New information on the distribution of *Oxyura leucocephala* on the Black Sea coast of the Caucasus is provided. The first appearance of the species in this region was recorded in 1991. At present *Oxyura leucocephala* is a small wintering and migratory species found on the Black Sea coast of the Krasnodarsky Krai (Russia) and Abkhazia. Single individuals or pairs of birds are usually noted, less often groups of up to ten white-headed ducks. The most significant was the wintering of *Oxyura leucocephala* on the lakes of the natural ornithological park in the Imeretinskaya lowland (Sochi, Russia) in 2016–2017. An assumption is being made about the formation of a new wintering area for *Oxyura leucocephala* occupying the northeastern coast of the Black Sea.

**Key words:** Abkhazia, Black Sea, Caucasus, migration, Novorossiysk, Sochi, white-headed duck, wintering

The white-headed duck *Oxyura leucocephala* Scopoli, 1769 (Anatidae, Anseriformes) refers to a widespread species inhabiting the southern part of Eurasia and North-West Africa. However, its breeding area is divided and fragmented (Stepanyan, 2003). The area of wintering of *Oxyura leucocephala* covers the countries of the Mediterranean, the Middle East and Central Asia, northern India and northern Africa. The results of winter bird counts indicate a reduction in their world population at the late XX century of more than 50% (Kreuzberg-Mukhina, 2002). Currently, *Oxyura leucocephala* is included on the IUCN Red List of Threatened Species with category «Endangered» (Endangered A2bcde + 4bcde) (BirdLife International, 2017).

In Southern Russia *Oxyura leucocephala* belongs to the regularly nesting species of the Volgograd region (Bukreev & Chernobay, 2011) and it also breeds in small numbers in Stavropol Krai and Krasnodarsky Krai, Dagestan and Kalmykia (Kazakov et al., 2004; Badmaev, 2013; Khokhlov & Il’yukh, 2013). In addition, in the late XX – early XXI century, there is an increase in the number of records of *Oxyura leucocephala* in the Crimea, where now it is a rare migratory, wintering, summer visitor and breeding species (Andryushchenko et al., 2013). *Oxyura leucocephala* was not registered on the Black Sea coast of the Caucasus before the 1990s.

We conducted regular (in all seasons of the annual cycle) avifaunistic surveys of the Black Sea coast of Abkhazia, as well as the southwestern part of the Russian Federation within the Tuapse region and City of Sochi between 1981 and 2018. During this time, 29 records of *Oxyura leucocephala* were registered mainly in the winter and migration periods. Oral reports of photographers, birdwatchers and colleagues (11 cases in total) on the observations of these white-headed ducks on the designated territory were also used.

For the first time *Oxyura leucocephala* (two individuals) was marked by us on the Black Sea coast of the Caucasus on the Inkit Lake near Pitsunda in the western part of Abkhazia on 15.04.1991 and 16.04.1991. At the beginning of the XXI century, records of *Oxyura leucocephala* began to acquire a regular character in this region.

From 2002 to 2011, eight cases of bird registrations were recorded on lakes near the sea coast on the territory of Abkhazia (Mayakskoe Lake near Sokhum, Skurcha Lake at the mouth of the Kodor River, Inkit Lake near Pitsunda), three of which – in winter, three – in late autumn and two – in early spring. Individuals and groups of three to ten white-headed ducks were observed (Table).

In 2007, *Oxyura leucocephala* was first discovered on the Black Sea coast of the Krasnodar-
sky Krai in May (Tilba, 2007) and June (Khokhlov & Il’yukh, 2007) on the lakes of the Imeretinskaya lowland (Sochi, Russia). One individual of *Oxyura leucocephala* was seen there by A.D. Lipkovich (oral report) on 31.12.2008.

Later, in 2016 (Shagarov, 2016), and mainly, in 2017, we noted a well-marked wintering of *Oxyura leucocephala* in the territory of the natural ornithological park in the Imeretinskaya lowland (Sochi, Russia) (Fig. 1). The regular presence of *Oxyura leucocephala* with a total number of up to ten individuals was traced from 28.12.2016 to 18.05.2017, and all the individuals noted were females. Birds did not leave one of the lakes of the natural ornithological park with a total area of 0.05 km² practically, where also *Anas penelope* Linnaeus, 1758 (~16 individuals), *Aythya fuligula* Linnaeus, 1758 (~450 individuals) and *Fulica atra* Linnaeus, 1758 (~120 individuals) were observed. However, in the winter season 2017–2018, without significant and prolonged cooling in the region, *Oxyura leucocephala* was not observed on the lakes of the Imeretinskaya lowland.

