

DATA ON THE COMPARATIVE ECOLOGY OF THE SCRUB WARBLER (*HIPPOLAIS PALLIDA ELAEICA* (LIND.)) AND ITS SPREADING ALONG THE TISZA IN THE YEARS 1973 TO 1974

A. BANKOVICS

Museum of Natural Sciences of the Bakony, Zirc (Hungary)

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Abstract

In 1973, the scrub warbler (*Hippolais pallida*) was found in new habitats along the Tisza. At the river bank opposite to Szajol three pairs, at Tiszasüly four pairs were found. All of them appeared in the *Salix triandra* L. stand fringing the river bed.

The wide ecological valency of *Hippolais pallida*, as a species extending its range, is shown by that while in Hungary it settles down in the first place to the floodplains of the river, near the water, its habitats in the Balkan peninsula are often in a dry environment far from the waters.

Distribution data

In 1972, I found scrub warblers (*Hippolais pallida elaeica* (LIND.)) at Tiszakürt, a northernmost site at the Tisza. I have not found it in the 8 km floodplain stretch investigated at Szolnok. In the latter area it did not appear in 1973, either, but rather north of it, at the riverside opposite to Szajol, in an about 400 m long stretching *Salicetum triandrae* association, at river-km 343, I found two pairs, and later 1 km south of them 1 pair, on the 14th of June. Next day, on the 15th of June, 40 km above Tiszasüly, at river-km 383, in the right-bank *Salicetum triandrae* zone I observed four singing males, in an about 300 m stretch. These observations are supporting, too, the earlier establishment that the scrub warbler settles down in the Tisza and Danube stretches in Hungary mainly in the *Salix triandra* L. stands fringing the edge of the river bed (BANKOVICS—MOLNÁR 1970, BANKOVICS 1974). (Fig. 1). The above habitats are new in respect of the distribution of the bird. But there may not be drawn any exact conclusion concerning the tempo of spreading of the species as in the areas mentioned no similar investigation took place in the earlier years. We may not know, therefore, when they appeared there. In connection with that I may mention that on June 22nd and 23rd, at Kisköre, between river-kms 400 to 403, I could not find them in the *Salix triandra* stocks, either, that ensure the optimum environmental conditions. It may be supposed, therefore, that it has not reached here in its distribution. That can only be proved, anyway, by the research work further on. In 1974, the prolonged flood, having passed in the hatching period, may have destroyed the nests of the population in the Tisza floodplains but, in the same way, it frustrated also the research work taking place with earlier methods. Thus the negative results of the observations carried out from the dam between

Tiszafüred and Tiszacsege on July 12th—13th do not say much. In that time, namely, there was still water standing several km broad, from dam to dam. Its real habitat was unapproachable because of the flood. I have not noticed any scrub warbler on the way. Nevertheless, it may already live, apart from this, in the area.



Fig. 1. Habitat of the scrub warbler, the *Salicetum triandrae* plant association at Tápé. (Photograph: Bankovics, A.).



Fig. 2. A male scrub warbler just passing food to a hatching hen-bird. (Photograph: MOLNÁR, Gy.).

In 1974, during the nesting time, I looked for it in vain, besides the Tisza, along the Zagyva, too, at Újszász, as well as between Győr and Kunsziget, at the Moson-Danube arm, too. Both areas are showing some affinity to the Tisza floodplains, the floodplain bird-community is almost the same, as well. But the scrub warbler is lacking in these areas, for the time being. Its favourable habitat, the *Salicetum triandrae* plant association is not formed, either, in the above sites. That, however, would be absolutely important for the settlement of the species.

On the distribution of the urbanized population we have obtained some data from 1973. It was first observed by JÓZSEF RÉKÁSI and ISTVÁN PELLE in Bácsalmás, an area under a thorough watching, that year. They could observe the singing-bird for a long time but they did not succeed in proving its nesting (Oral information by J. RÉKÁSI).

Ecological comparison

I should like to illustrate the changing ecological demands of the species by discussing my observations in Yugoslavia in 1973 and 1974. As contrasted with the river-floodplain populations in Hungary, I have often met the scrub warbler in Macedonia, Monte Negro, and Dalmatia in a strikingly arid environment. On May 5th, 1973 a male individual kept on singing in the almost unwooded East Macedonia, 5 km north of Lake Dojran, on dry, scrubby mountain-sides, among the scrubs of a valley kept wet by means of a source. The nearest considerable water, a mountain torrent, is 2 km from there. On May 9, 1973, at Ulanci, in the basin of Vardar, 200 m from the river, on a row of scrubs, there sang similarly a male warbler. These may still have been migrating birds. In 1974 I found this species in a still more strikingly arid environment. On May 18, in the shrubberies of a 1 square km coastal flatland situated at Petrovac-Bulgarica along the seaside of Monte Negro, there were three of four singing males 500 m from the sea. The birds spread to the dry shrubberies of the foot of the mountain, as well, and there continued singing and looking for nourishment in the pines. On May 20, at Makarska in Dalmacia, in an about 35 years old pinewood (*Pinus* sp.) covering the talus slope of the Biokovo mountain, I found their smaller population consisting of five to six pairs. Knowing the humid habitat of this bird at the Tisza, I found that extremely surprising as the nearest water, the Adriatic sea was 1.5 to 2 km far from there. The birds kept on singing within a good earshot of one another in the sparse pinewoods, in the upper part of the talus slope, about 300 m above sea level. As it was May the 20th, these must not have been migrating birds but they were surely individuals hatching there.

After recognizing all these data, we may value the ecological valency of the scrub warbler to be much wider than only forming opinion of a river-floodplain population. That's easy to understand as we are speaking of a spreading species, and there go strong vitality and a considerable adaptability with spreading tendency.

References

- BANKOVICS, A. (1974): Spreading and habits of *Hippolais pallida elaeica* (LIND.) along the Tisza — Tiscia (Szeged) 9, 105—113.
- BANKOVICH, A. and MOLNÁR, GY. (1970): Hazánk új fészkelő madárfaja a halvány geze (A new nesting bird species of Hungary, the scrub warbler) (*Hippolais pallida elaeica*). — Búvár 25, 413—415.
- KEVE, A. (1960): Nomenclator Avium Hungariae. — Budapest.