Executive Summary

Conservation Volunteers International Program (ConservationVIP) organized and led a volunteer trip to the Galapagos Islands during November 14 – 24, 2016, visiting the Islands of San Cristóbal and Isabela. The 13 member volunteer group included ConservationVIP Trip Leaders Mark Hardgrove and Chris Braunlich. A local guide from Ecuador Adventures, Andres de la Torre, assisted us throughout the trip. In addition, at different locations on the trip, the group was accompanied by local guides certified by Galapagos National Park Service.

The group’s activities supported a sea turtle research project which is being conducted by the University of San Francisco de Quito at the Galapagos Science Center on San Cristóbal. The research project is investigating the impacts of boat traffic on sea turtles in the Galapagos Marine Reserve. The volunteers photographed sea turtles at four different locations in the Galapagos, to contribute data for the research database.

The volunteer group also worked on a variety of habitat improvement projects at Campo Duro on Isla Isabela, where Giant Tortoises are raised in a protected environment until they are mature enough to be released in a natural setting in Galapagos National Park.
Interspersed with the turtle research and tortoise habitat support, the group picked up trash on several beaches in the Galapagos, a task which helps protect the shore birds and reduces ocean pollution which negatively impacts sea life.

During the trip, more than 500 hours were devoted to training, education, data collection and other volunteer work: 305 volunteer hours were dedicated to the sea turtle data collection and beach cleanup. In addition more than 195 hours were spent at Campo Duro on Giant Tortoise Habitat Restoration.

### Detailed Trip Report

**Day 1:** Trip Leaders and our local guide conducted an in depth orientation and briefing at Casa Opuntia, our hotel on San Cristóbal Island, beginning at 2:00 PM. Following the orientation, the group walked to the Galapagos National Park Visitor Center, where volunteers had their first introduction to the Park and learned about the natural history of the Galapagos Islands.

**Day 2:** In the morning, the group travelled by bus to the Centro de Crianza, stopping on route to see El Junco, the only permanent fresh water lagoon in the Galapagos. The Crianza is one of the Galapagos National Park’s breeding stations and sanctuaries for giant tortoises. At the Crianza we were introduced to the captive breeding programs which the group would be supporting later in the trip.
After returning to the hotel, the group members were outfitted with wetsuits, flippers, masks, snorkels and flotation vests, and then tested the snorkel equipment in the hotel’s swimming pool.

In the afternoon, the group was divided into two-person teams, and each team was issued a Go Pro Hero 3+ underwater camera. The cameras were previously donated by REI Adventures for use in the sea turtle documentation project. The group was instructed in proper use of the cameras and safety issues. It is difficult to concentrate on photography while also paying attention to the ocean and surroundings, so one member of each team photographs while the other team member is responsible for making sure that the photographer is safe and does not drift too far from the group. In addition, designated trip leaders and guides are responsible for watching the entire group in case any member requires assistance. This buddy system and oversight protocol was implemented each time the group snorkeled.

After walking to the nearby Carola Beach, the volunteers participated in their first sea turtle photography project. The group was new to the activity, and the water was rough and relatively cold (in the low 70’s), so it proved to be more challenging than some people anticipated. However, the group was clearly eager to do a good job, so they stayed in the water as long as they were physically able to tolerate the cold, and they were successful in collecting some good sea turtle photos. Following the project, the group walked back to the hotel and were instructed in the proper methods for cleaning the gear so it would be in good condition for the next photography project. (These basic procedures were followed after each snorkelling/photography session.)
Day 3: After breakfast, the group travelled in taxis to Playa Loberia, named after the sea lions (lobos) which frequent the beach. While we waited for the best tide to snorkel and photograph, most of the group hiked roughly two miles round trip along the coast to see the cliffs where swallow-tail gulls and boobies nest. Along the way, volunteers helped to pick up trash.

Once back at Playa Loberia, the group donned their snorkel gear, paired up for safety, and drifted in the bay photographing sea turtles for the research project. With calmer water, the water was clearer than the day before so the volunteers captured some excellent turtle photographs. In addition, they were treated to sightings of a variety of other sea life, including many colourful fish, sting rays and eel.
The group returned to the hotel to clean and store gear. After lunch we walked to the Galapagos Science Center, University of San Francisco de Quite, for a tour and presentation by Dr. Judith Denkinger, Marine Biologist, on the sea turtle census and research project she has been leading. At the Science Center they use computer software to identify individual turtles by their unique facial patterns and study each turtle’s carapace to identify injuries. The purpose of the research is to determine the impacts of increased boat traffic on sea turtles.

The group also watched a presentation about the research the Center has been conducting on plastics and other types of ocean trash and its effects on sea life. The startling statistics clearly impressed the group and motivated them for trash pick-up chores later in the trip.

**Day 4:** After breakfast the volunteers, guides and Dr. Denkinger divided into two groups for the boat trip to Kicker Rock. Because Galapagos National Park limits the number of people allowed at Kicker Rock at one time, the two boats traveled separately. The first boat went straight to Kicker Rock where the group snorkeled and photographed sea turtles. Meanwhile, the second boat went to Playa Puerto Grande, where the group walked the beach and picked up some trash, while they awaited their turn at Kicker Rock. (The first boat went to Playa Manglachito for similar activities after their Kicker Rock work.)
Both groups noticed that the water at Kicker Rock was colder than they experienced at the beaches in the Galapagos on prior days, making the snorkeling and photography more challenging. In addition, because the water at Kicker Rock is too deep to even see the ocean bottom, it was harder to get close-up photographs of the sea turtles. Still, some turtles were photographed and the volunteers appreciated the “magic” of snorkelling through the channel between the cliffs of rocks and were energized by the sight of sharks and the visit of playful sea lions.

