

## ODONATA OF THE PARCO REGIONALE FLUVIALE DEL TARO, NEAR PARMA, NORTHERN ITALY

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**Abstract** – 20 spp. were evidenced in 1995, in the Park, Emilia Romagna prov., Italy.

### Introduction

The Taro Park (*Parco Regionale Fluviale del Taro*) is a protected area in Emilia Romagna near Parma, northern Italy. It covers a 20 km stretch of the Taro River and its surroundings in 1-2 km width. It was established in 1988, to decrease the human pressure to conserve the quality of the landscape and to improve the quality of the river. More than 50% of the Taro region is agricultural area, but along the river there are soft-wood gallery forests (mostly with *Populus alba*, *P. nigra* and *Salix alba*) but hard-wood gallery forests also occur in little patches.

Hardly any information is available on the odonate fauna of the Taro Park. EGADDI et al. (1995) found *Ischnura* and *Onychogomphus* larvae in the river and GHETTI (1974) mentioned the presence of *Calopteryx splendens* near the Naviglio di Taro canal. The present study was carried out between April and July 1995.

### Material and methods

During this three months mostly larvae and exuviae were collected in order to obtain information on breeding sites. Adult individuals were generally sight recorded. The specimens were

preserved in 70% ethyl-alcohol.

For identification were used the keys and descriptions of ASKEW (1988), BENEDEK (1965), CARCHINI (1983), DREYER & FRANKE (1987), JÖDICKE (1993), LAISTER (1991) and STEINMANN (1984).

Dragonflies were collected at 5 sampling sites as follows:

- (1) Lake near the Taro at Ozzano which is formed from the widening of a little branch of the river, creating a basin with almost completely stagnant water. Its bottom is sandy and silty. After 200 metres the bed becomes narrow, again with flowing water. The macrovegetation is poor, mostly *Potamogeton lucens* and *Typha* spp. on its shore. The bed is elongated, with a maximum width of about 10 m.
- (2) Two shallow natural lakes, close to each other, near the Taro R., at Oppiano (Gaiano), in a poplar and willow forest; the surface of each ca 100-150 m<sup>2</sup>. They are characterised by a thick layer of detritus on their bottom. They are connected with the Taro R. by the Naviglio di Taro canal. The macrovegetation is rich, mostly *Potamogeton* spp. and submerged *Fontinalis*, but the marsh vegetation is poor, with some *Phragmites australis*.
- (3) Little marsh by a channel near Fornovo di

Taro, with shallow water and with silty bottom, covered almost completely with *Phragmites australis*, but there is also some open water (about 50 m<sup>2</sup>).

- (4) Some deep gravel pits near Collecchio. Dragonflies were collected in the southernmost pit, used as a fish pond. No marsh vegetation on the shore, but the macrovegetation becomes more abundant from April to July, mostly *Potamogeton natans* and *P. crispus*.
- (5) Taro R., at Ozzano. The river itself is typical of Apennines, rather fast flowing, with bouldery or gravelly substrate. The bed is wide and shallow.

### Results

During this period, 20 species were recorded in the Taro Park, 13 as larvae, 13 as exuviae and 13 as imagoes. In the checklist below the information on number of individuals collected or observed or their frequency are provided for each species in larvae, exuviae and imagoes. Information on sexes of larvae is not available in most cases.

—*Calopteryx splendens* (Harr.) – (1) larvae: 27-IV, 1; 16-V, 1. – imagoes: frequent from early V.

—*Chalcolestes viridis* (Vander L.) – (1) larvae: 10-V, 3; 16-V, 6; 06-VI, 3. – imagoes: 18-VI, 2 ♂. – (2) larvae: 14-VI, 24. – (3) larvae: 10-V, 3; 07-VI, 5; 21-VI, 3. – exuviae: 07-VI, 1 ♂.

