

Status and distribution of Redshanks *Tringa totanus* breeding along Mediterranean coasts

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A detailed list of sites and an estimate of each local population are given for Redshanks breeding along the Mediterranean coastline. The total population is estimated at 2 252-2 691 pairs, mostly concentrated in Italy (about 1 100 pairs) and Greece (600-650 pairs); the coasts of Albania, Tunisia, Spain, France and Turkey are of lesser importance for breeding Redshank.

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INTRODUCTION

The status and distribution of Redshanks *Tringa totanus* breeding in the Mediterranean (*sensu stricto*) is largely unknown. Population estimates are available only for Spain (Cramp & Simmons 1983), France (Yeatman-Berthelot & Jarry, 1994), ex-Yugoslavia (Bartovsky *et al.* 1987), Tunisia (Urban *et al.* 1986), with a comprehensive census available only for Italy (Valle *et al.* 1995). This paper goes some way to describe the status of the Redshank breeding in the Mediterranean coastal area and provides the first estimate of the numbers of birds breeding in the whole of this area.

METHODS

Data were collected in 1993-1996 through contact with scientific associations, institutions and experts who had direct information about the birds of Mediterranean countries. Each was asked to provide detailed information about breeding sites, number of pairs and, where possible, more general observations on the breeding of Redshanks in their area. About forty experts answered, providing very recent data. Only for some sites there were there no up-to-date information, whilst for the Montenegro coastline it was not possible to have any kind of data. When we had two estimates for the same site, we report both. A site is

