

The Explorers Club

Northern California Chapter

February 2015

In color at our web site: <http://www.explorersnorca.org>

LOCATIONS

Note venues and dates with care.

In San Francisco, CA,
our next meeting is 6:30 pm
February 27, a FRIDAY,
at Pomery Center
207 Skyline, San Francisco

Micronesia, Antarctica, Mozambique and Beyond:

Perspectives on decades of ocean research and raising a family 'underwater'

Nicole Crane FN95 MS and Giacomo Bernardi PhD

San Francisco - February 27, 2015

Nicole Crane and Giacomo Bernardi, Professors, Marine Biologists, and Explorers, grew up on the ocean, met at a marine station, lived underwater as aquanauts, and got married at the Doc Ed Ricketts Laboratory in Monterey, California. They have been studying the oceans together for decades, from the Antarctic to the tropics, raising their family along the way. Nicole and Giacomo frequently collaborate on research projects and when kids came along, they were fitted with wetsuits while infants, and accompanied them (willingly and unwillingly...) from Mozambique to Micronesia, and beyond. Nicole and Giacomo will share their perspectives on our changing blue planet with humor, family stories and scientific observations that span a period of great change in our oceans.

Giacomo Bernardi started free diving in the Mediterranean and scuba diving in the Red Sea in the late 70s. Always interested in fishes, he first worked on fish that live at high temperatures in volcanic lakes in Kenya and in Death Valley California for his PhD at the University of Paris. The next two years were spent in the military, working in a hospital in Tunisia, and then moving to California where he did Post-Doctoral research at Stanford's Hopkins Marine Station in Pacific Grove. His work on the population genetics of fish has taken him all over the world, including the cold Antarctic waters of McMurdo Station, the Galapagos, Madagascar and the Mozambique Channel. His filming of a fish using a tool in the shallow waters of Palau broke the exclusivity rule of tool use in mammals. He is currently working on the genomic consequences of living in a changing ocean, with a particular interest in the adaptations necessary to cope with ocean acidification.

Nicole Crane was born in the high plateau of Kabul Afghanistan – far from the ocean, but not from its influence. Her father was a world-class sailor, and between posts in landlocked countries he took his family for months at a time on their Hanna Carol ketch through the Mediterranean, Aegean and Adriatic seas, across the Atlantic, and through the Caribbean. Her early experiences sailing fostered a lifelong interest in the oceans. She and Giacomo, destined to meet, got scuba certified at the same time, though several oceans apart. She went on to study cetacean acoustics, marine ecology, and eventually to link humans and ocean conservation. Her work with colleagues in Belize contributed to the establishment of the Turneffe Atoll Marine Reserve, the largest in Belize. Her current project in Ulithi Atoll Micronesia combines traditional management with modern science to help communities develop sustainable management plans – the first effort of its kind in the region.



Nicole and Giacomo on Falalop, Ulithi Atoll, Micronesia,
in front of the wreckage of a WWII truck

CHARLES HARD TOWNES, FN'78

With heavy heart, we share news that CHARLES HARD TOWNES joined those before him on a mission of exploration forever 27 January 2015. Every member in our Northern CA Chapter should find pride in knowing such an individual was in our midst. Dr. Townes was professor emeritus of physics at the University of California, Berkeley. Townes' career highlights included a 1964 Nobel Prize in Physics for discovering the laser, ground-breaking astronomical research and 31 honorary degrees and 38 awards.

In a UC Berkeley lab staffed mostly by students, Townes pioneered in the field of infrared astronomy, looking at sources of heat in outer space, and precision infrared spectroscopy. He developed a novel infrared detector incorporating a precision CO2 laser. His infrared studies of the center of the galaxy with Reinhard Genzel, now professor of physics at UC Berkeley and director of the Max Planck Institute for Extraterrestrial Physics, revealed in 1985 swirling gas clouds that could only be orbiting a massive object, presumably a black hole. Dr. Townes turned 99 last July and continued to make daily visits to his office at UC Berkeley's Space Sciences Laboratory. RS

Ice Age Behemoths: The Mammoths of Siberia by Dr Timothy King

Dr King introduced himself and admitted that he is an archaeologist, not a paleontologist, and that really the study of the Woolly Mammoth that he was going to discuss was based on his personal hobby, not his professional interest. However, the bones and body that he was studying were not fossils, that is petrified bones, which is what paleontologists study, but instead the actual remnants of the original animal. He went on to describe a couple of the different kinds of elephants that evolved in Asia and Africa, specifically the Columbian Mammoth - a New World animal - and the Meridian Mammoth which he called an Old World Mammoth. The Woolly Mammoth is an Ice Age evolutionary product it needed to survive.

