

PROFESSOR ERWIN STRESEMAN AND HIS CONTRIBUTION TO AUSTRALASIAN ORNITHOLOGY

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INTRODUCTION

Within four months of one another three of the world's leading ornithologists passed away: Professor Erwin Stresemann of the Berlin Museum in November 1972, David Lack of Oxford University in March 1973, and Robert Cushman Murphy of the American Museum of Natural History also in March 1973.

Of these three leaders, Professor Stresemann is the least known in our part of the world: Murphy had visited Australia and New Zealand on several occasions and published particularly on oceanic birds of so much local interest: Lack's *Natural Regulation of Animal Numbers* became the recognized textbook and his numerous contributions on avian population ecology were simply part of the ornithological scene: Stresemann is less known in Australasia because most but not all of his tremendous production was published in his native German. Only few are aware, especially among the younger generation of ornithologists, that Stresemann in addition to his substantial contribution to international ornithology also profoundly affected and aided Australasian ornithology.

In this tribute an attempt is made to present an insight into the industrious life of a pioneer and at the same time to make his contributions to bird study in our part of the world more readily accessible through regional and taxonomic organisation of papers and translation of titles.

EARLY LIFE

Erwin Stresemann was born in Dresden on 22 November 1889. His father was an apothecary who had studied pharmacy and medicine, so academic attitudes and scientific thinking were not foreign to young Erwin who grew up in the suburb village of Strehlen; in the garden and surrounding fields he collected — as boys will — snails, insects, and caterpillars which he kept in a vivarium set up in a room in the

home. Gradually this collection of naturalia gave way to stuffed birds, some of which he obtained with the aid of an air rifle in the garden. In his museum/aviary the high school boy succeeded in raising a hybrid between a male Redpoll and female Goldfinch resulting in his first ornithological publication in 1906 when he was 16 years old.

In high school his bird-interested biology master, Dr O. Koepert, gave him the inspiring job of reorganizing the school's bird collection, and it appears that his destiny into ornithology was sealed. While still in high school he managed to travel widely, for his age, benefiting from his parents' comparative affluence, visiting Heligoland (resulting in a paper published in 1907 on autumn migration on the island), the Danish island of Bornholm, in the Sudeten Mountains, and even to Russia from where the sixth-form boy returned with a collection of Desert Buzzards (shot and prepared by himself); from subsequent study of these buzzards emanated a paper in 1907 on *Buteo zimmermannae*. In October of that year he displayed the buzzard skins at the 57th annual meeting of the German Ornithological Society and made the acquaintance of the leading German ornithologists of the day, among them Dr Ernst Hartert (curator of Rothchild's Tring collection of birds, and later author of the classic taxonomic work on birds of the palaearctic fauna), Dr Oskar Heinroth (author of the well-illustrated volumes *Die Vogel Mitteleuropas* on the growth and development of the birds of Central Europe, and a pioneer student of bird behaviour), Neumann, Reichenow and others. When first appearing for such a powerful gathering, young Stresemann was 17 years old, a month before his 18th birthday!

There was no stopping this gifted and industrious youngster. After U.E. examinations (*Abitur*) he commenced in Jena the study of medicine which at the time not uncommonly was pursued by zoologists; during this period he attended two marine biological courses at Bergen in Norway. The following year he transferred to Munich University where Dr K. Alverdes suggested that he take part in the 2nd Freiburg Moluccas Expedition under the geologist Karl Deninger of Freiburg. This was to be a major event in Stresemann's life, and after the expedition there was no turning back. German interest in the south-west Pacific was appreciable, and the German colonies at this time (and till 1919) included Kaiser Wilhelmsland (north-eastern New Guinea later to become an Australian Mandate), the Bismarck Archipelago with Neu-Pommern (now New Britain), Neu-Mecklenburg (now New Ireland), Bougainville, Admiralty Islands; the Mariana, Caroline and Marshall Islands; and other small islands and island groups including Palau, Nauru and Samoa (Western Samoa: Savaii now Savai'i, and Upolu).

A third expedition member was added, the ethnologist O. D. Tauern, and a seaworthy motor boat was built in Holland. Indicative of the foresight and energy of the 20 years old Stresemann were his activities in 1910 prior to his departure for the East: he studied all

available literature on, in particular, the fauna, geology and ethnology of the Moluccas; he visited the Zoological Museum at Tring in England and sought advice from Ernst Hartert; in August he climbed on Vesuvius in Italy to test his heat resistance for the tropics; in spite of all this — and some university studies — he found the time to band Black-headed Gulls in Bavaria (and publish about them), and climbed about on farm-house roofs, banding young White Storks (about which he also published). And Stresemann attended his first International Ornithological Congress (the 5th) held in Berlin, 30 May-4 June, 1910.

THE MOLUCCAS EXPEDITION

The expedition boat, named "Freiburg" was shipped to Singapore from where the party, a couple of months delayed, sailed eastwards in late November 1910. Storm and currents caused damage and necessitated repairs, and eventually the expedition stranded on the coast of Bali; during repairs in March-April 1911, Stresemann and Tauern explored Bali, recording 53 new bird species for the island. The battered "Freiburg" was left behind, and the expedition continued to the Moluccas in a Dutch steamer, arriving late April on the main island of Seram.

Stresemann devoted most of his time to ornithological studies, collecting in particular in the interior and in the mountains. He became so interested in the natives who acted as porters that for months he studied their language and culture (his linguistic studies later resulted in the publication of two detailed books on the Amboinic language). During January-March 1912 the neighbouring island of Buru was explored, the expedition departing for Europe on 1 April 1912 with a collection of 1200 bird skins.

The Moluccas expedition was the highlight of Stresemann's experience, providing the material on which part of his reputation was to rest, and enabling him to plan and guide the preparation of future expeditions of the "school" he developed around him when he was later appointed Curator of Birds at the Berlin Museum; among his students and associates later to go on exploring expeditions, to bring to Berlin large bird collections, were his star pupil Ernst Mayr, and Heinrich, Stein and von Plessen.

