Site 3: Long-nosed bandicoot case study

Scientific name:	Perameles nasuta Status: Not a threatened species however there are several endangered populations of bandicoots in Sydney
Description:	Body length 31-43cm. Up to 1.5kg. Long snout, pointed ears, a short tail, grey-brown fur, a white underbelly. Coat is bristly and rough. Average lifespan is 3 years.
Habitat:	Eucalypt forest, woodland, grassland, rainforest & suburban gardens. Nest in shallow holes lined with leaf litter under dense vegetation or debris.
Ecological niche:	Ground-dwelling marsupial. Nocturnal, territorial and omnivorous. It is a "bioturbator" in that turns over (reworks) soils. One of the 11 main species of bandicoot.
Predators/competitors:	Predators: Some species of owls, quolls, dingoes, snakes, foxes, cats, dogs. Competitors: Swamp wallaby (only for some food sources), rabbits.
Interrelationships:	Beneficial bioturbator - aerates soil and spreads natural fungal spores (both of which benefit plants). Bandicoots can die from "toxoplasmosis" from cat faeces.
Diet and feeding:	Eats insects, earthworms, insect larvae, spiders, plant tubers and fungi. Forages by digging small narrow conical holes. Prefers to forage in loamy soils.
Population notes:	Terrestrial, territorial, solitary, nocturnal. Relies on 'mosaic' vegetation, using open areas for foraging at night and dense undergrowth for nesting during the day.
Physiological/structural adaptations:	Rearward facing pouch - adapted for digging. Long snout - locates underground food by smell. The narrow front feet have three toes with long curving claws so the holes they dig are narrow and pointed at the bottom, and the narrow snout fits neatly into the hole to access the food at the bottom of the hole. Polyoestrus - breeds several times during the year. Can give birth up to five offspring, only one or two survive. Gestation period 11-13 days. The under-developed young travels through a cord attached from womb to pouch and drinks milk from the mother's teats until leaving the pouch at three months. Teeth: Evolutionary notes:
Behavioural adaptations:	Aggressive, territorial animals. Territorial behaviours include grunts and squeals, pouncing and chasing. Mating encounters are brief, however, breeding seasons are long and a female may produce two or three litters a year. Forages over territories ranging from 1-6 hectares. Males have larger territories than females. Prefers "Mosaic" habitats:
Human influences:	Major threats include habitat loss through land clearance and urbanisation, introduced predators (fox, cat, dog), vehicle strikes (road kill) and bushfire.
Sampling techniques:	Hair tubes, "Elliot" traps set along transects. Tagging. Recording sightings. Examining scats. Counting diggings. Mark/recapture (Capture/recapture) method used to estimate an population's size. Bandicoot remains are often found in fox scats
Distribution:	Once widespread and common in Sydney but their range has been greatly reduced around the harbour. Now "locally extinct" in many parts of their former range.