

Studen Kladenets Reservoir (CS Bulgaria), a stopover of the migratory Great White Pelicans (*Pelecanus onocrotalus* Linnaeus, 1758) through the Balkan Peninsula

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Abstract. An observation of a flock of 30 birds on 26 August 2020 on the coast of the Studen Kladenets Reservoir is discussed in the light of the species migration and conservation.

Key words: Great White Pelican, bird autumn migration, Important Bird Areas

The Great White Pelican (*Pelecanus onocrotalus* Linnaeus, 1758) is categorized as “Least Concern” species globally (BirdLife International 2018) and in Europe (BirdLife International 2015).

Introduction

Status in Bulgaria. An extinct species in Bulgarian fauna (Michev & Profirov 2011).

Former distribution. The subfossil record proved its distribution throughout the country in the last ca. 5000 years (Early Bronze Age – Middle Ages): Urdoviza (Early Bronze Age, 5000-4000 BP; Boev & Ribarov 1990), Kabile (2700 BC- 6th c. AD; Boev & Ribarov, 1993), Novae (1st -7th c. AD; Schramm 1975), Kostinbrod (end of 3rd-early 4th c. A. D.; Boev 2006), Durankulak (Ancient and medieval settlement; Boev 2018) and Krivnya (Medieval fortress; Boev 1999). The six known subfossil localities lie out of the the recent species’ breeding range (Hagemeiger & Blaire 1997).

Results

Observation. On 26 August 2020 between 10:45 and 11:55 h summer time EET (UTC+02:00 time zone) a flock of 30 birds was resting on a shallow sandy coast (Fig. 1) of the uncovered bottom of the reservoir because of the low level of water. We observed the birds from a considerable distance of ca. 450-500 m from an excellent position, the top of the Monyak peak (586 m a.s.l.). The birds were preening their plumage and sometime making short flights of ca. 50-150 m (Fig. 2).



Fig. 1. Flock of 30 Great White Pelicans, Studen Kladenets Reservoir, 26 August 2020. Photo: Z. Boev.



Fig. 2. A Great White Pelican, Studen Kladenets Reservoir, 26 August 2020. Photo: Zlatozar Z. Boev.

Weather. The maximum temperature in the vicinity of the Lisitsite village (Kardzhali Region), the nearest settlement in the region was about 35° C. The weather was sunny, windless and calm all the period between 22 and 28 August 2020.

Locality: The Studen Kladenets Reservoir (41°37'30"N, 25°31'55"E) was constructed between 1955 and 1957. It is the third largest reservoir (15 995.6 ha; 388,000,000 m³) in Bulgaria. It is 29 km long and up to 1.5 km wide and its surface elevation is 227 m a.s.l. In the summer at low level of water vast areas of dam's bottom are visited by many birds for feeding and resting along the shallow coast edges. The site is an Important Bird Area BG013 and supports 219 bird species, 91 of which are listed in the Red Data Book for Bulgaria (Iankov *et al.* 2007).

Discussion

After Michev (1990) in the past *P. onocrotalus* in Bulgaria was nesting, migratory and passage species, at present only on passage and by exception a wintering species. The only ringed birds, found in Bulgaria originated from Romania (Danube Delta) and all they have been registered along the Bulgarian Black Sea Coast. No data on inland migration routes so far through the Eastern Rhodopes are available. Iankov & Nyagolov (1987) report on a juvenile bird, shot in the autumn of 1974 in the vicinities of the Studen Kladenets village (Kardzhali Region). They also note the local hunters' records of several individuals of pelicans (*Pelecanus* spp.) during the winter season of 1980-s in the Studen Kladenets Reservoir. Michev & Kutsarov (2007) list 0-2 breeding pairs in the country, although they accept the species' status as extinct in Bulgaria: "Incidental breeding of 1-2 pairs - quite low and non-typical numbers for a species normally nesting in numerous colonies ..." (p. 60). Nankinov & Sapetin (1978) state that little flocks could be observed in the inner wetlands of the Balkan Peninsula. After these authors the autumn migration occurs in September – December. Up to 12 Dalmatian pelicans (*Pelecanus crispus* Bruch, 1832) have been recorded as wintering in the reservoir and no one of *P. onocrotalus* (Iankov *et al.* 2007).

Our record of 30 birds on 26 August 2020 is the first observation of a relatively numerous amount of individuals of *P. onocrotalus* at the beginning of the autumn migration far of the habitual migration route (Via Pontica) in this part of the Balkan Peninsula. It widens our knowledge on the possible species' inland dispersion in the non-breeding period, an important detail for its spatial conservation on the territory of Bulgaria.

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