10.1071/ZO18014_AC

Australian Journal of Zoology 2018, 66(4), 235-246

Supplementary Material

Thermal biology of the spotted snow skink, *Niveoscincus ocellatus,* along an altitudinal gradient

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Relationships between field active body temperatures and ait temperatures for Niveoscincus ocellatus along an elevational gradient across the active season (spring, summer, autumn).

There was a significant relationship between the field active body temperature and the substrate temperature in summer and autumn at the low altitude (Figs. S1b,c) (summer $F_{1,45}$ = 6.05, P = 0.0182, r^2 = 0.12; autumn $F_{1,36}$ = 18.84, P = 0.0001, r^2 = 0.35) and high altitude sites (Figs. S1h,i) (summer $F_{1,41}$ = 77.78, P < 0.0001, r^2 = 0.66; autumn $F_{1,43}$ = 33.05, P < 0.0001, r^2 = 0.44), but no significant relationship in spring at either the low or high altitude site (Figs. S1a,g) (low altitude $F_{1,33}$ = 0.26, P = 0.6166, r^2 = 0.008; high altitude $F_{1,45}$ = 0.04, P = 08399, r^2 = 0.0009). At the mid altitude, the field active body temperature was significantly related to the substrate temperature in spring ($F_{1,34}$ = 6.21, P = 0.0179, r^2 = 0.16) and summer ($F_{1,28}$ = 27.00, P < 0.0001, r^2 = 0.50) (Figs. S1d,e), but not in autumn ($F_{1,30}$ = 0.18, P = 0.6725, r^2 = 0.006) (Figs. S1f). The range of substrate temperatures at which lizards were active at the low altitude was 19.2-34.3 ºC (mean 28.6 ± 0.7 ºC), 22.2-35.3 ºC (mean 30.4 ± 0.5 ºC), and 15.9-7.8 ºC (mean 24.8 ± 0.7 ºC) in spring, summer, and autumn, respectively (Figs. S1a-c). At the mid altitude, the lizards were active at substrate temperatures of 17.0-37.5 ºC (mean 27.7 ± 0.9 ºC), 21.8-35.4 ºC (mean 27.0 ± 0.7 ˚C), and 20.6-30.6 ºC (mean 26.2 ± 0.6 ºC) in spring, summer, and autumn respectively (Figs. S1d-f). The range of substrate temperatures at the high altitude at which the lizards were active were 23.5-34.3 ºC (mean 29.8 ± 0.4 ºC), 18.9-38.8 ºC (mean 28.4 ± 0.9 ºC), and 16.6-31.8 ºC (mean 24.9 ± 0.7 ºC) in spring summer, and autumn, respectively (Figs. S1g-i).

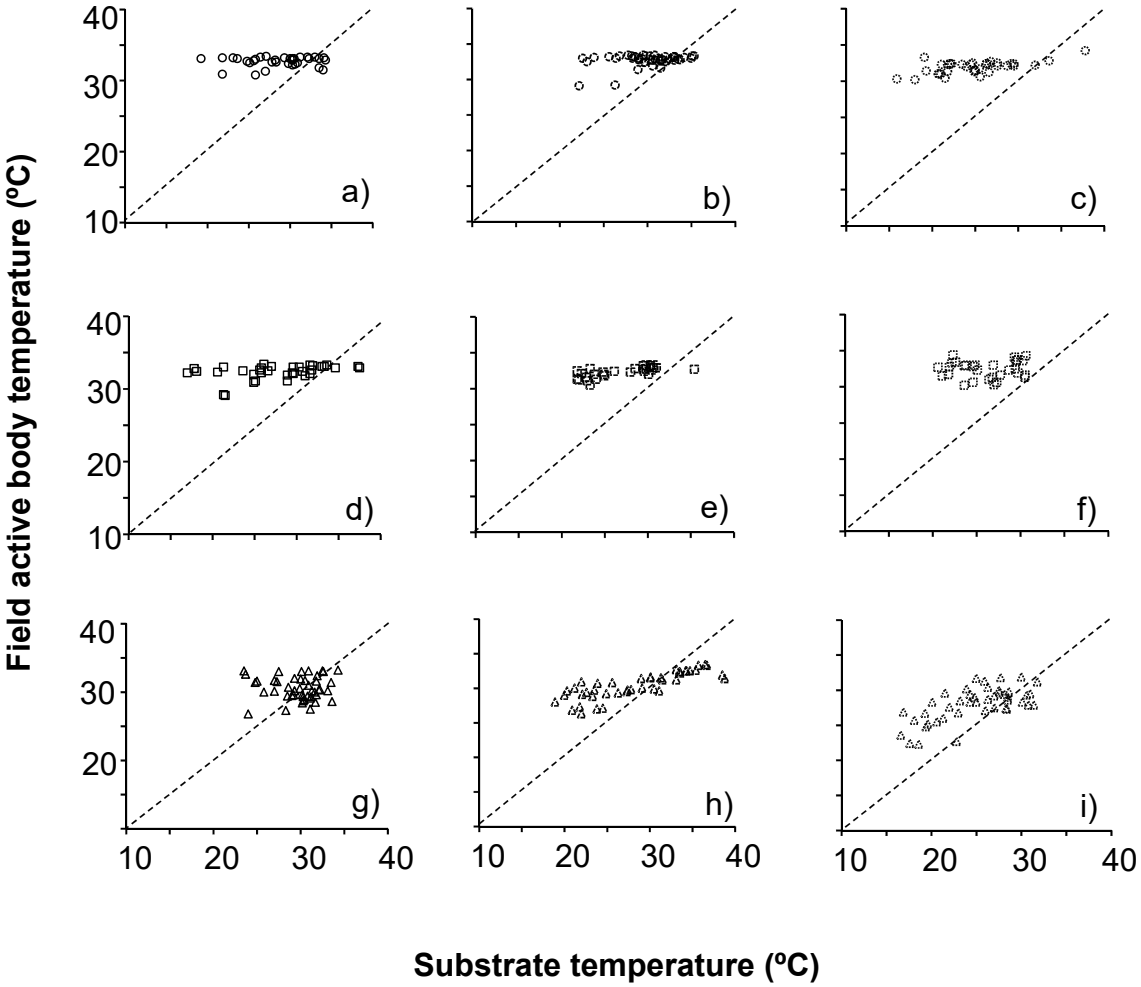

Fig. S1. The relationship between the field active body temperatures and the substrate temperatures of the spotted snow skink, *Niveoscincus ocellatus,* from the three sites studied across three seasons. Figures S1a-c are the low altitude in spring, summer, and autumn. Figures S1d-f are the mid altitude in spring, summer, and autumn. Figures S1g-i are the high altitude in spring, summer, and autumn. The diagonal line (axes X/Y) indicates the strength of relationship between body temperature and substrate temperature (thermoconformity).