Table 1. Main wintering localities of Kentish Plover in Spain, with their average number in brackets, and the average totals by zones. (+) = less than 25 birds. s = sporadic.

Zones	Number	Main localities
Atlantic Galicia	100	Corrubedo and estuaries of Corme and Lage, Arosa, Ortigueira and Vigo
Cantabria	S	Estuaries of Viveiro, Barqueiro and Guernica
Mediterr- anean	500	Ebro Delta (100), and salt-pans of Santa Pola (75), Torrevieja (75), and Almería (50)
Balearic Islands	200	Salobrar de Campos (60), Estany Pudent (40), and salt- pans of Ibiza (30), and Fornells (30)
Western Andalucia	7,200	Cádiz Bay (4,000), Guadalquivir Marshes (2,600), Huelva Marshes (200), Ayamonte and I. Cristina (150)
Canary Islands	400	Fuerteventura (200), Lanzarote (100)
Inland	100	Majavacas pool (+), Fuentepiedra pool (+)
Total Spain	8,500	Cadiz Bay (4,000), Guadalquivir Marshes (2,600)

Finally, from the data available of the complete period, the overall distribution of the Kentish Plover wintering in the

whole of Spain is analysed by six biotopes (Figure 2). The salt-pans and the rice fields hold more than 70% of the estimated wintering population, indicating the importance of these man-made areas for Kentish Plover. The inland areas and coastal lagoons hold a low proportion of winterers, with shores and estuary mudflats being intermediate. A more extensive exploration of the rice fields and shores would possibly change the relative importance of the these habitats (Figure 2). Although the salt-pans is now the main winter biotope, rice fields can be the most important biotope.

REFERENCES

- Alberto, L.J. & Velasco, T. 1988. Limícolas invernantes en España. J.L. Tellería (Ed.): *Invernada de aves en la Península Iberíca*, pp 71-78. Monografías de la SEO, no 1. Madrid. 208pp
- Cramp, S. & Simmon, K.E.L. (Eds.). 1982. The Birds of the Western Palearctic, vol. 3. Oxford. 913pp.
- Erard, CH. & Vielliard, J. 1965. Comentarios sobre avifauna invernal en el Oriente español. *Ardeola*, 11: 95-100.
- Glutz, U.N., Bauer, K. M. & Bezzel, E. 1975. Handbuch der Vögel Mitteleuropas, vol. 6. Akad. Verlag. Wiesbaden. 840pp.
- Telleria, J.L. 1981. *La migración de la aves en el Estrecho de Gibraltar, vol. 2: Aves no planeadoras.* Ed. Universidad Complutense. Madrid. 491pp.
- Velasco, T. & Alberto, 1993. Number, main localities and distribution maps of waders wintering in Spain. Wader Study Group Bull. 70: 33-41.

Phenology and distribution of waders ringed in Spain from the scheme Madrid Museo de Ciencias

F. Cantos & A. Fernández

Cantos, F. & Fernández, A. 1994. Phenology and distribution of waders ringed in Spain from the scheme Madrid Museo de Ciencias. *Wader Study Group Bull.* 73: 55-60.

F. Cantos & A. Fernandez, Apartado 32018 El Pardo. 28048, Madrid, Spain.

INTRODUCTION

Wader studies in Spain are few, with the exception of census work (Alberto & Velasco 1986; Martínez-Vilalta 1991), some studies concerned with wader communities (Souza 1978; Cordero-Tapia & López de Villar 1985; Martínez-Vilalta 1985b; Rubio 1986), breeding ecology and population size (Martínez-Vilalta 1985a; Domínguez *et al.* 1987; Souza & Domínguez 1989), wintering populations and wader migration (Bernis 1966; Asensio & Carrascal 1987; Alberto & Velasco 1988), and, recently, with wader ringing (Barbosa & Asensio 1990).



Figure 1. Seasonal pattern of ringing of chicks and fledglings/adults for the 30 least common waders.



Figure 3. Seasonal pattern of ringing of chicks and fledglings/adults of Avocet *Recurvirostra avosetta*.



Figure 5. Seasonal pattern of ringing of chicks and fledglings/adults of Redshank *Tringa totanus*.



