

# The Explorers Club

## Northern California Chapter

September 2015

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

### LOCATIONS

Note venues and dates with care  
In San Francisco, CA.

September 25, 2015  
Covenant Presbyterian Church  
321 Taraval Street  
San Francisco, CA 94116

## Characterizing Tornadoes by Visual & Doppler Radar Observations

### Tom Dolan MN14

For people living in tornado country where warnings are routinely given when a tornado is seen to be forming, up-to-date information is key to survival. While it is fairly well understood what ingredients in weather are needed for tornadoes to form, it is not fully understood why some storms produce them and others do not.

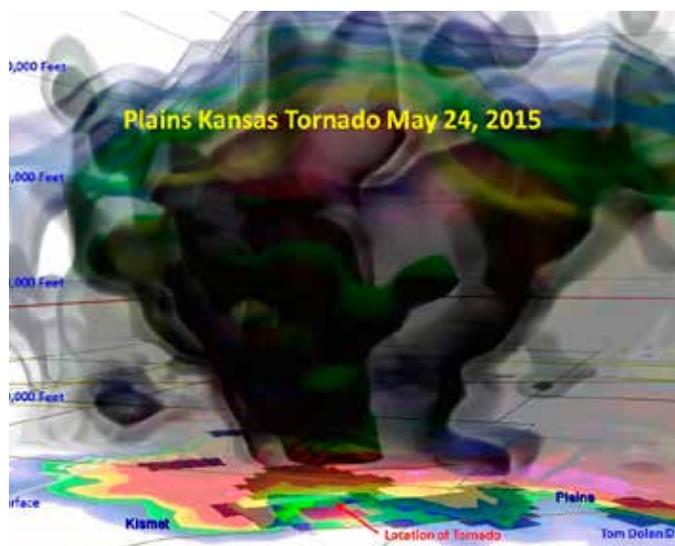
The primary goal is to photograph and videotape severe weather while staying at a safe distance. The live Doppler Radar is downloaded in the field with 3D analysis taking place as the tornado formation is taking place. The Data are filtered and blended and matched up with the photographs. The images are then sequenced into a video to provide sequential views of the complete picture



Currently, most storm warning forecasters and live TV broadcasts are using two dimensional Doppler radar views. Research has now led to the computer analysis of the Doppler data to provide a better understanding of both the formation and the behavior of a tornado. Presentation of this data in a composite display is shown in the illustration.

Since 2009, Tom Dolan has been doing field studies observing storms, and tornado tracks and comparing them to the Doppler Radar data. This information is logged to the research website and posted and videos as well as provided at conference presentations. There are few tornadoes in the annual cycle and getting the matching video to go along radar data is ideal in better understanding this severe weather threat

By doing direct field observation of the severe storms, back-tracking recent tornado tracks and matching them to the storm's live or archived Doppler radar data, it becomes easier to understand the storm morphology and perhaps to predict its path. An output of this research will be training guides that will further encourage the presentation of 3D views of tornado producing storms.



The data to be presented were taken during the period May 14-31, 2015, by driving 5600 miles starting in Denver and covering Nebraska, Kansas, Oklahoma, New Mexico and Texas. The timing and location of the research included areas during the peak tornado formation season along with views geographically free of trees to allow for better storm study observation.

The four tornadoes that started in Plains, Kansas on May 24, 2015 together lasted over 3 hours. The tornado radar image shown here was rated at an EF-1 and was a mile wide before it turned north missing the town.

### NEW EXPLORERS CLUB MEMBERS IN OUR CHAPTER AREA IN 2015

Arjun Gupta, Fellow  
Jonathan S. Knowles, Member  
Alan Eustace, Fellow  
Laurel C. Allen, Fellow

Elliott Jessup, Fellow  
James C. Kelley, Fellow  
Luiz A. Rocha, Fellow  
Christian K. Bowles, Student

## A DAY AT ANGEL ISLAND

It was a typical June day on San Francisco Bay. The Tiburon ferry was crowded as usual, but most of the passengers chose to remain inside the cabin. On Angel Island a breeze bearing wisps of fog came creeping down the hill over the museum and on to the picnic ground.. The gray waves showed a trim of white caps and there were several yachts bobbing at their moorings in the cove.

