

## PIONEER OF ASIAN ORNITHOLOGY

## Gerd Heinrich

N. J. COLLAR

There is a passage in a paper by J. H. Riley (1924) to which Pam Rasmussen drew my attention years ago, and which I suspect unlocked not only one man's career but also the ornithological secrets of the high mountains of that most intriguing of islands, Sulawesi. Riley, accounting for H. C. Raven's collection of birds from the island, was reflecting on the impact of the splendid two-volume *Birds of Celebes* (Meyer & Wigglesworth 1898):

Since the publication of Meyer and Wigglesworth's great work... naturalists seem to have conceived the idea that Celebes [Sulawesi] was well-worked so far as birds are concerned, thus instead of stimulating research, Meyer and Wigglesworth's work would seem to have discouraged it.

Did Erwin Stresemann, one of the brightest and longest-shining beacons of ornithology in the

**Plate 1.** Gerd Heinrich emerging from a sago swamp on Halmahera with a specimen of Drummer Rail *Habroptila wallacii* in 1931. Reproduced with permission from *The snoring bird*.



twentieth century, read this passage one day and decide to act on it, despatching Gerd Heinrich to the island for 18 or more months at the start of the 1930s? Heinrich's endeavours certainly brought extraordinary rewards—the triumphant rediscoveries of the Snoring Rail *Aramidopsis plateni* and Drummer Rail *Habroptila wallacii* (Plate 1) on top of six new species of bird, two of them in their own genus (Plates 2–4). Ironically enough, however, his achievements simply replicated the Meyer & Wigglesworth illusion: everyone seemed to believe that Heinrich had cleaned up, so that, setting aside some important work documenting the contents of Sulawesi's protected areas, no further pioneering exploratory work on the island's avifauna has ever taken place. That there are still new species to be found in Sulawesi we have known for ten years now from the pages of *Forktail*—see King *et al.* (1999)—but it is astonishing that almost 80 years have passed since Heinrich left for Sulawesi, and he remains the one and only man in that period, and indeed in the entirety of the twentieth century, to have taken on the challenge of travelling deep into unknown areas of the island in search of birds. One has to ask: if not for the exertions of Gerd Heinrich, how many of those six species would still remain undiscovered? And one also has to ask: who was this remarkable man (whom ornithologists otherwise also know from, in particular, his work on Mount Victoria in Burma and his time in the 1950s in Angola), and how did he manage to achieve all he did in those months he spent in Sulawesi?

The answers now come to us in a book published in 2007 by his more famous son, Bernd Heinrich. *The snoring bird: my family's journey through a century of biology* is not a conventional biography, for the first main subject, Gerd, fades steadily from the picture once Bernd himself is old enough to begin the memoir of his own remarkable career; yet it is a vivid, gripping account of the life of a young explorer-naturalist in the first half of the last century. It turns out that Gerd, though gifted, energetic, dedicated and intrepid, was a complex, difficult man, and to his credit (and evidently still somewhere deeply smarting from his own experiences) Bernd does not try to shield the reader from this truth about his father. For all that, it is impossible not to be beguiled by the story, and it is then a quick, natural step to find oneself in deep sympathy with the story's first subject.