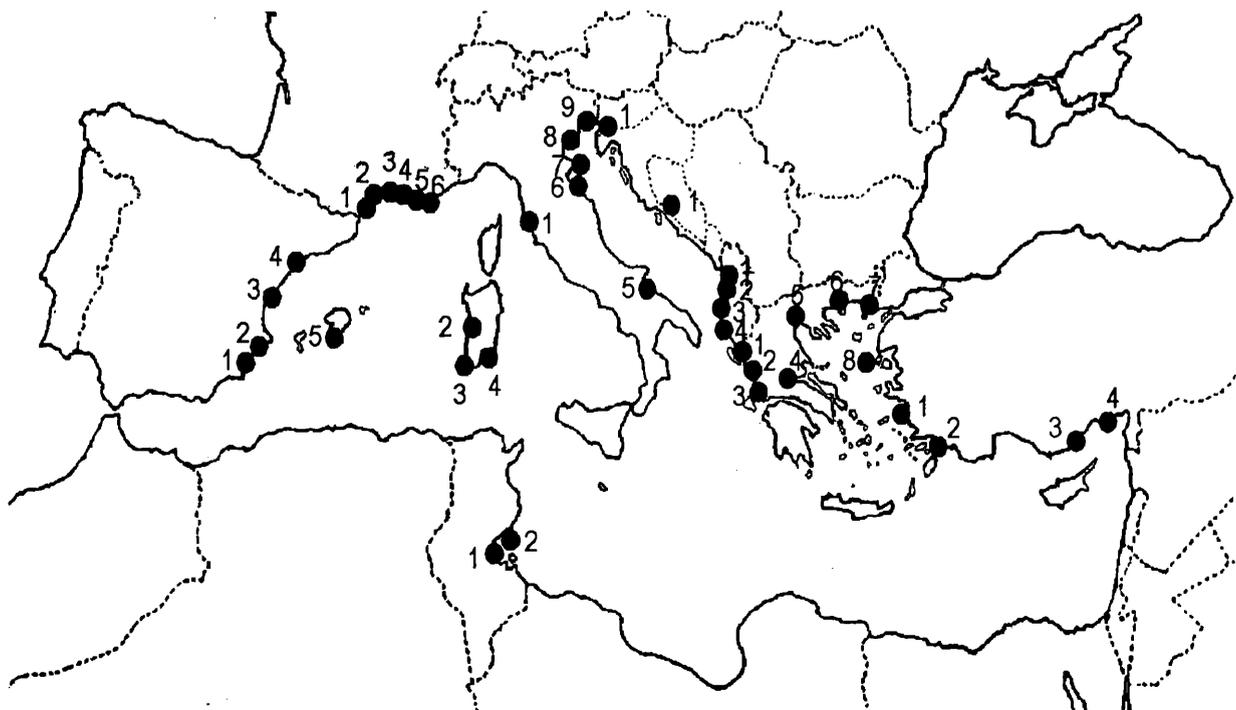


Figure 1. Map of breeding sites of Redshank along Mediterranean coasts. Numbers relate to site names in Table 1.

defined as an area (of varying size, from a few hectares to several thousands) where a discrete population of Redshank exists.

Each site mentioned by the local experts was reported on a map of the whole Mediterranean; the English names for the breeding sites are given, whenever possible, according to Grimmet & Jones (1989).

For some countries the totals reported to us sometimes do not correspond to the arithmetical sum of the sites, since information may be lacking for some breeding sites or whole areas. If not provided by the correspondents, we calculated the total number of breeding pairs in each country. We arbitrarily defined as coastal any population breeding within 30 km from the coastline. Only in some instances we reported data from non coastal sites, if they were of particular importance at a country level.

RESULTS

The results of our survey are summarised in Table 1, while Figure 1 illustrates the location of each site mentioned in the Table. A short comment on status in each country is given below.

Spain

The Mediterranean coasts of Spain hosts about a third of the population breeding in the whole country, *i.e.* 300-450 pairs (Velasco pers. comm.). The main breeding site is the Ebro Delta hosting 67 pairs (Bull. Parc Nat. Delta de l'Ebre 1992); other sites with a few pairs each, all of them totalling 18-58 pairs (Velasco pers. comm.), are scattered over the whole coastline, including the island of Mallorca. The small size of the Spanish coastal population is consistent with a previous paper reporting 10-50 breeding pairs for the same area (Martinez-Vilalta 1985).

France

Mediterranean France hosts a small population of 69-132 pairs, mostly concentrated in Camargue. For this site, the breeding population ranges from 47 pairs (Pineau pers. comm.) to about 100 pairs (Walmsley pers. comm.); Isenmann (1993) states that 20 to 60 pairs breed each year in the brackish areas. Mainly isolated pairs are found all along the remaining coastline (Dhermain, Brun & Pineau pers. comm.; GRIVE 1993). At least at the Berre Saltpans, an unprotected site, the few breeding pairs are threatened by human activities such as jogging and nest destruction (Dhermain pers. comm.).

Italy

The Italian population amounts to 1075-1181 pairs, 90% of which are located in the Venetian Lagoon. Minimal populations or single pairs are scattered on the remaining sites (Valle *et al.* 1995). The previous estimate of 300-600 breeding pairs (by Rallo in Tinarelli & Baccetti 1989) in the Venetian Lagoon has to be considered excessively low. Likewise, the report of 1000 non-breeding birds in the same area has to be rejected. In effect, though in

other breeding sites (Sardinia) flocks of tens of non-breeding birds are usually observed (Grussu pers. comm.) no evidence of non-breeding birds has been found in the Venetian Lagoon during the past 10 years (Valle & Scarton 1995). Two other sites of much lesser importance, each one holding about 50 pairs, are also located in the north-western Adriatic coast: the Po Delta and some wetlands of the Emilia-Romagna region. Sardinia as a whole held 8-28 pairs in 1994 and 8-17 pairs in 1995 (Grussu pers. comm.); in the Grado-Marano Lagoon the breeding of up to twenty pairs is likely.

Slovenia

In the Cerknica Lake, the only site for this country and located at about 50 km from the coastline, a small population of 4-8 pairs is present, with the first breeding reported in 1985 (Slavko 1993).

Croatia

A population of 30-50 pairs breed in two flooded fields; this is the only breeding site in the country. Other possible nesting sites have not been checked, due to the war (Radovic pers. comm.; Susic pers. comm.).

