FAQs for Primary School students

With contributions from the Year 6 and Year 7 classes, Albany Hills Primary School, Queensland

http://kangaroo.genomics.org.au

KANGAROOS

(1) Approximately how many kangaroo species are there?

Kangaroos belong to the superfamily *Macropodoidea,* often informally referred to as macropods, which means 'great-footed'. This superfamily includes 19 species in New Guinea and 49 species in Australia, and includes kangaroos, wallabies, wallaroos, pademelons, tree-kangaroos, and forest wallabies. Kangaroos and wallabies are the most abundant subfamily in the *Macropodoidea*, with 61 species in total.

Eastern Grey Kangaroos

Photo courtesy of Assoc. Prof Geoff Shaw
Department of Zoology, The University of Melbourne

(2) Can the red kangaroo take longer to have a joey during a drought so that there is good fresh grass when its baby arrives? How can they do this, if it is true?

Red kangaroos, like many macropodid marsupials (kangaroos and wallabies) can hold an embryo dormant while they are suckling a young in the pouch (for more information, refer to: http://kangaroo.genomics.org.au/public/tammar/?Tammar_wallabies:Tammar_Reproduction). This delay is controlled by suckling, however; not by drought conditions. In a severe drought, the mother's milk may dry up, at which stage the dormant embryo will reactivate and be born about one month later. This stimulates milk production again, and the baby then climbs to the pouch and starts sucking. The mother may get pregnant again, and if so, that embryo stays dormant while there is young being suckled in the pouch. In a very severe drought, the mother will stop her reproductive cycles so if she loses the young she will not get pregnant until good weather (rain) allows her to start reproducing again.

(3) Can any other Aussie marsupials control when they have young?

Many Australian marsupials reproduce seasonally, but only kangaroos and wallabies have lactation-controlled, delayed embryo growth like that described above in question 2.

(4) How long do kangaroo joeys spend in the pouch and why?

A joey – also known as a 'pouch young' – gets ready to leave the pouch when it is about 200 days old (almost seven months old), although this varies somewhat with species (there are 61 species in the kangaroo/wallaby family – see Question 1, above). Up to this age, the joey stays in the pouch where it is safe and warm. By about 200 days of age the young has developed the ability to regulate its body temperature on its own. It is then able to stay outside of the pouch where it has to cope with varying air temperatures. For a few weeks, the joey spends time both inside and outside the pouch, and when it is about 250 days old (depending on species), it leaves the pouch permanently. Joeys still keep drinking their mother's milk after first leaving the pouch, but as they get older, they start eating more grass and having less milk, until they finally wean.

(5) Can joeys fall out of the pouch while their mothers are jumping?

Small pouch young are rarely lost this way, but in the last few months of pouch life, when the young is large and growing rapidly, they may be lost from the pouch, especially if the mother is chased by a predator or is otherwise disturbed. By this stage, the young may still be able to get back into the pouch if the mother returns for them.

(6) I read in the paper that kangaroos are often culled. What do you think of the government doing this? (PS: I've heard that some vets say they agree with it!)

Culling kangaroos is a controversial issue and there is not space here to really answer your question. One of the arguments for culling is that with some species, the population will rise as the animals breed, until they have eaten all their food resources. This causes severe environmental damage to the vegetation and erosion. Once this happens, the kangaroos will die in huge numbers from starvation. Government authorities that manage the land have to weigh the costs of culling kangaroos with the environmental and other consequences of not culling. Often they decide to cull small numbers when necessary, to keep the population at a sustainable level and to avoid environmental damage and loss of other species that may result with unmanaged kangaroo population levels.

(7) I don't like them having to be culled. Can you tell me any other way to prevent too many kangaroos?

There are very few options at present to manage kangaroo populations in the huge areas of outback Australia. Some research work is being done on contraceptives (see http://www.conservation.bees.unsw.edu.au/koala/), but these may not be a practical alternative for some time.

http://kangaroo.genomics.org.au

For more educational information, go to 'Resources' at:
http://kangaroo.genomics.org.au