Executive Summary

Conservation Volunteers International Program (ConservationVIP®) organized and led a volunteer trip to the Historical Sanctuary of Machu Picchu in November, 2017, in collaboration with Peru’s Ministry of Culture, and the Ministry of Environment (National Service for Protected Area Management, SERNANP). The project was authorized by Doctor Vidal Pino Zambrano, Director de la Dirección Desconcentrada de Cultura Cusco - Ministry of Culture, and by Ernesto Escalante Valencia, Jefe del Santuario Histórico de Machupicchu, SERNANP. The
projects were discussed with anthropologist José Fernando Astete Victoria, Jefe del Parque Arqueológico Nacional de Machupicchu.

Twenty Volunteers, including the two trip leaders, Janice Ballak and Karla Burnley, ConservationVIP Board Member and Trip Leader respectively, and el Licenciado Santiago Carrasco Bellota, performed 640 total hours of volunteer work related to the following projects: The primary jobs for the Conservation VIP volunteers during the November trip were two-fold. The group worked on the grounds at the Museo Manuel Chavez Ballon in Aguas Calientes the first and last day and at Machu Picchu Sanctuary for two days in between. The first day of work at the Museo included clearing Falso Kion or false ginger. This is an invasive species that the group pulled out by the root and placed in the middle of the road so that it would be crushed by the busses. 27 bags of falso kion were collected and the area covered measured 300 meters in length x 2 meters wide. The group spent 160 hours removing and collecting this invasive species.

The next two days the group worked at Machu Picchu Sanctuary along the Inti Punku (Sun Gate) trail and at Huchuy Picchu removing pasto gordura, the same invasive grass that was removed during the June 2017 trip. This grass is a native of Africa and has begun to out-compete native species of plants. Melinis minutiflora is particularly adapted to grow quickly in disturbed soils and in areas recently burned by wildfires. The officials at the Machu Picchu Sanctuary, and biologist Julio Ochoa in particular, want to eradicate this invasive species before it is able to completely replace native species. Volunteers contributed 320 hours over a two-day period to remove *Melinis minutiflora* from the trail to the Sun Gate, on Huchuy Picchu, and on the terraces around Huchuy Picchu, and the lower trail to Huayna Picchu. The volunteers, Santiago, and Julio Ochoa and his assistants Wilbur, Cristian, Julian and Octavio; pulled and collected 68 large sacks of *Melinis minutiflora*.

The final day of work the group returned to the Museo removing trash along the river and the grounds of the museum’s botanical garden and surrounding area. The group spent 160 hours filling 48 large trash bags as well as accumulating a large pile of metal and another large pile of plastic and wood debris. Julio Ochoa and his team were quite pleased with the progress we made in removing all this unsightly waste.
During the trip, ConservationVIP donated equipment to help with the management and protection of Machupicchu Sanctuary:

1. To Miguel Zamora Salas, Coordinador de Gestión of Parque Arqueológico Nacional Machupicchu, Ministry of Culture, the group donated one Petzl climbing rope in blue, 60 meters x 9.8mm diameter; one Black Diamond Momentum Harness in black; one Black Diamond carabiner.

2. The group also donated to Miguel Zamora Salas 20 pair of UV protection gloves to help protect the ranger’s hands from sun damage which can occur at high elevation. In addition 25 tubes of Banana Boat sunscreen were provided to help protect from the sun.

3. To Ernesto Escalante Valencia, Jefe del Santuario Histórico de Machupicchu, SERNANP: one GARMIN 64S GPS unit to help rangers track animals.

4. In addition, volunteers donated used equipment including safety goggles, knee pads, and gloves for use in the field work.

Discussions were conducted with SERNANP and Ministry of Culture staff regarding the volunteers’ activities, and future projects. Trip leaders will provide this report to Dr. Vidal Pino Zambrano, Director Ministry of Culture-Cusco, Ernesto Escalante Valencia, Jefe del Santuario
Detailed Trip Report

Volunteers met the Trip Leaders and Licenciado Santiago Carrasco Bellota in Cusco on the afternoon of November 1, and spent the next one and one-half days acclimatizing and learning about the complex and storied culture of Peru. They visited several important sites including the Machu Picchu Museum, Qorikancha, and Sacsayhuaman.

