

Woodlands on the Wing

Issue 10 Spring 2014

The Great Western Woodlands is the world's largest remaining temperate woodland. BirdLife Australia is partnering with The Nature Conservancy to establish a long-term monitoring project in the woodlands to assess distribution, population status, movements and ecology of bird species in the region, to better inform conservation and management of this significant region. This project has been made possible through the generous support of the David Thomas Challenge and individual supporters from BirdLife Australia.

Spring Surveys

Much nesting activity was seen in many areas of the Great Western Woodlands this spring. The vegetation was looking green and vibrant with plenty of species in flower, although maybe not as spectacular as it can be when there are heavy winter rains. In 2014, the winter rains tended to be relatively low. Some interesting sightings included **Black-breasted Buzzard** at Karroun Hill and **Grey-fronted Honeyeater** at Karlkurla Bush Park.



Inland Thornbill by Mark Binns

"Eclipsed peach of a moon" at Cave Hill

Trip Report by Jan Waterman

Surveying the Cave Hill Area in the second week of October we thought we might be too late but were pleasantly surprised by the number of flowering eucalypts and nesting birds. The mallees were loaded with buds yet to come out. The Cave Hill dams were full and we saw some puddles in a few wheel ruts. The Kangaroo Hills Timber Reserve, just 20km from Coolgardie, was such a hotspot for honeyeaters we assured Queenslanders Neil Humphris and Greg Neill not to expect such a good count at all sites. At our first 2 hectare count we saw 15 various species and decided to split the group of observers as 7 proved too many in such a small area. After the second survey we leapfrogged the sites and did our counting much more efficiently in two groups.

birds are in our nature

Tawny Frogmouth, Western Yellow Robin, Australian Raven and Brown Falcon, plus numerous **Striated Pardalotes** were all seen nesting in the good conditions. A **Shy Heathwren** was seen in two locations, several **Southern Scrub-robins** seen, a **Chestnut Quail-thrush** hurried across the road and a **Spotted Nightjar** serenaded us all night at the Breakaways camp Site.

Cave Hill nearly cooked us on the Wednesday with 35°C and little shade but the eclipsed peach of a moon, rising over the rock made us forgive the sun (and flies).



Western Yellow Robin on nest
Photo: Ron Waterman

A **Boobook Owl** called to the moon and Donkeys came visiting the camp site, one braying late in the night, causing a member of the group to wonder in their dreams what bird call that might have been.

The drive into Banks Rocks was difficult because of the overgrown track but the rock would have been a great camp site and promised many species. Certainly the Rock is huge and needs a good big survey. A **Southern Scrub-robin** and some interesting calls whetted our appetite but we needed to press on.

McDermid Rocks was also a good camp and the **Purple-gaped Honeyeaters** were very abundant. Carol Trethowan's sharp ears found a **Southern Scrub-robin** who put on a cabaret and seemed to attract other birds.

Chestnut-rumped Thornbills, Crested Bellbird, Spiny-cheeked Honeyeaters, Redthroats, a pair of **Gilbert's Whistlers** and one Scarlet-chested Parrot were all on the lists.

We would do Cave Hill again in Spring, despite the flies, just to see the nests!!

Other Observations in Spring 2014

The spring surveys spanned a month, from 26 September to 18 October. A total of six areas were surveyed. Cave Hill and Jilbadji were surveyed for the first time in spring and for Karroun Hill it was the second spring survey. The remaining three areas surveyed were Fraser Range, Frank Hann/Peak Charles (BirdLife WA campout) and Helena and Aurora Range. The Goldfields Naturalists' Club surveyed Karlkurla Bush Park (Kalgoorlie) on 26 October.

Those on the Frank Hann/Peak Charles campout and survey were delighted to get good sightings of the **Shy Heathwren** (on two occasions) as well as **Gilbert's Whistler**, **Chestnut Quail-thrush**, **Red-capped Robin**, **Malleefowl** and **Australian Bustard**. The most numerous honeyeater species were; **Purple-gaped**, **Tawny-crowned**, **Spiny-cheeked** and **Brown-headed Honeyeater**. Four species of cuckoo were located at Peak Charles. They were the **Black-eared** and **Fan-tailed Cuckoo**, and **Horsfield's** and **Shining Bronze-Cuckoo**.