After his return in the summer of 1912 Stresemann continued his medical study in Freiburg, but soon travelled to Tring to examine and prepare his ornithological material, guided and supported by Hartert and Lord Rothschild. Stresemann named the most striking of his new birds in Rothschild's honour: the beautiful long-crested Rothschild's Myna *Leucopsar rothschildi*, a rare bird confined to Bali. Stresemann was a fast, methodical worker with a flair for writing and an ability to concentrate on essentials; the first among many of his publications on the birds of the East Indies appeared during the pre-war years 1912-13.

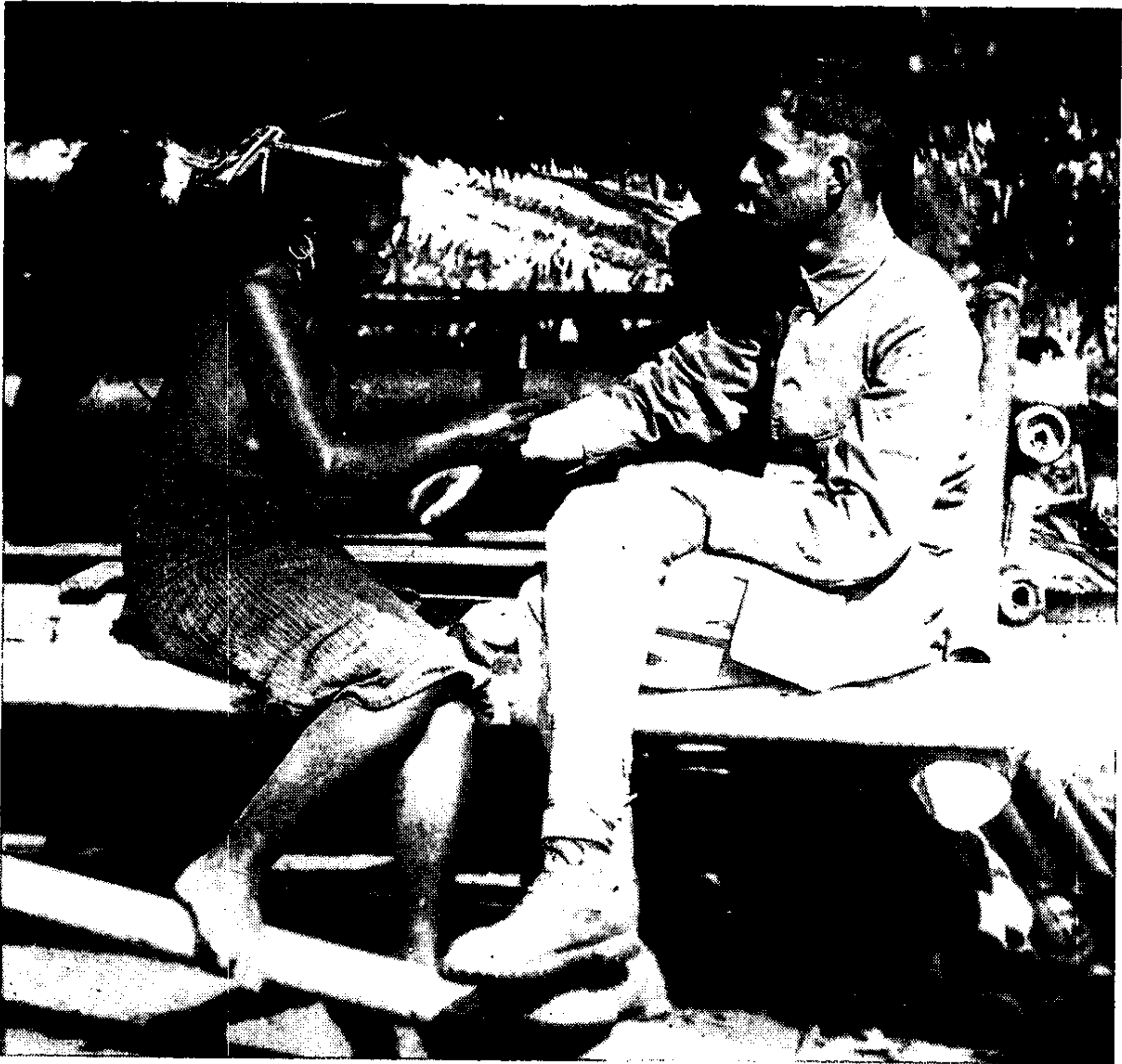


FIGURE 1 — The young Erwin Stresemann being tatoored with the head-hunters' sign by a native in Seram, 1911.



WORLD WAR I AND THE USE OF RANGEFINDERS

In the summer of 1914, when dark war clouds were gathering over Europe, Professor W. Kukenthal, chief editor and publisher of the monumental *Handbuch der Zoologie*, asked the then 24 years old Stresemann if he would write the volume on birds. This was indeed an honour and a challenge for a young man with no degree completed but with expedition and valuable papers to his credit (and already with the support of some of the leading ornithologists of the day).

The outbreak of the First World War in the summer of 1914 forced Stresemann to leave bird skins and desk and join a German artillery unit on the Western Front. Three years between Verdun and Belfort must have been a depressing experience for his alert mind, but even this enforced adventure produced some ornithological fall-out.

From an anchored balloon of a field-airship section he observed not only the accuracy of their own artillery fire but also the height of the flight of Swifts; three papers published in 1917 discuss the height of Swifts in flight, mixed bird flocks, and the use of rangefinders in determining the flying height of birds. His 28-page taxonomy of the Australian Raven (*Corvus coronoides*) was published in 1916 while he was at the front.

While on active service in Italy in November 1917 he was wounded and in a Munich hospital again had the opportunity to work on manuscripts. A detailed account of 'Three years ornithology between Verdun and Belfort' was published in 1918.

THE YOUNG CURATOR OF BIRDS

After the end of the war, Stresemann studied under the zoologist Richard Hertwig in Munich, preparing for publication (in 1920) his book on the *Avifauna Macedonia* based on the ornithological material collected by Doflein and Muller-Mainz.

He now devoted himself entirely and with all his energy to ornithological studies and writing, papers, notes, bulletins and books resulting from the effort. He also took up his university studies and graduated *summa cum laude* in March 1920; his major was in Zoology (his thesis on *Variation in the Body Size of Birds*), with minors in Botany and Anthropology.

