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PRIRODE SRBIJE
INSTITUTE FOR NATURE
CONSERVATION OF SERBIA



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VELIKI RONAC

Mergus merganser Linnaeus, 1758

Goosander

Taksonomija / Taxonomy

Red: Anseriformes

Porodica: Anatidae

Rod: *Mergus*

Sinonimi / Synonyms

Mergus castor Linnaeus, 1766

Status u međunarodnim dokumentima

International threat category

IUCN Red List: LC

BLI European Red List: LC

Bird Directive: Annex IIB

Bern Convention: Appendix III

CITES: -

CMS: Appendix II

Nacionalna kategorija ugroženosti

Status gnezdeće populacije: VU° D

OBRAZLOŽENJE: Prema Puzoviću i sar. (2015) populacija je za 2008–2013. procenjena na 50–70 parova (100–140 odraslih jedinki – ugrožena vrsta po kriterijumu D), dugoročni trend (1980–2013) ocenjen je kao ekstremni porast (>80%), kratkoročni kao umereni porast (30–49%). U Srbiji počinje da se gnezdi krajem 1980-tih (Marinković et al., 2008) i nema naznaka opadanja populacije u poslednje tri generacije (22 godine), zbog čega ne zadovoljava kriterijume A i C. Trend u budućnosti nemoguće je predvideti. Rasprostranjenost i zauzete površine su ograničeni (EOO procenjen na 5.161 km², AOO procenjen na 828 km²), nisu fragmentisani (ukoliko se izuzme potencijalno gnežđenje u jugoistočnoj Srbiji), a ekstremne fluktuacije u broju odraslih jedinki i gnezdećim lokacijama, odnosno u granicama rasprostranjenosti i zauzetim površinama nisu uočene, zbog čega ne zadovoljava kriterijum B. Populacija u Srbiji nije izolovana, u svim zemljama okruženja gde se gnezdi zabeležen je porast brojnosti (osim u Makedoniji gde stagnira), pa se ne očekuje smanjenje imigracije u budućnosti, zbog čega je konačni status snižen na kategoriju VU.

Status negnezdeće populacije: LC

OBRAZLOŽENJE: -

Opšte rasprostranjenje

Severna Evropa, mali delovi centralne Evrope i Balkanskog poluostrva, široki pojas severne i centralne Azije i severa Severne Amerike. Većina populacija iz Evrope i zapadne Azije zimu provodi uz obale severozapadne Evrope, u delovima Sredozemnog i Crnog mora ili na kontinentalnim slatkvodnim staništima koja se ne zamrzavaju. Areal zahvata 77.900.000 km² (BirdLife International, 2016zh).

VU LC



Veliki ronac *Mergus merganser*, mužjak (foto: Maciej Szymański)
Goosander *Mergus merganser*, male (photo: Maciej Szymański)

