

Papéis Avulsos de Zoologia

ON THE PRESENCE OF MALES IN *GYMNOPHTHALMUS*
UNDERWOODI, A PRESUMED ALL-FEMALE LIZARD
SPECIES (SAURIA, TEIIDAE)

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Hoogmoed (1973), following a suggestion of Thomas (1865), showed that the mainland populations of the microteiid previously known as *Gymnophthalmus s. speciosus* (for instance, in Peters & Donoso-Barros's 1970 Catalogue), are really co-specific with *G. underwoodi* Grant, 1958, originally described from Barbados. I have at hand small series from Brasil and Surinam, as well as a paratype of *underwoodi*, and think Hoogmoed is right in his assignment.

Grant's (1958) original series of 14 contained no specimens with femoral pores; he wondered whether they could be all females. Thomas (1965) examined more than 60 specimens from Barbados and Trinidad, and found no pores either. He further dissected all but the smallest specimens, and found them all to be females. He concluded (1965: 146) that "it seems likely that *Gymnophthalmus underwoodi* can be added to the list of lizards (mostly teiids) having unisexual populations". Hoogmoed (1973: 278) examined large series from both Surinam and Guyana, reviewed the evidence in the literature, and concluded "This is another parthenogenetic species". Cole (1975), on the basis of the information above, listed the form as probably parthenogenetic.

We have in our Museum the following 22 specimens:

BARBADOS: 1 ex., a paratype, from the Museum of Comparative Zoology.

SURINAM: Christiaan kondre (1); Langaman kondre (10).

BRASIL: *Roraima*: Surumu (1); Boa Vista (1). *Amazonas*: Paricatuba, prx. Tapurucuara (1); S. João, prx. Tapurucuara (1); Tapera, Rio Negro (1), Barcelos (1). *Pará*: Taperinha (1).

Of these I found four specimens to have pores, one preanal on each side plus a variable number of femorals (in the table below the number of pores is shown left side/right side).

Specimen	Locality	Body length	Pores
11582	Langaman kondre	33 mm	3/4
11588	Langaman kondre	32	3/2
3219	Boa Vista	36	5/5
13969	Surumu	32	4/3

Number 3219 has large normal functioning pores, with prominent plugs. Those of number 13969 are less conspicuous, but very clearly marked. After seeing these two specimens I went over the other materials very carefully, and discovered the two Surinam specimens. Their pores are very faint, and I had missed them before, but, once seen, there is no mistaking them. I dissected number 11588, and found it to have perfectly developed hemipenes, and what seemed to me at least one mature testicle.

I conclude that very probably *G. underwoodi* is going through a process similar to that of *Cnemidophorus lemniscatus* in South America (Vanzolini, 1970; Peccinini, 1971): individual populations are independently evolving towards complete loss of males, and as a result the species shows a mosaic of unisexual and bisexual populations. Again as in *C. lemniscatus*, it is unlikely that parthenogenesis in *G. underwoodi* is of hybrid origin; a spontaneous mechanism (Cuellar, 1974; Cole, 1975) is more probable.

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