In the midst of all these activities he also began writing what was to become his *opus major*, the *Aves* volume for Kukenthal's handbook series. The first part of the manuscript was finished in March 1920 and was sent to Kukenthal as a sample and a promise of what was to come (Figure 3 was a drawing of a Kiwi as an example of a terrestrial ground bird).

As pointed out by Nohring in his obituary in the *Journal für Ornithologie*, Stresemann could hardly have foreseen that this was the decisive moment in his life. Kukenthal was Director of the Zoological Museum in Berlin and was just then looking for a successor to the 73 years old Curator of Birds, Dr Anton Reichenow. In spite of resistance (there were many more senior persons who sought the curatorship), Kukenthal after reading Stresemann's manuscript for *Aves* was determined. Stresemann was appointed Curator of Birds in 1921 when 31 years of age. His meteoric rise to the most influential post in professional ornithology in the Weimar Republic was watched with surprise and envy by a few, but subsequent events showed Kukenthal had made the best possible choice.

Stresemann took over his new post when galloping inflation made even subscription to foreign journals and books an impossibility

(on 5 November 1923 the official exchange rate was 4.2 billion German Mark for 1 U.S. Dollar!). With characteristic ingenuity he induced the German Ornithological Society to establish its own library to be housed in the museum thereby obtaining the wanted journals in exchange. He took over from his predecessor publication of the journal *Ornithologische Monatsberichte* (also to be used in exchange), and in 1922 inspired Hermann Schalow to donate his large ornithological library to the library of the German Ornithological Society.

In 1922 Stresemann was elected Secretary General of the Ornithological Society, a post he kept unbroken till 1949 from when he carried on as President till 1967. From 1922-1944 and again 1951-1961 he was also the editor of the Society's quarterly publication *Journal für Ornithologie*. He instituted a policy of more papers on bird biology, morphology, physiology and behaviour and fewer faunistic reports; the journal increased in popularity, and in a few years subscribers had risen from 150 to 900.

The period from the early twenties till the outbreak of the Second World War was undoubtedly Stresemann's finest hour: with industry, intelligence and efficient planning plus stick-to-it-ness he wrote and had published his major book, *Aves*, edited two journals, served as Secretary General of the Ornithological Society, supervised between 1925 and 1939 a total of 22 Ph.D. candidates (among them a new generation of sky-stormers: Ernst Mayr, Schuz, Meise, Ruppell, Georg and Joachim Steinbacher, and Schafer), administered and developed the Bird Room of the Museum (his job), in addition to an annual production of a dozen research papers or more (with occasional irrelevancies thrown in, such as his 224 pages study of the Amboinic language, appearing in 1927).

THE AVES HANDBOOK

Stresemann's *Aves* was published in parts over the period 1927-1934 and is his lasting monument. In 899 quarto-size pages, with 944 text-figures (most from other works, some original) he painted the whole canvas of all that pertains to birds. His bibliography and choice of illustrations show the breadth of his reading and mastery of foreign tongues — he wrote and spoke perfect English. There are many references to Australasian birds, and the illustrations include both photographs and drawings of Australian birds (many nest photographs such as *Chlamydodera*, *Ptilonorhynchus* at its bower, *Neositta*, *Gerygone*, *Halcyon*, *Podargus*, *Leipoa* and *Megapodius*, drawings of birds of paradise, and others) and New Zealand birds (Huia drawing from Buller, the Cape Kidnappers Gannet colony, *Apteryx*, *Gallirallus* and *Habroptilus*). The section on avian anatomy covers several hundred pages and is probably the best ever written (a result of his early medical training?).

The avifaunas of Australia, New Guinea, New Zealand and other regions and islands of Australasia are discussed briefly but with

insight, in the capsule-form necessitated by the coverage of the work. Translations of these mini-expositions of the origin and differentiation of Australasian avifaunas are given below:

Australia (*Aves*, p. 656): "Australia shows old links with New Guinea, but there are not very many genera common to both regions. One third of the genera of Australian birds are only found within the confines of this continent. Particularly plentifully represented are the *Meliphagidae* and the *Psittaci*, and among these especially the group of rosellas (*Platycercinae*). The waterfowl (*Anseres*) are represented by a number of strange and unusual genera, such as *Cereopsis*, *Anseranas*, *Biziura*, *Stictonetta*, *Chenonetta*, *Malacorhyncus*, and *Chenopsis*. Among the song birds (*Passeres*) there are several very unusual genera in the eastern rain forests, such as *Menura* and *Atrichornis*. The number of bird species which have adapted to a life in the extensive desert regions is surprisingly low. To these belong *Eremiornis carteri* (*Sylviidae*), *Ashbyia lovensis* (*Sylviidae*), and *Lacustroica whitei* (*Meliphagidae*). The grass land to the north is the home of a great number of weaver-finches, ground pigeons, and parrots."

New Guinea (*Aves*, pp. 654-655): "New Guinea has as a result of its large extent and its rich ecological formations become an important evolutionary centre which has produced not only a large number of strange genera but even a few endemic families. The following groups have radiated here widely: the *Paradisaeidae*, *Laniidae*, *Muscicapidae*, *Meliphagidae*, *Dicaeidae*, *Campophagidae*, *Halcyones*, *Cuculi*, *Columbae* (among these in particular the genus *Ptilinopus*), *Psittaci* (in particular the *Loriidae*) and the *Casuarii*. Among the most unusual endemics are the starling-like genus *Paramythia*, the Crowned Pigeon (*Goura*) and the Mountain Quail *Anurophasis*. Southern New Guinea is avifaunistically very close to the Cape York Peninsula. The Aru Islands belong closely to the southern coast, Jobi shares many forms with the northern coast between Geelvink Baai and Astrolabe Baai, and the western Papuan islands are similarly related to the Arfak Peninsula; only Waigeu has apparently been independent and isolated for a long time and possesses even a separate genus of birds of paradise (*Schlegelia*). The Island of Biak is probably even older (without birds of paradise, but with such endemics as *Macruropsar* and *Otus beccarii*). Very peculiar endemic genera, such as *Anurophasis* (*Phasianidae*), *Salvadorina* (*Anseres*), *Oreostruthus* (*Fringillidae*), *Daphaenositta* (*Sittidae*) live in the high mountain country of New Guinea; other alpine birds are of western (*Turdus*, *Anthus*) or Australian origin (*Petroica*)."