Serbia-Montenegro

This species was not reported breeding in Montenegro in a recent review on the breeding waders in Yugoslavia (Bartovsky *et al.* 1987). No further data were obtained.

Albania

According to an ornithological survey made in 1993, the nearly 400-km long coastline of Albania is estimated to hold 175-225 pairs; detailed data are available only for a few sites (Vangeluwe pers. comm.).

Greece

Redshank is a fairly common wader in Greece, with an estimated population of 700-750 pairs, breeding almost entirely at some coastal sites; the most important are the Axios and Nestos Deltas (Handrinos & Akriotis in press). It must be emphasised that very little is known on the ecology of this species in Greece (Goutner, Hallmann, Handrinos, pers. comm.).

Cyprus

No evidence of breeding Redshanks has been found in this country (van den Berk pers. comm.).

Turkey

About 10 000-100 000 Redshanks pairs are believed to breed in Turkey (Magnin pers. comm.) but no recent information are available (Hale pers. comm.). However, the entire coastline supports only 50-90 breeding pairs (Kasperek pers. comm.) with a strictly Mediterranean population, including the Aegean coasts and excluding the Black Sea, of about 50 pairs (Kasperek pers. comm.; van den Berk pers. comm.). In this area few sites host small groups of breeders; in the Büyük Menderes Delta,

Table 1. Population and distribution of Redshank *Tringa totanus* breeding along Mediterranean coasts (only sites within 50 km from the coast have been included).

Country and site	Number of pairs	Reference
SPAIN		
1- Palmones Marshes	2-5	GOES 1993
2- Guadalquivir River	0-2 (P)	GOES 1993
3- Guadalquivir River	0-2 (P)	Velasco pers.comm.
4- Cerillos, Cabo de Gata & Punta Entinas Salt pans	6-15	Castro 1986
5- Mar Menor Lagoon and Salt pans	0-4 (P)	Velasco pers.comm.
6- La Mata and Torre Vieja Lagoons	1-5	Martinez-Vilalta 1985
7- Santa Pola Salt pans	6-10	Urios <i>et al.</i> 1991
8- Albufera of Valencia Lagoon	0-3 (P)	Velasco pers.comm.
9- El Moro Marshes	1-3	Albufera Biologic Station 1991
10- Millars River	0-1 (P)	Velasco pers.comm.
11- Prat de Cabanes Marshes	0-2 (P)	Velasco pers.comm.
12- Ebro Delta	67	<i>Butl. Parc Nat. Delta de l'Ebre</i> 1992
13- Albufera Lagoon	1-3	Rebassa 1992
14- Campos Salt pans and Marshes	1-3	Velasco pers.comm.
TOTAL	85-125	This work
FRANCE		
15- Coastline south of Leucate	<10	Pineau pers.comm.
16- Coastline from Leucate to Grau-du-Roi	2	GRIVE 1994
17- Salt pans of Aigues-Mortes	1-10	Pineau pers.comm.
18- Coastline from Grau-du-Roi to Fos-sur-mer (including the Camargue)	47/100	Pineau/Walmsley, pers. comm.
19- Pond and Salt pans of Berre	2-8	Savornin 1995 and 1996
20- Salt pans of Hyères	1-2	Orsini in Dhermain pers. comm.
TOTAL	69-132	This work
ITALY		
21- Orti-Bottagone Marshes	1	Politi in Valle <i>et al.</i> 1995
22.1- Pond of Salina Manna	1	Grussu pers. comm.
22.2- Cabras Pond	0-1	Grussu pers. comm.
22.3- Pond of Mistras	+	Grussu pers. comm.
23.1- S. Giusta Pond	0-5	Grussu pers. comm.
23.2- Arborea Marshes	0-7	Grussu pers. comm.
24.1- Lagoon of Santa Caterina	+	Grussu pers. comm.
24.2- Lagoon of Mulargia	1-3	Grussu pers. comm.
25- Chia Marshes	0-1	Grussu pers. comm.
26- Molentargius Pond and Salt pans	7-11	Grussu pers. comm.
27- Salt pans of Margherita di Savoia	2	Valle <i>et al.</i> 1995
28- Coastal Marshes of Emilia-Romagna	41-47	Tinarelli and Baccetti 1989
29- Po Delta	40-50	Valle <i>et al.</i> 1995
30- Lagoon of Venice	982-1032	Valle <i>et al.</i> 1995
31- Grado-Marano Lagoon	0-20 (P)	Valle <i>et al.</i> 1995
TOTAL	1,075-1181	This work
SLOVENIA		
32- Cerknika Lake	4-8	Slavko 1993
CROATIA		
33- Pasko and Cetinško Fields	30-40/50	Radovic/ Susic, pers. comm.
ALBANIA		
34- Lagoons of Kune and Vain	>2	Vangeluwe pers. comm.
35- Lagoons of Fushe-Kushe Patok	5	Vangeluwe pers. comm.
36- Lagoons of Divjaka-Karavasta	10-15	Vangeluwe pers. comm.
37- Lagoons of Lag e Nartes	+	Vangeluwe pers. comm.
38- Lake of Butrintit	+	Vangeluwe pers. comm.
TOTAL	175-225	Vangeluwe pers. comm.
GREECE		
39- Kalamas Estuary	ca. 10	Handrinos & Akriotis in press
40- Amvrakikos Gulf	30-60	Pergantis in Handrinos, in litt.
41- Mesolongi Wetlands	50-60	Foppen <i>et al.</i> 1995
42- Sperchios Delta	ca. 10	Akriotis <i>et al.</i> 1994
43- Axios Estuary and Alyki Lake	ca. 200	Handrinos & Akriotis in press
44- Nestos Delta and Keramoti Lagoons	ca. 150	Handrinos & Akriotis in press
45- Porto Lagos and adjacent lagoons	ca. 50	Meininger 1990
46- Evros Delta	ca. 50	Handrinos & Akriotis in press
47- Limnos Island	10	H'lzinger 1991

