



The Explorers Club Northern California Chapter

SEPTEMBER 2022

Also available at our web site: <http://www.explorersnorca.org>

**MONTHLY MEETING
FRIDAY 23 SEPTEMBER 6:30 PM
BY ZOOM INVITATION**

SPELEOLOGY & EXPEDITION CAVING Sonia Meyer TM'20

Spelunking is not an exploration activity that has received much attention by the Northern California Chapter of The Explorers Club. In this presentation, Sonia Meyer will provide a brief overview of the field of speleology, and then share a short story from one of her caving expeditions.

Sonia has been caving since 2016 peaking in 2019 at 1,200 hours underground. She has participated in domestic and international expeditions and conducted cave research at Carlsbad National Park, and is currently working on a cave climatology research project in China (delayed due to COVID). Sonia also serves as director for the National Speleological Society (NSS) and as treasurer for the San Francisco Bay Chapter of the NSS.



CHAPTER FIELD TRIP ROBERT FERGUSON OBSERVATORY SUGARLOAF RIDGE STATE PARK

Date: Sunday November 6, 2022 Time: Plan to show up by 6:45pm

Cost: \$30 per person (there is no age limit to attend), including optional overnight camping

Note: Please bring your proof of vaccination

Signup: To sign up, please make a payment either on paypal of \$32.00 per person through our website, www.explorersnorca.org, or send a check for \$30.00 per person payable to the Northern California Chapter of the Explorers Club to Anna Freitas, 161 Camino Posada, Walnut Creek, CA 94595. If you decide to pay by check, please send an email message to Anna Freitas (treasurer@explorersnorca.org) to reserve your spot(s) for the field trip.

Please see below regarding overnight camping and if desired RSVP with Tom Dietz at tjdietz415@gmail.com.

CONTINUED ON PAGE 2

CHAPTER FIELD TRIP (CONTINUED FROM PAGE 1) ROBERT FERGUSON OBSERVATORY SUGARLOAF RIDGE STATE PARK

Details: The Robert Ferguson Observatory is located in Sugarloaf Ridge State Park and is run by the Valley of the Moon Observatory Association, a collection of volunteer and professional astronomers and support staff. (www.rfo.org). There are three basic types of telescope designs (refracting, reflecting, and catadioptric) and RFO operates all three. The Observatory houses a 40 inch reflecting telescope f/3.6 and focal length of 3,600mm. There is an 8 inch reflecting spotting scope also used for observing mounted on the 40 inch. These telescopes have an integrated computer drive allowing constant tracking of night sky objects. The Observatory also houses an 8 inch, 2-meter-long refractor plus its attached spotting scope. This telescope also incorporates a tracking motor. The East Wing of the Observatory houses the Ritchey-Chretien 20 inch CCD (robotic) telescope which uses camera equipment for imaging distant objects. RFO also houses two 80mm telescopes for observing the Sun. Finally, RFO has a Radio Telescope that can listen in on the Sun's activity.

Our Chapter will have exclusive use of the Observatory led by VOTMOA docents. Docents will be speaking about the Observatory's founding and its telescopes in addition to guiding our Chapter's viewing of the night sky.

Feel free to arrive even earlier and enjoy Sugarloaf Ridge State Park and its hiking trails. One highlight of the Park is the Planet Walk, a scale model of the solar system that fits within the Park's boundaries. The exhibit is designed to give perspective to the spatial relationships within our solar system. To give both relative size and relative distance the exhibit shrinks our solar system down by more than 2.36 million times. If you begin at the "Sun" (southeast corner of the Observatory), the PlanetWalk takes you on a 4.5-mile round trip journey to the orbit of demoted to dwarf planet status, Pluto. Each step you take is roughly a million miles through space. At the PlanetWalk's scale, the nearest next sun is 10,000 miles distant. This walk has some steep parts and if you're interested in this activity please access the following link, <https://www.sugarloafpark.org/wp-content/uploads/2016/12/planet-walk.pdf>, to read about the terrain and recommendations for the trek.

Additional Information: Driving directions are below. The State Park (www.sugarloaf-park.org) provides bathrooms, fire rings, food storage boxes and picnic tables on site and you should feel free to bring snacks and drinks (alcohol is prohibited on Observatory grounds but allowed at the group camp site – see camping below). If you have a red flashlight, feel free to bring that (no white lights are allowed). The Observatory can provide a red acetate sheet to cover cell phones if needed. BTW, most camping headlamps have a redlight feature if you're so inclined to bring that with you. Check the outside temperatures as nights can be cool in the greater Santa Rosa area during November evenings – dress appropriately. Consider bringing a camping type chair to sit in between your times looking through the telescopes. If the weather is not cooperative for viewing we'll be in touch regarding rescheduling the event.