The Bismarck Archipelago (*Aves*, p. 655): "The birds of the Bismarck Archipelago can be described as a strongly impoverished Papuan avifauna. Birds of paradise are lacking, and only few *Meliphagidae* occur. Endemic genera are *Dicranostreptus* and

Ortygocichla, both from New Ireland. — The Solomon Islands are also relatively poor in bird species; by the predominantly Papuan character of their bird fauna, these islands have produced several endemic genera, including *Microgoura* (Columbae), *Edithiornis* (Ralli), and *Mochtopoeus* (Sylviidae)."

Fiji (*Aves*, p. 655): "The Fiji Islands may to some extent have received their avifauna along a land-bridge from the west; endemics include *Vitie* (= *Drymochaera*), *Trichocichla*, *Lamprolia*, *Muscylva*, and *Pyrrhulopsis*: all genera of high age."

New Zealand (*Aves*, p. 636-640): "There is much evidence that even a country like New Zealand, well populated with land birds as it is, must have received its avifauna from across the sea and at a time when the island group was no nearer the continents than at present. The presence of flightless birds, such as the Dinornithidae, Apterygidae, *Strigops*, *Cnemidornis* and others, seems to contradict this theory: but the view expressed earlier by W. D. Matthew (1915) that these forms had developed in New Zealand itself from flying birds, is difficult to refute with valid objections. Neither in Australia nor in South America do we find closely related forms of New Zealand's old endemics; and the hope has not been fulfilled that remains of an extinct land fauna might come to light from the old Tertiary deposits in the antarctic continent, indicating the possibility of the existence of a land-bridge South America - Antarctica - New Zealand; no other bird bones than those of penguins were found in lower Miocene beds on Seymour Island. The very fact that New Zealand is so rich in flightless birds supports the theory that these species have lost their ability to fly on the spot. F. C. Noll (1889), who in addition to the New Zealand birds also refers to the Dodo (*Didus* = *Raphus*), *Aphanapteryx* on Mauritius as well as *Pezophaps solitarius* on Reunion Island, observes correctly that 'such' helpless forms can only develop and survive on islands where mammals are absent.' New Zealand, like all old island groups, has not been populated with birds in one single period but the process has probably taken place slowly since the Cretaceous and is not yet completed. One of the newest immigrants is a small flycatcher, the Fantail *Rhipidura fuliginosa*, a close relative of the southern Australian *Rhipidura albiscapa*, and a small Silvereye *Zosterops lateralis* did not reach New Zealand till about 1856."

Stresemann (*Aves*, p. 656) supplements the above with a brief overview of New Zealand's zoogeographic position: "We must with certainty accept that New Zealand over a very long period, possibly as early as from the Cretaceous, has been populated with birds coming across the sea from the west and north-west. Many New Zealand birds are therefore now without close relatives and form the representatives of their own orders and families. From early immigrants derive the following: *Apteryx*, *Strigops*, *Nestor*, *Anarhynchus*, *Gallirallus*

(= *Ocydromus*), the mesomyodic passerines *Acanthisitta*, *Xenicus* and *Traversia*, the peculiar polymyodic passerines *Turnagra*, *Heteralocha*, *Creadion*, *Callaeas* (= *Glaucopsis*) and *Clitonyx*, and further a few giant forms which became extinct during the Pleistocene, including the Dinornithidae, the rail *Aptornis*, the goose *Cnemionis*, and the eagle *Harpagornis*. — The Chatham and Auckland Islands have probably mostly received their avifaunas via New Zealand; the former island group is characterized by *Anthornis*, *Miro* and the flightless rail *Cabalus modestus*, the latter by the two near-flightless ducks: *Nesonetta aucklandica* and *Mergus australis*."

TAXONOMY AND 350 NEW SUBSPECIES

Stresemann was professionally primarily a taxonomist, a describer of forms, and organizer of their relationships. His exceptionally good memory and breadth of studies, his own early explorations and later encouragement of expeditions, his rapidly growing collections in the Berlin Museum and easy access (in Europe) to other large collections all contributed to his large output in the description and classification of birds.

He entered the ornithological scene at a time when the majority of living birds had been described (the author names attached to the systematic names remind us of the great reapers: Linnaeus, Latham, Gould, Gray, Temminck, Gmelin), and yet he managed to describe between 1912 and 1950 no less than 25 new species and 350 new subspecies.

Stresemann's taxonomic work gave rise to the study of the associated problems of relationships and evolution. He stressed the importance of geographical isolation in the formation of new species (an area pursued with much vigour later by Mayr and Lack), and through extensive mutation studies pointed out the importance of mutation in the evolution of new forms. He did not spare himself and tackled the revision of many difficult and poorly described genera; of particular interest to us are his reviews of these genera from our part of the world: *Spizaetus*, *Batrachostomus*, *Cyornis*, *Pericrocotus*, *Tersiphone*, and *Zosterops*.

The following list of Stresemann's major contributions on the related subjects of scientific nomenclature, taxonomy and classification serves partly as a tribute to the author's stimulus to international ornithology, partly as a guide to new or renewed study of his lifetime experience and conclusions in the field of cataloguing birds:

1. Scientific nomenclature. *Auk* 41: 507-512. 1924. [In English].
2. The development of the concepts of species, variety and subspecies in ornithology. *Mitteilungen des Vereins sächsischer Ornithologen* 2: 1-8. 1927. [In German].
3. The Formenkreis-theory. *Auk* 35: 150-158. 1936. [In English].

4. Proposals for the development of a uniform nomenclature. *Proceedings of the VIIIth International Ornithological Congress*, Oxford 1934: 199-206. 1938. [In German].
5. Ecological kinship-, race- and species differences in birds. *Journal fur Ornithologie* 91: 305-324. 1943. [In German].
6. The development of theories which affected the taxonomy of birds. *Ibis* 92: 123-131. 1950. [In English].
7. The influence of nature philosophy observations on the ornithological systematics. *Proceedings of the Xth International Ornithological Congress*, Uppsala 1950: 132-138. 1951. [In German].
8. The status of avian systematics and its unsolved problems. *Auk* 76: 269-280. 1959. [In English].
9. Taxonomic significance of wing moult. *Proceedings of the XIIIth International Ornithological Congress*, Ithaca 1962: 171-175. 1963. [In English].