Country and site	Number of pairs	Reference
Other secondary sites	ca. 50	Handrinos & Akriotis in press
TOTAL	600-650	Handrinos & Akriotis in press
TURKEY		
a) West coast	50	van den Berk pers. comm.
48- Büyük Menderes Delta	4	Brinkmann <i>et al.</i> 1990
49- Dalyan Delta	2-6	Kiliç and Kasperek 1989
b) South coast	20 (P)	van den Berk pers. comm.
50- Göksu Delta	0-5	Kasperek, pers. comm.
51- Çukurova Wetlands	0-5	Kasperek, pers. comm.
TOTAL	20-40/50-70	Kasperek/van den Berk, pers. comm.
TUNISIA		
52- Kneiss area (incl. Kneiss Is.)	19-25	van Dijk 1993
TOTAL	200-250	Czajkowski in Urban <i>et al.</i> 1986
TOTAL	2,252-2,691	This work

+ = confirmed breeding in recent years, but present status unknown
(P) = probable or possible breeding

Brinkmann *et al.* (1990) counted four pairs in 1989. On the south coast, the Göksu Delta was well covered in 1989, 1991 and 1992; in the first year breeding was thought possible, but in the following years no proof of breeding were found, although Redshanks were present year-round (van den Berk pers. comm.). The same applies for the Çukurova wetlands, where extensive surveys were made in 1987 and 1990 (van den Berk pers. comm.).

Syria

No evidence of breeding Redshanks has been found in the whole country (Hanna pers. comm.). Nevertheless, in non-coastal habitats, nesting could not be excluded on the Golan heights, which has some suitable habitat (Keijl pers. comm.) and in the northern part of the country (Kasperek pers. comm.).

Lebanon

No breeding pairs are present in Lebanon, due to the lack of suitable habitat (Kasperek pers. comm.).

