

# AudioWings

Journal of the Australian Wildlife Sound Recording Group



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# AudioWings

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## EDITORIAL

Another year has gone by, and what a year it has been! Floods and devastating bushfires with the resultant loss of life were some of the tragic occurrences. Still, some people think that lighting bushfires are fun and some think that yearly bushfires are the answer to control the environment.

Let us hope that next year with soaring temperatures being envisaged some form of sensibility will prevail as dry conditions still persist in most of the country.

The workshop in Gundabooka was, in all respects, a great success with mild temperatures and little wind which allowed for great sound recording.

Bird and animal life abounded in the area and many of us were able to add additional sounds of different species to their sound library.

Twenty two members attended, some coming from as far away as WA, and some fascinating talks were heard. For details see pages 16-18 this journal.

After the workshop some members, including yours truly, explored the area further west of NSW and went on to Birdsville via the Walkers Crossing track. Unfortunately, weather conditions deteriorated somewhat, with persistent windy conditions and sometimes rain making sound recording very difficult. On the Birdsville Track, further south towards Mungeranie we headed right into the greatest dust storm ever experienced in Australia for the past 70 years, lasting for several days. The picture below shows a wall of dust coming to the photographer (unknown) and depicts the worst condition; we, fortunately, had it a little milder.



This dust storm also spelled the end of our adventures as it covered most of the East Coast, Victoria and SA.

I would like to take this opportunity to wish you all the best for the festive season and hopefully a prosperous 2010.

Fred van Gessel

## ULTRASONICS in BIRD COMMUNICATION?

By Phil Riddett

Some time ago Richard Ranft of the British Library recommended that we make recordings at the best quality we can. By that he meant the highest practical sample rate and word length. A little later I visited Hungary in the company of several other recordists. One, Richard Mudhar, was experimenting with using home assembled ultrasonic microphones to record bats. Using an SD 702 and these mics he demonstrated how frequencies well above human range could be recorded satisfactorily (1).

This got me thinking about using the equipment I had to record outside the conventional range. I experimented using my 702 and a Sennheiser MKH 20. This mic has a frequency response which is substantially flat between 20 and 20 kHz and I wondered if it was sensitive above 20 kHz. I experimented at home using aluminium cooking foil as a source of sound. One of our cats responds adversely to this rustling sound and as cats have hearing which extends significantly higher than humans, they might be hearing components we can't. I recorded it at 96 kHz, then used Spectrogram v14 (2) to see what was above my hearing range. There was plenty.

Many small and medium sized mammals are capable of hearing very high frequencies - bats make a living that way - but how important is the 20 to 40 kHz range to birds? Several experiments have been done to find the extent of birds' hearing - mostly on European and North American passerines. Somewhat surprisingly it was found that birds not only have a more restricted frequency range but they also have poorer sensitivity than humans over the entire frequency range (3). This would seem to preclude their use of the low ultrasonic range. But do they produce anything above 20 kHz? Just because they may be incapable of hearing much about 12 to 15 kHz does that rule out components above that range? The only way to find out was to look. I recorded the songs and calls of several common passerine species (Table 1).

When looking at the sonograms it showed four things: that birds do make sounds above 20 kHz, that the components seem harmonically related to the loudest fundamentals, that they are low level, and whether or not this was recorded was dependant on distance and vegetation.

An example is the recording of a Great Tit, *Parus major*, (recording number 3036, **sonogram 1**). It showed frequencies over 30 kHz and was made at a distance of about 5 metres from the bird. Great Tits are a small passerine which have a two note song often rendered as 'teacher, teacher'. Measuring the fundamental of the 'tea' part gave a frequency of 5250 Hz ( $\pm 13$  Hz) at -42 dB. The harmonics were 10393 Hz at -86 dB, 15536 Hz at -100 dB, 26143 Hz at -110 dB and 31286 Hz at -118 dB. The ratio between the frequency of the fundamental and the harmonics are 1.97, 2.96, 4.98 and 5.96. Allowing for measurement error this is 2, 3, 5 and 6. On this recording it's possible that there was another harmonic at 4 times, but it may have been lost in the background noise.

The low level of the harmonics and the atmospheric absorption makes it unlikely that anything much higher than the first harmonic is heard by neighbouring birds. The level of loss can be seen from graphs such as shown in Evans *et al.* (4). The fundamental would be attenuated by about 10 dB at 100 metres but the 31 kHz component by some 60 dB or more. Most small woodland birds have territories closer together than that, but you get the picture.

If these components are not heard by other birds in territorial song they might yet be useful in the communication between young and adults or between young in the nest. Unfortunately I have been unable to make any recordings at nests so far, but I did record a group of recently fledged Great Tits foraging in Extremadura, Spain (**sonogram 2**). They showed some ultrasound, but not much. A group of juvenile Starlings, *Sturnus vulgaris*, likewise (**sonogram 3**).

Apart from the possibility of nestlings using low ultrasonic range there is another - feeding. Research done by Péter Estók, Sándor Zsebök and Björn Siemers in the Bükk hills in Hungary showed Great Tits preying on Pipistrelle Bats, *Pipistrellus pipistrellus*. The bats make calls at about 15 kHz as they wake up from hibernation. Great Tits were attracted to these calls when these were played back to them (5).

You have to ask what the advantages and disadvantages are of producing sound to which the birds may not be sensitive. Judging from the low level of the ultrasonic components it's clear that no special effort is put into making them. If there were any advantages they would be selected for. Likewise, the only disadvantage that comes to mind is to the young in the nest. They are often predated by mammals which can, paradoxically, hear just those frequencies to which the adult birds may be insensitive.

All the birds recorded were passerines. It is possible that others might have sensitivity to low ultrasonic sound without producing it - owls are an obvious candidate. Rustling leaves do make sounds in the low ultrasonic range and Tawny Owls, *Strix aluco*, hunt mostly at night by hearing their prey (6). Other candidates might include the cave dwelling Oilbird, *Steatornis caripensis*, which, though it forages by sight, echolocates in its cave.

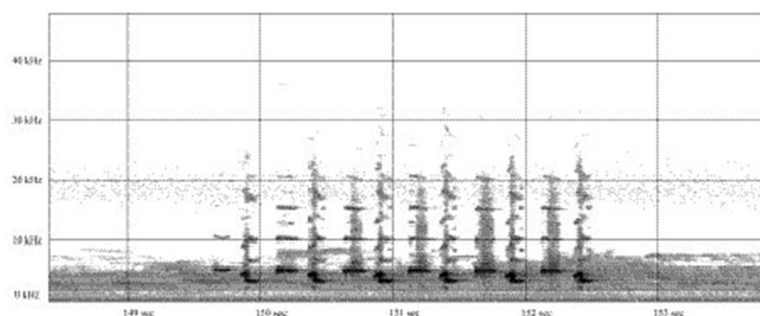
All recording made at 96 kHz sample rate, 24 bit, on a Sound Devices 702 recorder, using either a Sennheiser MKH 20, 8020 or 8040 microphone and normalized to -5 dB prior to measurement.