MOULT STUDIES

Stresemann was primarily a museum man, and his constant work with specimens gave rise — as a by-product — to a branch of ornithology previously much neglected, the study of moult and moult sequences in birds. As early as in 1921 he wrote a paper on the moult of songbirds in the service of systematics; scattered over the following 30-40 years followed a few more moult studies, but in later life, especially from 1960 and onwards, most of his work was on this subject, and most papers were published with his wife, Frau Vesta Stresemann.

Over the years following the Second World War the astounding growth of ornithology must have both thrilled and puzzled Stresemann. Such new fields as ecology and ethology developed and branched out, leaving the confining fold of ornithology; increased use of statistics, technological developments in the study of bird migration, computer-programming and similar new refinements were not absorbed into Stresemann's ornithological orbit; it is probably the enormity of present bird knowledge (mastered by him in his *Aves* in the 1920's) which made him choose to devote most of his sunset years to a narrow special study, the moult of birds.

As much of his work in this area is of general interest and as groups and species of birds found in Australasia are also covered in detail, some of his most important publications on moult are listed below:

1. Stresemann, V. & Stresemann, E. The primary wing moult of the birds of prey. *Journal fur Ornithologie* 101: 373-403. 1960. [In German].

2. Time period and development of the primary wing moult of palaearctic gulls, terns and waders. *Journal für Ornithologie* 104: 424-435. 1963. [In German].
3. The nomenclature of plumages and moults. *Auk* 80: 1-8. 1963. [In English].
4. Variation in the number of primaries. *Condor* 65: 449-459. 1963. [In English].
5. Moults of the gallinaceous game birds. *Journal für Ornithologie* 106: 58-64. 1965. [In German].
6. ——— & Stresemann, V. The Moults of Birds. *Journal für Ornithologie* 107 (Sonderheft): vii+ 1-445. 1966. [In German].
7. Inheritance and adaptation in moult. *Proceedings of the XIVth International Ornithological Congress*, Oxford 1966: 75-80. 1967. [In English].
8. Study on the onset of the primary wing moult in gulls and its cause. *Vogelwarte* 26: 227-232. 1971. [In German].

AFTER WORLD WAR I

Stresemann was a leading international ornithologist in the *inter bellum* period. All was well with the ornithological world. In 1934 he was President of the VIII International Ornithological Congress in Oxford (where he correctly in his opening speech addressed the female Mayor of Oxford as Mistress Mayor); the same year he attracted Gunther Niethammer (who visited New Zealand from December 1967 to February 1968 and published on the taxonomy of our introduced European passerines) to Berlin and encouraged him to write and publish the *Handbuch der deutschen Vogelkunde* which appeared in three volumes 1937-1942. In the last pre-war years he wrote with Meise and Schonwetter the *Aves Beickianae* on the ornithology of Kansu Province, China, and his *Birds of Celebes*. In 1936 he was appointed a member of the Reichsjagdrat (State Game Council) for his bird knowledge.

Hitler's war ended the 18 years of avian bliss since Stresemann was appointed Curator of Birds in Berlin. He carried on his studies for some time but in early 1941 began the dispersal of library and bird skins, hiding rare books, all type specimens, and 40 000 skins in an underground safe from where all material was recovered after the war. Also, early in 1941 the 52 years old reserve lieutenant was ordered to the Luftwaffe and saw service in Sicily, Greece and France (as evidenced in subsequent papers on birds in Crete, Brittany, and Sicily), but returned to Berlin exempted from further military service in December 1942.

During the remainder of the war Stresemann survived, protecting and hiding books and specimens, working on birds as possibility arose, with duty as Volksturmman at the Berlin Teltow canal; but in the

midst of bombs and shortages, he did not lose his humanity or sense of compassion: his old friend David Bannerman in his obituary in *Ibis* testified: "Perhaps amongst all his friends he will be remembered with the greatest affection and respect by those ornithologists who were *prisoners of war* in Germany during the second world war and who received from Erwin bird-literature which he somehow managed to



FIGURE 2 — Professor Erwin Stresemann in 1954 when he was 65 years of age and in which year he published 12 ornithological papers (one of which in English, in *Condor*), totalling 103 pages.

convey to them, to ease the monotony of their days. That generous action will never be forgotten by those who benefitted from such unexpected kindness."

The immediate post-war period was the low point, but the collections and books were retrieved. In 1945-1946 Stresemann had no papers published — there were no German ornithological journals. But some kind of peace came about in the world, the trees were in new leaf, migratory birds returned, the soil produced again, the wheels of industry turned, and the mailman came back.

The mental activity which occupied much of Stresemann's time during this difficult period was his work on the history of ornithology. During the late forties he collected and sifted this vast material and in 1951 published the 430-page volume on the development of ornithology from Aristotle to the present (published in English translation by Harvard University Press in 1975, see "References").

In his last years the *Meister* enjoyed a quiet home-life with Frau Vesta; together they studied and published many papers and a book on the moult of birds, and in pursuit of moult studies they visited American museums in 1962. *Festschripte* in his honour on his 60 and 70 years birthdays brought together the writings of his old students, associates and friends. He was elected an Honorary President of the German Ornithological Society, was honoured with the National Prize of the German Democratic Republic, was an elected Member of the Academy of Natural Science (Leopoldiana), Member of the German Academy of Science, Honorary Member of the British Ornithologists' Union, Honorary Fellow of the American Ornithologists' Union, and received many other honours. He kept up a wide correspondence with friends and colleagues in many lands. He was an eager attendant at national and international ornithological conferences, and the last meeting with old friends of his international ornithological circle was attending the opening in 1972 of the bird collection, British Museum (Natural History) in Tring — where he in 1910 had conferred with Hartert before setting out on his East Indies expedition.

In the introduction to *The History of Ornithology*, Stresemann stated that it was Aristotle who raised ornithology to a science; it is hardly presumptuous or unkind to other masters to suggest that it was Stresemann who over the uneasy period between the two World Wars widened ornithology to its present importance, adding avian physiology, ecology and behaviour to the narrower older ornithology resting upon morphologically based systematics.

