Acrocephalus 37 (168/169): 85–92, 2016
10.1515/acro-2016-0006

Recent data on the Danube Delta (Romania) avifauna from the 2014 and 2015 summer seasons

Novejši podatki o poletni avifavni delte Donave (Romunija) iz let 2014 in 2015

Botond J. Kiss[1], Vasile Alexe[1], Alexandru C. Doroşencu[1], Tănase Ceico[2], Nimrod B. Kiss[3], Mihai E. Marinov[1]

[1] Danube Delta National Institute for Research-Development 165, Babadag RO–828112, Tulcea, Romania, e–mail: jbkiss@ddni.ro
[2] National Environmental Guard, 5, Noiembrie 14, RO–820009 Tulcea, Romania, e–mail: ceicotanase@yahoo.com
[3] University of Auckland, 7 Symonds Street, Auckland NZ-1061 Auckland, New Zealand, e–mail: kravdragon@yahoo.se

For an area as vast as the Danube Delta ornithological data are in constant flux. New species appear, ecology and phenology change and unexpected phenomena occur (Kiss 1979, 1980A, 1980B, Kiss & Szabo 2000, Oţel et al. 2000, Platteeuw et al. 2004). Although many research programs in various institutions are under way, singular observations tend to be omitted from the record because they do not form an integral part of any specified research plan. Thus, such information is often communicated only informally. In this paper we summarize some interesting ornithological observations from the last two years in the Danube Delta.

Our observations were carried out in the summer months of 2014 and 2015 in the Danube Delta proper and the adjacent lagoon region (Figure 1).

Approximately 4655 km^2 of the area is under Romanian jurisdiction. The topography is mainly lowland terrain, with an average elevation of 0.52 m above sea level and with 83.2% of the total area permanently under water. The climate is temperate continental, with influence from the Black Sea. The January average temperature is -11°C; 22°C in June, and the annual average 11°C. The annual precipitation is 400–450 mm in the western areas and 300–350 mm at the shore and in the lagoon region. The vegetation coverage consists mainly of vast reed beds covering approximately 199,000 ha, periodically forming floating islands (local term *plaur*). 16% of the area is covered by woody vegetation; the predominant species being poplar and willow, with oak present on two large sand islands. (Hanganu *et al*. 2002, Munteanu 1996, Gîştescu & Ştiucă 2010).

The records presented are the result of observations made during our other research projects. Various equipment was used to facilitate observations, including a dinghy with a 15 HP outboard engine, Swarovski 7 x 42, 10 x 50 and Nikon 10 x 40 binoculars; Olympus E-500 digital camera with 40-150 mm zoom capacity, and a Fuji FinePix S 5700 digital camera. The image material was processed using ACDSee software. For various location-specific data we utilized information from our communal database, which is based on reports from field personnel.

Dalmatian Pelican *Pelecanus crispus*

In the spring of 2015, a mass mortality event occurred in the pelican colony Ceaplace in the northern part of the Sinoie lagoon (Figure 1). Between 25 and 29 Mar a minimum of 108 dead individuals were recorded, and another 10 until 7 Apr (AGERPRESS 2015, European Commission 2015b). Some birds perished while still incubating (Figures 2 and 3).

According to the press statement from the County of Tulcea Prefecture (AGERPRESS 2015) – later supported by separate statements from the Sanitary Veterinary Care and Food Safety Directorate of Constantza and The Institute for Diagnosis and Animal Health, Bucharest respectively – based on sample assessment, the mass mortality was caused by the H5N1 avian influenza virus strain (European Commission 2015b).

Although the majority of the colony members perished, 31 inhabited nests were located during April; and in June 60–70 almost mature chicks were found. Given that the total population of Dalmatian Pelican is 3,000–5,000 pairs (Crivelli 1996, Hagemeijer & Blair 1997, Iucn 2016), of which Romania has about 450 pairs (Platteeuw *et al.* 2004, 2005), or, according to more recent data, 240–330 pairs (CNDD 2015a), mortality during spring 2015 affected at least 13% of the population (18–25% of the more recent estimates). Similar deaths have occurred in Bulgaria; 21 cadavers were reported from the Srebarna colony. HPAI H5N1 virus was identified in examined specimens (European Commission 2015a). There is no information as to whether the virus affected other species as well, nor concerning the cause of the susceptibility to this virus in the Dalmatian Pelican.

