

## Confirmation of *Rachovia hummelincki* on the Paraguana Peninsula, Falcon, Venezuela (Rivulidae, Cyprinodontiformes)

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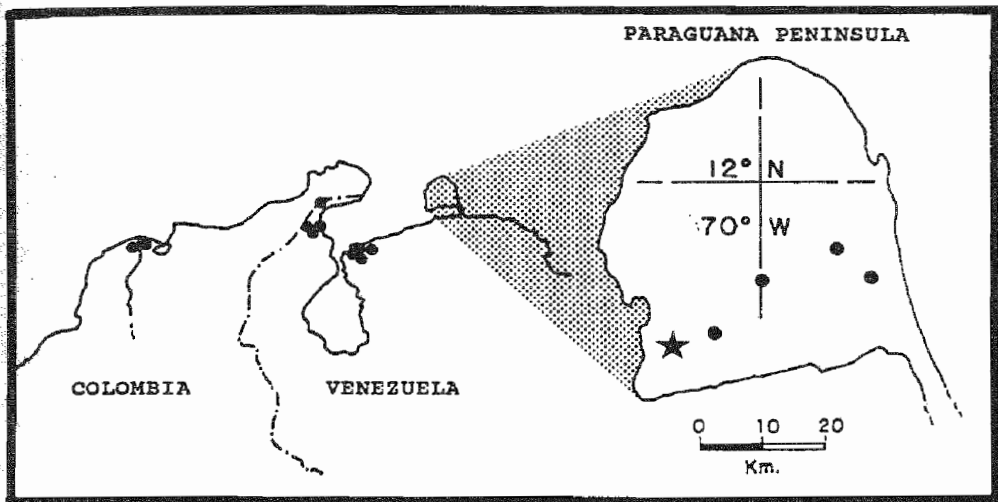
Description of the annual killifish, *Rachovia hummelincki* de Beaufort (1940:110) was said to have been based on specimens collected in 1937 from Pozo de San Antonio, east of Carirubana on the Paraguana Peninsula, Falcon, Venezuela. E. (Leo) Hoigne visited this locality in February of 1963 and 1964, but found it dry on both occasions (Turner, 1967). The next record of the species was a collection in 1963 from Barranquillita, Atlantico, Colombia (Turner, 1967) some 525 km from the type locality.

Turner pointed out that the two *R. hummelincki* localities are separated by imposing geographical barriers, and raised the possibility that there had been an accidental label exchange between the *R. hummelincki* specimens and a collection of *Austrofundulus transilis* (= *A. limnaeus* Schultz) recorded from Pozo de Arroyo de Apra, east of El Cardon in the Colombian Guajira (see Hummelinck, 1940:43, fig. 3). But, as Turner (1967) said, "Collections in the critical areas that might settle this question remain to be made."

Thomerson (1971) appeared to have made some of these collections, but his report of *R. hummelincki* in the Lake Maracaibo Basin, Zulia, Venezuela, was based on misidentification of the then undescribed *R. pyropunctata* Taphorn and Thomerson. He did visit the *R. hummelincki* type locality in August 1969 (Thomerson, 1971), and, once more, it was dry.

Taphorn and Thomerson (1978) reported a collection of *R. hummelincki* from across (west of) the Magdalena River from Turner's collection. *Rachovia brevis* (Regan) and *A. limnaeus* (Thomerson, et al, 1976; Taphorn and Thomerson, 1978) range well to the west of the Magdalena River, and the same may prove to be true of *R. hummelincki*. Taphorn and Thomerson (1978) also reported *R. hummelincki* from the Venezuelan coastal desert on both sides of the mouth of Lake Maracaibo, but, in the absence of additional data, did not discuss the possibility of accidentally switched labels raised by Turner (1967).

Rainfall events in the Paraguana Peninsula are even more episodic and less predictable than in other areas where annual killifishes occur in



Locations of *Rachovia hummelincki*. Star denotes type locality.

Venezuela (see Thomerson, 1971; Nico, Taphorn, and Thomerson, 1987). The fall of 1988 was particularly wet, and Taphorn and Eric Sutton went to the Paraguana Peninsula specifically to look for annual killifishes. They succeeded in making four collections of *R. hummelincki* as listed below. These collections are deposited in the Museo de Ciencias Naturales de Guanare (MCNG).

DCT 88-47. (70 specimens) small desert creek 4 km W of Hwy 4 on the road to Buena Vista, E of the village Maguigua. 11° 50' N, 69° 50' W. 29:X:1988.

DCT 88-48. (9) small creek in Miraca, beside a volleyball court on the road to El Hato. 11° 53' N, 69° 52' W. 29:X:1988.

DCT 88-49. (7 + several taken alive) road to Moruy, just E of the Judibana, in front of some houses beside a gravel road entrance. 11° 45' N, 70° 05' W. 30:X:198.

DCT 88-50. (97) small intermittent stream across the road from Judibana to Moruy, @ 1 km W of Moruy. 11° 51' N, 70° 00' W. 30:X:1988.

These are the critical collections that Turner (1967) desired, and they support de Beaufort's (1940) Paraguana Peninsula type locality for *R. hummelincki*.

The third collection listed above is within a few km of the *R. hummelincki* type locality, so, although Thomerson (1971) reported that the type locality will no longer support the species, it still exists in the local area. Because no other annual fishes were taken, we suspect that *R. hummelincki* is the only annual killifish on the Paraguana Peninsula.

It does coexist with *R. brevis*, or *A. limnaeus*, or both, at other localities (Turner, 1967; Taphorn and Thomerson, 1978).

*Rachovia hummelincki* is presently known from four local areas (Fig. 1.): (1) the lower Magdalena River valley near Barranquilla, Colombia, (2) the eastern side of the Guajira Peninsula, (3) the coastal desert east of Lake Maracaibo, and the southern part of the Paraguana Peninsula. All of the known localities for *R. hummelincki* are in arid areas near the coast. Fishes from all these populations look much the same, in contrast to the variation seen within and among populations of *R. brevis* and *A. limnaeus* (Thomerson, et al, 1976; Taphorn and Thomerson, 1978).

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