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10 COVER: HAM VERSUS TORTOISE:

The HD8M Galapagos Islands DXpedition(s)

By Jim Millner, WB2REM

Jim Millner, WB2REM, and Bill Mims, W2WCM, operated HD8M earlier this year from Santa Cruz Island in the Galapagos. Part of each QSL card donation received via OQRS.com was re-donated to the Galapagos Conservancy to protect the islands' wildlife. See Jim's article on page 10. (Cover photo by Kleber Orellana, courtesy of WB2REM)





FOCUS ON: Topband contestors battle it out during the solar minimum! See how you stacked up on p.15 & 102. Plus a bevy of DIY projects to keep you busy on p. 30, 34, 38, 42 & 44!

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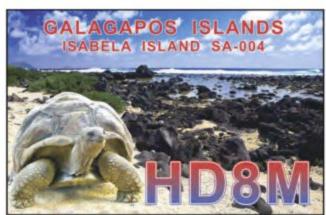
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It isn't uncommon for traveling hams to visit and operate from remote locations, but WB2REM has made three hamming visits to the Galapayos Islands over four decades, and reflects here not only on his expeditions but on how things have changed in the land of the uiant tortoises!



Ham Versus Tortoise: The HD8M Galapagos Islands DXpedition(s)

BY JIM MILLNER,* WB2REM

hen you hear the name Galapagos Islands, it probably conjures up visions of Jurassic Park-type wildlife roaming untouched and secluded on remote Pacific islands. It is a place where only 184 years ago, Charles Darwin developed his theory of evolution. He observed that due to different environmental features of closely grouped islands, the same species, over a period of time, developed different adapting traits in order to survive. My travel to the Galapagos Islands, over a 40-year period. has come in three parts. Each visit has given me a different perspective on the islands and how they have changed over those few years. In 1981, my wife Pam (KA2MGR) and I traveled there on our honeymoon. In 2017, I was the team leader for HD8M's Isabela Island operation, and most recently, in February/March 2019, HD8M was reactivated from the side of a volcano on Santa Cruz Island. Operating and exploring the Galapagos is a unique and fulfilling experience mixed



Photo B. Jim's wife, Pam, KA2MGR, and Rick, NE8Z/ HC1MD in 1981 from Mount Guagua Pichincha.



the Galapagos. (All photographs courtesy of the author unless otherwise stated)

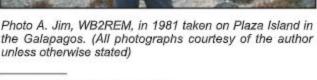




Photo C. Jim and Pam with NE8Z's young children, Christian and Gabriela, operating at 12,000 feet (Note: NE8Z's children are now in their 40s).

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Photo D. Baltra Island Crossing ... the only way to get from Baltra Island (where the airport is located) to Santa Cruz Island.



Photo E. The photo of the blue-footed booby that adorned one of HD8M's QSL cards was provided by an amateur photographer in exchange for antiseasickness medication during a rough ferry ride to Isabela Island.



Photo F. From left, Mark, WY1G; Ellis, N1MWJ (SK); and Nancy, KGØYL, setting up the hex beam.

with adventure and intrigue. Amateur radio was the catalyst to come to the Galapagos, but the beauty of the islands and their unique wildlife kept on bringing me back.

Ham Radio Honeymoon

My wife Pam and I got married in 1981. I was 30 years old (*Photo A*) and already had a number of adventures behind me. We explored a few possible honeymoon spots such as Bora Bora and the Aleutian Islands in Alaska, but the Galapagos won out. My next task was to convince Pam to let me bring a radio, specifically an Atlas 210X, on our hon-

eymoon. As you can imagine, it wasn't an easy sell, but with some convincing she allowed it. Despite her approval at the time, even after nearly 40 years, I am still hearing about it!

Going to the Galapagos in 1981 was a lot different than today. We flew from New York to Quito, Ecuador, where Rick, HC1MD/NE8Z, met us at the airport and took us up to his family farm at 12,000 feet on Mount Guagua Pichincha (*Photo B*). He had a VW Beetle from which he pulled out the battery and attached it to the radio. We strung a dipole from the trees and operated for a few hours from that altitude (*Photo C*). Rick was instrumental in helping us make arrange-



Photo G. The assembled hex beam outside the Drake Inn on Isabela Island.



Photo H. Ellis, N1INWJ, came across this tortoise on one of his long hikes.

ments to stay at the Hotel Galapagos on Santa Cruz Island. From Quito, we flew on one of the few weekly flights to Baltra Island in the Galapagos. Baltra Island Airport was originally built by the United States military during World War II to protect Panama. After the war, the Ecuadorian government resurfaced the airport and opened it to the public. The airport at the time was quite primitive. The terminal was a small building, and all luggage from the airplane was put in a circle on the runway, where it was retrieved. Today, Baltra Island Airport has modern terminals with all electricity supplied to it by three large wind turbines. A bus took us to Baltra Crossing, where we crossed the channel by ferry to Santa

Cruz Island (*Photo D*). The roads on Santa Cruz were unpaved. The city had one dirt street with a bar, a restaurant, and a few offices. Hotel Galapagos was about a mile down the port road near the Darwin Center. There were no taxis, and we had to walk with our luggage to the hotel. The hotel was adequate but without air conditioning.

Hotel Galapagos was owned by another ham, Forrest Nelson, HC8FN. Forrest had a tower and a tri-band beam that I used with the Atlas 210X. The one thing that saved me from future divorce was the electricity, which shut down at 10 p.m. and forced me to go off the air. In the room, there were huge 10-inch spiders on the celling and walls. Their presence required us to retreat under the covers in fear as the lights went off at 10 p.m. On Santa Cruz in 1981, there was an abundance of wildlife around Puerto Ayora. We saw blue-footed boobies, frigates, marine iguanas, and sea lions. Unfortunately, on my return in 2017, they were non-existent in the city/port area. Despite the circumstances, in 1981, I made 1,500 QSOs with the callsign WB2REM/HC8.