**Day 5:** The volunteers transferred via air shuttle in two groups from the island of San Cristóbal to Isla Isabela. The two EMETEBE flights were scheduled for 7 a.m. and 7:30 a.m., though they actually left relatively close to each other at 7:35 a.m. All baggage went with passengers without delays.

We spent our first two nights on Isla Isabela at the Volcano Hotel, in the village of Puerto Villamil. After checking into the hotel, we met our local guide Alfredo Boloña who led a walk to the Centro de Crianza, the Giant Tortoise Center on Isla Isabela. He gave a presentation on the captive breeding program there, which supports several sub-species of tortoises. We saw older breeding animals, adolescents, and hatchlings. One of the most remarkable sights he arranged was for us to see was a two month old tortoise. It was hard to believe that a creature so small would someday grow to be a giant tortoise.
In the afternoon, volunteers walked the local beach for 1-1/2 hours for trash cleanup, motivated by the presentation on damage to sea life from plastics in the ocean.

**Day 6:** In the morning we took a bus to the marina and boarded our boat to the Islet of Tintoreras. There we had an introduction to the different forms of lava on the islands, learned about the mangrove trees, and saw some blue-footed booby, marine iguanas, and the white-tipped reef sharks for whom the islet is named.

Following our visit to the island, we snorkelled in a bay adjacent to the marina, where we observed and photographed many sea turtles. The photos were later submitted to Dr. Denkinger to enable her to expand her census area to include the area near the Puerto Villamil marina.
In the afternoon we returned to town. The trip leaders bought some tools needed for the next volunteer projects, and then the group rode mountain bikes approximately 12 miles round trip to the Wall of Tears. This wall, towering 65 feet in places, was constructed in the 1940’s by convicts when Isabela was a penal colony.

Day 7: In the morning we travelled by open bus to Campo Duro, the location for our next volunteer project. Campo Duro is an Eco-Camp located in the cooler, lush, tropical highlands on the slopes of the Sierra Negra Volcano. Campo Duro works in concert with Galapagos National Park, providing a protected reserve to help raise giant tortoises from approximately 3 to 8 years old.

The group worked for 2-1/2 days on a variety of projects to improve the tortoise habitat at Campo Duro. On the first day, after a tour of the facility and settling into our tents, we:

- Removed large pieces of dead wood from tortoise enclosure
- Cut big pieces of deadwood into size suitable for camp firewood using the chainsaw recently purchased by ConservationVIP and stored at Campo Duro
• Began digging holes for fence posts around tortoise enclosure

• Watered new plants that had been recently planted to help form hedge around tortoise fence enclosure

• Cut cabbage leaves in the organic garden and carried them to the tortoise enclosure to feed the tortoises

• Raked leaves in the tortoise enclosure. Leaves were hauled in tarps and piled around the base of the trees in the enclosure to mulch the trees. The cleared ground will now be able to grow grass for the tortoises when the rains come.

**Day 8:** The group continued with projects at Campo Duro:

• Finished raking the leaves in the two acre tortoise enclosure. The tortoises enjoyed burrowing into the piles of leaves raked up by the volunteers
• Cut 50 tree stumps in the enclosure

• Dug more fence post holes

• Cut PVC pipe purchased by ConservationVIP into lengths to make 21 new fence posts

• Dug a trench to lay 100 meters of new water line (purchased by ConservationVIP), fitted the water line with connections and valves to feed 2 ponds, and backfilled the trench

• Trimmed vegetation around a water feature for a new fountain

• Using the chain saw, trimmed low-hanging limbs from 20 trees along the walkway around the tortoise enclosure
• Wired old fence posts to the fence

Working so close to the typically silent and slow moving tortoises, at times it was easy to forget they were there. But at moments, their poses were so absorbing, it was easy to grab the camera and forget about the work.

**Day 9:** In the morning, the group continued with the tortoise habitat projects:

• Set and filled 21 PVC pipe fence posts with dirt
• Trimmed 50 feet of red hedge and planted 100 cuttings for hedge around tortoise enclosure
• Relocated trash pile full of old logs and 10 cubic yards of brush to allow for future expansion of the tortoise area
• Cut more cabbage in the garden for tortoises
• Organized and inventoried tools for future projects
• Secured 200 fence posts with wire to straighten up fence

After lunch the group packed up, said goodbye to the appreciative Campo Duro staff, and returned to the hotel in town.

**Day 10:** The Volunteers travelled by bus to the Sierra Negra Ranger station where we had a more extensive introduction to the volcanic origins of the Galapagos Islands and hiked up the trail for a view of Sierra Negra volcano. The clouds were low, offering only intermittent and partial views of the caldera, but after the work at Campo Duro, it was good to walk and stretch our legs. That evening we met for a farewell dinner sharing memories of our time in the Galapagos.

**Day 11:** We had an early morning taxi transfer from the hotel to the Airport, where we boarded EMETEBE flights to Baltra. There we said our goodbyes and boarded flights to head home.

November 2016 Galapagos Volunteers at Centro de Crianza, Isabela Island

*Report submitted by: Mark Hardgrove, Director of Field Operations, ConservationVIP and Chris Braunlich, Director and Chief Executive Officer, ConservationVIP*