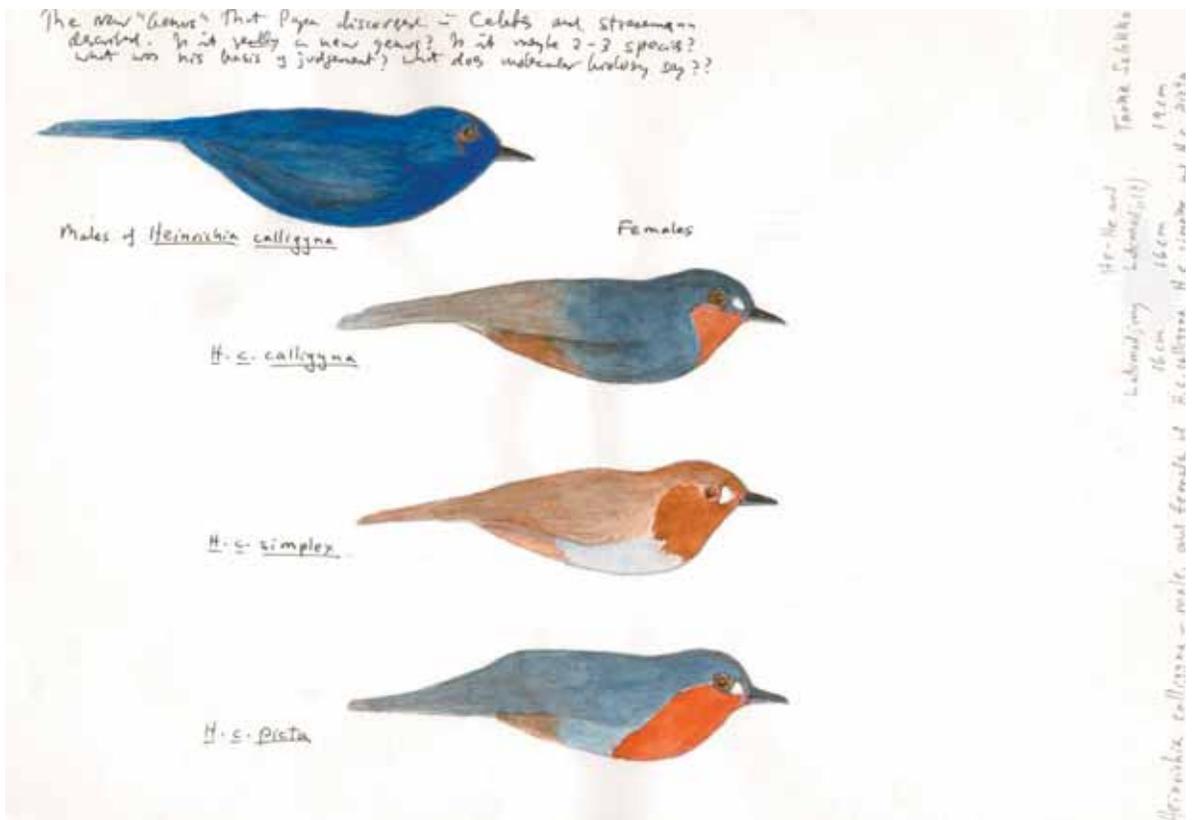
**Plate 2.** One of Heinrich's two new genera on Sulawesi: *Geomalia heinrichi*, Lore Lindu National Park, Sulawesi, Indonesia, September 2005.

**Plate 3.** The other of Heinrich's two new genera (and possibly three new species) on Sulawesi: Great Shortwing *Heinrichia calligyna*: females of nominate *calligyna* (left), *simplex* (middle) and *picta* (right) in the American Museum of Natural History, New York.



Gerd's life, at least until he drifts out of the book's focus after 1950, was full of lucky coincidences, hair-breadth 'scapes and last-gasp achievements. Indeed, the story itself can only properly be told because of the extraordinary chance that a fan of Bernd's book *Ravens in winter* happened to work in a Berlin library where Stresemann's correspondence is stored, a revelation which in due course yielded 1,500 photocopied pages of Gerd's correspondence with his mentor, friend and long-term supporter. And it was another fan of Bernd, reading an article about his work on ravens in a dentist's waiting-room, and suspecting a link to Gerd, who sent him an aunt's wonderful unpublished account of the farm where Gerd had grown up, complete with a description of the young man's antics, doing cossack dances to entertain the children and handstands on the fully laid breakfast table by way of greeting guests in the morning.

