean observations into an ecosystem approach to resource management. In: J. Hall, Harrison, D. E. & Stammer, D., Eds. (ed.) Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 1). Venice, Italy: ESA Publication WPP-306.
- Koslow, J.A., R. Goericke, A. Lara-Lopez, and W. Watson. 2010. Climate, the oxygen-minimum zone, and deepwater fishes of the southern California Current. CalCOFI Conference. La Jolla, CA.
- Koslow, J.A., R. Goericke, S. McClatchie, R. Vetter, and L. Rogers-Bennett. (In press). The California Cooperative Oceanic Fisheries Investigations (CalCOFI): the continuing evolution and contributions of a 60-year ocean observation program. In: J. Hall, Harrison, D. E. & Stammer, D., Eds. (ed.) Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 1). Venice, Italy: ESA Publication WPP-306.
- Koslow, J. A., R. Goericke, A. Sunstsov, and W. Watson. 2010. Climate and larval fish assemblages in the southern California Current, 1951–2008. Climate and Fisheries Symposium. Sendai, Japan.
- Koslow, J.A., R. Goericke, and W. Watson. 2010. Climate and fish assemblages of the southern California Current, 1951–2008. PICES Conference. Portland, OR.
- Koslow, J. A., R. Goericke, W. Watson, and A. Lara-Lopez. (In press). Impact of declining intermediate-water oxygen on deepwater fishes in the California Current. Mar. Ecol. Prog. Ser.
- Koslow, T., L. Rogers-Bennett, and D. Neilson. 2010. A time series for the phyllosoma of the California spiny lobster (*Panulirus interruptus*) off southern California, 1951–2008: relationships with climate and the fishery. CalCOFI Conference. La Jolla, CA.
- Lara-Lopez, A., P. Davison, and J. A. Koslow. 2010. Methodological challenges to estimating abundance of mid-trophic organisms using multi-frequency acoustics and net sampling in contrasting hydrographic regimes off southern California. ICES Working Group on Fisheries Acoustics Science and Technology (FAST). San Diego, CA.
- Larinto, T. (ed.) 2010. Status of the Fisheries Report: An Update through 2008. A Report to the Fish and Game Commission. 231 p. Available at: <http://www.dfg.ca.gov/marine/status/index.asp>.
- Lavigne, M., T. M. Hill, H. J. Spero, and T.P. Guilderson. 2010. Climate, productivity, and intermediate water nutrients: new records from bamboo coral Ba/Ca. American Geophysical Union, Fall Meeting 2010.
- Liu, K-K., L. Atkinson, R. Quiñones, L. Talaue-McManus, J. R. Moisan. 2010. Coupled Circulation/Biogeochemical Models to Estimate Carbon Flux. In: Carbon and Nutrient Fluxes in Continental Margins. Springer Berlin Heidelberg, p 539–558.
- Lo, N. and B. Macewicz. 2010. Daily egg production method survey. Workshop on enhancing stock assessments of Pacific sardine in the California Current through cooperative surveys, La Jolla, CA.
- Lo, N. C. H., E. Dorval, R. Funes-Rodríguez, M. E. Hernández-Rivas, Y. Huang, and Z. Fan. 2010. Utilities of larval densities of Pacific mackerel (*Scomber japonicus*) off California, USA and west coast of Mexico from 1951 to 2008, as spawning biomass indices. Ciencia Pesquera, 18, 59–75.
- Lo, N. C. H., B. J. Macewicz, and D. A. Griffith. 2010. Spawning biomass of Pacific sardine (*Sardinops sagax*) off the U.S. in 2010. NOAA Technical Memorandum NMFS-SWFSC No. 1–35 pp.
- Mackas, D. L., and G. Beaugrand. 2010. Comparisons of zooplankton time series. Journal of Marine Systems 79: 286–304.
- Mason, J. (2010) Review of the use of California Commercial Fisheries Landings and Recreational Catch Data in stock assessments. Managing Data-Poor Fisheries: Case Studies, Models & Solutions. California Sea Grant College Program 2010.
- McClatchie, S., R. Goericke, G. Auad, and K. Hill. 2010. Re-assessing the temperature index for Pacific sardine (*Sardinops sagax*) stock assessment. Canadian Journal of Fisheries and Aquatic Sciences 67: 1782–1790.
- McClatchie, S., R. Goericke, R. Cosgrove, G. Auad, G. and R. Vetter. 2010. Oxygen in the Southern California Bight: Multidecadal trends and implications for demersal fisheries. Geophysical Research Letters, 37, L19602.1–L19602.5.
- McVeigh, B. A. B., J. J. Geibel, and P.E. Kalvass. 2010. Sport clamming in Humboldt Bay, California during 2008: Comparisons with historical survey data. Cal. Fish and Game 96:245–255.
- Munro, D. R. and P. Quay. 2010. Gross and net production estimates in the California Current System from oxygen triple isotopes and the O₂/Ar ratio. American Geophysical Union, Fall Meeting 2010.