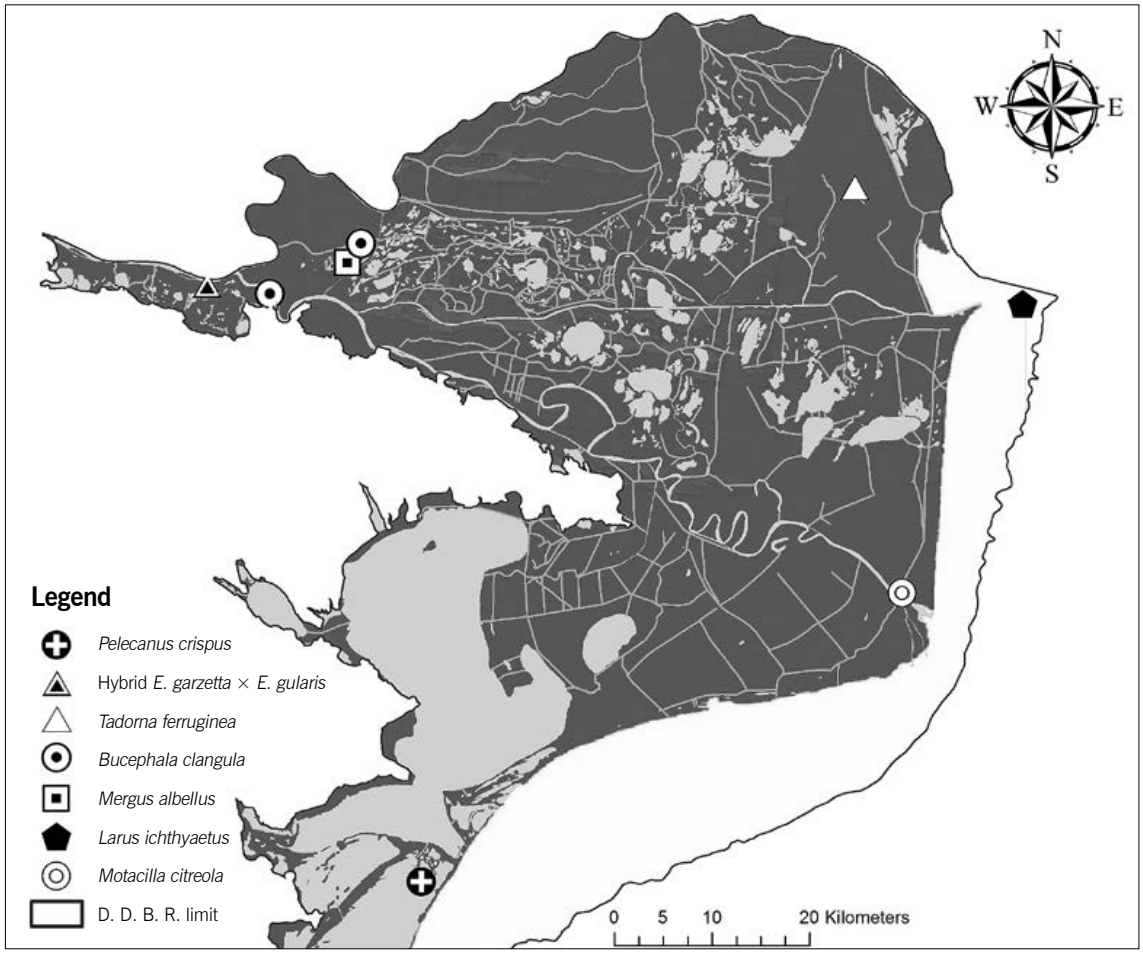

Figure 1: Schematic map of the Danube Delta, with observation sites of the species discussed. D. D. B. R. – Danube Delta Biosphere Reserve

Slika 1: Shematski zemljevid delte Donave z vrisanimi lokacijami opazovanj redkih vrst. D. D. B. R. – Biosferni rezervat delte Donave

Little Egret *Egretta garzetta* x Western Reef Heron *Egretta gularis*

Western Reef Heron traditionally nests on the western coasts of Africa and Asia, but vagrants of the species have been recorded in the Americas and adjacent archipelagos. The species' exact taxonomical relations are still debated (BirdLife International 2016), but the recent literature recognizes it a as separate species (del Hoyo J. *et al.* 2016). Possible Western Reef Egret hybrids have been reported from the Danube Delta and the possibility of nesting -suggested (Petrescu 2010). However, the published image material is closer to the rather typical hybrid colour variations than the pure species as traditionally described (Dubois & Yésou 1995, Dies *et al.* 2001, Bigas *et al.* 2002).

