



## Brumation a Survival Strategy in Reptiles

[Source: TH](#)

Recently, researchers have shed light on a survival strategy employed by [reptiles](#) known as **brumation**.

- Brumation refers to a **state of dormancy or reduced activity** in reptiles, akin to [hibernation in mammals](#), typically occurring in colder months with limited food availability and is a natural part of their cycle.
  - Reptiles are **cold-blooded vertebrates**. (Vertebrates have backbones.) They have dry skin covered with **scales or bony plates** and usually lay soft-shelled eggs.
- Reptiles enter brumation to **conserve energy and endure harsh conditions** when temperatures drop and food becomes scarce, allowing them to survive until they can **reemerge for feeding and reproduction** in favourable environments.
- Reptiles retreat to sheltered areas like **burrows or rock crevices**, slowing metabolism to endure extended periods without eating.
- Researchers have documented instances of brumation in various reptilian species, including **turtles, snakes, and lizards**, each exhibiting unique behaviours to cope with adverse conditions.

### HIBERNATION

Hibernation is a state of inactivity and decreased metabolism in some endotherms\*, such as bears.

Hibernation usually takes place during extreme cold temperatures when the body decreases body temperature and slows heart rate and breathing to conserve energy.

\*Endotherms (warm-blooded) regulate body temperature internally. Humans are endothermic.



### AESTIVATION

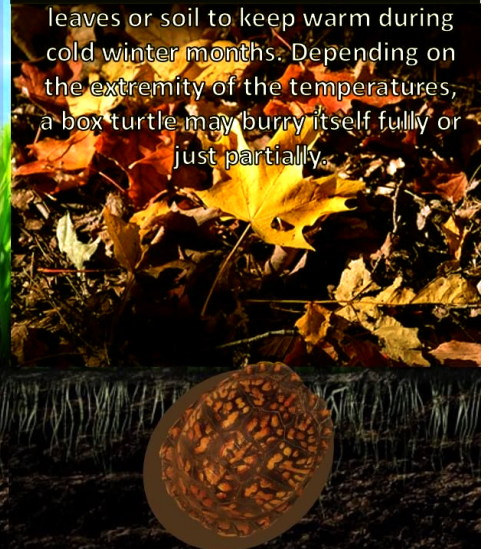
Aestivation refers to a state of inactivity in ectotherms\* that occurs during extreme warm temperatures. Box turtles will aestivate in shallow forms, or depressions, in the soil. This allows them to stay moist and cool.



\*Ectotherms (cold-blooded) depend on external sources to regulate body temperature. All reptiles are ectotherms.

### BRUMATION

Brumation is a hibernation-like phase of inactivity in ectotherms during extreme cold temperatures. Box turtles will burry themselves in leaves or soil to keep warm during cold winter months. Depending on the extremity of the temperatures, a box turtle may burry itself fully or just partially.



Read more: [World's Smallest Reptile](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/brumation-a-survival-strategy-in-reptiles>

