Executive Summary

Conservation Volunteers International Program (ConservationVIP) organized and led a volunteer trip to the Historical Sanctuary of Machu Picchu in November 2016, 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 engineer José Carlos Nieto Navarrete, Jefe of the Historical Sanctuary of Machu Picchu for 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, John Hollinrake and Dr. Bill Sapp, ConservationVIP Board Members, and el Licenciado Santiago Carrasco Bellota, performed 500 hours of volunteer work related to the following projects:
1. On Sunday, November 6, 2017, volunteers cleared *Melinis minutiflora*, known colloquially as *pasto gordura*, from 1.35 kilometers of Inca Trail between the Guard House and the Sun Gate, from 0.16 kilometers of the 50-steps portion of the Inca Trail between Wiñay Wayna and the Sun Gate, and from an approximately 1 meter buffer on either side of the trail. Total area cleared of approximately 5,205 square meters. One group of volunteers dug 35 holes for planting native trees along the trail.

2. On Monday, November 7, 2017, one group of volunteers cleared *Melinis minutiflora* from 750 sq. meters of terraces at the native plant nursery above the Guard House. Another group cleared *Melinis minutiflora* from 1.0 kilometer of trail from the nursery to Machu Picchu Mountain. A third group of volunteers dug approximately 30 holes for planting native trees along the trail to Machu Picchu Mountain. A total of 3,750 square meters were treated.

3. On Tuesday, November 8, 2017, and Wednesday, November 9, 2017, the volunteers were divided into several groups. Groups removed *Melinis minutiflora* from 2.24 kilometers of the trail from the sacred rock to Huayna Picchu summit and down to the Temple of the Moon; from 0.78 kilometers of the trail to the summit of Huchuy Picchu from the junction with the Huayna Picchu trail; and from surrounding terraces. A total of 9,090 square meters of trail, buffer area, and terraces were treated.
During the trip, ConservationVIP donated equipment to help with the management and protection of Machu Picchu Sanctuary:

1. To Miguel Zamora Salas, Coordinador de Gestión of Parque Arqueológico Nacional Machupicchu, Ministry of Culture, the group donated a medium sized Tomahawk brand animal trap and a Moultrie motion activated camera.

2. The group also donated to Miguel Zamora Salas 40 pair of safety sunglasses. These safety glasses will be distributed to the park rangers who work at Machu Picchu, to help protect their eyes from sun damage which can occur at high elevation.

3. To José Carlos Nieto Navarette, Jefe Del Santuario Histórico de Machupicchu, SERNANP, one Black & Decker brand gasoline weed whacker (desgrozadora), model GSTE33

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, to engineer José Carlos Nieto Navarrete, Director of the Historical Sanctuary of Machu Picchu for 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 November 2, 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, Coricancha, and Sacsayhuaman.

On November 4, 2016, 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 5, 2016. During the visit, the volunteers received extensive lectures by Lic. Santiago Carrasco Bellota and Dr. Bill Sapp about the Inca culture and preservation issues related to increased
visitation as they toured the Sacred City. The volunteers also visited the Inca Bridge and Huayna Picchu before returning that evening to Aguas Calientes. Volunteers were also taken on a tour of the Manuel Chavez Ballon Museum at Machu Picchu by Sanctuary biologist Julio Ochoa of the Ministry of Culture. Mr. Ochoa also took the volunteers on a tour of the Botanical Garden located next to the museum.

Archaeological Site Volunteer Project Description

The primary job for the ConservationVIP volunteers during the November 2016 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 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.

![Figure 3. Removing Melinis minutiflora from a terrace on the trial to Huchuy Picchu.](image)

Park Administrator Zamora Salas arranged for a government bus to transport volunteers from Aguas Calientes to the Sanctuary and back each day 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.

During the evening of November 9, the volunteers joined Mr. Miguel Zamora, Archaeologist Jose Bastante, and many of the staff at the Ministry of Culture offices for a presentation ceremony. John Hollinrake presented Mr. Zamora with the animal trap, and motion-activated camera and Dr. Bill Sapp presented Mr. Zamora with 40-pairs of safety sunglasses to the delight of the Ministry of Culture employees. Then Dr. Sapp gave a PowerPoint presentation about the work of the ConservationVIP volunteers. This was followed by a presentation by Mr. Bastante, who also presented each of the volunteers with a copy of his newly published book celebrating 100 years since the “discovery” of Machu Picchu. Mr. Bastante asked the group to examine a new, English language version of the Sanctuary guide and volunteer Constance Kintner and Dr. Sapp agreed to help edit it for Mr. Bastante.

**Return to Cusco**

On Thursday, November 10, 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.

**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 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.

John Hollinrake and Bill Sapp,
Trip Leaders and Directors of Conservation Volunteers International Program