He then went on to explain how his hobby led him to the center of Ice Age study in the world. The frozen Tundra of Eastern Siberia is full of the preserved remains of the animals, including mammoths that lived during the ice age of about 27,000 years. During a period of global warming, as the temperature increased, the ice began to melt, muddy ground became exposed and these huge animals became trapped in the mud and swamps. Subsequently, with renewal of the ice and snow formation in the revitalized ice age, the remains of the trapped animals became covered with ice and snow, and preservation of these corpses kept them in a pristine state until the present when the current increase in temperatures has thawed the ground and erosion revealed the skeletons and preserved corpses, including tusks. Excavations by humans for tusks led to the discovery of the well preserved mammoth that caught the interest of our speaker.

The ivory hunters continue to ravage these animal grave yards, leading to concerns that all will be destroyed. Dr. King's efforts to achieve the preservation of at least one carcass for study led to the expedition that we heard about in the talk on Friday. The anatomically complete specimen was a female estimated to be about 55 years old. Specimens of the hair and bone of the animal was available for inspection after the talk.

A question about cloning the animal came up which led to a discussion about the practical aspects of taking the DNA from an animal of 27,000 years ago, inserting it into the ovum of a currently alive equivalent animal, an elephant, and successfully bring it to gestation and delivery, and what would result. It is very unlikely that such effort could produce an actual clone of that 27,000-year-old specimen.



Mammoth wool & trunk



Kay Schmieder and Joan Boothe sniffing real mammoth bone.

To complete his talk Dr King described the discovery of some genuine mammoth bones in an artichoke field in Castroville, near Monterey Peninsula in 2010. The local farmer was cooperative so that the work could proceed. An effort was made to keep the discovery a secret so that it could be studied without being the target of souvenir hunters and apart from a single article in the San Francisco Chronicle, the press cooperated. Even so, within an hour of the Chron hitting the streets, a helicopter was noted circling over the field. And after the project was completed the farmer had a new product line: the Mammoth Artichoke.

Several stone tools from the ice age 27,000 years ago were also found, evidence that humans had hunted the mammoths. Dr King also had an ivory necklace made from mammoth tusks, purchased locally. He found the locals very friendly, but even so it took the efforts of a local KGB officer to get the crew back out of the country.

PHOTO OF THE MONTH

If any member of the NorCa Chapter has a favorite exploration picture they would like to have considered for the Photo of the Month, please submit it to the Newsletter editor with about 200 words describing what it was and how you came to be there to take it. This month's entry was originally submitted by Teresa O'Kane to the First Exploration Photo Contest at the Chapter Holiday Party in December 2012. It was one of the winners..

BAOBAB HIGHWAY

This picture was taken looking north along the Avenue of the Baobabs in Western Madagascar, Lat 20.25 S, long 44.42 E at 4:30 pm, local time, some time during their year spent crossing Africa by bush taxi in 2012.. The Avenue of Baobabs is located on a commonly used bush taxi route between Morandava and Tsiribihina in Western Madagascar. Though tourists regularly stop at the remote site, it is not a commercial attraction.

At eighty feet tall and ten feet wide, the Baobab is often called the "upside down tree" because the roots of the tree appear to be on top. In the lower right hand corner of the photo, a bush taxi drawn by a pair of Zebus, a domesticated ox found in Asia and Africa, plods up the road. As Teresa says about the zebu, "very tasty with green peppercorn sauce."



Photo by Teresa O'Kane or Scott Soper

EDITOR'S NOTE: The Newsletter has gone digital with distribution via the internet and website. Want a hard copy? Contact the Editor or Steve Smith to submit your email address if not already receiving notices OR for a b&w print. Pass the word..

From the Chair

With few wrinkles, last Friday we settled comfortably into the Pomeroy Center, our new meeting place. Same friendly staff, same tasty food, larger space. We were a full ship with over seventy ready to hear Dr. Tim King breathe life into a lovely, smelly, Siberian Woolly Mammoth said to be 55 years old prior to sinking into frozen mud, and into history.

I would also like to commend both new Member, Dr. Sherry Wren FN'14, old timer Paul Freitas MN'10 and Dede Hicks for their immediate assistance rendered to a fellow member. Both fully qualified Doctors knowledgeably relieved a tense situation at our meeting.

