POINTS OF VIEW

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Oil Spills and Glue: a Comment on a Sticky Sampling Problem for Lizards

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Recently, Vargas et al. (2000) reported results from a study comparing survivorship of lizards caught using three techniques: noosing, glue traps and rubber banding. Although their study makes valuable comment on catching lizards, the reader is imparted with a cautionary warning of high fatality rates with glue traps. We have found glue traps to be a very effective, useful and safe tool for capturing fast-moving and wary flat lizards (*Platysaurus*). We have also identified at least one flaw with the Vargas et al. study and take this opportunity to further comment on trapping lizards with glue traps.

The glue trapping technique of Vargas et al. consisted of checking traps every 15 min. In our experience, a lizard left struggling on a glue trap becomes hopelessly stuck and difficult to remove without some handling stress and/or injury. While sampling African flat lizards (*Platysaurus broadleyi* and *Platysaurus intermedius wilhelmi*), we always monitor our glue traps continuously and are usually able to remove the trapped lizard within seconds of capture. Also, in most instances, lizards were only caught by a relatively small portion of their body and therefore easily removed. This is particularly important in hot climates where lizards can quickly expire from hyperthermia on exposed traps (Bauer and Sadlier 1992).

After removing lizards from glue traps, Vargas et al. facilitated glue removal by placing the lizard in a plastic bag with several ml of canola oil (following Bauer and Sadlier 1992). Trapping and glue removal therefore constituted a single treatment and the influence of the glue cannot be separated from that of the oil in their protocol. It is possible that placing the lizard in a plastic bag with oil could contribute substantially to handling stress or that the resulting oil coating could impair physiological function. Rodda

et al. (1993) have also reported lizard fatalities from smothering, after using cooking oil in a plastic bag. Without an appropriate control in the Vargas et al. study, we cannot properly evaluate the impact of oil on lizards. In our studies, we used small amounts of cooking oil, between thumb and fore-finger, to gently massage glue from the lizard's body. If necessary, we also used paper towels to remove excess oil and glue. There was thus no need to place lizards in plastic bags and minimal oil was used. Furthermore, in instances where only a portion of the lizard contacted the trap, we did not always find it necessary to use oil.

Although many of the lizards that we captured (> 1200 *P. broadleyi*; > 40 *P i. wilhelmi*) were released the day following capture and resighted in the field as part of a mark-recapture study, we also transported *P. broadleyi* (N = 30) and *P i. wilhelmi* (N = 28) back to the laboratory for other studies and experienced no fatalities. The *P. i. wilhelmi* were used in two laboratory-based studies (McKinon and Alexander 1999; Alexander et al., in review) and released two years later, without a single fatality. Clearly, trapping these lizards with the use of glue traps had little effect on survival. Thus, although Vargas et al. are likely correct in their assertion that trap-related fatalities have a species-specific component (also see Rodda et al. 1993), we believe that their trap monitoring regime and handling procedure may also have affected their findings.

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