



Conservation Volunteers International Program

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PROJECT REPORT MACHU PICCHU SANCTUARY VOLUNTEER EXPEDITION November 5 - 14, 2012

Executive Summary

Conservation Volunteers International Program (Conservation VIP) organized and led a volunteer expedition to Machu Picchu Sanctuary, November 5 - 14, 2012, 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 Dr. David Ugarte, Regional Director, Ministry of Culture – Cusco, Biologist Dra. Ada Castillo, Director of the Santuario de Machupicchu for SERNANP, and by Anthropologist Dr. Fernando Astete, Director of the Historical Sanctuary of Machupicchu.

Eighteen volunteers, including the three trip leaders, and one local guide completed restoration of a variety of projects:

1. Maintained three kilometers of the Inca trail system: Putucusi Trail section, and trails inside the Orchid Garden) within the sanctuary, including the repair/installation of 14 water drains;
2. Removed plants and moss from trail retaining walls, seating/resting areas, and steps/tread;
3. Removed undesired vegetation from the edges of the trails that encroached within the two kilometer trail prism;
4. Cleaned 370 stone steps of plants and soil debris on the Inca Trail (Putucusi section);
5. Removed soil and vegetative debris from 9 stone steps on the Inca Trail covered by a landslide that occurred in 2012. (Putucusi section);
6. Planted approximately 15 trees on a slide-damaged area within the Orchid Garden adjacent to Machu Picchu Pueblo;
7. Cleaned and removed vegetation from 10 trees previously planted by CVIP volunteers in 2011 within the Orchid Garden;
8. Removed moss and plants from 60 sq. meters of rock walls, windows, and wall niches, within the Chachabamba archeological site at Km. 104 under the direct supervision of the Ministry of Culture site manager, Sr. Victor Pacheco.
9. Removed plants and vegetative debris from two fountains (15 sq. meters) on the north side of the Chachabamba archaeological site.
10. Carried 50 young alder trees from the Chachabamba SERNANP nursery approximately 2.5 km. to the site of the June, 2012 devastating wild fire for reforestation by SERNANP.
11. Ten water rescue life vests were donated by REI (Recreational Equipment Inc.) to the Search and Rescue Team of Machu Picchu Pueblo.

In total, volunteers donated 507 hours of time. In addition, volunteers donated approximately USD \$315.00 in new tools and equipment, and approximately USD \$300 in used equipment: Water bottles, knee pads, pants, personal water purification kits, and gloves.

Trip leaders will provide this report to Biologist Ada Castillo for SERNANP, and Dr. Fernando Astete, and the Administrator for the Ministry of Culture in Cusco. Discussions were conducted with community business leaders. All spoke favorably of the expedition and the positive effect of the project upon the cultural and natural resources, visitor safety, economic development in the community, and international bilateral relations. The Ministry of Culture and SERNANP representatives invited Conservation VIP volunteers to return to the Machu Picchu Sanctuary for additional volunteer opportunities.



Volunteers and Guides at Machu Picchu November 2012

Detailed Trip Report

On Monday, November 5, 2012 the trip leaders Rich Tobin, John Hollinrake, and Dr. William (Bill) Sapp III, with local guide Santiago Carrasco met with representatives from SERNANP and the Ministry of Culture to discuss work plans for the expedition. Meetings were conducted with Dra. Sara Justina Herrera Delgado, Assistant Regional Director of the Ministry of Culture, and with Dr. Fernando Astete, Machu Picchu Anthropologist, for authorization Volunteers and Trip Leaders,

and instructions related to the volunteer work to be conducted at Chachabamba.

All eighteen volunteers joined the four trip leaders in Cusco on Monday afternoon November 5, 2012. A safety discussion and trip orientation meeting was held in the hotel. Thereafter, a Cusco city walking tour was conducted by local guide Santiago Carrasco and Dr. Bill Sapp to provide a background on the history and culture of the region as part of the orientation training for the volunteers.

On Tuesday November 6th, volunteers participated in an orientation tour of Sacsayhuaman and the Awanakancha textile cooperative. During the afternoon of the November 6th, all volunteers traveled to the large terraced Inca archaeological site of Tipón, approximately 20 km. south of the City of Cusco. These orientation tours provided context for the upcoming week of work within the Machu Picchu Sanctuary.

On Wednesday November 7th, volunteers traveled from Cusco by bus to Ollantaytambo, then by train to Machu Picchu Pueblo (Aguas Calientes). After checking into the hotel, volunteers received a briefing by SERNANP Park Rangers Leonarda Quino Rodriguez, Wilbur Huillca Sairitupa, and Solano Perez Candia, then began working in the rare orchid section of the sanctuary with a variety of tools: shovels, rakes, clippers, cutters, nylon brushes, and hand

saws. Volunteers removed unwanted vegetation and invasive species within the trail tread, and cleaned the seating and resting areas of vegetation and moss. Fifteen trees were planted in a landslide area threatening the community of Machu Picchu Pueblo. Vegetation was removed surrounding ten trees that were previously planted by CVIP In 2011 in the landslide area.

On Nov 8th, 2012, all volunteers toured the Sacred City of Machu Picchu accompanied by local guide Santiago Carrasco and Dr. Bill Sapp.

On Nov 9th, volunteers began performing trail maintenance and repair on the Putucusi Trail.

