

Appendix B

Field Studies and Data Management: 2011 Summary Report

For convenience, the 2011 HBOC Field Studies program and the status of Data Management by HBOC in 2011 are discussed separately in this report. In practice, the two are intimately connected: no field studies program has any significant value unless the data from it are appropriately managed (including storage, analysis, and dissemination of results).

FIELD STUDIES

A feature of HBOC's Field Studies program is the high degree of collaboration with other conservation minded organisations – such as the Kooragang Wetlands Rehabilitation Project, The Wetlands Centre, DECCW offices in Newcastle, Nelson Bay, and Gloucester, Crown Lands Department and Birds Australia. Individual Club members often receive similar strong support from relevant organisations when conducting their regular surveys.

i) Important Bird Areas

HBOC is responsible for the monitoring programs for six Important Bird Areas (IBA's) in the Hunter Region: Hunter Estuary IBA, Lake Macquarie IBA, Lower Hunter Valley IBA, Barrington Tops and Gloucester Tops IBA, Mudgee-Wollar IBA (that part of it lying within the Hunter Region), and Greater Blue Mountains IBA (that part of it lying within the Hunter Region). The 7th IBA in our Region – Cabbage Tree Island and Boondelbah Island IBA – is monitored by DECCW as part of their Gould's Petrel Recovery Project.

IBA monitoring was a significant component of HBOC's Field Studies program in 2011, and will continue to be so in future years. However, resource constraints mean that the monitoring efforts have to be prioritised; it is a fact of life that there is only a small core group within the Club that are willing or able to dedicate any time to conducting surveys.

Hunter Estuary IBA

Highlights from this IBA in 2011 were:

- 4,497 Chestnut Teal (~4.5% of the world population) in the lower Hunter 9 Apr, at 3 main locations (all of which lie within the IBA)
- 1,600 Sharp-tailed Sandpiper (1.0% of the Flyway population) at Ash Island 12 November
- Six individual Australasian Bitterns found on (*date to be checked*)
- Up to seven Australian Painted Snipe on Ash Island for ~ 1 week in December (this is not an IBA nomination species but it is an important record nevertheless).

The regular monthly surveys of the shorebirds and other waterbirds in the Estuary continued. The simultaneous visits to Tomago Wetlands discontinued (however, monthly mid week visits to Tomago Wetlands continued all year). Tomago Wetlands is not part of the IBA but shorebird numbers are slowly increasing there as tidal inundations occur more frequently (and may justify a future extension to the IBA boundary).

Some individual Club members conduct frequent surveys of the Hexham Swamp NR section of the IBA and therefore there currently are no plans to undertake monitoring for shorebirds

and general waterbirds there as a formal HBOC activity (however, see the comments about Australasian Bittern further below).

The final part of the Hunter Estuary IBA is The Wetlands Centre at Shortland. Some individual Club members conduct regular surveys and therefore there currently are no plans to undertake monitoring for shorebirds and general waterbirds as a formal HBOC activity. However, in August (*check date*) and December 2011, HBOC assisted The Wetlands Centre to carry out nest counts for Australian White Ibis and the four egret species. Although none of those species were triggers for the IBA nomination, the nest count data are considered to provide valuable insights about the health of the IBA; also, the annual counts have been carried out for more than a decade, and thus are forming an increasingly valuable database.

The Australasian Bittern (another target species for the IBA monitoring program) is unlikely to be detected by the survey methodologies normally used at these various wetlands. Consequently, specific dusk/evening surveys were undertaken in November (*check date*) 2011 – these yielded six individual birds. Unfortunately, the planned use of a recording device (“Song Meter”) left overnight at areas of apparently suitable habitat for Australasian Bittern did not eventuate because of resource/logistics reasons. We hope to do better in 2012. The Song Meter is discussed in more detail later in this report.

Pambalong NR is another part of the IBA, with Latham’s Snipe being the trigger species for the nomination. A methodology for surveying there for Latham’s Snipe is well established; however, there was no survey conducted in 2011 because the water levels at Pambalong NR are very high and there is little suitable habitat available for Latham’s Snipe currently. Instead, HBOC members surveyed for Latham’s Snipe at several other wetlands areas within the IBA as well as outside of it (very few birds were found).

Barrington Tops and Gloucester Tops IBA

The trigger species for the IBA nomination was the Rufous Scrub-bird (with another 5 supporting species). Prior to 2010, HBOC possessed almost no information about Rufous Scrub-bird distribution within the IBA and had no insights into how a systematic monitoring program for the species could be undertaken. Filling those gaps was a major success of the HBOC Field Studies program in 2010, and HBOC became the lead organisation for a monitoring program that was also used in the four other IBA’s for Rufous Scrub-bird in NSW and Queensland.