Israel

The species does not breed in the Country (Keijl, Blitzblau & Langer pers. comm.). Nevertheless, Blitzblau (pers. comm.) reports territorial behaviour observed along the Carmel coast.

Egypt

According to Goodman & Meininger (1989) Redshank does not breed in this country.

Libya

The Redshank has never been reported breeding in Libya and no evidence of breeding was found during a recent

survey (Meininger *et al.* 1994).

Tunisia

In this country, 200-250 pairs were reported by Cramp & Simmons 1983 and by Urban *et al.* 1986. No more recent data have been obtained about the size of the entire population. Breeding pairs were reported being mostly located in the Gulf of Gabes (van den Berk pers. comm.). The Kneiss area supports a small population of 19-25 pairs (van Dijk 1993), which breed in loose colonies (Keijl pers. comm.).

Algeria

The species does not breed in the country (Boukalfa pers. comm.).

Morocco

No evidence of breeding has been found for this country (El Ghazi & Thevenot pers. comm.).

CONCLUSIONS

The information gathered allows us to estimate the Redshanks breeding along the Mediterranean coastline at 2 252-2 691 pairs. About 60 sites have been identified, mostly in lagoons and salt pans. Along the Mediterranean coastline the largest population inhabits the Venetian Lagoon, which hosts about the 40% of total. In this area breeding Redshanks are mostly concentrated in colonies of 20-200 pairs, located in small saltmarsh islets (Valle *et al.* 1994). The existence of these islets is threatened by several natural and man-made factors such as compaction of sediments, erosion and sea-level rise (Day *et al.* 1995). Greece supports another 600-650 pairs, but more detailed information are needed for this country. The same applies to Tunisia and Albania, which should host about 200 pairs each. Good data are available for

the Spanish and French coasts which support only limited numbers, about 100 pairs each. More precise information are clearly needed to assess the importance of each site and the actual trend for the Mediterranean coastal populations.