The intrepid explorers of the Northern California Chapter's annual picnic gathered around the loaded picnic tables, scouting out the salad selections and clutching a vintage red wine to stave off the summer chill. This was one of those picnics in which the attendees tended to stick close together for warmth and found that it was a great time to talk to folks that we knew but hadn't had time to get to really know. And a good time was had by all.

In the group photo are Anders (the younger) and Alden Jepsen in front; and left to right Laurence Glacy (visiting from the San Diego chapter), Steve



Smith, Barry Boothe, Kathy Jepsen, Sandra Cook, Tom Paterson, Sue Estey, Jim Hurson, Anders (the elder) and Joan Boothe. Other photos: on the left are Barbara Berg and Leslie Ewing; above is Sandra Cook. All picnic photos by Von Hurson. AJ



## PHOTO AND STORY OF THE MONTH

Got a favorite picture from your explorations? How about an interesting personal story? Please submit them to the Newsletter editor (ajviking@aol.com) so the rest of the club can enjoy them - picture, story or both. This issue's pictures and story are by our own Chapter Chair, Joan Boothe MN07, from her winter activity in 2014 as a lecturer on a Russian tour vessel in Antarctica..

### The Hitchhiker

Early in the morning in late January, 2014, I was at Ernest Shackleton's 1907-09 Nimrod expedition hut at Cape Royds on Ross Island, in the far south of Antarctica's Ross Sea. I spent several hours inside the hut talking about the hut, its Heroic Age occupants and what had happened there, to fellow passengers on my trip as they cycled through. It was a wonderful time, soaking in the atmosphere of a truly historic place.

After only a few hours, however, it was time to go, and so we left, to sail north a few miles to Cape Bird on Ross Island, home to



one of the largest Adelie Penguin rookeries in the Ross Sea. There we landed, at what is a truly beautiful place, noisy and crowded with adult penguins and their greedy chicks.

Several hours ashore passed quickly, but then the seas began to rise, and safety dictated a return to the ship before it was too late. I stood on shore with others waiting for our zodiac transport. To our surprise, as it approached we saw that the human driver already had a passenger, an unexpected hitchhiker — an Adelie penguin perched calmly on a pontoon side.

Shades of where I had been in the morning. In 1908, while Shackleton's men were unloading their ship to establish their base at Cape Royds, men rowing a ship's boat ashore had also found themselves with a penguin passenger — an Adelie that had innocently propelled himself out of the water, and, to his shock, had found himself landing inside the boat instead of in the water. Shackleton's men had grabbed the shocked bird and unceremoniously tossed him back in the water.

As for our passenger at Cape Bird, he made a somewhat more dignified voluntary exit



back into the sea. For me, the day was complete, its close neatly linked back to where it had begun.

Joan Boothe MN07

## HONOR ROLE OF PAID UP DUES FOR 2015

James Allan  
Barbara Berg  
Marion Blumberg  
Kendra Bolt  
Joan Boothe  
Barry Boothe  
Ann Chokas  
Karoli Clever  
Nicholas Clinch  
Sandra Cook  
Wendy Crowder  
David Dolan  
Thomas Dolan  
Elaine Dvorak  
Donald Dvorak  
Sue Estey  
Lesley Ewing  
Eric Follstad  
Susan Fox  
Peter Hemming  
David Hirzel  
Louise Heyneman  
Alan Hutchison  
Ann Hutchison  
Anders Jepsen  
Kathy Jepsen  
Fred Johnson  
Kathryn Judd  
Steven King  
Jonathan Knowles  
Keith Kvenvolden  
Lee Langan  
Karine Langan  
Iyana Leveque  
Luke Mertens  
Angelina Mertens  
Christopher Michel  
Teresa O’Kane  
James Prigoff  
David Serne  
Sara Showmaker-Lind  
Stephen Smith  
Zack Stewart  
Richard Tenaza  
Judy Van Austen  
Robert Van Austen  
Edward Von der Porten  
James Weil  
Mark Weiman  
Sherry Wren

## FROM THE CHAIR:

Summer is over and that means activity for the Northern California Chapter resumes. As your new chapter chair, I am looking forward to an exciting year. I will be working closely with our officers and board to bring you stimulating speakers, exciting field trips, and looking for other opportunities that we can join together in. Several of our officers/board members — in particular Vice Chair Steve Smith, Secretary Von Hurson, Webmater Mike Diggles, Newsletter Editor Anders Jepsen, Website designer Bob Schmieder, Historian Lesley Ewing, and Meeting Hostess Aldeana Saber — have been active for some time. New faces include Kendra Bolt, our new Treasurer, the person to contact whenever you have a money question, and Rick Blake, our new Field Trip Coordinator.

