

## Orchids - Conservation & Preservation

I noticed an interesting thread on The Orchidboard (summer, 2016), and decided to elaborate on it here.

**CITES** = *Convention on International Trade in Endangered Species*.

CITES is an international convention, ratified by most countries (incl. the US). It is best described as a prohibitive organization.

It was designed to protect animals (banning trade in elephant ivory, rhino horns, etc.). At the last moment, the founding conference added plants, without proper recognition of the differences between animals and plants. Example:

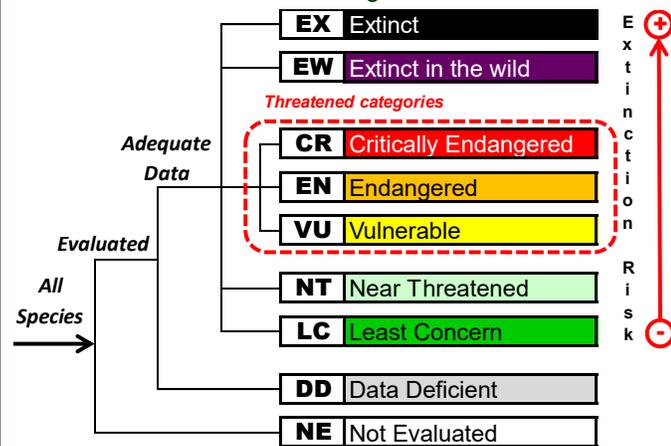
- If you possess a rhino horn, **odds are that the rhinoceros is dead.**
- If you possess an orchid seed pod:
  - ⇒ **Odds are that the plant is still alive.**
  - ⇒ **A seed pod can produce 10,000+ seedlings in the lab, but at best 1 or 2 in nature.**

The net result of CITES, is that international trade in many orchids (*Paphiopedilum* in particular) is virtually impossible. For those interested in more detail, I suggest reading 'Orchid Fever' by Eric Hansen.

**IUCN** = *International Union for Conservation of Nature*

This is a voluntary membership organization, which evaluates the status of animal, plant and fungi species. They claim 1300 government organizations and 16,000 scientists as members, and their goal is to evaluate 160,000 species by 2020.

Their definitions are illuminating and useful:



To clarify:

**Extinct** = No living members anywhere.

**Extinct in the Wild** = exists only in private collections, or in populations transplanted outside of the original range of this species.

**Extirpated** = No longer lives in this region of the original range, but still exists in other regions.

While extinction in the early days could be laid squarely at the feet of orchid collectors, who shipped out thousands of

plants to Europe, and burned off the forest so other collectors could not supply the same species, there are many other causes today. These range from loss of habitat to global warming (I am not going into the causes here, but there can be zero argument about the fact, that significant warming is taking place).

Some of the stories about **EW** species are pure serendipity, while others are more mundane.

**Laelia gouldiana** from Mexico has not been seen in the wild in generations, but it is widely grown in private gardens. This species has smaller, but darker, flowers than *Laelia anceps*. It blooms in Nov-Dec with 3-6 flowers on a tall spike. The cultural requirements are identical to those of *Laelia anceps*.



From the serendipity class comes the story of **Epidendrum ilense**.



A botanist (or orchid collector?) walked through an area of recently cleared forest somewhere in Ecuador. He noticed some orchids on the ground, which he had not seen before, and saved them from rotting or burning.

To the best of my knowledge, this species has never been found in the wild since. It is still alive in a few botanical gardens and nurseries. With that large & frilly white lip, this species has been used to hybridize with. I used to have a meristem of **Ett Haiku Twinkle 'Red Elf'** (*Ctt. Trick or Treat* x *Epi. ilense*); I discovered that it can rebloom on old flower stems (setting a side branch).



There are several global seed banks, which might have seed from some of the species already extinct, but that is no assurance that those seeds will be sown, germinated and plants reintroduced. Anyone owning plants in the **VU** through **EW** categories, should consider self-pollinating their plants, if the plant is strong enough to carry a pod.

If you do not want to produce a large quantity of plants by yourself, you can offer the pod to Troy Meyers (Meyers Conservatory), or any orchid nursery that you have good

I tried this with *L. gouldiana*, but apparently this species is self-infertile, so I did not get a pod (2 plants are needed!).