

# IMPLEMENTATION OF AN ORCHID RESCUE CENTER AT THE EL PAHUMA ORCHID RESERVE, ECUADOR

Project Final Report

**Ceiba Foundation for Tropical Conservation  
1605 Monroe St., Suite 104, Madison, WI 53711**

**20 January 2014**

## **Background**

The El Pahuma Orchid Reserve is a privately-owned forest protected since 2000 under a conservation easement held by the Ceiba Foundation for Tropical Conservation (U.S. 501(c)(3) EIN# 31-1565636). The purpose of the reserve and associated conservation project is to protect native Ecuadorian orchid species and their natural habitat, and to provide public education on the biology and conservation of this popular group of plants. In August 2008, the Ministry of the Environment of Ecuador formally licensed El Pahuma as one of the country's several orchid rescue centers (Centros de Rescate) for plants that are either displaced by development projects or decommissioned from illegal collections. We received \$1,455 in support from the San Diego County Orchid Society to establish a secure location to maintain the orchids received and support the ongoing care of the orchid plants by reserve staff and volunteers.

## **Goals and Activities**

The orchid rescue program at the El Pahuma Orchid Reserve had the original goals of 1) providing a safe and prosperous home for the estimated 1000-2000 orchids being rescued from the expansion of the Los Bancos – Santo Domingo road, 2) creating interpretational materials about the orchid rescue program, and 3) reintroducing native orchids into the wild. We proposed to use the funds from SDCOS specifically toward completion of two related activities, namely **the establishment of a secure location for keeping rescued orchids, and the maintenance and use of the orchid collection.**

## **Use of SDCOS funds:**

The \$1,455 requested from SDCOS was combined with Ceiba's \$500 contribution and in-kind support of the El Pahuma reserve itself and the local government's Environment Department to establish the rescue facility and re-establish the rescued plants. Ceiba's contribution paid 25% of the wages for Giovanni Lima to care for the orchids and travel to the Quito Botanical Garden to receive training in orchid care. The local Department of Environment agreed to contribute transport of the plants from rescue sites to the reserve. The El Pahuma reserve contributed time and travel costs for meetings with the Ministry of Environment (MAE) to legalize the rescue center, cleared a 0.5 ha area in the forest understory to house plants, and contributed 50% of the Giovanni's salary to care of the orchids, and roughly 25% of the salary of the reserve manager's time to oversee the project. The Quito Botanical Garden provided training to Giovanni Lima and offered a discounted supply of growing media.

Due in part to it taking longer than expected for the Ministry of Environment to approve El Pahuma's "patente", a mechanism for the legal management of flora and fauna on private lands, and six month extension for using the funds was requested by El Pahuma in June 2009, and granted. Furthermore, \$400 of the \$900 destined for the gardener's salary was spent on the costs (including legal fees and elaboration of a management plan) to obtain the "patente" which was required by the Ministry of Environment. The remaining \$555 to be used for supplies and consumables, with only minor changes from the proposal budget. Unfortunately, despite considerable cost and effort to obtain the "patente", and a willing local environment department ready to transport plants, no additional authorizations to transport specified loads of orchids to El Pahuma were granted by the MAE. In the end, a total just over 250 plants were brought to the reserve. Documentation of the changes and a final budget detailing how all funds were spent are appended to this report.

### **Project Evaluation:**

The orchid rescue project was monitored through self-reporting by the Lima family and field visits by Ceiba. In the process of obtaining the "patente", there was a change of personnel in the department administering these licenses, and despite several requests, no further authorizations were granted to transport rescued orchids to El Pahuma. It is unclear why this is the case; it may be due to personal conflicts between Efraín Lima (the owner of El Pahuma) and the MAE field staff, or his son (Rene Lima) who had been spearheading the reserve's involvement in the rescue effort. It may also have been because the MAE selected reserve's around Mindo instead, since they were closer to the road building project. The 100 Phragmepediums, a few bromeliads and some palms were maintained at the El Pahuma reserve until September 2009 when the MAE picked them up to be taken to the Mindo site. It was disappointing to the Lima family and all of us at Ceiba that despite obtaining the external financial support, the unpredictable and somewhat capricious nature of Ecuadorian bureaucracy made El Pahuma unable to obtain more rescued plants.