First Return Visit

In September 2017, a group was formed to put Isabela Island, also in the Galapagos, on the air under the callsign HD8M. Isabela is located 2° south of the Equator. To get there, we again flew from the U.S. to Quito and from there to Baltra Island. After a night's stay on Santa Cruz, we took a rough ferry ride to Isabella Island. Fortunately, team member Mark Bevan, WY1G, sat next to an amateur photographer who was seasick and who, in return for a scopolamine patch, gave Mark a photo she took of a blue-footed booby, which became the front side of our 2017 HD8M operation QSL card (*Photo E*). We stayed at the Drake Inn, which was across the road from the beach. Mark, WY1G; Nancy Yoshida, KGØYL; Ellis Rud, N1MWJ (SK); and David Sturm, HC5DX, helped set up the hex beam (*Photos F* and *G*) and wire antennas. We had two stations, one with an IC-706MK2G and the other an

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Elecraft K3 with KPA500 amplifier (loaned to us by Elecraft).

In our off time, we explored the island. Nancy and I went on a 14-mile hike up the Sierra Negra volcano, which — incidentally — erupted three months after our visit. Ellis, who was a park ranger in Massachusetts, had the Galapagos on his bucket list and on one of his long walks came across the tortoise in Photo H. Unfortunately, Ellis passed away a year after returning from the Galapagos. Isabela had an abundance of wildlife

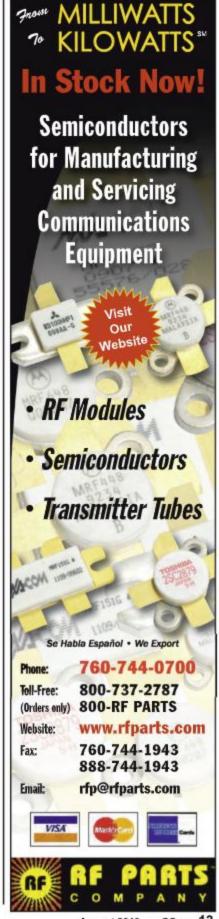
and resembled what we saw on Santa Cruz Island in 1981. We saw many sea lions, Sally Lightfoot crabs (see https://tinyurl.com/y4ddung6), land and marine iguanas, flamingos, blue-footed boobies, giant tortoises, and numerous Darwin's finches (see wildlife montage In Photo I). Mark was brave enough to swim in the 68°F water and said it was an eye-opening experience to see marine Iguanas surfing with him In the ocean. Although the members of our team were not seasoned DXpedition



Photo I. A collage of wildlife found in the Galapagos. Top row, from left, are a sea lion, a flamingo, and more sea lions; bottom row, from left, are a blue-footed booby, a Sally Lightfoot crab, and a Galapagos tortoise.



Photo J. Jim, WB2REM (L), and Bill, W2WCM (R) on the 2019 HD8M DXpedition.





New 4th Edition!

By Franz Langner, DJ9ZB



Known throughout the DX and DXpedition world as a meticulous and tireless operator, Franz Langner, DJ9ZB, is also noted as one of the most knowledgeable individuals in Amateur Radio in terms of documenting DXCC entities.

This is the fourth edition of his series of books bearing the title DX World Guide. It was first published in Germany in 1988 and followed by a second edition, also in Germany in 1977. The third edition, published in the U.S.A in 2012 was the first to use color throughout. This 380-page, fourth edition, also full color throughout, includes information on well over 300 DX entities.

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Photo K: This giant moth was just one of many large and amazing insects that found their way into our hotel room each night!

operators, we made nearly 5,000 QSOs in the five days we were on the air.

HD8M Redux

In February/March 2019, Bill Mims, W2WCM, and I reactivated HD8M, this time from Santa Cruz Island (Photo J). We each carried two IC-7300 transceivers along with a total of five wire antennas. We were able to find a beautiful house in the center of the island, up on the side of the Shield volcano. We were totally isolated with very few people within miles of the house. Electrical noise was virtually nonexistent, and at our elevation of 1,500 feet, with the landscape sloping down to the ocean, our antennas played quite well. The house had large glass windows, which gave us an excellent view of the ocean and wildlife. Unfortunately, at night, the Jurassic Park-type insects were attracted to the light emanating from our radio area and attached themselves to the windows. As the night progressed, they found their way through the screens on the windows and cracks in the door where we had our coax coming through. Consequently, by morning, we literally had an inch-thick carpet piled up on the floor of the weirdest assembly of bugs and crunchy worms I have ever seen (Photo K).

On our off time, we watched Darwin finches and giant tortoises as they freely roamed the property (*Photo L*). We also walked a 1-mile long lava tube (see video at http://hd8m.com/photos.html). In the end, we made 8,400 QSOs on a combination of SSB, CW, and FT8 modes.

Helping Wildlife

HD8M's 2017 and 2019 missions served a dual purpose. One was to provide a new country to hams who were in need of the Galapagos. We were the first station licensed to operate on 60 meters from HC8, which made many 60-meter enthusiasts happy. Secondly, we are committed to giving back to the Galapagos in order to help preserve the beauty of the islands and to protect their wildlife. In light of this, we teamed up with the Galapagos Conservancy (<www.galapagos.org>) and pledged to donate \$1 to the organization for every QSL card donation received via OQRS.com. To date, between the two HD8M DXpeditions, HD8M has donated \$3,400 to the conservancy, and we are pleased to say that we were featured in their quarterly magazine in an article that shines a positive light on amateur radio.



Photo L. Tortoises on the Santa Cruz property. (Photo by and courtesy of Niels Olsen).