**Table 1**

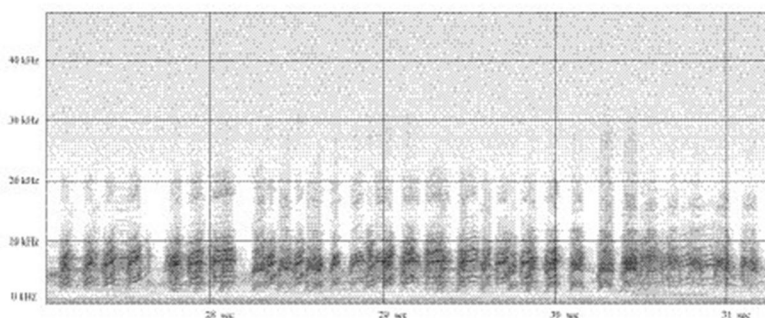
Species	Highest Frequency
Blackbird ( <i>Turdus merula</i> )	22,571
Blue Tit ( <i>Cyanistes caeruleus</i> )	40,016
Coal Tit ( <i>Periparus ater</i> )	42,579
Great Tit ( <i>Parus major</i> )	34,990
Long Tailed Tit ( <i>Aegithalos caudatus</i> )	24,345
Nightingale ( <i>Luscinia megarhynchos</i> )	31,639
Robin ( <i>Erithacus rubecula</i> )	25,725
Chaffinch calls ( <i>Fringilla coelebs</i> )	38,637

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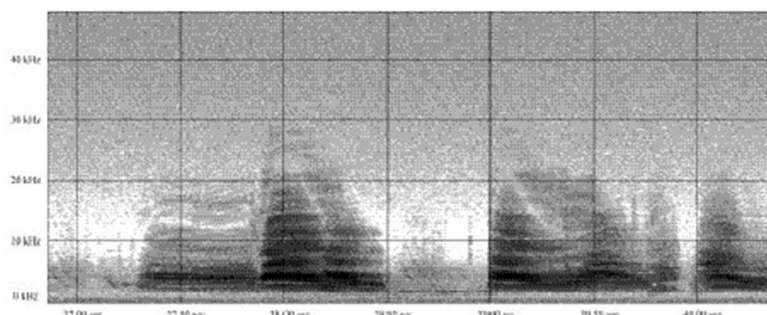
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**SONOGRAM 1**  
Great Tit Adult



**SONOGRAM 2**  
Great Tit Juv



**SONOGRAM 3**  
Starling

## **What is 'Acoustic Ecology'? Soundscape Studies and the Work of the *World Soundscape Project* (WSP) at a Glance.**

**By Poppi Doser**

The term 'acoustic ecology' is virtually synonymous with the work of Canadian composer and author R. Murray Schafer during the 1970s and epoch of the World Soundscape Project (WSP). Somewhat appropriately dubbed the "father of acoustic ecology", Schafer helped give birth to an organisation and new field of research concerned specifically with the health, restoration and preservation of the world's soundscapes, and in particular, the natural quiet associated with areas of protected land and wilderness. Commenting on the World Soundscape Project's past and present function, Barry Truax, founding member and Lecturer in Acoustic Communication, states:

"The main purpose of the World Soundscape Project's work was to document acoustic environments, both functional and dysfunctional, and to increase public awareness of the importance of the soundscape, particularly through individual listening sensitivity. In current terminology, the goal is to put 'acoustic ecology' on the environmental agenda."

While the field of acoustic ecology is still in its developmental stage, its basic principles remain the same. For example, *listening* is the practice upon which successful study of any soundscape depends. To aid the development of the aural sensibility proponents of acoustic ecology often undertake exercises—Schafer called it "ear cleaning." These exercises can be practiced individually as well as in a group. An example of an exercise popular amongst music educationists is the practice of silence for extended periods of time (typically one day). A second exercise is wearing (foam) earplugs for a day, such as has been performed by students of Edwin Karlow's Musical Acoustics course. Reporting back on the experience of being "deaf for a day" and the loss and subsequent recovery of 'ambience', one particular student writes:

"Almost all of the background noise, which I had become so accustomed to, was gone. Cars on the street, birds in the air, the sound of sprinklers...all the little things that you never notice are there until they gone, were gone. ... . When I took out the earplugs...a rush of sound overwhelmed me. All the ambient noise that I tolerate day to day was all of a sudden at the forefront of my hearing."

Hildegard Westerkamp, founding member of both the World Soundscape Project and its child organisation—The World Forum for Acoustic Ecology (1993), regularly conducts group activities called 'soundwalks' and 'listening walks.' A soundwalk is "an exploration of the soundscape of a given area using a score as a guide." The 'listening walk' differs slightly through its "concentration on listening... . Sounds heard and missed can be discussed afterwards." Both activities function as a means of raising community awareness about local soundscapes. "Critical thinking" typically accompanies the practice of concentrated or conscious listening. Increasing (industrial) noise levels around the city of Vancouver (what Schafer called "sound sewage"), and a perceived need for reformation of both urban and regional environmental "noise" legislation were the original impetus behind the formation of the World Soundscape Project and development of the field of acoustic ecology. Schafer observed "human-induced noise [as] a contributing factor to soundscape loss", diminishment of "human listening potential", and in turn, experience of the world.

"Schizophonia", a provocative term coined by Schafer during the 1970s and used to reference (at its most fundamental level), "the splitting of sounds from their original contexts", is symbolic of Schafer's perceived separation taking place between the individual and environment, between place and the individual's sense of that place, and the subsequent devolution of the individual's want and ability to *listen* that occurs as a result of incessant exposure to human-induced noise and "lo-fi" sound environments—those in which the sounds associated with mechanics, industry, technology, electricity and the electroacoustic predominate.

Truax, commenting on the main difference between high and low fidelity sound environments, writes:

"Within the hi-fi environment, the listening process is characterized by interaction. One does not have to fight the environment to make sense of it. Rather, it invites participation and reinforces a positive relationship between the individual and the environment. The "lo-fi" environment, in contrast, seems to encourage feelings of being cut off or separated from the environment. The person's attention is directed inward, and interaction with others is discouraged by the effort to "break through" that is required. Feelings of alienation and isolation can be the result."

In recognition of "the negative approach that noise pollution inevitably fosters," proponents of acoustic ecology have proceeded to embrace a more "holistic approach, including positive and negative aspects as well as non-residential functions of urban environments." Westerkamp, now functioning as Editor of *Soundscape*, The World Forum for Acoustic Ecology's biannual publication, states:

"Beyond fighting sound pollution, the task of sound ecologists is to design healthy and attractive sonic environments, sonic places. Continual sensitisation of the ear, creative town planning, legislative action (noise abatement regulations), the design of acoustic parks and playgrounds and the innovative preservation of worthwhile sounds of past and present may be among the means to achieve such ends. This tuning of the negative spectre of a polluted sound world into vision where the sonic environment becomes a place for renewal and creativity has been the genius of the Project."

Following almost forty years of soundscape studies, there are now ten affiliate organisations of The World Forum for Acoustic Ecology located worldwide in America (ASAE), Canada (CASE), Germany (FKL), UK and Ireland (UKIFAE), Australia (AFAE), Greece (HSAE), Japan (SAJ), Finland (FSAE) and Mexico (NPFAE). *Soundscape's* accompanying Regional Activity Reports denote activities conducted by the individual affiliates differ markedly, in turn suggesting some misalignment of agenda. This fact is, however, more a statement of the interdisciplinary nature of the field, which at present draws interest from artists, scientists, scholars, environmentalists and educators, and those researching in disciplines as diverse as science, aesthetics, philosophy, architecture, music and sociology. Perusal of the growing number of resources available both in hard copy and on the internet is indicative of a growing demand amongst the public for information around the status, health and function of the world's soundscapes; that far from dissolving, the place of acoustic ecology and the importance of the work of the World Soundscape Project now continued by The World Forum for Acoustic Ecology and its ten affiliates, is just beginning to be realised.

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## FLYING FOXES - A REMINISCENCE

by Syd Curtis

I am deeply indebted to flying foxes, for it is thanks to them that back in 1968 I became involved in wildlife sound recording and lyrebird research. It all started though, way back in April 1929.

In that year Francis Ratcliffe, a young Oxford graduate, was brought to Australia by the Council for Scientific and Industrial Research (now CSIRO), to study flying foxes which were becoming a nuisance to orchardists.

Ratcliffe's first foray into a flying fox camp was on Tamborine Mountain in Queensland, where I was born and where I grew up. In his book *Flying Fox and Drifting Sand - the Adventures of a Biologist in Australia* (Chatto and Windus, London, 1933), Ratcliffe writes:

"I was taken to see the camp by the wife of one of the settlers on the mountain, who brought her eighteen-months-old son with her because he could not be left at home alone."

That was in April 1929, so actually I was only thirteen months old. My mother was a naturalist, well-known in the local scientific community for her knowledge of the plants and animals of Tamborine Mountain. As Hilda Geissmann (her maiden name) she is one of those included in the 1997 Queensland Museum book, *Brilliant Careers - Women Collectors and Illustrators in Queensland*.

