

SHOREBIRDS

Recent surveys of the intertidal areas of the Shoalwater Bay Military Training Area (SWBTA) indicate that Port Clinton is a highly significant feeding and roosting area for migratory shorebirds overwintering from their high latitude feeding grounds in the northern hemisphere.

A survey conducted in December 1995, timed to coincide with the summer peak for populations of migratory species overwintering in the area, recorded 6985 shorebirds in Port Clinton. These were made up of 16 species of migratory waders and four species of resident waders (Table 1). Bar-tailed godwits, whimbrels and eastern curlews were the most numerous with over a thousand individuals recorded for each species.

Although this survey records only one beach stone-curlew, Port Clinton is known to support at least four breeding pairs. The Shoalwater Bay region is known to support up to 100 individuals making it a key site for the species which has been listed as 'vulnerable' in *The Action Plan for Australian Birds* (Garnett 1992)

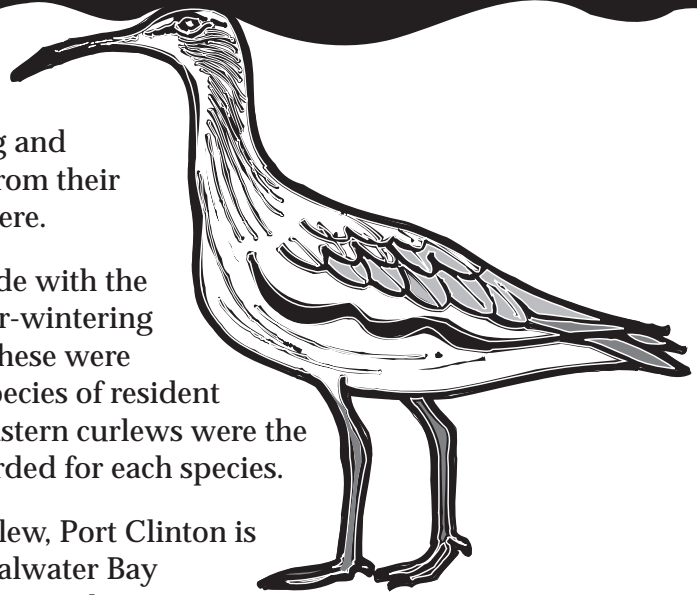
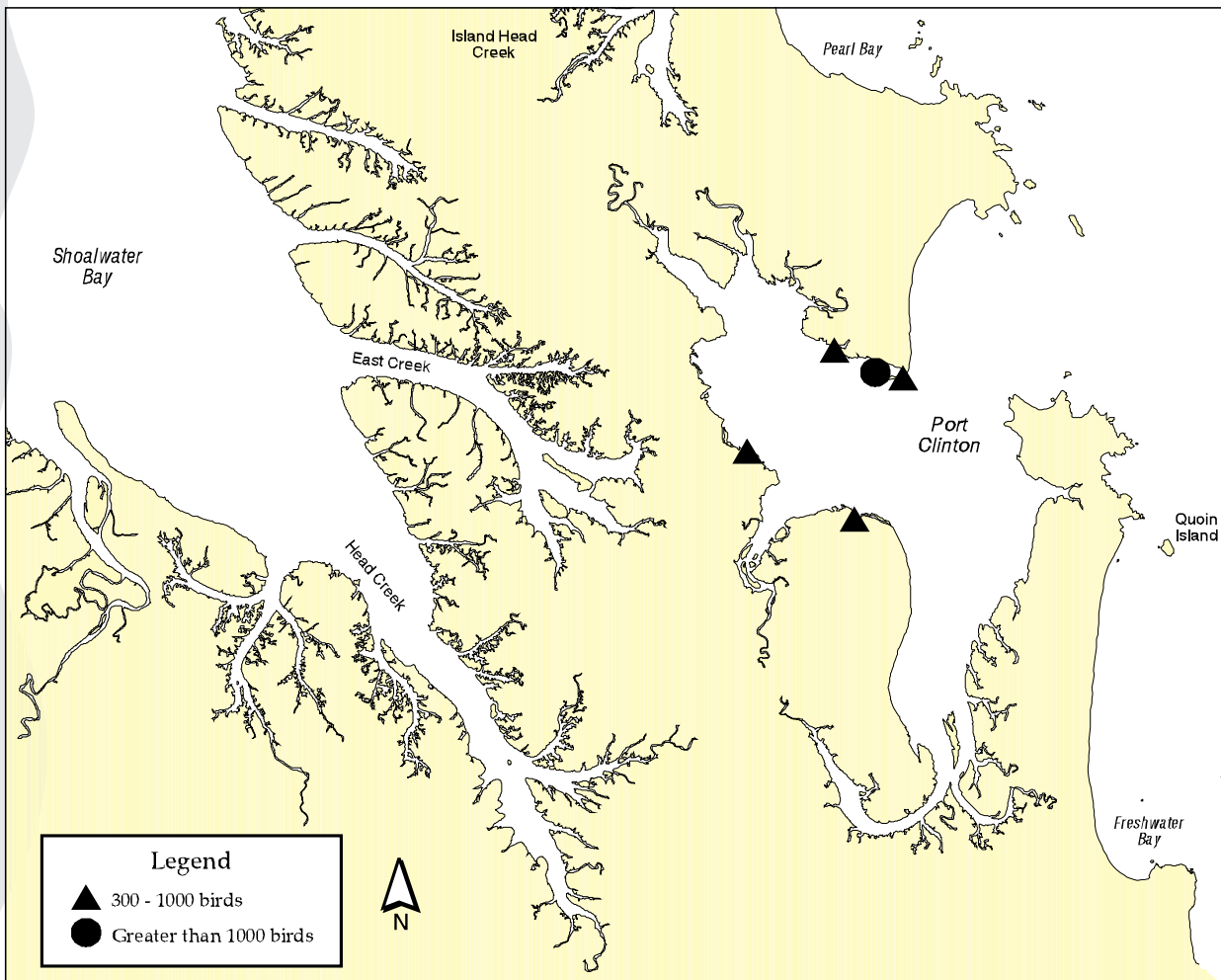