In 2011, our focus was to confirm the Rufous Scrub-bird territories identified in 2010 and to extend the survey effort beyond the core high altitude habitat. Two intensive Rufous Scrub-bird surveys were conducted; these were based around 3-day visits to Gloucester Tops habitat during September and October 2011. Some enthusiastic surveyors also made follow-up day visits. 26 territories were confirmed based on calling birds being present at the same location in 2010 and 2011. We also added considerably to the knowledge of the bird populations at high altitudes in the Hunter Region (in addition to the Rufous Scrub-bird, other specialist species with restricted range include the Olive Whistler, Red-browed Treecreeper and Crescent Honeyeater).

After discussions with HBOC member Louise Williams in 2011, she will undertake a Gloucester Tops / Rufous Scrub-bird habitat related Honours project in 2012 for her Environmental Biodiversity degree. The details of this project will be finalised in the coming months.

Greater Blue Mountains IBA

Within the Hunter Region, this IBA comprises Yengo NP and Wollemi NP. The trigger species for the IBA nomination was the Rockwarbler (with another 6 supporting species). Prior to 2010, HBOC had very little involvement with this IBA. The initial challenge is to identify where Rockwarblers occur, and then to develop an appropriate monitoring protocol that allows any changes in their abundance or distribution to be flagged. A small team of HBOC members visited southern parts of Yengo NP in late 2010; this visit did not yield many Rockwarbler territories. A community awareness campaign was launched in January 2011 and this has led to information about several other known locations. So far we have had little opportunity for follow up. It is an aspiration for the Field Studies program to achieve a more systematic approach to the monitoring program for this IBA including its data capture/data management aspects.

Lake Macquarie IBA, Lower Hunter Valley IBA and Mudgee-Wollar IBA

The trigger species for all 3 of these IBAs are Regent Honeyeater and Swift Parrot. The areas with suitable habitat for these species are visited by birdwatchers as part of the Birds Australia Regent Honeyeater and Swift Parrot surveys in May and August each year. The data are reported to Birds Australia. Therefore there currently are no plans to undertake any additional monitoring in this IBA as a formal HBOC activity. However, it is an aspiration for the Field Studies program to achieve a more systematic approach to the monitoring program for this IBA including its data capture/data management aspects.

ii) Other Field Studies

Many individual Club members conduct regular surveys at locations around the Region – for example, Morpeth Wastewater Treatment Works, Manning Estuary, Forster/Tuncurry, Curricabundi NP, Ash Island rehabilitation areas, Newcastle Bight, Port Stephens, Birubi/Fingal coastline, Newcastle Baths, Green Wattle Creek, Black Rock, and farm properties at Butterwick, Duns Creek and the upper Allyn Valley. HBOC continues to encourage that this happens and that the data from those surveys are recorded and analysed. Also, HBOC encourages its members to take part in nationally organised surveys – such as for Regent Honeyeater / Swift Parrot, Painted Snipe – that are organised by groups such as Birds Australia.

In 2011, HBOC organised three waterbirds surveys of Port Stephens – the usual February summer survey and July winter survey, and a special one-off survey for Australian Pied Oystercatcher in December. The boat based surveys, done in conjunction with the local DECCW office at Nelson Bay, have been conducted for many years now and thus are forming an increasingly valuable database about Port Stephens waterbirds. Land based surveys of the main shorebird roost sites every second month by an individual Club member continued in 2011; these complementary surveys are very valuable and they further add to the richness of the database.

Surveys were made every two months by HBOC members at the property *Greswick Angus*, near East Seaham. These surveys have been underway now for about 6 years, and they have built and continue to build an extremely valuable database.

Twelve sets of surveys were conducted during spring and early summer to monitor the recovery of bird populations in four patches of rehabilitated habitat at Green Wattle Creek in collaboration with the NSW Department of Crown Land Management and a

preliminary report has been submitted. Burning caused substantial changes in the bird populations benefitting ground foraging species like the Speckled Warbler and Painted Button-quail.

