

# **Aestivation (Summer sleep or summer dormancy)**

- **Some animals have ability to remain dormant during unfavourable summer months when there is water scarcity or intense heat.**
- **Aestivation is shown by desert animals And variety of them like snails, ground squirrel etc.**

- **some show aestivation & hibernation. e.g. Snails show hibernation / aestivation according to availability of water.**
- **Ground squirrel aestivate in summer and hibernate in winter.**

- **Normally in insects, during summer the adults die but the eggs & pupae survive by remaining dormant.**
- **In case of snails, sawbugs, shrimps adults remain dormant in unfavourable condition.**

- **Desert Amphibians. show aestivation / dormancy**
- **Ex. Spade foot toad – has spur like projection on hind leg for digging. In drought period it starts digging & burrows in the soil. It encloses itself in gelatinously material, mud, sand & remain their for 8-9 months. It wake up with 1st showers of rain & life cycle is completed in 3 months.**

- **In the same manner ticks & mites show dormant condition. They remain dormant during winter & summer & remain active only during spring.**
- **e.g. Dermacentre (Rocky mountain wood tick)**

- **Mammals like kangaroo rat, pocket mouse aestivate when there is scarcity of food**
- **whereas in white footed mouse aestivation occurs when there is shortage of water.**
- **In some birds like swift aestivation is due to scarcity of food.**

- **A very unique phenomenon is shown by lung fishes like Protopterus, Lepidosiren, Neoceratodus which show aestivation.**
- **They remain alive in earthen cocoon for many years & for this purpose they store urea in their tissues to absorb water.**
- **The metabolic rate falls to 1/100 due to which they can aestivate for a long period.**