The farm, 1,344 ha in extent, was at Borowke, midway between Poznan and Gdansk, 200 km east of Berlin in what was then Prussia and is now Poland. Gerd, born in Berlin on 7 November 1896—four days before another, more familiar pioneer of Asian ornithology, Sálím Ali—was heir to the estate. He grew up speaking both German and Polish, and at school became fluent in Latin, but natural history was always his love, especially insects. He was 15



**Plate 4.** Colour sketches by Bernd Heinrich of male (top) and female Great Shortwings *Heinrichia calligyna* in the Zoological Museum, Berlin.

when he approached a curator at the Berlin Natural History Museum and asked which was the least known group of insects he could study. The answer, Hymenoptera, set him on his course to become one of the world’s greatest experts on ichneumon wasps.

In August 1914, aged just 17, he enlisted in the German army and by the end of the month was fighting on the eastern front as a cavalryman, equipped with sword, lance and carbine. Victories over the Russians took him ever deeper eastwards and brought him, before he was 20, the Iron Cross for bravery and the order to oversee the execution of two Russian patriots by firing squad. Soon afterwards, distraught that a girlfriend would not marry him, he applied to join the newly established Luftwaffe. Being teetotal, he teamed up with a fellow non-drinker who would be lookout to his pilot in their Junker “flying coffin”. He was the only man in his unit, though shot down twice, never to be wounded. By the spring of 1918 he was a squadron leader in France, and was selected by a higher-ranking officer to fly him on a “mission impossible”, which, however, they managed to survive. In World War II, this same officer, never having forgotten Heinrich’s courage and skill on that mission, saved his life, paradoxically by enlisting him into the German forces again, when

he heard that Poles, even ethnic German ones like Heinrich, were being summarily shot by the Nazis as they took over all the farms in western Poland.

With the creation of Poland after 1918, Heinrich became a Polish citizen, went back to Borowke and in 1924 married Annaliese Machatchek, daughter of a local lumber merchant. They spent the next spring collecting birds’ eggs and ichneumons in the Danube Delta (where their daughter Ulla was conceived), and Heinrich left a copy of his bird observations from the trip with the director of the Berlin Zoo, Lutz Heck, when petitioning Heck for a commission to collect animals. Heck forwarded the manuscript to Stresemann, who immediately got in touch with Heinrich, asking if he could publish it in *Journal für Ornithologie*. A life-long friendship was born.

Heck and Stresemann combined to give the 30-year-old Heinrich his first break as a professional explorer-naturalist, sending him to what is now Iran. Stresemann wanted in particular to determine whether the Syrian Woodpecker *Dendrocopos syriacus* was a species or subspecies of Great Spotted *D. major*, while Heck wanted a live specimen of the rare leopard *Panthera pardus tulliana*. For months Heinrich sought both in vain, scouring the Elburz Mountains and the Caspian coast before going down with a dose of malaria so

bad that he made arrangements for his own funeral (although from his sickbed he managed to negotiate the purchase of a leopard from a Persian army officer). But another small cluster of those lucky breaks combined to save him: (1) after Annaliese cabled the German Embassy in Tehran, a passing businessman who had been a patient of his doctor father, hearing the name Heinrich and presuming the person to be the son, underwrote the cost of a plane to fetch him; (2) the embassy doctor had just received his first consignment of plasmoquin, newly developed as an improvement on quinine; and (3) from his hospital bed as he recovered in Tehran Heinrich saw (and shot!) a specimen of Syrian Woodpecker, the last bird that he collected on the entire expedition—establishing a pattern that was to repeat itself in Sulawesi.

