FROM:
ILL - University of
Mississippi Libraries
Library Loop
University, MS 38677

FIRST CLASS
WIX - Steenbock Memorial Library, ILL
University of Wisconsin
550 Babcock Drive
Madison, WI 53706

ARIEL

Fax:
Ariel: 144.92.117.148

LIBRARY MAIL

Call #: QL640 .H45.
Location: MAIN LIBRARY
Patron: 20376

Article
Journal Title: Journal of the Herpetological Association of Africa.
Volume: Issue:
Month/Year: 1985 Pages:
Article Title: Bouskila,-A; A trapping technique for capturing large active lizards
Article Author: Herpetological Association of Africa.

Maxcost: $32 ifm

ARIEL

ILL Number: 7699857

TN: 93722 Billing: WIX Charge

University of Mississippi ILL

A TRAPPING TECHNIQUE FOR CAPTURING LARGE ACTIVE LIZARDS

AMOS BOUSKILA
Israel Herpetological Information Centre
Har gilo, D.N. Harei Yerushalaim 91076, Israel

SUMMARY

A method is described for capturing large *Uromastyx aegyptius* (Agamidae). A hooped fishing net trap is placed around the burrow, and set to block the entrance when pulled. The operator releases the trap when the lizard is out foraging, and it is trapped as it tries to reenter its burrow. The technique is simple and cheap, and captures large lizards, safely, and sufficiently rapidly for body temperature readings. It is applicable to other burrow-living lizards, e.g. *Cordylus giganteus.*

INTRODUCTION

Reptiles are usually captured either by passive traps, relying on the reptiles activity (Rodgers 1939; Vogt 1941; Fitch 1951, 1975; Banta 1957; Medica, Hoddenbach & Lannon 1971) or actively by hand or noose Medica *et al.,* 1971; Jenssen 1973; Serena 1980). Neither techique is appropriate for wary lizards which remain near burrows, ready to dodge in.

During an ecological study of *Uromastyx aegyptius* Forskol, 1775 (Agamidae), I developed a technique for capturing and marking individuals from a population near Hazeva, 'Arava Valley', Israel. This large (up to 750 mm total length), herbivorous desert lizard, is usually seen near burrow openings. When frightened, it escapes rapidly into the nearest burrow. This new technique operates by blocking the burrow opening from a distance, while the lizard is outside, thus preventing its retreat.

THE METHOD

Structure

One side of a piece of fishing net (ca. 2 x 1.5 m, cotton filaments, 1 x 1 cm mesh) was pinned to the ground, behind the burrow, by pegs. The net was folded behind the burrow, leaving the entrance free and enabling the lizard to emerge (Figure 1). The opposite side of the net, was attached in advance to a string 30-120 m long, leading to the hidden operator. When setting the net, one should ensure that on pulling the string the net will cover the opening completely.

Operation

Nets were set in the study area when *U. aegyptius* were inactive, and then left in position. On seeing a lizard in the open, the string closing the nearest burrow was pulled and fastened to a stake (planted in advance) to block the opening. The frightened lizard, whilst endeavouring to enter the barred burrow (Figure 2), usually entangled itself in the net. Where two burrows were close together, both strings were pulled, to prevent the lizard from escaping into the adjacent burrow.

Refinements

To achieve rapid blocking of the opening, a non-stretchable string should be used. It should be pulled directly away from the burrow, so as to position the net correctly. The actual direction of the string can be deflected around a pivot, planted 2-3 m in front of the burrow. This sometimes facilitates pulling the string from a covered position, without frightening the lizard. To avoid the net being caught on the pegs holding its margin, they should be inverted U-shaped ones with only the curved top above the soil.

Efficiency

During the summer of 1980, 28 individuals of *U. aegyptius* were caught by this method - (approximately 85% of the estimated adult population in the research area). After development, the technique, proved to be 100% efficient. Almost any shape of burrow opening can be dealt with, by adjusting the net accordingly. This method does not endanger the lizards, although several suffered superficial bleeding on the snout, whilst endeavoring to enter through the net.

DISCUSSION

In contrast to certain conventional traps, no digging or other damage to the study area is required. After moving the nets, there remains no significant disturbance of the environment. The equipment is cheap, and portable.

Since capture of the lizards requires only the time to reach it from the end of the string, this is also a valid



Figure 1: A folde



Figure 2: A *U. a* grab the lizard.

