



Verband tussen amfibiër-habitatsbenutting en bloedparasiet-infeksievlakke in die Pongola-vloedvlakte

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Correlation between amphibian habitat utilisation and blood parasite infection levels the Pongola floodplain. Frogs play an important role in the food web where they serve as both predators and prey. They thus play a key role in the stability of most ecosystem communities. Studies have shown that there is high correlation between the relative abundance of prey in the area, and the frequency these species are found in the gut contents of frogs in that same area. Southern Africa has a rich frog diversity. Frogs are highly adaptive organisms and have established in almost every suitable habitat on the subcontinent. Even though frogs are found in a wide variety of environments, most species are very specific to the particular habitat in which they are able to survive in and more importantly reproduce in. The aim of this study is to assess and document amphibian species diversity and habitat viability in the Pongola floodplain situated below the Pongolapoort Dam in northern KwaZulu-Natal. To investigate the effect of habitat utilisation on parasite diversity and infection levels a blood parasite survey on the amphibians in this area will also be conducted. In the life cycle of these blood parasites the vector is often either a mosquito or a leech. The leech is more likely to infect the more aquatic species while the mosquito will infect the terrestrial species. The hypothesis of this study is that the parasite species composition will reveal information that will enable us to better understand habitat requirements and utilisation.

Paddas speel 'n belangrike rol in die voedselketting waar hulle as beide predatore en prooi optree, en hul speel dus 'n sleutelrol in die stabiliteit van ekosisteme. Navorsing toon dat daar 'n noue verband is tussen die voorkoms van prooi in die area, en die frekwensie waarin hierdie spesies in die maaginhoud van paddas in dieselfde area aangetref word. Suider-Afrika is ryk in paddadiversiteit. Paddas is hoogs-aanpasbare organismes en het hulself gevestig in bykans elke geskikte habitat op die subkontinent. Alhoewel paddas in 'n wye verskeidenheid omgewings aangetref word, is meeste baie habitat spesifiek. Die doel van hierdie studie is om amfibiër-spesiediversiteit sowel as habitatbenutting in die Pongola-vloedvlakte in noordelike KwaZulu-Natal te dokumenteer. Om die effek van habitatbenutting op parasietdiversiteit en infeksievlakke te bepaal, sal bloedparasiet-opnames van amfibiërs in hierdie omgewing gemaak word. Die vektor vir hierdie parasiete is gewoonlik muskiete of bloedsuiers. Bloedsuiers is geneig om akwatiese spesies te infekteer, terwyl muskiete terrestriële spesies infekteer. Die hipotese van hierdie studie is dat parasiet-spesiediversiteit inligting sal openbaar wat sal help om habitatvereistes en -gebruik beter te verstaan.