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REFERENCES

- Akriotis, T., Handrinos, G. & Kondylis, G. 1994. Avifauna and conservation of the Spercheios Delta. *Biol. Gallo-hellen* 22: 123-141.
- Albufera Biologic Station 1991. Archibebe comun *Tringa totanus*. In: Dies, J.I & Dies, B. (eds.). *Anuario Ornitológico Comunidad Valenciana*. Año 1990, 3: 43-44.
- Bartovsky, V., Kleteckí, E., Radovic, D., Stripevic, M. & Susic, G. 1987. Breeding waders in Yugoslavia. *Wader Study Group Bulletin* 51: 33-37.
- Brinkmann, R., Heins, J.-U., Köhler B. & Rösler, S. 1990. *Menderes-Delta. Zustand und gefahrdungen eines Ostmediterranean flussdeltas*. Institut für Landschaftspflege und Naturschutz, Hannover.
- Butletí del Parc Natural Delta de l'Ebre 1992. *Notes Florístiques i Faunístiques* 7: 45-49.
- Castro, H. 1986. *Ecología y dinámica anual de las poblaciones de aves en las salinas de Cabo de Gata*. Tesis Doctoral. Universidad de León.
- Cramp, S. & Simmons, K.E.L. 1983. *The birds of the Western Palearctic*. Vol. 5. Oxford University Press, London.
- Day, J.W., Are, D., Rismondo, A., Scarton, F. & Cecconi, G. 1995. Relative sea level rise and Venice lagoon wetlands. *Proceedings of the MEDCOAST 95 Conference*, Tarragona, 24-27 October 1995: 793-807.
- van Dijk, A.J. 1993. Breeding birds in the Kneiss area. In: Spiekman, H.W., Keijl, G.O. & Ruiters, P.S (eds.). *Waterbirds in the Kneiss area and other wetlands, Tunisia. Eastern Mediterranean Wader Project, spring 1990*. WIWO Report No. 38, Zeist.
- Foppen, R., Pergantis F., Roussopoulos, J. & Sarris, F. 1995. Breeding birds in the Messolonghi wetlands, spring 1990. In: De Nobel, W.T. (ed.). *Birds of the Messolonghi wetlands. Eastern Mediterranean Wader Project, spring 1990*. WIWO Report No. 53, Zeist. Pp. 78-87.
- GOES 1993. Monográfico Limícolas. *Milvus* 4: 1-41. Grupo Ornitológico del Estrecho. Tarifa.
- Goodman, S.M. & Meininger, P.L. (eds.). 1989. *The birds of Egypt*. Oxford University Press, Oxford.
- Grimmet, R.F.A. & Jones, T.A. 1989. *Important bird areas in Europe*. ICBP Technical Publication No. 9, Cambridge.
- GRIVE (Groupe de Recherche et d'Information sur les Vertébrés et leur Environnement) 1993. Feuille de liaison no. 35, septembre-octobre 1993.
- Handrinos, G.I. & Akriotis, G. 1996. *The birds of Greece*. Croom Helm, London.
- Hözinger, J. 1991. Wetlands on the Greek Island Limnos: a bird habitat of international significance. *Kartierung mediterr. Brütvogel* 6: 19-25.
- Isenmann, P. 1993. *Oiseaux de Camargue*. Societé d'Etudes Ornitologiques, Brunoy.
- Kılıç, A. & Kasperek, M. 1989. The birds of the Köycegiz-Dalyan area. *Birds of Turkey* 8: 1-32.
- Martinez-Vilalta, A. 1985. Breeding waders in the Iberian Peninsula. *Wader Study Group Bulletin* 45: 35-36.
- Meininger, P.L., Wolf, P.A., Hadoud, D.A. & Essghaier, M.F.A. 1994. *Ornithological survey of the coasts of Libya, July 1993*. WIWO Report No. 46, Zeist.
- Rebassa, M. 1992. *Tringa totanus*. Camaroja. In: GOB (eds.). *Anuari Ornitológic de les Balears, año 1991*. 6: 87.
- Savornin, G. 1995. *La nidification des laro-limicoles et des Tadornes sur les salins de Berre en 1994*. Report to CEEP.
- Savornin, G. 1996. Bilan de la première année d'enquête sur les limicoles nicheurs dans les Bouches du Rhône. Report to CEEP-LPO.
- Slavko, P. 1993. [Breeders of Lake Cerknica and its vicinity]. *Acrocephalus* 14: 32-62.
- Tinarelli, R. & Baccetti, N. 1989. Breeding waders in Italy. *Wader Study Group Bulletin* 56: 7-15.
- Urban, K., Fry, H. & Keith., S. 1986. *The birds of Africa*. Vol. II, Academic Press.
- Urios, V., Escobar, J.V., Pardo, R. & Gomez, J.A. 1991. *Atlas de las aves nidificantes de la Comunidad Valenciana*. *Conselleria d'Agricultura i Pesca*. Generalitat Valenciana.
- Valle, R. Scarton, F. 1995. La Pettegola *Tringa totanus* nidificante nella laguna di Venezia: le ragioni di una scelta coloniale. *Avocetta* 19: 36.
- Valle, R., Scarton, F. & Borella, S. 1994. Nesting parameters of Redshank *Tringa totanus* in the Venetian Lagoon. *Le Gerfaut* 84: 15-18.
- Valle, R., Scarton, F., Tinarelli, R., Grussu, M., Utmar, P. & Borella, S. 1995. Primo censimento della popolazione di Pettegola *Tringa totanus* nidificante in Italia. In: Pandolfi, M & Foschi, U.F. (eds.). *Atti del VII Convegno nazionale di Ornitologia. Suppl. Ric. Biol. Selvaggina*, XXII: 601-605.
- Yeatman-Berthelot D. & Jarry, H (eds.). 1994. *Nouvel atlas des oiseaux nicheurs de France 1985-1989*. Societé Ornithologique de France, Paris.