At Fraser Range there were four groups of **Emu** with young chicks ranging in age from three months to one year old. Of note were **Chestnut-rumped Thornbills** at one site, very few **Inland Thornbills** and one **Gilbert's Whistler**.



Emu and chicks west of Balladonia

Photo: Mark Binns

In the Helena and Aurora Range area flowering species of *Grevillea* and *Dryandra arborea* provided sources of nectar for **White-**

fronted Honeyeater, **Red Wattlebird** and **Spiny-cheeked Honeyeater**. A pair of **Red-backed Kingfishers** were located in woodland north of the range and **Little Woodswallow** looked to be nesting in a tree spout (also known to nest in banded ironstone formation (BIF) rock).

At Karroun Hill there were large flocks of **Red-tailed Black-Cockatoos** and a sighting of a single **Major Mitchell's Cockatoo** that behaved as if it had a nest nearby. A juvenile **Black-breasted Buzzard** was seen flying over the south-west corner of Karroun Hill Nature Reserve showing its rich reddish-brown underneath, black fingered wing tips, strong white windows in the wing and short rounded tail.

A waterhole was found at Jilbadji with great views of birds coming in to drink and a nesting **Black-faced Cuckoo Shrike**. The Hyden-Norseman Road provided some great spots for birds including **Hooded Robin**.

In the Mt Jackson Range area, Neil Humphris and Greg Neill had **Crimson Chats** flying over at breakfast time and watched many birds coming to water at a rockhole.

Spring remote survey

A second remote survey was conducted this year in spring. Mark Binns and Wayne O'Sullivan headed out into the GWW on 10th October to survey west of Balladonia Road and south of Dundas Nature Reserve.

Remote surveys focus on areas where there have been few or no bird surveys (i.e. 15' blocks with <5 bird records). The first remote survey was conducted in June 2014 and focused on the area east of Balladonia Road to Toolina Cove Track.

Mark and Wayne found the birds to be active with several sightings of **Malleefowl** and **Australian Bustard** as well as **Gilbert's Whistler**, **Chestnut Quail-thrush** and **Southern Scrub-robin**. There were **Emu** with chicks and both **White-winged** and **Blue-breasted Fairy-wrens**.

Although the survey was cut short with the build up of an impending storm, there was a feeling of achievement with productive surveys conducted in six 15' blocks. One of these blocks could only be accessed via an old, overgrown exploration track, a venture they decided to take although for Mark resulted in the patching of flat tyres and a rethink of logistics. The heavy rains did come bringing 60 to 70mm of rain in many areas though unfortunately making it too wet to head back out in to the GWW.

Nectar Feeders - Harry Recher gives a talk on honeyeaters in the Great Western Woodland

On the 21 October 2014, Professor Harry Recher gave a talk at Murdoch University on the Honeyeaters of the Great Western Woodland.

Although not a public lecture, both Liz and Shapelle were invited to attend. The talk was preliminary to his 2014 Keith Roby Memorial Lecture on the evening of the same day "*Failure of Science, Death of Nature*".

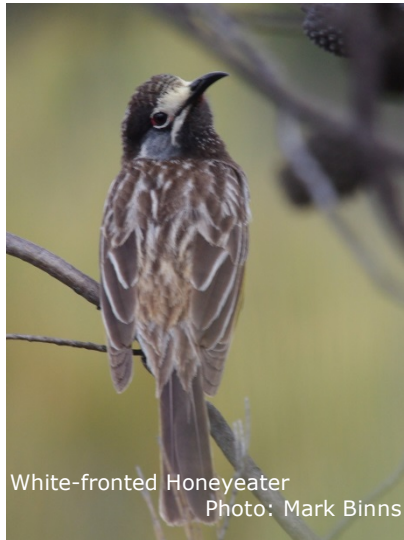
Harry Recher and Ted Davis have conducted studies on the foraging behaviour of birds in the Great Western Woodland (note: Woodland is singular) since 1997. These studies include extensive observations on the foraging behaviour of the different honeyeater species.