Figure 2. Seasonal pattern of ringing of chicks and fledglings/adults of Black-winged Stilt *Himantopus himantopus*.



Figure 4. Seasonal pattern of ringing of chicks and fledglings/adults of Dunlin Calidris alpina.



Figure 6. Seasonal pattern of ringing of chicks and fledglings/adults of Common Sandpiper *Actitis hypoleucos*.

🗖 Chicks 🔄 Fledges



Tenerife 🔒

Figure 7. Ringing distribution in Spain.



Figure 9. Ringing distribution of Avocet Recurvirostra avosetta.



Figure 11. Ringing distribution of Redshank Tringa totanus.



Figure 8. Ringing distribution of Black-winged Stilt *Himantopus himantopus*.



Figure 10. Ringing distribution of Dunlin Calidris alpina.



Figure 12. Ringing distribution of Common Sandpiper Actitis hypoleucos.

C C		т л т л т т т 	C. F. 101AL 3 3 4 6 26 4 868 67 288 25 56 342 227 165 23 25 342 23 25 148 187 125 134 97 125 134 97 148 125 148 148 1166 1166 1166	L T. 1890 1890 935 935 53 538 558 558 558 558 558 125 125 125 128 1118 111
Reminand attraction 1			33 9 626 264 868 67 28 25 56 342 56 342 57 285 276 282 276 282 276 282 165 155 134 97 134 97 125 148 125 148 148 1118 156 252 158 257	11118 11118 11118 11118 11118 11118 11118 11118 11118 11118
Maintanta Maintantanta Maintantanta Maintantanta Maintantanta Maintantantanta Maintantantantanta Maintantantantantantantantantantantantantan		опта и и и и и и и и и и и и и и и и и и и	33 626 264 868 67 28 28 67 1 28 25 342 56 342 28 276 342 28 104 97 165 114 1116 1 1116 1 1 215 1 25 1118 1 1 215 25 1 1118 1 1	1890 1890 935 935 53 22 398 558 558 1987 125 125 125 125 231 126 231 232 232 232 232 232 232 232 232 232
Anticipational contractions Anticipation Anticipation <t< th=""><td>стания и пользования и поль Пользования и пользования и</td><td>ы мита и та и и и и и и и и и и и и и и и и</td><td>22 868 868 868 22 22 25 23 25 24 25 24 25 24 25 187 1188 1168 1118 1118 1118 155 257 257 257 257 257 257 257 257 257 2</td><td>1111 1111 1111 1111 1111 1111 1111 1111 1111</td></t<>	стания и пользования и поль Пользования и пользования и	ы мита и та и и и и и и и и и и и и и и и и	22 868 868 868 22 22 25 23 25 24 25 24 25 24 25 187 1188 1168 1118 1118 1118 155 257 257 257 257 257 257 257 257 257 2	1111 1111 1111 1111 1111 1111 1111 1111 1111
$\label{eq:alphaneline} \label{eq:alphaneline} eq:alphanelin$		ישטאעל אבשטה יישטאלי אישטא	22 28 25 25 22 28 25 25 25 25 25 25 25 25 25 25 25 25 28 2 28 2 28 2 28 2 28 2 25 1 12 5 1 12 5 1 12 5 1 11 16 1 11 16 1 11 16 1 11 16 1 11 16 1 11 1	23 53 53 53 22 398 55 55 55 55 55 55 55 55 57 231 125 125 125 231 125 231 231 2231 231 2231 2
	и — « « « « « « « « « « « « « « « « « «	าดกรา กราย เมื่อการาย	228 25 28 25 56 342 56 342 276 285 276 285 148 187 1187 148 148 1187 156 148 1187 156 156 156 156 156 156 156 156 156 157 156 157 156 157 156 157 156 157 156 157 156 157 156 156 156 156 156 156 156 156 156 156	21 53 53 53 55 55 55 55 55 55 55 55 57 57 57 11 12 5 11 12 5 23 11 12 5 23 12 5 23 12 5 23 12 5 23 12 5 23 12 5 23 23 23 23 23 23 23 23 23 23 23 23 23
Cutation	▲ 2 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	ังกัน กัน มี เกิดกรุก นักคพิศ 	2007 200 200	5 1 1 29 29 398 57 57 57 57 57 57 57 57 57 1187 128 1118 2118
Glatestinisedia Constrainedia Constr	489 4505 8 899 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	чокаи йиийч 	227 165 56 322 8 232 276 282 276 282 187 134 187 125 148 148 166 166 232 232	192 192 192 192 192 57 57 57 112 125 112 125 1112 212 212 212 212
