

# Field Studies and Data Management: 2012 Summary Report

For convenience, the 2012 HBOC Field Studies program and the status of Data Management by HBOC in 2012 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 Birdlife 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 (IBAs) 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 7<sup>th</sup>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 2012, 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 2012 were:

- 1,000-2,000+ Chestnut Teal (1-2% of the world population) on Ash Island during March-April
- Large numbers (500-700+) of Sharp-tailed Sandpipers at both Tomago Wetlands and Hexham Swamp NR late in the year (Tomago Wetlands is not part of the IBA but it adjoins it; HBOC's survey results for Tomago may justify a future extension to the IBA boundary).
- A total of 8 Australasian Bitterns in surveys between 6-14 Oct (and another bird at Tomago Wetlands).
- Up to 19 Australian Painted Snipe in Maryland (Hexham Swamp NR) for a few weeks in October/November (although not an IBA nomination species this is a very important record).

The regular monthly surveys of the shorebirds and other waterbirds in the Hunter Estuary continued. A new initiative involves monitoring birds in an area of samphire on Ash Island, which was burnt during a wildfire in January 2012. Monitoring commenced in March 2012 using a survey design involving four 2ha sites following discussions with NPWS. Ten HBOC members have been involved and by year end 30 sets of surveys had been completed. An interim report was submitted to NPWS after six months. The project has been very successful and has generated intriguing results with respect to species which opportunistically exploited the burnt area. The project will be ongoing to provide NPWS feedback on the effectiveness of their samphire restoration and management experiments.

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 (other than an annual dusk/evening survey for Australasian Bittern).

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; the 2012 survey (in December) yielded 50 birds, which is the highest count at Pambalong NR for many years.

The final part of the Hunter Estuary IBA is The Wetlands Centre at Shortland. Some individual Club members conduct regular surveys, with the results summarised in the annual Bird Reports, and so currently there are no plans to undertake monitoring for shorebirds and general waterbirds as a formal HBOC activity. However, in March, August and December 2012, HBOC members 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.

### 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 2012, our focus was to confirm the Rufous Scrub-bird territories identified in 2010 and 2011 and to extend the survey effort beyond the core high altitude habitat. One intensive Rufous Scrub-bird survey was conducted, during a 3-day visit to Gloucester Tops habitat during October 2012. Some enthusiastic surveyors also made follow-up day visits. 18 territories were confirmed based on calling birds being present at the same location in 2010 and/or 2011. This was a somewhat disappointing result as, despite repeated visits, we did not find birds at several of the territories which had been occupied in 2010-11.

### 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 was 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. From efforts in 2010 and 2011, we have identified some Rockwarbler territories; however, 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 Birdlife Australia Regent Honeyeater and Swift Parrot surveys in May and August each year. The data are reported to Birdlife Australia, which also in 2012 undertook substantial monitoring efforts in the lower Hunter Valley using their own resources. Therefore there currently are no plans to undertake any additional monitoring as a formal HBOC activity.

# 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 properties at Butterwick, Duns Creek, and Tocal. Monthly surveys at Walka Water Works continue and the first decade of effort has been analysed and published in *The Whistler*. 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 Birdlife Australia.

In 2012, HBOC organised two waterbirds surveys of Port Stephens, in summer (February) and winter (July). 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.

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 7 years, and they have built and continue to build an extremely valuable database.

There were two new initiatives in 2012 (as well as the Ash Island samphire monitoring discussed earlier). One new project is to survey the land birds of Broughton Island, initially to collect base line data after the relatively recent removal of feral pests and then ongoing monitoring for changes which may be occurring. This project, a collaborative effort involving NPWS and the Broughton Island Conservation Society, commenced in August and already in excess of 50 data sheets have been generated. The other project, involving monitoring on the Tocal Agricultural College property, which has excellent wetland and bush habitat, is less advanced. Survey sites and methods have been selected, and preliminary surveys conducted.

A Memorandum of Understanding has been drafted which will provide HBOC members an opportunity to contribute to the project.

A function of the HBOC's Field Studies activities is to encourage members to undertake individual projects and where appropriate to provide assistance with design, conduct and analysis of results. In 2012, we assisted Grahame Felletti to establish monitoring protocols for surveys at locations in Charlestown (such as the Golf Course) and Greg Little at Blue Gum Hills Regional Park. A further two individual projects are under development.

## iii) Song Meter

The Song Meter was used extensively in 2012 to monitor at Rufous Scrub-bird territories. This work has helped increase our understandings of the calling behaviour of this cryptic species. A paper will appear in the 2012 issue of *The Whistler*, which is in press.

### DATA MANAGEMENT

HBOC has a variety of ways by which data from field studies and from opportunistic sightings by local birdwatchers are managed. 2012 saw further entrenchment of the initiatives started in previous years 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 Birdlife Australia to receive all the data for the Hunter Region from the BA Atlas database ("Birdata"). In June 2012, HBOC received the 2011 data from the Atlas and also an updated data set for the period 1998-2010.

The availability now of Atlas data for the Hunter Region has helped reinvigorate the local interest in supplying records for the Atlas. Although the main effort still is due to a small core of people, many more HBOC members have commenced submitting data. A total of 1,498 survey forms were submitted to the Atlas for 2011, compared with 1,356 for 2010, 1,198 for 2009, and an average of <800 surveys for each of the preceding 7 years. HBOC increasingly uses the Atlas to archive data collected during outings, to record incidental sightings and for the results of surveys conducted as both individual and collaborative projects involving HBOC members.

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. An Excel based program recently revised by Ian Martin allows statistical reports for individual species to be readily generated.

Online data entry to Birdata is increasingly used by many HBOC members. However some contributors continue to prefer paper entry using "pink sheets" which are sent to BLA's central office in Melbourne for scanning. Online entry provides superior data security and we encourage it (however, it removes immediate scrutiny of records by the Atlas Regional organiser, Ann Lindsey). Errors in Birdata, due to incorrect species identification or to data entry mistakes, are a serious issue. During 2012 recommendations were made to BLA

suggesting ways Birdata could be enhanced to facilitate data entry and to provide reports which could be routinely used for checking database integrity. Ideally Birdata would become a multipurpose database generating reports for projects (e.g. shorebird counts) as well as regional and national statistical summaries and overviews. Currently this versatility and the issue of data integrity mean that it is usually necessary to input data to and maintain two databases (i.e. Birdata and a project database). This is inefficient and erodes time available for data analysis and publication. Hopefully enhancements to Birdata will eliminate the need for double data entry.

In 2012, 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. 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 and so those important records are not being captured from record sheet scrutiny either. In some cases people have started submitting 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 an 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 still need to work out what can be done about this deficiency.

# ii) Data Analysis and Reporting

The main vehicle for data analysis and reporting is the Hunter Region Bird Report. The 2011 Bird Report (#19 in the series) was published in late 2012, with data for 438 species. Once again, the Atlas data were included in the Report with also a summary of the full 14 years of prior data (for all locally common species).

HBOC's journal *The Whistler* is another important vehicle for data analysis and reporting. Volume 5, published in late 2011, contained a number of papers where the authors analysed data from regular surveys which they carry out, as does Volume 6 which was finalised in 2012 and is currently in press.

After additional surveys of burnt and rehabilitated sites at Green Wattle Creek were conducted as campaigns in autumn and spring, a number of changes in habitat use by species like the Whistlers, Fuscous Honeyeater and Speckled Warbler were identified. These are the subject of a draft paper which has been discussed with the owner Crown Lands, a division of the NSW Department of Trade and Investment.

### Alan Stuart / Mike Newman

Coordinators: Field Studies & Data Management 26 January 2012