

LARUS Hrvatska akademija znanosti i umjetnosti	49 (2005)	7–12 str. 1 tablica, 3 slike	Zagreb 2005
	Primljeno na sjednici Razreda za prirodne znanosti HAZU, dne. 24. rujna 2005.		

UDK 598.422(497.521.2).18

Original scientific paper  
*Izvorni znanstveni članak*

## STATUS OF THE LESSER BLACK-BACKED GULL *Larus fuscus* IN ZAGREB, NW CROATIA

*Status tamnoledeg galeba Larus fuscus u Zagrebu, sjeverozapadna Hrvatska*

LUKA JURINOVIĆ

*Luka Jurinović, Osječka 3,  
HR – 10410 Velika Gorica, Croatia, luka.j@inet.hr***ABSTRACT**

Lesser Black-backed Gulls *Larus fuscus* were studied at Zagreb city rubbish dump, Jakuševac, from February 2000 to December 2003. In the year 2000 there were only 22 field days distributed over the whole year, but in 2001–2003 birds were counted regularly once a week. A total of 163 field days yielded 46 occasions on which Lesser Black-backed Gulls were observed. Most of the sightings were during spring migration, from March to May. The greatest number of Lesser Black-backed Gull recorded on Jakuševac rubbish dump was 51 on 12<sup>th</sup> April 2003.

Results of this study show Lesser Black-backed Gull to be a regular visitor in Zagreb during the spring migration and irregular wintering species. The species was not recorded during the autumn migration at all.

**INTRODUCTION**

The Lesser Black-backed Gull *Larus fuscus* breeds in the north and the west of Europe, from the White Sea to Iceland and to the south, to Iberian Peninsula (HAGEMEIJER & BLAIR 1997). Unlike most of the other gull species, the Lesser Black-backed Gull is a long-distance migrant and winters along African coast, Eastern Mediterranean and Atlantic coast of Europe (CRAMP 1983).

According to the published literature, it was considered to be an irregular visitor in Croatia. They were observed in small numbers mostly during the spring migration, lasting from February till April (STIPČEVIĆ 1996, PIASEVOLI & PALLAORO 1991) and in September (TUTMAN 1980, DATHE 1934). The species has been observed mostly along the coast, and only few records are from the inland part of Croatia (IGALFFY 1964, Ornithological collection of the Croatian Natural History Museum).

## MATERIAL AND METHODS

The study took place at Zagreb rubbish dump, Jakuševac (45.50°N, 16.00°E). It is situated in the eastern part of Zagreb, near the river Sava. Zagreb has around 1,000,000 citizens, and therefore a few hundred trucks bring garbage to the dump every morning. This garbage provides an abundant source of food for birds, especially gulls and crows. In winter there can be more than 10 000 gulls present on rubbish dump daily. Most of them are Black-headed Gulls *Larus ridibundus* and Yellow-legged Gulls *Larus cachinnans michahelis*.

The seasonal occurrence and numbers of gulls was studied from February 2000 till December 2003. All gull species were counted on the rubbish dump and on the river Sava, close by, where they rested after feeding. In the year 2000 there were only 23 field days distributed over the whole year, but in 2001–2003 birds were counted regularly once a week.

Gulls arrive at rubbish tip approximately one hour after the sunrise and leave it approximately one hour before sunset. Counts were made during every field day in the morning hours (10–11 AM) when the majority of trucks bring rubbish to the dump. At that time most of the gulls are present at rubbish dump. Visits to the rubbish dump lasted one to several hours, depending on the number of gulls present. Usually count lasted one hour and additional time was used for searching of colour-ringed birds. All observations and counting of gulls were done by the author of the article.

Birds were counted with 8 × 40 binocular and 20–60× Swarovski telescope. Determination of Lesser Black-backed Gull's subspecies followed using GRANT 1997, HARRIS et al. 1994 and HARRIS et al. 1996.

## RESULTS

During the study period on the total of 163 field days, Lesser Black-backed Gulls were observed 46 times (Table 1, Figure 1), 28% of all field days. Most of the sightings (54%) were during the spring migration (March–May) when Lesser Black-backed Gulls were seen on 60% of field days. The maximum number of birds seen on a single day was 51 on the April 12<sup>th</sup> 2003 (Figure 2). Almost all birds seen were adults and sub-adults (3<sup>rd</sup> calendar year and older) and only once was a 2<sup>nd</sup> calendar year bird recorded.