We are a dynamic chapter, with new people joining us as EC members or Sirdars nearly every month. Many of these people have indicated an interest in becoming more actively involved in Chapter activity and management. Early in August, I sent an invitation to all EC members and Sirdars who had attended three or more meetings in the past two years asking if they would like to attend a gathering to discuss ways they could participate. Many responded enthusiastically, and at the end of August, I hosted a gathering attended by 26 people, including nearly all our board and officers, plus a number of people who had not previously been active beyond attending regular meetings. It looks as if we have many people who want to play a larger role in our chapter, and that’s great. For us to continue to thrive, this is just what we need. I intend to make this one of my emphases this year — getting as many people involved in what we’re doing as possible. If you were not contacted in my early August invitation and want to be a “doer” in our chapter, please do let me know. As Uncle Sam used to say, “We Want You!” Continuing on that theme — from time to time we’ll put a notice in the newsletter when we need people to help with a particular project, meeting, or event.

Another emphasis this year will be to ramp up our field trip activity. We are working on organizing one for the fall, have one already planned for January, and have several other ideas in the pipeline for later in the year. Rick Blake is working hard on this, and he’ll be looking for help in organizing and planning trips. Details will be coming soon.

Finally, you will note from this Newsletter and the September meeting announcement that once again, we have changed our meeting location. We have not done this by choice, but rather as a result of shifting circumstances. We will be holding our September, October, and November meetings at the Covenant Presbyterian Church (see details re this location on the last page of the newsletter and in the September Meeting announcement). Being there will allow us to maintain our \$49/meeting price. It also has plenty of parking and decent public transit access. Otherwise, however, it’s not an ideal venue, but it will serve our purposes adequately. We’re considering alternatives.

Joan Boothe MN07

## WE NEED HELP

Help is needed to set up table and chairs at Covenant Presbyterian Church for the September meeting. If you can help, please contact Joan Boothe at hoodooskr@aol.com.

## MEET THE TREASURER KENDRA BOLT

**Kendra Bolt FN14** is a scientist working toward the development of gene therapies for rare, fatal, pediatric diseases. She earned a doctorate in systems and computational biology for her research on the temperature dependence of lifespan; the BOLT theory of human aging is currently in press. Kendra founded an international effort that enables runners to turn any athletic event into a fundraiser for ocean conservation and shark protection, and captains the RunForSharks team in New York City’s annual marathon. An avid scuba diver and former pupil of the Oregon Institute of Marine Biology, the ocean remains her first love. She’s currently working on an art history book about the late California photographer Edward Weston, and trying to manage a very large, indoor avocado tree.



Photo by Joan Boothe

**From the National Board:**— Summer is field time for most explorers; so, most board activity has been behind the scenes: building membership (40 new applications being reviewed), coordinating with our licensing partner, Diageo (an exciting new global marketing campaign featuring The Explorers Club), building a budget (more detailed and robust than any before), creating a new Club brochure (updating after exhausting our previous editions), and planning details of the November 7-8 Lowell Thomas Dinner in Melbourne, Florida (honoring five new awardees and including exciting visits to the Kennedy Space Center.) Your Directors have been busy. —Lee Langan FN99

## ED ROSS'S BIG BIRTHDAY

Warmest congratulations to Edward S. Ross, FN 79, on his 100th birthday, which he celebrated this past September 1. Ed, one of our longest Northern California Chapter members, has had a remarkable career as a world-renowned entomologist and experienced anthropologist. He spent more than 60 of his 100 years traveling the world, photographing and carrying out in-depth studies of the insect known as “embiids”, in the course of which he discovered multiple new species. He has been a contributor to the *National Geographic* and is a curator emeritus at the California Academy of Sciences.