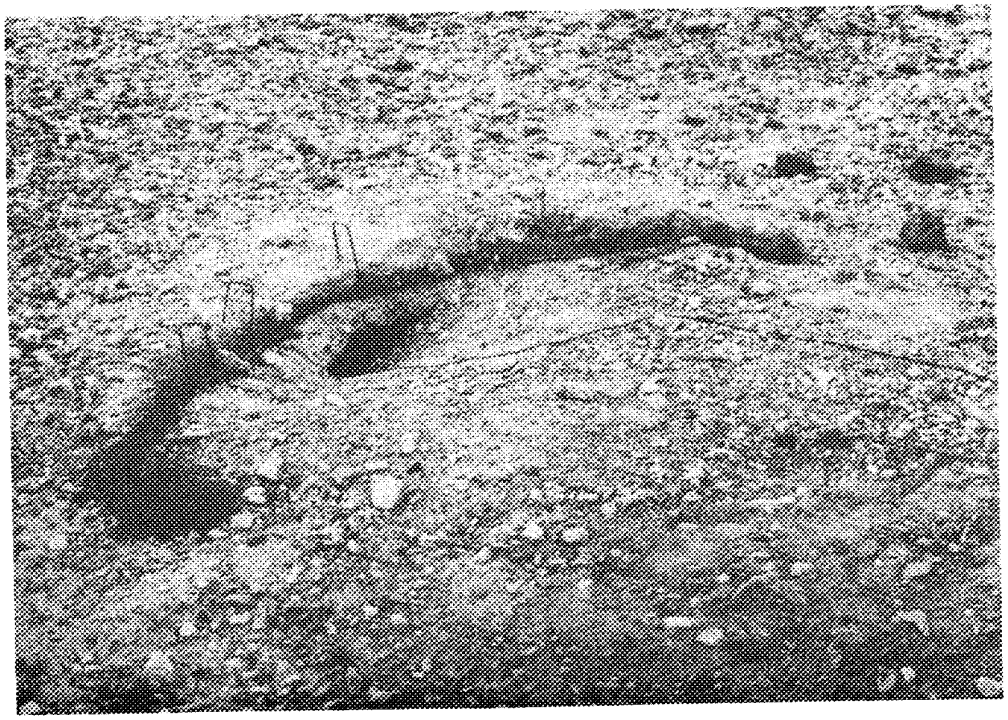


Figure 1: A folded net behind a burrow, set in position ready to be pulled.

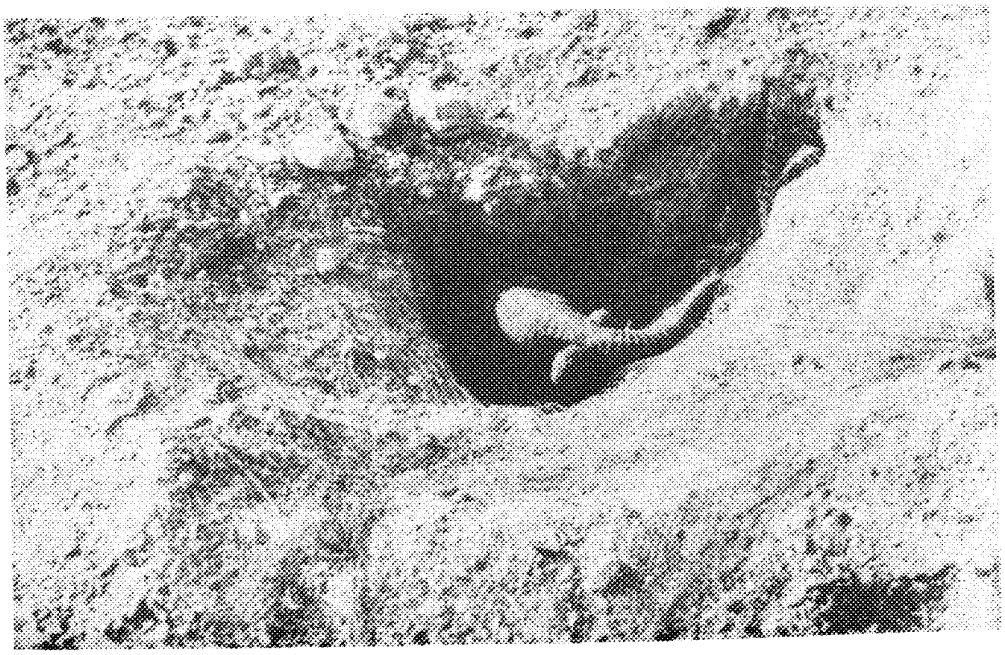


Figure 2: A *U. aegyptius* endeavouring to enter the blocked burrow through the net. The operator can come and grab the lizard.

method for measurements of body temperature, at least in relatively large animals.

