

THE WOOD SANDPIPER (*Tringa glareola*) ON LAKE ATANASOVSKO (E BULGARIA)

Svetla Dalakchieva and Konstantin Popov

ABSTRACT

Dalakchieva S., Popov K. 2002. *The Wood Sandpiper (Tringa glareola) on Lake Atanasovsko (E Bulgaria)*. Ring 24, 1: 57-60.

In Bulgaria the Wood Sandpiper can be met in suitable habitats nearly all over the year. It is a typical migrating bird. During migrations and in summer Wood Sandpipers form congregations on the lakes along the Black Sea coast, especially on Lake Atanasovsko. The first birds arrive at the lake after mid-March. In April their numbers increase and at the beginning of May the spring migration is the most intensive. In summer only mature non-breeding birds remain on the lake. It is possible that some of them breed in Bulgaria or in the adjacent countries. The autumn migration starts at the end of July. In August numbers of the birds increase several times. We observed the last Wood Sandpipers on the lake until mid-October. As a whole for a period of 15-20 years the numbers of Wood Sandpipers migrating along the Bulgarian Black Sea coast decreased several times.

S. Dalakchieva, K. Popov, Bulgarian Ornithological Centre, Institute of Zoology, BAS, Boul. "Tzar Osoboditel" 1, Sofia 1000, Bulgaria, E-mail: s_dalakchieva@yahoo.co.uk

Key words: Wood Sandpiper, migration, dynamics

INTRODUCTION

In Bulgaria the Wood Sandpiper can be met nearly all over the year in suitable habitats – streams, rivers, marshes, lakes, channels, fishing-pools, rice-fields, flooded thin forests, wet meadows, coastal bays (Nankinov *et al.* 1997). It is a typical migrating bird, that arrives at Bulgaria after 4 March and stays until 30 November – very seldom single birds remain also during winter (Nankinov 1998). During migrations and at the beginning of summer Wood Sandpipers form congregations on the lakes along the Black Sea coast, especially on Lake Atanasovsko. Sometimes these congregations contain hundreds of individuals. Information about the observations of Wood Sandpipers can be found in many faunistic papers (Alleon 1886, Petrov and Zlatanov 1955, Prostov 1964 and others) but the article of Nankinov (1998) is the only one concerning the migration dynamics of this bird in Bulgaria.

MATERIAL AND METHODS

The material for this article was collected from 1991 to 2000. During this period the counts of birds on the lake were performed every 15 days whole year round. Altogether 240 counts were accomplished and 1524 Wood Sandpipers were recorded. Every time the counts were performed using one and the same transect (about 15 km long) around the lake.

Lake Atanasovsko is a coastal lagoon, located at 10 km to the north of the town of Burgas (E Bulgaria). It is a shallow hypersaline lake, which is used for salt-production. Therefore it is divided by dikes into small basins. All over the year the water level is maintained artificially as the average depth is 0.3 m. A channel with fresh water overgrown with reeds surrounds the lake. At the north-eastern part of the lake there are meadows, which have been attracting a lot of birds since they became flooded in 1999.

RESULTS

Spring migration

The first Wood Sandpipers arrive at Lake Atanasovsko after mid-March: 15 March 1992 – 1 bird, 16 March 1992 – 2 birds. Until the end of the month their numbers remain low (Fig. 1). In April numbers of the birds start to increase – in the middle of the month they form congregations of up to 30 birds: 12 April 1992 – 15, 15 April 2000 – 29 indiv. At the beginning of May the spring migration of Wood Sandpipers is the most intensive. In comparison to April their numbers increase several times: 1 May 1992 – 28, 3 May 1994 – 42, 1 May 1997 – 85 birds. Towards the end of May the birds start to leave and their numbers decrease. In May we recorded

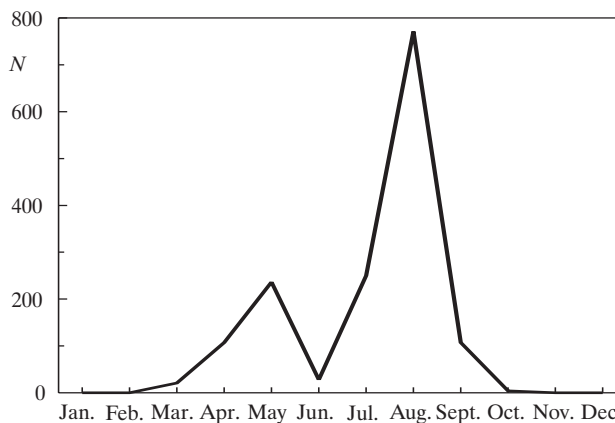


Fig. 1. Total numbers of Wood Sandpipers recorded on Lake Atanasovsko in subsequent months

totally 235 Wood Sandpipers, which is 15.4% of all the birds observed in the whole period. In June we usually observed only single birds.

