

## **P6.**

### **Body temperature and activity of *Acanthodactylus schreiberi* (Sauria: Lacertidae) from a sand-dune ecosystem in Cyprus**

Zotos, Savvas<sup>1,2</sup>; Adamopoulou, Chloe<sup>3</sup>; Chondropoulos, Vassilis<sup>4</sup>; Kadis, Costas<sup>2</sup>; Legakis, Anastasios<sup>3</sup>

<sup>1</sup>Herpetological Society of Cyprus, Paphos, Cyprus

<sup>2</sup>Nature Conservation Unit, Frederick Research Centre, Nicosia, Cyprus

<sup>3</sup>Zoological Museum, Dept. of Biology, University of Athens, Athens, Greece

<sup>4</sup>Section of Animal Biology, Dept. of Biology, University of Patras, Patras, Greece

Body temperature and activity patterns of the lacertid lizard *Acanthodactylus schreiberi schreiberi* were studied during 2009 in a well preserved dune ecosystem on the island of Cyprus. Body temperatures, along with air and substrate temperatures were measured at the capture moment in the field using a cloacal thermometer. Activity patterns in the population under study were documented through monthly sampling. The information resulting from these measurements was linked to existing temperature data from selected microhabitat sites in the study area (substrate surface in bare sand, shaded area inside bush, air at 5cm above the substrate surface, borrow under bush). The mean annual body temperature of adult lizards was found to be 35.5°C (range=29.2–39.6; SD=2.48). No difference



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ  
ΔΕΠ ΒΙΟΛΟΓΙΑΣ

was observed between sexes but subadults had slightly lower mean body temperatures than adults. This is attributed to the smaller body size of subadults since body temperature was found to be positively correlated with snout-vent length of individuals. Body temperature is highly correlated with air temperature (5cm above substrate surface) on a yearly, monthly and daily basis. During summer, a high correlation between the hour of the day and body temperature was found during the first hours of the day (morning thermoregulation), while no correlation is obvious after 09:30. Our results on lizards' activity show that individuals remain active during the whole year although they minimize their presence during the cold period of winter. During spring and autumn lizards can be observed throughout the day with a peak before midday, while in summer they avoid being active during the high temperature period of noon. Hourly temperatures from selected microhabitats in comparison with body temperatures during the same daily period can explain this behaviour. The results of this study are parallel with similar results from other related lacertid species.

**szotos@biol.uoa.gr**