We possess information regarding an uncertain sighting of two specimens on 11 May 2015 on the right-hand banks of Danube, upstream of the Chilia branch junction (Figure 1). The birds were sighted foraging in shallow water on the very edge of the current about 200 m apart from each other. The cautious birds fled the approach of the observers' dinghy, so only one of the specimens could be identifiably photographed. The image shows a dark colour phase specimen, matching the description of Little Egret x Western Reef hybrids (Dubois & Yésou 1995, Magyar & Yésou 2000, Qninba et al. 2011).

Ruddy Shelduck *Tadorna ferruginea*

Ruddy Shelduck nesting in Romania was primarily observed in the tall Dobrogean banks of the lower

Figure 2: Dead Dalmatian Pelicans *Pelecanus crispus* in the colony (photo: V. Alexe)

Slika 2: Poginuli kodrasti pelikani *Pelecanus crispus* v koloniji (foto: V. Alexe)

Figure 3: Dalmatian Pelican *Pelecanus crispus* dead on the nest (photo: V. Alexe)

Slika 3: Poginuli kodrasti pelikan *Pelecanus crispus* na gnezdu (foto: V. Alexe)

Danube and a few small inland lakes; nesting sites were also recognized along the continental coastline of the Razim-Sinoie lagoon system (Vasiliu & Şova 1968, Tălpeanu 1970, Papadopol 1976, Weber et al. 1994, Munteanu 1998, Ciochia 2001). Occasional breeding has also occurred elsewhere (Cuzic 2004, Botnariuc & Tatole 2005). The presence of the species in the Danube Delta usually rests on sparse observations of solitary individuals or small groups, with no evidence of nesting. Ruddy Shelduck nesting in the actual Danube Delta was first confirmed in the summer of 2015 on the salt lake situated between the villages Letea and C. A. Rosetti, on Letea Dune. In early June, conservation ranger Lupu Costel reported a family of Ruddy Shelduck with 12 ducklings, which he had repeatedly observed. The area further held three Shelduck *Tadorna tadorna* families, with 3, 4 and 7 ducklings respectively. On 25 Jun we secured a series of confirmatory photographs with the female and ducklings.

Both Common and Ruddy Shelduck are known to nest frequently in the setts of mid-sized mammals: Fox *Vulpes vulpes* and Badger *Meles meles* (Linţia 1955, Papadopol 1966, Cndd 2015b); the nests of the observed birds were located in the Letea-C.A. Rosetti earth-dam, or in the slopes of sand dunes near the forest. According to the ranger's report, the ducklings reached flying age and left the area in early August.

Goldeneye *Bucephala clangula*

In the early 1900s, the Goldeneye was still regarded as a common species that, although occurring in relatively small numbers, nested in the flood-plains of lower Danube, as well as in the Danube Delta. At that time these regions harboured plenty of old, hollow willow trees, suitable for their breeding (Linţia 1955, Vasiliu & Şova 1968, Munteanu 1998, Munteanu 2002). These circumstances lasted into the 1960s (Vasiliu & Şova 1968), but in the following decade Goldeneye was mentioned only as a transient winter visitor in the Danube from October to March and, during exceptionally cold winters, it only migrated through the region (Tălpeanu 1970). Flocks on migration mainly frequent the lagoon area, less commonly the actual Delta or the Danube itself (Botnariuc, Tatole 2005). In recent years, the species has been sighted repeatedly during the breeding season, as single individuals, in pairs or in small flocks, sometimes performing courtship displays in the evening. Since 2000, at least three cases of confirmed nesting have been recorded (Botnariuc & Tatole 2005, Cuzic & Gheba 2011, Cndd 2015c). The breeding population for Romania was estimated at 0–3

pairs in 1996–2002, and 20–40 pairs in 2000–2012 (BirdLife International 2004, EIONET 2008–2012a). Nevertheless, data regarding nesting locations and distribution were lacking. In the last two years we have observed a number of nests between May and July in the Sontea-Fortuna hydrological unit with old, flooded willow trees; especially around the lakes Coteț, Lunga, Martinca, Meşteru, Nebunu, Purcelu and Tătaru. In addition to numerous observations of adults, on 25 Apr 2014 a breeding female was located in an old willow. Only the partially submerged trunk remained of the dead willow. The nest was located in a hole in the upper part of the trunk, probably excavated by a Black Woodpecker *Dryocopus martius*. The poor condition of the tree did not allow a thorough examination of the nest (Figure 4).

