AUSTRALIAN PIED OYSTERCATCHERS *HAEMATOPUS LONGIROSTRIS* IN THE HUNTER REGION OF NEW SOUTH WALES, AUSTRALIA

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In 2008-2009, counts of Australian Pied Oystercatcher *Haematopus longirostris* at roost sites along the coast of the Hunter Region of New South Wales, Australia, indicated that at least 200 birds were regularly present. These counts are significant in the light of previous estimates of just 232-250 birds for the entire NSW coastal population. Port Stephens has been identified as a very important site for this species, with frequent counts of 100-150+ birds during the surveys. There are relatively few breeding records in the Hunter Region, and it is possible that most of the birds at Port Stephens come from breeding territories elsewhere.

INTRODUCTION AND METHODS

The Australian Pied Oystercatcher is widely distributed in Australia and the total population is estimated at 11,000 birds, including small populations in Southern New Guinea and Aru Island (Delany & Scott 2006). However, in New South Wales the species is relatively uncommon and it is classified as Endangered under the NSW *Threatened Species Conservation Act 1995*. Watkins (1993) estimated the NSW population to be 250 birds. A later estimate was 232 birds comprising 119 birds in the Tweed River-Clarence River area and another 113 birds were thought to be present to the south (Owner & Rohweder 2003). Recent observations of around 200 birds in the Hunter Region of NSW are therefore surprising and significant.

For many years I have collected and collated bird records for the Hunter Region (as defined in the 1989 NSW Regional Environmental Plan), using many data sources including my own and those of Hunter Bird Observers Club. The coastal fringe of the Hunter Region extends from Diamond Head (approx 31° 44'S 152° 48'E) to about 20km south of Swansea (approx 33° 10'S 151° 39'E) (see Figure 1); this represents an estimated shoreline of about 250km. The main locations at which Australian Pied Oystercatchers were recorded were roost sites at Swansea (around the mouth of Lake Macquarie), Newcastle (at Hunter Estuary locations, and Newcastle ocean baths), Newcastle Bight, Port Stephens, Forster/Tuncurry (at the mouth of Wallis Lake), Manning River Estuary (at Harrington and Mudbishops Point/Farquhar Inlet). Pairs and small parties were also recorded at other coastal and estuarine locations.

Those main roost site locations have been the subject of regular surveys, usually monthly and carried out at high tide, except at Forster/Tuncurry at the entrance to Wallis Lake where the surveys (which commenced in July 2009) have been made in the mid-tide period due to resource constraints. Some of the locations are able to be surveyed using land-based visits to the main roost sites. The methods for the surveys at Hunter Estuary (Newcastle), Port Stephens and Newcastle Bight are more intricate due to the greater size of those locations, and are summarised thus:

- The high tide roost sites around the Hunter Estuary have been surveyed monthly since early 1999. Four teams of observers simultaneously visit the known roost sites in the Estuary, recording all shorebirds and any other waterbirds present.
- Parts of Port Stephens were surveyed regularly in the mid 1980's for the AWSG counts but then the area largely was ignored by shorebird surveyors. Summer counts re-commenced in 2004 and winter counts in 2008; they are boat-based surveys (using 5-6 boats simultaneously) of all the high tide roosts in the Port (see Stuart 2005 for details).
- The 34 km coastline of Newcastle Bight is a popular 4WD leisure destination and as such, for a long time was largely ignored by bird watchers. Recently, most of the area was gazetted for conservation (as the Worimi Conservation Lands) and surveys were commenced in July 2009 with the co-involvement of National Park rangers; the surveys are made from a vehicle driven along the beach and also accessing potential roost sites behind the dunes.

RESULTS AND DISCUSSION

Table 1 summarises the summer and winter counts of Australian Pied Oystercatcher in the Hunter Region during 2008 and 2009 (prior to 2008, not all of the main roosting sites were surveyed regularly). From these data it is estimated that at least 200 birds were present in the Hunter Region in 2008 and 2009. It should be noted that all the winter 2009 counts were made within a two week period – although this does not rule out that movements between locations had occurred, it makes it less likely.

Where pre-2008 data are available for the main locations listed in Table 1, they strongly indicate that high numbers of Australian Pied Oystercatchers have been present in the Hunter Region for a considerable time. The pre 2008 data for the individual locations are discussed below.

Until 2008, the Swansea area was not regularly surveyed, but there were frequent reports of some birds present there (main locations: Coon Island, Black Neds Bay, Marks Point). Since January 2008, there have been several counts of 6-10 birds, and 14 birds were recorded there in January 2009.

Although Australian Pied Oystercatchers are not always recorded in the Hunter Estuary, over 2002-2009 they were present in 93 of 96 surveys. In that time, the average summer (February-March) count has been 12 birds and average winter count (July-August) has been six birds (with summer and winter peak counts of 29 birds in March 2003 and 18 birds in July 2009, respectively).

100+ birds have been present in seven of the nine surveys of Port Stephens to date (Stuart 2007; Stuart unpublished). A much smaller count in March 2005 (30 birds) may have been a consequence of some weather/operational problems on that survey (Stuart 2007).

Several pairs and small parties of Australian Pied Oystercatchers were regularly present along Newcastle Bight. The count of 13 birds in July 2009 is preceded by opportunistic records of 13 birds December 1998 and July 2001, 22 birds in July 2002 and 11 birds in December 2001.

Since the regular surveys commenced at Forster/Tuncurry, 13-18 birds have been present most months. These counts were preceded by opportunistic records of 20 birds present June 2002 and 15-20 birds in January 2005 and April 2006, while 47 birds were reported present in March 2003.

