

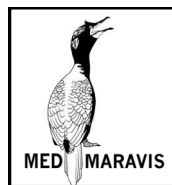
**ECOLOGY AND CONSERVATION  
OF MEDITERRANEAN SEABIRDS  
AND OTHER BIRD SPECIES UNDER THE BARCELONA CONVENTION**

UPDATE & PROGRESS

*Proceedings of the  
13th Medmaravis Pan-Mediterranean  
Symposium*

Editors

Pierre Yésou - Nicola Baccetti - Joe Sultana



2012

## New important wintering sites for the Black-headed Gull *Chroicocephalus ridibundus* in Apulia, SE Italy

Cristiano Liuzzi<sup>1</sup>, Giuseppe La Gioia<sup>1</sup> & Fabio Mastropasqua<sup>1</sup>

<sup>1</sup>Ornitologia Mediterranea c/o Giuseppe La Gioia, via M. Saponaro 7, I-73100 Lecce, Italy.  
ormepuglia@gmail.com

**Summary:** The distribution and abundance of Black-headed Gull *Chroicocephalus ridibundus* in Apulia are better known thanks to the data collected from 2003 to 2011 for the International Waterbird Census project by the Or. Me. ("Ornitologia Mediterranea") Nature Association. The species was dominant at regional level with an average of 55,623 individuals. A new site of international importance for the species was found (code BA0200, corresponding to the coast around Trani in Bari province) where an average of 23,157 individuals were counted (min. 5,611 in 2003, max. 58,622 in 2006, SD 17,133).

**Key-words:** *Chroicocephalus ridibundus*, Black-headed Gull, Apulia, Italy

### Introduction

In Apulia, the International Waterfowl Census (IWC) project brought about a widespread and almost complete coverage of the region since 2003, after a trial year in 2002. Fieldwork was carried out by the Ornitologia Mediterranea Association. Until then, only the most important inland waters for birds had been counted (i.e. the wetlands of Foggia province and the Salento), thus ignoring many areas that have proved particularly suitable for marine birds. This note reports the distribution and abundance of Black-headed Gull *Chroicocephalus ridibundus* in Apulia from 2003 to 2011.

The species overwinters regularly in Italy. During the period 1996-2000, on average, 208,247 birds were counted in 322 zones, making it the most abundant and widespread gull species (Baccetti *et al.* 2002). Apulia is one of the areas where the greatest concentrations are observed (Brichetti & Fracasso 2006). The Apulian wetlands were divided by Italian National Wildlife Institute INFS (now known as ISPRA) into 47 "macrozones", i.e. functional ecological units, made up of one or more zones (Baccetti & Serra 1994, and subsequent changes and additions: <http://www.infs-acquatici.it>). Two further zones were added which, although on the borders of Apulia, were encoded as being in neighbouring regions.

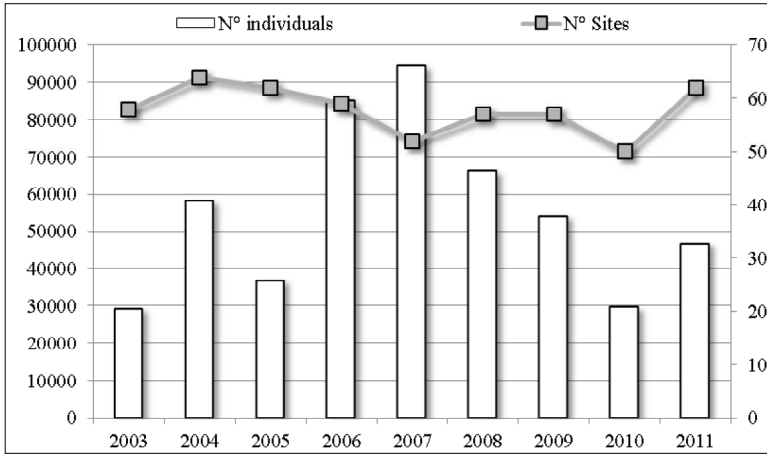
### Methods

The complete census method (Overton 1971), used for counting wintering waterfowl, was adopted. The birds were observed using suitable optical devices, such as 10x42 binoculars and a 20-60x72 telescope. Species-level identification was carried out using Svensson *et al.* (1999) and Olsen & Larsson (2003). As far as possible, we followed the directions provided by Cranswick (1998) and implemented in the counts of wintering waterfowl regularly carried out in conjunction with INFS. In order to standardize the censuses, a map was created for each zone based on IGM (Istituto Geografico Militare) maps, showing the path to follow during the census and stop-off points for observation: this made it possible to follow the same route and benefit from optimum views. Field

observations were entered into a database for data analysis, while the maps were created using the ArcGIS 9.2 software.

**Results**

At regional level, over the nine years of surveys, the species was found in 98 zones, with a maximum of 64 in 2004 and a minimum of 50 in 2010 (Figure 1). On average, 55,623 Black-headed Gulls were counted (min. 29,246 in 2003, max. 94,421 in 2007, SD 23,189). Of particular



interest is a new site of international importance for the Black-headed Gull (code BA0200, corresponding to the coast around Trani in Bari province). An average of 23,157 Black-headed Gulls were counted: (min. 5,611 in 2003, max. 58,622 in 2006, SD 17,133).