Harry opened with the statement that: "*The Great Western Woodland is an integrated ecosystem - not to be fragmented*".



Spiny-cheeked Honeyeater calling
Photo: Mark Binns

Food sources used by honeyeaters were divided into arthropods as their source of protein, and nectar, lerp, manna and sap as their sources of carbohydrate. One of the many features of the Great Western Woodland (GWW) that support honeyeater populations is its 'biodiverse tree species composition'. For example, at one of their study sites they could show that the honeyeaters foraged in different groups of tree species for nectar (Red Morrell, Gimlet) than for arthropods (Salmon Gum, Dundas Blackbutt).



White-fronted Honeyeater
Photo: Mark Binns

Harry also suggested that the nomadic honeyeater populations in the GWW are likely to have been affected by the extensive clearing in the Wheatbelt. When the flowering is low in the GWW there may now be less options available to these nectar dependent honeyeaters. Prior to clearing the nomadic honeyeater species we see today in the GWW may have also used flowering events to the

west in the Wheatbelt and further across to the coast.

Honeyeater species tend to nest during times of high flower abundance. In the GWW the quantity of rain and when it falls can vary from year to year, influencing flower abundance. Prof. Recher cautioned that it likely wasn't the 'normal' rainfall patterns in the GWW that supported sufficient breeding activity [and flowering] to maintain their populations; rather it was the occasional high rainfall events.

The potential vulnerability of honeyeater populations was also encapsulated by an observation made in eastern Australia where large flowering events could occur on the east coast without any honeyeaters visiting. Were honeyeater populations were too low or unable to travel to these areas?

Honeyeaters vary in their size, bill shape, movements and social behaviour. These differences are reflected in the degree they are dependent on nectar as their main source of carbohydrate and how and where they forage for insects and other arthropods.



Yellow-plumed Honeyeater
Photo: Chris Tzaros

Among the 14 dominant species of honeyeater in the Great Western Woodland, the Red Wattlebird is the largest, has a long bill and high dependence on nectar. By contrast, the small Brown-headed Honeyeater has a short straight bill and relies less on nectar, feeding on psyllids and their lerps. They also find insects by probing and gleaning rather than hawking. The Red Wattlebird hawks for insects, a technique that has a high energy cost, supported

by its high nectar intake. The medium sized Yellow-plumed Honeyeater has a straight bill, tends to be sedentary and has less reliance on nectar. They can occur as large groups or colonies to the exclusion of small birds such as Weebills and pardalotes. Singing Honeyeaters are sedentary and territorial and possibly quite flexible in their dependency on nectar. The White-fronted Honeyeater has a curved bill and high dependency on nectar. This honeyeater is often described as nomadic as it has the ability to move considerable distances to find sources of nectar.

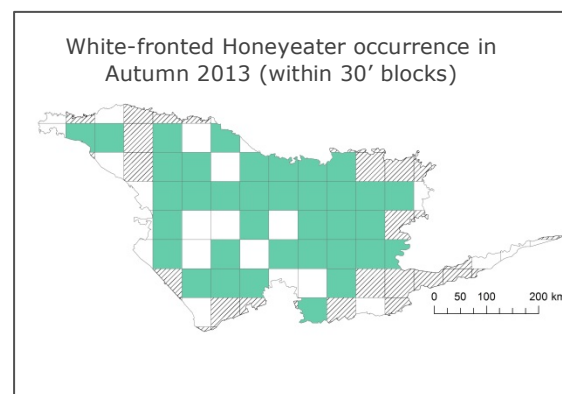
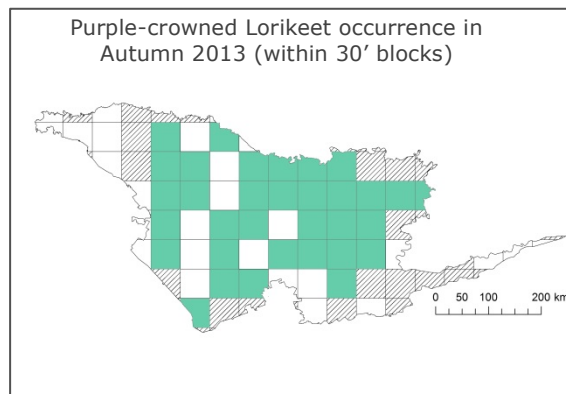


