## Treks and Tears of 2019

We slipped into 2019 with quality family time. Laughter, hugs and joy will be cherished forever. We spent New Year's Eve with Bernadette and her pals. She was beautifully adorned in a black lace dress, energized on steroids and a perpetual smile. In the wee hours of the morning, we silently kissed her goodbye as we zipped off to catch our flight before the roosters were up.

Back on the left coast, desert hiking and skiing Mammoth
Mountain jump started the year. 20 JAN, the cosmos gifted us a lunar eclipse and full moon. Annie



enjoyed being camp commander while Germar, Randy and Vi < collected shadowband measurements of the moonlight.

February captivated us with the crucial link between Central and South America – Panama! It is the land bridge that once permitted animals to cross from the North to the South and vice versa,

until first the French, and then the U.S. decided to dig an 82 km trench across it. After entire mountains had been moved and over 25,000 people had perished in the effort, global commerce

finally could get cheap stuff from China to the East Coast. Of course, we had to inspect this most daring engineering marvel with our friends Nic & Barbie.

Our next stop was Azul Paradise in the Bocas del Toro archipelago, advertised as "whispers of powdery white sand, decadently soft to the touch, blended with endless blue bliss." Wow! On top of that, we made friends with the Ngöbe-Buglé, the indigenous people of the mangrove forests, poisonous red frogs

<and lazy sloths.>





We then headed inland and trekked up "La India Dormida". They served beer on the trail, just like in



Bavaria. Germar was very happy. < On to San Blas, the land of the Guna Yala. They are the only indigenous people that ever defeated western civilization, and to this day still have autonomous status from Panama. The anniversary of their rebellion of 1925 was coming up and kids were running around all over town with their wooden guns, prepping for the celebrations. We also learned that, according to their traditions, men must pay a fine when they shit on their wives. We were appalled, until we learned that they can't pronounce "ch" as in "cheat". We spent two awesome days

on a private island at the Yandup resort, > only shared by 5 other tourists. The locals, in contrast, were crammed on a tiny neighboring island with 3000 people and the plastic trash of western civilization

(seems that we are taking over their paradise in the long run after all!)

Once our friends departed, we climbed the highest mountain of Panama, Volcan Baru, V one of the few spots in the world where you can see the



Atlantic and Pacific Ocean at the same time (except that

you can't, because it is shrouded in clouds about 99.9% of time). We were supposed to get a guide and ended up twisting the arm of the National Park 's warden by saying that we would only explore the first two kms of this "muy, muy peligroso" 5200 ft climb. Despite all warnings that we would surely die, we did it. We ran into a local family with a 6 year old on top who had a blast hiking down, singing along the way.

As our finale, we visited the Emberá. Annie couldn't get her eyes off

the loin cloths covering their hunky hineys, and Germar felt like a giant amidst the oliveskinned beauties. >

Thank you, Cookie, for putting this wonderful trip together and sharing your great country with



March came in like a lion with a phone call. 1 MAR, Bernadette > left us due to her 4 year battle with cancer. Kelly was with us when the call came. We ran away to Anza Borrego, hoping that this year's "super bloom" of desert wildflowers would appreciate the deluge of tears. "Berni" was my favorite sister, wedding officiant, seamstress, attorney, activist, professor, jewelry maker, and touched so many lives. We were soon en route to Buffalo to shed more tears with family, friends and colleagues. It was an amazing tribute and Uncle Mark put it succinctly in his eulogy: he lived nearby and had no idea how busy she was and



soon realized she could only accomplish as much as she did because she did not have a TV.

April brought back precious memories of Bernadette. The treasure of her marrying us will be forever in our hearts. We celebrated our blissful first year of marriage in Valle de Guadelupe, Baja California. < Years of ogling the magnificent Sierra Blanca finally came to a happy end. We trekked through sage, chaparral and old growth forest V to the summit. We were on the top of the Valle!

Soon thereafter, we led a trip to Wind Wolves Preserve V for the SD Hiking Club. We were bummed when we learned that there are no wolves, but the preserve's tall grasses swaying in the wind *looked* like wolves running through. Very cool! We also were blown away by the verdant

hillsides, cool geology, ancient rock art, wind poppies, and an owl dropping a snake from a tree, almost hitting our tent below, resulting in Annie frantically looking for the snake to

make sure that it didn't hide in the tent.



Then Annie was off to Santa Cruz Island to wrestle a kit fox > for her food.



As usual, Annie brought in May with a cumpleaños fiesta. Aunt Sarah flew in from Buffalo and the party began. A new 100% compostable bike < was a highlight. Thank you, Diane and Monte, for thinking green!!!

Germar presented his lunar measurements of January at

a workshop in Canaan, Ct. Being a small town, the only venue available was a nursing home. The locality served the purpose perfectly, but talking science while "Elvis" > was singing in



the lobby at hearing-aid volume to the elderly was

quite a challenge. While on the right coast, we also visited family and friends and frolicked amongst



historical sites. < Why hike

when you can glide? We started off June on the ski slopes of Mammoth.>



The snow was still awesome, although we had to dodge a few blightning strikes.

