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Zoology (4)

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Topic Parental Care of Amphibia

→ The Amphibians were the pioneers amongst the Vertebrates to invade land. On coming to this new Environment they had to face many hostile forces and they had to develop various ways & means to overcome the obstacles.

Naturally Greatest Importance was given to the perpetuation of race, so that they can ultimately win the struggle.

- As a result, the reproductive mechanism had undergone extensive modification. Rearing or caring of the offsprings is an achievement in the trend of evolution. It will be unwise to think that the care of young is a mammalian monopoly.

→ Factors affecting parental care ⇒

Parental Care Amphibia seems to have developed independently in the animal kingdom. There are various ways by which the parental care is manifested in amphibians.

→ Selection of Site

→ Care of the Eggs is restricted to the selection of Site in amphibians.

The Eggs are washed out into the water of the streams of or ponds by the rains and development starts there.

① Frothing of water

→ Some anurans just after the laying of the Eggs, the surroundings water is made frothy by wriggling movement of hind limb, so that the Eggs are preventing from desiccation and also can escape the sight of enemies. Both males and females participate in the process.

② foam Nest

= According to Mallik, Mallik and Das (1980), Polypedates (= Rhacophorus) maculatus. The foamy mass looks like an irregular ball.

⇒ After lying of Eggs the Parents take Care of them by building nests. Three types of nests are encountered

They are

MUD NEST

↳ In Hyla faber, Parent dig a small hole in the mud for the developing Eggs and the surplus mud acts as the was.

Leaf Nest

↳ In Phyllomedusa, a South American, the leaf nest is built by holding the margins are glued together by cloacal secretion. It has an aperture at the base and the nest overhangs water area.