

## Orchid Habitat Loss, Preservation, and Restoration I

As orchid growers we mimic the natural habitat of orchids in our greenhouses and windowsills. As we know, the closer to ideal cultural conditions the better our orchids will grow. So it is the same with orchids in their natural habitats. We also know for the most part that orchids are niche growers. They need specific cultural requirements or natural elements to survive. The natural habitat for many orchids has been degrading in the last century and a half at an ever-rapid pace. There are many pressures that have been growing that are taking their toll on the environment. Changes in temperature, humidity, rainfall and weather pattern, all falling under the heading climate change or global warming, slowly degrade habitat but are fast enough so that orchids cannot evolve to the conditions or spread to more favorable areas. Development like road building, agriculture and housing directly destroy orchid habitat. We need to be smarter with the resources that we have.

The Orchid Conservation Coalition has started a new initiative to document and bring stories of orchid habitat loss, preservation and restoration to the orchid growing community and the public. The first seven orchid conservation stories can be seen at: <http://www.orchidconservationcoalition.org/hl/index.html>



*Calochilus pulchellus* and its original habitat before rescue. This habitat is lost to development. photos by Alan Stephenson

The stories include three from Australia about *Calochilus pulchellus*, *Corunastylis superba*, *Prasophyllum affine* and *Cryptostylis hunteriana*. *Corunastylis superba* is known from one area, part of which has been wiped out by the placement of a gas line. Road building may have done in the rest. On these web pages you can read about the struggle to save *Calochilus pulchellus*, *Prasophyllum affine* and *Cryptostylis hunteriana* from development. Only formally described in March 2007, *Calochilus pulchellus* was known from 25 plants before 5 of those orchids were threatened by destruction from development. The story tells of relocating the orchids literally in front of the earth clearing machinery. The ultimate success of this relocation is yet to be determined.

There is a picture of deforestation in Bolivia near where the second ever plant of *Masdevallia vasquezii* was found and the only site for *Masdevallia burianii*.

The story from Ecuador is about the commercial growing of naranjilla in the Pastaza River valley. This is the same valley that the EcoMinga Foundation (<http://www.ecominga.net>) is trying to save in part with it's Rio Anzu Reserve.

From Indonesia, there is a story about the regular burning of fields and forests in Central Sulawesi. This forest is very rich in orchids, many of which are still undescribed and known from nowhere else.



*Dendrobium vogelsangii* regenerating on a burned tree in Central Sulawesi. photo by Peter O'Byrne

From Nebraska, USA, there is a story about the saving by volunteers and Omaha Henry Doorly Zoo of *Cypripedium candidum* from a habitat that had become a lost cause because of development of roads and houses. This site is only one of seven known sites of *Cypripedium candidum* in Nebraska.

It is relatively easy to change and control our growing areas in *ex situ* especially when compared to the elements in a natural orchid habitat. In our growing areas we can change things quickly. In the wild it is harder to reverse damage to orchid's natural habitat and even harder once that habitat has been destroyed and you're trying to reestablish an orchid species. Our growing area does not stop at the edge of our windows or the door of our greenhouse. The earth and it's habitats are our collective greenhouse. We are responsible for much of the damage to the cultural conditions of this greenhouse. It is up to us to change and correct the natural habitat the best we can so that orchid species can continue to grow for future generations.

If anyone knows or wants to add habitat loss, preservation or restoration stories to this initiative, please contact the Orchid Conservation Coalition at: [information@orchidconservationcoalition.org](mailto:information@orchidconservationcoalition.org)