Autumn migration

At the end of June and at the beginning of July the numbers of Wood Sandpipers start to increase again. After mid-July we recorded congregations of more than 20 Wood Sandpipers: 17 July 1996 – 24, 17 July 1998 – 27, 15 July 2000 – 39, 31 July 2000 – 40 birds. In August their numbers increase several times. During this month we observed totally 770 Wood Sandpipers, which is 50.5% of all birds recorded in the whole period. The congregations consist of dozens of birds: 15 August 1992 – 79, 30 August 1993 – 70, 15 August 1997 – 60 indiv. In September Wood Sandpipers start to leave. Their numbers seldom exceed 10 birds: 15 September 1993 – 30, 29 September 1998 – 21 indiv. The autumn migration gradually abates and in October there were only single birds recorded. We observed the last Wood Sandpipers until mid-October: 15 October 1994 – 2 birds and 15 October 1999 – 2 birds. Other authors (Michev *et al.* 1999) recorded the species on Lake Atanasovsko also during November: 15 November 1998 – 1 birds. A wintering bird was seen on the lake on 11 February 1988 (Nankinov 1998).

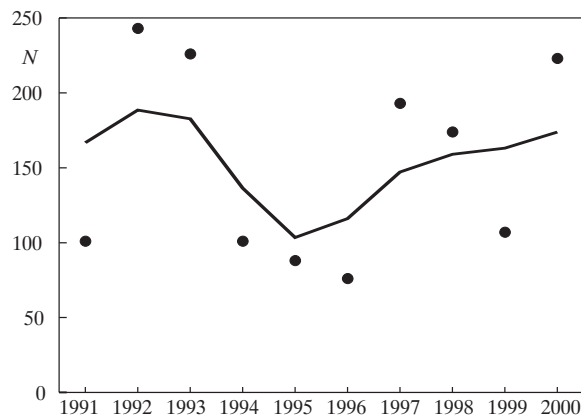


Fig. 2. Total numbers of Wood Sandpipers recorded on Lake Atanasovsko in subsequent years. Dots – numbers in subsequent years, line – smoothed by running average.

When comparing the total numbers of Wood Sandpipers recorded every year on Lake Atanasovsko it is visible (Fig. 2) that they vary along the years. Such situation may be explained by natural fluctuation of the population number, different breeding success or may be caused by the changes in their habitats.

DISCUSSION

The spring migration of Wood Sandpiper along the Bulgarian Black Sea coast starts after mid-March and is the most intensive in May. It lasts shorter and is not so

intensive as the autumn passage. During the 1970s and the 1980s spring congregations of the Wood Sandpiper on Lake Atanasovsko contained hundreds of birds: 1 May 1975 – 200 indiv. (Nankinov *et al.* 1997). In the last decade the numbers of migrating Wood Sandpipers decreased.

The Wood Sandpipers remaining on the lake during breeding period are mainly mature non-breeding birds, which forage on the rich food resources of the lake. It is possible that some of them breed in Bulgaria or in the adjacent countries. In the past the breeding range of the Wood Sandpiper comprised also the territory of Bulgaria. Petrov and Zlatanov (1955) supposed that the species was breeding in Dobrudja or nearby. There is only one confirmed fact of breeding – from the vicinity of Sofia, where 2 eggs were collected in 1897 (Anonymus 1907). It is possible that in some years single pairs remain and breed in suitable habitats. Recently, breeding of the Wood Sandpiper was confirmed for Slovenia (Vogrin 1998).

The increase in numbers of Wood Sandpipers in July and at the beginning of August is caused by the appearance of young birds migrating from the adjacent breeding places. The autumn migration becomes the most intensive in August. Not further than 20 years ago the August congregations of Wood Sandpipers on Lake Atanasovsko consisted of hundreds of birds: 13 August 1983 – 701 indiv. (Nankinov 1998), but now the numbers of the birds decrease. It is possible that these are the changes in the habitat characteristics of Lake Atanasovsko and other lakes along the Black Sea coast, which are the main reason of such situation, but it can be also due to natural fluctuation in the population number. Summing up, for a period of 15-20 years the numbers of Wood Sandpipers migrating along the Bulgarian Black Sea coast decreased several times as for last 10 years there have been no congregations exceeding 100 birds on Lake Atanasovsko.

REFERENCES

- Alleon A. 1886. *Memoire sur les oiseaux dans la Dobrodja et la Bulgarie*. Ornith. 2: 397-428.
- Anonymus. 1907. *Collections du Musee d'histoire naturelle*. Sophia: 484 pp.
- Michev T., Profirov L., Dimitrov M., Nyagolov K. 1999. *The Birds of Atanasovsko lake. Status and Checklist*. Bourgas Wetlands Publ. Ser. 1: 1-34.
- Nankinov D. 1998. *Wood Sandpiper Tringa glareola and Green Sandpiper Tringa ochropus in Bulgaria*. Int. Wader Stud. 10: 370-374.
- Nankinov D., Simeonov S., Michev T., Ivanov B. 1997. *Fauna Bulgarica*. 26. *Aves, Part II*. Edit. "Pr. M. Drinov", Edit. "Pensoft": 1-427.
- Petrov B., Zlatanov S. 1955. *Materials on the birds fauna in Dobrudja*. J. Sci. Int. Minist. Agric. 22: 93-113.
- Prostov A. 1964. *Research on the Ornithofauna of Burgas Region*. Bull. Inst. Zool. Acad. Sci. Bio. 15: 5-68.
- Vogrin M. 1998. *New breeding site of the Wood Sandpiper Tringa glareola in Central Europe*. Wader Study Group Bull. 87: 24-25.