Back from Persia, Heinrich began an affair with Annaliese's 16-year-old sister Liselotte, but the unperturbed Annaliese remained his wife and the three worked together as a team for at least another decade. Heinrich devoted much of the next three years to the production of 21 papers on ichneumon wasps, and in 1928 he spent a year in Berlin studying zoology and botany, which included a trip to England to visit ichneumon specialists at the British Museum as well as Rothschild and Hartert in Tring. One evening back in Berlin, over supper at Stresemann's house, he got the commission of a lifetime. One of the other guests, Dr Leonard C. Sanford, a long-time benefactor of the American Museum of Natural History, was nursing a very particular desire: to obtain for AMNH a specimen of what we now call the Snoring Rail *Aramidopsis plateni*, known from a couple of specimens and sites in Sulawesi, as documented by Meyer & Wigglesworth but unknown in the twentieth century (a 1918 specimen deposited in Leiden—see Collar *et al.* 2001—never having been mentioned in print). Stresemann had recommended Heinrich to Sanford as the man for the job, and Sanford was willing to put up the money—US\$5,000 for all expenses for an eight-month expedition with the proviso that Heinrich bring back 3,000 bird specimens (i.e. around 12 birds a day).

With the two sisters as his companions—they served him devotedly as excellent skin preparators—Heinrich landed in Sulawesi on 16 March 1930, and immediately sought out Paulus Moninka, the native hunter who had caught the type specimen of Snoring Rail back in 1885. Fortunately for ornithology, after 45 years Moninka could not remember clearly where the bird had come from, and Heinrich, taking his cue from others, including Sanford, proceeded to plan his fieldwork on the assumption that the rail was a species of the high mountain forests. Thus with

two local helpers and nineteen horses (soon to be swapped for 50 porters), the Europeans began the ascent of the first target range, the Latimojong Mountains in the south of the island, where he quickly discovered the frustrations of silent, empty, dripping forests and the occasional sudden thrill of passing bird parties. The correspondence between Stresemann and Heinrich in the ensuing months was punctuated with the latter's unhappy reports of failure on the Snoring Rail front, no matter how many other discoveries were made, and with the former's exhortations to keep looking, particularly as Sanford, coughing up another US\$2,000, had expressed the view that women on an expedition must be a liability. "It is up to you to cure his mysogyny", Stresemann wrote, "preferably by reporting to him that your wife caught the *Aramidopsis* with her bare hands". When they shifted their ground to northern Sulawesi and Heinrich found a new flycatcher, Stresemann called it *Cyornis sanfordi* (Plate 5) in an attempt to appease the expedition's increasingly impatient benefactor.

Heinrich moved westward on the Minahasa Peninsula, but still the rail put in no appearance. "You cannot know how much worry all this gives me, and how nervous this hopeless thing makes me", he wrote to Stresemann after almost a year of fruitless searching. "Could *Aramidopsis* perhaps actually be a swamp rail, not a woodland rail as Sanford presumes?" In desperate need of a break, in 1931 Heinrich took himself to Halmahera (see Heinrich 1956), to seek out the Drummer (Invisible or Wallace's) Rail *Haproptila wallacii*, which Sanford had also asked for. The enterprise proved almost as frustrating. "We sit in our swamp camp, half eaten by mosquitoes and gnats...", he reported to Stresemann. "Nobody knows *Haproptila*. It is miserable! I am again in despair. Where shall I go when every track, every hold, fails?"

But eventually a lead from a native hunter brought him into contact with an old man who claimed to have eaten *Haproptila*, at a place called Fanaha. After several days of careful preparation, Heinrich's team finally snared two birds. He wrote:

I am solidly confident no European has ever seen this rail alive, for that requires such a degree of toughening and such demands on oneself as I cannot so easily attribute to others. *Haproptila* is shielded by the awful thorns of the sago swamps... In this thorn wilderness, I walked barefoot and half-naked for weeks.

A photograph of him, holding the specimen of *Haproptila* aloft (Plate 1), shows that he was not exaggerating about his half-nakedness. How he endured the cuts of the sago and the bites of the

flies is beyond comprehension: his son reports that in another photograph, taken during his trip to Burma, 103 biting flies can be counted just on the front of his legs below the knees, and elsewhere that Gerd's way of toughening himself up for fieldwork was to roll naked in beds of stinging nettles.