On 14 May 2014 we observed one more female in the vicinity, with 6 ducklings aged only a few days. On 19 Apr 2015, along the Tulcea branch and directly upstream of the city, we spotted a drake and a duck in a pair; on 31 May the duck was spotted again in the same location – this time with 5 ducklings, a few days old. Note that the three known cases in contemporary Romanian literature describing females with ducklings are from the month of June (Botnariuc & Tatole 2005, Cuzic & Gheba 2011). These observations provide further details regarding the return of the Goldeneye to former nesting areas in Romania.

Figure 4: Nesting hollow used by Goldeneye *Bucephala clangula* in an old willow *Salix* sp. (photo: V. Alexe)

Slika 4: Duplo v stari vrbi *Salix* sp., v katerem je gnezdil zvonec *Bucephala clangula* (foto: V. Alexe)

Smew *Mergus albellus*

Another species whose nesting was recently reconfirmed in the Danube Delta is the Smew. According to classical Romanian ornithological literature, the Smew nested in the floodplains of the lower Danube to the east of former Lake Greaca, and in Dobrogea (Linția 1955, Vasiliu & Şova 1968). In the next few decades it was considered only a migratory and wintering species (Tălpeanu 1970, Munteanu 1998). Wintering flocks converge on the larger lakes in the Delta and in the lagoons and, in times of exceptional frosts, along the ice-free parts of the coast and the Danube. Large flocks arrive in the Delta in October and leave by the end of March/beginning of April; but in recent years more and more observations have been from the nesting period, so far without accurate data (Munteanu 2004, Botnariuc & Tatole 2005, Cndd 2015d). From the first records of the reappearance of Smew as a breeding species, the population for Romania was estimated to be 0–5 pairs in 1996–2002, and 10–15 pairs in 2000–2012 (BirdLife International 2004, EIONET 2008–2012b). As in the case of the Goldeneye, data on the nest locations and on the exact distribution were lacking. The sites of our own observations of nests coincide with those of the Goldeneye, which can be explained by the similar ecological requirements. We observed single birds, pairs, juveniles or small groups of birds in the observation area on 24 Apr, 14 May and 21 Jun 2014.

An important, but indirect reason for the rise of appropriate habitats is the institution of environmental protection in the Delta region. This led to an ageing tree population, which in turn promotes the spread of the Black Woodpecker (Botnariuc & Tatole 2005).

Pallas's Gull *Larus ichthyaetus*

We reported earlier on the expansion of the Pallas's Gull populations from Eastern Europe westwards, the first recorded nesting in the Danube Delta and the nest site characteristics. The only known breeding site for this species in Romania is Musura Bay (Kiss *et al*. 2008, 2009, 2010). The Romanian breeding population is estimated at 70–120 pairs. Significant variations of breeding success are recorded from one year to another but the overall population trend is a slight increase. Observations from the 2015 season have produced new data regarding the nesting of this species. The observations originate from the same sand-and-silt island at the mouth of the Sulina branch where they nested in 2009. On 24 Apr 2015, during our first survey, choppy conditions and strong surf made it impossible to disembark, and as a result all we could establish was that Pallas's Gull again nested on the island, interspersed with a large colony of Caspian Gull *Larus cachinnans*. The Caspian Gull colony had relocated about 800 m south as a result of

hydromorphological changes in the bay. In the colony, situated among tall halophile vegetation, the birds were already roosting on their nests, and incubation had started for both species. At a later survey on 10 Jun, we carefully examined the colony, and noted that the incubation period had nearly ended, very few nests still having eggs (Figure 5).

The older fledglings had congregated among the sandy areas between the patches of vegetation but, reacting to the approach of the observers, they moved down to the shallow water on the inner side of the island. This behaviour of forming nurseries surrounded on all sides by parent birds is typical of Pallas's Gull, both in a colony and on water (Figures 6 and 7).