On November 10th, the volunteers continued work on clearing and cleaning the Putucusi section of the Inca Trail. The volunteers completed their trail maintenance and repair of the Putucusi Trail on November 11th.



Pictures show removal of landslide mud and debris from Inca steps on Putucusi Trail, buried during storm and flood of 2009. Volunteers cleared all mud and plant debris from steps, and eliminated risk of further mud and plant debris from falling onto trail below cleared area.

Prior to removal of mud and debris from steps, hikers were forced to use temporary trail through jungle, causing further erosion and damage to critical habitat.

On November 11, 2012, the volunteers presented Personal Flotation Device rescue life vests (PFDs) donated by REI to the Machu Picchu Pueblo Search and Rescue team, consisting of local Police and Rangers: Darmiro Palomino Gonzales (Seguridad), Narciso Choque Valencia (Seguridad) Wilber Huillca Sairitupa (SERNANP), Leonarda Quino Rodriguez (SERNANP), Felix Quispe Escobar (Ministerio de Cultura), and Eleazar Ormachea Hurtado (Ministerio de Cultura). A presentation ceremony was conducted in the town plaza and all volunteers, guides, and members of the police and ranger force were present for the ceremony. In December 2012, volunteers from the Santa Barbara County, California, Search and Rescue Team, who have previously participated in CVIP volunteer trips, will return to Machu Picchu Pueblo for ongoing training, with an emphasis in swift water rescue, using the new PFDs.



Presentation of Personal Flotation Devices (PFDs) to Search and Rescue Team members at Machu Picchu Pueblo. PFDs were generously donated by REI. Swift water rescue training will be conducted in December 2012 by former participants of CVIP volunteer trips to Machu Picchu.

On Nov 12th, volunteers performed plant and moss removal from the walls, pillars, windows, niches, and fountains at Chachabamba archaeological site at Km. 104. Volunteers carried 50 young alder trees from the SERNANP nursery at Chachabamba to the location of the June 2012 brush fire. Volunteers saw recent fire damage to the trail, and received historical and natural history information from SERNANP staff. Volunteers hiked from Km. 104 to the Sun Gate at Machu Picchu accompanied by a SERNANP Ranger.



Volunteers at Chachabamba prior to work project cleaning stones and mortar, and removal of vegetation.



Volunteers carefully removing plant and moss from stone pillar. Chachabamba.



Removal of plant material from terrace and water fountain at Chachabamba.

On November 13th, 2012, upon completion of all work assigned to volunteers by SERNANP and the Ministry of Culture, participants returned to Cusco by train and bus with stops in Ollantaytambo and Pisac. Our final dinner on November 13th included a presentation of traditional cultural music and dance. Most volunteers departed on November 14th; several volunteers stayed for further travels in Peru, or traveled on to Bolivia and Ecuador.

Trail Maintenance

Orchid Garden. Volunteers again this year maintained this popular trail within the rare orchid area of the sanctuary, a distance of approximately one km. Three previously created water drains were maintained to ensure water properly drained away from the trail. All of the rock steps and three resting/seating areas were cleaned of loose soil debris, vegetation, and moss to improve safety. Vegetation and Invasive plant species within the trail prism were cut back or removed along the entire length of this trail to improve safety for hikers, and enable the orchids to thrive.

Putucusi Trail. Volunteers cleaned, cleared, and maintained the entire lower half of the Putucusi Trail from the entrance gate to the new guardhouse just below the ladders, approximately 2 km distance. A major landslide in 2010 covered 9 Inca steps between the cave and the base of the ladders. Volunteers removed all of the mud, dirt, and vegetative debris covering the Inca steps. Dirt and debris was carefully distributed away from the debris field to prevent it from falling onto the existing trail below. This area represented approximately 10 linear meters of trail. Prior to the clearing and removal of this mud and debris, hikers were the trail by walking on plants and damaging trees and shrubs.

The trailside vegetation and moss growing on all of the Inca stones for the entire distance from the entrance gate at the railroad tracks to the base of the ladders were cleaned, representing a distance of approximately two km. Three hundred seventy (370) Inca steps were cleared of loose soil debris and plant materials.

Ten previously created drainage dips were maintained, and three new dips were created, to reduce future erosion of the trail. The trail is now clear of all debris, mud, and vegetative matter from the entrance gate to the base of the ladders.

Reforestation. SERNANP requested the assistance of the volunteers to carry 50 young alder trees from the nursery at Chachabamba up the Inca Trail from Km. 104 to the location of the brush fire that occurred in June 2012. This area was in the process of being reforested by SERNANP personnel while the volunteers passed along the trail. The devastation and erosion observed by the volunteers in the burned area provided an opportunity for the volunteers to understand why reforestation is a critical activity of SERNANP, and the importance of the volunteers assistance in delivering the trees to the site of the reforestation.

Chachabamba Inca Site Vegetation Removal. The Ministry of Culture requested the assistance of the volunteers in removing moss and plant material from the walls, pillars, windows, niches, and fountains of the Inca site at Chachabamba. The volunteers were provided an orientation and were instructed by local site manager Victor Pacheco in the proper technique for removing moss and plant material. During a three hour work session, the volunteers cleaned approximately 60 sq. meters of the wall surfaces of the site. Vegetation and dirt was removed from two of the fountains located on the north side of the site.

Acknowledgments

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Report prepared by John Hollinrake, Executive Director
Conservation Volunteers International Program