### Table. Records of *Oxyura leucocephala* on the Black Sea coast of the Caucasus

| Record place                        | Data            | Description of water body                                                                 | Number and sex of met birds | Information source                     |
|-------------------------------------|-----------------|------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------|
| Pitsunda, Inkit Lake (Abkhazia)     | 15–16.04.1991   | Lake with rare near-water vegetation, located 400 m from the seashore                     | male and female               | Malandzia, 2002                        |
| Sokhum, Mayakskoe Lake (Abkhazia)   | 8.01.2002       | Lake with rare near-water vegetation, located 1 km from the seashore                     | male                          | A.V. Ratia, oral report                |
| Pitsunda, Inkit Lake (Abkhazia)     | 23.03.2002      | Lake with rare near-water vegetation, located 400 m from the seashore                    | five males                    | A.K. Shavlovoh, oral report            |
| Sokhum, Mayakskoe Lake (Abkhazia)   | 25.11.2004      | Lake with rare near-water vegetation, located 1 km from the seashore                     | two males and six females     | Authors’ observations                  |
| Sokhum, Mayakskoe Lake (Abkhazia)   | 25.11.2004      | Lake with rare near-water vegetation, located 1 km from the seashore                     | about ten individuals         | A.V. Ratia, oral report                |
| Sokhum, Mayakskoe Lake (Abkhazia)   | 27.11.2004      | Lake with rare near-water vegetation, located 1 km from the seashore                     | one individual                | A.N. Ivanitsky, oral record            |
| Pitsunda, Inkit Lake (Abkhazia)     | 28.01.2006      | Lake with rare near-water vegetation, located 400 m from the seashore                    | one individual                | A.K. Shavlovoh, oral report            |
| Adler district, Sochi, Imeretinskaya lowland (Russia) | 4.05.2006-1-2.06.2006 | Lake with thicket of reed and cattail on the banks, located 100 m from the seashore | female                       | Tilba, 2007 Khokhlov & Il’yukh, 2007  |
| Sokhum, Mayakskoe Lake (Abkhazia)   | 25.03.2007      | Lake with rare near-water vegetation, located 1 km from the seashore                     | male                          | Authors’ observations                  |
| Adler district, Sochi, Imeretinskaya lowland (Russia) | 31.12.2008 | Lake with rare near-water vegetation, located 500 m from the seashore | female                       | Photo by A.D. Lipkovich                |
| Kodor River, Skurcha Lake (Abkhazia) | 4.12.2011 | Lake with a rare near-water vegetation, located 150 m from the seashore                | three individuals             | Authors’ observations                  |
| Kerch Strait (Russia)               | January 2013    | Sea strait                                                                                | five individuals              | Solokha & Lokhman, 2017                |
| Anapa (Russia)                      | January 2013    | Plain site with thicket of reed 800 m from the seashore                                | ten individuals               | Solokha & Lokhman, 2017                |
| Taman Bay (Russia)                  | January 2014    | Lake with rare near-water vegetation, located 50 m from the seashore                     | two individuals               | Solokha & Lokhman, 2017                |
| Adler district, Sochi, Imeretinskaya lowland (Russia) | 18.01–24.03.2016 | Lake with rare near-water vegetation, located 500 m from the seashore | single females and pairs      | Authors’ observations                  |
| Adler district, Sochi, Imeretinskaya lowland (Russia) | 27.12.2016–18.05.2017 | Lake with rare near-water vegetation, located 500 m from the seashore | pairs, single females and groups from six to ten females, 20 records in all | Authors’ observations                  |
| Novorossiysk (Russia)              | 27.03.2017      | Sea lagoon                                                                               | male                          | A.V. Popovich, oral report             |
| Novorossiysk (Russia)              | 29.03.2017      | Sea lagoon                                                                               | two females, four records in all | Photo by I.P. Torgachkin               |
| Novorossiysk (Russia)              | 11–23.02.2018   | Sea lagoon                                                                               | two females, four records in all | Photo by I.P. Torgachkin               |
Oxyura leucocephala has appeared in the northwestern part of the Black Sea coast of the Krasnodarsky Krai recently. Five white-headed ducks were found in the Kerch Strait and ten individuals in the wetlands of Anapa in January 2013. Two birds were recorded in Taman Bay (Solokha & Lokhman, 2017) in the winter of 2014. In addition, the individuals and pairs were observed in the Sudzhuk lagoon of Novorossiysk (oral reports by A.V. Popovich and I.P. Torgachkin) on 27.03.2017 and 29.03.2017, and also from 11.02.2018 to 23.02.2018 (Fig. 2).

