

The Hogsback's Threatened Frogs-a report by PhD student Jeanne Tarrant
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I recently visited the Hogsback region for fieldwork as part of my PhD research. The broad aims of the project are to re-assess the status of South Africa's threatened frog species (currently standing at twenty one species listed as Critically Endangered, Endangered or Vulnerable) and in particular to determine the distribution of the amphibian fungal disease, chytridiomycosis, and to investigate whether this disease is having any impact on the Country's threatened species. The disease is having a devastating impact on species around the world, but fortunately has not been found to cause massive die-offs in South African populations.

Hogsback is home to two Endangered species, aptly named the Amatola Toad (*Vandijkophrynus amatolicus*) and the Hogsback Chirping Frog (*Anhydrophryne rattrayi*). Both species have a very restricted distribution and are threatened by the forestry plantations in the area. The toad, being a grassland species, is at higher risk than the Hogsback Frog (which occurs in indigenous forest) since grasslands are not offered the same level of formal protection as the forests; by law removal of indigenous forest is now prohibited. As such, none of the toad's range is formally protected.

The Amatola Toad (see picture below) is a relatively small toad with a maximum size of 37 mm. They are usually a uniform dark-grey or olive in colour with a thin line running down the centre of the back. The skin is typically "toady", with many warts and conspicuous paratoid glands behind the eyes. The call is described as a nasal squawk, which males issue from concealed positions, usually during rain. The Hogsback Frog (see picture below) is one of South Africa's smallest species, reaching about 22 mm in length. Their colouration ranges from light grey to copper to dark brown, with irregular markings and they have a dark band running from the fore-arm, across the eye to the snout. They are identifiable by their high-pitched *ping-ping* call, which males emit from concealed positions on the forest floor, especially in misty weather.



During my recent visit we surveyed known sites for both species. We heard the Hogsback frog calling at a number of locations – along the paths to both the Madonna and Child and Kettle Spout waterfalls as well as at Hobbiton. An individual female was eventually found by Steve Boyes and Kirsten Wimberger about halfway down the path to Madonna and Child. The species appears to occur in numerous places is likely quite widespread throughout the indigenous forest patches. We swabbed the frog for the disease-causing fungus and released it back to where it was caught.

More worryingly, we did not find any evidence (that is, neither the adults of tadpoles) of the Amatola Toad. In fact, the last time it was recorded was eleven years ago in 1998! Granted, the area has not been surveyed regularly and it may be that our

visit took place before enough rain had fallen to prompt breeding activity from the toads, but this lack of evidence of the toad may be cause for concern. There are still a number of grassy wetland sites that may potentially be home to the toad, although most of these are surrounded by plantations, which accelerate the drying-out of the wetlands. I do plan to visit the area again over the new-year, when hopefully enough rain has fallen to warrant the toads emerging from their slumber in the soil. Lets hope I find some!

Lastly, plaintive rain frogs and their eggs were found by a Hogsbackian resident (Ticia) and brought to us, which were very special sights. Below are photos of the frog as well as the eggs.



Until next time, Jeanne Tarrant
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