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Contents

Birding Events on the Web.....	2
IBAs under threat.....	2
New BARC Checklist.....	2
Count Penguins in Your Spare Time.....	2
ABSA Grant Applications.....	2
Anomalies in Victoria.....	2
Drone v. Hawk.....	2
Hummingbird.....	3
US Data on Wind-Turbine Deaths.....	3
Koels Again!.....	3
Rawnsley's Bowerbird.....	3
Wing Tucks.....	3
Sound Localisation in Birds.....	4
Penguin Genomes Reveal Secrets.....	4
Is Human Food Good for Gulls?.....	4

Editorial

Members by now will be receiving their hard copy of the 2014 Corella. This is the final piece of our revised publishing schedule, where all Corellas are published on the website, available only to members, and the year's output is collected together and published as one volume in December.

Only paid up members will have access to Corella on-line, so please attend to your renewal for 2015.

The hard copy of Corella will be available to buy at a price \$10 more than a subscription.

Included in this newsletter is the contents list for the December edition, and this will continue with each edition, allowing members to decide what and when they read out of the on-line Corella. There is also a preview of the March 2015 Corella contents.

We continue our search for a permanent person to take on the management of the Association's Mist Net Service. Please give the President a bell if you think you could take on this job for the Association.

AGM 2015

You will find formal notice of and details of the AGM and Scientific Day for 2015 as an enclosure with your hard copy of Corella.

Newsletter 117 December 2014 ISSN 2202-297X (Online)

New ABSA Website

The new ABSA website has been launched in the last few days. Once again, we have to ask people to log on using the details sent to you by email, and then change your password. If you have not received an email about this in the last few days, please contact us on <info@absa.asn.au> to get further instructions.

The site has been professionally designed, and will be easier to use than the current site, which was put together by yours truly at a time when we could not afford a professional design. Thankfully things have changed.

The site comes with a few new capabilities, including a forum for discussion of bird issues. We hope you will join in and make this a lively exchange of ideas.

There may be a short period when not all the content of the previous website has been transferred, but we will retain links to the old site for those things until it has all gone across.

Ed.

Corella Vol. 38, No 4 - Contents

Diet of 25 sympatric raptors at Kapalga, Northern Territory, Australia 1979–89, with data on prey availability.
L. Corbett, T. Hertog and J. Estbergs 81

Breeding ecology of Welcome Swallows *Hirundo neoxena* in the Yarra Valley, Victoria: the nestling stage.
A. Lill 95

The utility of closed aluminium and butt-ended stainless steel leg bands for Australian Pelicans *Pelecanus conspicillatus*.
M. H. Waterman, C. E. Manning, G. R. Johnston and O. Fuller 104

Book Review:

Finding Australian Birds: A Field Guide to Birding Locations, by Kurtis Lindsay 107

Recovery Roundup 108

Birding Events on the web

The Ausbird website <www.ausbird.com.au> is starting an events page, and welcomes contributions and visitors. There is a small charge for commercial events, but no cost for non-profits.

IBAs classified as under “Very High Threat” in recent Birdlife Australia Report.

Billiatt SA	Mallee Emu-wren
*Boodjamulla Qld	Carpentarian Grasswren
Flinders Ranges SA	Short-tailed Grasswren
Gammon Ranges & Arkaroola SA	Short-tailed Grasswren
Gawler Ranges SA	Short-tailed Grasswren
Little Desert Vic	Malleefowl
*Lower Hunter Valley NSW	Regent Honeyeater
*Murray-Sunset, Hattah & Annuello Vic.	Mallee Emu-wren
*Norfolk Island	Norfolk Island Green Parrot
Patho Plains Vic	Plains-wanderer
*Riverina Plains NSW	Plains-wanderer
Wandown Vic	Malleefowl
Watervalley Wetlands SA	Sharp-tailed Sandpiper
Wyperfeld, Big Desert & Ngarkat Vic. & SA	Mallee Emu-wren

Of these, five are considered to be “in danger”. These are marked with an asterisk. The key species threatened is also indicated for each IBA. <<http://birdlife.org.au/media/ibas-in-danger>>

New BirdlifeAustralia Rarities Committee (BARC) Checklist of Australian Birds

Courtesy of David James on Birding Aus:
A new version of the BARC Australian Checklist v2014Jul is now available on the BARC website:
<http://www.tonypalliser.com/barc/barc-home.html>

Like previous versions, this checklist is intended to follow the IOC World Bird Names checklist to the letter, in terms of species taxonomy, scientific and English names, spelling and sequence. As with previous versions, subspecies are not included. There are no intended deviations from the IOC list (other than abbreviating it to species and Australia) and there are no novel taxonomic opinions expressed by BARC in that regard. This upgrade includes changes to the IOC list up to 15 April 2014.

