

Raptors of estuarine Port Stephens

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In 2004, members of the Hunter Bird Observers Club (HBOC) began carrying out boat-based summer surveys of the waterbirds in Port Stephens. Analogous winter surveys started in 2008. The general survey procedure has remained constant (Stuart 2011). The numbers of shorebirds, waterbirds and birds of prey are recorded. Because the surveys are done by boat, most of the latter are estuarine-foraging raptors. Records of woodland birds of prey are a chance event.

The four main raptors recorded in the Port Stephens surveys are White-bellied Sea-Eagle *Haliaeetus leucogaster*, Whistling Kite *Haliastur sphenurus*, Osprey *Pandion haliaetus* and Brahminy Kite *Haliastur indus*. Sea-Eagles and Whistling Kites are the dominant species. Usually, several Ospreys are encountered, and less frequently Brahminy Kites.

The survey method was not designed with raptors in mind. It is unlikely to yield highly accurate numbers for them. They patrol sizable territories and it cannot be excluded that the same bird is sometimes encountered by more than one survey team. However, the survey teams follow set routes each time and therefore should tend to intersect with the same territories in each survey. A relationship would be expected to exist between the counts of raptor numbers during the surveys and the actual numbers of birds present in Port Stephens.

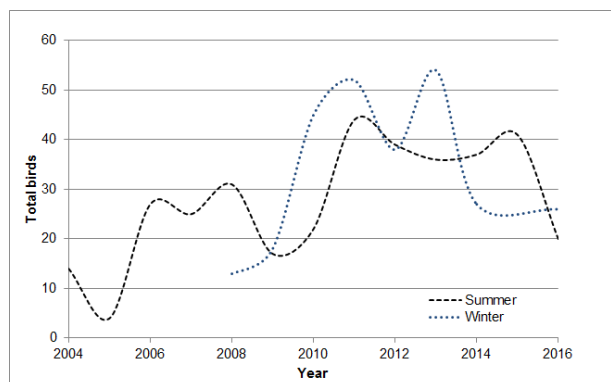


Figure 1. Total counts of estuarine foraging raptors in Port Stephens.

Figure 1 shows the numbers of raptors from summer and winter surveys (there was no winter 2015 survey). The general trend initially was that numbers were increasing. Since 2014, there appears to have been a decline. This has primarily been associated with a decrease in the numbers of Whistling Kites being recorded.

Table 1. Numbers recorded for individual estuarine foraging raptors in Port Stephens.

Year	Season	White-bellied Sea-Eagle	Whistling Kite	Osprey	Brahminy Kite
2004	S	6	6	2	0
2005	S	1	3	0	0
2006	S	15	9	3	0
2007	S	14	9	2	0
2008	S	16	13	2	0
	W	3	4	5	1
2009	S	10	6	1	0
	W	7	10	1	0
2010	S	13	5	4	0
	W	20	18	7	0
2011	S	27	6	10	1
	W	18	16	15	3
2012	S	20	9	10	0
	W	15	15	8	0
2013	S	16	12	8	0
	W	28	16	0	1
2014	S	22	6	7	2
	W	16	5	4	2
2015	S	28	3	9	1
	W	-	-	-	-
2016	S	12	0	7	1
	W	13	6	6	1

Table 1 details the counts for each species. A review of the data has led to the following conclusions about changes that have occurred during the period 2004-2016:

Brahminy Kite: Birds were not resident in Port Stephens initially, but possibly now are. They are known to breed in the north of the Hunter Region and their range has been expanding southwards (Stuart 2016).

Osprey: Recorded in low numbers initially. Since 2010, the population seems to have stabilised and it is now at least 8-10 birds.

White-bellied Sea-Eagle: Numbers fluctuated initially, then increased notably. The relatively low 2016 count is discussed below.

Whistling Kite: The Port Stephens population appeared to increase in 2010-13. However, since then there seems to have been a notable decline.

The count for White-bellied Sea-Eagles was low in the summer 2016 survey and no Whistling Kites were recorded (**Table 1**). In the weeks prior to the survey there had been a prolonged period of heavy rain. Although many mullet were observed to be present in summer 2016, water turbidity levels had deteriorated (T. Kendall pers. obs.). As both species hunt by sight (Marchant & Higgins 1993), possibly they had relocated their hunting efforts to wetland areas or the coastline. It is noted that the numbers of cormorants and pelicans in Port Stephens in the 2016 survey also were relatively low (being 60% of the 13-year average total count

for those species). The winter 2016 count for White-bellied Sea-Eagles was closer to normal, lending support for the notion that many birds were foraging away from Port Stephens in February 2016.

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