



## AMPHIBIANS IN DRAMATIC DECLINE; UP TO 122 EXTINCT SINCE 1980; NEARLY ONE-THIRD THREATENED WITH EXTINCTION

Decline points to urgent need to improve water management

**October 15, 2004, Gland, Switzerland (IUCN)** – The world's amphibian species are under unprecedented assault and are experiencing tens of thousands of years' worth of extinctions in just a century, according to the most comprehensive study ever conducted.

Today, IUCN, Conservation International and NatureServe published the key findings of the Global Amphibian Assessment in *Science Express*, based on the work of more than 500 scientists from over 60 nations. The article is also scheduled to appear within the next few weeks in the journal *Science*.

Over the past three years, scientists analyzed the distribution and conservation status of all 5,743 known amphibian species – which include frogs and toads, salamanders, and caecilians. Of these, 1,856 – or 32 percent – are now considered threatened with extinction. In addition, sufficient data are lacking to accurately assess the status of nearly 1,300 other species, most of which scientists believe are also threatened.

Amphibians are widely regarded as "canaries in the coal mine," since their highly permeable skin is more immediately sensitive to changes in the environment, including changes to freshwater and air quality.

"Amphibians are one of nature's best indicators of overall environmental health," said Russell A. Mittermeier, president of Conservation International (CI). "Their catastrophic decline serves as a warning that we are in a period of significant environmental degradation."

Key findings of the study include:

- According to the *IUCN Red List of Threatened Species*, at least 1,856 amphibian species are threatened with extinction, representing 32 percent of all species. By comparison, only 12 percent of all bird species and 23 percent of all mammal species are threatened.
- At least nine species have gone extinct since 1980, when

the most dramatic declines began. Another 113 species have not been reported from the wild in recent years and are considered to be possibly extinct.

- 43 percent of all species are in population decline; fewer than one percent are increasing. Twenty seven percent are stable, and the rest are unknown.
- 427 species are considered Critically Endangered (CR), 761 are Endangered (EN), and 668 are Vulnerable (VU).
- Colombia has 208 threatened amphibian species the most in the world – followed by Mexico with 191, Ecuador with 163, Brazil with 110, and China with 86. Haiti has the highest percentage of threatened amphibians, with 92 percent of its species at risk of extinction.

"Since most amphibians depend on freshwater and feel the effects of pollution before many other forms of life, including humans, their rapid decline tells us that one of Earth's most critical life support systems is breaking down," said Simon Stuart, Senior Director of the IUCN/CI Biodiversity Assessment Unit, and leader of this research.

Pollution of waterways and destruction of habitat are the lead causes of the decline in amphibians. Pollution treatment and prevention are therefore recommended measures, not just for the survival of amphibians, but for the health of ecosystems and the communities that live within them as well. Further, conservation of habitat and the implementation of mitigation measures for the construction of infrastructure are key measures.

Conservation of habitat becomes especially important where ecosystems provide a range of water services, which may include flood control, water purification or groundwater recharge, or where there is a strong dependence of local communities on biodiversity. In some regions of the world, amphibians and other freshwater species are important sources of protein, and are a source of income where they are traded on local markets.

"The decline of amphibians is alarming news because the status of freshwater species is a measure of the health of our rivers, the health of our water supply and the livelihoods of riparian communities," said Dr. Ger Bergkamp, Coordinator of the IUCN Water & Nature Initiative.

Finally, allocation of specific amounts of water to ecosystems – where they maintain livelihoods, water services or unique biodiversity – is a measure that requires urgent attention in water management.

## More information

Complete data about each species, as well as country and regional breakdowns, is available starting Thursday afternoon at www.globalamphibians.org.

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