When Heinrich got back to Makasar to resume the *Aramidopsis* hunt, he found letters from Stresemann telling him his Sulawesi collections contained "fantastic discoveries", and reporting that the zoological philanthropist Richard Archbold had put up another US\$10,000 to keep the expedition going, in anticipation of a good series

INGO WASCHKIES



**Plate 5.** Matinan Flycatcher *Cyornis sanfordi*, Gunung Ambang, Sulawesi, Indonesia, September 2008.



YONG DING LI

**Plate 7.** Heinrich's Nightjar *Eurostopodus diabolicus*, Anaso Track, Lore Lindu National Park, Sulawesi, Indonesia, June 2007.

**Plate 6.** Heinrich's Nightjar *Eurostopodus diabolicus*, Anaso Track, Lore Lindu National Park, Sulawesi, Indonesia, August 2008.

INGO WASCHKIES



of mammal skins. So the work continued; and buoyed by the discovery that *Habroptila* was a swamp bird, Heinrich decided to concentrate his final efforts for *Aramidopsis* on swamps as well. Eventually it paid off: on 20 January 1932, at the very end of his fieldwork, this time in the south-east of the island at a locality called Wawo, at the foot of the Mengkoka Mountains, he stalked a rail in a swamp and procured it, “the most priceless catch that I have ever hunted or will hunt” as he wrote in his reminiscences of the venture, *Der Vogel Schnarch* (Heinrich 1932). Into the bargain he had, in the preceding twenty months, found a new cobra, *Naja celebensis*, at least one new rodent, *Hyosciurus heinrichi*, at least one new frog *Limnonectes heinrichi*, 156 new ichneumons (he produced a 265-page account of the creatures on Sulawesi two years later), and six new species and no fewer than 45 new subspecies of bird. The new bird species were Moluccan Cuckoo *Cacomantis (Cuculus) heinrichi* (this on Halmahera), Heinrich’s Nightjar *Eurostopodus diabolicus*, (Plates 6 and 7) Great Shortwing *Heinrichia calligyna* (which both Bernd Heinrich and I suspect may be better treated as three species, Gerd having collected all three subspecies and possibly still the only man in the world to have seen all three taxa in the field: see

**Plate 8.** Minahassa Owl *Tyto inexpectata*, Tangkoko-DuaSudara Reserve, Sulawesi, Indonesia, August 2008.



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Plates 3–4), Geomalia *Geomalia heinrichi* (Plate 2), Lompobattang Flycatcher *Ficedula bonthaina* and Matinan Flycatcher *Cyornis sanfordi* (Plate 5). Moreover, he had rediscovered not only the Snoring Rail and the Drummer Rail but also such little-known creatures as Blue-faced Rail *Gymnocyrex rosenbergi*, Sulawesi Woodcock *Scolopax celebensis* and Minahassa (or Unexpected) Owl *Tyto inexpectata* (Plate 8).

Altogether he had amassed over 5,000 bird specimens, which were divided between the American Museum of Natural History, New York, and the Museum für Naturkunde, Berlin. Stresemann (1931, 1932) wrote up the descriptions as the specimens came in, and is usually credited as the sole author of the gigantic set of papers that fully and finally accounted for the expedition in *Journal für Ornithologie*, but given Heinrich’s centrality to the project, and the fact that his extensive field notes on each species were incorporated, I have always preferred to cite the product as “Stresemann & Heinrich (1939-1941)”.

