Conservation Volunteers International Program (ConservationVIP®) organized and led a volunteer trip to Machupicchu National Archaeological Park in November 2021 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 Anthropologist Oscar Paredes Pardo, Director of the Decentralized Directorate of Culture Cusco - Ministry of Culture, and by Ernesto Escalante Valencia, Ministry of Environment (National Service for Protected Area Management, SERNANP).
The projects were discussed with anthropologist José Bastante, Director of the Machupicchu National Archaeological Park, archaeologist Rosa Huilcanina, Chief of Visitor and Tourist Services Office, and park biologist Sr. Julio Ochoa.

This was the first volunteer trip of Conservationvip® to Machupicchu after the Covid19 pandemic lockdown. Seven volunteers, including Director John Hollinrake and trip leader Milagros Flores-Roman of ConservationVIP®, and the Licenciado Santiago Carrasco Bellota, performed 186 total hours of volunteer work related to the following projects: The primary jobs for the Conservation VIP volunteers during the November 2021 trip involved removing non-native grass and other plants in the Machu Picchu National Archaeological Park.

Specifically, during the first three days volunteers worked removing non-native grasses at the upper terraces below the Inca rock quarry within the Machupicchu National Archaeological Park Citadel. By removing pasto gordura (*Melinis minutiflora*) from multiple locations within the National Archaeological Park, ConservationVIP volunteers provided an important service to the Ministry of Culture and SERNANP and contributed to the preservation of the natural and cultural environment. Melinis minutiflora is particularly adapted to grow quickly in disturbed soils and in areas recently burned by wildfires. The officials at the Machu Picchu National Archaeological Park, and biologist Julio Ochoa in particular, want to eradicate this invasive species before it can completely replace native species.

The fourth day of work was performed at the Museo Manuel Ballon; it included clearing “Falso Kion” or false ginger. This is an invasive species that the group pulled out by the root and placed in bags. Additionally, volunteers assisted the Rangers cleaning an Inca wall in front of the museum of invasive plants that threatened damaging the wall. The area covered measured 500 meters in length x 2 meters wide.

Volunteers contributed 186 hours over a four-day period to remove *Melinis minutiflora* from the citadel terraces and the Museum Manuel Ballon area. The volunteers pulled and collected 69 large sacks of *Melinis minutiflora*, under the direct supervision of park biologist Sr. Julio Ochoa and his staff.

During the trip, ConservationVIP donated equipment to help with the management and protection of Machupicchu Sanctuary. The following items were received by Archaeologist Dr. Jose Bastante, Director Machupicchu National Archaeological Park:
- 2 units of trimming scissors
- 5 units of safety glasses
- 1 unit of First Aid Kit
Discussions were conducted with SERNANP and Ministry of Culture staff regarding the volunteers’ activities and future projects. Trip leaders will provide this report to Ernesto Escalante Valencia, Ministry of Environment (National Service for Protected Area Management, SERNANP), and to anthropologist José Bastante, Director of the Machupicchu National Archaeological Park.
Detailed Trip Report

Volunteers met the Trip Leaders and Licenciado Santiago Carrasco Bellota in Cusco on the afternoon of November 4 and spent the next one and one-half days acclimatizing and learning about the complex and storied culture of Peru. They visited the Cusco Cathedral on November 4. In the evening the volunteers enjoyed the fine dining of a traditional Peruvian dinner while enjoying the camaraderie of the volunteer group.
On Nov 5, volunteers visited several important sites including the Cusco Regional Museum, the Qorikancha, and the ancient Inka citadel of Sacsayhuaman for educational purposes to understand the complexity of the Spanish and Inka cultures.

Volunteers at the Inka Citadel of Sacsayhuaman

On Nov 6, enroute to Machupicchu, volunteers stopped at the town of Chinchero at an elevation of 13,500 ft., an indigenous village and former palace of Emperor Topa Inca Yupanqui. There they visited the 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 had an opportunity to purchase weavings directly from the weavers before heading to Ollantaytambo to catch the train to Machu Picchu Pueblo (Aguas Calientes). Upon arrival, the volunteers proceeded to check-in and enjoyed dinner at the Hotel Inkaterra Restaurant.

Volunteers at the weaving cooperative center at Chinchero  Volunteers heading to Machupicchu by train!
On November 7, Volunteers used their entrance tickets to visit Machu Picchu where they were guided by Lic. Santiago Carrasco Bellota to learn about the Inca culture, and preservation issues related to increased visitation as they toured the Sacred City. The volunteers returned that evening to Aguas Calientes and enjoyed a relaxing dinner at the Ayaska restaurant.

Panoramic view of the Machupicchu Citadel with Apus (sacred mountains) in the background

Volunteers in front of one of the energy rocks in Machupicchu
Archaeological Site Volunteer Project Description

The primary job for the ConservationVIP volunteers during the November 2021 trip was to return to Machu Picchu post-pandemic to reinforce Conservation VIP’s long-term commitment to working with the Ministry of Culture and SERNANP, providing assistance in protecting the cultural and environmental resources of the Machu Picchu region.