Thus, at present Oxyura leucocephala began to appear periodically on the Black Sea coast of the Caucasus from the mouth of the River Kodor in Abkhazia to the Taman Bay in the Krasnodarsky Krai (Fig. 3). Most bird registrations took place in winter and a smaller one – during the migration period.

In the late XX and early XXI centuries, Oxyura leucocephala was recorded in winter also in the coastal regions of the Crimea. On the basis of the observations of 1990–2011 it was believed that the wounded and weakened birds were left to winter (Grinchenko, 2011). However, according to other sources, Oxyura leucocephala winters in various parts of the Crimea periodically, and white-headed ducks were observed there in 2013 regularly (Andryushchenko et al., 2013).

Fig. 1. Two females of Oxyura leucocephala in the natural ornithological park in the Imeretinskaya lowland (Sochi, Russia). Photo: Lev M. Shagarov.

Fig. 2. Male of Oxyura leucocephala in the Sudzhuk lagoon of Novorossiysk (Russia). Photo: Anton V. Popovich.

Fig. 3. Records of white-headed duck on the Black Sea coast of the Caucasus.
Winter habitats of *Oxyura leucocephala* are large open water bodies, lakes, sea bays, more often with rocky shores (Isakov, 1952). In Uzbekistan birds were observed in the deep-water parts of lakes far from the coasts (Kreuzberg-Mukhina, 2002). In other regions, for example, in the Middle East (Israel) wintering *Oxyura leucocephala* (according to December observations in 2009) adhered to lakes, as well as artificial reservoirs of fresh water – reservoirs devoid of aquatic vegetation. It is noted that fish-breeding ponds along the Mediterranean coast have lost their attraction for wintering birds (Rozenfeld & Popovkina, 2012).

As a rule the white-headed ducks usually use for wintering small lakes of natural or artificial origin with rare coastal near-water vegetation located in the immediate vicinity of the shoreline of the Black Sea of the Caucasus. Less often they were noted in the sea bays and in the smooth sites (Table). There are no changes in the appearance of their habitats here. Similar habitats are also used by birds in the southern part of the Crimea. In particular, the white-headed ducks were recorded mainly in small inland water bodies with a lack of above-water vegetation and located up to 10 km from the shore of the sea, as well as in the sea bays and in the floods (Grinchenko, 2011; Andryushchenko et al., 2013).

The appearance and regular registrations of *Oxyura leucocephala* testify to the formation of a new wintering area of this species located north of the main places of its winter stay on the Black Sea coast of the Caucasus and in the Crimea. Perhaps this is due to the redistribution of birds occurring in other regions, particularly in the Mediterranean (Kreuzberg-Mukhina, 2002) and in Turkey (BirdLife International, 2017). Apparently, the low number of *Oxyura leucocephala* is explained both by their stay in the peripheral part of the wintering area, and by the recent appearance of this wintering site, which is currently at the formation stage. We believe it is for this reason that the presence of *Oxyura leucocephala* in typical habitats on the Imeretinskaya lowland has not been an annual occurrence yet.

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Tilba P.A. 2007. Some rare and insufficiently studied bird species in the Southeast part of Krasnodar Region. *Strept 5*(1–2): 5–18. [In Russian]
Privedeny novye svedeniya o rasprostranении савки Oxyura leucocephala na Chernomorskom pobereже Kavkaza. Perevo pojavlenie vиda v этом регионе зарегистрированo v 1991 г. V настоящее время савка является malochislennymim zimuyim и prolетnym vидом, встречающимся на Chernomorskom pobereже Krasnodarskogo kraя (Rossiya) i Abhazii. Obuchno otmeчаются одиночные особи или пары pтиц, реже группы численностью до 10 жуков. Naиболее vыраженной былa зимовка савок v 2016–2017 гг. на oзерах prirodnoy ornitologического parka v Immeretskoy nizmennosti (Sochi, Rossiya). Vysказываетsя предположение o формировании нового района зимовки савок, занимающего severo-vосточное pobereже Chernogo morey.

Ключевые слова: Abhazia, зимовка, Kavkas, migraция, Novorossiyansk, savka, Sochi, Chernoе more