Without constant vigilance around nests and fledglings, successful breeding of Pallas's Gull would not be possible within a colony of the very aggressive Caspian Gull (Burger *et al.* 2016). We surmise that its successful territorial expansion and colonization is significantly facilitated by a strategy of collectively watching and rearing their nestlings.

On 24 Jun, on our final survey, we no longer found un-hatched eggs or downy fledglings. Most of the feathered young birds were hidden among the tall halophilic vegetation, and some compact groups of young birds were already on the water. We estimated the number of young birds to be 100 to 120 individuals. This is approximately 30% more than our estimate of fledglings in 2009.

Figure 5: Pallas's Gull *Larus ichthyaetus* nest with egg and a two-day young (photo: T. Ceico)

Slika 5: Gnezdo ribjega galeba *Larus ichthyaetus* z dva dni starim mladičem (foto: T. Ceico)

Citrine Wagtail *Motacilla citreola*

The Citrine Wagtail has expanded its breeding territory westwards through to Eastern Poland, northward to the Kola Peninsula, and through the central part of the Eastern European Plains towards southern Finland and the Baltic region (Bezzel 1993, Hagemeijer & Blair 1997, Meissner & Skakuj 1997, Alexander et al. 2007). It was first described in Romania in the mid-1970s (Nadra & Paşcovschi 1975) and has been regarded as a scarce passage migrant since. The first record of a probable breeding attempt of the species for Romania was in July 2006 when a juvenile bird was caught on Grindul Chituc, a natural sand levee between the southern part of the lagoons and the sea shore (SÁNDOR et al. 2007).

On 29 May 2014, in the eastern part of the Danube Delta close to the village of Sf. Gheorghe, we observed a male sitting on a prominent plant stem, repeatedly flying off to catch insects, but always returning to its prominent position. Other Citrine Wagtails were not observed in its vicinity, but its vigilant attitude suggested a nest nearby.

On 16 Jun, we again surveyed the area and re-discovered what was most probably the same bird, together with a female; both were catching insects and descending with their prey to a slightly raised mound surrounded by dense vegetation. A pair of birds, repeatedly returning to a specific location carrying sustenance is an accepted criterion according to the EBCC evidencing an established nest and indicates that the chicks are now fed by the parent birds (Hagemeijer & Blair 1997). The habitat was a tall rush saltmarsh dominated by *Juncus maritimus* and surrounded by a drainage channel. Because we assumed that the chicks were in the nest hiding in the vegetation, we did not bother them further with a direct examination. Accordingly, we believe that this constitutes additional evidence regarding the nesting habits of Citrine Wagtail in the Danube Delta and in Romania.

Acknowledgements

We express our thanks to ranger Costel Lupu for information on the Ruddy Shelduck.

Povzetek

Avtorji predstavljajo nekatera favnistično zanimiva opazovanja o avifavni delte Donave (Romunija). Spomladi leta 2015 je pomembno gnezditveno kolonijo v črnomorskih lagunah močno prizadel množični pogin 118 kodrastih pelikanov *Pelecanus crispus* zaradi virusa ptičje gripe (sev H5N1). Opazovan je bil možen križanec med obalno čapljo *Egretta gularis* in malo belo čapljo *Egretta garzetta*.

Figure 6: The parent birds form a perimeter around a Pallas's Gull *Larus ichthyaetus* nursery on the shore (photo: B. J. Kiss)

Slika 6: Odrasli ribji galebi *Larus ichthyaetus* varujejo "vrtec" mladičev na obali (foto: B. J. Kiss).

Figure 7: Pallas's Gull *Larus ichthyaetus* nursery in the water (photo: B. J. Kiss)

Slika 7: "Vrtec" ribjih galebov *Larus ichthyaetus* na vodi (foto: B. J. Kiss)

Opisano je prvo gnezdenje rjaste kozarke *Tadorna ferruginea* v delti Donave. Zvonec *Bucephala clangula* in mali žagar *Mergus albellus* se kot gnezdilca vračata na območja, ki sta jih zapustila v zgodnjem 20. stoletju. Predstavljeni so podatki o premiku kolonije ribjih galebov *Larus ichthyaetus* zaradi hidromorfoloških sprememb v zalivu ter obrambne strategije v mešani koloniji s črnomorskim galebom *Larus cachinnans*. Leta 2014 je bilo prvič zabeleženo verjetno gnezdenje citronaste pastirice *Motacilla citreola* v delti Donave.

