
SKILLS PROFILE

Resourceful, adaptable, and enthusiastic interdisciplinary scientist with demonstrated abilities to conduct in-depth research and produce high quality documents while meeting deadlines, work well independently and as a valued team member, and effectively resolve problems through strong leadership. Strengths include:

- Strong background in environmental research, data analysis, modeling, and visualization.
- Excellent written and oral communication and management skills for scientific publications, environmental reports, public presentations, and training/supervising students and volunteers.
- Experience preparing documents and reports pursuant to federal and state environmental regulations, including the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), Federal and California Endangered Species Act (ESA and CESA), Clean Water Act (CWA), Magnuson-Stevens Fishery Conservation Act, Marine Mammal Protection Act, Migratory Bird Treaty Act.
- Experience conducting and coordinating field surveys and biological monitoring for the following: amphibians, recreational fisheries, intertidal habitat, marine mammals, and nesting birds.
- Proficient in Microsoft Office Suite, ArcGIS, R, and Maxent (modeling software).

EDUCATION

D.Env (Ph.D) Environmental Science & Engineering, Institute of the Environment, UCLA

Dissertation: Amphibian disease and the impacts of wildlife trade, invasive carrier species, and climate change.

Additional Research: Abundance and distribution of intertidal rockweeds (Fucales) along the US west coast.

MS Environmental Health Sciences, School of Public Health, UCLA

Research: Effects of urbanization on amphibian populations. Certification: Leaders in Sustainability.

BA Biology, Minor in Education, UC Berkeley

Relevant Coursework: Applied Ecology, California Ecosystems, Ecology of Marine Infectious Disease, Vertebrate Natural History, Environmental Transport, Environmental Toxicology, Aquatic Chemistry, Atmospheric Chemistry, Physical Oceanography, Hydrology, Water and Wastewater Treatment, Environmental Microbiology, Environmental Law, Business and the Environment, Environmental Economics, Environmental Analysis and Policy, Sustainable Architecture, Epidemiology

RESEARCH EXPERIENCE

Affiliate/Postdoctoral Researcher, Museum of Vertebrate Zoology, UC Berkeley/San Francisco State University, San Francisco Bay Area, CA 2014 - Present

- Conduct amphibian disease research in collaboration with researchers at other academic institutions and government agencies to publish studies in peer-reviewed journals.
- Present research to academics, government agencies, non-profits, and the general public.

Scientific Aid, California Recreational Fisheries Survey, California Department of Fish and Wildlife, Belmont, CA 2017 - Present

- Interview recreational anglers and collect fisheries data that inform stock assessments and regulations.
- Educate anglers and the general public about current fishing regulations.

Environmental Scientist III, AECOM, Oakland, CA 2011 - 2017

- Provided environmental impact assessment, permitting, compliance, planning, and oversight services for public and private sector clients to comply with federal, state, and local regulations.*
- Conducted environmental assessments in terrestrial and aquatic habitats in California and Canada.
- Managed client, contractor, and agency relationships throughout project timelines.

* Please see Detailed Professional Experience on pages 3-4 for details, including a list of clients and responsibilities.

Graduate Student Researcher, UCLA, Los Angeles, CA 2008 - 2011

- D.Env research: marine rocky intertidal seaweeds and invertebrates on the west coast of the US, in collaboration with the Marine Rocky Intertidal Network and the Bureau of Ocean Energy Management.
- MS research: impacts of urbanization on newt populations in Southern California, in collaboration with the National Parks Service.

Research Assistant, Southern California Coastal Water Research Project, Costa Mesa, CA 2009

- Supported beach water quality studies to detect levels of fecal indicator bacteria.
- Applied various rapid methods for quantifying bacteria levels in water and sand.

Staff Research Associate/Lab Manager, UCLA, Los Angeles, CA 2005 - 2007

- Managed and maintained the lab and six genetic mice lines for spinal cord development research.
- Performed perfusions, gross and micro dissections, cryostat sectioning, and immunohistochemistry experiments to support neuronal migration and axon regeneration studies in mice and rats.
- Supervised and trained incoming graduate students, employees, and volunteers.
- Implemented a user-friendly recordkeeping system and substantially reduced mouse housing costs.

Staff Research Associate, NCIRE, The Veterans Health Research Institute, San Francisco, CA 2002 - 2004

- Managed and maintained nine genetic mice lines for heart disease research in three Cardiology labs.
- Performed gross dissections, myocyte isolation and culture, and PCR to support heart failure studies.
- Decreased animal housing bills by ~\$3000/month.