Camping: The Observatory is in the Sugarloaf Ridge State Park and we have reserved the campground for the night of November 6. As such, if anyone would like to camp that night please let Tom Dietz at tjdietz415@gmail.com know and he can review the details.

Directions to Northern California's most active Public Observatory
Robert Ferguson Observatory, 2605 Adobe Canyon Rd, Kenwood, CA 95452

From Highway 12 east of Santa Rosa, turn on Adobe Canyon Road toward Sugarloaf Ridge State Park. Follow the road up the canyon. From the Park's entrance kiosk, proceed straight up the road, following the signs to the observatory. Please drive slowly—hikers and animals abound!

Just past the horse corrals, you will come to a green gate. Do not drive past the gate, even if it's open. Park in the gravel area between the corrals and the green gate, then walk past the gate up the road a short distance to the observatory.



A Member's Contribution: Ellen Lapham MN 17



This is my signature photo from January 2015. A 35 minute hike from our home in Ridgway Colorado. I am looking south towards Ouray with Cimarron Ridge and the San Juans in the distance. Why is this photo important to me today? It shows an abundance of snow (remember normal winters?) on our escarpment at 8000 ft, down in the valley and on the far peaks. Now our snow season is off and on, with less accumulation, more fast melting. Climate Change has altered the water regime. So I take this image as not only a reminder but also a nudge that I have to do my part to cut my carbon footprint. So, in 2022 I co-founded *Climbers Cutting Carbon.org** and we launch this Fall.

* **Climbers Cutting Carbon** is a toolkit for personal steps you take to meet the global goal of 50% reduction in carbon emissions by 2030. Our website is the starting point on this journey. We present ways for you to devise your own path forward - no one action is the best one for you except the one(s) you choose.

EDITOR NOTE: The Newsletter would like to publish occasional photo essays, like this one and like the one from Cheryl Leonard MN'20 in the April 2022 newsletter. If you have a photo and story that you would like to submit, please contact Cheryl Leonard, MN'20 for help with the format. All submissions will be considered for inclusion in upcoming editions of the Newsletter.

2022 GLOBAL EXPLORATION CONFERENCE (GLEX)

by Dr. Robert Schmieder FE'86 reporting from from Ponta Delgada, Azores



During the first week of July, 2022, Chapter Chairman Emeritus Dr. Robert Schmieder, FE'86, attended the Global Exploration (GLEX) Conference in Ponta Delgada, on the island of Sao Miguel, in the Azores. This was the third such conference, the previous two being split between Lisbon and the Azores. The nine Azores islands are located at the triple junction (where the North America, European, and African plates intersect), about a thousand miles west of Portugal, in the North Atlantic Ocean.



The conference was held in the magnificent Teatro Micaelense. It was attended by about 200 members and guests. The program was opened with inspiring remarks by Azores President José Manuel Bolieiro. He emphasized that the islands are dedicated to

being an example and active force for preserving and protecting the Earth. "This is what we want for the World," he said, "and this is what the Azores are today." He was followed by Richard Garriott, President of the Explorers Club, who spoke of "The New Golden Age of Exploration."

The program included 28 talks by outstanding explorers, organized into 5 sessions: Space, Oceans, Earth I, Earth II, and the Explorers Club 50. The last is a list of 50 outstanding persons actively engaged in projects worldwide that leverage the means and methods of explorers to effect positive change in the world. Presentations included such topics as "Mars Exploration and the Davinci Venus Program," "Extraterrestrial volcanoes," "How tiger sharks discovered a lost ecosystem," "Resurrecting the mammoth," "African twilight: Vanishing ritual and ceremonies," "Farm from a box: Food as a pathway to peace and prosperity," and "Polar bears and Polar nights." Most presentations were lavishly illustrated by graphics, photographs, and videos on a huge screen.



During breaks there was the opportunity to mingle with the speakers. Among others, Bob had the pleasure of befriending Derek and Beverly Joubert, conservation filmmakers and photographers from National Geographic. The Jouberts are globally recognized award-winning filmmakers, conservationists, and National Geographic explorers-in-residence based in Botswana. Their mission for more than 30 years has been the conservation of key wildlife species, with a focus on large predators. The Jouberts have published 12 books, produced 30 films for National Geographic, and written many scientific articles. They have received 8 Emmy Awards and a Presidential Order of Merit awarded by Botswana's president for their conser-

EDITOR'S NOTE

Besides the GLEX conference, Dr. Schmieder visited several of the other Azore islands in preparation for his scientific expedition to visit one or two other islands including Faial, in September. Bob and his expedition partner

Fred Belton will investigate a group of microscopic marine animals called Foraminifera in an effort to elaborate the dynamics of recolonization of the island shelf after its complete destruction by a series of volcanic eruptions in 1957- 58.

