WHOSE FAULT IS IT ANYWAY?
A Walk to the End of the San Andreas Fault Zone at Mussel Rock
A Virtual Field trip in the San Francisco Bay Area
Created and Led with Photos and Captions by Sirdar David Hirzel

The NorCA Chapter of the Explorers Club took a remarkable VIRTUAL field trip to the San Andreas fault early in May. It was led by Sirdar David Hirzel, assisted by his associate Alice Cochran and virtually organized by Member Jimmy Friedman MN’19. About 30 members participated by dialing in to the ZOOM event.

The trip began inland at the edge of the fault scarp (1). It proceeded near a wood frame home in a development from the 50s and 60s (2) that showed clear evidence of earthquake shifting, then northwest along the fault and under Highway 1 until it reached the coast 1.2 miles farther. Along the way we passed a playground (3) which came right up to the overgrown fault scarp. From there we came to the local FDR Elementary school (4) which had been built on a large area of fill. We could see where a road crossed the fault, with a water reservoir in the background that was right on the fault. Further on, we reached the coast and Mussel Rock. Looking back down the coast we were able to see a large landslide (5) on the edge of the fault zone. Houses could be seen right on the edge of the new cliff created by the landslide.

From the toe of that landslide one could see as far north as Fort Funston, way beyond Pacifica. Mussel Rock marks the point where the San Andreas fault heads northwest out under the ocean. From our vantage point, looking back south we could see a seismic sensor installed in Mussel Rock and beyond that an outcrop that showed two different rock types - lighter colored sediments of the North America plate and the darker rocks of the Pacific plate (7). South, beyond that outcrop, we could see the landslide scarp and a beach area with large rocks installed at its base to stabilize the slide.

Looking south along the scarp and the old railway right-of-way, heavy construction equipment could be seen reflecting the ongoing work to shore up the cliff in order to save some of the expensive dwellings that were now located much closer to the cliff than they used to be. An example of one failed stabilization effort was the rebar that jutted out of the soft, barely consolidated sandstone which in places had simply washed away. Apartments right along the scarp had been evacuated and were to be demolished (8). A large sink hole (9) could be seen beside a staircase to the beach the steps of which simply disappeared in the rubble at the bottom.

A final picture (10) showed the old Dollar Radio Station, built by the Dollar shipping company many decades ago to communicate with off-shore ships serving the Asian routes. Today a stairway originally meant to reach the beach has partially fallen off and the rest can be expected to follow in the years to come. A notable feature of that station was the regular messages received in 1929 from Admiral Byrd in Antarctica. These were forwarded on to the New York Times for inclusion as regular progress reports on his first expedition to the South Pole.

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David Hirzel has made his home on the San Mateo County Coast since 1989, first in Moss Beach a quarter mile from the Fitzgerald Marine Reserve, and since 2005 in Pacifica, the same distance removed from the San Andreas Fault Zone. He has been studying coastal geology and erosion in the field ever since, with particular attention to how coastside development has unfortunately ignored the potential geologic hazards, with sometimes catastrophic results. The digital field trip “Whose Fault Is It Anyway?: A Walk to the End of the San Andreas Fault Zone at Mussel Rock” is one result of that informal investigation. All comments and opinions expressed are those of Mr. Hirzel.

When not hiking the blufftops Hirzel makes a living in architectural design, and writes nonfiction books based on Arctic and Antarctic exploration (the Tom Crean Sailor on Ice Trilogy, and most recently When Your Life Depends on It: Extreme Decision-making Lessons from the Antarctic.)
FIGURES: NUMBERS ARE REFERRED TO IN TEXT

1) Through Brookhaven Neighborhood
2) Trace under Highway One
3) Near Fairmont Playground
4) FDR Elementary School
5) Daly City Landslide
6) Mussel Rock to Point Reyes
7) Two Plates Collide: North America on left, Pacific on right
8) Failed sea wall, built without consideration for water erosion
9) Trail down the cliff, undermined by sink hole
10) Dollar Radio Station, contacted by Admiral Byrd from Antarctica
RECENT NEW NORCA MEMBERS OF THE EXPLORERS CLUB

Allison T. Fundis MN’20
Cheryl E. Leonard MN’20
Shari S. Plummer MN’20

EDITOR’S NOTE:

The Chapter newsletter serves its members not only by keeping them up to date on events of the Chapter but also by providing a forum in which members can express their thoughts and ideas. Notes submitted by members will be printed as time and space permit.