Abstract

A number of faunistically interesting observations related to the avifauna of the Danube Delta (Romania) are presented. In the spring of 2015, a mass mortality event with a minimum of 118 dead birds occurred in a major Dalmatian Pelican *Pelecanus crispus* colony in the Black Sea lagoons caused by the avian flu virus, strain H5N1. A possible hybrid between Little Egret *Egretta garzetta* and Western Reef Heron *Egretta gularis* was observed. The first nesting of Ruddy Shelduck *Tadorna ferruginea* in the Danube Delta was documented. Goldeneye *Bucephala clangula* and Smew *Mergus albellus* are re-colonising the areas they abandoned in the early 20th century. New data regarding the relocation of Pallas's Gull *Larus ichthyaetus* colony in the Danube Delta as a result of hydromorphological changes in the bay, nesting and defence strategies against Caspian Gulls *Larus cachinnans* are described. Probable nesting of Citrine Wagtail *Motacilla citreola* in the Danube Delta was documented in 2014 for the first time.

References

AGERPRESS (2015): Comunicat de presă - Instituția Prefectului - Județul Tulcea – [http://www.agerpres.ro/comunicate/2015/03/27/comunicat-de-presa-institutia-prefectului-judetul-tulcea-17-55-36], 27/03/2015.

Bezzel E. (1993): Kompendium der Vögel Mitteleuropas. – AULA-Verlag, Wiesbaden.

BirdLife International (2004): Birds in Europe: population estimates, trends and conservation status. BirdLife Conservation Series No. 12. – BirdLife International, Cambridge.

BirdLife International (2016): Species factsheet: *Egretta gularis*. – [http://www.birdlife.org/datazone/species/factsheet/22729692], 06/07/2016.

Botnariuc N., Tatole V. (2005): Cartea Roşie a Vertebratelor din România. – Academia Romana, Bucharest.

Burger J., Gochfeld M., de Juana E., Garcia E. F. J., Kirwan G. M. (2016): Pallas's Gull (*Larus ichthyaetus*). In: del Hoyo J., Elliott A., Sargatal J., Christie D. A., de Juana E. (eds.). HBW Alive, Lynx Edicions, Barcelona. [http://www.hbw.com/node/53987], 25/08/2016.

Ciochia V. (ed.) (2001): Aves Danubii. Păsările Dunării de izvoare (Donaueschingen) pînă la vărsare (Marea Neagră). – Editura Pelecanus, Braşov. (In Romanian).

CNDD (2015a): Pelicanul Cret – Dalmatian Pelican. pp. 84–85. In: Atlas of communitary interest bird species from Romania. – Fundația Centru Național pentru Dezvoltare Durabilă, Bucharest. (In Romanian).

CNDD (2015b): Călifarul Roşu – Ruddy Shelduck. pp 20–21. In: Atlas of comunitary interest bird species from Romania. – Fundația Centru Național pentru Dezvoltare Durabilă, Bucharest. (In Romanian).

CNDD (2015c): Rața Sunătoare – Common Goldeneye. pp. 50–51. In: Atlas of comunitary interest bird species from Romania. – Fundația Centru Național pentru Dezvoltare Durabilă, Bucharest. (In Romanian).

CNDD (2015d): Ferăstraş Mic – Smew pp. 52–53. In: Atlas of comunitary interest bird species from Romania. – Fundaţia Centru Naţional pentru Dezvoltare Durabilă, Bucharest. (In Romanian).

Crivelli A. (1996): Action Plan for the Dalmatian Pelican (*Pelecanus crispus*) in Europe. pp. 53–66. In: Heredia B., Rose L., Painter M. (eds.): Globally threatened birds in Europe. – Council of Europe Publishing, Strasbourg.

Cuzic V. (2002): Contribution to the study of the avifauna of Traian Lake, Tulcea County. – Scientific Annals of the Danube Delta Institute for Research & Development 9: 60–68.