Purple-crowned Lorikeet
Photo: Mark Binns

Purple-crowned Lorikeets are gregarious, very specialised nectar feeders in the GWW. These lorikeets feed predominantly from eucalypt flowers for both nectar and pollen, using their brush-like tongue. Unlike honeyeaters, the Purple-crowned Lorikeet can digest the pollen and utilise it as a source of protein. However, their high dependency on eucalypt blossoms (and

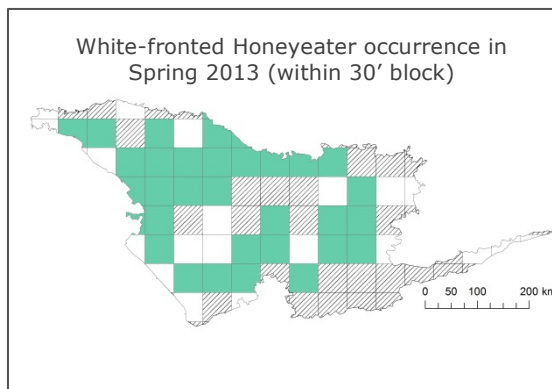
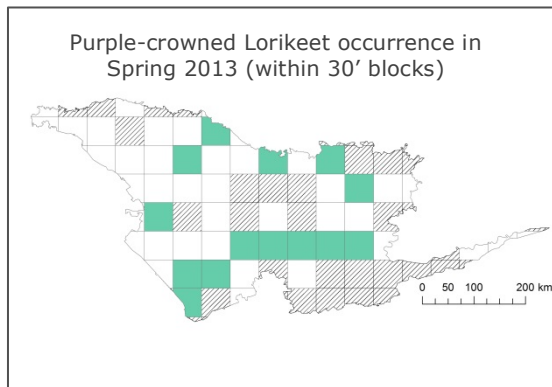
occasionally *Melaleuca* blossom) means that their occurrence is often transitory. They can move great distances to locate sources of nectar.

The nomadic nature of the White-fronted Honeyeater and Purple-crowned Lorikeet can be shown using the GWW bird data. Both the Purple-crowned Lorikeet and White-fronted Honeyeater showed a very similar distribution in Autumn 2013, as presented in maps below.



present absent not surveyed

In Spring 2013, the distribution of the Purple-crowned Lorikeet became more restricted and although the White-fronted Honeyeater remained more widespread, it similarly showed some contraction away from the central area and east boundary of the GWW (figures below).



■ present □ absent ▨ not surveyed

Other species of honeyeater that are common in the GWW are the Spiny-cheeked Honeyeater, White-eared Honeyeater, Yellow-throated Miner, Purple-gaped Honeyeater and Tawny-crowned Honeyeater. There are also the northern, nomadic, arid honeyeaters that venture in to the GWW including the Pied Honeyeater, Black Honeyeater and Grey-fronted Honeyeater. Lastly, there are the south-west species, such as the New Holland and White-cheeked Honeyeater that occur in the southern areas of the GWW and the Western Spinebill, Western Wattlebird and White-naped Honeyeater that are rarely seen in the GWW, and then only just inside the southern boundary.

Contact email for Prof. Harry Recher: hjrecher@bigpond.com



On a salt lake at Frank Hann
Photo: Jon Pridham

Results of the Participant Questionnaire

Thank you to all participants in the GWW Participant Questionnaire. A total of 39 responses were received from the 65 previous participants that were contacted (a 60% response rate).