An entertaining story of exploring in Africa in a 40-year old Land Rover by our Chapter Member, Teresa O’Kane MN’13, My Life With NDOTO has been published and is available from Amazon. A review will appear in next month’s issue of the newsletter. AJ

 UPCOMING ZOOM MEETING WITH ROZ SAVAGE

Roz Savage is an English ocean rower, environmental advocate, writer, and speaker. She holds four Guinness World Records for ocean rowing, including first woman to row solo across three oceans: the Atlantic, Pacific and Indian. She has rowed over 15,000 miles, taken around 5 million oarstrokes, and spent cumulatively over 500 days of her life at sea in a 23-foot rowboat. She was awarded the MBE (Member of the Order of the British Empire) in the Queen’s Birthday Honours 2013 for services to environmental awareness and fundraising.

With all of her time rowing alone, she has a lot of experience with solitude. As more and more people began to shelter in place, she realized that she could share her rowing experiences with people who are sheltering in place. She recently finished a book for this time, The Gift of Solitude (The Amazon link (valid across all Amazon sites) is http://mybook.to/ The Gifts of Solitude).

For this ZOOM meeting, Roz will talk about her rowing efforts and her new book. Tune in for her talk. Since Roz is Sheltering-in-Place in the UK, the ZOOM meeting will take place at about 10:00 AM on Friday 22 May.
The ZOOM site will open at 9:30 AM for socializing.

Jimmy Friedman MN’19 writes:

My first trip to Asia was in 1986. Since that time I have made over fifty trips to Japan, Thailand, Laos, Cambodia, Vietnam, Myanmar & India. My primary purpose is to teach and study martial arts, following my late teacher Kato Hiroshi Sensei through the cold and rain, lost in the forests of Japan, or teaching a group of 150 novice students ages 4 to 60 in Varanasi, the world’s oldest city. My curiosity has never left me. I currently travel to India every year to teach martial arts. I am also collaborating with the Mumbai Aikido dojo in their goal to teach self defense to one million women in India. Last year I visited Myanmar, Nepal and India to teach seminars. I may be the first American teacher to lead a seminar in Kathmandu.

A few years ago, while in NYC, I visited TEC headquarters; a tour was starting and they allowed me to join. I returned to San Francisco, found the Northern California branch link, contacted Joan Boothe and inquired if I could attend an event. I showed up with a dream and zero expectations that I could ever become a TEC member. At my first event I was overwhelmed at the kindness and welcoming attitude of the TEC NORCA chapter members. With their grace and guidance, as of February 2019, I am proud to say I officially became a TEC MN’19. I am honored and humbled to be in a club with such distinguished and accomplished individuals. I am proud to be given the responsibilities of being not only the Social Media Czar but also the Field Trip Director!
FROM THE CHAIR

I speak on behalf of the Board in wishing that you are all safe and healthy. These are challenging times for many of us – challenging to learn to work at home; challenging to give up on spring travel plans; challenging to celebrate significant events like Easter, Ramadan, birthdays, anniversaries, and such without the presences of friends and loved ones; and challenging to stay safe and sane. I appreciate anew the trials of traveling with young children. It now takes me three or four tries to leave the house. Oops, left my sunglasses in the kitchen, so take off the outdoor shoes to go get them; oops, heading out the door with my bedroom slippers on; oops, where did I leave my face mask. Sounds familiar?

