Conservation Volunteers International Program (ConservationVIP®) organized and led a volunteer trip to the Historical Sanctuary of Machu Picchu in November, 2018 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 Sr. Luis Nieto Degregori, Director de la Dirección Desconcentrada de Cultura Cusco - Ministry of Culture, and by Ernesto Escalante Valencia, Jefe del Santuario Histórico de...
Machu Picchu, SERNANP. The projects were discussed with anthropologist José Fernando Astete Victoria, Jefe del Parque Arqueológico Nacional de Machupicchu.

Twenty volunteers, including Barbara Kennedy and Janice Ballak the two trip leaders and ConservationVIP® Board Members, and el Licenciado Santiago Carrasco Bellota, performed 540 total hours of volunteer work related to the following projects: The primary jobs for the Conservation VIP volunteers during the November trip involved removing non-Native grass and other plants in the Machu Picchu Sanctuary and at the grounds of the Museo Manuel Chavez Ballon in Aguas Calientes the last two days.

The first two days the group worked at Machu Picchu Sanctuary along the Inti Punku (Sun Gate) trail, Puente Inka (Inka Bridge) trail, Machu Picchu Mountain, Huchuy Picchu and Huayna Picchu removing pasto gordura (*Melinis minutiflora*), the same invasive grass that was removed during the June 2018 trip and the 2017 trips. 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, the Inka Bridge, on Machu Picchu Mountain, Huchuy Picchu, and Huayna Picchu. The volunteers, Santiago, and Julio Ochoa and his assistants Wilbur, Cristian, Julian and Octavio; pulled and collected 46 large sacks of *Melinis minutiflora*.

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 vehicles passing over it. Other groups worked on pulling *alocasia odora* (Elephant Ear) and *tritonia*, other invasive plants. The area covered measured 700 meters in length x 2 meters wide. The group spent 120 hours removing and collecting the invasive species as well as cleaning and removing growth on an Inca wall.

The final day of work the group returned to the Museo removing trash around the grounds, one group focusing on a large pile and very large bag of plastic bottles. The group spent 100 hours filling 45 large trash bags, 30 bags filled with crushed plastic bottles and 15 bags of trash. 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 two Sherman Collapsible Traps, Moultrie MCG-13297 A-251 Camera, 60mm Mammut rope, Black Diamond Harness, Black Diamond Carabiner, 10 small gardening tools.

2. To Ernesto Escalante Valencia, Jefe del Santuario Histórico de Machupicchu, SERNANP: 21 pairs of leather work gloves

3. 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 Sr. Luis Nieto Degregori, Director Ministry of Culture-Cusco, Ernesto Escalante Valencia, Jefe del Santuario Histórico de Machupicchu, SERNANP, to Administrator of the Machu Picchu Park, Miguel Zamora Salas, and to Anthropologist Fernando Astete, Jefe del P.A.N. Machupicchu.

Detailed Trip Report

Volunteers met the Trip Leaders and Licenciado Santiago Carrasco Bellota in Cusco on the afternoon of October 31, 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 2, 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 used their entrance tickets to visit the Machu Picchu Sacred City on November 3. Many of 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 2018 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 4, 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, Inka Bridge trail and Machu Picchu Mountain.
November 5, the volunteers worked behind the Huayna Picchu check point. Smaller groups worked in the various areas at Huchuy Picchu, removing invasive grass from the trail and viewpoints. The volunteers also worked on removing pasto gordura (*Melinis minutiflora*) from the terraces in the back of Huchuy Picchu. A final group climbed to the top of Huanya Picchu where they also removed pasto gordura (*Melinis minutiflora*) from the terraces.

November 6, 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 *Melinis minutiflora*, *Tritonia*, *Alocasia Adora Oja* and *Impatiens* from the grounds, up the road on the side of the museum and along the Puente (bridge). One of the groups also worked on cleaning and clearing the Inca wall near the museum.

November 7, the volunteers returned to the Museo Manuel Chavez Ballon where they picked up trash along the around the botanical garden and removed several large piles of plastic bottles which they crushed and placed into smaller bags.

Park Administrator Miguel Zamora Salas arranged for a government truck 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 pasto gordura (*Melinis minutiflora*) from multiple locations within the Sanctuary and along the Inca Trail, ConservationVIP volunteers provided an important service to the Ministry of Culture and SERNANP and contributed to the preservation of the natural and cultural environment.

Return to Cusco

On Thursday, November 8, 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 9 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 2018 Machu Picchu volunteers, for their efforts to help conserve Machu Picchu for future generations.

Barbara Kennedy and Janice Ballak,
Trip Leaders and Directors of Conservation Volunteers International Program
Volunteers in Machu Picchu Pueblo (Aguas Calientes)