Outcomes of the Questionnaire were:

- 79% of respondents were BirdLife Australia members and 21% non-members - *great to get non-members involved.*
- 72% of respondents were 60 years and over, of which 13% aged over 75 - *our main core of people that make it all happen!*
- 38% of respondents were confident in identifying birds in the GWW and 49% moderately so. *Workshops on bird identification and usage of the GPS were requested.*
- 85% of respondents said that they regularly read the newsletter. *A few suggestions were made for the Woodlands on the Wing newsletter and these will be followed up.*
- Respondents indicated that they received all or most of the information and assistance they required from GWW Project staff. *More information will be provided on how to locate sites and up to date information on nearest fuel and water stops.*
- Most respondents indicated that the length of surveys were sufficient to complete all the tasks (usual length of survey being seven days, range 2-10 days). *Those that had a preference for a longer survey time were in the field for 2-5 days.*
- For data entry, most respondents (70%) preferred using hard copy *Atlas sheets*, while some preferred to use *Birdata* (23%) and a few (8%) had a preference for using an *iPhone/Android app - if and when available!*
- 95% of respondents were happy with the safety requirements for official GWW surveys (minimum of two vehicles and a satellite phone per survey team). *We know and understand that these safety requirements preclude those that would prefer to travel alone from partaking in official GWW surveys - though not from contributing their sightings and surveys if they happen to be travelling through!*
- 92% of respondents indicated that they would be interested in taking part in future field surveys, either one (41%) or two (44%) per year. A few were keen to do three or four surveys per year.
- Participation in GWW surveys can depend on many factors. Some factors cited were work and family commitments, access to a 4WD vehicle, age, accommodation, timing and affordability. *Everyone's commitment is truly appreciated.*
- If for some reason we could not provide fuel vouchers, less than 9% of respondents indicated that this would reduce their current activity. *Intention is to seek funding to continue to provide fuel vouchers.*
- 92% of respondents agreed that the surveys had increased their awareness and appreciation of the GWW. *Three quotes below:*
"The project has fully immersed me in a wonderland and offered an opportunity to contribute to citizen science ..."
"I didn't realise it is such a huge area and so important to conserve. The variation in terrain and vegetation is fantastic."
"Love the birding in that dry country."

Species in Focus

CHESTNUT QUAIL-THRUSH

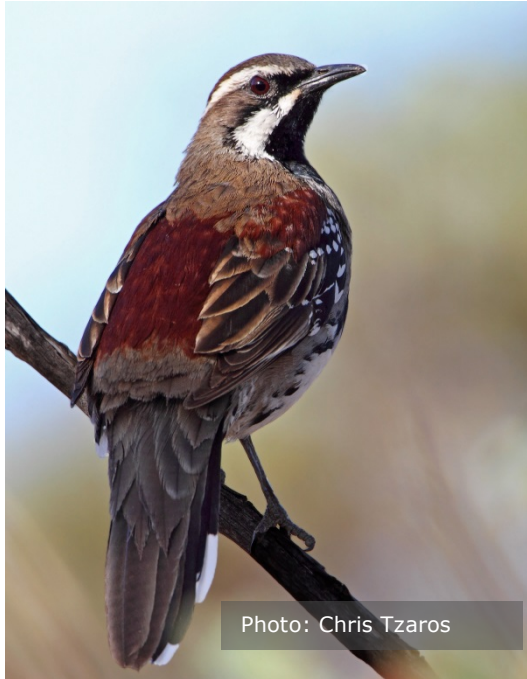


Photo: Chris Tzaros

The Chestnut Quail-thrush, also known as the Chestnut-backed Quail-thrush, is a medium sized bird (21-26 cm). One of its most distinctive features is a chestnut coloured lower back. The females also have chestnut colouring on the side of the neck while the males have a distinctive velvety black throat and chest. Both the female and the male have a brown head, white stripe above and below the eye, brown upper back, black shoulders with white spots, brown and black wings and tail, black tail feathers white tipped, brown rump and predominantly white belly.

The Chestnut Quail-thrush feeds on invertebrates, obtained while feeding on the ground amongst the leaf litter. These birds occur in pairs and breed during the cooler and usually wetter winter months.