Cuzic V., Gheba P. (2011): Raţa sunătoare (*Bucephala clangula* L.), specie cuibăritoare în Delta Dunării – Despre Păsări 1: 19. (In Romanian).

del Hoyo J., Collar N., Kirwan G. M. (2016): Western Reef-egret (*Egretta gularis*). In: del Hoyo J., Elliott A., Sargatal J., Christie D. A., de Juana E. (eds.). HBW Alive, Lynx Edicions, Barcelona. [http://www.hbw.com/node/467292], 25/08/2016.

Dies J. I., Prosper J., Dies B. (2001): Occasional breeding by Western Reef Egret in eastern Spain. – British Birds 94: 382–386.

Dubois P. J., Yésou P. (1995): Identification of Western Reef Egrets and dark Little Egrets. – British Birds 88: 307–319.

EIONET (2008–2012a): Population status and trends at the EU and Member State levels. – [http://bd.eionet.europa.eu/article12/summary?period=1&subject=A067], 28/07/2016.

EIONET (2008–2012b): Population status and trends at the EU and Member State levels. – [http://bd.eionet.europa.eu/article12/summary?period=1&subject=A767-A], 28/07/2016.

European Commission (2015a): HPAI H5N1 in Bulgaria SCOPAFF Animal Health & Welfare. – [http://ec.europa.eu/food/animals/docs/reg-com_ahw_20150416_pres_ai_bulgaria.pdf], 17/04/2015.

European Commission (2015b): SCOPAFF meeting 16–17 April 2015, Brussels Pathogenic Avian Influenza H5N1 in wild birds, in the Danube Delta Biosphere Reservation – România. – [http://ec.europa.eu/food/animals/docs/reg-com_ahw_20150416_pres_hpai_h5n1_romania.pdf], 17/04/2015.

Fábián G., Sterbetz I. (1966): Fekete kis kócsagok (*Egretta garzetta* L.) Európában. – Aquila 71/72: 99–112. (In Hungarian)

Gîştescu P., Ştiucă R. (2010): Delta Dunării, Rezervaţie a biosferei. – Editura CD Press, Bucharest. (In Romanian).

Glutz von Blotzheim U. N., Bauer K. M. (1999): Handbuch der Vögel Mitteleuropas. Band 8/I. – AULA-Verlag, Wiesbaden.

Hagemeijer W. J. M., Blair M. J. (eds.) (1997): The EBCC Atlas of European Breeding Birds. – T & AD Poyser, London.

Hanganu J., Dubiyna D., Zhmud E., Grigoraş I., Menke U., Drost H., Ştefan N., Sârbu I. (2002): Vegetation of Biosphere reserve "Danube Delta". – Evers Litho & Druk, Almere.

van Impe J. (1977) : L'avifaune estivale du complex lagunaire Razelm Sinoe (Roumanie). – Alauda 45: 17–52. (in French)

IUCN (2016): The IUCN Red List of Threatened Species. Version 2016-1, *Pelecanus crispus*. – [http://www.iucnredlist.org/details/22697599/0], 01/08/2016.

Kayser Y., Dietrich L., Tatin L., Hafner H. (2000): Nidification mixte de l'Aigrette des récifs *Egretta gularis* en Camargue en 1996. – Ornithos 7: 37–40. (in French)

Kiss J. B. (1979): Seltene Vögel im Donaudelta 1978. – Vögel der Heimat. 49 (12): 224 – 227.

Kiss J. B. (1980A): *Charadrius asiaticus* Pall. et *Larus ichthyaetus* Pall. en Roumanie. -Travaux du Muséum d'Histoire Naturelle "Grigore Antipa" 22: 541–545.

Kiss J. B. (1980B): Interessante Brutbeobachtungen im Donaudelta 1977. – Vögel der Heimat 50 (1): 243–245.

Kiss J. B., Marinov E. M., Alexe V. (2008): Preliminary data on the ornithological fauna of the islet forming in the south part of Musura Gulf, between Stambulul Vechi (Ukraine) and Sulina (Romania) branches of the Danube. – Scientific Annals of the Danube Delta Institute for Research & Development 14: 31–34.

Kiss J. B., Alexe V., Marinov M., Sándor A. (2009): Date privind situaţia pescăruşului asiatic (*Larus ichthyaetus* Pall. 1773) în România şi cuibăritul său în Rezervaţia Biosferei Delta Dunării. – Despre Păsări 2: 18–19. (In Romanian).