Throughout September, you can see a selection of Ed’s spectacular photos in an exhibit at the 142 Throckmorton Theater in Mill Valley, open from 2 PM to 6 PM, Monday through Saturday and also during theater business hours (7 PM to 10 PM).



Ed Ross and a long-horned beetle in Ecuador

## A VOLUNTEER’S EXPERIENCE IN REEF SUSTAINABILITY

Text and photos by Rick Saber MN01

Chapter member Nicole Crane recruited 15 of us for this month-long non-stop working expedition to the extremely remote atoll of Ulithi where Nicole and her husband Giacomo Bernardi have been working since 2009 on the sustainability issues of declining fish catches and reef maintenance. Our long planned expedition was nearly can-



celled when super typhoon Maysak ravaged this area over the Easter weekend two months prior to our departure.

We were warmly greeted on arrival at Falalop’s tiny 3,000’ airstrip, then set up basecamp at the only Lodge in this region. Most of the houses (one room open dwellings) lost their roofs or were blown down or into the Lagoon. Our Lodge suffered major damage as well leaving half of the rooms uninhabitable with no running water. Nearly all normal food sources such as taro were destroyed or salt water damaged. It was rustic living for us as well as our hosts. Dining was minimal, mostly rice, no sweets, zero alcohol and small mysterious fish chunks. During our stay, we joined the community in cleanup efforts removing thousands of glass shards, roof shingles, nails and fallen tree limbs; all a curse to

bare feet.



Five years of intense data collection by Nicole and her teams has resulted in an emerging picture of declining reef health due to numerous stress issues facing the Ulithi reefs and, by extension, other reef systems in the South Pacific.

Working in collaboration with the Ulithian’s, data is converted into usable form then shared with their Chiefs. A liaison person titled “Junior” has been aboard for the entire five years of this program. By all



rights a Chief, Junior, who wears many hats, is a master of diplomacy and integral to the

project. He and Nicole have addressed and shared the concerns of reef health and fish sustainability with all involved in addressing changes through understanding and implementing viable solutions accepted by the impacted communities. Traditional methods and fishing techniques, historically employed, had always resulted in adequate catches of fish- their primary food source.

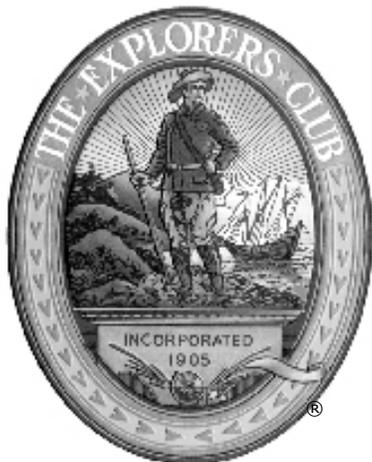
Overfishing has been targeted as the primary cause of declining catches, however many other changes in oceans and reefs



have added to this problem. Some of these have scant solutions such as ocean’s rise, changing acidity and rising sea temperature, all detrimental and stressful to reef and fish health. Closing off defined areas for set times to allow fish repopulation has been one successful method and was instrumental in survival following the epic typhoon of March when these closed areas were reopened, yielding immediate temporary relief as a primary source of food.

## September 2015 Issue

### Northern California Chapter Established 1973



Chair: Joan Boothe MN07  
415 346-5934  
hoodooskr@aol.com  
Vice Chair: Stephen E. Smith FN96  
925 934-1051  
ecnca@oceaneearth.org  
Treasurer: Kendra Bolt FN14  
731-327-2658  
NorCalExplorers@gmail.com  
Secretary: Von Hurson MN10  
Trekking@sonic.net  
Webmaster: Mike Diggles FN92  
Newsletter: Anders Jepsen FN03  
ajviking@aol.com  
925-322-8893

#### **Chapter Calendar of Events** (Venues are identified as soon as known.)

##### Upcoming Events (2015)

September 25 . . . . . Tom Dolan  
Studying Tornadoes . . Covenant Presbyterian Ch  
October 23 . . . . . David Imus  
Art of Cartography . . Covenant Presbyterian Ch  
November 7-8 . . . . . Lowell Thomas Meeting  
November 20 . . . . . Arjun Gupta  
TBA . . . . . Covenant Presbyterian Ch  
December 13 . . . . . HolidayParty  
. . . . . Home of Joan Boothe