In the cause of science, Ratcliffe did shoot some flying foxes and he writes:

"Having given my guide time to carry her baby out of earshot, I fired. The commotion which followed was unbelievable. The camp had quietened down; but now, in an instant, an indescribably clamour arose. The tree-tops were filled with flutterings and crashings as several thousand bats took wing at once, bringing down a shower of twigs and leaves."

Ratcliffe continued:

"My guide of that morning I have only seen on one occasion since. It was almost exactly a year later when I walked with a friend on to her veranda. My friend had been a naturalist since his schooldays, and I had spent a year in the bush as a professional biologist; but in her [Hilda's] company we could only listen and learn. She had spent her whole life on the mountain. She knew the habits of every bird and beast that lived there, and where the rare ferns and orchids could be found. The birds, I think, were her favourites."

Though his visits were all too few, Ratcliffe kept in touch with my family. He took me trout fishing up the Cotter River when I was a student at the Australian Forestry School in Canberra (1949-50). He was by then a fairly senior officer in CSIRO. In 1959 CSIRO commenced a study of the Superb Lyrebirds at Tidbinbilla in the ACT. Norman Robinson was the officer mainly concerned, and I think Ratcliffe was Chief of the Wildlife Division when in the mid 1960s Norman wanted to get data on Albert's Lyrebirds for comparison. Ratcliffe suggested that he should consult me. (I was then an officer of the National Parks section of the Queensland Department of Forestry.) I took Norman to Cunningham's Gap National Park where he tape recorded an Albert's, and I recommended he go to O'Reilly's to record the Lamington Albert's.

Those were the first recordings I ever heard of Albert's Lyrebirds, and I was most impressed. In 1967 I represented Queensland at a Forestry Research conference in Munich, and on the way home bought a Uher tape recorder in a duty free shop in Hong Kong. Not surprisingly my first serious recording was of an Albert's Lyrebird in the following (1968) winter breeding season. With incredible beginner's luck, I got an excellent recording; and next day got an even better one with the mic (on a long cable) right beside the bird. Norman was duly impressed by the recordings and this eventually led to a joint research project on Albert's vocal behaviour in which I used automatic recording gear supplied by CSIRO.

And so I was hooked on lyrebirds and sound recording - really thanks to those flying foxes.

That flying fox camp Ratcliffe visited in 1929 was in what is now Palm Grove National Park on Tamborine Mountain. Advice I've received indirectly from the Park Service is that there is no longer any flying fox camp in the park. I assume that this is because European settlement has been so extensive and destroyed the habitat that provided their food.

In April 1969 I made a recording of flying foxes in Palm Grove. It was not a very good recording but of some historic interest in view of their later demise (you can hear this recording on the accompanying CD). There were still some thousands of them in the camp at that time and although daytime is their rest time, they are never entirely quiet. And in my primary school days I had learnt how easily they can be roused.

Palm Grove is so named because of the very numerous Piccabeen Palms (*Archontophoenix cunninghamii*) which form an under-storey below the rainforest canopy in which the flying foxes roost. Each palm frond has a sheath around the stem, often over a metre long and if flattened out, more than half a metre wide. Pick up a well dried frond and whack the sheath hard against the trunk of a tree: makes a bang like a gun shot and the flying foxes take off in mass and voice their concerns. Schoolboy humour as practised some 70 years ago: get some unsuspecting classmate to visit the camp and then (after getting into a suitably sheltered spot, but making sure the victim is not), bang a palm frond to make the bats take off, with the inevitable shower of leaves, twigs and bat droppings!

I can't say which species of flying fox inhabited that camp at Palm Grove (track 30 on CD), but probably it was Grey-headed Flying Foxes.

Flying foxes have recently been in the news here in Queensland (and not for the first time) when someone died from the so called Hendra virus which can infect horses and which can then be transmitted to humans. Flying foxes are known to carry the virus, and it has been suggested that horses become infected by eating food contaminated by flying fox droppings.

Even if flying foxes are involved as carriers of the virus, total eradication of this native species of mammal would be extremely costly, very difficult and highly unpopular with many Australians. Flying foxes are also maligned by orchardists, although the flying foxes actually prefer natural foods like blossoms and nectar of eucalypts and native fruits and lillypillies. Francis Ratcliffe found that the orchard raids were done by a small minority of a huge and mobile population, and in 1929 had suggested in his official report that a campaign against flying foxes would be futile and a waste of time and money.

Now that I am living at Hawthorne in Brisbane, we have only a small suburban garden but we do have a fruiting palm tree and a red bottlebrush which are sometimes visited by flying foxes, probably both Grey-headed and Little Red Flying Foxes (track 32). And this happily gives me the opportunity to record and observe them.

You can hear some of their calls on the accompanying CD.

## Xeno-canto: a 21st century way to appreciate bird song

**Bob Planqué and Willem-Pier Vellinga**

The internet has opened up many new possibilities to create rich and dynamic information sources, run at low cost and supplied with data by communities of enthusiasts. Formerly inaccessible databases are now available for everyone to use, as are a wealth of free and open-source software plus web-services such as mapping applications. Examples of hugely successful birding websites harvesting this new technology are [www.eBird.org](http://www.eBird.org) and its Dutch counterpart [www.waarneming.nl](http://www.waarneming.nl), both community websites documenting bird and other nature observations.

Xeno-canto ([www.xeno-canto.org](http://www.xeno-canto.org), which means roughly 'unknown song') fits squarely into this concept. Many readers may know that xeno-canto is a large, web-based collection of bird vocalisations. Indeed, xeno-canto has quickly established itself as one of the largest resources of bird songs anywhere. Starting out as a website on Neotropical bird song, it has recently expanded into Asia, Africa and Europe, and even more recently, the Australasian and Pacific area ([www.xeno-canto.org/australasia](http://www.xeno-canto.org/australasia)). This last branch covers Papua, Australia, New Zealand and all of the Pacific islands except Hawaii. Some facts (correct at the time of writing, but probably out-of-date by the time you read this): in the four years of its existence, over 320 recordists have joined forces and accumulated more than 31,000 bird recordings of over 5,500 species from across the globe. Australasian coverage is of course not as comprehensive as on the Americas branch yet, but there are nearly 1,000 recordings now of over 300 species.

However, this article is not really about the collection itself. Instead, we want to share with you the various ways the recordings are made accessible to the sound-oriented birdwatcher. Xeno-canto is something of a playground for novel ideas on classifying and organizing data on bird song, biogeography, and life history.

### Identifying bird songs

Originally, xeno-canto was developed specifically to identify unknown bird songs from the Neotropics. This is a relevant problem: birdsong is a common tool for avifaunal inventories. However, it takes much effort to acquire a comprehensive knowledge of an avifauna's repertoire. Only a few professional ornithologists and bird guides have ever been able to master this. For the traveling birder or the otherwise employed, there is little hope of ever achieving such proficiency.

Should we despair? Not completely. Some of the great institutional collections, such as the one at the Macaulay Library at Cornell, are finding their way onto the web. And, of course, there are many great cassettes, CDs, CD-ROMs and DVDs that, between them, contain a large portion of the bird sounds in Australasia.

Nevertheless, buying loads of recordings doesn't necessarily help. Granted, such collections are very useful to confirm tentative identifications or to use, judiciously, for playback. If, however, you are really clueless (like the authors, who tried forlornly to identify hours of dawn chorus from the Peruvian Amazon), their use is limited. The collections rarely offer any facility to search for unidentified voices. A large private collection of vocalisations certainly increases the odds of encountering the right whistle or squeak, but at a cost: you need much more time to track it down.

So, we thought, would it not be possible to devise 'field marks' for sounds and to combine these with data noted by sound-recordists (such as altitude, habitat and location) in order to narrow down the options? What about fast ways of searching through large collections of sounds to quickly compare a few that match shared criteria? And what about reaching out to other recordists facing the same problem? The web seemed to provide the way forward.

Our first idea was to devise a qualitative 'scoring system' for particular characteristics of the vocalisation such as length, volume, pitch, number of notes, speed and variability. For each characteristic, we developed some user-friendly categories to describe it: pitch might be 'even' or 'rising', for example, and volume might be 'increasing' or 'decreasing'.

