

ELKHORN SLOUGH SCIENCE SYMPOSIUM

Moss Landing Marine Laboratories
11 October 2019



abstracts!

ARRIVAL 8:30 AM Sign in, mingle, enjoy coffee and tea

PLENARY PRESENTATIONS Most presentations are 12 min talks; a few are shorter* or longer**

WELCOME AND OVERVIEW 9:00 AM

Jim Harvey (MLML)*

Dave Feliz (ESNERR)*

Kerstin Wasson (ESNERR)** *Elkhorn Slough: Values, threats, and science*

SCIENCE EDUCATION: TRAINING THE NEXT GENERATION 9:45 AM

Virginia Guhin (ESNERR) *The power of a K-12 education and research science partnership*

Caroline Casey (CA Coastal Alliance) *Marine mammal scientist-in-training program*

brief break

RESTORATION SCIENCE: HESTER MARSH AND OYSTERS 10:30 AM

Monique Fountain (ESNERR)** *Science-based tidal wetland restoration in Elkhorn Slough / Do fish like restored wetlands?*

Charlie Endris (MLML) *Unmanned aerial systems as a tool for wetland restoration: Planning, monitoring, and decision-making*

Alexandra Thomsen (CSUMB) *Understanding patterns of plant colonization at Hester Marsh*

Karen Tanner (UCSC) *Testing clustered plantings to inform salt marsh restoration*

Kerstin Wasson (ESNERR) *Olympia oyster restoration aquaculture in a recruitment-limited estuary*

Presentation of Elkhorn Slough Conservation Science Award

LUNCH and POSTER SESSION Poster presentations starting 20 min into lunch break

WATER QUALITY & BIOGEOCHEMISTRY: TRACKING A EUTROPHIC ESTUARY 1:15 PM

John Haskins (ESNERR)	<i>So how is the water doing? Interactive water quality report card</i>
Margaret Zimmer (UCSC)	<i>Spatiotemporal nitrate concentration dynamics in a salt marsh system</i>
Lena Champlin (Drexel University)	<i>Diel and seasonal cycles of coastal acidification and carbonate chemistry at Elkhorn Slough</i>
Jessica Williamson (CCWG)	<i>Moro Cojo watershed wetland restoration and nutrient reduction</i>

ARCHEOLOGY & HISTORICAL ECOLOGY: UNDERSTANDING THE PAST 2:15 PM

Alec Apodaca (UC Berkeley)	<i>An eco-archaeological study of Elkhorn Slough</i>
Andrea Woolfolk (ESNERR)	<i>Who are you calling sluggish? Elkhorn Slough before 1909</i>

brief break / Pilates stretch session On patio with Jill Thompson

SALT MARSH DYNAMICS 3:05 PM

Kathryn Beheshti (UCSC)	<i>The effect of an ecosystem engineer on Elkhorn Slough salt marshes</i>
Susanne Fork (ESNERR)*	<i>Successful establishment of a marine pulmonate snail far poleward of its previously documented range</i>

OTTERS & THE ESTUARY 3:30 PM

Karl Mayer (Monterey Bay Aquarium)	<i>Surrogate-rearing a keystone species for population and ecosystem restoration</i>
Rikke Jeppesen (ESNERR)*	<i>Recovering population of the southern sea otter coincides with declining population of invasive green crabs</i>

PERSPECTIVES ON 40 YEARS OF CONSERVATION AND SCIENCE 4:00 PM

Mark Silberstein (ESF)**	<i>40 years, 4,000 acres, 40,000 memories: Science, conservation and connection in Elkhorn Slough</i>
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POSTER SESSION & HAPPY HOUR 4:30-5:30

POSTERS

THE "JUST SLOUGH IT" EELGRASS & MARSH SCIENCE CREW

Annakate Clemons (UCSC)	<i>Sea otter foraging in proximity to seagrass restoration sites</i>
Jezebel Powers & Annabelle Pavlak (UCSC)	<i>Public outreach science program catapults the production of a virtual miniseries featuring Slough animals</i>

Mason Emery (CSU Fullerton)	<i>Native crab predation may be contributing to declining invasive snail population</i>
Hannah & Mayah Levy (Archbishop Mitty)	<i>Setting the record straight: Testing whether <i>P. crassipes</i> burrows in a lab setting</i>
Natalie Rossi (UCSC)	<i>Tracking crab colonization into the Hester Marsh restoration site</i>
Kathryn Beheshti (UCSC)	<i>Ecosystem multifunctionality enhanced with seagrass restoration success</i>

WATER QUALITY & BIOGEOCHEMISTRY

Emilio Grande (UCSC)	<i>Coupled high-frequency sensor network and environmental tracers to quantify subsurface nitrate transport</i>
Andria Greene (UCSC)	<i>Quantification of salt marsh denitrification along a tidal inundation gradient</i>
Katie Graves (MLML)	<i>Anaerobic fermentation of the macroalgae to produce biohydrogen and mitigate coastal eutrophication</i>
Samantha Champ (Monterey Bay REU)	<i>Testing for water and sediment contamination for select persistent organic pollutants</i>
Jacque Chisholm (MLML)	<i>Quantifying discharge of nutrient-containing groundwater into Moro Cojo Slough</i>
Ariane Arias Ortiz (UCSC & UCB)	<i>Carbon sequestration in wetlands: An interplay between burial and export</i>

OYSTER RESTORATION

April Ridlon (ESNERR)	<i>The Native Olympia Oyster Collaborative</i>
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Thanks to [MLML](#) for the use of their facilities, and to the [Elkhorn Slough Brewing Company](#) for donating beer!