Although the rescue effort itself fell short for a number of reasons, the funds from this project improved El Pahuma's capacity to care not only for the rescued plants while they were on site, but for the hundreds of other plants in its native plant garden. The water tank and tubing was absolutely necessary for ensuring the survival of the orchids through the dry season, and are still functional and in place. The training and salary support Giovanni received applied equally well to his ability to care for the reserve's own orchid collection, and he remains the most capable manager of the orchid collection at the reserve to this day. Hence the funds received by SDCOS provided a direct long-term benefit to the reserve.

**FINAL REPORT**

**BUDGET - Ceiba Foundation for Tropical Conservation  
IMPLEMENTATION OF AN ORCHID RESCUE CENTER AT  
THE EL PAHUMA ORCHID RESERVE, ECUADOR**

Line #	ITEM	PROPOSED USE OF FUNDS			ACTUAL		
		UNIT COST	# UNITS	TOTAL COST	AMT. REQUESTED	AMT. USED	REASON FOR CHANGE
<b>Materials and supplies</b>							
1	construction materials for growing benches and frames (wood, bamboo, chicken wire, nails)	\$30.00	8	\$240.00	\$240.00	\$240.00	
2	6" plastic pots (box of 50)	\$37.95	10	\$379.50	\$0.00	\$0.00	
3	5" plastic pots (box of 50)	\$28.95	10	\$289.50	\$0.00	\$0.00	
4	fern bark, pine bark and sphagnum media (50 lb bags)	\$8.50	15	\$127.50	\$0.00	\$0.00	
5	spools of wire	\$3.00	10	\$30.00	\$30.00	\$30.00	
6	handtools (pruners, trowels, shovels)	\$50.00	1	\$50.00	\$50.00	\$50.00	
7	250 gal. water tank	\$45.00	1	\$45.00	\$45.00	\$45.00	
8	200 m hose	\$0.70	200	\$140.00	\$140.00	\$140.00	
9	tags and signage	\$50.00	1	\$50.00	\$50.00	\$0.00	not needed
new	transport of materials					\$50.00	overlooked in initial proposal; transport of materials and water tank
<b>Personnel</b>							
10	gardener salary per month	\$150.00	12	\$1,800.00	\$900.00	\$500.00	other half provided by Ceiba
new	legal fees for obtaining patente (permit) for management of wild species					\$400.00	change in use of funds requested and approved by SDCOS
11	training materials	\$50.00	1	\$50.00	0	0	provided by QOS free of charge to Giovanni
<b>TOTALS</b>				<b>\$3,201.50</b>	<b>\$1,455.00</b>	<b>\$1,455.00</b>	

### **Justification of Amounts Requested**

- 1 New growing benches are needed because hundreds of new plants will be acquired and they need a place to be maintained
- 5 For hanging orchids and wiring together pots made locally from plastic mesh
- 7 There is no nearby reservoir; water is run to growing area in a hose from nearby stream and will be stored in a tank.
- 8 see above
- 9 Rescue Center guidelines require all plants to be labelled with name, date and provenance
- 10 Most important budget item! The reserve does not have personnel currently on staff to care for rescued plants.

Additional costs will be covered either by the Ceiba Foundation, by the El Pahuma Orchid Reserve, or by other funding sources. If a donation of pots cannot be obtained, the gardener will spend part of his time fabricating pots from locally available mesh and wire.