The two main high tide roost sites in the Manning Estuary (at Harrington, and at Mudbishops Point near Old Bar) have been surveyed monthly since January 2008, with >10 Australian Pied Oystercatchers recorded in 75% of the surveys and 15+ birds in 33% of them. Prior to 2008, there are several opportunistic records including 22 birds in November 2002, 29 birds in March 2003 and 26 birds in January 2005.

Australian Pied Oystercatchers have been recorded at several other locations in the Hunter Region in recent years – for example, shorelines at Broughton Island, Dora Creek, Saltwater NP, Booti Booti NP, Diamond Head, Crowdy Bay NP, and in particular along the coastline between Seal Rocks and Hawks Nest (most of this area is in Myall Lakes NP). The latter coastline was known to have at least three resident pairs in the late 1990's and there is a record of 22 birds present there in January 2000 and some other records of >10 birds. Unfortunately, there have been no systematic surveys done for the area.

Assuming that 10+ birds continue to be present at the Myall Lakes NP coastline, there would have been up to 20 birds at Hunter Region locations other than those named in Table 1 at the times of the summer and winter counts. Coupled with peak summer/winter counts of 5-10 birds at Swansea, 6-12 at Newcastle, 10-15 at Newcastle Bight, 120-150 at Port Stephens, 15-20 at Forster/Tuncurry and 15-20 at Manning Estuary, there were at least 200 birds, and perhaps as many as 240 birds, present each year in the Hunter Region of NSW.

Breeding records for a population of at least 200 birds in the Region were relatively sparse. There were occasional records of pairs with young at two Hunter estuary locations (Stockton Sandspit and Kooragang Dykes); two pairs attempted to breed along Newcastle Bight in 2009; four pairs are known to have bred in the Manning Estuary in late 2009; and there are pre-2008 breeding records from Myall Lakes NP and the Forster/Tuncurry area. There was at least some influx of immature birds from other places:

- A bird I recorded in the Manning Estuary in September 2008 had been banded as a pullus at Bundjalung NP near Ballina in northern NSW in November 2007 (G. Clancy *pers. comm.*)
- Two birds banded in the Ballina area (at Beswicks Beach in October 2006 and Bundjalung NP in October 2008) were at Lemon Tree Passage in Port Stephens in May 2009 (M. Kearns *pers. comm.*)
- Two other Ballina birds (banded at Bundjalung NP in October 2006 and Broadwater NP in November 2008) were present on Newcastle Bight in July 2009 and subsequently were

frequently recorded in the Hunter Estuary (roosting on the Kooragang Dykes) over September-December 2009 (M. Newman *pers. comm.*, C. Herbert *pers. comm.*).

Not all such movements are in the southerly direction; there is an older record where a bird banded at Corner Inlet Victoria in August 1994 was at the Forster/Tuncurry site (at Wallis Lake) in October 1995 (Morris and Burton 1997).

Despite the high counts in summer and winter at Port Stephens, there are no known breeding records from within Port Stephens. That area seems to have suitable (and undisturbed) habitat for only a small number of breeding pairs. It is possible that a proportion of the birds may disperse and nest outside of Port Stephens; similar behaviour has been noted elsewhere (Newman 1982). On the other hand there seems to be evidence that birds move between roosting sites from time to time. For example, the counts of 47 birds at Forster/Tuncurry on March 2003 and 40 birds in February 2008 are considerably above the normal situation there, similarly the counts of 29 birds in the Manning Estuary in March 2003 and 26 birds in January 2005. It is interesting that both Forster/Tuncurry and Manning Estuary had peak counts at about the same time, in March 2003; unfortunately, there was no count made at Port Stephens at that time.

CONCLUSIONS

At least 200 Australian Pied Oystercatchers appear to be present in the Hunter Region each year, based on systematic surveys at most of the key locations and numerous opportunistic observations. This is an important finding in view of the previous estimates of 232-250 birds in all of New South Wales; those now appear to have been under-estimates.

Counts of Australian Pied Oystercatcher from Port Stephens represent up to 1.5% of this species total world population and thus Port Stephens is an internationally significant location for this species. There are no known breeding records for Port Stephens, and there appears to be few suitable and undisturbed habitats where breeding might occur. Indeed there is scant evidence of successful breeding anywhere in the Hunter Region. Newly fledged birds are easily identified and they are seldom seen during the extensive survey work conducted in the Region. Possibly, the birds at Port Stephens breed elsewhere and move to Port Stephens after the breeding season.

There seems to be scope for a detailed study of how the Australian Pied Oystercatcher utilises the Hunter Region. Such a study might focus, for example, on identifying the breeding territories for the Hunter Region population and on determining the extent and timing of movements within the Region and into/out of it. The results of the study could help to develop improved conservation strategies for this species in New South Wales, where the Scientific Committee has recently reclassified it as Endangered.

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Location	Summer ¹ 2008	Winter ² 2008	Summer ¹ 2009	Winter ² 2009
Swansea	5	6	10	5
Newcastle	7	3	17	18
Port Stephens	107	154	134	122
Newcastle Bight	п.с.	<i>n.c.</i>	<i>n.c.</i>	13
Forster/Tuncurry	40	<i>n.c.</i>	<i>n.c.</i>	15
Manning Estuary	22	13	19	16
Other sites (estimated)	10-20	10-20	10-20	10-20
Total (estimated)	200-220	200-220	210-240	200-220

 Table 1.
 Summer and winter peak counts of Australian Pied Oystercatcher at Hunter Region locations, during 2008-2009

¹Feb-Mar period ²June-July period n.c. no count

Figure 1. Coastline of the Hunter Region of New South Wales. The insert shows the location within New South Wales