At Helena & Aurora Range
Photo: Scott Corbett

In 1840, John Gould gave the Chestnut Quail-thrush the scientific name *Clinclosoma castanotum*. The genus name *Clinclosoma* means thrush-like while the species name *castanotum* refers to its chestnut coloured lower back.

The Chestnut Quail-thrush is one of seven currently recognised species of Quail-thrush based on a genetic study published in 2012. Six species of Quail-thrush occur in Australia and one in Papua New Guinea. In Western Australia there are three species of Quail-thrush: the Western Quail-thrush (in the northern arid country – previously grouped with the Chestnut-breasted Quail-thrush), Nullarbor Quail-thrush (west of the WA/SA border to the east and north-west of the GWW) and Chestnut Quail-thrush in the Great Western

Woodlands and beyond (Nullarbor to Shark Bay).

There is some thought that the Chestnut Quail-thrush may include several subspecies, its distribution spanning the width of southern Australia including South Australia, Victoria and New South Wales. More genetic studies are planned.

The distribution of the Chestnut Quail-thrush in Western Australia extends from the coast at Eyre Bird Observatory to Shark Bay. While it often occurs in mallee country on sand, within the northern areas of the Great Western Woodlands it also occurs in woodland and acacia shrubland on red laterite soils.

The seven species of Quail-thrush now recognised - based on genetic studies*

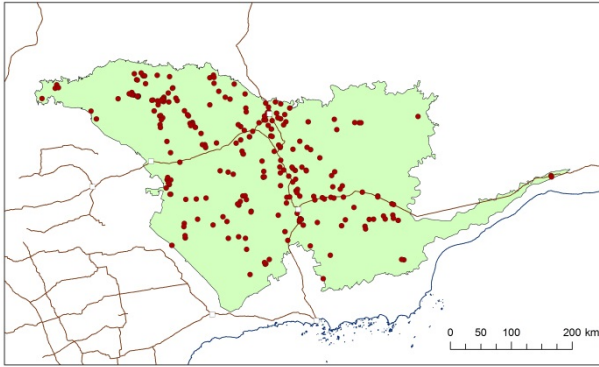
Quail-thrush	<i>Clinclosoma</i> (C.) & species name	Occurrence
Chestnut (Chestnut-backed)	<i>C. castanotum</i>	Southern Australia (including GWW)
Western	<i>C. marginatum</i>	WA: Goldfields, Pilbara, Shark Bay
Nullarbor	<i>C. alisteri</i>	Nullarbor (in saltbush country)
Painted	<i>C. ajax</i>	Papua New Guinea
Spotted	<i>C. punctatum</i>	East Coast (Victoria, NSW southern Qld)
Chestnut-breasted	<i>C. castaneothorax</i>	Inland eastern Australia
Cinnamon	<i>C. cinnamomeum</i>	Inland Australia (SA and NT)

* genetic studies by Alicia Toon, Jeremy J. Austin, Gaynor Dolman, Lynn Pedler and Leo Joseph, published in *Molecular Phylogenetics and Evolution*, 2012.

While the international status of the Chestnut Quail-thrush is considered of Least Concern (IUCN rating) due to its broad distribution, in New South Wales it is recognised as Vulnerable. Factors that have been identified as contributing to its decline in New South Wales are clearing and degradation of habitat, inappropriate fire regimes and predators. Factors that alter the habitat structure, produce less leaf litter, and less cover in the understorey are also significant threats. Genetic isolation is also seen as a concern as is the effect of fox and cat predation on already declining populations.

In Western Australia there is little known about this cryptic and relatively quiet species. Due to large areas of continuous uncleared lands in the Great Western Woodlands, along the coast of the Nullarbor and areas of Shark Bay it is not uncommon, although always rewarding to locate. Based on records to 2013, its distribution is widespread throughout the GWW, exceptions being in the north-east corner and southern edge (see figure below). However, during remote surveys in 2014 more locations have been found south of Dundas Nature Reserve in the southeast corner.

Distribution of Chestnut Quail-thrush in the GWW



Curiosity led two astray - To Find an Active Malleefowl Mound by Dave Taylor

It is often said, "curiosity killed the cat". However, in this instance, it produced a more exciting result.

