

Anatomical, physiological and behavioral adaptations of Gerbil for the conservation of water

Gerbil is the small in size about 5-25cm, burrowing rodents which possess the soft-fur with sand colored and contain the long hind-legs. Gerbils are lived in the desert, grasslands and in dry-sandy places. They possess a large middle ear which recognize the less-frequency sounds such as the flapping wings of the owl which is greatly helpful for them to prevent from the predators. In addition, if they observe the danger then they adopt behavioral adaptations by thumping their tails that warns to the other gerbils to enter into their burrows. Usually, they have more surface area than volume so the water is evaporated from their body immediately. The temperature is high in deserts so, they can't spend much time in the day-light so, mostly gerbils are active during night-time and they gather the seeds with moisture.

Moreover, where the gerbils are lived there the environment is hot so they burrowed into the underground to protect from the immense heat of the day which is helpful adaptation for them to protect from the burning heat and the water is also conserved. Mostly gerbils are founded in the hot desert so, they adopt various adaptations to conserve water for their survival. Usually, their bodies don't contain the abundant of water hence, they take much of their water from the plants which they are used as a feed. Their feces are too dry and the urine is also concentrated hence water is lose too little.