PUBLICATIONS ON AUSTRALASIAN BIRDS

Stresemann's many publications on the birds of South-east Asia and Australasia are of particular interest to us, inevitably so as our Australian and New Zealand bird faunas have immigrated from the north-west, via the Malayan Peninsula and the East Indies.

Publications covered in this bibliography encompass the two northern routes of entry, Malaya to the Indonesian Islands, and the Philippines, Moluccas and New Guinea (with the Bismarck Archipelago

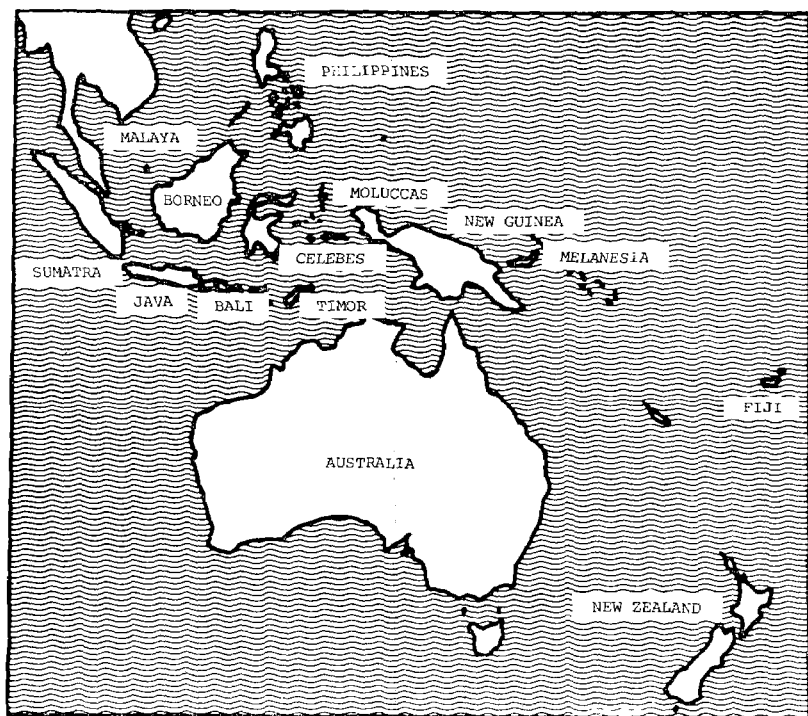


FIGURE 3 — Stresemann's publications on East Indian and Australasian ornithology have been divided in this bibliography into regional sections as shown in this map. For order of presentation and sub-divisions see the list of contents (p. 138).

of much interest to Stresemann), as well as Australia, New Zealand and Fiji (cf. the map, Figure 3). Valuable contributions were made to the ornithology of Celebes and the Moluccas right in the centre of the difficult Wallace's Line region where Asia and woodpeckers end.

Included in this list are publications covering ornithological exploration, descriptions of new species and subspecies, reviews of taxonomy and distribution and other observations from the area covered; excluded are references on species introduced into the region (as a number of European passerines) when the publications originate elsewhere. References included have been culled from the *Aves* sections of *Zoological Record*, from the bibliography (compiled by Ilse Jahn)

in the *Journal für Ornithologie* 1973, from examination of many original works, and reviews and summaries in *Ibis*, *Auk*, and elsewhere.

GENERAL

Faunistic, nomenclature, miscellanea:

- (1) Description of a new genus and new species of birds from the Dutch E. India Islands. *Bulletin of the British Ornithologists' Club* 31: 4-6. 1912. [In English].
- (2) Ornithological miscellanea from the Indo-Australian region. Part 1. *Novitates zoologicae*, London 19: 311-351. 1912. Part 2. *ibidem* 20: 289-324. 1913. [In German].
- (3) Nomenclature of several birds of the Oriental Region. *Anzeiger der Ornithologischen Gesellschaft in Bayern* 4: 23-25. 1921. [In German].
- (4) Contribution to the nomenclature of Indo-Australian birds. *Ornithologische Monatsberichte* 31: 40-41. 1923. [In German].
- (5) Contributions to the ornithology of the Indo-Australian Region. I. *Mitteilungen aus dem Zoologischen Museum in Berlin* 12: 177-195. 1925. II. *ibidem* 12: 348-354. 1926. III. *ibidem* 15: 635-645. 1930. [In German].
- (6) Review of the "Mutation studies" I-XXIV and their main results. *Journal für Ornithologie* 74: 377-385. 1926. [In German].
- (7) Birds collected during Capt. James Cook's last expedition (1776-1780). *Auk* 67: 66-88. 1950. [In English].
- (8) Birds collected by Labillardiere during the "Voyage a la recherche de Laperouse" (1791-1794). *Mitteilungen aus dem Zoologischen Museum in Berlin* 29: 75-106. 1953. [In German].
- (9) Analysis of C. J. Temminck's "Catalogue Systematique" (1807). *Zoologische mededeelingen. Rijksmuseum van natuurlijke historie te Leiden* 31: 319-331. 1953. [In German].

Birds of Prey Falconiformes:

- (10) Note about *Accipiter planes* (Reichenow). *Ornithologische Monatsberichte* 30: 109-111. 1922. [In German].
- (11) Remarks on H. Kirke Swann's "Synopsis of the Accipitres." The Indo-Australian birds of prey. *Journal für Ornithologie* 70: 487-488. 1922. [In German].
- (12) *Hieraaetus kieneri formosus* subsp. n. *Ornithologische Monatsberichte* 32: 108-109. 1924. [In German].
- (13) The Formenkreis of the Marsh Harrier *Circus aeruginosus*. *Journal für Ornithologie* 72: 262-269. 1924. [In German].
- (14) *Spizaetus alboniger* (Blyth) and *Spizaetus nanus* Wallace, two incorrectly united species. *Journal für Ornithologie* 86: 425-431. 1938. [In German].
- (15) Dementiew, G. & Stresemann, E. The specimens of the Peregrine Falcon (*Falco peregrinus*) and the Saker (*Falco cherrug*) in the

Berlin Zoological Museum. *Journal für Ornithologie* 96: 344-346. 1955. [In German].

