

ECHIDNA (*Tachyglossus aculeatus*)
FACT SHEET

General Information

- The Short-beaked Echidna is one of three living monotremes or egg laying mammals.
- Echidnas can be found in all climatic conditions and ecosystems within the Australian bioregion.
- Echidnas are usually solitary living.
- Echidnas have good sense of orientation.
- Echidnas should not be translocated.*
- Echidnas are key cultivators who enhance soil aeration, moisture penetration, nutrient mixing, seed dispersal and spread of mycorrhizae.*
- Echidnas cannot be aged by size or body weight.
- Male echidnas show distinct seasonal variations in body mass.
- Presence or absence of pouch or spur cannot be reliably used to sex an echidna.
- Echidna numbers cannot be assessed by frequency of foraging digs.
- Echidnas in the wild and captivity can live for more than 50 years.



Natural History

- Echidnas are not territorial; home ranges overlap.*
- An active home range can be in excess of 250 hectares.*
- Home range size is influenced by habitat and food availability.*
- Echidnas ingest a large variety of invertebrates including grubs, worms, nematodes, soft bodied insects, ticks, beetles, invertebrate eggs, insect larvae, ants, termites, carrion insects and other cryptic invertebrates.
- Individual echidnas show individual food preferences. They do not eat out a given source but do return at specific times to feed on selected sources.*
- Not all food sources ingested by an echidna leave evidence in the faeces.
- Foraging echidnas produce a series of characteristic digs or soil disturbances: nose pokes, bulldozing (turning the surface soil in continuous patches), shallow digs (< 5cm) and deep digs (> 5cm and as deep as 30cm).*
- Echidnas (and platypuses) have the lowest operative body temperature (31-33°C) of any mammal.
- Echidnas can use torpor, a physiological process of lowering body temperature, heart rate, respiration and metabolism, at any time of the year. Torpor is an energy saving mechanism that may relate to food availability.

Reproduction

- Echidna breeding period is between late June and early September.
- A female echidna usually becomes sexually mature (ie produces her first young) at five to seven years of age, but may be as old as 12 before reproducing.*
- Females produce only one egg per breeding cycle.
- Female breeding cycles are individualistic and may be as infrequent as once every five years.*
- Males can be sexually active each year.*
- There are generally more sexually active males in a given year than sexually receptive females.

- 'Echidna Trains' are part of the courtship behaviour. One female (often the largest individual by weight) attracts any number of males.
- The largest 'train' recorded in recent years was eleven individuals.*
Courtship trains can last between 2 and 60 days.*
- Echidna copulation (intromission) lasts between thirty minutes to two hours.*
- Within 48 hours of breeding the female no longer attracts males.*
- The gestation period is 22 days \pm 12hrs.*
- The female lays her single egg directly into the pouch.*
- A lactating female echidna can forage up to eighteen hours a day and during that time produce more than 1,000 digs. After weaning the young, the same female may feed for one hour a day and produce as few as thirty digs.*
- Displaced lactating females will travel great distances trying to return to a burrow young.*
- Unless a female is carrying a puggle, there is no obvious way to visually distinguish between a male and female.

Young and Recruitment

- A pouch young echidna is called a 'puggle'.*
- There is no teat for the young to attach to, it uses its front legs to hang onto the hairs in the mother's pouch.
- The young suckles milk from an area called a 'milk patch' which is located where a nipple would be expected.
- Young remain in the pouch for 45 to 55 days, depending on the size of the mother and are then placed in a nursery burrow.*
- Once in a burrow, the female returns only 2hrs every 5 days to suckle the young.*
- Young are weaned at about 7 months of age.*
- There is no mother offspring relationship after weaning.*
- Young echidnas disperse from the natal area at twelve to 18 months of age and can move more than forty kilometres to establish a home range.*
- Ten to 15% of young die within the first twelve months through normal causes such as pneumonia, parasites, and natural predation.*

Threats

- On Kangaroo Island, in addition to the natural predator, Rosenberg's Goanna, a further 25% of burrow young echidnas are killed by feral cats.*
- Australia wide, echidna remains have been found in scats of feral cats, dogs, foxes and pigs.
- The use of low wire electric fences is fatal to echidnas.*
- Residual agricultural chemicals and new compounds formed through chemical interaction with unusual soil types find their way into the echidna food chain.*
- Road kills have a major impact on echidna populations across Australia.

*Material from © field research of Rismiller & McKelvey 1988 – 2017. Pelican Lagoon Research & Wildlife Centre, Penneshaw, SA 5222. E-mail: echidna@kin.net.au

