

## Special Report/OCI Funds Conservation Efforts in Mexico and Colombian Andes

ORCHID Conservation International is pleased to announce that it has recently awarded its first two grants for orchid conservation. The first was given to Johnson Bridgwater of WildShare International for an *Orchid Conservation Program in the El Cielo Biosphere Reserve* in Tamaulipas, Mexico. The second went to two young Colombian researchers, Ana María Benavides and Angela María Patiño, who are becoming increasingly concerned at the accelerating destruction of their native orchids as a consequence of habitat destruction and the extensive extraction for horticultural purposes.

Ana María Benavides is an associate researcher with the Biodiversity Group of the Corporación para Investigaciones Biológicas (CIB), and Angela María Patiño is a Master's student at the Instituto de Biología of the Universidad de Antioquía. They have been awarded funding for a project entitled *Epiphyte Orchid Distribution and Population Dynamics on a Disturbance Gradient in Andean Cloud Forests* in the Arví Regional Park.

**MEXICO** Bridgwater's grant will allow WildShare International ([www.wildshareintl.org](http://www.wildshareintl.org)) to continue to work hand in hand with the local citizens of El Cielo on a holistic plant-conservation project. WildShare International will collaborate with the University of Oklahoma and the Institute of Ecology and Food (Autonomous University of Tamaulipas), as well as community members from Alta Cima and Joya de Salas. The grant will furnish seed money to carry out a field study aimed at establishing baseline characteristics related to analyzing the habitat and abundance of three of El Cielo's rarest orchids, *Euchile* (syn. *Prosthechea*) *mariae*, *Stanhopea tigrina* and *Laelia speciosa*. It is expected that the results of the field work will be published in 2008.

### Grants in 2007

ORCHID Conservation International is offering a second round of orchid grants for 2007. If you are interested in applying for a grant, you can find details on the organization's Web site (<http://orchidconservation.org/>).

The use of this grant will result in heightened awareness of the plight of Mexico's orchid populations for both local inhabitants of the reserve and thousands of annual visitors by funding the materials and manpower needed to implement an educational orchid program at the Jardín Botánico de Alta Cima, where a permanent educational display featuring living specimens and bilingual graphic displays will be installed. In an effort to reduce human impact on the orchids' wild populations, an educational program is being created that will be presented to all the villages in the vicinities of where these orchids occur.

For periodic updates on the El Cielo project, visit [www.elcielobiosphere.org/conservation.html](http://www.elcielobiosphere.org/conservation.html). For further information: Johnson Bridgwater (e-mail [jbridgwater@wildshareintl.org](mailto:jbridgwater@wildshareintl.org)).

**COLOMBIA** Lack of information about how the disturbance of forest affects native orchid populations delays conservation efforts. Although this type of study is time- and labor-intensive, it is relatively simple to implement and can be a powerful conservation tool. Orchid population monitoring programs produce invaluable information for evaluating population viability, for understanding the factors that affect population decline and for long-term population management. Such studies are indispensable for species conservation guidelines. The Arví project is designed to use such techniques to determine orchid epiphyte distribution and population dynamics in undisturbed and disturbed Andean forests.

Arví Regional Park is one of the few protected areas along the Andes in Colombia. Located between 5,250 and 8,200 feet (1,600 and 2,500 m) in the central cordillera, close to Medellín, and covering an area of \_\_\_ square acres (11.25 ha), the park is composed of natural



ABOVE Ana María Benavides in Arví Regional Park, Colombia, where she and co-worker Angela María Patiño are studying orchid conservation.

forest in different states of conservation and includes agricultural areas and forest plantations. Due to the combination of conditions, climate, altitude and location, the area remains orchid rich, and the park is a strategic place for regional conservation.

This project aims to establish permanent plots consisting of a total of 350 trees of differing sizes and representative species along a transect down the mountainside. Benavides and Patiño will employ rope climbing techniques to access the epiphytes where necessary. Individual plants will then be tagged with metal labels and sections of root removed for later microscopic examination for the presence of mycorrhizal fungi. The resulting data will provide basic information about local orchid diversity and distribution that can be used to assess population viability in different orchid species. The project also provides an opportunity for local people to contribute by generating information for orchid conservation.

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