Echidna

Tachyglossus aculeatus

Echidnas, with their distinctive spines and tubular snout, are familiar to most Australians. The echidna and platypus are monotremes (mammals that lay eggs), which are only found in Australia and New Guinea. They have many features which are reptilian in nature such as their egg laying, legs that extend outward then downward, and a lower body temperature (about 31-32°C) than other mammals.

Echidna. Image © Adam Holbrook

Description

Echidnas are 30 cm to 45 cm in length and weigh between 2 kg and 5 kg with Tasmanian animals being larger than their mainland counterparts. The body, with the exception of the underside, face and legs, is covered with cream-coloured spines. These spines, which reach 50 mm in length, are in fact modified hairs. Insulation is provided by fur between the spines which ranges in colour from honey to a dark reddish-brown and even black. The fur of the Tasmanian subspecies is thicker and longer than that of echidnas in warmer mainland areas and therefore often conceals the spines.

Distribution

The echidna is common throughout most of Australia and lowland New Guinea. In Tasmania it is particularly common in dry open country on the east coast. It is also found on open heathlands and in forests and can sometimes be seen slowly wandering along roadsides in its characteristic rolling gait.

Lifestyle

The echidna is shy and moves slowly and carefully, but can usually be approached by treading softly. It is solitary for most of the year but at mating time several males may follow a female. Their activity patterns differ with location and temperature — in the warmer parts of Australia it is completely nocturnal, spending the daytime resting out of the heat. They typically shelter in rotten logs, stumps or burrows, or under bushes. In more temperate areas foraging occurs around dusk, while echidnas in southern Australia are often active during the day, particularly during winter.

If disturbed, echidnas will usually lower the head, and with vigorous digging, sink rapidly into the ground leaving only the spines exposed. On hard surfaces they will curl into a ball — presenting defensive spines in every direction. They are also capable of wedging tightly into crevices or logs by extending their spines and limbs.

The echidna is adapted for very rapid digging, having short limbs and powerful claws. The claws on the hind feet are elongated and curve backwards—to enable cleaning and grooming between the spines. However, despite this, they are infested with what is said to be the world's largest flea — *Bradiopsylla echidnae*, which is about 4 mm long.

Surprisingly, echidnas are good swimmers, paddling about with only the snout and a few spines showing. They have been seen to cross wide beaches to swim and groom themselves in the sea.

Male echidnas, like their relative the platypus, have a spur on each hindfoot. However, unlike the platypus the spur is blunt and the venom gland is not functional.

Breeding

The breeding season for echidnas is from the end of June to September. Two weeks after mating, a single rubbery-skinned egg is laid directly into a small backward-facing pouch which has developed in the female. After 10 days the egg hatches and the young remains in the pouch

During the following period of lactation the female spends most of her time in a burrow but will leave the young behind, covered with soil or wood fibre, to go

foraging. As echidnas lack nipples, the mammary glands secrete milk through two patches on the skin from which the young suckle. When juvenile echidnas start to develop spines they are often left in a burrow by the mother for several days at a time while she goes out to feed. Echidna milk is extremely rich and the devloping juvenile can maintain its growth even though it may only feed every two to four days when she returns. Juveniles are eventually ejected from the pouch at around two to three months of age as growing spines cause discomfort for the mother. Suckling gradually decreases until the juvenile is weaned at about six months of age.

Diet

The diet of echidnas is largely made up of ants and termites, although they will eat other invertebrates— especially grubs, larvae and worms. The strong forepaws are used to open up the ant or termite nest and the echidna then probes the nest with its sensitive snout. Any insects in the nest are caught on the echidna's 15 cm tongue, which is covered with a layer of sticky mucous and moves very quickly, hence the name *Tachyglossus* meaning 'fast tongue'. The jaws are narrow and have no teeth so food is crushed between hard pads which lie in the roof of the mouth and on the back of the tongue. Large grubs are squashed and the contents licked up. Echidnas eat a lot of soil and ant-nest material when feeding, and this makes up the bulk of droppings.

Status

The echidna is common and widespread. They are less affected by the clearing of land than many other native animals as they can live anywhere that there is a supply of ants. Despite their covering of spines they do have natural predators such as eagles and Tasmanian devils— which even eat the spines! They were a favourite food of Aboriginal people and early white settlers although they are now wholly protected by law.

How you can help

- Drive carefully! Many cars are so low that they will clip echidnas even if driving over them. So, drive *around* echidnas if it is safe.
- If there are echidnas in your area, leave gaps under fences where possible to allow them to roam freely.
- Control your dogs and prevent them roaming — they can easily kill echidnas. If an echidna wanders into your backyard and you are alerted by your dog barking, then remove the dog from the immediate area, when the echidna senses it is safe it will continue on its way.
- Do not pick up echidnas without protection. Their spines are very sharp and can cause local infections. Also, echidnas often break their snouts when dropped. If an echidna is injured or in danger and has to be handled, the best method is to place it in a sack or plastic garbage bin.
- Echidnas are very faithful to a 'home range' so should not be relocated; in particular you might be relocating an adult female who has a dependant juvenile in a burrow.

Further information

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