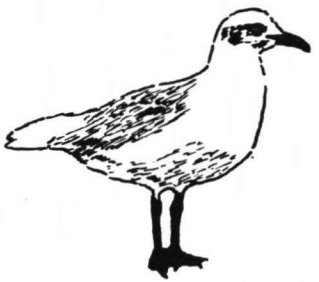
First results of colour-ringing non-breeding Mediterranean Gulls *Larus melanocephalus* in NW France

Eerste resultaten van het kleurringen van niet broedende Zwartkopmeeuwen in NW Frankrijk



During the past two decades, the Mediterranean Gull *Larus melanocephalus* has become a regular and quite numerous visitor to NW France (Milbled & Apchain 1978, Raevel 1993a). This phenomenon is mainly concentrated at Boulogne-sur-Mer / Le Portel (Pas-de-Calais, 50°42' N, 1°34' E), where the biggest concentration of the species north of Brittany occurs (Hoogendoorn *et al.* 1992, Meininger *et al.* 1993, Raevel 1993a, b). The average wintering population now consists of 300-450 birds and peak numbers reached 900 birds in autumn 1993. The increase of wintering and migrating numbers closely follows the overall growth of the breeding population of the Mediterranean Gull in the western palearctic and is also found in the recently established colonies in NW Europe (Bekhuis & Meininger 1990, Meininger & Bekhuis 1990). In order to assess origins and movements of the non-breeding population of Mediterranean Gulls in NW France, a colour-ringing programme was started in the winter of 1991/92.

The main aim of the programme was to obtain information on the population dynamics, the movements and the origins of the birds migrating through NW France. Other biological data, like behaviour, biometry and moult, are gathered at the same time. The programme has been submitted to, and was accepted by, the Scientific Committee of the French ringing scheme (Centre de Recherches sur la Biologie des Populations d'Oiseaux, Paris). It has been developed in close cooperation with the ringing programme on the Dutch/Belgian breeding population (Meininger 1991a, b, Boldreghini *et al.* 1992). All catches were made at Le Portel. Birds were captured both with clap-nets or in individual traps ('bal-chatri'), either on the beach or on a concrete sea-wall. In two winters 89 birds were ringed (table 1). All birds

were given a metal ring on the tibia, engraved *Museum Paris* and a light green darvic (PVC) ring with white engravings of a three digits code. Most birds were ringed in winter (November-February), some during post- (October) and pre-nuptial (March) migration. Resighting sessions have been carried out on a regular basis (104 visits in 49 ten-day periods). The breeding season (May-July) was covered less frequently (20 decades not visited), because most birds disappear from our study area in summer.

Age classes are grouped with the first of July as dividing date (*cf.* Meininger *et al.* 1993). Data concerning 3rd winter or older birds have been pooled, because these age classes are not distinguishable all year round. The age-ratio of the captured birds did not match the actual age-ratio in the wintering population. First-winter and second-winter birds represent on average less than 20% and less than 10% respectively of the whole wintering population (Meininger *et al.* 1993, Raevel 1993a). The age-ratio of the captured birds is thus strongly biased, either as a result of the shyness of

Table 1. Mediterranean Gulls Larus melanocephalus *colour-ringed at Le Portel, Pas-de-Calais, France, winters 1991/92 and 1992/93.*
Tabel 1. Aantallen bij Le Portel, Pas-de-Calais, Frankrijk, gekleurringde Zwartkopmeeuwen, winter 1991/92 en 1992/93.

	1st winter	2nd winter	≥3rd winter	Total
1991/92	20	1	6	27
1992/93	9	28	25	62
Total	29	29	31	89
%	32.6	32.6	34.8	

Table 2. Recoveries (found dead) and re-sightings of Mediterranean Gulls colour-ringed at Le Portel, Pas-de-Calais, France,1991-93.
Tabel 2. Vondsten en waarnemingen van Zwartkopmeeuwen, gekleurringd bij Le Portel, Pas-de-Calais, Frankrijk, 1991-93.

	Ringed	Recovered	Re-sighted	Total	Re-trapped
1991/92	27	1	21	22	1
%		3.7	77.8	81.5	3.7
1992/93	62	1	57	58	
%		1.6	91.9	93.5	
Total	89	2	78	80	
%		2.2	87.6	89.9	

older birds or perhaps because of the greater use by immatures of anthropogenic food, used for attracting birds into the catching area.

Of 89 colour-ringed birds, 78 (87.6%) have been resighted at least once. Differences between age classes were small (1st winter 82% resighted, n= 28; 2nd winter 92%, n= 25; ≥3rd winter 89%, n= 36). Two first-year birds have been reported dead in the ringing area, of which in one case only the ring was found (P. Bernard *pers. comm.*, K. Kuiper *in litt.*). The overall recovery rate (sightings + recoveries) was 90% Additionally, one adult bird was retrapped one year later.

Each colour-ringed bird was on average resighted eight times (mean 6x during the first year, range 0-15x, and 16x during the first two years following its ringing, range 0-38x). Most of the controls have been made in the ringing area and its immediate surroundings (less than 3 km). By 1 November 1993, seven sightings were reported from other locations: France 3 (Vendée, Maine-et-Loire, Manche), The Netherlands 2 (Zeeland), Germany 1 (Oberbayern) and Hungary 1 (Györ Sopron). The figures of table 2 and the very high global control rate demonstrate once again, as already mentioned by Meininger (1991a, b) and Boldreghini *et al.* (1992), the great value of colour-ringing. Details of observations of colour-ringed Mediterranean Gulls are welcomed by the first author and for The Netherlands by **Peter L. Meininger**, Rijksinstituut voor Kust en Zee (RIKZ), Postbus 8039, 4330 EA Middelburg, The Netherlands.

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Samenvatting In deze bijdrage wordt een overzicht gegeven van de inspanningen in Noord-Frankrijk om Zwartkopmeeuwen te voorzien van lichtgroene kleurringen met witte inscripties (3-letter combinaties). In de winters 1991/92 en 1992/93 werden in totaal 89 vogels geringd (tabel 1), waarvan er 80 (89.9%) werden teruggemeld of gevonden (tabel 2). De meeste terugmeldingen kwamen uit de buurt van de ringplaats, maar daarnaast werden vogels gezien op andere plaatsen in Frankrijk (3), in Nederland (2), Duitsland (1) en Hongarije (1) (stand 1 november 1993). De gegevens tonen eens te meer het grote belang van kleurringprogramma's aan bij het vergaren van informatie over dispersie van meeuwen.

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