PUBLICATIONS

Yap TA, Koo MS, Ambrose RF, Wake DB, Vredenburg VT (2015) Averting a North American biodiversity crisis. *Science* 349(6247):481–482. DOI: 10.1126/science.aab1052

Yap TA, Gillespie L, Ellison S, Flechas SV, Koo MS, Martinez AE, Vredenburg VT (2016) Invasion of the fungal pathogen *Batrachochytrium dendrobatidis* on California Islands. *Ecohealth* 13(1)145-150. DOI: 10.1007/s10393-015-1071-y

Yap TA, Nguyen NT, Serr M, Shepak A, Vredenburg VT (2017) *Batrachochytrium salamandrivorans* and the risk of a second amphibian pandemic. *Ecohealth* 14:851-864. DOI: 10.1007/s10393-017-1278-1

Yap TA, Koo MS, Ambrose RF, Vredenburg VT (in press) Introduced bullfrog facilitates pathogen invasion in western North America. *Plos One*

PRESENTATIONS & INVITED LECTURES

Yap TA (2 November 2017) “Protecting amphibians from disease: using models to guide conservation action.” California Department of Fish and Wildlife Science Symposium. UC Davis, Davis, CA

Yap TA (21 November 2016) “Assessing the threat of two deadly fungal pathogens to amphibian biodiversity and the impacts of human-mediated movement of an invasive carrier species.” I.B. 234 Seminar on Biology of Amphibians & Reptiles (Herp Group), UC Berkeley, Berkeley, CA

Whitaker SG, Dilly GF, Ambrose RF, **Yap TA**, Richards DV (6 Oct 2016) “Widespread declines in abundances of the intertidal rockweed *Silvetia compressa* on the Channel Islands.” CAIslands Symposium, Ventura, CA

Yap TA (16 April 2016) “Emerging infectious disease and amphibian mass extinction: how research can guide biodiversity conservation policy.” Our Changing Planet Lecture Series, Cal Day, UC Berkeley, Berkeley, CA

Yap TA (2 December 2015) “Salamander vulnerability to *Bsal*, a lethal chytrid fungus.” EcoINFORMA Workshop: Promoting Synergy in the Innovative use of environmental data, Washington DC

Koo MS, **Yap TA**, Vredenburg VT, Catenazzi A, Spencer CL, Wake DB (1 Aug 2015) “Averting a biodiversity crisis: AmphibiaWeb addresses the new *Bsal* threat.” Society for the Study of Amphibians and Reptiles Meeting. University of Kansas, Lawrence, KS

Yap TA (12 May 2015) “A new chytrid fungal pathogen threatens North American salamander biodiversity.” Colloquium in Ecology, Evolution, and Conservation Biology, San Francisco State University, San Francisco, CA

Yap TA, Ambrose RF (2012) “Investigating Rockweed Abundances in the Rocky Intertidal of the West Coast of the USA.” Annual Multi-Agency Rocky Intertidal Network (MARINe) workshop

AWARDS

EcoINFORMA Student Competition Winner 2015, Charles F. Scott Fellowship 2014-2015, Friday Harbor Labs Scholarship 2010, William & Flora Hewlett Foundation Award 2009-2010, University Fellowship 2007-2011

SELECTED PRINT/NEWS MEDIA

KQED Public Radio – KQED News (aired 4 Aug 2015). [**Interviewed**]

KQED Science (4 Aug 2015). *Killer fungus could “devour” California’s salamanders*. By Johanna Varner. [**Interviewed**] <http://ww2.kqed.org/science/2015/08/04/killer-fungus-could-devour-californias-salamanders/>

Wired (30 July 2015). *What it’s like to watch a species go extinct*. By Lizzie Wade. [**Interviewed**] <http://www.wired.com/2015/07/watching-species-go-extinct-frogs-bd-salamanders-bsal/>

Christian Science Monitor (30 July 2015). *Why scientists want to ban salamander imports*. By Joseph Dussault. [**Interviewed**] <https://www.csmonitor.com/Science/2015/0730/Why-scientists-want-to-ban-pet-salamander-imports>