Three subspecies of Lesser Black-backed Gull are recorded in the study area *Larus fuscus graellsii*, *L. f. intermedius* and *L. f. fuscus*. Most of the birds seen belong to nominate *L. f. fuscus*. During the study period, subspecies were determined occasionally and only in the last year of research.

Peak numbers of Lesser Black-backed Gulls were recorded during spring (March–May) during each of the four years of study (Figure 2.). The maximum daily counts in each year were 16, 34, 27 and 51 in 2000–2003 respectively. Outwith the spring period, numbers were usually small (median day count = 0), however an exceptional count of 24 birds was recorded on July 2<sup>nd</sup> 2002.

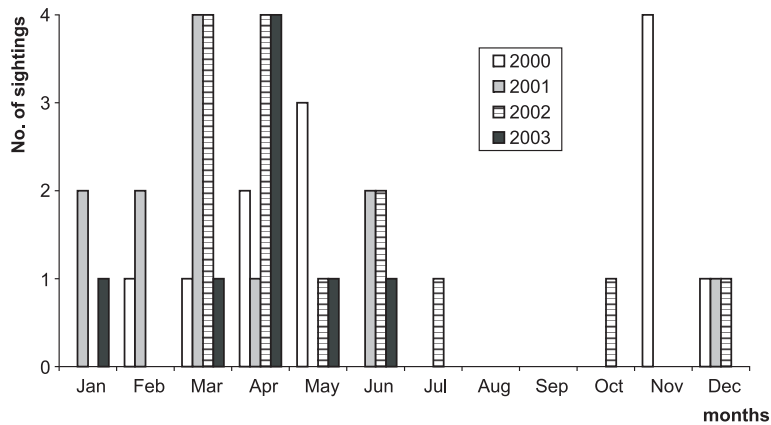
During the study special attention was put on searching for colour-ringed birds. In the study period 245 colour-ringed gulls were seen but none of them were Lesser Black-backed Gulls. Most of these birds were Yellow-legged Gulls, ringed as pulli on

Croatian part of Adriatic. In the April of 2004 there were two colour-ringed Lesser Black-backed Gulls seen on Jakuševac, both ringed as pulli in Finland and belonging to nominate subspecies *fuscus*.

**Table 1.** Number of field days per month in study period.

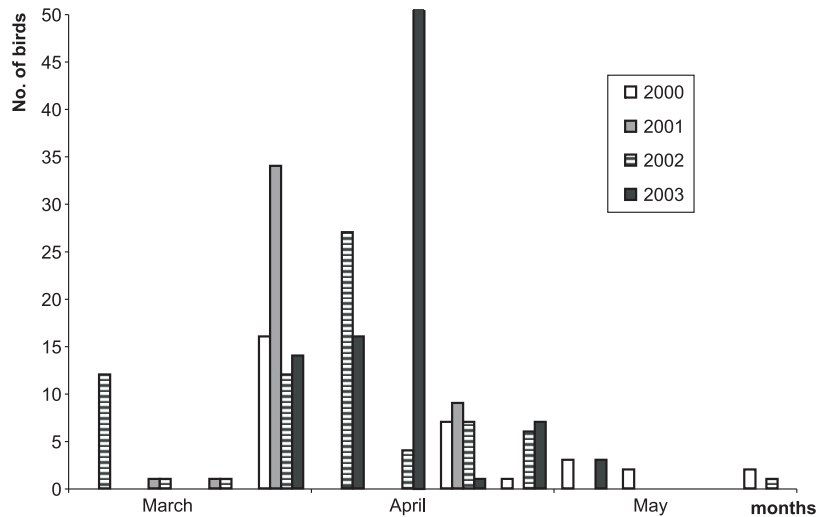
**Tablica 1.** Broj terenskih izlazaka po mjesecima u periodu istraživanja.