I think my personal challenges have spilled over to Chapter events and I’ve been slow to get us into the remote world. My earlier e-mail explains a lot of that. I look at this newsletter as a good sign that we are getting into a new routine. This newsletter announces some new meeting opportunities. At the beginning of May, David Hirzel provided a Zoom meeting about the geology of Pacifica, as a preview of a future field trip that he hopes to lead this summer. On May 22nd Roz Savage will present a Zoom meeting on ocean rowing and lessons that she learned about being alone. She is in the UK and used the Shelter-in-Place (SIP) time to write a book, The Gift of Solitude, about these lessons. To let all of us be awake for the Zoom meeting, it will be held at 10 AM, with the zoom meeting opening at 9:30 AM so people can log in and socialize. This newsletter also announces a new Chapter effort – the Explorers’ Story Corps Program. This seems like a good opportunity for our SIP time, but hopefully you’ll want to engage in this when sheltering requirements are loosened. Due to the continuing restrictions on large groups, the May presentation by Sandra Cook – Foreign Devils ion the Silk Road has been postponed.

On behalf of the Board I would like to thank our current three Elected Directors, Sandra Cook, Paul Freitas and Jim Hurson for three-years of service in support of the Chapter. I am pleased that Paul Freitas would like to run for a second term; Sandra Cook has agreed to be appointed to a special one-year term to provide continuity for Elected Director turnover.

On May 29th, we will hold our Annual Meeting through Zoom. The big item for the Annual Meeting will be to elect Directors to serve the three-year terms on the Board. The Board has recommended the following three members to fill the Elected Directors positions – Kimberly Chambers, Paul Freitas, and Jimmy Friedman.

Please bear with us and remain flexible as we sort through a process for presentations, meetings and events that was developed when we thought in-person gatherings would be the norm. Stay safe, and may we meet again soon to share our SIP stories and exploration plans.

Lesley Ewing, FN’93

THE EXPLORERS STORY PROJECT - NORTHERN CALIFORNIA CHAPTER
by Dr. Lesley Ewing FN’93

To borrow from Ernest Shackelton, we all have “our own White South” – that place or creature or focus that drives us, some might say compels us to explore. I hope you and your families are all safe. If so, while we are sheltering in place, perhaps we can use some of this quiet time to recount quests for our personal White South, through a DIY version of NPR’s Story Corps. A few years ago, Barbara Berg suggested that we set up a Story Corps booth for our Chapter. That seems like too much work, but recordings are now easy enough that we can use a DIY (Do It Yourself) version. Almost everyone with a smart phone has a voice memos app and the Chapter’s website now has the storage options to let us take your recordings and post them for others to enjoy. If you are not interested in doing an Explorers Story Corps interview, stop now, the rest of this message provides information on how to plan for an interview, how to set up the recording process, some interview suggestions, and then how to get your finished recording to our website.

HOW TO PLAN FOR AN INTERVIEW

The general plan is that each interview would be about 20 – 30 minutes. If you cannot cover all your exploration thoughts in one 20- to 30-minute recording, consider breaking your discussions into a few segments. You should think about where you want to do the interview. Ideally it should be someplace quiet so that the recording will not be interrupted by noisy road traffic, dogs, unexpected guests and such. Also, the space should be comfortable so that you can settle in for a conversation. The NPR Story Corps website provides some more details about interview locations (links provided at the end of this message).

You should also think about whom you want to do the interview. While sheltering in place, you might be limited by the people nearby. Do you want to have a conversation about an expedition that you did together with your interviewer, or do you perhaps want him/ her to explain your work to a family member? Each interview will be different and all options are good ones.

(Continued on page 5)
These should not be surprise interviews. The person being interviewed should know the questions and be able to think about their answers. Some exploration-type questions are provided, but, feel free to make up your own questions if you want. Again, the NPR Story Corps site also has sample questions. By knowing the questions, you can figure out, in general, what you want to say ahead of the interview. That way, if Kathy Sullivan was an inspiration, but you often confuse her name with your neighbor Kate Sullivan, you can write down her name on a crib sheet. Hopefully, the actual interview, while prepared, will be a conversation, rather than sounding like a scripted speech. Each of us has our own distinct voice and this comes through best in a conversation, rather than if you read a prepared speech. Also, the interviews should be fun; only do this if you want to.