- (16) The type locality of *Spilornis bassus* (J. R. Forster). *Journal für Ornithologie* 100: 355. 1959. [In German].
- (17) Organisation of the genus of crested serpent eagles *Spilornis*. *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich* 104: 208-213. 1959. [In German].

Gulls, terns and waders Charadriiformes:

- (18) Note on *Charadrius alexandrinus elegans* Reichenow; *Poecilodryas pachydemas* Reichenow; *Pluvianellus sociabilis* Hombron & Jacquinot. *Ornithologische Monatsberichte* 33: 20-21. 1925. [In German].
- (19) The subspecies of *Charadrius mongolus*. *Ornithologische Monatsberichte* 48: 51-56. 1940. [In German].
- (20) *Calidris ferruginea* (Pontoppidan) instead of *Calidris testacea* (Pallas). *Ornithologische Monatsberichte* 49: 21. 1941. [In German].
- (21) Spring migration of the Curlew Sandpiper (*Calidris ferruginea*). *Ornithologische Monatsberichte* 52: 50-51. 1944. [In German].
- (22) How widely does *Charadrius alexandrinus* L. move about? *Ornithologische Monatsberichte* 52: 55. 1944. [In German].
- (23) The White Tern (*Gygis alba*). *Orion*, Innsbruck 6: 1-8. 1951. [In German].

Cuckoos Cuculiformes:

- (24) Note about *Centropus rectunguis* Strickl. and related species. *Verhandlungen der Ornithologischen Gesellschaft in Bayern* 14: 37-38. 1919. [In German].
- (25) Systematics of the genus *Centropus* (Mutation studies XXVIII). *Journal für Ornithologie* 87: 61-64. 1939 [In German].
- (26) ——— & Stresemann, V. Moults of the crested cuckoos (*Clamator*). *Journal für Ornithologie* 110: 192-204. 1969. [In German].

Swifts Apodiformes:

- (27) What is *Collocalia fuciphaga* (Thunb.)? *Verhandlungen der Ornithologischen Gesellschaft in Bayern* 12: 1-12. 1914. [In German].
- (28) Contributions to a revision of the swiftlets (*Collocalia*). I. *Mitteilungen aus dem Zoologischen Museum in Berlin* 12: 179-190. 1925. [In German]. II. *ibidem* 12: 349-353. 1926. [In German].
- (29) A note about some swiftlets (*Collocalia*) and their nests. *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin* 1926: 47-48. 1926. [In German].

Other Non-Passeriformes:

- (30) The genus *Strix* in the Malaysian Archipelago. *Ornithologische Monatsberichte* 32: 110-111. 1924. [In German].
- (31) Brief review of the Indo-Malayan Scops owls (*Otus*). *Mitteilungen aus dem Zoologischen Museum in Berlin* 12: 191-195. 1925. [In German].
- (32) ——— & Meyer, O. Contribution to the development of *Megapodius* and *Oxyura* in the egg. *Ornithologische Monatsberichte* 36: 65-71. 1928. [In German].
- (33) The structure of remiges in several physiologically flightless rails. *Alauda* 4: 1-5. 1932. [In French].
- (34) A critical study of the genus *Batrachostomus*. *Mitteilungen aus dem Zoologischen Museum in Berlin* 22: 304-329. 1937. [In German].
- (35) Life of the Gannets. *Orion*, Innsbruck 8: 772-780. 1953. [In German].
- (36) ——— & Stephan, B. Number and numeration of the primaries in the honey-guides (Indicatoridae). *Journal für Ornithologie* 109: 222. 1968. [In English].

*Perching birds Passeriformes:**Cuckoo-shrikes Campephagidae:*

- (37) On the generic names *Graucalus*, *Coracina*, *Calvifrons* and *Stoparola*. *Ornithologische Monatsberichte* 21: 24-25. 1913. [In German].
- (38) "Heterogeny" in the Rassenkreis *Edolisoma morio*. *Ornithologische Monatsberichte* 47: 124-126. 1939. [In German].
- (39) Another migrant with complete post-nuptial and pre-nuptial moults: *Pericrocotus divaricatus* Raffles. *Journal für Ornithologie* 113: 218. 1972. [In German].
- (40) ——— & Stresemann, V. The complete post-nuptial and pre-nuptial moults in *Pericrocotus divaricatus* Raffles. *Journal für Ornithologie* 113: 435-439. 1972. [In German].

Shrikes Laniidae:

- (41) Migration of the Brown Shrike (Formenkreis *Lanius cristatus*). *Journal für Ornithologie* 75: 68-85. 1927. [In German].
- (42) ——— & Stresemann, V. The post-nuptial and pre-nuptial moults of the Asiatic shrikes *Lanius tigrinus* and *L. isabellinus*. *Journal für Ornithologie* 112: 373-395. 1971. [In German].

Flycatchers and warblers Muscicapidae:

- (43) The genus *Acrocephalus* in the Indo-Australian Archipelago. *Ornithologische Monatsberichte* 32: 167-168. 1924. [In German].
- (44) Species of the genus *Cyornis*. *Ornithologische Monatsberichte* 33: 45-53. 1925. [In German].
- (45) ——— & Schauensee, R. M. de. Notes on some South Asiatic species of the genus *Cyornis*. *Proceedings of the Academy of Natural Sciences of Philadelphia* 88: 337-351. 1936. [In English].

- (46) ——— & Arnold, J. Speciation in the group of Great Reed Warblers. *Journal of the Bombay Natural History Society* 48: 428-443. 1949. [In English].

White-eyes *Zosteropidae*:

- (47) The *Zosterops* group of the Indo-Australian Region. *Mitteilungen aus dem Zoologischen Museum in Berlin* 17: 201-238. 1931. [In German].
- (48) *Zosterops siamensis* Blyth — a yellow-breasted subspecies of *Zosterops palpebrosa* (Mutation studies XXIX). *Journal für Ornithologie* 87: 156-164. 1939. [In German].