National threat category

Breeding population status: VU° D

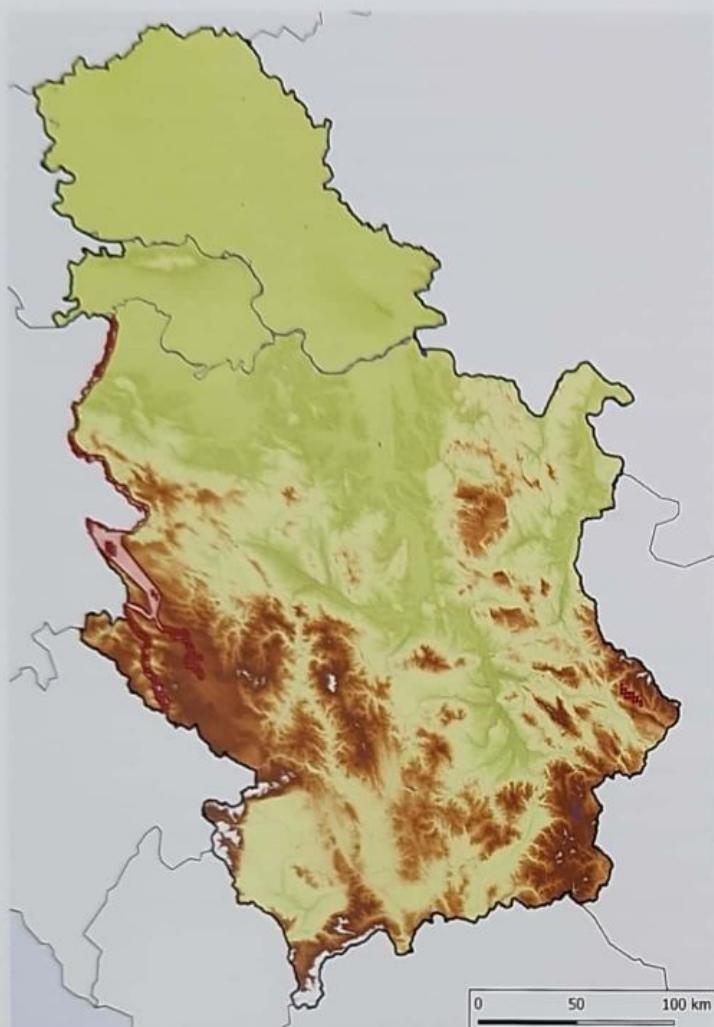
JUSTIFICATION: According to Puzovic et al. (2015) population in 2008-2013 had 50-70 breeding pairs (100-140 mature individuals – Endangered under D criterion), long-term trend (1980-2013) was estimated as extremely increasing (>80%), and short-term trend as moderately increasing (30-49%). The species began breeding in Serbia during the late 1980s (Marinković et al., 2008), and there is no indication of population decline over the last three generations (22 years), hence it does not meet the A and C criteria. It is not possible to project future trend. Extent of occurrence and area of occupancy are limited (EOO estimated at 5,161 km², AOO estimated at 828 km²), not fragmented (excluding breeding in south-eastern Serbia), and there are no noted extreme fluctuations in the number of mature individuals and breeding locations, extent of occurrence and area of occupancy, hence it does not meet B criterion. Population in Serbia is not isolated, and all countries of the region where the species breeds have recorded increase (except Macedonia, where it is stagnating), so immigration in the future is not expected to decline, which is why the final status of species has been downlisted to VU category.

