

The Wallace Line According To Morten

It's always an exciting adventure to hear from former *Nature Watch* editor, Morten Strange! He made a recent trip to the Indonesian island of Lombok with his family members and some close friends, sailing across from Bali and retracing the steps that Alfred Russel Wallace had taken back in 1856. Among the highlights, Morten offers us yet another interesting point of view on the Wallace Line in his contemporary update that completes our 2013 round of Centenary tributes to the great British naturalist.

Text by **Morten Strange**

The Wallace Line as 'seen' above from approximately 2,500m near the Gunung Rinjani crater rim on Lombok. Notice the three Gili islands in the near distance and the volcano Gunung Agung some further 70 km away on Bali.
Photo: Morten Strange

The great contrast
between the two divisions
of the Archipelago
is nowhere so abruptly exhibited
as on passing from the island of Bali
to that of Lombok,
where the two regions
are in closest proximity.



A.R. Wallace in his classic,
The Malay Archipelago.

After returning to England from his sojourn in Malaysia, Singapore and Indonesia (1854-1862), it took Wallace quite a while to edit and compile the huge mass of field materials he had collected for his book. Upon publication some years later, it was an overnight success and secured Wallace a steady income lasting a long time. The classic has been in print ever since – it is still a great read even if you are not a die-hard naturalist. Wallace's work is full of honest insight and amazing accounts of an era and a way of life long gone.

Many people continue to pay tribute to the great British naturalist on his Centenary (2013), although the *National Geographic* feature on him in their December 2008 issue is somewhat symptomatic of his status: "The Man Who Wasn't Darwin". Maybe not exactly the legacy one would want to be remembered by as someone who was not someone else!

Around this region, however, there is great recognition of Wallace's immense contributions to natural history – surely not least because of the imaginary line he described that was subsequently given his name. The concept was covered in *Nature Watch* 21(1), so I will not go into the details here. In

that issue, you can find a useful list of websites with lots of information about Wallace and his achievements.

The Wallace Line runs between Borneo and Sulawesi, and further south, at another point between Bali and Lombok. In his time (please see the opening quote), Wallace reflected on the startling contrast between the two 'zoo-geographic' subregions that we now routinely call the Sunda Subregion (to the west) and Wallacea (to the east). Wallace described in detail how this gradual transition between Oriental regional and Australasian regional fauna became abruptly distinct between Bali and Lombok islands. Landing on Lombok after a two-day transfer from Bali in June 1856, Wallace wrote that "small white cockatoos were abundant ... some small honey-suckers ... and

the strange mound-maker *Megapodius* ... are also here first met with on the traveller's journey eastwards."

Today that journey doesn't take two days; it takes only about two hours! I was invited across by Bridget Hedderman (featured in *Nature Watch* 17(2)) of Ecofieldtrips fame. Sometime in June this year, I, Bee Choo and our son Mark (who is ten) decided to make a trip there. Together with marine biologist Helen Newman and two of Bridget's biology teachers, we retraced Wallace's footsteps to prepare such a trip for a group of students that Bridget was planning to host later in 2013. The field trip would show these students the ecology of Bali and the said 'Wallacean' transformation on Lombok.

So does the Wallace Line 'work' today? Can you still sense the startling



The Yellow-crested Cockatoo *Cacatua sulphurea* that Wallace found abundant on Lombok is now locally extinct. Nick Baker took this recent photo further east, on Flores. Photo: Nick Baker



Of the birds Wallace singled out as typical denizens of what we now call the Wallacea subregion, Indonesian Honeyeater *Lichmera limbata* is still numerous and easy to find on Lombok, especially in the montane forest. Photo: Filip Verbelen.

change of birdlife that especially struck Wallace? If I have to be honest ... no, not really! All those Yellow-crested Cockatoos that Wallace found in abundance were then described as "not rare" by an observer in 1927, as "relatively scarce" by someone else in 1972, and now seem to have completely disappeared from Lombok. The bird was last seen in 2001 (Myers & Bishop, 2005). Today this Indonesian endemic is scarce throughout Wallacea and critically endangered with a real threat of global extinction. The *Megapodius* that Wallace discovered nesting throughout Lombok (currently named Orange-footed Scrubfowl *M. reinwardti*) has not been recorded on the island since 1896 (Myers & Bishop, 2005). Out of the distinct Lombok birds Wallace singled out, his "small honey-suckers" still occur (we presently call them "honeyeaters"). Wallace found three species



Wallace found the Orange-footed Scrubfowl *Megapodius reinwardti* breeding all over Lombok, but it hasn't been sighted there since 1896. Photo: James Eaton.