##### 2016

January 22 . . . . . Ted Cheeseman  
Humpback Whales (?) . . . . . TBA  
February 26 . . . . . Rosemarie Twinan  
Game Counting in Africa . . . . . TBA

##### Earlier Chapter Events (2014)

October 11 . . . . . Lowell Thomas Award Dinner  
. . . . . Bowers Museum, Santa Ana, CA  
October 24 . . . . . Dylan Burge  
Botany Field Trip . . . . . Golden Gate Park  
November 21 . . . . . Tony Liang  
An exploration into cancer. . . City Forest Lodge  
December 6 . . . . . HolidayParty

##### 2015

February 27 . Nicole Crane & Giacomo Bernardi  
Romance & Discovery Under the Sea. . Pomeroy  
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 Sciences  
June 13 . . . . . Chapter Picnic  
. . . . . Angel Island

Send address changes and  
corrections by email to Steve Smith  
[ecnca@oceaneearth.org](mailto:ecnca@oceaneearth.org)

## UPCOMING EVENTS, EXPEDITIONS & FIELD TRIPS

November 6-8, 2015 ---- Lowell Thomas Dinner, Melbourne, Florida.

January 2016 ----- Observing Robotic Surgery Field Trip

January, 2016 ----- Northern California Chapter member Peggy Day MN'84 is planning a expedition to Bhutan in January and will have room for up to 8 individuals. For more information, contact Peggy at [mizday@me.com](mailto:mizday@me.com)

March, 2016 ----Dr. Bob Schmieder reports a change in size of ship and timing of the Heard Island expedition.. The revised travel date is around March 2016. For more information, email him at [schmieder@cordell.org](mailto:schmieder@cordell.org)

### WANTED: MEDIC FOR BAJA CALIFORNIA EXPEDITION

A volunteer medic (EMT or above) is needed for an expedition to the site of a sixteenth-century Manila galleon wreck in Baja California which has produced dramatic finds during the past fifteen years.

The expedition leaves San Diego by car on 20 October and returns on 4 November. There will be land and sea work. On site, the crew will be camping most of the time.

For information, contact Peter Von der Porten at 650-483-1457 or [Septempvonderporten@gmail.com](mailto:Septempvonderporten@gmail.com).

## SOLAR IMPULSE 2 WINTERS IN HAWAII

On the solar impulse website, Bertrand Piccard reports on plans to continue the Round The World solar powered flight. Now in Hawaii undergoing battery repairs, the weather window will close before that task is complete. The aircraft will be stored at the University of Hawaii, and once the repairs are completed, and the weather cooperates the flight is expected to continue early in 2016

## MEETING Friday, September 25, 2015

### Covenant Presbyterian Church

**Reserve** \_\_\_\_\_ spaces  
**Date** Friday, 25 September, 2015  
**Place:** Covenant Presbyterian Church  
321 Taraval Street  
**San Francisco, 94116**  
**Time:** 6:30 - reception  
7:15 - dinner ---8:00 - program  
Meal Options (reserve your choice)  
Chicken Marsala or Grilled Salmon or veggie (Pasta Primavera)  
**Cost:** \$49 in advance \$60 after 22 September  
Students: \$35. (2015 dues: Members \$25, Sirdars \$50)  
Please mail reservations, meal choice, checks & dues to Kendra Bolt  
email: [NorCalExplorers@gmail.com](mailto:NorCalExplorers@gmail.com) Call 731-327-2658 or  
mail to 1800 Bryant Street #114, San Francisco, CA 94110

### We have an established PayPal account

With an account, you can sign up and remit your mealcosts,dues,etc to the NorCA Chapter by transferring money to: [explorersnorca@gmail.com](mailto:explorersnorca@gmail.com)  
There is a PAYPAL BUTTON on our website ([www.explorersnorca.org](http://www.explorersnorca.org)); easy to use!  
(There is a slight extra fee of \$2 for this service.)