Non-breeding population status: LC

JUSTIFICATION: -

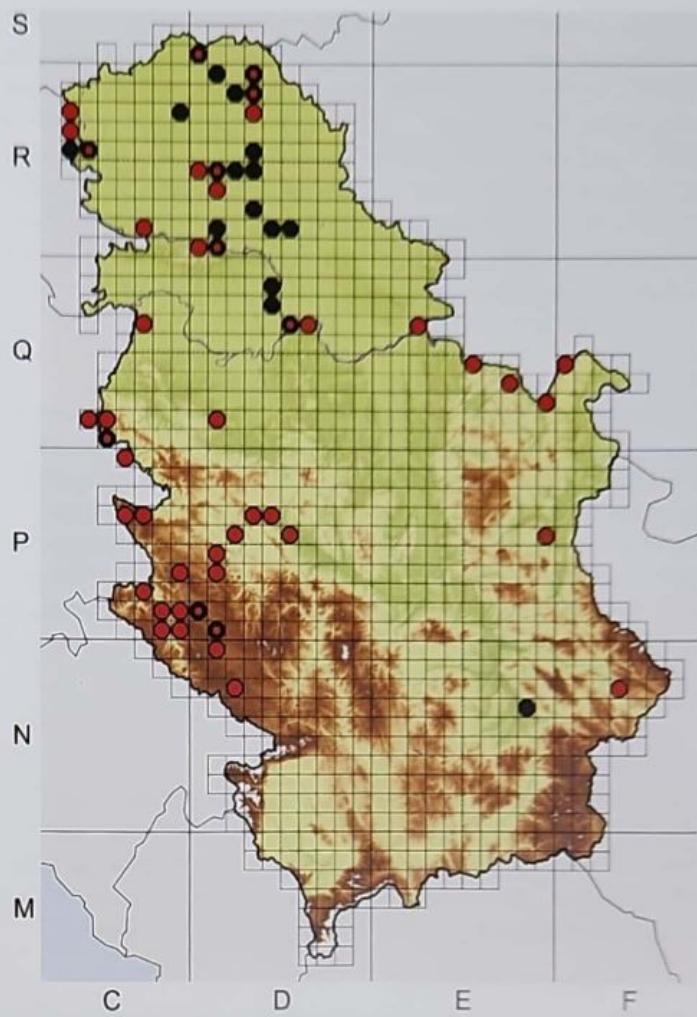
General distribution

Northern Europe, small areas in Central Europe and Balkan Peninsula, a wide belt of Northern and Central Asia and northern part of North America. Most of the populations from Europe and Western Asia spend winters along the coasts of north-western Europe, parts of the Mediterranean and Black Sea, or at continental freshwater habitats that do not freeze over in winter. Range was estimated at 77,900,000 km² (BirdLife International, 2016zh).



Slika 128: Rasprostranjenost (svetlocrveni poligoni) i zauzete površine (tamnocrveni kvadratići) velikog ronca *Mergus merganser* u toku poslednje generacije.

Figure 128: Range (light red polygons) and area of occupancy (dark red squares) of Goosander *Mergus merganser* during the last generation.



Slika 129: Nalazi velikog ronca *Mergus merganser* u Bazi podataka:
● – nalaz u toku poslednje tri generacije, ● – nalaz pre tri generacije,
● – nalazi pre i u toku poslednje tri generacije

Figure 129: Records of Goosander *Mergus merganser* in the Database:

- – recorded during the last three generations
- – recorded more than three generations ago,
- – recorded both before and during the last three generations

Rasprostranjenost u Srbiji

U vreme gnežđenja: Šumadija i zapadna Srbija – Mačvanska (r) i Zlatiborska oblast (r); Južna i istočna Srbija – Pirotska oblast (m). Gnezdarica većih akumulacija na rekama drinskog sliva (Drina, Lim i Uvac). Na Drini se gnezdi od jezera Perućac u kanjonu Tare do ušća u Savu. U novije vreme osvaja planinske akumulacije u jugozapadnoj Srbiji (Ribnica na Zlatiboru, Zaovine na Tari), a postoje nalazi i na Zavojskom jezeru – Visočici kod Pirot-a, koji upućuju na pokušaje osvajanja novih područja za gnežđenje u istočnoj Srbiji.

Van vremena gnežđenja: Tokom seobe, disperzije i zimovanja, prisutan je u manjim grupama širom Srbije, najčešće na Dunavu i većim akumulacijama.

Distribution in Serbia

Breeding period: Šumadija and Western Serbia – Mačva (r) and Zlatibor districts (r); Southern and Eastern Serbia – Pirot district (m). Breeding at larger reservoirs on the rivers of Drina river basin (Drina, Lim and Uvac). On the Drina it breeds from Perućac lake in Tara canyon to the confluence into Sava. Recently it has been spreading to mountain reservoirs in south-western Serbia (Ribnica at Zlatibor and Zaovine at Tara), and there are some observations at Zavojsko lake – Visočica near Pirot, indicating attempts of colonization of new breeding areas in Eastern Serbia.

Non-breeding period: Appears in small groups throughout Serbia during migration, dispersion and wintering, most commonly on the Danube and larger reservoirs.