Want to Help Count Penguins?

The Australian Antarctic Division has started a citizen science project where volunteers count penguins in images taken by remote cameras. Details of the project, Penguin Watch, can be found at <http://www.antarctica.gov.au/news/2014/wanted-volunteers-to-count-antarctic-penguins>
Or you can get straight into it at:
<<http://www.penguinwatch.org>>

FAR Grants - Call for Applications

The Australian Bird Study Association Inc. operates a fund to provide financial assistance to ornithological researchers, both amateur and professional. This fund, known as the ABSA Fund for Avian Research (FAR), comprises a special deposit account that was established from donations made to the Association to support research on Australian native birds.

The total amount available for grants in any year is limited to the interest earned on the FAR account over the preceding year. The total value of annual grants will not normally exceed \$2,000 and is intended to provide researchers with assistance in the acquisition of research equipment and/or travel within Australia.

In awarding grants, the management Committee of the Australian Bird Study Association will assess:

- a) the quality of the project
- b) the applicant's ability to carry it out
- c) a realistic costing and timetable
- d) the likelihood that successful completion of the research will lead to publication of the results.

Applicants should be members of the Association. All other things being equal, preference in grant applications will be given to members. Individual grants will not normally exceed \$2,000 for members and \$1,000 for non-members.

Grantees are required to make a report to the ABSA no later than January of the year following the bestowing of the grant. This report should outline the results achieved in the project and the acquittal of grant funds. Any funds not utilised in meeting the expenditure proposed in the FAR Grant Application should be repaid by the grantee at the time of making the above report.

Any publication arising from work supported by the ABSA FAR should include an acknowledgement to that effect.

Applications must be typed in the format of the FAR Grant Application form which is available on the ABSA website. Applicants should email their signed applications to: info@absa.asn.au

The deadline for lodgement of applications will be 31st January each year. All applications will be considered and assessed at a meeting of the Committee in February. Applications may be granted in-full, in-part, or be rejected. Applicants will be notified in writing of the success or otherwise of their application. The Committee's decision is final and no correspondence will be entered into.

Anomalies

It was reported that Crikey website noted that it costs Victorian banders \$505 for ethics approval for a banding activity, but only \$158.70 for a duck hunting licence. Mmmmm!!

(If anyone can confirm these figures, we'd love to get the details. *Ed*)

Drone V. Hawk

From Carl Clifford: The use of drones for various pursuits is becoming more and more common. There are hazards though:

<http://www.theguardian.com/world/video/2014/oct/10/hawk-attacks-drone-video>

Hummingbird

If anybody doubts the flying ability of a hummingbird, have a look at this clip of a hummer playing in a fountain:

<<http://www.wimp.com/hummingbirdfountain>>

US Data on Wind Turbine Deaths

A Comprehensive Analysis of Small-Passerine Fatalities from Collision with Turbines at Wind Energy Facilities

W. P. Erickson et al. Published: September 15, 2014

DOI: 10.1371/journal.pone.0107491

Abstract:

Small passerines, sometimes referred to as perching birds or songbirds, are the most abundant bird group in the United States (US) and Canada, and the most common among bird fatalities caused by collision with turbines at wind energy facilities. We used data compiled from 116 studies conducted in the US and Canada to estimate the annual rate of small-bird fatalities. It was necessary for us to calculate estimates of small-bird fatality rates from reported all-bird rates for 30% of studies. The remaining 70% of studies provided data on small-bird fatalities. We then adjusted estimates to account for detection bias and loss of carcasses from scavenging. These studies represented about 15% of current operating capacity (megawatts [MW]) for all wind energy facilities in the US and Canada and provided information on 4,975 bird fatalities, of which we estimated 62.5% were small passerines comprising 156 species. For all wind energy facilities currently in operation, we estimated that about 134,000 to 230,000 small-passerine fatalities from collision with wind turbines occur annually, or 2.10 to 3.35 small birds/MW of installed capacity. When adjusted for species composition, this indicates that about 368,000 fatalities for all bird species are caused annually by collisions with wind turbines. Other human-related sources of bird deaths, (e.g., communication towers, buildings [including windows]), and domestic cats) have been estimated to kill millions to billions of birds each year. Compared to continent-wide population estimates, the cumulative mortality rate per year by species was highest for black-throated blue warbler and tree swallow; 0.043% of the entire population of each species was estimated to annually suffer mortality from collisions with turbines. For the eighteen species with the next highest values, this estimate ranged from 0.008% to 0.038%, much lower than rates attributed to collisions with communication towers (1.2%-9.0% for top twenty species).