ContractiveContractiv	2 1 8 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7		227 165 56 342 8 285 8 285 8 285 8 285 128 134 148 148 148 148 148 125 148 116 155 155 155 155 155 156 155 155 155	392 22 23 558 558 55 55 55 55 55 55 55 55 55 55 12 12 51 12 51 11 11 50 23 11 25 23 12 55 23 12 55 23 12 55 23 12 55 55 55 55 55 55 55 55 55 55 55 55 55
Constraint albitist 1			22 56 342 8 285 8 285 8 285 276 282 5 5 5 187 187 148 148 148 148 156 156 257 257	22 398 593 558 558 55 55 55 55 187 125 125 125 125 231 126 1118 272
Correctival haticula Correctiv	• 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		56 342 8 285 8 285 276 282 5 5 5 134 97 118 1118 1118 1 1118 1 156 156	398 293 558 57 57 57 187 187 148 148 148 166 1118 272
	25 12 12 12 12 12 12 12 12 12 12 12 12 12	, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8 285 276 282 57 57 57 57 187 187 148 148 1118 1118 155 252	293 558 57 57 57 187 125 125 125 125 231 272 272
	2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	, , , , , , , , , , , , , , , , , , ,	276 282 57 59 134 97 187 187 148 148 168 1118 252	558 558 1125 1125 111 272 272
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	чопан биибч п	5 134 57 187 187 125 128 148 168 1118 252	5 57 187 1287 125 125 116 272
Watching warding Matching warding and did to be and did to be and and did to be and and and did to be and and did to be and and and did to be and and and did to be and and and did to be and and and did to be and <td>1 F 0 F 8 7 8 9 9 8 9 7 7</td> <td>o 4 0° 10 ∴</td> <td>134 57 134 97 125 125 148 148 168 1118 252 252</td> <td>57 231 187 125 125 148 148 1166 1118 272</td>	1 F 0 F 8 7 8 9 9 8 9 7 7	o 4 0° 10 ∴	134 57 134 97 125 125 148 148 168 1118 252 252	57 231 187 125 125 148 148 1166 1118 272
	5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	н 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	134 97 187 125 125 148 148 148 118 1118 1118 15	231 187 125 125 125 125 272 272
	0 F 8 9 9 9 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7	* n n n n n m m m m m m m m m m m m m m	187 125 148 148 166 1118 272	187 125 148 148 9 1118 272
	2 1 2 2 3 3 3 3 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 5 7 7 7 1 8 5 7 7 7 7	125 148 148 148 148 125 15 15	125 148 148 9 11148 272
Autoritation10112232323232324Califit lerrundint13132333312333333333Califit lerrundint131333333133333333Califit lerrundint131331313331333333Califit lerrundint131313313334333333Califit lerrundint333331333334333333Califit derrundint3331323434343434Canifit derrundint3331323434343434Canifit derrundint3331323434343434Canifit derrundint1111113434Canifit derrundint111113434Canifit derrundint11223434Canifit derrundint1111134Canifit derrundint11113434Canifit derrundint112243434Canifit derrundint11113434Canifit derrundint113343434Canifit derrundint </th <td>8 N 8 N M 8 N N</td> <td>т 2 и и 2 и</td> <td>148 148 166 1118 272 15</td> <td>148 158 1166 1118 272</td>	8 N 8 N M 8 N N	т 2 и и 2 и	148 148 166 1118 272 15	148 158 1166 1118 272
MatterAutomata12212Califit formation11111111Califit formation11111111Califit formation11111111Califit formation11111111Califit formation11111111Califit formation11111111Califit formation11111111Califit formation111111111Califit formation1111111111Califit formation11111111111Califit formation11111111111Califit formation111111111111Califit formation111111111111Califit formation1111111111111111111111111 <t< th=""><td>9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9</td><td>ч 8 ч ч 8</td><td>1118 1 272 15</td><td>1118 272</td></t<>	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ч 8 ч ч 8	1118 1 272 15	1118 272
