- ple,J.S. and Cooper,J. 1975. The Palaearctic wader population of Langebaan Pringle.J.S. Lagoon. Ostrich 46: 213-218.
- yle,J.S. and Cooper,J. 1977. Wader populations (Charadrii) of the marine littoral of the Cape Peninsula, South Pringle, J.S. Africa. Ostrich 48: 98-105.
- Serle, W. 1955. The bird-life of the Angolan littoral. Ibis 97: 425-431.
- e,W. 1957. A contribution to the ornithology of the Eastern Region of Nigeria. *Ibis* 99: 371-418, 628-685. e,W. 1965. A third contribution to the ornithology of the British Cameroons. *Ibis* Serle.W.
- Serle.W. 107: 60-94.
- Smith, P.A. 1966. Palaearctic waders in the Niger Delta. Bull. Niger. Ornithol. Soc. 3: 2-6.
- Summers,R.W. and Waltner,M. 1979. Seasonal variation in the mass of waders in southern Africa, with special reference to variation migration. Ostrich 50: 21-37.
- Summers, R.W., Cooper, J. and Pringle, J.S. 1977. Distribution and numbers of coastal waders (Charadrii) in the southwestern Cape, South Africa, summer 1975-76. Ostrich 48: 85-97.

- Thiollay, J.M. 1985. The birds of Ivory Coast. Malimbus 7: 1-59.
- Tye, A. and Tye, H. 1987. The importance of Sierra Leone to waders on the East Atlantic Flyway. Wader Study Group Bull. 49, Suppl./IWRB Special Publication 7: in press.
- Vrydagh, J.-H. 1953. Comportement de quelques oiseaux Eurasiens dans leurs quartiers d'hiver au Congo Belge. *Gerfaut* 43: 301-327.
- waders Walsh, F. 1971. Early Palaearctic at Kainji and New Bussa in 1969. Bull. Niger. Ornithol. Soc. 8: 32-34.
- Whitelaw, D.A., Underhill,L.G., Cooper, J. and Clinning, C.F. 1978. Waders (Charadrii) and other birds on the Namib coast: counts and conservation priorities. *Madoqua* 11: 137-150.

# WSG INTERNATIONAL PROJECT ON BLACK-WINGED STILTS: SECOND PROGRESS REPORT

#### by Philippe J. Dubois

#### INTRODUCTION

The main event of the year was a technical meeting held from 12-13 December 1986 at Rochefort, France, between the national co-ordinators of the WSG Project. Portugal, national Spain, France and Italy were represented. We discussed the results of studies carried out in each country in 1986, together with the L.P.O. Expedition to Morocco in September 1986. An colour-marking scheme was international adopted, starting in 1987. A project proposal will be submitted to the E.E.C. for a co-operative study on Black-winged Stilts in Southern Europe.

## RESULTS

As the first progress report, we summarise the results of the studies carried out in each country.

(co-ordinator: Rui Rufino, CEMPA, <u>Portugal</u> Lisboa).

Batty (supervising students at the Les

**University of Faro)** Feeding and feeding behaviour of *Himantopus himantopus* in one salina at Faro (by Antonina M. dos Santos).

Studies of feeding rates (number of paces, number of items ingested and number of pecks) and food availability. The results suggested that the main prey was Artemia salina, although other prey were taken when the salinas had a lower salinity level.

<u>M. Bolton (at Portimao)</u> Study of factors affecting hatching success in a small population in South-west Portugal. The major factor influencing hatching success seems be the degree of vulnerability to ground to predators.

A. Xeira (Tejo Estuary) (This work was started in 1983 by Goncalo Jardim of which a note was published) The 1985 and 1986 studies focussed on changes in breeding and non-breeding numbers, clutch size and hatching success, breeding success, and dispersion. In the breeding seasons a total of 12 adults and 26 juveniles were colour ringed. Two adults ringed in 1985, were present at the site this season.