This project is a collaboration with the University of the Azores, the Marine Geology Division of the University of Lisbon, and the U.S. Geological Survey.

HONOR ROLL
Paid up Dues for 2022

MEMBERS

Allan, James
Ballou, Philip
Berg, Barbara
Bolt, Kendra
Boothe, Joan
Bruffet, Leonard
Bunch, Nick
Chambers, Kimberley
Chang, Joyce
Chase, H. Keith
Chirurg, J. Thom
Cohn, Francesca
Cook, Sandra
Cooper, Alan
Cromwell, Thomas
Dana, Don
Dietz, Thomas
Diggles, Michael
Durbin, Thomas
Dvorak, Don
Dvorak, Elaine
Ellis, Scott
Estey, Sue
Eustace, (Robert) Alan
Ewing, Lesley
Fadiman, Maria
Fox, Susan
Freitas, Anna
Freitas, Paul
Friedman, James
Friedman, Lincoln
Gontcho A Gontcho, Satya
Grubbs, Melodie
Hemming, Peter
Heyneman, Donald
Higgins, Robert J.
Horne, William (Clif)
Hurson, Jim
Hurson, Von
Hutchison, Alan
Jake, Krist
Jepsen, Anders
Kelley, James
Kuhns, Matthew
Kvenvolden, Keith
Langan, Lee
Lapham, Ellen
Lee (Akey), Katherine
Leonard, Cheryl
Mangus, Rodney
Meniketti, Marco
Mercer, Meaghan
Pedtke, Andrew
Phillips, William McKinley III
Ross, Sandra Miller
Saber, Rick
Schmieder, Bob
Schwemmer, Robert
Smith, Ronald
Smith, Steve
Tarter, Jill
Thompson, Scott
Weed, Ryan
Weil, James
Whiteside, Dede
Winter, Mordechai
Wren, Sherry

SIRDARS

Adams, Ralph Wyatt Jr.
Arroz, Linda
Boothe, Barry
Brandt, James
Clever, Karoli
Cohn, Lawrence
Crowder, Wendy
Davis, Shane
Durighello, Joy
Friedman, Christen
Heyneman, Louise
Hutchison, Ann
Isaac, Nancy
Jepsen, Kathy
Johnson, Fred
Kidd, Joe
Langan, Karine
Longo-Cohn, Mary
Mani, Cassandra
(Cassie)
Messerly, Ed
Miskiv, Rick
Nikas, A. James III
Novotny, Margaret
O'Keeffe, Bonny
Patterson, Tom
Pennathur, Sudha
Reddy, Shridhar
Rolandson, Matthew
Ruxton, Meg
Saber, Aldeana
Sabharwal, Akun
Schmieder, Kay (Kathleen)
Stewart, Zach
Van Austen, Bob
Van Austen, Judy
Walker, Nigel
Weiman, Mark
Yoder, Karl

A FEW WORDS FROM THE CHAIR

Our 2022/23 year officially started July 1st, but this is the real start – with the beginning of our speaker program, on September 23rd. Sonia Meyer, TM'20, will start our program with her talk about caving. Sonia was originally going to be part of our May 2020 meeting, but an exam conflicted with our meeting, and she chose her education over us.



At our July Board of Director's meeting, the Board directed me to continue to use Zoom for most of our presentations and to add a few in-person events throughout the year for socializing. Sonia's presentation will use zoom, but for October, I am exploring a possible opportunity for an in-person event. We'll need to change from meeting on Friday evening, but I am hoping the benefits of an in-person option will over-ride any inconvenience from a mid-week meeting. The draft program should make the date change worthwhile.

After about a 3 year hiatus, we'll start our field trips in early November with a visit to the Ferguson Observatory. Tom Dietz, FN'20 has set up this event and arranged for us to camp near the Observatory so we will not need to negotiate winding roads late at night. (If we will be allowed to have a campfire, I'll bring ingredients for S'mores.) Then, in keeping with the Board's support for zoom meetings, our November program with Ryan Weed, FN'19 will be by zoom. We'll end 2022 with a Holiday Party at Rick and Aldeana Saber's home.

