

**"We set out to save as many species as we could from extinction"**



Coronated tree frog



Lemur leaf frog



Green-and-black poison frog



Panamanian golden frog



La loma robber frog



Tabasara rain frog



La hondura robber frog



Limosa harlequin frog



### DID YOU KNOW...?

Frogs and other amphibians have lived on Earth since the time of the dinosaurs – that's around 360 million years!

### Fatal fungus

A fungus (a kind of mould) called chytrid had taken hold in the El Cope national park to the west of El Valle. It was wiping out almost all the amphibians in its path as it spread through the frogs' favourite hangouts – rivers, pools and streams. Attacking the skin through which they breathe, the fungus killed around 80% of frogs wherever it travelled. Things were looking bad for the poor amphibians!

But Edgardo and fellow scientists from Project Golden Frog came up with a clever plan to bring the amphibians back from the brink. They would build a special centre in the area where frogs could be kept safe from the fungus. They would also be bred in captivity, in case their species disappeared in the wild. And once the chytrid problem passed, the frogs could be reintroduced to their natural habitat. Biologists and conservationists from all over the world looked to help

the frogs. And, in 2005, the El Valle Amphibian Conservation Center (EVACC) began to take shape at El Nispero Zoo in the little town of El Valle de Antón.

### Hoppers' hospital

"We focused on some of the amphibians we thought were most at risk, which turned out to be frogs, and then set out to save as many species as we could from extinction," explains Paul Crump, a British

amphibian conservationist from Houston Zoo in Texas, USA, who has been involved with EVACC since the project began.

The top team of scientists and volunteers quickly learned to cure infected frogs with daily soaks in an anti-fungal bath, kept tanks and water clean, and made sure the frogs had fresh plants to hop around on.

"We had to learn to look after animals that had never been kept in captivity before," says Edgardo. "First of all, we needed to figure out how to feed them!"

Grasshoppers, crickets, termites and ants all proved tempting dishes for the hungry hoppers – as long as their insect snacks were still alive and wriggling. Yum!

### Species saved

Brilliantly, the team's hard work has paid off. EVACC is now home to around 250 hi-tech tanks, complete with tropical plants and pools of filtered water, housing more than 800 fit and healthy frogs.

Edgardo, who is now the centre's director, and his team look after almost 50 frog species. They've succeeded in saving six different types of frog, which they're convinced have now disappeared in the wild. And while some captive critters have yet to breed, lots of the frogs are becoming parents – many times over!

What's more, EVACC has built a special amphibian exhibition centre where local people, schools and tourists visiting the area can pop in and get up close with some of the amazing amphibians that used to thrive in the forest around them. It's also a place where they can learn about the huge challenges these creatures face. "It's an important part of the project," says Edgardo, "because spreading the word can inspire people to help." So far, about a quarter of a million visitors have shown support by hopping by!

### Help and hope

And more help is on its way. A second rescue centre at Summit Zoo – close to the country's capital, Panama City – has been set up so that more of these precious animals can be saved.

So while chytrid continues to spread through the country's forests, scientists are hard at work, studying the species that are immune to the disease, such as the marine toad and red-eyed tree frog.

"Perhaps we will find a special kind of vaccine to protect them in the wild," says Paul, "or learn to breed amphibians that can fight off the fungus effects."

"Keeping these frogs alive so far is a victory, and the babies that have been born at EVACC are a reward," Edgardo says. "But we hope to figure out how to beat chytrid in the wild, so these animals can return to where they belong!"

It's clear that Edgardo and his team aren't giving up on their croaking chums. So hopefully, one day, they'll be bouncing back to health – and their forest home!