	2000	2001	2002	2003
January	0	4	4	4
February	1	4	4	5
March	3	5	4	4
April	2	3	4	4
May	3	5	4	3
June	0	3	3	3
July	1	4	3	4
August	0	5	5	3
September	1	4	4	4
October	3	4	3	4
November	5	4	3	4
December	3	4	5	4
Σ	22	49	46	46



**Figure 1.** Number of sightings of Lesser Black-backed Gull *Larus fuscus* on Zagreb city rubbish dump, Jakuševac.

**Slika 1.** Broj viđenja tamnoleđeg galeba *Larus fuscus* na zagrebačkom odlagalištu otpada, Jakuševac.



**Figure 2.** Number of Lesser Black-backed Gulls *Larus fuscus* present at Jakuševac rubbish dump during spring migration.

**Slika 2.** Brojnost tamnoledjih galebova *Larus fuscus* zabilježenih na odlagalištu otpada Jakuševac za vrijeme proljetne selidbe.

## DISCUSSION

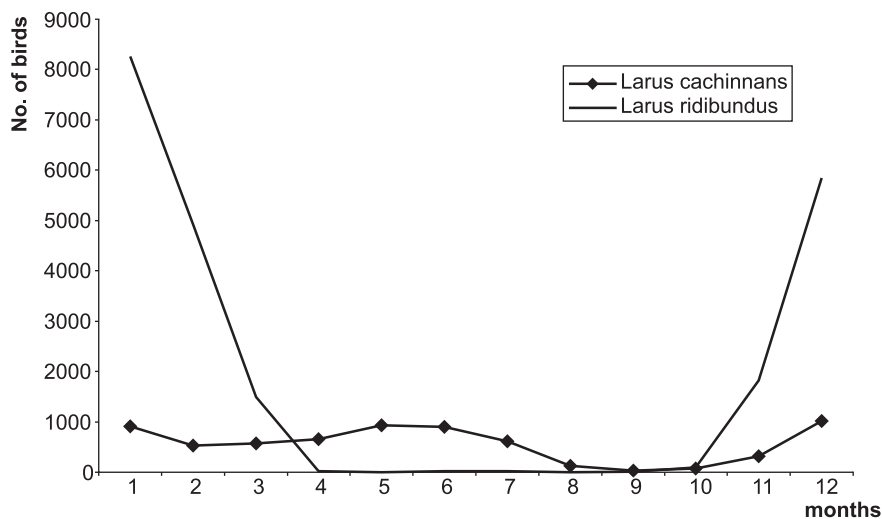
The results of this study show that Lesser Black-backed Gulls were regular in the study area during spring migration. Out of 42 field days during March, April and May in these four years, Lesser Black-backed Gulls were recorded 25 times. They were recorded annually in March and April. On April 12<sup>th</sup> 2003 there were 51 birds present at Jakuševac, the highest number ever recorded in Croatia. In the same period (March–May) there were 200–2 000 Yellow-legged Gulls present at rubbish dump (Figure 3.) and it is likely that some Lesser Black-backed Gulls could have been undetected.

Lesser Black-backed Gulls were not recorded during August and September in the study area.

In the winter of 2000/2001 Lesser Black-backed Gulls were present from November till February and they were recorded on 9 out of 15 days of fieldwork: seven times one bird was recorded and two times two birds. In the winter of 2001/2002 Lesser Black-backed Gulls were recorded only once; 1 bird on December 21<sup>st</sup>. In the winter of 2002/2003 Lesser Black-backed Gulls were present from October till January and they were recorded on 3 out of 15 days of fieldwork in that period. Each time 2 birds were recorded. In winter period there were up to 10 000 other gulls present at rubbish dump (Figure 3.) and that is the most probable reason why they were not recorded on every field day. It is possible that some Lesser Black-backed Gulls were undetected and that wintering population was bigger those years.

This is the first study on occurrence of gulls in Croatia and it is likely that new status of Lesser Black-backed Gull in the area simply reflects increased observer effort. Until this study all records of Lesser Black-backed Gull were accidental during

other faunistical research and according to them the species is considered to be irregular in Croatia (KRALJ 1997). This study show Lesser Black-backed Gull to be a regular visitor in Zagreb during the spring migration and irregular wintering species, at least in NW Croatia. To get more precise status of this species in Croatia more detailed research in other parts of Croatia is necessary.



**Figure 3.** Average monthly number of gulls seen at rubbish tip in the period 2001–2003.

*Slika 3.* Prosječna brojnost galebova po mjesecima na odlagalištu otpada u periodu 2001–2003.

