

NOTES ON THE NATURAL HISTORY OF *OLOLYGON RUBRA* (LAURENTI)

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Banks (1985) recently reported on the occasional accidental importation of Daudins treefrog (*Ololygon rubra*) into the British Isles. He notes that he was unable to breed them in captivity. In this note I will present a summary of some of my field data on this species, which may be of some practical use to those herpetologists who are trying to breed lowland tropical frogs in temperate regions.

Notes on the ecology of *Ololygon rubra* from the savannas of southern Venezuela have been published by Hoogmoed and Gorzula (1979). *Ololygon rubra* are less common than the larger *Ololygon x-signata* and are most frequently found in perianthropic environments such as gardens and banana plantations. During the dry season they are frequently found in bathrooms and in toilet cisterns. Females with mature oviducal eggs have been found in April and June and it is assumed that they breed during the rainy season. A marked dry season occurs in southern Venezuela from January to the end of March, and *Ololygon rubra* possibly aestivate for part of this period. The rainy season begins in April. The mean annual rainfall can vary from under 1000mm to more than 2000mm. Rainfall during the rainy season is not daily. More than a week can pass without rain, but more than 100mm may fall in another week.

The mean minimum air temperature during the year is about $24 \pm 2^\circ\text{C}$. This temperature is reached just by about midnight and does not rise until after 06.00 am. Maximum air temperatures are reached about 2 pm, and can be anywhere from 29°C to above 40°C . The hottest months are from April to July. Although Venezuela is north of the equator there is little change (about 1 hour) in daylength between the summer and winter solstices.

Ololygon rubra probably breeds in shallow temporary pools or at the edge of large ponds or lagoons. It is most unlikely that it breeds in running water. Other savanna species that breed in temporary or shallow bodies of water are: *Bufo granulosus*, *Bufo marinus*, *Pleurodema brachyops*, *Physalaemus enesefae*, *Leptodactylus fuscus*, *Elachistocleis ovalis*, *Hyla microcephala*, *Hyla minuscula*, *Ololygon x-signata*, *Phyllomedusa hypocondrialis* and *Phrynohyas venulosa*. Although there is resource partitioning between these species some generalities about such bodies of water are pertinent here. The water is usually shallow (often only a few centimeters deep), muddy, and with aquatic plants. Surface temperatures of the water may reach about 35°C during the day, but do not usually drop below 25°C during the night. The waters are acidic with a pH of about 6 or slightly below, and are very low in electrolytes (compared to London tap water), with a conductivity of between 20 to 60 $\mu\text{S/cm}$.

If any members of the BHS find this type of information useful for their captive rearing studies I will be pleased to prepare short data sheets on other species of herpetofauna from this area.

REFERENCES

- Banks, B. (1985). *Hyla rubra*: a Case of Illegal Immigration. *British Herpetological Society Bulletin* No. 12: 43-44.
- Hoogmoed, M.S. and Gorzula, S.J. (1979). Checklist of the Savanna Inhabiting Frogs of the El Manteco Region with Notes on their Ecology and the Description of a New Species of Treefrog (Hylidae, Anura). *Zoologische Mededelingen*, 54(13): 183-216.