This approach has quick and easy applicability on the xeno-canto website. Users can rapidly narrow down a search by selecting only those cuts that meet specified criteria. One might, for instance, request details of all cuts 'that are 3–6 seconds long, have 6–20 notes and decrease in pitch. Listening to the subset of recordings that meets these criteria, or quickly checking the accom-

panying sonograms, guides the user to promising recordings, one of which hopefully matches the call or song being sought.

This system is far from perfect, of course. But especially for birds with a limited repertoire made of simple songs, it actually works quite well.

### **Biogeography**

Over time, we have been able to combine more data sources and tools with the recordings, most notably Google Maps. Markers for each recording superimposed on the species' range enable the user to get a detailed geographical overview of xeno-canto holdings of a species (Fig. 1), including its subpopulations or subspecies. Perusing the information in the text windows of the markers means that it has never been easier for birders to appreciate geographical variation in bird vocalisations. To add additional layers of functionality, several different maps may be used as a background, including the familiar satellite maps offered by Google Maps and the spectacular Shuttle Radar Topography Mission (SRTM) elevation map (for which see Fig. 1).

### **Sonograms**

Sounds are great, but the listener can only hear one at a time, which makes them less than ideal for direct comparison. One solution is to represent sounds visually as sonograms and then compare sets of sonograms much as one would compare plates in a field guide. Nowadays, creating sonograms is a 'piece of cake', and xeno-canto displays sonograms for all recordings. Sonograms enable visual comparison of sounds produced by related species or by the same species in different locations.

### **The future**

For the Americas, there are several databases with life history information and distributional data which have been incorporated into xeno-canto. This has allowed a number of extra features, such as overlaying distribution ranges onto Google Maps, or the generation of sonogram checklists. We invite everyone to try them, and hope to be able to offer similar features on the Australasian website in the near future.

On the subject of future plans, our horizons are broad. We would like to extend xeno-canto into other taxa (e.g. mammals, frogs and insects). Automated recognition is another interesting area that we are currently exploring. The most likely early use of such software will be to offer a way to find recordings that are 'similar' to a reference recording, thereby augmenting the search features already on xeno-canto.

Such new areas will require a lot of work. Xeno-canto started as a labour of love run by the authors in their spare time. We enjoy running xeno-canto because of its community ethos: many people have already helped us develop the system. Xeno-canto will continue to need assistance. If you like what you see and hear, join us! If you are an IT whizz and think that functionality is missing or poor, talk to us. And, of course, do spend time in the field recording or behind your desk digitising those old tapes! Today the web is replete with photos but sound recordings remain hard to find. Attractively priced, high quality recording equipment will soon be available to the masses, and eager recordists will be looking for ways to put their new kit to use. Xeno-canto will be there, a friendly community of people trying to make sense of bird sounds from around the globe. Keep it in mind!

### **Acknowledgements**

We thank all xeno-canto members for sharing their recordings, for their comments and for their assistance in improving the site. The photographs that illustrate this article were kindly provided by xeno-canto member Tom Tarrant; We are also grateful to the Natural History Museum Naturalis, Netherlands, for their long-term financial support.

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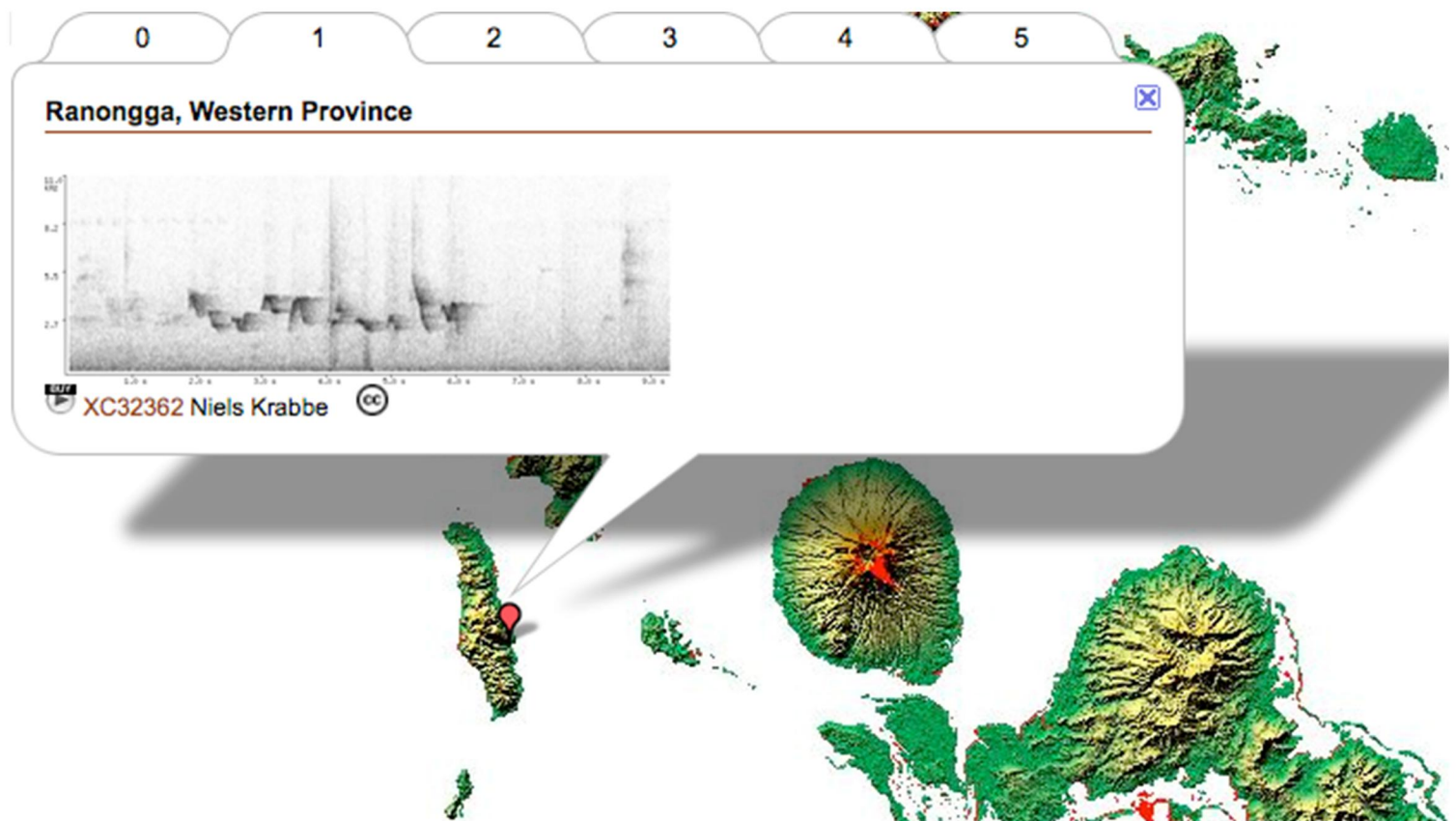


FIGURE 1

Superimposed upon a SRTM elevation map, this figure shows the location of one of several recordings of Ranongga White-eye *Zosterops splendidus* made by Niels Krabbe, together with its sonogram and other data.



## XENO-CANTO – some comments from a contributor

To participate in Xeno-canto you have to want to share your recordings and not expect money in return. I think that 30 seconds of sound at mp3 resolution is a fair thing for free sharing. I do enjoy listening to recordings from others from around the world, so it is only fair that I also contribute some sounds. Xeno-canto is a wonderful educational resource. It could also potentially link in with our Australian Wildlife Sound Recording Group, and maybe get us more members.

Bob Planque is UK based (although his address is given as the Netherlands), and Willem-pier Vellinga is Netherlands based; together they moderate and provide the web site Xeno-canto.

Last year, while I was still on dial-up internet connection (I now have satellite!) I contributed 46 Australian recordings to Xeno-canto, and these were my experiences:

If you want to upload say more than 10 recordings then it is worth while filling in the supplied spreadsheet. Quite a lot of information about each cut is requested, including scientific name (a list is provided), time, date, location, GPS co-ordinates if possible. Plus the infuriatingly fiddly recognition codes that may help people to find their mystery bird by navigating to length of song phrase, pitch (up or down), variable or not, song or call. (I would have thought harsh or melodious would also be useful categories, but they are not included.) However, the amount of information you provide about your recordings is up to you.