The biologist for the Sanctuary, Sr. Julio Ochoa again requested that the volunteers remove an invasive species of grass, *Melinis minutiflora*, continuing the project which was last performed by ConservationVIP volunteers in November 2019 prior to the Covid 19 Pandemic closure of Peru. 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 region, and biologist Julio Ochoa in particular, want to eradicate this invasive species before it is able to completely replace native species.

On November 8, volunteers commenced working on the terraces of the Llaqta (Citadel) below the Inca rock quarry, enjoying one of the most spectacular landscapes in the world. The area designated for removal of the “pasto gordura” consisted of eight terraces, each one lower than the other descending to a cliff that drops approximately 1000 ft. down to the Urubamba River. The volunteers worked alongside the Park’s staff, who provided guidance and who ensured that safe working conditions were observed by all.

Removal of the “pasto gordura” must be performed by hand, to protect the Inca ruins from damage by mechanical means, and to ensure the root system is destroyed. The use of herbicides in the Machupicchu National Archaeological Park is prohibited as the Park is a UNESCO World Heritage site, and the home to many rare and endangered flora and fauna. A total of 16 bags of “pasto gordura” were removed and destroyed by the Park Rangers.

*Rangers and Volunteers Working Together*
On November 9, volunteers continued working on the terraces, with the volunteers dividing into teams of two to work on a section of terrace, moving down the terraced slope as each terrace was cleared of “pasto gordura”. A total of 15 bags of “pasto gordura” were removed and destroyed by the Park Rangers.

On November 10, the Conservation Volunteer International Program Group at Machu Picchu continued working on the terraces to effectively eliminate the invasive weed from the area of terraces that represent the northern rock quarry terraces. A total of 13 bags of “pasto gordura” were removed.
Volunteers celebrating accomplishing their work at the Citadel of Machupicchu and expressing their joy by raising their arms in gratitude to the Pachamama (Goddess of Mother Earth) for such magical experience.

On November 11, the ConservationVIP volunteers were requested by Biologist Julio Ochoa to assist in the removal of the invasive “Falso Kion”, or False Ginger from the grounds of the Machu Picchu Museo Manuel Chavez Ballon and Botanical Gardens, and to help the Park Rangers clear and clean an Inca terrace wall that is located at the entrance to the Museum. Prior to commencing the work on the museum grounds, the volunteer group was invited to visit the Machu Picchu Museo Manuel Chavez Ballon and was then provided a guided tour of the Botanical Garden by Biologist Julio Ochoa. Thereafter the volunteer group commenced its work which resulted in the clearing an area of 500 meters in length x 2 meters wide of false ginger and filled 9 bags of plant material from the terrace wall.
During the four days of volunteer work, the volunteers and the park staff collected a total of 69 bags of "Pasto Gordura", covering an area of 8 terraces of 43,000 square feet. Additionally, invasive false ginger was removed from the Museum grounds, and the Inca wall at the entrance to the Museum.

On November 12, after volunteering in the Machupicchu National Archaeological Park, the group departed by train from Aguas Calientes heading to the archaeological park of Ollantaytambo where they were guided by Lic. Santiago Carrasco Bellota through the ruins, visiting the Temple of the Sun, and the beautiful Inca fountains and baths. The group visited a traditional Inca style home in the original village of Ollantaytambo, learning about the raising of guinea pigs (Cuy), and having the unique opportunity to observe an ancestral shrine inside the home. After the visit to Ollantaytambo, the group returned by bus to Cusco for a final volunteer group meal and celebration of a successful trip.

On November 13, The Machu Picchu Volunteer Trip ended with breakfast. Most volunteers extended their stay in Cusco and remained a few more days, including a visit to Rainbow Mountain, located 4 hours south of Cusco.

Having worked in an area of so much meaning is the reason behind this program. Safe Journey back home to our amazing volunteers. Until we meet again!
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 archaeologist Rosa Huilcanina, Chief of Visitor and Tourist Services Office Machupicchu National Archaeological Park, for hosting and spending time with our Volunteers. Many thanks also to biologist Julio Ochoa, and his staff, who spent much of the time working shoulder-to-shoulder with the volunteers. Conservation Volunteers International Program wishes to further acknowledge the support and guidance offered by Director of the Machupicchu National Archaeological Park Jose Bastante, with whom ConservationVIP looks forward to continuing to work to expand the scope of assistance that ConservationVIP can offer to this unique cultural and environmental site.

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 2021 Machu Picchu volunteers, for their efforts to help conserve Machu Picchu for future generations.

Respectfully submitted,

John Hollinrake and Milagros Flores-Roman,
Conservation Volunteers International Program