Veličina i trend populacije u Srbiji

Prvo gnežđenje u Srbiji utvrđeno je 1987. (Marinković & Orlandić, 1989; Marinković et al., 2008), nakon čega su populacija i rasprostranjenje u stalnom porastu i širenju. Prva procena populacije za 1990–2002. bila je 20–25 parova (Puzović i sar., 2003). Zaključno sa 2008. populacija je procenjena na 39–53 para (Puzović i sar., 2009). Za 2008–2013. smatra se da ima 50–70 gnezdečih parova. Dugoročni trend (1980–2013) ocenjen je kao ekstremni porast, kratkoročni kao umereni porast (Puzović i sar., 2015).

Bionomija

Krupna plovuša izduženog tela. Tokom reprodukcije živi u parovima, zimi u jatima. Jaja polaže u duple drveća, pukotine stena ili u postavljene kućice. Gnežđenje počinje krajem marta i traje više od tri meseca. Ženka sama brine o inkubaciji i odgajanju mladunaca. Hrani se roneći, pre svega ribom, ali i vodenim beskičmenjacima i vodozemcima. U Srbiji je uglavnom stanarica, ostaje na vodama u široj okolini gnežđenja do zamrzavanja. Tokom mitarenja (mužjaci se mitare pre ženki) ne lete oko mesec dana. Van perioda gnežđenja zadržavaju se u jatima do nekoliko desetina jedinki.

Staništa u Srbiji

KATEGORIJE STANIŠTA: Vodotoci sa otvorenom vodom (5.1.1) i stajće vode sa slobodnom površinom (5.1.2). U periodu reprodukcije duboka, bistra i ribom bogata oligotrofna jezera, akumulacije i reke, gde može loviti ronjenjem, uglavnom u šumovitim i stenovitim područjima u dolinama, pobrdu i brdsko-planinskim predelima.

Faktori ugrožavanja u Srbiji

- Gubitak vodenih staništa usled urbanizacije (izgradnja viken-dica i turističkih objekata) obala jezera i akumulacija (1.1, 1.3) i preterane eksploracije šljunka i peska (5.4)
- Zagadenje vodotoka ispuštanjem otpadnih voda i deponovanjem čvrstog otpada (9.1, 9.2, 9.3); zamucivanje i smanjenje prozirnosti vode
- Smanjenje ribljeg fonda, posebno pomori ribe usled zagadenja ili neodrživog izlova (5.4)
- Uznemiravanje na vodama tokom reprodukcije i zimovanja od ribolovca i izletnika (6.3)
- Nezakonito ubijanje (5.1)
- Nestanak pogodnih prirodnih mesta za gnežđenje usled seče starih stabala sa dupljama uz obale voda; uništavanje prirodnih stenovitih obala sa potkapinama i pukotinama (7.3)

Mere zaštite

Pasivna zaštita: Strogo zaštićena vrsta.

Aktivna zaštita: U zaštićenim područjima gnezdi se godišnje 60–70% populacije, pre svega u NP „Tara” i SRP „Klisura reke Uvac”. Manji broj parova gnezdi se i u područjima predloženim za zaštitu (npr. PP „Zlatibor”). Većina populacije nalazi se unutar IBA, ekološke mreže i mreže Emerald. Održava se redovan zimski monitoring u okviru nacionalnog IWC (Šćiban i sar., 2012).

Population size and trend in Serbia

The first breeding attempt in Serbia was recorded in 1987 (Marinković & Orlandić, 1989; Marinković et al., 2008), continuously expanding range and increasing population size afterwards. The first population estimate for 2000–2012 was 20–25 pairs (Puzović et al., 2003). By the end of 2008 population estimate rose to 39–53 pairs (Puzović et al., 2009). Population estimate for 2008–2013 was 50–70 breeding pairs. Long-term (1980–2013) and short term trend (2008–2013) were assessed as extreme and moderate increase, respectively (Puzović et al., 2015).