**Figure 1. Number of sites and individuals of Black-headed Gulls in Apulia, 2003-2011.**

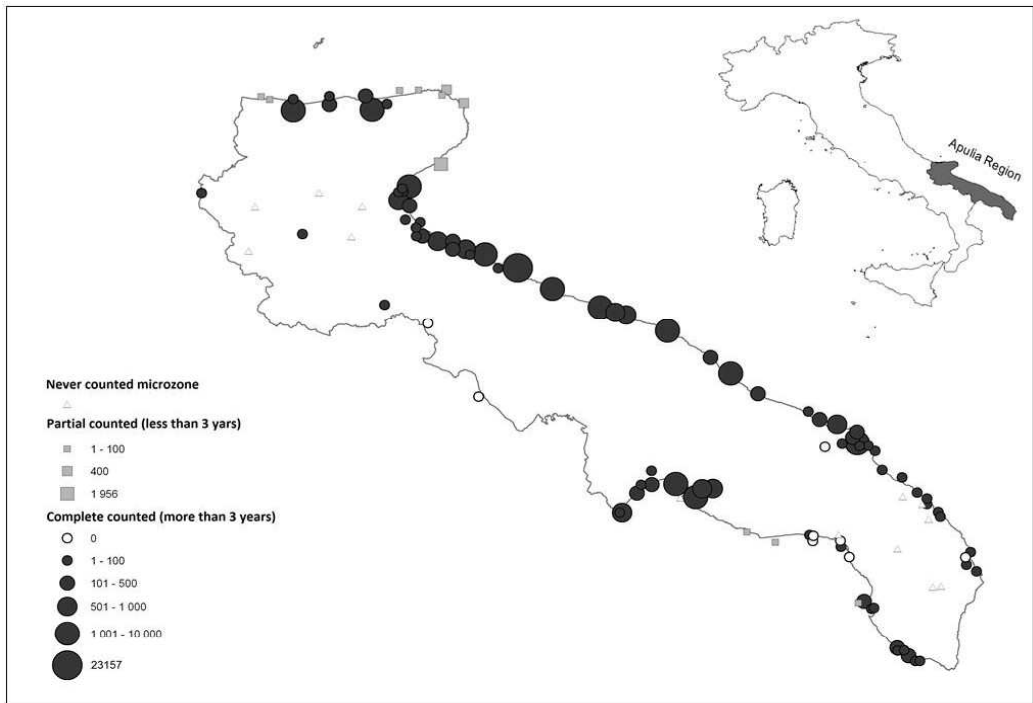
Zone Code	BA 0200*	TA 0800	BA 0600	BA 0400	FG 1000	BA 0100	FG 0300	FG 0500	BA 0500	TA 0200	BR 0700	BR 0400	BR 0300
Mean	23157	6613	6233	3905	3689	2654	2650	2610	2422	1334	1295	752	652
%	39.1	11.2	10.5	6.6	6.2	4.5	4.5	4.4	4.1	2.3	2.2	1.3	1.1

**Table 1. Important regional sites (\*Important international site) for Black-headed Gull in Apulia, with average numbers and proportion of each site in the regional grand total. Zone Codes: according to the INFS wetland list.**

**Discussion and Conclusions**

In Apulia Black-headed Gulls were mostly concentrated in the coastline between Gargano and Bari, but discreet concentrations were recorded near Taranto and Brindisi city (Figure 2), close to the major harbour areas, particularly along the regional Adriatic coast. Numbers were rather low in southern Apulia, probably due to the absence of large fishing fleets. From this work emerges the importance of macrozone BA0200 (Table 1) corresponding to the coastal stretch between Barletta, Trani and Bisceglie, which should be classified as a Site of International Importance under the Ramsar Convention (criterion 5), as it exceeds the value of the presence of 20,000 birds.

**Acknowledgements.** Our heartfelt thanks go out to all Ornitologia Mediterranea members who



**Figure 2. Distribution of Black-headed Gull in Apulia, 2003-2011.**

helped collect the data, especially Giuseppe Nuovo, Tommy Capodiferro, Angelo Nitti, and Anthony Green who also translated this paper into English.

## References

- Baccetti, N. & Serra, L.** 1994. *Elenco delle zone umide italiane e loro suddivisione in unità di rilevamento dell'avifauna acquatica*. Documenti tecnici, I.N.F.S., 17: 1-163.
- Baccetti, N., Dall'Antonia, P., Magagnoli, P., Melega, L., Serra, L., Soldatini, C. & Zenatello, M.** 2002. Risultati dei censimenti degli uccelli acquatici svernanti in Italia: distribuzione, stima e trend delle popolazioni nel 1991-2000. *Biol. Cons. Fauna* 111: 1-240.
- Brichetti, P. & Fracasso, G.** 2006. *Ornitologia Italiana* Vol. 3. Alberto Perdisa Editore, Bologna.
- Overton, W.S.** 1971. Estimating the numbers of animals in wildlife populations. In Giles R.H. (ed.), *Wildlife management techniques*. The Wildlife Society, Washington D.C. pp. 403 – 455.
- Svensson, L., Mullarney, K., Zetterstrom, D. & Grant, P.J.** 1999. *Collins Bird Guide*. Harper Collins, London.
- Olsen, K.M. & Larsson, H.** 2003. *Gulls of Europe, Asia and North America*. Christopher Helm, London.

CITATION: The editors recommend that for references to this work the following citation should be used:

**Liuzzi, C., La Gioia, G. & Mastropasqua, F.** 2012. New important wintering sites for the Black-headed Gull *Chroicocephalus ridibundus* in Apulia, SE Italy. (Pp.168-170). In **Yésou, P., Baccetti, N. & Sultana, J.** (Eds.), *Ecology and Conservation of Mediterranean Seabirds and other bird species under the Barcelona Convention - Proceedings of the 13th Medmaravis Pan-Mediterranean Symposium*. Alghero (Sardinia) 14-17 Oct. 2011. Medmaravis, Alghero.