PV Tiles for Solar Aircraft

The Solar Impulse 2, captained by Bertrand Piccard and Andre Borschberg, will carry one solar tile from the Chapter as it flies around the world in 2015. A poll of attendees at the Friday meeting approved the proposal by the Chairman that the Chapter donate \$250 to the Round the World solar flight project, to buy a solar tile for the wing.

EXPLORERS CLUB ANNUAL DINNER AND AWARDS NYC 20-22 MARCH

At ECAD, the NorCA Chapter has four full tables of ten attending. President Alan Nichols has extended a personal invitation to all to meet in his office at the Lowell Thomas Explorer Headquarters at 3PM FRI 20th followed by a secret tour led by Becky Nichols through this historic building. This will precede the Friday night cocktail reception aboard the USS Intrepid. There will be other interesting events scheduled as well. A briefing will be sent in early March to those attending.

On March 27 we'll be hearing from Dr. Mark Harrison about geochronology.

Our April 24 meeting will highlight Dr. David Ainley who will show his documentary film "Last Ocean," trying to save the Ross Sea. Our final formal meeting prior to summer, when we're out "in the field" exploring, is planned for THURS 23 MAY at the Academy of Science complex in Golden Gate Park, San Francisco.

Capt. Rick Saber

Attention Hikers

Past Chapter Chair and current Chapter Treasurer Steve Smith has asked your Editor to solicit expressions of interest from any of the chapter members who might like to take part in potential hikes and climbs of some of the higher mountains in our region, particularly those in the Sierras, including those peaks known as the 14ers. "We are looking for some hardy souls for possible multi-day treks. A modicum of back-country experience which includes moderate distance (20 miles RT) and familiarity with altitude would be advisable. No technical climbing is intended. *These are not 'official' chapter functions.*"

Email Steve at ecna@oceanearth.org if this piques your interest.

Call for Expedition Items

The members of the NorCA chapter continue to demonstrate their energy within the Explorers Club membership. As the year progresses, plans are being continued for exploration in various parts of the world. So far I know of the two expeditions by Suzanne Klotz and Bob Schmieder. Are there any others out there or being planned? Please email me at ajviking@aol.com. AJ

Contact Info Update

In early March, all those with email will be contacted to both update their contact information as well as become current on your annual Chapter dues. Please respond to this call as it will be basis for both the roster and website.. If you don't get email, now is a good time to pay your dues and make sure your snail mail address is correct. AJ

50 YEARS A MEMBER

Congratulations to Carl Walstrom DE65 on achieving the half-century mark of Explorer Club membership. Carl served as a long term National Board Member and Treasurer during "troubling times." He reinstated 501-c-3 status for the Club, no easy task but reaping enormous benefits for TEC. Carl was instrumental in gaining ability for women to attend ECAD; more importantly, Carl helped institute by-law changes allowing women to join The Explorers Club. Carl earned Medalist status through recognition by the Board of Directors for advancing both the goals of exploration or our social welfare objectives. To our knowledge, Carl Walstrom is our only Northern CA member to have reached the pinnacle of fifty membership years. RS

EXPLORERS ON THE MOVE

(If you have news of a Chapter member's impending expeditionary activity, please send the information to the editor.)

Bob Schmieder FN82 is in Australia and Asia working on details of the Heard Island Expedition, scheduled for November/December of this year.

Suzanne Klotz MN12 is in the Himalayas of northern India recording the local rituals and customs and documenting the use of masks in their ceremonies.

Chapter Officers for the coming term 2015-17

The nominating committee consisting of Lee Langan FN'99, Captain Robert Schmieder FE'66 and Dr. Steven Smith FN'96. are working on a proposed slate of candidates for the roles of Chapter Chair and Vice-Chapter Chair, If you are interested in being considered, please contact the Committee Members. Nominees will be announced in our March Newsletter and at our March Meeting. Both elected positions will be voted on at our April Meeting provided a quorum is present.

It should be pointed out that all the tasks performed to keep our Chapter going are performed by volunteers. If you have an interest in getting involved, talk to any of the Chapter officers. You will not regret it.