There is more than one way to supply recordings. You can do this directly via the Xeno-canto web-site, but first-time contributors might find this a bit daunting. My own method worked well, I filled in the spreadsheet for each batch or 20 or so recordings, emailed that to Bob Planque, plus the mp3 sound clips, as email attachments. Bob then sorted out the recognition codes and uploaded everything to the Xeno-canto site. (Zipping of these sound files might help if you have that capacity, but if you don't, then just send as is.)

On my Mac, the Excel (Word) spreadsheet proved to be unreliable for the column of dates, with Excel having a mind of its own and translating what I had typed in, not only to a new format but also a whole new date!! So if you are finding Excel 'rubbery' then I recommend putting a full stop at the end of the date, which seems to pin it down, e.g. 28-08-1989. Times and GPS seemed OK i.e. not rubbery.

In the Australasian section there are a large number of songs and calls from PNG species (fascinating to listen to), and just two from Fiji. If you want to check out what there is on the Xeno-canto web site for Australia, then go to Browse, and click on the column Location for locations to appear in alphabetical order. Australia comes first. You can also sort other columns in the same way. If you want to download any sounds, you click on the catalogue number, then left or right click 'link to soundfile', then 'save link as' and the sound should then save to your desktop as an mp3 file.

Yes that's right, people can 'steal' your recordings, despite Xeno-canto copyright provisions. But I figure people can steal your recordings anyway, so I choose to simply give them away in short cuts as mp3 format. I do this to spread the word about how beautiful and fascinating is birdsong. The more recognition of this fact, perhaps the more likely we are to protect habitats from noise pollution and outright destruction.

If someone wanted to use your recording for a commercial purpose, they can contact you via Xeno-canto, indeed if you have sample recordings on that site it may actually be good advertising for you.

Thirty seconds at 64k mp3 compression rate is a good average to aim for, but if you didn't want to share at that higher quality, you could simply go lower in the mp3 resolution. Mono is best too, because Xeno-canto concentrates on single bird species, rather than more general habitats. However there is nothing stopping you from uploading long stereo files if you want, so long as they are less than 1 MB for each clip.

You can also see photos of any bird species you want, by following the links in each sound clip to images on Flickr, another of those free-sharing web sites that can give so much joy. If you want to use those images for some other purpose, then you contact the photo contributor.

I do intend to contribute some more recordings to Xeno-canto in the near future, and I hope that other Audiowings members will support this most worthwhile web site and database of bird song.

see: <http://www.xeno-canto.org/australasia>

**Vicki Powys**

English	Scientific	Recordist	Date	Time	Country	Location	Elev.(m)	Type	Remarks	Cat.nr.	Action
Orange-footed Megapode [DS]	Megapodius reinwardt	Vicki Powys	03-08-1990	03:00	Australia	West Alligator Head, Kakadu NP, NT	10	duet (A)	duet, pauses shortened [options] [discuss] [sono] A B C D E	XC30634	Revise / Delete
Rose-crowned Fruit-dove [DS]	Ptilinopus regina	Vicki Powys	03-08-1990	10:00	Australia	West Alligator Head, Kakadu NP, NT	10	song (A)	1 perched [options] [discuss] [sono] A B C D E	XC30635	Revise / Delete
Yellow-tailed Black-cockatoo [DS]	Calyptrorhynchus funereus	Vicki Powys	19-03-2001	16:26	Australia	Dunn's Swamp, near Rylstone, NSW	668	? (A)	1 bird perched, then takes flight [options] [discuss] [sono] A B C D E	XC30639	Revise / Delete
Sulphur-crested Cockatoo [DS]	Cacatua galerita	Vicki Powys	01-06-2004	10:45	Australia	Bomerah Ck, near Coolah, NSW	552	calls (A)	harsh calls from 1 [options] [discuss] [sono] A B C D E	XC30636	Revise / Delete
Sulphur-crested Cockatoo [DS]	Cacatua galerita	Vicki Powys	05-07-1990	08:00	Australia	Lawn Hill National Park, Queensland	170	calls (A)	conversational calls from 2 perched [also] [options] [discuss] [sono] A B C D E	XC30637	Revise / Delete
Little Corella [DS]	Cacatua sanguinea	Vicki Powys	27-08-1993	06:25	Australia	East Baines River, Gregory NP, NT	112	calls (A)	harsh and tri-syllabic calls from circling flock [options] [discuss] [sono] A B C D E	XC30638	Revise / Delete
Crimson Rosella [DS]	Platycercus elegans	Vicki Powys	17-10-1995	06:48	Australia	Sunny Corner, NSW	1203	calls (A)	bell calls, then harsh calls before flight (2 cuts) [options] [discuss] [sono] A B C D E	XC30642	Revise / Delete
Swift Parrot [DS]	Lathamus discolor	Vicki Powys	10-06-1997	16:53	Australia	Capertee Valley, NSW	502	calls (A)	chattering calls from flock before flight [also] [options] [discuss] [sono] A B C D E	XC30641	Revise / Delete
Australian King-parrot [DS]	Alisterus scapularis	Vicki Powys	03-03-1992	06:30	Australia	Sunny Corner, NSW	1203	? (A)	1 bird perched, then takes flight, pause shortened [options] [discuss] [sono] A B C D E	XC30640	Revise / Delete
Brush Cuckoo [DS]	Cacomantis variolosus	Vicki Powys	02-12-1988	07:05	Australia	Sunny Corner, NSW	1203	calls (A)	ascending & descending calls from a pair [also] [options] [discuss] [sono] A B C D E	XC30643	Revise / Delete

## Bill Snapping in Fairy-Wrens

### By David Secomb

I have heard bill snapping in a variety of bird species such as herons and honeyeaters during events that is often associated with courtship or aggression. No doubt others can add to this. For this article bill snapping is the noise produced by closing the bill for the purpose of communicating to others. (editors' note; bill snapping is always observed in the Red Wattlebird, *Anthochaera carunculata* when bathing)

I have on occasions observed bill snapping in Blue-breasted Fairy-wren, *Malurus pulcherrimus* and Red-winged Fairy-wren, *M. elegans* in the SW of WA. In the majority of cases this occurred while chasing other fairy-wrens. It is not known if the catalyst for bill snapping (disputes?) involve inter-family or intra-family conflict. There is no mention of bill snapping for any fairy-wren species in HANZAB. It comments that there is little physical interactions between males, as they prefer to resolve disputes vocally.

During discussions with Eleanor Russell, co-author of Fairy-Wrens and Grasswrens (1997), she also failed to find any references in the literature to bill snapping. In her extensive research, Eleanor has also observed bill snapping in both of the above species including Purple-crowned, *M. coronatus* and Splendid Fairy-wren, *M. splendens*. During her surveys for Blue-breasted and Purple-crowned Fairy-wren where playback was used on occasions, birds would approach in an aggressive manner, singing and bill-snapping.

In her more detailed studies of the Red-winged and Splendid Fairy-wren where family groups had been colour banded, bill snapping was often heard when chasing intruders. Because bill snapping was often observed as a by-product of playback, it was not included in Fairy-wrens and Grasswrens (E. Russell pers. com.)

I have shown three examples of bill snapping in Fairy-wrens, refer accompanying CD tracks 60 & 62

### Blue-breasted Fairy-wren (track 60A & 60B on the CD)

1- During an early morning walk at Millers Point, WA, on 30 December 2007, a male crossed the road. Shortly after it was seen being chased by a another male and female. During this exchange, rapid calling and bill snapping could be heard.

2- At Ongerup, WA, on 15 March 2009, a family of Blue-breasted Fairy-wrens approached me, which included five to six female plumaged birds and one single male moulting into eclipse plumage. While I was sitting down, the male advanced and commenced calling aggressively, including bill snapping. After leaving for a short period, the male returned with the remaining family where they fed around me for several minutes before moving on.

