

# The IUCN Red List of Threatened Species™ 2009 update

## Amphibian Facts



Total species assessed in = 6,285 (up by 25 since last year – but note that there have been taxonomic changes since last year, which will affect the figures)

Total EX or EW = 39 (1%) [EX = 37; EW = 2]

Total threatened = 1,895 (30%) [CR = 484; EN = 754; VU = 657]

Total NT = 382 (6%)

Total DD = 1,597 (25%)

Total LC = 2,372 (38%)



### **Kihansi Spray Toad (*Nectophrynoides asperginis*) - EW**

This toad was described in 1999, and in last year's Red List it was assessed as Critically Endangered, although it was acknowledged that the species may already have disappeared from the wild. This year it is formally declared Extinct in the Wild. The species was only known from the Kihansi Falls, in the Udzungwa Mountains, Tanzania, where it was formerly abundant, with a population of around 17,000 animals. The population showed natural fluctuations in size: it was at a high in May 1999, dropping to lower numbers in the course of 2001 and 2002, and at a high again in June 2003 when the total population was estimated at 20,989 individuals. However, since then the population has gone into steep decline, and by mid-January 2004, only three toads could be found, with just two males heard calling. There were a few records of calling animals during the rest of 2004, and an unconfirmed report from May 2005, but there have been no records of the species since then despite surveys. The extinction of this species in the wild appears to have been related to the Lower Kihansi Hydropower Project, which, in 2000, involved the construction of a dam upstream of the Kihansi Falls. This removed 90% of the original water flow to the gorge, thereby hugely reducing the volume of spray, particularly in the dry season, as well as altering the vegetational composition. An artificial gravity-fed sprinkler system was set up to mimic the natural spray of the Kihansi ecosystem with the remaining water flow. Unfortunately, the sprinkler system was not ready by the time the water flow was reduced in 2000, and by the time the sprinklers were used (nine months later) the ecosystem had already dried up. Later, during the dry season in 2003, the artificial sprinkler system failed for a while. Around this time, the fungal disease chytridiomycosis was confirmed in dead Kihansi Spray Toads, and this disease is probably responsible for the final population crash. It is possible that the drought caused by the failure of the sprinkler system resulted in stress to the animals that rendered them susceptible to the disease. There are also reports that the 2003 crash coincided with a brief opening of the dam's floodgates to flush sediments; tests showed that these contained pesticides used in maize farming operations upstream, in concentrations sufficient to kill the toads. Photo © [Tim Herman](#)



### **Rabb's Fringe-limbed Treefrog (*Ecnomiohyla rabborum*) – CR**

This newly described treefrog (described in 2008) enters the Red List as Critically Endangered. It is known only from central Panama, where it occurs in tropical forest canopies. In 2006, the chytrid fungus *Batrachochytrium dendrobatidis* was reported in the area where this species is known to occur. Only one individual has been heard since the chytrid fungus was detected. There is also some ongoing forest clearing within the species' range for the development of luxury holiday homes, although it has not yet reached critical levels. This species has been one of several collected for captive breeding efforts (a total of five individuals, including one female have been collected from the wild for this). So far, however, attempts at captive breeding have not produced positive results. Photo © [Brad Wilson](#).