Autorial activations 1 2 6 2 10 102 10 23 23 Califications 1 2 1 1 10 595 109 96 23 Califications 1 2 1 1 10 595 109 96 23 Califications 1 2 1 1 10 23 24 10 103 595 96 23 Califications 1	9 7 7 8 9 7 7 8 9 7 7 7 7 7 7 7 7 7 7 7	4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	166 1118 1 272 15	1118 272
Calibration 13 33 10 35 103 55 103 55 103 55 103 55 22 22 22 22 22 22 23 24 23 24 24 24 24 24 24 25 24 23 24 23 24	8 5 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	, , , , , , , , , , , , , , , , , , ,	100 1118 1 272 15	1118 272
Diffused nut protext 4 23 47 23 47 23 47 23 24 23 24 23 24 23 24 <td>5 M M 80 H N</td> <td></td> <td>272</td> <td>272</td>	5 M M 80 H N		272	272
L'AMBOGINYERES minimus J Z I J Z I J Z I J J Z J J Z J J Z J J Z J) m g ч N	7 5 7	115	212
Scolorax rusticola 1 124 1 12 1 12 1 12 1 12 1 </th <td>9 8 H N</td> <td>2 82 1</td> <td>~</td> <td></td>	9 8 H N	2 82 1	~	
Galifnace oalinace 77 124 31 12 1 12 1 </th <td>8 4 6</td> <td>82 1</td> <td>;</td> <td>15</td>	8 4 6	82 1	;	15
Limosa linosa 1 3 1 1 1 1 1 Limosa linosa 1 1 1 2 2 1 1 1 2 Limosa lanconica 1 1 1 2 2 1 2 2 Limosa lanconica 1 1 2 1 2 2 2 Numenius ring arouta 1 1 1 31 9 1 2 Numenius ring arouta 1 1 1 1 1 2 1 Numenius ring arouta 1 1 1 1 2 1 2 Numenius arouta 1 1 1 1 1 2 1 Numenius arouta 1 1 1 2 1 2 1 Numenius arouta 1 1 1 1 2 1 2 Tringa extension 1 1 1 1 2 1 1 Tringa extension 1 1 1 2 1 2 1 Tringa extension 1 1 1 1 1 2 1 Tringa extensitita <t< th=""><td>7 7</td><td>1</td><td>305</td><td>305</td></t<>	7 7	1	305	305
Limosa laponica 1 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	2		248	248
Warenius phaconus 1 31 9 1 2 Warenius acousta 1 1 2 2 1 2 Warenius acousta 1 1 1 3 2 1 2 Warenius acousta 1 1 1 3 3 2 1 2 Warenius acousta 1 1 1 3 3 1 3 3 Tringa totanus 4 26 104 1 14 11 9 302 181 126 57 24 18 Tringa totanus 1 1 1 1 1 1 2 1 18 126 57 24 18 Tringa totanus 1 1 1 1 1 2 1 2 1 1 Tringa dareola 5 1 2 1 2 1 2 4 3 5 5 5 5 Tringa dareola 5 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2	79	79
Numenius arcusta 1 3 Numenius arcusta 1 1 3 Tringa ervthropus 1 1 1 2 5 Tringa totanus 4 26 104 1 11 93 302 156 181 126 57 24 18 Tringa totanus 4 26 104 1 1 1 2 1 18 Tringa totanutilia 1 1 1 1 2 14 11 93 302 181 126 57 24 18 Tringa totanutilia 1 1 1 1 2 1 2 1 18 Tringa colropus 1 1 1 1 2 1 2 4 26 Tringa dareela 5 11 2 2 27 27 6 3 5 Octifia hypoleucos 4 1 5 10 2 7 70 6 7	4	2	47	47
Tringa ervthrobus 1 1 1 1 2 5 1 Tringa totanus 4 26 104 1 14 117 93 302 156 181 126 57 24 18 Tringa totanus 4 26 104 1 1 1 1 2 3 2 3 Tringa totanut 1 1 1 1 1 2 181 126 57 24 18 Tringa totantilla 1 1 1 1 2 1 2 1 1 Tringa ochropus 6 9 1 2 2 6 9 1 Critita hrooleucos 6 1 5 1 2 7 7 10 5 6			•	•
Tringa totanus 4 26 104 1 14 117 93 302 126 126 57 24 18 Tringa stagnatilia 1 1 1 1 1 1 1 1 18 126 57 24 18 Tringa stagnatilia 1 1 1 1 1 2 1 18 Tringa correpus 1 1 1 1 2 1 5 4 Tringa correpus 5 1 2 2 1 2 6 3 5 Octifie hypoleucos 4 1 54 92 10 2 7 70 6		T	80	8
Tringa stannatilia 1 1 1 1 93 302 181 126 57 24 18 Tringa nebularia 1 1 1 1 1 33 302 181 126 57 24 18 Tringa nebularia 1 1 1 2 1 2 1 2 Tringa ochropus 6 9 1 2 1 7 10 5 6 Tringa olareola 5 11 2 9 1 28 61 48 8 Actitis hypoleucos 4 1 54 92 10 2 77 92	ŝ		52 .	52
Tringa mebularia 2 1 Tringa ochropus 4 6 9 1 7 10 5 4 Tringa dlareola 5 11 2 9 1 28 61 48 8 3 5 Octifie hypoleucos 4 1 54 92 10 27 22 6	24	18 10	108 1257 1	1365
Tringa ochropus 1 7 10 5 4 Tringa dareela 5 1 28 61 48 8 3 5 Activish hypoleucos 4 1 5 1 5 7 27 22 6			'n	Ŷ
Trinda alareola 5 1 28 61 48 8 3 5 Actitis hypoleucos 4 1 54 92 10 2 779 65 1	•		28	28
Actitis hypoleucos 4 2 9 1 2 27 22 6 1 54 92 10 2 7 79 65 1	Ē	5	173	173
			85	85
Arenaria interpres	18	5	17 1342 1	1359
			2.2	