During the autumn GWW survey in Frank Hann National Park, curiosity of a salt pan got the better of Jon Pridham and Dave Taylor. After conducting a 2 ha survey, they headed toward the salt pan and at about 100 m in from the edge, they came across a Malleefowl nest. The mound looked active - scrapings around the nearby vegetation appeared extremely fresh. After sitting away from the nest for a period to see if any birds turned up, which they didn't, John and Dave noted the GPS location and continued with their surveys.

About a month later, they returned with two Bushnell motion sensor cameras. These were set up approximately five metres apart on either side of the nest. Further study showed the nest was being cared for with more fresh scrapings. They again sat off from the nest for a couple of hours hoping to see the birds, but to no avail. They returned to the site the following day to check the cameras but nothing had been filmed. Ten days later, Jon was on his way to Tasmania via the Lake King/Norseman Road and Frank Hann National Park and picked up the cameras. Low and behold, the cameras showed two birds attending the nest.

Video clips were recorded on eight of the 12 days from 25 August to 5 September 2014. On most days the clips were recorded over 15 to 30 minutes. An exception was on 27 August when a total of 14 clips were recorded over a period of 2 hours (7:35 - 9:37 am). Two shots taken from the video clips are shown below. Most clips showed two birds visiting and working the nest together, one often more actively scratching than the other.



Notice

Coordination of GWW surveys in 2015

The **Autumn 2015** GWW bird surveys will be coordinated by the Survey Coordinator of the GWW Committee, Maris Lauva with assistance from Shapelle McNee.

This is a transition stage, from the GWW Project bird surveys being managed and coordinated by two part-time project staff (Liz and Shapelle) to being overseen by the GWW Committee (from June 2015), when Maris will be the main contact person.

Email contact for GWW surveys will remain the same and reach both Maris and Shapelle: gww@birdlife.org.au

What's On?

UPCOMING SURVEYS

We have the summer surveys coming up in early December and then in 2015 there are two planned survey times, autumn and spring. For the autumn surveys there are two suggested dates in April.

For the Autumn 2015 survey, Maris Lauva (Survey Coordinator on the GWW Committee) will be the coordinator, whom will receive lots of assistance from Shapelle and fellow committee members.



Cave Hill Survey team
Photo: Ron Waterman

GWW SUMMER SURVEY

6 to 12 December 2014

Coordinator of surveys: Shapelle McNee

An early summer survey will hopefully beat the intense heat sometimes experienced in the GWW. There has been recent rain in the GWW and in mid-November some birds were still breeding and eucalypts flowering. Summer surveys can provide invaluable information on where the more mobile birds are, such as honeyeaters. Currently, there is one group of volunteers interested in heading out to Dundas and in need of a group Leader (6-12 December). There has also been some interest in doing a survey after the 15 December.

GWW AUTUMN SURVEY

4-10 April or 24-30 April 2015

Coordinators of surveys: Maris Lauva and Shapelle McNee

Autumn is a wonderful time to be out in the Great Western Woodlands. A time to discover how the year is starting out for the birds in 2015 - the weather patterns often varying from one part of the GWW to the other! Autumn surveys are planned for either early in April, including the Easter long weekend or later in April over the Anzac day long-weekend.

FUTURE SURVEY DATES

The suggested survey dates are listed below for the summer survey in 2014 and the autumn and spring surveys in 2015. Please remember that all dates are flexible and surveys at any time within a season are appreciated. If you are keen to become involved either as a group leader or a participant, please contact Shapelle and Maris to lock in your preferences and to receive copies of the relevant information. Contact email address: gww@birdlife.org.au

Summer 2014: 6 – 12 December

Autumn 2015: 4 – 10 April including Easter weekend OR
24 – 30 April including Anzac weekend

Spring 2015: 5 – 11 September OR
26 September – 2 October including Queen's Birthday weekend



Brown Falcon at Peak Charles
Photo: Jon Pridham



Photo: Tim Sargent

For more information about the project please contact:

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