- Neal, A. C., M. Gonsior, M. Gassel, H. Coleman, N. Argyropoulos, C. Hume, R. Mielke, D. Steuerman, K. D. Knobelspiesse, and B. Balestra. 2010. Initial analysis of marine debris accumulation in the Subtropical Convergence Zone of the North Pacific Gyre. Proceedings from the 2010 AGU Ocean Sciences Meeting. 2010 Ocean Sciences Meeting, Portland, OR (USA).
- Nur, N., J. Jahncke, M. Herzog, J. Howar, J. A. Wiens, and D. Stralberg. 2010. Wildlife hotspots in the California Current System Technical Report to the Resources Legacy Fund Foundation No. 1–37 pp.
- Parnell, P. E., E. F. Miller, C. E. Lennert-Cody, P. K. Dayton, M. L. Carter, M. L. and T. D. Stebbins. 2010. The response of giant kelp (*Macrocystis pyrifera*) in southern California to low-frequency climate forcing. Limnology and Oceanography 55, 2686–2702.
- Powell, J. R., M. D. Ohman, and R. E. Davis. 2010. Glider-based analysis of covariability of ocean fronts and zooplankton acoustic backscatter in the California Current System. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Ralston, S., and B. R. MacFarlane. 2010. Population estimation of bocaccio (*Sebastodes paucispinis*) based on larval production. Canadian Journal of Fisheries and Aquatic Sciences 67: 1005–1020.
- Rogers-Bennett, L., R. F. Donnanville, J. D. Moore, and L. I. Vilchis. 2010. Response of red abalone reproduction to warm water, starvation and disease stressors: Implications of ocean warming. J. Shellfish Res. 29:599–611.
- Santoro, A. E., K. L. Casciotti, and C.A. Francis. 2010. Activity, abundance and diversity of nitrifying archaea and bacteria in the central California Current. Environmental Microbiology, 12, 1989–2006.
- Send, U., P. Burkitt, N. Gruber, G. C. Johnson, A. Kortzinger, J. A. Koslow, R. O'Dor, S. Rintoul, and D. Roemmich. (In press). Towards an integrated observing system: *in-situ* observations. In: J. Hall, Harrison, D. E. & Stammer, D., Eds. (ed.) Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 1). Venice, Italy: ESA Publication WPP-306.
- Song, H., A. J. Miller, and B. D. Cornuelle. 2010. Estimating ocean states during the LTER CCE-P0605 cruise using ocean data assimilation analysis. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.
- Song, H., A. J. Miller, B.D. Cornuelle, and E. Di Lorenzo. (In press). Changes in upwelling and its water sources in the California Current System driven by different wind forcing. Dynamics of Atmospheres and Oceans.
- Stramma, L., S. Schmidtko, L. A. Levin, and G. C. Johnson. 2010. Ocean oxygen minima expansions and their biological impacts. Deep-Sea Research I 57: 587–595.
- Sunstov, A., J. A. Koslow, and W. Watson. (Submitted). The spatial structure of coastal ichthyoplankton assemblages off central and southern California. Estuarine, Coastal, and Shelf Science.
- Sunstov, A.V. and J. A. Koslow. 2010. Nearshore ichthyoplankton communities off southern and central California. Climate and Fisheries Symposium. Sendai, Japan.
- Sweetnam, D. 2010 Current management and fishery-dependent sampling of the U.S. Pacific Sardine Fishery. Workshop on enhancing stock assessments of Pacific sardine in the California Current through cooperative surveys, La Jolla, California.
- Sydeiman, W.J., and S.A.Thompson. 2010. The California Current Integrated Ecosystem Assessment (IEA), Module II:Trends and Variability in Climate-Ecosystem State, Farallon Institute for Advanced Ecosystem Research, Petaluma, California.
- Todd, R. E., D. L. Rudnick, and R. E. Davis. 2010. Mesoscale and submesoscale thermohaline structure in the California Current System from glider observations. American Geophysical Union, Fall Meeting 2010.

- Weber, E. D. and S. McClatchie. 2010. Predictive Models of Northern Anchovy *Engraulis mordax* and Pacific Sardine *Sardinops sagax* Spawning Habitat in the California Current. Mar. Ecol. Prog. Ser. 406: 251–263.
- White, J. W. and L. Rogers-Bennett. 2010. Incorporating physical oceanographic proxies of recruitment into population models to improve fishery and Marine Protected Area management. Calif. Coop. Oceanic Fish. Invest. Rep 51:128–149.
- Yu, H. 2010. Characterization of mysterious algal cultures from the California coast. Unpubl ms. Monterey Bay Aquarium Research Institute.
- Zeigler, L. A., J. Badger, J. P. McCrow, I. Paulsen, E. E. Allen, S. J. Williamson, and A. Allen. 2010. Microbial metagenomics across a southern California Current upwelling mosaic. Proceedings from the 2010 AGU Ocean Sciences Meeting. Portland, OR.