- -----

Total number of waders ringed 10697

Symbols key for Figures

Species map	General
	map
<50	<100
50-100	100-400
101-200	401-750
201-400	751-1000
>400	>1000

The lack of data is due to the limited attention paid to waders by Spanish ringers (Barbosa & Asensio 1990), although, in recent years, the number of waders ringed has increased considerably (Asensio 1990).

This lack of interest is due to the special techniques required to capture the birds and the low population densities of most wader species at most times of the year. In addition, the areas favoured by waders are generally different to those where ringing is carried out, which explains why so few birds of this group have been ringed to date.

This report provides an overview of the wader ringing activity in Spain during the period 1957-1984, and offers phenological and geographical data which may provide a better understanding of waders in Spain.

RINGING RESULTS

The number of waders ringed in the MADRID-MUSEO DE CIENCIAS scheme (Madrid-Sciences Museum) accounts for two thirds of waders ringed in Spain until 1984. The rings employed were no longer used officially after 1982. The data gathered cannot therefore be used to assess ringer activity in the last decade. It does, however, provide a useful guide to the seasonal and geographical distribution of ringing between 1957 and 1984.

We analysed ringing data from the scheme run by the Centro de Migración de Aves de la Sociedad Española de Ornitología (Centre for the Study of Bird Migration of the Spanish Ornithological Society), taking into account the following information: species, age, month and location (province) of ringing. Table 1 shows the number of each wader species ringed in Spain between 1957 to 1984 under this scheme, showing the results by month and age of the birds when ringed. In total, 35 species were ringed, only four of which consisted of more than 1,000 individuals. The total number of waders ringed was 10,697.

The number of chicks and adults/fledglings ringed each month is shown in Figures 2 - 6 for the five species that were ringed in the greatest numbers (Black-winged Stilt *Himantopus himantopus*, Avocet *Recurvirostra avosetta*, Dunlin *Calidris alpina*, Redshank *Tringa totanus* and Common Sandpiper *Actitis hypoleucos*). Figure 1 provides the combined data for the remaining species.

