Survival mechanisms of desert larks

Survival mechanisms of desert larks and, as temperatures rise, behavioural heat avoidance comes into play. Most desert species are characterised by being pale, and for a long time it was thought that this was an adaptation for reducing heat gain from the sun. However, evidence now points more strongly to this being an adaptation for reducing predation. This is further supported by some species, such as the Desert Lark *Ammomanes deserti* of North Africa, Arabia and India, differing in upper part coloration regionally, such that their colour matches that of the soil. But physiology aside, there are several behavioural options open to reduce heat loading, one of the most common being to confine activity to the cooler times of day. Dune Larks *Calendulauda erythrochlamys* do this, retiring to the shade of a grass clump to avoid the heat. Gray’s Larks *Ammomanops grisii* have a different solution, perching a few centimetres above the ground, facing into the wind and spreading their folded wings to expose their thinly feathered sides to the breeze. Spike-heeled Larks *Chersomanes albofasciata* have yet another solution – they forage around the burrows of ground squirrels, retreating into the burrows when the heat gets too much. These burrows can be 20°C cooler than the surrounding soil.

In the past it was thought that birds lived in deserts because they were pre-adapted to do so. More recent research, however, convincingly demonstrates that they have in fact evolved both physiological and behavioural traits that have allowed them to be successful in one of the most punishing habitats on the planet.

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