On November 3, volunteers traveled from Cusco by bus to Ollantaytambo, then by train to Machu Picchu Pueblo (Aguas Calientes). On the way, they stopped at Chinchero, an indigenous village and former palace of Emperor Topa Inca Yupanqui. There they toured the church of Our Lady of Monserrat, Inca terraces and remains, a Huaca (Inca shrine), and experienced a short section of the Inca Trail. They visited a weaving cooperative where they learned about traditional Andean weaving techniques and ate a traditional Peruvian lunch before heading to Ollantaytambo to catch the train to Aguas Calientes.

Volunteers with their entrance tickets visited the Machu Picchu Sacred City on November 4. The Volunteers began their day by hiking to Huayna Picchu. Later during the visit, the volunteers received extensive lectures by Lic. Santiago Carrasco Bellota about the Inca culture, and preservation issues related to increased visitation as they toured the Sacred City. They returned that evening to Aguas Calientes.

Archaeological Site Volunteer Project Description

The primary job for the ConservationVIP volunteers during the November 2017 trip was to remove an invasive species of grass, *Melinis minutiflora*. This grass is a native of Africa and has begun to out-compete native species of plants. *Melinis minutiflora* is particularly adapted to grow quickly in disturbed soils and in areas recently burned by wildfires. The grass itself becomes a significant fire hazard once it cures. The officials at the Machu Picchu Sanctuary, and biologist Julio Ochoa in particular, want to eradicate this invasive species before it is able to completely replace native species.

November 5 the volunteers arrived at Museo Manuel Chavez Ballon where they were initially allowed a self-guided tour through the museum. After the tour the Park botanist Julio Ochoa provided an overview of the museum grounds and split the volunteers into four smaller groups. The volunteers, along with Julio Ochoa and his four assistants, began removing Falso Kion from the grounds, up the road on the side of the museum and along the Puente (bridge).

November 6, the volunteers arrived at Machu Picchu and were led to the upper terraces where they received an orientation from Park botanist Julio Ochoa. The volunteers, along with
Julio Ochoa and his four assistants, began removing Pasto Gordura along the trail from the Guard House to the Sun Gate.

November 7, the volunteers worked behind the Huayna Picchu check point. Several groups worked at Huchuy Picchu, removing invasive grass from the trail and viewpoints. Another group removed Pasto gordura from along the trail and viewpoints on the way to Huayna Picchu. The volunteers also worked on removing pasto gordura from the terraces in the back of Huchuy Picchu.

November 8, the volunteers returned to the Museo Manuel Chavez Ballon where they picked up trash along the river bed and in and around the botanical garden.

Park Administrator Zamora Salas arranged for a government bus to transport volunteers from Aguas Calientes to the Sanctuary and back for the two days the group worked there.
and made sure that volunteers were able to have free access into and out of the Sanctuary in order to perform their appointed tasks. Biologist Ochoa also arranged for the gates at the Huayna Picchu control station to remain open while the volunteers worked on the trails above.

By removing *Melinis minutiflora* from multiple locations within the Sanctuary and along the Inca Trail, ConservationVIP volunteers provide a tremendous service to the Ministry of Culture and SERNANP and contributed greatly to the preservation of the natural and cultural environment.

**Return to Cusco**

On Thursday, November 9, the ConservationVIP group returned by train to Ollantaytambo where they toured the ruins of Emperor Pachacutec’s palace and the Temple of the Sun. Afterwards the group returned to Cusco by bus and enjoyed a farewell dinner.

The trip adjourned after breakfast on November 10, and most volunteers returned home. A few continued their explorations of Peru and South America.

**Acknowledgments**

Conservation Volunteers International Program acknowledges and thanks the Ministry of Culture, the Ministry of Environment (National Service for Protected Area Management, SERNANP), and the community of Machu Picchu Pueblo for the privilege of volunteering in Peru. We particularly thank Mr. Miguel Zamora Salas, Coordinador de Gestión of Parque Arqueológico Nacional de Machupicchu, Ministry of Culture, for hosting and spending time with our Volunteers. Great thanks are also reserved for biologist Julio Ochoa, and his staff, who spent much of the time working shoulder-to-shoulder with the volunteers.

Special thanks are extended to Licenciado Santiago Carrasco Bellota, who provided excellent historical and environmental information. His work with the Peruvian ministries prior to our arrival was critical in obtaining the necessary permits to carry out our work at the Sanctuary.

Last, but not least, ConservationVIP® thanks our hardworking November 2017 Machu Picchu volunteers, for their efforts to help conserve Machu Picchu for future generations.

Janice Ballak and Karla Burnley,
Trip Leaders and Director of Conservation Volunteers International Program
Volunteers along with Julio Ochoa and his team at the Museum