DETAILED PROFESSIONAL EXPERIENCE

Type	Client	Description
Impact Assessment and Permitting	BG Group British Columbia, Canada	Researcher, field crew leader, and technical support for studies regarding the construction of a liquefied natural gas facility. Prepared an Environmental Impact Statement and Environmental Assessment (Intertidal and Subtidal Marine Habitat Section), an Abalone Habitat Assessment, an Abalone Presence/Absence Memorandum, a Subtidal Habitat Summary Report, and a Marine Fish Life Histories Report. Coordinated and conducted intertidal surveys and marine mammal surveys. Coordinated subtidal field surveys.
Impact Assessment and Permitting	Phillips 66 Port Costa, CA	Field manager and biologist. Provided biological resources and permitting support for a wharf deconstruction project. Prepared an Initial Study/Mitigated Negative Declaration; an Essential Fish Habitat Assessment; a Biological Assessment; permit applications for the California State Lands Commission, United States Army Corps of Engineers, Regional Water Quality Control Board and San Francisco Bay Conservation and Development Commission; a Stakeholder Communications Plan; and a public fact sheet. Conducted surveys for nesting birds, habitat, and wetland delineation. Coordinated all field activities, including all site visits, surveys, and community involvement.
Impact Assessment and Permitting/ Environmental Compliance	Valero Refining Company Martinez, CA	Provided biological resources and permitting support and environmental oversight for the repair of an oil pipeline. Prepared a Biological Assessment, environmental monitoring logs, and a post-construction report. Conducted pre-construction biological surveys (e.g., nesting bird surveys), construction monitoring, and crewmember training.
Impact Assessment and Permitting	United States Coast Guard Tahoe City, CA	Provided biological resources and permitting support for a pier extension. Prepared a joint Environmental Assessment/Initial Study Mitigated Negative Declaration/Tahoe Regional Planning Agency Initial Environmental Checklist, a Biological Assessment, and a Prime Fish Habitat Mitigation and Monitoring Plan.

Impact Assessment and Permitting	Caltrans District 4 San Francisco, CA	Provided permitting support for the replacement and extension of an outfall pipe in the San Francisco Bay. Prepared an Incidental Harassment Authorization Permit Application.
Impact Assessment and Permitting	New Jersey Army National Guard Sea Girt, NJ	Provided permitting support for a programmatic master plan and a stand-alone new construction project. Prepared Environmental Assessments, Findings of No Significant Impact, and a Coastal Area Facility Review Act Application for new construction.
Impact Assessment and Permitting	Phillips 66 Contra Costa County, CA	Provided technical support, review, and editing for the preparation of a Field Sampling Plan for a benthic infaunal and submerged aquatic vegetation habitat assessment.
Environmental Compliance	Levi Strauss & Co MS, NV, TX, Canada, Mexico	Project Manager. Provided environmental oversight and consultation regarding the Superfund Amendments Reauthorization Act Title III Emergency Planning and Community Right-to Know Act. Organized and maintained hazardous chemical inventories for seven facilities throughout North America. Prepared and submitted Tier II reports. Sent out notifications and quarterly updates.
Environmental Compliance	Southern California Edison CA, NV	Subject Matter Expert. Reviewed desert tortoise, desert bighorn sheep, and nesting bird daily monitoring reports for installation of a transmission line. Reports were required by the project's Mitigation, Monitoring, Compliance, and Reporting Program and were accessed and submitted to agencies through Southern California Edison's proprietary database.
Environmental Compliance	Praxis/California Broadband Cooperative Mono and Inyo Counties, CA	Provided field support for the Digital 395 fiber network installation along the U.S. route 395 highway. Conducted habitat surveys to identify and mark water features and potential habitat for sensitive species. Provided environmental oversight and construction monitoring with a focus on biological resources compliance. Used various online field applications for report write-ups and submittals.
Environmental Compliance	Bay Area Rapid Transit (BART) Oakland, CA	Provided support for environmental oversight and construction monitoring with a focus on stormwater and biological resources compliance for construction of the BART Oakland Airport Connector. Conducted construction monitoring, prepared daily environmental monitoring logs, and uploaded Rain Event Action Plans to the State Water Resources Control Board's Stormwater Multi-Application, Reporting, and Tracking System.
Environmental Compliance	Caltrans District 4 Foster City, CA	Provided environmental oversight for a guardrail installation project along U.S. Route 101 and Interstate 280. Conducted nesting bird surveys prior to vegetation trimming, guardrail installation, and implementation of vegetation control.
Environmental Compliance	Golden Gate Bridge, Highway and Transportation District San Francisco, CA	Provided support for environmental oversight and construction monitoring with a focus on erosion control and biological resources compliance for construction of the Golden Gate Bridge Moveable Median. Conducted construction monitoring. Prepared daily environmental monitoring logs and monthly environmental compliance reports.
Environmental Compliance	San Francisco County Transportation Authority San Francisco, CA	Provided environmental oversight for the construction of a freeway on-ramp and off-ramp. Conducted pre-construction bat surveys prior to the removal of vegetation and abandoned buildings.