Quito, Junio de 2009

Señores  
FUNDACION CEIBA  
Quito.-

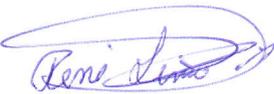
De nuestras consideraciones,

Por medio de la presente, la Reserva Orquideológica "Pahuma", solicita de la manera más comedida a Ustedes, la prórroga en la asignación de los recursos destinados para el Centro de Rescate de la Reserva, cuyo monto es de MILCUATROCIENTOS CINCUENTA Y CINCO DOLARES AMERICANOS con 00/100 (1450,00 USD), por un período de seis meses calendarios que corren a partir de la reunión mantenida el 22 de Junio de 2009.

En espera de saber pronto de Ustedes, muchas gracias por su atención.

Atentamente,

  
Ruth Lima  
RESERVA ORQUIDEOLOGICA "PAHUMA"

  
René Lima  
RESERVA ORQUIDEOLOGICA "PAHUMA"

Quito, 19 de agosto del 2009

Señores  
FUNDACION CEIBA  
QUITO.-

La presente tiene por objeto solicitarles un cambio en el uso de los fondos que fueron asignados para el plan de rescate del Pahuma.

En la reunión mantenida en el mes de julio acordamos que el monto de 1.455,00 dólares asignados para el centro de rescate se los invierta en un jardinero durante un año que cubriría los 900,00 dólares para el pago del salario y los 555,00 dólares restantes serían utilizados para la compra de suministros para el centro de rescate.

De estos valores se solicita que se haga un desembolso para la compra de un tanque de agua que servirá para dar riego al jardín. Esta compra es urgente debido al verano.

Le agradezco de antemano por la atención que se digne dar a la presente.

Atentamente,



Ruth Lima



René Lima

Quito, 30 de Septiembre del 2009

Estimados Joe y Catherine,

El objeto de esta carta es saludarles y agradecerles porque ya compramos el tanque de agua y ya se está utilizando en la reserva para el riego y las cabañas.

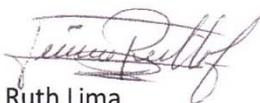
Por otro lado queremos solicitarles el desembolso del saldo para continuar con el proyecto, es decir cambio de nutrientes, masetas y de mesas de guadua. En este momento contamos con la colaboración de René, Roberto y Geovanny para poder ejecutar lo antes posible este trabajo.

Revisando el presupuesto, de los 1.455,00 nos hemos gastado ya en el tanque y el transporte del mismo: 190,24, reservamos los 900 para el pago del jardinero y nos queda un saldo de 359,76. En eso está incluido, los materiales necesarios para la renovación de las plantas dentro del jardín botánico.

Como ya tenemos los requisitos para el cambio de la patente, queremos saber si es posible que nos colaboren con los 400,00 dólares para pagar el trámite. La diferencia cubriríamos nosotros que es lo que cobra el ingeniero para hacer el plan de manejo.

Nos gustaría que nos den una respuesta lo antes posible para no demorarnos más tiempo en este trámite.

Les agradecemos de antemano, cuídense mucho.



Ruth Lima



Ceiba Foundation for  
Tropical Conservation

17 Octubre 2009

Estimada Ruth,

Nos alegre que el proyecto de rescate de plantas en Pahuma esté procediendo bien. Por medio del presente, autorizamos el desembolso de \$359.76 para la compra de materiales para la renovación de las plantas dentro del jardín botánico. Anota que, como siempre, requememos las facturas para toda compra hecho con estos fondos, entregado mensualmente a Carmen Játiva. Favor de coordinar directamente con ella para la entrega de esa documentación.

En cuanto a la patente, se quedará \$900, entonces pueden sacar los \$400 para la patente de esos fondos. Entonces les quedaría \$500 para empezar a pagar un jardinero hasta encontrar otra fuente de financiamiento. Lastimosamente, Ceiba no puede ayudarles con fondos adicionales por el momento porque nos encontramos con un presupuesto bastante estrecho.

Espero su comprensión.

Saludos cariñosos,

Catherine

cc: Carmen Játiva