I was talking recently with Mike Diggles, our long-term webmaster; after 28-years, he would like to pass on the website development and maintenance to someone else. Ideally, two people will work on the website and Mike has offered to serve as a back-up for the new webmaster until a second person volunteers to help. If you have web-skills and want to help with our site, let me know or reach out to Mike.

Finally, if you attend the Lowell Thomas Dinner in Boston, please consider preparing a short write-up from the dinner for the next newsletter.

Take care, explore safely, and bring back good stories,

Lesley Ewing, FN'93

CHAPTER FIELD TRIPS

Robert Ferguson Observatory: November 6, 2022. See page 2.

For more information or suggestions for other trips,
contact:: Tom Dietz - fieldtrips@explorersnorca.org.

IN MEMORIUM

Frank Donald Drake (May 28, 1930 – September 2, 2022)

Frank Drake, FE'77 was a radio astronomer, best known by the scientific community for the Drake's Equation and by the rest of the world for his efforts to detect intelligent extraterrestrial life, transforming this search from fringe science to serious scientific exploration. Once computers became common desktop accessories, millions joined the Search for Extraterrestrial Intelligence (SETI) program by enabling their computers to do 'off-hours' searches. More recently, through the Kepler telescope and other efforts, scientists have found that many planets throughout the universe have habitable characteristics similar to those on Earth.

The Drake's Equation, devised in 1961, was created to stimulate scientific dialog surrounding the number of civilizations whose electromagnetic emissions could be detected. Drake derived the formula to present as part of the first meeting on the Topic of SETI. Drake's first of many efforts to use radio waves in his extraterrestrial life search was in 1960, at the National Radio Astronomy Observatory in West Virginia (Project Ozma) and his life-long association with the SETI began at the Arecibo Observatory In 1974.

Dr. Drake's career started as an engineering physicist and astronomer and served as an electronics officer for three years with the US Navy. Among his many accomplishments, Dr. Drake created the first interstellar message ever deliberately transmitted, helped design the plaques and golden records that were carried aboard Voyagers 1 and 2, served as the chief of NASA's Lunar and Planetary Sciences Section at the Jet Propulsion Lab, was the Cornell University Goldwin Smith Professor of Astronomy, director of the National Astronomy and Ionospheric Center, SETI director of the Carl Sagan Center for the Study of Life in the

Universe, and Dean of the Division of Natural Sciences at UC Santa Cruz. He was a member of the National Academy of Sciences, fellow of the American Academy of Arts and Sciences, president of the Astronomical Society of the Pacific, and was awarded the first Education Prize by the American Astronomical Society.

Dr. Drake began his career on the east coast and moved to California in the 1980s. We may be able to thank Dr. Jill Tarter, FN'98 for Frank's move to our chapter. Jill is a cofounder of SETI and one of Frank's long-term friends and colleagues and we'll close this memorial with her comment for Scientific American and agree that he will be missed. She wrote:

“ I think the first time I met Frank was at Arecibo in the late 70's. My husband, Jack Welch, was on the Scientific Advisory Committee and then the President's Advisory Committee for Arecibo; I tagged along on those trips to Puerto Rico and spent the meeting hours hanging out at the observatory getting to know the telescope. The first time I actually got to work with Frank was during John Billingham's 'Life in the Universe' Conference at Ames Research Center in 1979, though I'd been using the Drake Equation as a TA for years. After Tom Pierson and I co-founded the SETI Institute in 1984, we wanted Frank to leave Cornell and come be its President. I participated in a phone call that Barney Oliver made to Frank to twist his arm to make that happen; it was most memorable, and Amahl Drake acted as our secret weapon. Barney prevailed and Frank began his Northern California life at UC Santa Cruz and the SETI Institute – to everyone's benefit. He will be missed. (**Dr. Jill Tarter**, submitted to Scientific American)”

EDITOR'S NOTE: Going to press, we have learned of the passing of long-time Chapter Member **Alan Hutchinson MN'67**. Next month's issue of the Northern California Chapter of The Explorers Club will include an In Memorium for Alan.