The disadvantages of this method are; (1) the time required to set the nets properly, and to check that they close the burrows efficiently; and (2) the fact that the operator must be present when the lizard is out, in order to catch it.

Despite these disadvantages, this method, which combines elements of trapping and chasing, may often solve the problem of capturing lizards that remain near their burrows.

ACKNOWLEDGEMENTS

The method was developed as part of an ecological study guided by Prof. Y.L. Werner and Prof. I. Noy-Meir of the Hebrew University of Jerusalem, and supported by the Society for the Protection of Nature in Israel. I wish to thank the Hazeva Field Study Centre for providing research facilities and Prof. Y.L. Werner and Dr. J. Heller, of the Department of Zoology, the Hebrew University of Jerusalem, who have critically examined the MS.

REFERENCES

BANTA, B.H., 1957. A simple trap for collecting desert reptiles. *Herpetologica.* **13**: 174-176.

FITCH, H.S. 1951. A simplified type of funnel trap for reptiles. *Herpetologica.* **7**: 77-80.

FITCH, H.S. 1975. A demographic study of the Ringneck Snake *(Diadophis punctatus)* in Kansas. *Univ. Kansas Pub., Mus. Nat. Hist.* **62**: 1-53.

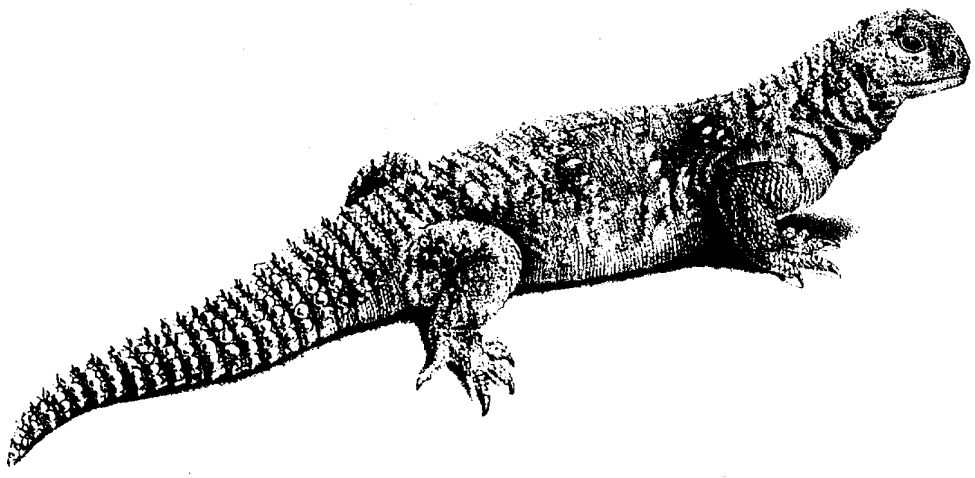
JENSSEN, T.A., 1973. Shift in the structural habitat of *Anolis opalinus* due to congeneric competition. *Ecology.* **54**: 863-869.

MEDICA, P.A., HODDENBACH, G.A. & LANNOM, J.R. Jr., 1971. Lizard sampling techniques *Rock Valley Miscellaneous Pub.* **1**: 1-55.

RODGERS, T.L., 1939. A lizard live trap. *Copeia:* 51.

SERENA, M., 1980. A new technique for capturing *Cnemidophorus. J. Herp.* **14**: 91-91.

VOGT, W., 1941. A practical lizard trap. *Copeia:* 115.



Uromastic loricatus (From Boulenger 1885)

The genus
sections, on
species, inclu
1830, and th
including *Tel*

While the firs
origin (Zinne
originates ir
absolutely n
the two sectic
the result of
two sections
also in food s
selection.

Anderson (
Telescopus d
Arabia. It is
the Negev
(Hoofien 19
mountainou
1974).

All current
ecology of t
from a few
and geograp
distribution
the Negev d
1976, allowe
ecology of s
male and fe
field as if th

OBSERVA

Most field o
made by ch
60 encounte
observation
were kept fo
to two year

*Deceased.