Figure 7 shows the national distribution of ringed waders in Spain, by province, and indicating those areas most important for wader ringing. One must bear in mind however, that these results are biased due to the preferences of individual ringers and their geographic distribution. Finally, Figures 8 - 12 show the geographic distribution of ringing of the five species most ringed.

CONCLUSIONS

In view of the results, the greatest number of waders are found during the breeding season, between May and July, and during the autumn migration, including August and September (Figure 1).

The strong autumn migration stands out with respect to weak spring migration (as shown by Bernis (1962) for passerines) and the minor importance of wintering in Spain as well (Alberto & Velasco 1988).

The areas with the most ringing (Figure 7) coincide with the most important wintering areas (Alberto & Velasco 1988) and previously by Barbosa & Asensio (1990) as important for ringing.

However, in some areas ringing activity has notably increased (Ebro Delta, Valencia and other adjacent provinces), others on the other hand, have lost their importance for waders (La Mancha Húmeda).

The existence of wader concentrations in a few coastal localities, could make a continuous ringing study easy, providing information that will help to conserve waders and their habitats, which are threatened all over Europe and especially in Spain.

REFERENCES

- Alberto, L.J. & Velasco, T. 1986. Censo nacional de limícolas. La Garcilla 66: 29-32.
- Alberto, L.J. & Velasco, T. 1988. Limícolas invernantes en España. In: J.L. Tellería, (Ed.), *Invernada de aves en la Península Ibérica*. Monografía 1. SEO, Madrid.
- Asensio, B. 1990. Informe sobre la campaña de anillamiento de aves en España. Año 1989. *Ecología* 4: 239-295.
- Asensio, B. & Carrascal, L.M. 1987. Migratología de las Agachadizas Comunes (*Gallinago gallinago* L.) invernantes en la Península Iberíca. *Ardeola* 34: 225-242.
- Barbosa, A. & Asensio, B. 1990. Ringing waders in Spain: the current situation. *Wader Study Group Bull*. 59: 30-32.
- Bernis, F. 1962. Sobre la migración de nuestros passeriformes transaharianos. *Ardeola* 8: 41-121.
- Bernis, F. 1966. Aves migradoras ibéricas. Fasc. 4. SEO. Madrid.

- Cordero-Tapia, P.J. & López de Villar, P. 1985. Fenología de limícolas en un pequeño río litoral Mediterráneo - El Tordera -(NE de España). *Ardeola* 32: 131-136.
- Domínguez, J., Barcena, F., Souza, J.A. & Villarina, A. 1987. Breeding waders in Galicia, northwestern Spain. *Wader Study Group Bull.* 50: 28-29.
- Martínez-Vilalta, A. 1985a. Breeding waders of the Iberian Peninsula. *Wader Study Group Bull.* 45: 35-36.
- Martínez-Vilalta, A. 1985b. Descripción de la comunidad de limicolas invernantes en el Delta del Ebro. *Doñana Acta Vertebrata* 12: 221-229.
- Martínez-Vilalta, A. 1991. Primer censo nacional de limícolas coloniales y Pagaza Piconegra, 1989. *Ecología* 5: 321-327.

- Rubio, J.C. 1986. Estudio de la comunidad de limícolas de las Marismas del Odiel (Huelva). Oxyura III: 97-132.
- Souza, J.A. 1978. Limícolas de Baldaio desde 1975. Reducción de presencia por drástica transformación del medio. *Braña* 2: 37-59.
- Souza, J.A. & Domínguez, J. 1989. Efecitvos y distribución del Chorlitejo patinegro (*Charadrius alexandrinus*) en Galicia. *Ecología* 3: 305-311.

ERRATA

We apologise for the poor print quality of several of the figures in recent *Bulletins* and reproduce again, at larger scale some of the figures from Peter Reay and Sara McMahon's paper in *Bulletin* 71: 44-46.

Figure 1a. Tamargram for the main wader species own the Tamar Estuary Complex in 1989.

Figure 1b. Tamargram for the main wader species on the Tamar Estuary Complex in 1990.

-327.