A culinary orgasm to Baja with our amigos rounded off the month. The food is other worldly. You often have no idea of what you are eating, < but it will never be a burrito, cheese nachos or hamburguesa.

We enjoyed the 4 JUL holiday on the San Bernardino Divide trek with Kelly

and Troy, > bagging nine peaks
along the way. It was a rather
shaky outing, thanks to the
magnitude 7.1 earthquake
that rattled us in our tent as
the 70 ft pine towering above
us swayed precariously. Since
you are reading this, the pine
didn't topple ①







We returned to Alpine to gather up Alex and Audric, students from Belgium. We were surrogate parents for 3 weeks, but we would have loved longer. We had tons of fun together, camping, biking, boogie boarding, kayaking and

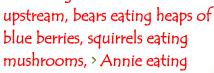


enjoying the serpent of Anza Borrego. ^ We were introduced to the finest Belgian Chocolates and we retaliated by getting them hooked on S'mores.



Lydia lured us to trek the Copper Ridge in the Northern Cascades bordering Canada with Janel and Elmo for the Labor Day holiday. < The "Alps of North

America" were spiced up with salmon > swimming



heaps of blueberries, stinging bees, waterfalls, pristine alpine lakes, glaciers, volcanoes, mountains reminding us of Torres del Paine, V and even a fire tower. When we started, we ran into two 12 year olds, who just completed the trip and were almost in tears because of the beauty they had been immersed in. Five days and four nights later we had assumed the same state of mind. It was one of the most beautiful treks we have ever done. Really!







Welcome to Queenstown!! Spring is in the air. Alexandra, New Zealand hosted the UNEP scientists this year. While Germar was saving the ozone layer, Annie explored the area with the WASPs (Wives and Sexual Partners). They were so fortunate to be able to watch the 2<sup>nd</sup> best sheep-shearer in the world. The sheep had no say in that matter, but trust the gals, the shearer's muscles told it all. :0)

When the

meeting was over, we jumped in a Jucy Campa for our Kiwi adventure. Spring skiing was our first stop near Queenstown. We then hooked up with Crissy and Owen



and their awesome amphibious boat. We drove up onto beaches & camped for 3 days on the shores of Lake Manapouri. > We

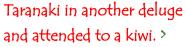
bagged Monument Peak < in the middle of the lake; a must for surveyors! Onward and north, we marveled the Blue Pools, V Franz Josef Glacier & Punakaiki Rocks. Finally reaching

the northern end of the South Island, we trekked the Abel Tasman Coast. After trekking for 10 hours in a deluge, we were ecstatic that the very romantic and luxurious Awaroa Lodge let



us in, muddy as we were.
On to mountain biking
the Queen Charlotte
Trek, featuring stunning
vistas of the
Marlborough Sound. < We

crossed the Cook Strait over to the North Island and visited Rayleigh & Alan in New Plymouth via Kapiti Island. We trekked halfway up Mount



The perfect stratovolcano, Mt Ngauruhoe, greeted our Jucy in all its glory at Tangariro National Park.





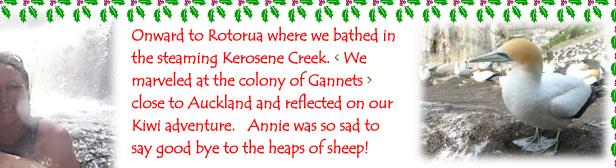


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Onward to Rotorua where we bathed in the steaming Kerosene Creek. < We marveled at the colony of Gannets > close to Auckland and reflected on our Kiwi adventure. Annie was so sad to say good bye to the heaps of sheep!



Our 132<sup>nd</sup> "kissaversary" was in Ojai, an artsy town

east of Santa Barbara. We enjoyed camping in another deluge, bringing back fond memories of New Zealand. We biked & trekked up Nordhoff Peak with Michele and Raul in a lovely light rain, wetting the snow below our feet. We dried off at the Topa Mountain > and Majestic Oak wineries where we savored the most beautiful Syrah, ever.



Since Annie is fully enjoying retirement, Germar had to work double-duty. He published his measurements during

the Great American Eclipse of 2017; an analysis on the benefits of the Montreal Protocol in curbing increases in solar UV radiation at Earth's surface; and the lengthy quadrennial assessment report prepared by "his" UNEP panel on the environmental effects of ozone depletion. Other contributions included a chapter on ozone and UV radiation to NOAA's State of the Climate report, and a paper published in Nature Sustainability on "ozone depletion, ultraviolet radiation and prospects for a sustainable future." Click on the links, if interested! 2019 has been an exceptional year professionally.

Germar launched us into Christmas with a band when his left Achilles tendon ruptured while modul skiing. We would have hoped for a different kind of fireworks ringing in the end of the year, but here we are. Surgery and at least six months of recovery are coming up. We made the best of it and enjoyed the winter wonderland of Mammoth Mountain and Mono Lake. > The good news for you is that next year's holiday letter will



be shorter as there is only so much you can write about sitting on a stationary bike, building up muscles, day in, day out.



We thank you for making our world a special place and wish you a fabulous 2020 without broken, torn, split, or ruptured body parts!

Love you! Juniper, Chinquapin, Germar & Annie