## ACKNOWLEDGMENTS

I would like to thank Jelena Kralj, Dragan Radović, Vesna Tutiš and Davor Čiko-  
vić for commenting on drafts; Katarina Brajdić and Maša Rimac for language im-  
provements; Sanja Barišić, Martina Temunović, Duje Lisičić, Ivan Budinski and Krešo  
Mikulić for fieldwork assistance. I am grateful to an anonymous referee who made  
valuable comments that improved the manuscript. This study was partly financed by  
the ZGOS Company.

## REFERENCES

- CRAMP, S. (1983): The Birds of the Western Palearctic. Vol. III: 801–815. Oxford Univer-  
sity Press, Oxford.
- DATHE, H. (1934): Ein Beitrag zur Wirbeltierfauna Dalmatiens. Zool. Garten 7: 108–130.
- GRANT, P. J. (1997): Gulls. A Guide to Identification. Second edition. Academic Press,  
London.

- HARRIS, A., SHIRIHAI, H., CHRISTIE, D. (1996): The MacMillan Birder's Guide to European and Middle Eastern Birds. MacMillan Press LTD, London.
- HARRIS, A., TUCKER, L., VINICOMBE, K. (1994): The MacMillan field Guide to Bird Identification. Grange Books, London.
- HAGEMEIJER, E. J. M., BLAIR, M. J. (1997): The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. T & A D Poyser, London.
- IGALFFY, K. (1964): Prilog fauni ptica ribnjaka Draganići i okolice. Zbornik Gradskog muzeja Karlovac, 1: 256–272.
- IGALFFY, K. (1971): Problem zaštite ptica na obalnom području i jadranskim otocima. u: Varićak, T.: Simpozij o zaštiti prirode u našem kršu; 2–3. 10. 1971. Zagreb. JAZU: 203–211.
- KRALJ, J. (1997): Ornitofauna Hrvatske tijekom posljednjih dvjesto godina. *Larus* 46: 1–112.
- PIASEVOLI, G., PALLAORO, A. (1991): Ornitološka zbirka prirodoslovnog muzeja u Splitu. *Larus* 43: 89–119.
- STIPČEVIĆ, M. (1996): A Contribution to the Croatian List of Rare and Scarce Birds Recorded from 1985–1995. *Natura Croatica* 5: 53–81.
- TUTMAN, I. (1980): Sastav i dinamika mješovitih populacija ptica dubrovačkog područja. Doktorska disertacija. Sarajevo: PMF.

## SAŽETAK

Od veljače 2000. do prosinca 2003. proučavao sam pojavljivanje tamnoledeg galeba *Larus fuscus* na zagrebačkom odlagalištu otpada Jakuševac. U navedenom periodu, s iznimkom 2000. godine, na teren sam izlazio jedanput tjedno i brojao sve vrste galebova. Napravio sam 163 terenska izlaska, od kojih sam tamnoledeg galeba zabilježio 46 puta.

Tamnoledeg galeba sam redovito promatrao u periodu od ožujka do svibnja. To je razdoblje njihove proljetne selidbe te su tada najbrojniji. Najveću brojnost zabilježio sam 12. travnja 2003 – 51 pticu, što je i najveća brojnost ikad zabilježena u Hrvatskoj. Većina ptica zabilježenih za proljetne seobe pripadaju podvrsti *fuscus*.

Za vrijeme jesenske selidbe (kolovoz i rujan) tamnoledeg galeba nisam zabilježio na području istraživanja.

Na zagrebačkom području tamnoledi galeb je neredovita zimovalica. U zimama 2000/01. i 2002/03. barem su dvije ptice zimovale. Uzevši u obzir da se u tom razdoblju na zagrebačkom odlagalištu otpada hranilo približno 10.000 galebova, moguće je da su neke ptice ostale neprimijećene i da je zimujuća populacija tih godina bila veća.

Prije ovog istraživanja smatralo se da je tamnoledi galeb u unutrašnjosti Hrvatske neredovita skitalica. Međutim, rezultati ovog istraživanja pokazuju da je tamnoledi galeb u sjeverozapadnoj Hrvatskoj redovita, ali malobrojna preletnica i neredovita zimovalica.