—*Platynemis pennipes* (Pall.) – (1) larvae: 11-IV, 2; 27-IV, 1; 16-V, 3; 21-VI, 2. – imagoes: frequent from late IV. – (2) larvae: 11-IV, 1; 27-IV, 1. – (3) exuviae: 10-V, 1 ♀. – imagoes: frequent from early V.

—*Coenagrion puella* (L.) – (1) imagoes: rare from early V. – (2) larvae: 11-IV, 10; 27-IV, 32. – exuviae: 27-IV, some. – imagoes: frequent from late IV. – (4) larvae: 10-V, 1. – imagoes: frequent in VI.

—*Erythromma viridulum* (Charp.) – (4) larvae: 10-V, 1; 07-VI, 21. – imagoes: rare in early VI.

—*Ischnura elegans* (Vander L.) – (1) larvae: 11-IV, 5; 27-IV, 1; 10-V, 1; 16-V, 1; 06-VI, 1; 21-VI, 2. – imagoes: frequent from early V. – (3) larvae: 10-V, 16; 07-VI, 10; 21-VI, 1. – exuviae: frequent from mid V. – imagoes: frequent from early V. – (4) larvae: 19-IV, 3; 10-V, 2; 07-VI, 1. – exuviae: 19-IV, frequent; 10-V, frequent. – imagoes: 19-IV, 1 ♂; frequent in V and VI.

—*Aeshna mixta* Latr. – (3) larvae: 07-VI, 2 ♂.

—*Aeshna cyanea* (Müll.) – (2) larvae: 27-IV, 1 ♀.

—*Anax imperator* Leach – (1) imagoes: 24-V, 1 ♂. – (2) larvae: 11-IV, 1 ♀. – (3) imagoes: 07-VI, 1 ♂. – (4) imagoes: 07-VI, rare.

—*Onychogomphus forcipatus* (L.) – (5) larvae: 19-V, 1 ♂. – exuviae: 18-VI, 3 ♂, 5 ♀; 21-VI, 15 ♂, 25 ♀. – imagoes: 18-VI, 2 ♂.

—*Libellula fulva* Müll. – (3) exuviae: 07-VI, 1 ♂; 21-VI, 1 ♂.

—*Libellula depressa* L. – (1) imagoes: 06-V, 1 ♂, 1 ♀; 24-V, rare; 06-VI, 1 ♂. – (3) imagoes: 10-V, rare.

—*Orthetrum albistylum* (Sel.) – (1) larvae: 16-V, 1. – imagoes: frequent from early V. – (3) exuviae: 10-V, 3 ♂; 07-VI, 2 ♂, 1 ♀. – imagoes: 10-V, rare. – (4) imagoes: 07-VI, rare.

—*Orthetrum brunneum* (Fonsc.) – (3) exuviae 07-VI, 1 ♀.

—*Orthetrum cancellatum* (L.) – (1) imagoes: rare in V and VI. – (3) exuviae: 07-VI, 1 ♂.

—*Orthetrum coerulescens* (Fabr.) – (1) imagoes: frequent from mid VI. – (3) larvae: 21-VI, 1. – exuviae: 07-VI, 2 ♂; 21-VI, 2 ♂, 3 ♀.

—*Crocothemis erythraea* (Brullé) – (4) imagoes: 07-VI, 1 ♂.

—*Sympetrum pedemontanum* (Allioni) – (3) exuvia: 21-VI, 1 ♂.

—*Sympetrum striolatum* (Charp.) – (3) exuviae: 07-VI, 7 ♂, 6 ♀; 21-VI, 2 ♂, 7 ♀.

—*Sympetrum sanguineum* (Müll.) – (1) exuviae: 18-VI, 1 ♂. – (3) exuviae: 07-VI, 4 ♂, 1 ♀. – (4) larvae: 07-VI, 1.

### Discussion

During this short study 20 dragonfly species were recorded in the Taro Park, 6 Zygoptera, 14 Anisoptera. Because of phenological differences, the checklist cannot be considered complete.

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