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The beautiful estate that Bridget Hedderman and Helen Newman have set up near Sanur on Bali to host their Ecofieldtrips' students. Photo: Morten Strange

and they all survive on Lombok. We missed the Helmeted Friarbird during this visit, but it is a regular sighting at other times. We however saw a few Sunda Honeyeaters in flowering trees and the most remarkable must be the Indonesian Honeyeater. The species is treated as an Indonesian endemic today (Strange, 2012). From the moment we landed on the small resort-island Gili Air near Lombok and all the way till we camped at 2,600m on the Gunung Rinjani crater rim – this bird followed us. Occurring in astonishing densities at around 1,000-2,000m, you will hear and see this highly numerous bird on Lombok just about everywhere in the forest. For the record – it is also the only member of the Meliphagidae family to cross the Wallace Line west into Bali, where birders have recorded the species around interior wooded areas such as the Bali Botanical Gardens in the Bedugul Highlands.

Lombok does have, nevertheless, a number of good resident birds that you cannot find on Bali. We recorded the Metallic Pigeon, Flores Hawk-eagle, Chestnut-backed Thrush as well as heard the calls of Elegant Pitta and White-rumped Kingfisher, but missed Red-cheeked Parrot and two Indonesian endemics, Red-chested Flowerpecker and Five-coloured Munia seen recently by others.

I guess we did not really spend enough time on the island. Our little group hiked up to the crater rim on Gunung Rinjani, except for Bee Choo who stayed near the trail-head in Senaru to take care of Mark. (The hike up from 600-2,600m is a bit much for a 10-year-old.) That apart, I have to say the trek is somewhat touristy for my taste - there were some hundred other people comprising tourists, guides and porters on the narrow trail both days during the walk up and down. Our small group walked business class! The porters we hired even had the movie-director type of deck-chairs for us and cooked elaborate, hot meals at lunch and dinner. I wondered if I would ever get used to pitching my own tent again! My serious concern was



Right: While the main group hiked up Gunung Rinjani, Mark and Bee Choo visited this waterfall near Senaru. Photo: Ng Bee Choo



At the small resort island Gili Air near Lombok, we transferred from the public ferry to a smaller speedboat that took us the rest of the way across the waters. Photo: Morten Strange



Our accommodation in Senaru near the entry into Gunung Rinjani National Park with the forest and the volcano on the left. Photo: Ng Bee Choo



The camp site along the Rinjani crater rim. I was relieved the guy who stayed in the little green tent on the left didn't sleep-walk at night! Photo: Morten Strange

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Gunung Rinjani is an active volcano erupting as recently as 2010. The huge crater was formed in 1258 when its earth-shattering eruption probably caused a sudden cooling of the entire planet. The central vent cone, seen as an island on the crater lake, has been gradually building up since 1847. Photo: Morten Strange



Woodswallows are a small family of mainly Australasian birds. We found the White-breasted Woodswallow *Artamus leucorhynchus* on both Bali island and Senggigi along the Lombok coast. Photo: Mark Wen Strange

the general lack of toilet facilities around the crater rim camp site ... you really had to watch where you stepped in that area, if you know what I mean.

Even when Wallace visited Lombok and the rest of what is now eastern Indonesia, he hardly considered himself a pioneer. He remarked that Europeans as well as other people had long travelled and settled in these parts some 300 years before him. Especially much of the land along the coastline had come under increasingly intense agricultural development and social movement since the early 19th century. The monkeys, the deer, the Yellow-vented Bulbuls and many plants, even butterflies, you find today on Lombok do not really belong there. Such human-ecological trafficking over time has blurred the Wallace Line effect.