Kiss J. B., Alexe V., Marinov E. E. M., Sándor A. (2010): Data on the distribution of the Greater Black-headed Gull (*Larus ichthyaetus* Pall. 1773) and its breeding in the Danube Delta Biosphere Reserve. – Scientific Annals of the Danube Delta Institute Tulcea 16: 19–22.

Kiss J. B., Szabo L. (2000): First breeding record of White-tailed Lapwing in Romania (and Europe outside Russia). – British Birds 93 (8): 400–401.

Linţia D. (1955): Păsările din R. P. R. – Editura Academiei R. P. R., Bucharest. (In Romanian).

Magyar G., Yésou P. (2000): Reconsideration of a Hungarian specimen of a Black-coloured Egret as Western Reef Egret (*Egretta gularis*). – Aquila 105/106: 35–40.

Meissner W., Skakuj M. (1997): First broods of the Citrine Wagtail *Motacilla citreola* in Poland and changes in the species breeding range in Europe. – Notatki Ornitologiczne 38 (1): 51–60.

Munteanu I. (1996): Soils of the Romanian Danube Delta Biosphere Reserve. – Evers Litho & Druk, Almere.

Munteanu D. (coord.) (2002): Atlasul păsărilor clocitoare din România. – Publicaţiile Societăţii Ornitologice Române 16, Cluj-Napoca.

MUNTEANU D. (coord.) (2004): Important Bird Areas in Romania. – Alma Mater, Cluj-Napoca. (In Romanian)

NADRA E. (1979): O clasică coloraţie aposematică la călifar *Tadorna tadorna* (L.) Tibiscus: 173–177.

Nadra E., Paşcovschi S. (1975): *Motacilla citreola* Pallas, a new species for Romanian avifauna. – Tibiscus 1: 237–242. (In Romanian)

Oţel V., Ciocîrlan V., Fedorchenko A., Kiss J. B., Murariu D., Niţu E., Rákosy L., Ruicănescu A., Sárkány A., Sârbu I., Szabó L., Török Z. (2000): Red List of plant and animal species from Danube Delta Biosphere Reserve Romania. – Aves, Odorheiu Secuiesc. (in Romanian)

Papadopol A. (1966): La Protection de Certains Oiseaux Aquatiques et de Certains Biotopes Typiques de ces

Espéces. – Proceedings of the International Conference on Waterfowl Research and Conservation Brno: 305–316.

Petrescu E. (2010): Hibrid *Egretta gularis* x *Egretta garzetta*? – Despre păsări 2: 18. (In Romanian).

Platteeuw M., Kiss J. B., Sadoul N., Zhmud M. Y. (2004): Colonial Waterbirds and their habitat use in the Danube Delta as an example of a large-scale natural wetland. – Evers Litho & Druk, Almere.

Platteeuw M., Kiss J. B., Zhmud M. Y., Sadoul N., (2006): Large colonial waterbirds in the Romanian and Ukrainian Danube Delta: a complete survey in 2001/2002. – Scientific Annals of the Danube Delta Institute Tulcea 12: 103–108.

Qninba A., Benhoussa A., Ibn Tattou M., El Idrissi Essougrati A., Ben Haj S., Rguibi Idrissi H. (2011): Cas probable d'hybridation Aigrette garzette *Egretta garzetta* x Aigrette des récifs *Egretta gularis* dans l'archipel d'Essaouira (Maroc). – Alauda 79: 241–242.

Sándor D. A., Moldován I., Bugariu S. (2007): First breeding record of the Citrine Wagtail (*Motacilla citreola*) in Romania. – Scientific Annals of the Danube Delta Institute Tulcea 13: 107–110.

Tălpeanu M. (1970): Les Anseriformes de Roumanie (Nidification, Hivernage). – Travaux du Muséum d'Histoire Naturelle "Grigore Antipa" 10: 297.

Vasiliu G. D., Şova C. (1968): Fauna vertebratica Romaniae. – Muzeul Judeţean Bacău, Studii si Comunicări, Bacău.

Weber P., Munteanu D., Papadopol A. (1994): Atlasul provizoriu al păsărilor clocitoare din România. – Publicaţiile Societăţii Ornitologice Române 2, Cluj-Napoca.

Prispelo / Arrived: 17. 5. 2016
Sprejeto / Accepted: 18. 9. 2016