Sleepy solution

A desert mammal's answer to erratic resources? Siesta.

The fat-tailed dunnart *Sminthopsis crassicaudata*, an insect-eating marsupial of Australian deserts, copes with unreliable food supplies by essentially getting more shut-eye.

Many animals use torpor, a state of very low metabolism and body temperature that looks like a deep sleep, to endure food shortages or extreme weather such as drought.

Adam Munn, Pippa Kern and Bronwyn McAllan from the University of Sydney have found that a less obvious threat — unpredictable food sources — also triggers torpor. They kept dunnarts in a lab for 19 days, each with a nestbox, under constant conditions except for daily food provisions, which varied between unlimited, 70 per cent less than normal and ever-changing.

When in their nests, dunnarts with irregular rations spent about 80 per cent of the time in torpor — nearly 2.5 times more than the animals with ample food and 12 per cent more than those with limited but constant provisions. They also ‘slept’ up to six hours per bout (compared with 2.5–3.5 for the others). The findings imply that resource variability, predicted to intensify as weather patterns get more chaotic, may be a far bigger threat than previously thought.

SOURCE: Naturwissenschaften LINK: www.eol.org/pages/323752