Back on Bali, we bird-watched around the beautiful estate that Bridget and Helen have built up near the beach north of Sanur. Our group managed to add a new species to the Bali bird list – one Common Myna who was no doubt an escapee! Sturnids, otherwise, are hard to come by in Indonesia. We just had two Javan Mynas near Bridget's place and two Asian Glossy Starlings in Ubud – that was it. The only Asian Pied Starling I saw was in a cage, as was the only Magpie Robin. That was the first

time I missed this common garden bird on a Bali visit! Setting off from Sanur, we drove up one day to the Ubud area to recce an eco-walk for the coming students' trip. The terrain was picturesque – an interesting cave had bats and lizards in it, but the birdwatching was excruciatingly slow. The last time I did a Bali trip was in 1998. Comparing then and now, I saw a lot more people this time, a lot more buildings, a lot more

cars and trucks on the roads, but, alas, fewer birds. It is the same these days for most of the places I return to!

During those seven days on Bali and three on Lombok, despite our efforts, we recorded just 77 bird species: 44 on Bali only, 21 on Lombok only and 22 on both Bali and Lombok.

Shades of disappointment aside, we also had moments of sheer magic, such as that one morning waking up on



We did the hike up Gunung Rinjani on business class. Notice the deck chairs that the poor porters had to carry so that we could sit down properly to lunch! Photo: Morten Strange



I couldn't leave Bali without looking up my old buddy, Victor Mason. We finally tracked him down at one of his favorite haunts in Ubud. I helped Victor by providing landscape photographs for his excellent *Birds of Bali* (1989), a book so delicately illustrated by the late Frank Jarvis. Photo: Ng Bee Choo



Bali has just one endemic vertebrate animal, which is the famous Bali Myna. This year (2013) Lombok gets the confirmation for its one and only endemic bird – Rinjani Scops-Owl *Otus jolandae*, a subspecies split from the more widespread Moluccan Scops-Owl *O. magicus*. The owl is reported to be locally common in the Gunung Rinjani National Park – our group couldn't find it however! Filip Verbelen snapped this photo in 2008 and contributed it to a decisive research paper on the subject. Photo: Filip Verbelen

the Gunung Rinjani crater rim and visualizing the Wallace Line from 2,500m above sea-level. The lowlands far below us looked nicely laid and serene. The Gili islands between Lombok and Bali were clearly visible, and so, too, the towering volcano Gunung Agung in the distance some 70km away, sitting on Bali. What a stunning landscape.

On the way back from Lombok to Bali, Mark and I got to sit on the roof of the speed ferry during the crossing. Just as we were crossing the Wallace Line at possibly the deepest point of the Strait, dolphins appeared. They ought to be Spinner Dolphins *Stenella longirostris*. First we saw two or three, then 10 to 12, and soon they were everywhere, speeding along with us. One jumped high out of the water right next to the ferry. As far as my eyes could see, they might have numbered in the hundreds swimming out there and beyond. I didn't take any photos nor use the binoculars. Mark and I simply took in this amazing sight of an ocean alive with these beautiful mammals. I was reminded of what the jazz musician Louis Armstrong once said: "It's a wonderful world ... if only we'd give it a chance." 🌿

REFERENCES

- Mason, V. & Jarvis, F. (1989). *Birds of Bali*. Periplus Editions, Singapore.
- Myers, S.D. & K.D. Bishop (2005). A review of historic and recent bird records from Lombok, Indonesia. *Forktail*, 21: 147-160.
- Strange, M. (2012). *A Photographic Guide to the Birds of Indonesia*. 2nd Edition. Periplus Editions, Hong Kong.
- Wallace, A.R. (1983). *The Malay Archipelago* (first published 1869). Graham Brash, Singapore.



Morten Strange has been a member of MNS/NSS since 1984 and is the former editor of Nature Watch. Check out his list of publications at http://en.wikipedia.org/wiki/Morten_Strange