**Red-winged Fairy-wren (track 62 on CD)**

3- At Warren PN near Pemperton, WA on 26 December 2008, a male moulting into eclipse plumage was moving through the shrubbery with wings spread, quivering rapidly and calling softly. It ventured into an area where the vegetation obscured my sight. It was there that the area erupted into a crescendo of sounds, with an unknown number of birds, predominantly males, chasing each other and calling vigorously. Bill snapping could be easily heard; also another call I had not heard before. After the chasing ceased, territorial song was heard for a short period.

**Summary**

From the above and other observations it is suggested that bill snapping and accompanying calls are associated with acts of aggression. Observations by Eleanor Russell indicate this behaviour to be associated with and while chasing intruding birds. Furthermore, this type of behaviour is not considered a rare event.

The male Ongerup bird took it one step further by trying to 'eject' me from the area.

Of the three broad groups of fairy-wrens that inhabit Australia (chestnut-shouldered, blue and bi-colour, HAZAB p257) bill snapping has been observed in two of these, by me and Eleanor Russell.

It has been observed in a wide geographical area of Western Australia. Aggressive behaviour that involves chasing may be more frequent than suggested in HANZAB. It would be interesting if other members have also observed this behaviour.

**Acknowledgement**

Many thanks to Eleanor Russell for her observations and general comments.

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**FRIGATEBIRDS and their Roost in WEIPA, NEQld**

**By Fred van Gessel**

**Introduction**

Of the five species of frigatebirds found in the world, three occur in Australia, two of which, the Least, *Fregata ariel* and the Greater, *F. minor*, are regularly found in the Cape York area.

Frigatebirds are large, mainly black or black with white underparts, deep fork-tailed, long slender-winged (2.4m wingspan) seabirds with a rather long bill with hooked tip and very short legs adapted for clinging, but not for walking.

They are found throughout all tropical oceans (in Australian waters mainly the Coral Sea, Arafura Sea, Gulf of Carpentaria and the Timor Sea) and are strictly marine and pelagic. The Least Frigatebird being the most common of the two species. They are surface feeders, feeding mainly on flying fish, which they catch in the air, and squid, but also resort to piracy, hence the name 'man-o-war bird', by harassing other seabirds to dislodge or disgorge their catch. They are very maneuverable, especially when chasing other seabirds while trying to pirate food. Frigatebirds also snatch eggs and chicks in seabird colonies and capture small turtles on beaches when they hatch.

They breed on off-shore islands or atolls where trees, bushes or some form of vegetation is available, such as Christmas Island, Raine & Quoine Island on the Great Barrier Reef, and NE & SW Cay. The unusual breeding biology of the frigatebirds usually accounts for a range of ages and sexes, including breeders and resting breeders. Because they tend to forage long distances away from their breeding sites Frigatebirds depend largely on available roost sites to extend their foraging range and these roost sites are also important for shelter during bad weather conditions (cyclones, etc.) and resting places between breeding seasons. Least Frigatebirds often congregate close to mainland coasts just before the onset of a tropical cyclone and they are frequently seen under such conditions along the waterfront of Cairns.

Frigatebirds share similarities in their ecology with albatrosses in that they only breed every second year or so and are presumably long lived birds.

One female *F. minor* was known to have lived for 38 years (HANZAB, Vol.1B: p.912, 1990). The breeding cycle of *F. minor* is abnormally protracted compared to most birds and takes over a year to complete a cycle (Nelson, 1975)

## Vocalisation

Tony Baylis and I visited Weipa in November 2008 and Sue Gould, one of our AudioWing members and Weipa resident, showed us the areas where frigatebirds came in to drink in the late afternoon and to roost in the trees on the outskirts of Weipa at night.

Squadrons of birds were seen in the air coming from all directions, a truly fascinating and magnificent sight, with up to several thousand birds being estimated.

The late afternoon birds were mostly silent as they descended, skimming the surface to scoop up water for a drink, but the evening roost provided a different scenario.

The Weipa roost site is centred on an area of heavy industrial activity and along the main road leading into Weipa. As a consequence noise from the mining activities and traffic makes sound recording of their vocalisations a little more difficult.

The sounds emanating from the sites where birds were jostling with each other to find a place in the canopy, was music to our ears and it was with great reluctance we had to leave the area.

Frigatebird vocalisations, although well known, have not previously been described for the Australian population (HANZAB, Vol.1B, 1990).

The night roost at Weipa may have up to 2000 birds regularly in attendance (S. Gould pers. com.), making it the largest known mainland roost site in Australia and probably the world (Mustoe 2008).

What proportion of the two species was involved was uncertain as darkness prevented a true count but it represented a substantial proportion of the national population and also probably included birds from various age groups, breeders and non-breeding birds.

Unfortunately, as is often the case in industry, this roost site is slowly being degraded, trees being cleared to make way for the ever demanding mining activities and profit.

The abundant food availability and the absence of islands nearby in the Gulf of Carpentaria undoubtedly has some influence on their choice of roosting area.

The Weipa roost has long been recognised by residents and some Australian ornithologists as an important site for frigatebirds, however the loss of some significant part of the roosting area recently poses a direct threat to its continual viability.

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## Bill Flentje, Honorary Life Member Howard Plowright

On Monday 28 September 2009 Howard Plowright and Michael Gallagher had the pleasure and honour of presenting the Australian Wildlife Sound Recording Group's Certificate of Honorary Life membership to Bill Flentje at his home in Bendigo. Bill was delighted to be the third recipient and was in sparkling form. He regaled us with past exploits but in particular Michael & I were able to



browse a comprehensive and revealing booklet Bill, and his family, had put together on the occasion of his 90<sup>th</sup> birthday. What a full and rewarding life he has had, and continues to enjoy to the fullest extent possible consistent with health constraints. We had a tour of the garden and were able to see where many of those Eastern Rosella calls were made – and how Bill has ‘measured out’ a circuit to ensure he takes the prescribed daily exercise. Bill is still recording wildlife, he has recently purchased a hand-held Olympus solid-state recorder, courtesy of Vicky Powys’ recent review in AudioWings. Although Bill is not keen to enter the digital age, his son, Neil, sees to it that sound is downloaded.

We mustn’t forget Betty – she made sure Michael & I were made most welcome and provided a hearty afternoon tea. All in all a most enjoyable visit and we were able to wish Bill, & Betty, all the very best on behalf of the Group. I’m sure most of you remember Bill was our inaugural President following Incorporation and he has entertained members at various workshops with his field-craft and recordings from the Whipstick and elsewhere. Enjoy your Life Membership Bill; we look forward to hearing some of your next generation recordings – thank you for everything.

**Australian Sound Recording Group Workshop  
September 6-11, 2009  
Held at  
Belah Station, Gundabooka National Park  
Via Bourke, NSW**

The 2009 Australian Wildlife Sound Recording Group workshop was held at Belah Station in Gundabooka National Park.

**About the Park**

Gundabooka National Park, covering an area of 43,000 hectares, is about an hour's drive southwest of Bourke. It is a remote, arid-zone park, encompassing extensive plains of mixed vegetation. At its centre is an impressive synclinal geological feature with rocky escarpments and secluded gorges. The main feature of the park's landscape is the Gundabooka Range, which rises to a height of 500 metres at Mount Gundabooka. The rust coloured rocks that can be seen on the rugged surface of the cliffs, gorges and hills are over 385 million years old.

The Gundabooka Range is a significant place for the Ngemba and Paakandji Aboriginal people of western New South Wales. It features prominently in the consciousness of Aboriginal people today and in particular the people of Bourke and Brewarrina. Certain places in the range were used as venues for large ceremonial gatherings. Paintings have been found under several overhangs, which highlight many aspects of the Ngemba culture.

Visitation and use of the area by Aboriginal people continued after European settlement in the 19th century. However subdivision of the land around the beginning of the 20th century and the movement of Aboriginal people onto missions made visitation more difficult.

