



EASTERN QUOLL BREEDING AND SPECIES RECOVERY PROGRAM

The eastern quoll (*Dasyurus viverrinus*), also known as the eastern native cat, is a medium-sized carnivorous dasyure marsupial native to Australia.

Eastern quolls are generally about the size of a small domestic cat, with adult males measuring 53 to 66 cm in total length, including the 20 to 28 cm tail, and having an average weight of 1.1 kg. Females are significantly smaller, measuring 48 to 58 cm, including a 17 to 24 cm tail, and weighing around 0.7 kg. They have a tapering snout, short legs, and erect ears. They can be distinguished from all other species of quoll by the presence of only four toes, rather than five, on the hind feet, lacking the hallux.

They have a thick coat covered by white spots, that can be either light fawn or near black, with off-white underparts stretching from the chin to the underside of the tail. Both fawn

and black individuals can be born in the same litter, although in surviving populations the former represent about three times more common than the latter. The spots are 5 to 20 mm in diameter, and are found across the upper body and flanks, from the top of the head to the rump, but, unlike some other species of quoll, do not extend onto the tail.

Females possess a relatively shallow fur-lined pouch formed by lateral folds of skin. The pouch becomes enlarged during the breeding season and includes six to eight teats, which only become elongated and functional if one of the young attaches to them, regressing again after they leave the pouch. As with all quolls, the penis of the male bears an unusual fleshy appendage. The large intestine of eastern quolls is relatively simple, having no caecum, and not being divided into a colon and rectum. An unusual feature of eastern quolls is the

presence of an opening connecting the ventricles of the heart in newborn young, in addition to that connecting the atria found in all marsupials. Both openings close after a few days.

The Australian Wildlife Society as part of its Wildlife Animal of the Year initiative is supporting Australian Ecosystems Foundation in the recovery of this rare, near-extinct Australian marsupial predator. Trevor Evans, a founding member of AEFI and Australian Geographic 2010 Conservationist of the Year, has been breeding eastern quolls at Secret Creek Sanctuary since 2003 and now holds the largest captive breeding population on mainland Australia. This population is becoming increasingly important as the species continues to disappear throughout its remaining range. Eastern quolls are extinct on mainland Australia, and Tasmania has been the last stronghold for this quoll for many years. However, there is now evidence

of a 10-year decline in population numbers in Tasmania and a submission has just been made to list the species as Threatened in this last island refuge.

AEFI is part of the Mainland Eastern Quoll Recovery Team, a group dedicated to conserving the species on mainland Australia. The quolls are exchanged with other private sanctuaries in New South Wales and Victoria, and each year new quolls are brought up from Tasmania to ensure good levels of genetic diversity in the captive population.

The aim of the breeding program is to return the eastern quoll to the wild on mainland Australia. AEFI is working through a seven-step reintroduction process, which includes genetic testing of the captive population to make sure they are fit enough for release, and disease testing to make sure the quolls don't introduce anything to wildlife at the reintroduction site and also to make sure they are not susceptible to any diseases already out there in the wild.

Eastern quolls are beautiful animals, with light to chocolate brown coats covered in white spots, providing them with perfect camouflage as they move through the bush with great speed and agility. These quolls are a medium-sized marsupial predators, growing



up to the size of a small domestic cat, and are capable of hunting animals the size of a rabbit. However, they are predominantly insectivorous eating a variety of small prey as well as vegetation and fruit. They were once widely found from northern New South Wales down to Victoria and South Australia, but the last confirmed sighting on the mainland was in the Sydney suburb of Vaucluse in 1963. Quolls are part of the Dasyurid

family and related to the Tasmanian devil, the now extinct Tasmanian tiger and the smaller Dasyurids such as antechinus.

If you would like to support this project to secure the future of this endearing spotted marsupial carnivore, please make a donation. All donations of \$2 or over are tax deductible. To donate to this program go to our website at www.australianwildlife.net.au under 'Projects'.