HOW TO SET UP THE RECORDING PROCESS

One of the easiest ways to make your recording is to use the Voice Memos App on your iPhone or the Voice Recordings App on your Android or Samsung phone. If you want to get fancy with your iPhone, you can do voice recordings with Garage Band. Most recording functions on phones are just like with a tape recorder. There will be a red record button that you hit to start and stop the recording. You can start and stop throughout the recording, but normally a continuous conversation will be best if you can do that. Once you stop, save the file with a name and the date of the recording. The recording app also has forward and reverse buttons to let you listen to what you have recorded after it’s saved. Do play around with this before you do the real interview.

When you are ready to do the actual interview, put your phone into airplane mode to avoid having your recording session interrupted by a phone call. The microphone in most smart phones is near the bottom. When you are doing a recording, point the microphone in the direction of the person who is speaking and make sure you are not covering the microphone with your hand. And, as with all microphones, keep a little distance between your mouth and the microphone to get a clear sound. If you want to use earbuds with the built-in microphone, that will work, but remember to pass the microphone back and forth between the interviewer and interviewee, and do not cover the microphone with your hand.

Once you’ve saved your interview, you can e-mail it to yourself to save on your computer or send it to Mike Diggles so he can post it on our website. If the file is too big to e-mail, do not fear. We will set up a Dropbox folder that you can use to transfer it. Or, save it to a thumb drive and hand it to Mike or one of the officers when you next come to an in-person meeting.

SOME INTERVIEW SUGGESTIONS

Start with an introduction of the people who are talking, both the interviewer and interviewee, any relationship between them and then have the interviewee talk about their background.

Possible questions
1. What does it mean to you to be an explorer?
2. Why did you want to join The Explorers Club?
3. Will you talk about one of your [fill in the blank; climbs, dives, treks, photographs, conservation efforts, etc.]?
4. Who are your heroes and heroines?
5. What are the biggest changes that you’ve seen in your field or in exploration?
6. What most encourages you about the future of exploration?
7. What are your upcoming plans?
8. Is there anything that you always bring with you on an expedition?
   a talisman, rabbit’s foot, photo, book, memento, piece of gear, etc.
9. What are your favorite activities between expeditions?
10. Since exploration is of little or no value unless the findings and experiences are shared with others, how do you share your experiences? What are your favorite ways to share?
11. How do you promote your planned expeditions to create interest and sharing with others?
12. If these questions do not work for you, feel free to make up your own questions, or visit Story Corps for other ideas.

REFERENCES

This project has borrowed inspiration and some material from Story Corps. If you want more guidance or information, please check out this website or some other oral history documenting sites.

Story Corps General Instruction -- https://storycorps.org/participate/storycorps-diy/
Story Corps Questions -- https://archive.storycorps.org/great-questions-list/
Our Chapter tries to record all of our dinner meetings. Videos of recent speakers’ presentations are available on the Chapter Website.

WANT TO GET INVOLVED IN THE INNER WORKINGS OF THE CHAPTER?
There are lots of tasks that come up during the course of a year: speakers, meetings, field trips, membership, newsletter, etc. A good place to get started is by volunteering to serve on a committee. Talk to any of the Chapter Officers or Directors for more information.

NORTHERN CALIFORNIA CHAPTER 2020 DUES
The Northern California Chapter dues are paid for the calendar year. Dues are now due for 2020.

Sirdars have annual dues of $50.00. In addition to their national dues, members have optional dues of $25.00. Dues can be paid by check payable to The Northern California Chapter of The Explorer’s Club or by paypal. If you use paypal, there will be a $2.00 fee for the service. If you pay by check, please mail your check to Anna Freitas, 161 Camino Posada, Walnut Creek, CA 94595.

Please note that Northern California Chapter dues can be tax-deductible depending on your individual tax situation.

To recognize those who pay their dues, we include an honor roll of paid sirdars and members on the monthly newsletter.

ZOOM SITE OPENS AT 7:30 PM.
ANNUAL MEETING STARTS AT 8:00 PM.
ZOOM INSTRUCTIONS FOR THE VIRTUAL MEETINGS ARE TO BE ANNOUNCED.