Koels again!

For those who don't know, I'm a PhD student from ANU studying hosts of the Pacific Koel. One of these hosts is the Noisy Friarbird. I was wondering if anyone knows of good places to find friarbird nests around the western Sydney area? So far I've found pairs at Blue Hills Wetlands, John Whitton Memorial Place off the Great Western Highway, and Scheyville and Cattai National Parks. I've also visited Castlereagh Reserve where they have been reported, but I only found Olive-backed Orioles on my last visit.

Any suggestions or advice are much appreciated

Virginia Abernathy <virginia.abernathy@anu.edu.au>

Rawnsley's Bowerbird

Reported by Lloyd Nielson on Birding Aus:

My attention has been brought to an interesting photo on Facebook - I think it was posted on Saturday (11th October). Apparently it has been taken in the vicinity of Coffs Harbour.

If this is genuine which it appears to be, it will be probably only be the third time a bird such as this has been recorded. The original bird was collected near Brisbane on 14 July, 1867 by Henry Rawnsley. A second bird was seen and photographed at Beachmont (near Binna Burra) south of Brisbane during 2003 & 2004. So if this is from Coffs Harbour, it makes it all the more interesting. Cliff Frith and Daniel Blunt have a good article in Australian Field Ornithology - 22:2:53 on Rawnsley's Bowerbird

It is presumed that Rawnsley's Bowerbird is a hybrid between Satin and Regent which has to be the case. However, it is interesting that all three birds seem to be similarly marked with yellow generally confined to the primaries.

The link is -

<https://www.facebook.com/photo.php?fbid=833465676685002&set=o.173561852669263&type=1&permPage=1>

Wing Tucks

Reynolds KV, et al. 2014. Wing tucks are a response to atmospheric turbulence in the soaring flight of the steppe eagle *Aquila nipalensis* J. R. Soc. Interface 11: 20140645. <<http://dx.doi.org/10.1098/rsif.2014.0645>>

Abstract:

Turbulent atmospheric conditions represent a challenge to stable flight in soaring birds, which are often seen to drop their wings in a transient motion that we call a tuck. Here, we investigate the mechanics, occurrence and causation of wing tucking in a captive steppe eagle *Aquila nipalensis*, using ground-based video and onboard inertial instrumentation. Statistical analysis of 2594 tucks, identified automatically from 45 flights, reveals that wing tucks occur more frequently under conditions of higher atmospheric turbulence. Furthermore, wing tucks are usually preceded by transient increases in air-speed, load factor and pitch rate, consistent with the bird encountering a headwind gust. The tuck itself immediately follows a rapid drop in angle of attack, caused by a downdraft or nose-down pitch motion, which produces a rapid drop in load factor. Positive aerodynamic loading acts to elevate the wings, and the resulting aerodynamic moment must therefore be balanced in soaring by an opposing musculoskeletal moment. Wing tucking presumably occurs when the reduction in the aerodynamic moment caused by a drop in load factor is not met by an equivalent reduction in the applied musculoskeletal moment. We conclude that wing tucks represent a gust response precipitated by a transient drop in aerodynamic loading.

Preview: Vol. 39 No. 1 March 2015

Papers

A comparative evaluation of transect, point count and two hectare search methods for bird abundance estimates in dry sclerophyll forest and rainforest. S.L. Totterman

The movement and survival of Star Finches *Neochmia ruficauda subclarescens* in the Wyndham Region of Western Australia. J. Lewis and J. Leyrer

Nightly and seasonal patterns of Barking Owl *Ninox connivens* loud calls at one site in Kakadu National Park, Northern Territory, Australia: 1981–82 L. Corbett

Banding Project Report, No. 3:

New Chums Road, Brindabella Ranges, Australian Capital Territory. A. Drew, M. Davies, J. Stol and J. Harsdorf

Book Review:

Australian High Country Raptors G. Clancy

Recovery Round-up.

