

of Montecristo (Tuscan Archipelago). The weather conditions were clear, with almost no wind and rapidly increasing atmospheric pressure, after a storm of some days from southern quadrants. Since we spent most of the time on the deck both before and after spotting the dragonfly, but did not see it further, we consider unlikely that it hid on board either before or after appearing.

Dragonflies, in particular aeshnids and libellulids, are well endowed for active dispersal, including migration (P.S. CORBET, 1980, *A. Rev. Ent.* 25: 189-217). By its migration from Africa northwards (A. HEYMER, 1967, *Annls Soc. ent. Fr.* (N.S.) 3: 787-795), *Hemianax ephippiger* occasionally reaches places as far as Iceland (U. NORLING, 1967, *Opusc. entomol.* 32: 1-2). Long migrations are also reported for various *Sympetrum* species e.g. A.E. GARDNER, 1955, *Ent. Gaz.* 6: 149; I. HIURA, 1976a, *Nat. St.* 22(8): 3-6; 1976b, *ibidem* 22(9): 2-4; J. LEMPert, 1984, *Libellula* 3(3/4): 29-34; C. LONGFIELD, 1948, *Ir. Nat. J.* 9(6): 133-141; 1957, *Entomologist* 90: 44-50; S. MIELEWCZYK, 1978, *Notul. odonatol.* 1(2): 29; 1982, *ibidem* 1(10): 165-166; S. OBANA, 1969, *Tombo* 12: 17-23).

High dispersal rates are reported for *Sympetrum* populations (e.g. N.K. MICHIELS, 1989, *Abstr. Pap. 10th Int. Symp. Odonatol.*, 24; and unpubl. data), but little is known about the distances actually covered by non migrant, dispersed individuals. Apart from mass flights of dragonflies, supposingly migrating over the sea (e.g. S. ASAHINA, 1971, *Proc. XIII Int. Congr. Ent., Moscow* 1: 106; J.P. HAILMAN, 1962, *Am. Midl. Nat.* 68: 430-433; C. LONGFIELD, 1948, cf. above; S. MIELEWCZYK, 1978, cf. above; 1982, cf. above), little information is available concerning single dispersed dragonflies off the coasts (e.g. F. CAPRA, 1976, *Lav. Soc. ital. Biogeogr.* (N.S.) 5 (1974): 539-561; C. UTZERI, 1988, *Boll. Ass. romana Ent.* 42 [1987]: 1-8), even though this might represent a far more common occurrence than reported. The present record of a *Sympetrum* flying between Corsica and the Italian peninsula raises the question of whether any interchange between the respective populations might occur.

Assuming a 10 km/h flight speed, our *Sym-*

A MALE OF *SYMPETRUM STRIOLATUM* (CHARP.) IN FLIGHT OVER THE TYRRHENIAN SEA (ANISOPTERA: LIBELLULIDAE)

October 11, 1989, at 3:30 p.m., a male *S. striolatum*, that was flying over the sea, briefly perched on board of the oceanographic ship "Minerva", then it took flight again and was lost. The dragonfly appeared to be in good condition. The Loran ship's position, a few minutes after spotting the dragonfly, was N 41°44.73', E 10°31.43', which corresponds to 47.3 marine miles (= 87.6 km) from Corsica (Aleria, river Tavignano) and 34.5 (= 63.9 km) from the islet

petrum would have reached the nearest coast (Montecristo) at about 10 P.M., that is after several hours of nocturnal flight. When on a long migration over the sea, dragonflies necessarily keep flying by night; however, it is not known if this also occurs during short range dispersal. Generally, at temperate latitudes, dragonflies spend their night perching and need a warming-up period before starting their daily activity (e.g. M.L. MAY, 1976, *Ecol. Monogr.* 46: 1-32). This determines a much shorter daily flight period, in comparison with the actual length of the day. Overflying the Tyrrhene across the point where the dragonfly was spotted would probably need over 20 hours, so it is not certain whether it could accomplish this journey without any rest. However, F. CAPRA (1976, *Lav. Soc. ital. Biogeogr.* (N.S.) 5 [1974]: 539-561, p. 543: footnote 1) reported on a pair of *Ischnura genei*, a weak coenagrionid from the larger Mediterranean islands, which was collected off the Sicilian coast and the same author (1937, *Boll. Soc. ent. ital.* 69(4): 50-58; 1976, cf. above) and F. TERZANI (1983, *Redia* 66: 137-145) recorded the same species from the islets of Capraia, Elba and Giglio (Tuscan Archipelago), which they had most probably reached from Corsica. Thus, it seems likely that also *S.striolatum*, which is a much better flier than *I. genei*, can cross the central Tyrrhene. However, it is probable that the dragonflies rest on the Tuscan islets and frequent liner ships connecting Corsica and Sardinia with the mainland of Italy. Ships, if sailing in the same direction as dragonflies, could also help their dispersal.

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