

Feather Fascination!

with local Birdwatcher,

Jim Butler

SOLAR REWARMING!

THE Owlet-nightjar (20cm, 50g) is Australia's most abundant, smallest and most widespread nocturnal bird. This so called 'moth owl' feeds at night on insects and has evolved large forward-facing eyes and a tiny beak surrounded by cat-like whiskers for this purpose.

Surprisingly, the tiny beak opens to a large mouth, adapted to catching insects in flight; but is also feeds on the ground and in trees.



The Owlet-nightjar is often heard but rarely seen in the wild because during the day it roosts inside hollows and flies at night in the dark. But occasionally on a sunny winter's day it is visible catching some sun at the entrance to its hollow. They form permanent bonding pairs and are residents. Both sexes construct the nest inside the hollow, which is a bed of green eucalyptus leaves. The leaves are refreshed regularly and act as an insecticide to maintain the nest hollow's cleanliness.

Owlet-nightjars, being small, require a high rate of resting energy expenditure to survive inside the safety, stillness and cold of their hollows. Owlet-nightjars, one of the few birds that roost in hollows year-round, have evolved to conserve energy by daily bouts of torpor. Torpor is a physiological state of reduced body temperature achieved by a controlled and reversible decrease in metabolic rate. Winter can be a period of negative energy balance and many non-migratory warm-blooded birds like the Owlet-nightjar use torpor to balance the energy budget. Increased survival by reducing energy expenditure is the primary function of torpor.

Owlet-nightjars using torpor during the day must rewarm to normal body temperatures to go foraging in the night. Most rewarming by birds is achieved through shivering. Although the rewarming phase forms the most energetically expensive period of the torpor/rewarming cycle, exposure to direct solar radiation decreases the internal energy expenditure. Owlet-nightjars maximise the external energy input by standing in sunlight in the hollow's entrance.

Check tree hollows for these s(t)unning ONs!

– Jim

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Image: Australian Owlet-nightjar by Tina Heybroek in winter, Upper Brookfield.