European exploration of the Darling River began in the early years of the 19th century and the Gundabooka Range was noted by Charles Sturt during his explorations in 1829. Gundabooka station was established in 1857 but was only used sporadically by pastoralists. By the late 19th century the mountain range was included in the neighbouring stations of Yanda and Gundabooka. These were subsequently subdivided as part of the soldier settlement scheme following World War One.

Three of these smaller stations, Ben Lomond, Belah and Mulgowan, now comprise the park. All contain elements of historic interest including homesteads, quarters, shearing sheds and yards. The old homestead rubbish tips are also of archaeological interest. The park was gazetted in 1996.

**Suitability of the Park for the AWSRG workshop**

One of the reasons for choosing Gundabooka for the 2009 workshop was that it is on the edge of the out-back. The landscapes, birdlife and recording opportunities available are a taste of what can be found further west. Habitats across the park include extensive stands of mallee and mulga, stately belah trees, grasslands and woodlands. Birdlife can be quite prolific, including dry-country species such as Splendid Fairy Wrens, Red-capped Robins, Emus, Chats, Spotted Bowerbird and Crested Bellbirds.

In addition, and very importantly, noise pollution is insignificant. Overhead plane traffic is negligible and road noise can be heard (in the distance) from only the extreme eastern section of the park.

**Our quarters and catering**

We were based at the shearers' quarters of old 'Belah' station. The quarters were rustic and basic, but sufficient, for our needs. A number of members camped nearby in the mulga woodlands.

Provision of meals can be a problem at a workshop such as ours but we were extremely lucky to have a local woman, Samantha Mooring, recommended. Samantha lives on a property only about 50km away (right next door in that part of the country) and has a stellar reputation for catering in the Bourke area. As well as providing an abundance of delicious food, Samantha took great care to provide for those with special dietary needs.

**The program**

On the first day **Cecily Hampton**, an elder and traditional owner of Gundabooka, spoke to us about the special significance of the park to her people. After lunch Sarah-Jane Oakroot, a National Park Ranger, led the group on a walk to Dry Tank and the lookout to Mt Gundabooka. The first few kilometres of the walk were through a level, red-brown landscape transformed by recent rains into an endless native garden filled with beautiful wildflowers. Towards the end the track rose steeply to Dry Tank and the lookout to Mt Gundabooka. Words such as 'wondrous', 'spectacular' and 'majestic' spring to mind to describe the landscape we viewed from the lookout but fail to do it justice. We were privileged to have such an inspiring introduction to our home for the next five days.

On Tuesday morning, the first talk of the program was given by new member, **Michael Gallagher**.

Michael described his experiments on nesting Eastern Rosellas *Platycercus eximus*. The talk was in two parts, *Observations and Recordings of Nesting Rosellas* and *Can Amateur Recordists Contribute to Animal Vocalization Research?*

Michael had placed a nest box so that it could be seen from his kitchen. A pair of eastern rosellas obliged and raised successive broods in this box. Visual and vocal recordings of the developing young were made each breeding season from 2003 to 2006. Analysis of the large amount of data is nowhere near complete but some interesting findings have emerged so far.

Michael noted that the clutch sizes were all below the accepted average and wondered if this was due to the stresses of living in a suburban situation. He also noted that the birds appear to interact with a rich array of soft vocalizations in and near the nest and that parents appear to use vocalizations to coax young to leave the nest.

In the second part of the talk Michael noted that although amateurs have contributed widely to wildlife field research, there are considerable impediments facing an amateur who wishes to make a significant contribution to an understanding of bird vocalizations. Essentially these impediments boil down to time and money. Meaningful results need sound experimental design, large databases and complicated analysis. These are essentially beyond the resources of an individual.

The next presentation 'Birds of the arid Zone' was given by **Tony Baylis**. Tony has made several trips to the arid zone, which can be defined simply as areas with an average rainfall of less than 200 mm per year. More complicated definitions are based on landform and other qualities. Using The New Atlas of Australian Birds, Tony estimated a total of 230 species in the 1000 square kilometres of arid zone he visited. Most of these birds are found in other zones. There are few specialists. Among these specialists are the plains wanderer, the flock bronzewing, a few grasswrens and the chestnut-breasted whiteface.

The most favourable places to photograph and record birds were near water and Tony delighted us with photos of the recording sites and some sights and sounds of some of the birds found at these clay pans, creeks, waterholes, rivers and lakes. Sites visited included Goyder's Lagoon, the Diamantina River, Coongie lakes, Mungerannie waterhole and Cowarie station.

Following Tony, **Neil Boucher** gave us an update on the terabyte sound recorder he has been developing in conjunction with Queensland Parks and Wildlife and others. The original prototype was developed about two years ago and nine are currently in the field in most states of Australia. The aim of the project is to detect calls and recognize calls 24 hours a day seeking rare birds, bats, frogs, whales and other species. One problem encountered in the field is that the microphone cannot be easily protected from the weather because protection causes distortion of the frequency response. What is needed is a cheap, disposable microphone with a suitable frequency response.

On Tuesday afternoon **Roger Boughton** led a discussion entitled BBB (the Boughton Bee in the Bonnet). Roger spoke of the need to raise awareness of Wildlife Sound Recording and the associated Societies. Topics covered included targeting young people (e.g. through schools), holding occasional 'fun trips' in addition to the more serious workshops and the role of our organizations in society particularly in raising awareness of issues such as conservation and increasing noise pollution.

On Wednesday morning **Neil Boucher** talked about another aspect of his work with sound recording – an alternative to sonograms based on the Fourier transform. A major problem with the Fourier transform is that it generates extra frequencies when breaking the complex waveform into its component frequencies. An alternative transform is based on LPC (Linear Predictive Coding). This still gives a broad band of frequencies as an artefact but the frequency is more sharply defined. Representation of the subsequent transform in 3 or 4 dimensions is much more complex than a traditional 2-D sonogram but much more informative.

The next speaker, **Kerry Watson**, gave a fascinating 'behind the scenes' account of the ABC production *Parrots of Australia* produced by David and Liz Parer. This film has won major awards including the Grand Prize in Japan, the Eagle Award in USA and several sounds awards.

Kerry was employed as a field assistant (general dogsbody) for the production and found skills he never knew he had. As well as solving all sorts of technical and logistic problems Kerry was thrown in the deep end as a sound recordist. Some highly technical techniques involved waving a feather duster in front of the microphone. A skilled feather-duster waver could generate many different sound effects by judicious adjustment of speed and direction.

A behind-the-scenes video was made at the time of production. Kerry showed and discussed scenes from this including an interview with the composer of the background music. Words cannot do justice to the wonderful images captured in this production. It is well worth purchasing.

Early on Wednesday afternoon **Jenny and Peter Beasley** treated us to scenes from a frozen Churchill, Manitoba. They had planned a bird recording and photographic session but an unseasonable summer blizzard greatly thwarted their plans. Nevertheless they did capture delightful shots of some birds such as snow buntings and snow geese and provided us with a fascinating glimpse of the rigors faced by wildlife (and humans) under these conditions.

The rest of Wednesday afternoon was left free for participants to explore the park and pursue their various interests.

On Thursday morning we were treated to a mind-extending exposition by new member **Perdita Phillips** who has recently become interested in sound recording as a component of her art. Perdita and her work defy categorization. She is an artist with a Bachelor's degree in Environmental Science and a recent PhD from Edith Cowan University. Her media include sculpture, drawings and installation. Much of her work involves unusual representations of animals, humans and the natural environment which may help us, if we allow ourselves, to see the natural world afresh and not according to our often subconscious learned expectations. In words from her website:

*Perdy creates a world where everyday entities and events are brought out of their invisibility. She extends an invitation to immerse yourself in a richer reality overflowing with humour and wonder.*

The consequences of a general lack of empathy with the natural world were sadly illustrated in the next talk by **Fred van Gessel**. Fred showed images from his recent trip to South Korea where he saw first-hand problems associated with the world's largest reclamation project – the 'reclamation' of the mud-flats at Saemangeum. Fred was a participant in a project run by the Australian Wader Study Group to survey the waders of Saemangeum mudflats. Not only are the ecological costs catastrophic but the social costs are also significant with the most disadvantaged sections of society being the most affected. For example there were people whose only source of income was gathering and selling shell-fish. With the virtual extinction of shell-fish in the reclaimed flats, these people face extreme destitution.