Bionomy

Large waterfowl with elongated body. In pairs during the breeding period, forms flocks in winter. Eggs are laid in tree holes, cracks in rocks or nest boxes. Breeding season starts in late March and lasts more than three months. Only female incubate eggs and rear young. Feeds mostly on fish, also aquatic invertebrates and amphibians. Mostly sedentary in Serbia, remaining at water bodies in the wider vicinity of breeding site until they freeze. Males start moulting into eclipse plumage before females, and moulting birds are unable to fly for about a month. Forms flocks not larger than a few dozen individuals outside the breeding season.

Habitats in Serbia

HABITAT CATEGORIES: Water courses (5.1.1) and water bodies (5.1.2). During the breeding period deep, clear, fish-rich oligotrophic lakes, where it can hunt by diving, mostly in forested and rocky areas in valleys, foothills and hilly and mountainous landscapes.

Threats in Serbia

- Loss of water habitats, mostly due to urbanization (expansion of weekend zones and tourism infrastructure) on the shores of lakes and reservoirs (1.1, 1.3), as well as overexploitation of gravel and sand (5.4)
- Pollution of watercourses by influx of waste water and deposition of solid waste (9.1, 9.2, 9.3)
- Decrease in fish stocks, especially in large fish die-offs due to pollution or unsustainable fishing (5.4)
- Disturbance by fishermen and tourists on the water bodies used for reproduction and wintering (6.3)
- Illegal killing (5.1)
- Disappearance of suitable natural nesting sites due to logging of old trees along the banks, as well as destruction of natural stony banks with overhangs and crevices (7.3)

Conservation measures

Legal protection: Strictly protected species

Conservation actions: Between 60 and 70% of population breeds annually in protected areas, particularly in NP “Tara” and SRP “Klisura reke Uvac”. A smaller number of pairs also breed in the areas proposed for protection (e.g. PP “Zlatibor”). Most of the population breeds within IBA, ecological and Emerald networks. Regular monitoring is conducted in winter period within the International Waterbird Census (Šćiban et al., 2012).



Specifične mere koje treba preduzeti

- Usaglašavanje aktivnosti u šumarstvu, vodoprivredi i eksploataciji rečnih nanosa sa merama zaštite (5.2)
- Očuvanje starih stabala za gnezdenje, posebno na rubovima šuma i obezbeđivanje mira tokom reprodukcije (2.1, 5.2, 5.4.2)
- Sprečavanje izgradnje novih objekata na obalama jezera i reka i uklanjanje ilegalno izgrađenih objekata (5.2, 5.4.2)
- Sprečavanje nezakonitog ubijanja (5.4.2)
- Proglašenje zaštite područja na kojima su prisutne grupe gnezdećih parova (npr. Drina u Mačvi) (1.1, 1.2)
- Sprečavanje zagadenja vodotoka i kontrola kvaliteta vode u jezerima i akumulacijama (2.1, 5.2, 5.4.2)
- Očuvanje prirodne morfologije vodotoka i sprečavanje kanalisanja reka (1.1, 1.2, 2.1, 5.2, 5.4.2)
- Postavljanje kućica za gnezdenje u nedostatku prirodnih duplji i šupljina (3.2)

Proposed conservation measures

- Harmonization the activities in forestry, water industry and river sediment exploitation with protection measures (5.2)
- Conservation of old trees suitable for nest sites, especially at forest edges, and prevention of disturbance during the breeding period (2.1, 5.2, 5.4.2)
- Removal and prevention of construction of illegally built objects on lake and river banks (5.2, 5.4.2)
- Prevention of illegal killing (5.4.2)
- Inclusion of the important breeding sites into the network of protected areas (e.g. Drina river in Mačva) (1.1, 1.2)
- Prevention of watercourse pollution and control of water quality in lakes and reservoirs (2.1, 5.2, 5.4.2)
- Conservation of natural morphology of watercourses and prevention of regulation of river banks (1.1, 1.2, 2.1, 5.2, 5.4.2)
- Placement of nest boxes, in the areas where natural tree holes and crevices are lacking (3.2)

Slobodan Puzović i Stefan Skorić

Slobodan Puzović & Stefan Skorić