**Site description**

The Adur Estuary is a small and narrow embanked estuary, roughly in the middle of the conurbation from Brighton to Littlehampton that stretches along the south coast of England. The estuary is sheltered, flowing into a natural harbour at its mouth, and is bordered by human developments on the south slopes of the South Downs, including the town of Shoreham-by-Sea along the south and west banks, and Shoreham Airport to the east. The estuary is designated as an SSSI, and includes some small areas of saltmarsh, and intertidal mudflats are exposed at low tide. The area is intensively farmed and agricultural land drainage has removed much of the tidal plain and created extensive lowland wet grasslands.

The main leisure activities of the estuary are water-based, with sailing, power boating and in particular jet-skiing; some shooting occurs in the upper estuary. A commercial mussel fishery is in the mouth of the estuary, and includes some small areas of saltmarsh, and intertidal mudflats are exposed at low tide. The area is intensively farmed and agricultural land drainage has removed much of the tidal plain and created extensive lowland wet grasslands. A number of manufacturing industries and boat-building yards are also based in Shoreham.

**Bird distribution**

Few grebes were seen on the Adur in the winter of 2003/04, with only single Little and Great Crested Grebes recorded. Cormorants were similarly scarce, but Little Egrets were counted in small (<3) numbers in each of the count months. Grey Heron, Mute Swan and Shelduck were all recorded in single figures over the winter.

Teal were confined to the area downstream from the Norfolk Bridge, and it is on this section of river that the majority of saltmarsh is found. This area is therefore likely to provide the most suitable habitat for Teal to dabble in the muddy shallows for seeds and other plant material. The peak count of Teal was 41 in January, with a winter average of 23 birds. Other ducks recorded occasionally were Wigeon and Mallard, whilst one Red-breasted Merganser was also seen in February.

The Adur does not support notably high densities of any waterbird species, although the intertidal flats are used at low water by the nationally more abundant waders. No more than four Oystercatchers were seen. Most Ringed Plovers were recorded between the A27 bridge and the railway bridge on the middle reaches of the estuary (Figure 56). Numbers reached 56 in January but dropped to just six the following month. It is possible that weather may have affected counts of this species, as the estuary is sheltered and could harbour more birds during cold spells. There are exposed mudflats for foraging birds in the middle of the Adur, although densities of Ringed Plover were lower on the sector furthest down river, where intertidal habitat also exists. In contrast, Lapwing were recorded in higher densities on this sector, and were also found further upriver. A notable feature of Lapwing distribution on the Adur is that many were recorded in the fields to the west of the river, which comprise Shoreham Airport (Figure 56). These birds were roosting at this location, utilising the expanse of flat grassland in preference to the estuary itself. The peak count on this sector reached 202 in January. Dunlin were spread more evenly throughout the upper and lower parts of the estuary. Numbers of Dunlin varied throughout the winter, with over 100 counted in the first two months, dropping to 52 in January and recovering to 83 in February. Like Ringed Plover and Lapwing, Dunlin were not observed on the middle section between the railway bridge and the Norfolk Bridge. A few Redshank were counted on this sector, however, and the species was thinly spread across the intertidal areas of the river. Counts were no greater than the 53 recorded in January. Turnstone was the only species recorded in noteworthy densities on the middle sector of the river, peaking at 52 birds in January, and was more densely distributed here than elsewhere on the river. The habitat between the railway bridge and the Norfolk Bridge tends to be sand or shingle, and is thus more suitable for Turnstone than for the other species of wader that favour muddier substrates. Other occasional records were made of Knot, Ruff and Snipe.
Figure 56. WeBS Low Tide Count distributions of Ringed Plover and Lapwing at the Adur Estuary, winter 2003/04.