September 2022 Issue
Northern California Chapter
 Established 1973



CHAPTER OFFICERS & TEAM

Chair: Lesley Ewing FN'93
 Vice Chair: Jimmy Friedman MN'19
 Secretary: Joyce Chang MN'17
 Treasurer: Anna Freitas MN'17
 Treasurer@explorersnorca.org
 Webmaster: Mike Diggles FN'92
 Newsletter Editor: Anders Jepsen FN'03
 ajviking@aol.com; 1-925-322-8893

2022

September.23.Sonia Meyer
 Speleology & Expedition Caving Zoom
 October 2? TBD
 November 18 Ryan Weed
 Interstellar Human Exploration Zoom
 December 11 Holiday Party
 Saber Residence

2020

May 24 Dr. Sandra Cook
 Foreign Devils on Silk Rd RESCHEDULED
 May 22, 9:30 AM: Roz Savage
 The Gift of Solitude ZOOM Presentation
 May 29, 7:30 PM ZOOM ANNUAL MEETING
 June 5, 8 PM. Eliot Jessup
 24 hr Grand Canyon Rim-to-Rim. Zoom
 September 20 Explorers Club Chapter VP
 Intro to Northern California Chapter Zoom
 September 25 Liz Taylor and Sylvia Earle
 Mission Blue- Hope Spots. Zoom
 October 30 Mimi George
 Vaka Taumako Project Zoom
 November 20 Cheryl Leonard
 Found Objects and Music. Zoom
 December 13. Holiday Party

2021

. Zoom
 January 22 Diana Pickworth & John Wilken
 Explorations (2) Zoom
 February 26 Kent Lightfoot
 Fires & indiginous land use practices Zoom
 March 26 Deana Weibel
 Motivations for robotic space exploration Zoom
 April 23 Brandi DiCarli & Scott Thompson
 Farms from a box Zoom
 May 21 ANNUAL MEETING
 May 21 Alison Fundis
 Deep Sea Exploration. Zoom
 September 24. Ashley Lemke
 Archaeology Below the Surface Zoom
 October 15 Dr. Craig Clements
 Wildfire in the West Zoom
 November 19 Dr Roberto Junco
 Caribbean Archaeology Zoom

2022

January 28 Scott Warnasch.
 Iron coffins
 February 25 Satya Gontcho a Gontcho
 Astro physics and Cosmology
 March 25 Randall Reeves
 Sailing round the Americas and Antarctica
 April 22 ECAD
 April 29 Bryan Heisinger
 The Hester Lake B-24 Wreck
 May 20 Annual Meeting
 Urban Mobility and UAVs Aaron Singer
 June 12 Chapter Picnic

CHAPTER DIRECTORS

Directors (Past Chairs)

Joan Boothe MN'07
 Lesley Ewing FN'93
 Lee Langan FN'99
 Anders Jepsen FN'03
 Alan Nichols FN'84

Bob Schmieder PhD FE'86
 Rick Saber MN'01
 Stephen Smith FN'96
 Paul Freitas MD MN'10
 Jimmy Friedman MN'19

Elected Directors

Kimberly Chambers MN'16
 Bill Phillips JD MN'21
 Satya Gontcho A Gontcho MI'21
 Tom Dietz FN'20

Chapter Email Addresses

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 vicechair@explorersnorca.org

treasurer@explorersnorca.org
 secretary@explorersnorca.org

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 fieldtrips@explorersnorca.org

MEETING VIDEOS

“Our Chapter has been recording our zoom meetings and the previous in-person meetings. Please go to our Chapter website explorersnorca.org and click on “Videos of Past Presentations”. Presentation videos on the website go back to 3/22/2019.”

SPEAKER OPPORTUNITY

St. Francis Yacht Club Wednesday Yachting Luncheons

Founded in 1966 and with 50 programs per year, the Wednesday Yachting Luncheon is the longest running and largest speaker series in the yachting world. Each week, the yacht club welcomes speakers to share insights and expertise with their growing audience. A new show is added to the club archive every Wednesday at 12:00 noon.

The Wednesday Yachting Luncheons continue a 56-year tradition of showcasing relevant topics from knowledgeable speakers. The programs air on YouTube every Wednesday at 12:00 noon. If you would like to be a guest speaker, please contact Meg Ruxton, EC NorCal Chapter member, megruxton@comcast.net, and provide her with a short bio, summary of the topic and contact info (email address and phone number).

NORTHERN CALIFORNIA CHAPTER DUES

The Northern California Chapter dues are paid for the calendar year. A new chapter club year started on January 1st. Member dues are \$25 annually; sirdar dues are \$50 annually.

The Honor Roll is a listing of individuals who have paid their dues. To verify whether you have paid your dues, just check the Honor Roll list on the prior page.

Dues can be paid on-line by clicking on the paypal link on the website. If you prefer to pay by check, please make the check payable to Northern California Chapter of the Explorers Club. Mail the check to Anna Freitas, 161 Camino Posada, Walnut Creek, CA 94595.

Please note that Northern California Chapter dues can be tax-deductible.

Anna Freitas MN'17, Treasurer