Table 1. High tide counts of shorebirds in Port Clinton in December 1995 (from P. Driscoll 1995)

species	common name	numbers
<i>Limosa lapponica</i>	bar-tailed godwit	2370
<i>Numenius phaeopus</i>	whimbrel	1474
<i>Numenius madagascariensis</i>	eastern curlew	1031
<i>Tringa stagnatilis</i>	marsh sandpiper	3
<i>Tringa nebularia</i>	common greenshank	150
<i>Actitis hypoleucos</i>	common sandpiper	3
<i>Xenus cinereus</i>	Terek sandpiper	391
<i>Heteroscelus brevipes</i>	grey-tailed tattler	641
<i>Arenaria interpres</i>	ruddy turnstone	1
<i>Calidris tenuirostris</i>	great knot	340
<i>Calidris canutus</i>	red knot	1
<i>Calidris ruficollis</i>	red-necked stint	208
<i>Calidris acuminata</i>	sharp-tailed sandpiper	3
<i>Calidris ferruginea</i>	curlew sandpiper	1
<i>Esacus neglectus*</i>	beach stone-curlew	1
<i>Haematopus longirostris*</i>	pie oystercatcher	126
<i>Haematopus fuliginosus*</i>	sooty oystercatcher	1
<i>Pluvialis squatarola</i>	grey plover	36
<i>Charadrius ruficapillus*</i>	red-capped plover	7
<i>Charadrius mongolus</i>	lesser sand plover	1
<i>*resident species</i>		

Half of the intertidal area in Port Clinton is covered by mangroves where species such as the whimbrel, grey-tailed tattler and Terek sandpiper roost individually or in dispersed groups during high tide. Saline coastal flats on the landward side of the mangroves and sand or rubble beaches are essential roosting habitat for other shorebirds such as the eastern curlew and pie oystercatcher. Large aggregations of shorebirds at these beach roost sites are particularly susceptible to disturbance.



