

THE MOUTHS OF BABES

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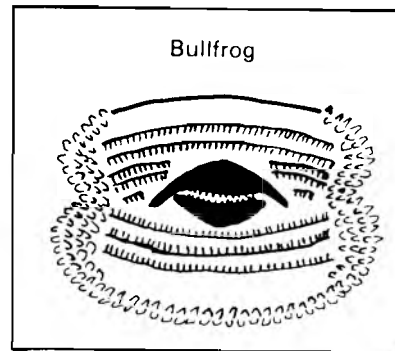
Small grey blobs moving slowly through the water and we do not even notice them. A mass of small black blobs might just warrant a second glance, but how many people are prepared to give a tadpole more than a passing glance.

Upon closer observation, tadpoles in their shape and size, vary from one family to another as much as the adult frogs into which they will one day metamorphose. Perhaps, as in the case of the Bullfrog (*Pyxicephalus adspersus*) the change from tadpole to frog might only take about 30 days, but it could also take from one to two years as in the case of the common Rana (*Rana angolensis*).

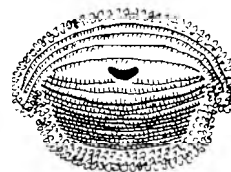
The mouth of the tadpole is of special importance. For anyone who is prepared to observe the tadpole mouth through a low powered microscope an amazing sight will be revealed. A tadpole mouth is specifically designed for the environment into which it will hatch and for coping with the type of food it will eat. The mouth may be simple as in the Platanna (*Xenopus laevis*) which filters plankton by gulping the water or it may be more complicated as in the Running frog (*Kassina senegalensis*) which is capable of biting large pieces out of leaves. But all in all, the tadpole mouth is a super efficient organ for collecting food and each species of tadpole has a unique mouth structure. By its mouth a tadpole can therefore fully be identified.

A tadpole mouth is made up of two horny plates, the **suprarostrodont** and the **infrarostrodont**, which form the jaws for biting. Above and below the jaws are rows of comb-like teeth known as the **keradonts**. The mouth area may be partly or totally surrounded by rows of **papillae**. These then are some of the criteria used to identify tadpoles. The fact that not all tadpoles have these structures, is in itself a means by which they can be identified.

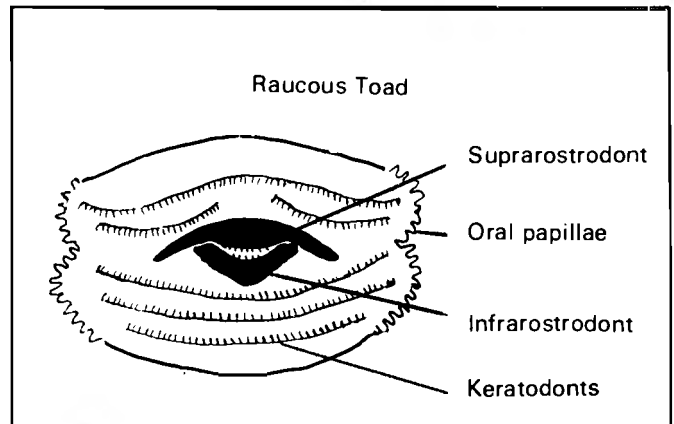
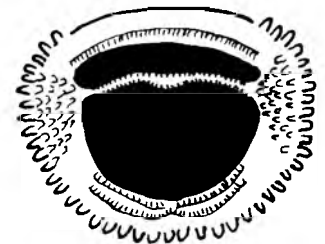
The simplified drawings (after Wager 1965) will illustrate how complicated and variable the mouth of the tadpole can be.



Ghost Frog



Running Frog



Platanna



BIBLIOGRAPHY

- DISK, D.E. VAN. 1966. Systematic and field keys to the families, genera and species of Southern African Anuran tadpoles. *Ann. Natal Mus.* 18: 231-286.
WAGER, V.A. 1965. *The Frogs of South Africa*. Cape Town: Purnell & Sons (S.A.).