A function of the HBOC's Field Studies activities should be to encourage members to undertake individual projects and where appropriate to provide assistance with design, conduct and analysis of results. Although demand will be limited the availability of this assistance needs to be promoted.

iii) Song Meter

HBOC purchased a Song Meter in late 2010 and then the complementary software ("Song Scope") and a dedicated laptop computer in January 2011. It has proven more difficult than we expected to use the software for our intended purpose i.e. identifying cryptic target species. However, in the final 3-4 months of 2011 Peter Struik has taken the reins on this and there is now encouraging progress towards our objectives.

DATA MANAGEMENT

HBOC has a variety of ways by which data from field studies and from opportunistic sightings by local birdwatchers are managed. 2011 saw further entrenchment of the initiatives started in 2010 and which have substantially enhanced HBOC's data capture and management capability and the analysis and reporting of data.

i) Data Collecting

An arrangement is in place with Birds Australia to receive all the data for the Hunter Region from the BA Atlas database. In June 2011, HBOC received the 2010 data from the BA Atlas and also an updated data set for the period 1998-2009.

The availability now of BA Atlas data for the Hunter Region appears to have helped reinvigorate the local interest in supplying records for the BA Atlas, although the effort still is due mainly to a small core of people. A total of 1,356 survey forms were submitted to BA for 2010, compared with 1,198 for 2009 and an average of <800 surveys for each of the preceding 7 years.

The availability of the Atlas data is considerably enhancing our local knowledge of the distribution and relative abundance of species in the Hunter Region, and will allow us in future to have a much better handle about how these may be changing. This applies particularly for the more common species, for which our local capability to collate and analyse data has been very limited and therefore we have not been able to track any distribution or abundance changes for such species at regional scale.

In 2011, there continued to be growth in participation (# of subscribers, # of messages posted) in HBOC's on-line forum hunterbirding. This forum was set up by HBOC in late 2009 and has been adopted with great enthusiasm by local birdwatchers. The main reason for that has been the interest by subscribers to receive and share information about uncommon birds that they can have the opportunity to see. However, a very important additional outcome is that far more records about opportunistic sightings are reported now. This enhanced information flow about uncommon species nicely complements the information about more common species flowing from the BA Atlas database (the Atlas database also

includes records for uncommon species, although the full details for them are more difficult to obtain).

A downside is that many people are not well aware of what records are important, and their hunterbirding postings potentially omit important records of species which are out of range or which are present in unusual numbers or season. Very few individuals now submit HBOC record sheets for their sightings from site visits and so those important records are not being captured from record sheet scrutiny either. In some cases people have started submitting BA Atlas record sheets instead and these are able to be scrutinised for the interesting records (as well as the mistaken ones). However, where people are using electronic reporting through "Birdata" we have no immediate knowledge of what data are being submitted and by whom. We receive one annual summary about six months after the end of the year, and it does not indicate the numbers present or the date of the record. We will need to work out what can be done about this gap in reporting that has developed.

Another challenge for 2012 is to improve the integrity of the BA database, which is known to contain a number of errors. The increasing trend to the electronic submission of data to the Atlas through the BA "Birdata" interface eliminates errors associated with data entry from hard copy "pink sheets" at BA's National Office. However, it removes immediate scrutiny of records by the Atlas Regional organiser, Ann Lindsey. Local vetting by Ann is an important function, particularly when inexperienced observers are involved. A further problem is that submission through "Birdata" does not generate custom reports which can be used for regional analysis. Hence, for many of our projects double entry of data is necessary (i.e. into Birdata for national use and into HBOC member's databases for regional use).

ii) Data Analysis and Reporting

The main vehicle for data analysis and reporting is the Hunter Region Bird Report. The 2010 Bird Report (#18 in the series) was published in late 2011, with data for 437 species. Once again, the BA Atlas data were included into the Report with also a summary of the full 13 years of prior data (for all locally common species).

HBOC's journal *The Whistler* is another important vehicle for data analysis and reporting. Volume 4, published in early 2011, contained a number of papers where the authors analysed data from regular surveys which they carry out and also had a paper with distribution maps for threatened species in the Region, using BA Atlas data for generating the maps. Volume 5 also included papers where the authors analysed data from regular surveys.

A new HBOC Special Report, summarising the 2010 Rufous Scrub-bird surveys (HBOC Special Report #6), was published in 2011; copies of it were provided to all the key stakeholders (such as NPWS, DECCW, BA) and HBOC received very positive feedback about the report.

Papers about the waterbirds of Morpeth WTW and the shorebirds of Port Stephens were accepted in 2011 for publication in *The Stilt* (the appearance of the relevant issue is delayed until early 2012). Also, a paper about Grey Fantails has been submitted to *Australian Field Ornithology* and should appear during 2012.

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