From the Board: From the Board—Your Board met in Corpus Christi, Texas in mid-January, hosted by the Harte Oceanographic Research Institute and the Texas Chapter. It was a productive session where new Director nominations and a new Chapter located in Sweden, were approved, as were specific plans for the March ECAD. Several upcoming programs were outlined and these active ventures morphed into a day-long long-term planning retreat that attempted to reduce the opportunities we have to those most effective in carrying out our mission to advance and preserve the instinct to explore. In short, current activities are positive, the finances are secure and long-term thinking is active. Lee Langan FN99

February 2015



Chair: Rick Saber
415 457-0345
eagle@rsaber.com
Vice Chair: Joan Boothe
415 346-5934
hoodooskr@aol.com
Treasurer: Stephen E. Smith
925 934-1051
ecnca@oceaneearth.org
Secretary: Von Hurson
Webmaster: Mike Diggles
Newsletter: Anders Jepsen
ajviking@aol.com

**Northern California
Calendar of Events**

(Venues are identified as soon as known.)

Our Next Event

February 27 . Nicole Crane & Giacomo Bernardi
Romance & Discovery Under the Sea. .Pomeroy

Upcoming Events (2015)

March 21 ECAD
American Museum of Natural History New York
March 27 Dr. T. Mark Harrison
Earth's Geochronology.Pomeroy
April 24 Dr. David Ainley
Last Ocean (& NorCA election)Pomeroy
May 21 (Thursday)Meg Lowman
Underground Tour, CA Academy of Science
June 13 Chapter Picnic
. Angel Island
September TBA
October Lowell Thomas Meeting

Earlier Chapter Events (2014)

April 25, 2014 Dr. T. Mark Harrison
Mountain BuildingCity Forest Lodge
April 26, 2014FIELD TRIP
Geyser's Field trip. Richard Blake
May 23 Dr. Meg Lowman
Forest Canopies.City Forest Lodge
June 8 Summer Gathering
Gene & Sybil Boudreau's home, Sebastapol
June 20FIELD TRIP
USS Hornet. Oakland
September 26 M.E.A McNeill
Apiary ScienceCity Forest Lodge
October 11. Lowell Thomas Award Dinner
. Bowers Museum, Santa Ana, CA
October 24. Dylan Burge
Botany Field TripGolden Gate Park
November 21. Tony Liang
An exploration into cancer. . City Forest Lodge

Send address changes and
corrections by email to Steve at
ecnca@oceaneearth.org

DIRECTIONS TO THE POMEROY CENTER

From the South Bay: N on 101, LT W on John Daly, RT N on Skyline, LT W on Herbst (Zoo) Road.
Go .1 mi to Pomeroy Center. Park only in the lit-up area.

From the North Bay: S on 101, Cross the Golden Gate Bridge, RT S on Park Presidio to 19th Ave and on to Sloat
Blvd. RT W on Sloat to Skyline Blvd/Highway 35. LT S on Skyline to Herbst Road . Go .1 mi to Pomeroy Center. Park
only in the lit-up area.

From the East Bay: W on 80 to Golden Gate Bridge exit, onto Octavia Street. LT W on Fell. In GG Park LT S on
Sunset (37th Ave), RT W on Sloat to Skyline Blvd/Highway 35. LT S on Skyline to Herbst Road . Go .1 mi to Pomeroy
Center. Park only in the lit-up area.

From San Francisco: Proceed to 19th Avenue or Sloat Blvd , follow the directions for "From the North Bay."

February 27, 2015

Ocean research and raising a family 'underwater'

February 27, San Francisco @ Pomeroy Center

Date FRIDAY, February 27, 2015
Place: Pomeroy Center
207 Skyline Blvd
San Francisco, CA 94132
(415) 655-4100
Time: 6:30 - reception
7:15 - dinner — 8:00 - program
Cost: \$49 in advance; \$60 after 24 February
Students: \$35. (2015 dues: members, \$25; Sirdars, \$50)
Please mail reservation information, checks & dues to Steve Smith,
email ecnca@oceaneearth.org, call (925) 934-1051, or
mail to 402 Via Royal, Walnut Creek, CA 94597

Reserve _____ spaces
Name: _____
Address (if changed): _____
Companion: _____
Meal choice*:

We have an established PayPal account.

For those of you who have an account, you can sign up and remit dinner costs to the NorCA
Chapter by transferring money to: explorersnorca@gmail.com

There is a PAYPAL BUTTON on our website (www.explorersnorca.org); easy to use!
(There is a slight extra fee of \$2 for this service.)

*February Meal Options (select your choice)
chicken marsala or salmon or veggie (pasta primavera)