Location of major high-tide roosts in Port Clinton

One high-tide roost supporting 2612 birds and four high-tide roosts each with between 300 and 1000 shorebirds were located in Port Clinton during the survey (see map). All of these species are dependant on Port Clinton's extensive intertidal flats and shores for food where they forage for small crabs, ghost shrimps, worms and molluscs during low tide periods. The birds disperse for feeding as the tide drops, and congregate again at their roosts as the tide rises. Observations suggest that roost sites are used consistently during the summer months. Significant numbers of birds are also known to stay in Port Clinton during winter instead of returning to the northern hemisphere for the summer breeding season. These are mostly young birds that have not yet begun to breed.

Twenty-five bird species protected by the Japan-Australia Migratory Bird Agreement (JAMBA) and listed under the China-Australia Migratory Bird Agreement (CAMBA) are known to visit Port Clinton. In addition, the whole of the SWBTA together with Corio Bay is listed as a wetland of international importance under the Ramsar Convention. Under these agreements and the Ramsar Convention, Australia is obliged to take steps to protect the habitat required by these species for feeding and roosting.

Other species

Fifteen other bird species were recorded in Port Clinton during December 1995 (Table 2).

Table 2. High tide counts of birds other than shorebirds in Port Clinton during 1995 (from P. Driscoll 1995)

species	common name	numbers
<i>Cygnus atratus</i>	black swan	10
<i>Phalacrocorax melanoleucos</i>	little pied cormorant	3
<i>Phalacrocorax varius</i>	pied cormorant	46
<i>Pelecanus conspicillatus</i>	Australian pelican	110
<i>Egretta garzetta</i>	little egret	26
<i>Ardea alba</i>	great egret	15
<i>Threskiornis molucca</i>	Australian white ibis	20
<i>Platalea regia</i>	royal spoonbill	86
<i>Ephippiorhynchus asiaticus</i>	black-necked stork	3
<i>Pandion haliaetus</i>	osprey	1
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	1
<i>Larus novaehollandiae</i>	silver gull	63
<i>Sterna nilotica</i>	gull-billed tern	7
<i>Sterna caspia</i>	caspian tern	49
<i>Sterna bergii</i>	crested tern	72

The breeding territories of osprey, a species which is rare and probably declining along Australia's east coast, encompass the Freshwater Bay peninsula. Australian pelicans breed on Akens Island in nearby Shoalwater Bay and appear to use Port Clinton for feeding.

Two other species which were not recorded in this survey but are known residents of Port Clinton are also of high conservation status. They are

- the Radjah shelduck *Tadorna radjah* which has small breeding populations on coastal billabongs and mudflats in Port Clinton and is near the south-east limits of its range on Australia's east coast in the SWBTA, and
- the collared kingfisher *Todiramphus chloris colcoughi* which establishes colonies at the mouths of extensive mangrove-lined estuaries. Such specific habitat requirements are extremely limited and consequently this species has a patchy distribution and is relatively uncommon on the east coast of Australia. Local populations belong to a geographically limited subspecies which ranges from the Burdekin River and Bowling Green Bay to the Tweed River.

Sources

This report is based on the results of the *Survey of shorebird feeding areas and roosts in the Shoalwater Bay area* coordinated by P. O'Neill (Queensland Department of Environment Rockhampton) and P. Driscoll (Queensland Wader Study Group) in December 1995 and the draft report 'Port Clinton/Byfield Marine Park : background to declaration and zoning' prepared by Queensland Department of Environment planning staff in 1996.

This report has been prepared as background material for preparation of a draft zoning plan for the Gumoo Woojabuddee Section of the Great Barrier Marine Park and adjacent areas including the waters of Port Clinton and the intertidal areas of Freshwater Bay and the Byfield coast. There are no management proposals contained in this report. If you have any questions about the process contact:



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