G. Vowles (Algarve) 41 young were ringed in 1985 and 25 in 1986 in Algarve.

Spain (co-ordinator: Luis J. Alberto, Facultad de Ciencas, Sevilla)

From regional censuses carried out for 3 years in Spain, the national population was estimated to be 8 000 pairs, well below the "over 20 000 pairs" stated in the literature (BWP).

<u>France</u> (co-ordinator: Philippe J. L.P.O., Rochefort). Dubois,

In 1986, 166 juveniles were ringed (135 colour-ringed) together with 8 adults. The first results from the colour-ringing programme which began in 1983 show that some degree of philopatry occurs in juveniles, some birds can breed from the first year but most of them seem to breed only from the third year, and that some mate-changing occurs during the breeding season.

The significance of supranormal clutches was also studied. Some sightings of birds coming from the Atlantic coast were made in Morocco, Sardinia and Camargue.

Table 1. Number of pairs breeding in each region in 1985 and 1986

	1985	1986	
Piemonte	21-35	35-45	
Veneto	106-122	78-96	
Emilia-Romagna	351-389	480-537	
Toscana	10-18	3-4	
Puglia	170	100-112	
Sardegna	142-152	170-171	
Sicilia	46-52	20-31	
Lombardia	1-2	7-9	

Table 2. Number of pairs breeding in each habitat in 1985 and 1986

	1985	1986
Ricefield Sugar refinery and	20 2.2%	40 4.2%
pig-farm basins	152 17.0%	214 22.6%
Fish culture basins and canals	6 0.7%	4 0.4%
Salinas Dammed freshwater	274 30.7%	262 27.6%
pools Lagoons and coastal	85 9.5%	49 5.2%
pools	353 39.7%	380 40.0%

<u>Italy</u> (co-ordinator: Roberto Tinarelli, Bologna)

A census of the Italian breeding population of Black-winged Stilts was made through a group of 40 researchers. The total population was estimated to be 893-1005 breeding pairs. The distribution of pairs in 1985 and 1986 is shown in Table 1. Table 2 shows the use made of different habitats. Compared to 1985 the number of breeding pairs had increased in Emilia-Romagna region, decreased in the Puglia region and had not changed in the other regions. A total of 96 pulli were ringed during the spring 1986 (81 with colour-rings). Data were collected on breeding chronology, egg laying, hatching, nest descriptions and breeding success. All the data on breeding biology, plus those collected in 1983, 1984, 1985 and with those to be collected next season will be the object of a comprehensive final report in 1987. <u>Greece</u> (co-ordinator: Vassilis Goutner, Thessaloniki)

No progress in 1986.

<u>Morocco</u> (L.P.O. Team Expedition - September 1986)

In autumn 1986 a team from the L.P.O. (J.J. Blanchon, Y. Berthome, A. Doumeret, P.J. Dubois and M. Metais) spent 3 weeks in South Spain and Morocco. Censuses and age/sex-ratios were made. Studies of diurnal activities and foraging strategies of both adults and immatures were made. Studies on diurnal activities and foraging strategies of both adults and immatures were made at Sidi Moussa/Oualidia, where 26 birds were caught mainly by cannon-netting, which appears to be very efficient. A report was published for the French Environment Ministry.

### International Colour-marking Scheme

From 1987 onwards it was decided that each country of marking would be identified by a specific colour-ring. This ring will be placed above the left tarso-metatarsian articulation, whatever the national scheme. The following colours were chosen:

Portugal:	black
Spain:	white
France:	yellow
Italy:	dark green
Greece:	red
Africa:	orange

All sightings should be sent to the WSG Colour-Scheme Co-orinator (H. Galbraith, 96 Neilston Road, Paisley, Strathclyde, PA2 6EL, U.K.).

#### The Future

An E.E.C. Project proposal will be submitted at the beginning of 1987.

Expeditions are planned in North Africa during the 1986/87 winter by R. Tinarelli, and during the 1987/88 winter an L.P.O. Expedition is planned in Mali and Senegal to study wintering conditions of Black-winged Stilts and to search for colour-marked birds from Europe.

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