After such resounding success in such difficult conditions, one might have expected the commissions to come rolling in; but doubtless the political turmoil of the Weimar Dämmerung acted as a deterrent. *The snoring bird* skips the next few years of Gerd Heinrich’s life, although the writing-up of the ichneumons must have taken much of the time (as well as popular books on his Indonesian and Persian exploits: Heinrich 1932, 1933). The next expedition we hear of is one he made to Bulgaria for the best part of a year, starting in April 1935. On that trip Heinrich again saw a Syrian Woodpecker, pursued it into a cemetery in order to collect it, “and was promptly arrested by the village cop for disturbing the peace of the deceased”! Meanwhile he was in constant touch with Stresemann, who he hoped would procure him a big commission to go somewhere more interesting, like New Guinea. It may well be—Bernd is unable to tell from the documents at his disposal—that Gerd was also very keen to get away from Nazi Germany. When Stresemann’s negotiations with Archbold about New Guinea broke down, the Philippines became a serious possibility; but in May 1936 those plans fell through too. Then Heinrich (who all this time must have been busy writing a detailed account, presumably based on museum collections in various places, of the ichneumons of Madagascar, which appeared in French in 1938) got interested in Burma, owing to reports sent him by the Swedish entomologist Malaise, and he started badgering Stresemann to help him raise the funds for a collecting trip there. One of Stresemann’s replies began affectionately: “Dear too expensive for the Yankees researcher...”

In April 1937 came the news that Sanford would probably put up \$1,000 for bird skins from Burma. Heinrich took this as a green light, enrolled his niece Marlis to find a large, luxurious car—they lighted on a Stutz—to ship to Burma to impress dignitaries and thereby open doors, and booked his passage for Rangoon with the three women, Annaliese, Liselotte and Marlis. Before he left, however, he hired a Polish tutor, Hilde, for his now twelve-year-old daughter Ulla, and promptly fell in love with her. The devoted Annaliese, still Gerd's wife, again took it in her stride, and when during the Burmese expedition the conscience-stricken Hilde wrote to Gerd to break off their relationship it was Annaliese who indignantly wrote back to her: "How could you do such a thing? When he got your letter Gerd became very sick, depressed and unable to work. Don't you know that his work in the jungles of Burma requires all his energy, and that he needs your support...?"

There is nothing in *The snoring bird* about the ornithological achievements of the Burmese expedition, which targeted Mount Victoria and also focused on mammals and ichneumons. However, another whopping publication came out in *J. Orn.*, simultaneously with the Sulawesi findings, and which I cite here as Stresemann & Heinrich (1940), full of nuggets of information about rare birds like Mrs Hume's Pheasant *Syrmaticus humiae* and White-browed Nuthatch *Sitta victoriae*, and including the descriptions of nine new subspecies (six of them still recognised today: Haffer *et al.* 2004). In spite of the horseflies, mosquitoes, gnats, ticks and leeches which tormented the party in the summer of 1938, there was a touch of Eden about the meadows and forests of Mount Victoria, which Heinrich dubbed "God's mountain". But if he was sorry to leave it, he was sorrier still when he opened his accumulated correspondence: Marlis's father, fearful of war in Europe, was demanding her immediate return home. And when, back in Germany in late 1938, Heinrich declined out of apparent exhaustion to give a talk for which a German businessman had advanced some money, the businessman ominously signed off his demand for reimbursement with "Heil Hitler!"

When war broke out with the Nazi invasion of Poland, Heinrich, back on his farm at Borowke and with Hilde now several months pregnant, was as scared of the Poles as he was of the Germans. "*Aramidopsis* and the other rails have made me a swamp bird", he wrote to Stresemann. In a marsh on the estate he dug himself a secret shelter among the sedges, and his blacksmith (whom he was later, by an act of great courage and decency, to save from death in a detention camp) made him some tin boxes in which he sealed the types and other

prize specimens from his enormous ichneumon collection before burying them on the farm. Soon afterwards he was tipped off that he was on a list for liquidation; it was then that he approached the officer from the suicide mission over twenty years before, and reluctantly went back to soldiering.

It is clear that Heinrich had no time for Nazism and was disgusted by things the Reich did and made him do. One amusing indication of his and Hilde's feelings for the Führer were the strains and pushings that Hilde went through to ensure their child—this was Bernd—was not born on Hitler's birthday but the day before. Nonetheless in 1940 Gerd went to serve as a military administrator in eastern Poland and then in 1941 to Smolensk in western Russia, where he witnessed terrible things; but just as it all began to go badly wrong for the Germans in early 1942 Heinrich's unit was fortuitously transferred back to Poland, and then, even better, he was released to oversee the sowing and harvesting at Borowke, where he stayed until called up again in September 1943 to run a quiet airbase near Gdansk. Before he left, however, he had a premonition he would never see Borowke again; and so it proved to be.

