study use of such extracted data was considered appropriate. Details of how prey values were selected are as follows:

Macoma. Energy content estimated for the median age class (shell height 4.62 mm) in January on Ythan Estuary as 9.53 cal (Chambers and Milne 1975, Tables 1 and 2). In calculating the median, *Macoma* in the smallest class (shell height 2 mm) were omitted since these would have been recorded as "very small items".

Nereis. Values for the 0-1 and 1+ year classes of 47 and 235 cal/item were used (Evans *et al.* 1979, Table 9).

Very small items. Extreme values of 0.12 cal and 2.5 cal were used; the former is for 0-1 year *Hydrobia ulvae* (Evans *et al.* 1979, Table 9) and the latter is as determined by Pienkowski (1982) for this prey type.

WADERS WORLDWIDE

Members of the British Trust for Ornithology (BTO) will know that towards the end of 1986, the Estuaries Programme of the BTO initiated a regular double-page feature entitled "Shorelines" in *BTO News*, in order to keep BTO members informed of developments in the wader world. Some articles in "Shorelines" relate to studies involving BTO staff and membership participation, whereas others are aimed at providing the global perspective necessary for an appreciation of wader biology. Among the latter is a continuing series providing overviews of wader studies taking place in different parts of the world. We felt that these articles are of considerable interest to wader enthusiasts worldwide. With the agreement of the BTO, we will be reprinting some of these articles in the *Wader Study Group Bulletin*. The first of the series, on southern Africa, appears below.

The Editors

WADERS IN SOUTHERN AFRICA

Les Underhill

Reprinted from BTO News No. 152: 14-15 (Sept-Oct 1987)

The BTO ethos strongly permeates wader studies in southern Africa. Most ringers here are either first or second generation BTO-trained. First Clive Elliott and later Ron Summers provided professional leadership and input to the Western Cape Wader Study Group (WCWSG) since its inception in 1971, making it the first wader group in the southern hemisphere. Like the various wader groups in Britain, the WCWSG links and coordinates the activities of mainly amateur ringers.

Based on his pioneering work in eastern Scotland, Ron Summers coaxed the WCWSG into counting waders along the southern Africa coastline in 1975, long before he helped in motivating the Winter Shorebird Count in Britain. Due to the small teams of counters we could muster, the southern Africa coast was covered in a series of surveys over several years. The results of each survey have been published: an up-to-date list of these reports and papers may be found in *Wader Study Group Bulletin* 49: *Suppl.*: 15-34. A few sections of coast remain to be done. The coast of the Transkei is scheduled for December 1987, leaving only the diamond prospecting areas of southern Namibia and parts of the northern Cape unsurveyed for waders.

LANGEBAAN LAGOON

Important wader projects of the WCWSG completed in the past ten years have resulted in publications on the Curlew Sandpiper, Knot, Terek Sandpiper and Sanderling. The WCWSG has organised midwinter and midsummer counts at Langebaan Lagoon, on the Atlantic coast 100 km north of Cape Town and the most important wetland for waders in South Africa. A summary paper is in press (Underhill, *Ostrich* 1987). Our efforts played at least a small part in the proclamation of Langebaan Lagoon as a National Park in 1985. The January wader population at Langebaan Lagoon averages 34 500 birds, placing it among the major wetlands for waders along the East Atlantic Flyway. Table 1 gives a comparison of the species composition and abundance of waders in January at Langebaan with that at Lindisfarne, an estuary on the northeast coast of England holding a similar number of waders. Some striking points emerge. These distant sites both hold seven of the top twelve waders. Much the most abundant waders at Langebaan and Lindisfarne respectively are the ecologically similar Curlew Sandpiper and Dunlin. Only one resident African wader, the White-fronted Sandplover, closely related to the Kentish Plover, appears among the top twelve at Langebaan.

The Percy Fitzpatrick Institute of African Ornithology at the University of Cape Town is the local equivalent of the Edward Grey Institute at Oxford. There, Phil Hockey and Alison Bosman are doing fascinating work on predator-prey relationships between African Black Oystercatchers and limpets. They have found that limpets grow bigger and faster on offshore islands where the run-off after rain is enriched by the guano of the seabird colonies. Oystercatcher densities are about five times higher on these islands than the adjacent mainland. They remove mostly medium-sized limpets - the largest ones are left to breed and the smallest to grow.

In Port Elizabeth, on the Cape south coast, Paul Martin is completing a PhD on the ecology of waders on the Swartkops estuary. He also holds the rare distinction of being the first person in Africa to observe a Hudsonian Godwit - this bird appeared on the estuary early in