Following Fred's talk, **Gayle Johnson** spoke about research she has been involved with at Griffith University in Brisbane. The project has been investigating changes in numbers and types of species of birds as a result of vegetation changes in parts of South-east Queensland. Data from on-going bird surveys in suburban, small forest fragments and larger forested areas are being compared with data gathered from the same sites in the early 1990s. There were some surprises, for example while there were increases in some introduced species there were also declines. Further, many native species increased in suburban sites. However the most alarming feature was the disappearance of small bush birds from all but the larger fragments and extensive tracts of forest.

The **AGM** was held on Thursday afternoon (refer page 19).

The concluding talk on Friday morning was on a lighter note. **Fred** showed sights and sounds from a recent trip to Iron Range in far north Queensland. This trip was in connection with a long-term bird-banding study. All the birds shown were beautiful; some, e.g. the magnificent riflebird, were stunning. A very interesting finding from the banding study was that resident birds (as distinct from migrants) moved no more than 1-2 km over the study period.

A feedback session concluded the proceedings.

### **Special Evening Activities**

On Tuesday several members participated in an **Astronomy Evening** facilitated by Michael Gallagher. The location was excellent for viewing some of the fainter objects in the sky such as the Jewel Box near the Southern Cross.

On Thursday evening, **June Boucher**, Quiz Mistress extraordinaire, organized us into teams and subjected us to a rigorous quiz. Quiz topics included ornithological questions (mandatory) and questions based on the history and geography of Gundabooka. Great fun was had by all and June was declared honorary Quiz Mistress for future workshops.

This location was somewhat difficult for some members to get to but the overwhelming opinion was that it was well worth the trip.

Thanks to the organizers who facilitated a most enjoyable workshop.

### **Gayle Johnson**

**Minutes of the 7th Annual General Meeting of  
The Australian Wildlife Sound Recording Group Inc  
Held at Belah, Gundabooka National Park, NSW  
on 10<sup>th</sup> September 2009**

The meeting opened at 13.30hrs.

**1. Present**

Fred van Gessel (President), Bill Rankin, Howard Plowright, Andrew Skeoch, Ed McNabb, Paul Jacobson, Michael Gallagher, Tony Baylis, Roger Boughton, Roger Charters, Jenny Beasley, Bob Tomkins, Perdita Phillips, Gayle Johnson, Neil Boucher, Kerry Watson.

**Apologies** Syd Curtis, Vicki Powys, Stuart Fairbairn, Bill Flentje, Joy Garlick, David Stewart, David Secomb, Ric Gleadell, David Burton, Brian Harrison, Peter Beasley, Ian Venables, Jill Plowright

**2. Minutes** of the 6th AGM, were published by email and available at the meeting.

Moved, They be accepted, proposed, Bob Tomkins, seconded, Michael Gallagher, carried.

**3. Reports**

All reports, President's, Treasurer's, AudioWings Journal Editor's and Sound Editor's, previously circulated by email and available at the AGM, were read in full.

Moved, The above reports be accepted, Proposed Roger Boughton, seconded Gayle Johnson, carried.

**Public Officer:** The statutory requirements have been fulfilled in relation to the Incorporation Act.

**4. Election of Officers** No recorded proxies. Howard Plowright in the Chair.

**President:** Fred van Gessel.

**Vice President:** W(Bill) Rankin.

**Secretary:** Howard Plowright.

**Treasurer:** Howard Plowright. .

**Journal editor:** Fred van Gessel.

**Sound (CD) editor:** Vicki Powys.

**Public Officer:** Bob Tomkin

**Committee:** Ed McNabb, Tony Baylis, Andrew Skeoch, Gayle Johnson.

Paul Jacobson re-nominated at the meeting.

Moved, There being no other nominations for the above positions all be duly elected.

Proposed Tony Baylis, seconded Roger Charters, carried.

**5. General business – The President in the Chair**

1. After wide discussion, Proposed that we maintain the status quo regarding copyright on members contributions to the circulating CD. Moved Ed McNabb. Amendment moved by Neil Boucher, that submissions can be nominated by contributors as being available for Group purposes as seen fit. Seconded, Bob Tomkins. The proposal and amendment carried.

2. That subscriptions remain at 2008 levels and insurance be maintained. Moved Roger Charters, seconded Paul Jacobson, carried. Tony Baylis dissented.

3. That the committee investigate sites in South Australia and Western Australia for the 2011 Workshop and report back to the 2010 AGM. Subsequent to this discussion it was moved that Cheryl Tipp, Sound Archivist, The British Library Sound Archive, be invited to attend the Workshop and give the Keynote address. Full board and accommodation to be provided but not travel expenses. Moved Howard Plowright, seconded Ed McNabb, carried.

4. Paul Jacobson reported on the website & noted the domain name is registered. Software allows great flexibility, membership renewal/reminders, sound, photographs, articles but greater authority needed to publish members contributions; ability to increase links to related sites e.g. Roger Boughton's Wildlife Sound Recording Society. Paul willing to continue developing the site. Moved the report be accepted, proposed Howard Plowright, seconded Ed McNabb, carried.

**6. Other business**

Michael Gallagher acknowledged the special contribution of Vicki Powys, Sound Editor, & all present supported his comments with acclamation. Fred van Gessel reported that Stuart Fairbairn had approached him regarding material to help newcomers. It was felt AudioWings, the Website and individuals offered considerable help.

There being no further business the meeting closed at 15.37 hours.

**Howard Plowright**



**Group photo of participants at workshop, Gundabooka, NSW**

From left to right : Neil Boucher, Dick Pike, Jane Boucher (rear) Anna Doneley (front), Kerry Watson, Gayle Johnson, Jill Plowright, Roger Chartes (rear), Howard Plowright (middle), Peter Beasley, Andrew Skeoch, Michael Gallagher, Jenny Beasley (front), Roger Boughton, Nicole Spillane, Bill Rankin, Fred van Gessel, Paul Jacobson, Perdita Phillips, Bob Tomkin.

Tony Baylis and Ed McNabb are missing from the photograph

## ***The Australian Wildlife Sound Recording Group Inc***

If you would like to join The Australian Wildlife Sound Recording Group: Send this coupon together with a cheque or overseas bank draft to the Secretary: Howard Plowright, 17 Chester St Surrey Hills, 3127 Victoria.

**The journal AudiWings and CD is produced twice yearly**

Renewal is due on the **1st January** each year. Membership includes 2 copies of the *AudioWings* Journal and CD per year.

**Australian membership is AS\$50.00 payable January . Overseas membership is AS\$60.00 per year.**

**Household (family) \$20.00/additional person. Student/scholar will receive a \$20.00 discount.**

(Household family members have full voting rights, but household only receives a single journal & Cd twice a year)

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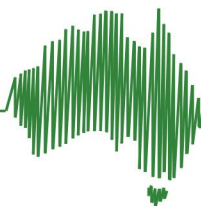
## Inside this issue

Editorial	Fred van Gessel	1
Ultrasonics in Bird Communication?	Phil Riddett	2 - 3
What is 'Acoustic Ecology'? Soundscape Studies and the Work of the <i>World Soundscape Project</i> (WSP) at a Glance.	Poppi Doser	4 - 6
Flying Foxes—A Reminiscence	Syd Curtis	6 - 7
Xeno-Canto: a 21st century way to appreciate bird song	Bob Planqué and Willem-Pier Vellinga	8 - 10
Xeno-Canto – some comments from a contributor	Vicki Powys	10 - 12
Bill Snapping in Fairy-Wrens	David Secomb	12 - 13
Frigatebirds and their Roost in Weipa, NEQld	Fred van Gessel	13 - 14
Bill Flentje - Honorary Life Member	Howard Plowright	15
Australian Sound Recording Group Workshop At Gundabooka, NSW - September 6-11, 2009	Gayle Johnson	16 - 18
Minutes of the 7th Annual General Meeting of The Australian Wildlife Sound Recording Group Inc.	Howard Plowright	19
Group Photo— Gundabooka Workshop	Roger Charters	20

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