Even so, his luck—which, the more he had of it, the more one thinks he somehow made for himself, through force of attitude—did not desert him. *The snoring bird* tells a story of almost miraculous good fortune, mired inextricably in the worst of fortunes, as the Heinrich women and children made their way to find Gerd, and then as everyone struggled westwards before the Russian advance on and past Berlin. Eventually the family even managed to cross a British-run checkpoint bridging the Elbe-Trave canal, because it was manned by a couple of Poles who took a shine to the girls from their homeland. They ended up spending the years 1945–1951 in a tiny forester's hut deep in the Hahnheide, east of Hamburg, where they lived as hunter-gatherers, making use of Gerd's 30-odd small mammal traps, relics of his Burmese collecting endeavours, to catch food in the forest. For Bernd, it was "my childhood paradise".

But it is here, when Bernd recalls his own experiences of his father, that one sees aspects of a hardened, single-minded and self-centred Gerd that his singular habit of taking on, using and discarding (or at least relegating) lovers only partly reveals. He proves to be an exacting, authoritarian father, and in his endeavour to instill discipline and strength in his young son he was sometimes emotionally brutal. His heartless treatment of the 20-year-old Ulla, evicting her from the Hahnheide hut with the instruction to get a job and find a husband, was something she never forgave; and the tension between father and son—great affection

in both of them mingling with great distrust—clearly never left them, even after Bernd became a distinguished biologist, celebrated author and athlete of world-beating prowess.

The rest of Gerd's story is not for coverage here, but in any case little of it, in terms of biological exploration, is told, and he never went back to Asia. All Stresemann's kind efforts to find Gerd a post in a German museum fell foul of post-war economic depression, and the family left for America in April 1951. Gerd never got a permanent post there, either, despite his unrivalled knowledge of ichneumon wasps and the evidence of his extraordinary *curriculum vitae*. He had commissions that took him on collecting expeditions to Angola (the glorious White-headed Robin-chat *Cossypha heinrichi* was his greatest ornithological find there) and Tanzania, and to various North American museums to classify their ichneumon collections. When he died at the age of 88 in 1984, he had described 1,479 species and around 180 genera of ichneumon wasp (Weems 1986, S. Schmidt *in litt.* 2009), but sadly I can find no indication that the discoverer of two of the most exciting birds to come to light in the twentieth century, *Heinrichia* and *Geomalia*, was memorialised in any ornithological journal. It is fitting that, 25 years after his passing, and 25 years after the foundation of OBC, the omission can be made good, thanks to Bernd Heinrich's admirable book.

Bernd tells a story that is not just illuminating for anyone interested in the life of his father, or in the life of an early twentieth century naturalist, but also for the way it shows how people of Gerd's generation and nationality coped with circumstances which were exacting and terrible, yet about which we have strangely little testimony or sense. In this regard I find many of the quotations from his various accounts of his travels (Heinrich 1932, 1933, 1937, 1940) and from his letters to Stresemann particularly moving, with an almost Orwellian or Nabokovian sense of loss and longing. Here he is, writing to his "Lieber Meister!" from the depths of the last winter of the war, 4 January 1945, trapped in the abominations of history and only half-daring to dream of the freedom that *natural* history could bring:

I cannot delve too deeply and lose myself in the romantic forests of remembrances, or I get caught with an elemental force of nostalgia. The lark twittered today so happily—as if knowing that spring is coming. What a wonderful impression! And if one could relive the swamps and the hunt for *Aramidopsis* then all would again be wonderful.

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N. J. Collar,  
BirdLife International, Wellbrook Court,  
Girton Road, Cambridge CB3 0NA, U.K.  
Email: nigel.collar@birdlife.org