Penguin Genomes Reveal Secrets

Two Antarctic penguin genomes reveal insights into their evolutionary history and molecular changes related to the Antarctic environment.

Cai Li *et al. GigaScience* 2014, 3:27 doi:

10.1186/2047-217X-3-27

Abstract:

Background: Penguins are flightless aquatic birds widely distributed in the Southern Hemisphere. The distinctive morphological and physiological features of penguins allow them to live an aquatic life, and some of them have successfully adapted to the hostile environments in Antarctica. To study the phylogenetic and population history of penguins and the molecular basis of their adaptations to Antarctica, we sequenced the genomes of the two Antarctic dwelling penguin species, the Adélie penguin *Pygoscelis adeliae* and emperor penguin *Aptenodytes forsteri*.

Results: Phylogenetic dating suggests that early penguins arose ~60 million years ago, coinciding with a period of global warming. Analysis of effective population sizes reveals that the two penguin species experienced population expansions from ~1 million years ago to ~100 thousand years ago, but responded differently to the climatic cooling of the last glacial period. Comparative genomic analyses with other available avian genomes identified molecular changes in genes related to epidermal structure, phototransduction, lipid metabolism, and forelimb morphology.

Conclusions: Our sequencing and initial analyses of the first two penguin genomes provide insights into the timing of penguin origin, fluctuations in effective population sizes of the two penguin species over the past 10 million years, and the potential associations between these biological patterns and global climate change. The molecular changes compared with other avian genomes reflect both shared and diverse adaptations of the two penguin species to the Antarctic environment.

Is Human Food Good for Gulls?

Auman, HJ (2008) The Effects of Anthropogenic Food on the Body Condition, Biochemistry, Stable Isotopes and Egg Quality of Silver Gulls in Tasmania. PhD thesis, University of Tasmania.

<<http://eprints.utas.edu.au/7955/1/01front.pdf>>

Abstract:

Many studies worldwide have attested to an increase in gull populations following urbanisation, and it is widely presumed that gulls have benefited as a direct consequence. However, foraging at tips and food outlets may induce a health cost in urbanised birds and the benefits of eating anthropogenic food should be questioned; the physiological health effects of "garbivory" on wild birds are yet to be tested. This study was based on the premise that a negative effect on the health and hence fitness of gulls was expected from eating the equivalent of human "junk food". This research investigated the potential adverse effects of an anthropogenic diet on the health of Silver Gulls (*Larus novaehollandiae*) by comparing birds breeding at a remote, non-urbanised site (Furneaux Island Group, Bass Strait) with those at an urbanised (Hobart) colony in Tasmania, Australia. A variety of approaches were used to assess the health of this species to gain a more comprehensive evaluation. Mass and body condition (measured by an index), stable isotopes in whole blood ($^{13}\text{C}/^{12}\text{C}$ and $^{15}\text{N}/^{14}\text{N}$), blood biochemistry (HDL- and total cholesterol, triglycerides, glucose, calcium, sodium, potassium and corticosterone), and egg quality (physical measurements and mass, absolute and proportional chemistries, shell thickness, yolk colour and historic comparisons) were compared between the two gull populations. Urbanised gulls were heavier and had greater body condition than structurally identical non-urbanised gulls. Analyses of stable isotopes in whole blood suggested that remote, non-urbanised gulls tended to eat from a more marine origin, while urbanised gulls fed from a different food web and from a more freshwater/terrestrial origin. Assessment of regurgitations suggested that although specific dietary items were generally either human-derived or natural, some overlap existed between sites. The urbanised gulls had higher levels of HDL-cholesterol in their blood. Clutch sizes did not differ, but eggs from the Furneaux Island Group were larger, heavier and had greater yolk mass than those from Hobart, as well as greater carotenoid concentrations in the yolk. Although urbanised Silver Gulls were apparently successful in laying eggs, poorer reproductive success may have resulted from smaller, lighter eggs that contain proportionally less yolk reserves. Overall, the Silver Gull provided a very good model to study the effects of urbanisation on a native species and numerous opportunities exist to focus future research in this area.