

PARENTAL CARE IN AMPHIBIA

Looking after the egg & young until they are independent, to depend from predator, is known as parental care.

[1] protection by nests, nurseries developed countless interesting methods to give protection to their defenceless eggs & larvae from predators.

1. Selection of site

Many frog and toad lay egg on land near water. Many on leaves and branches overhanging water. *Phyllomedusa*, *Rhacophorus* glue their eggs to foliage hanging over water free from reach of aquatic egg predator in their microhabitats, the tadpole on hatching drop into water to complete metamorphosis.

2. Defending egg

In *Rana clamitans* maintain territories & attack small intruders to defend eggs. Male or female even guard egg. Some tree frog laying egg above water may sit beside the egg & rest on top.

3. Direct development

In *Hyla nebulosa*, the egg hatch directly into frog thus avoiding larval mortality.

4. foam nests

Many amphibian convert mucous secretion into nest for young. In American tree frog *Leptodactylus mystacinus*, stir up a frothy mass of mucus fills it in hole near water and lays egg in them.

5. Mud nest

In *Hyla fabre*, the male digs a little crater like hole in which female lay egg.

6. Tree nests

South American tree frog *Phyllomachus hypochondriacus* lays egg in a folded leaf nest with margin glued together by cloacal secretion. tadpole when formed fall straight into water below.

7. Gelatinous bags

In *Salamandrella Keyserlingi*, a small aquatic salamander also deposit 50 to 60 small eggs in a gelatinous bag which is fastened to aquatic plant.

[11] Direct carrying by Parent

1. Coiling around eggs

In *Ichthyophis*, the female lays egg in burrow in damp soil and guards them by coiling her body around them until they hatch.

2. Transferring tadpole to water

In *Phyllobates*, deposit their egg on ground. The tadpole hatching out, fastens to the back of one of parent with their sucker like mouth and transported to water.

3. Eggs glued to body

Many amphibian such as *Desmognathus fuscus*, female carries the string of egg coiled around her neck until they have hatched.

4. Eggs in back pouches

In *Hyla gaeldii* the posterior part of back of female forms a sort of incipient brood pouch in which eggs remain exposed.

In *Nototrema*, the eggs are covered by skin forming a single large brood pouch which opens past. in front of cloacal aperture.

5. organs as brooding pouches

Male of terrestrial South American Darwin's frog, *Rhinoderma darwini*, pushes at least two fertilized eggs into his vocal sac.

In west African tree frog *Hylambates blewingei*, the female carries eggs in buccal cavity.

6. Viviparity

Some anurans are ovoviviparous. They retain eggs in oviducts & female give rise to living young.

Viviparity is widely common in order Gymnophiona.