Other perching birds *Passeriformes*:

- (49) *Pteruthius xanthochloris obscurus* subsp. n.; *Domicella albidinucha* Rothschild; *Sericornis arfakiana keysseri* subsp. n. *Ornithologische Monatsberichte* 33: 59. 1925. [In German].
- (50) *Dicrurus leucogenys* and *Dicrurus leucophaeus*. *Ornithologische Monatsberichte* 38: 58-59. 1930. [In German].
- (51) ——— & Mayr, E. 1950. Polymorphism in the Chat genus *Oenanthe*. *Evolution* 4: 291-300. 1950. [In English].
- (52) Bowers and display of the bower birds. (Report on a lecture by F. Frank). *Journal für Ornithologie* 94: 367. 1953. [In German].
- (53) Bower and display of the bower birds (*Ptilonorhynchidae*). *Vogelwarte* 16: 148-158. 1954. [In German].

MALAYA

- (54) *Abrornis sakaorum* sp. n. described. *Bulletin of the British Ornithologists' Club* 31: 27-28. 1912. [In English].
- (55) *Lanius fuscatus* Lesson: a mutation of *Lanius schach schach* L ! *Ornithologische Monatsberichte* 31: 79-82. 1923. [In German].
- (56) *Baza lophotes melli* subsp. n. *Journal für Ornithologie* 71: 525. 1923. [In German].
- (57) What is *Phylloscopus inornatus* (Blyth) ? *Ornithologische Monatsberichte* 32: 17-18. 1924. [In German].
- (58) Nests and eggs of Malaysian birds (Report of a lecture by H. Ohnesorge). *Journal für Ornithologie* 72: 563-564. 1924. [In German].
- (59) Notes on the systematics and distribution of some swiftlets (*Collocalia*) of Malaysia and adjacent subregions. *Bulletin of the Raffles Museum, Singapore* 6: 83-101. 1931. [In English].
- (60) The Malaysian Archipelago as winter quarters for palaearctic bird migrants (Report of a lecture by H. Desselberger). *Journal für Ornithologie* 80: 152-153. 1932. [In German].
- (61) ——— & Stresemann, V. Moults of some species of the genus *Emberiza* 1. 1. *Emberiza melanocephala* and *E. bruniceps*. 2. *Emberiza aureola*. *Journal für Ornithologie* 110: 291-313. 1969. [In German].

SUMATRA

- (62) A new woodpecker from Sumatra. *Verhandlungen der Ornithologischen Gesellschaft in Bayern* 14: 288-289. 1920. [In German].
- (63) A note on a rare woodpecker from Sumatra. *Club van nederlandsche vogelkundigen. Jaarbericht* 11: 32-33. 1921. [In German].
- (64) The woodpeckers of Sumatra. A monographic study. *Archiv fur Naturgeschichte* 87 (A): 64-120. 1921. [In German].
- (65) Contributions to the avifauna of Sumatra. *Ornithologische Monatsberichte* 30: 6-7. 1922. [In German].
- (66) *Zosterops incerta* A. B. Meyer = *Vernivora rubricapilla rubricapilla* (Wilson). *Ornithologische Monatsberichte* 30: 87. 1922. [In German].
- (67) Nomenclatorial remarks on Sumatran birds. *Journal of the Federated Malay States Museums* 11: 349-350. 1924. [In English].
- (68) Distribution of *Caprimulgus pulchellus* Salvadori. *Journal fur Ornithologie* 97: 239. 1956. [In German]. (Also occurs in Java.)

BORNEO

- (69) Study of the cave swiftlets (Collocaliinae) of south-eastern Borneo. *Ornithologische Monatsberichte* 34: 104-108. 1926. [In German].
- (70) *Collocalia francica natunae* subsp. nova. *Ornithologische Monatsberichte* 38: 181-182. 1930. [In German].
- (71) Birds from the River Kajan (north-eastern Borneo). *Temminckia: a Journal of Systematic Zoology*, Leiden 3: 109-136. 1938. [In German].

JAVA

- (72) Mutation studies XII. *Copsychus amoenus* (Horsfield). *Journal fur Ornithologie* 72: 252-255. 1924. [In German].
- (73) *Collocalia francica bartelsi* subsp. nova. *Ornithologische Monatsberichte* 35: 46. 1927. [In German].
- (74) *Ninox scutulata javanensis* subsp. nova. *Ornithologische Monatsberichte* 36: 54. 1928. [In German].
- (75) ——— & Bartels, M. Systematic review of the birds hitherto recorded from Java. *Treubia, Recueil de travaux zoologiques, hydrobiologiques, et oceanographiques*, Buitenzorg, 11: 89-148. 1929. [In German].
- (76) Two new bird subspecies from Java. *Ornithologische Monatsberichte* 38: 148-149. 1930. [In German].
- (77) A bird collection from the Papandajan volcano area (western Java). *Treubia, Recueil de travaux zoologiques, hydrobiologiques,*

- et oceanographiques*, Buitenzorg 12: 425-430. 1930. [In German].
- (78) *Treron curvirostra*, a new subspecies for Java. *Ornithologische Monatsberichte* 42: 148-149. 1934. [In German].
- (79) Systematic position of *Rhopodytes kangeanensis* Vordermann. *Ornithologische Monatsberichte* 47: 124. 1939. [In German].

BALI

- (80) Note on three rare parrots and on the zoogeographical relations of Bali. *Bulletin of the British Ornithologists' Club* 31: 15. 1912. [In English].
- (81) The birds of Bali. *Novitates zoologicae*, London 20: 325-387. 1913. [In German].
- (82) *Gerygone sulphurea plesseni* subsp. nova. *Ornithologische Monatsberichte* 34: 22-33. 1926. [In German].
- (83) Two corrections to the list of the birds of Bali. *Ornithologische Monatsberichte* 36: 104-105. 1928. [In German].
- (84) Contribution to the avifauna of Bali. *Ornithologische Monatsberichte* 40: 54-55. 1932. [In German].
- (85) A new Bonelli's Eagle from Sumbawa: *Hieraaetus fasciatus renschi* subsp. nova. *Ornithologische Monatsberichte* 40: 78-80. 1932. [In German]. (Sumbawa is east of Bali).

TIMOR

- (86) *Fregata minor minor* (Gm.) at the coast of Timor. *Ornithologische Monatsberichte* 30: 113-114. 1922. [In German].
- (87) The wild fowl of the island of Timor. *Ornithologische Monatsberichte* 36: 50-51. 1928. [In German].
- (88) *Ninox fusca plesseni* subsp. nova. *Ornithologische Monatsberichte* 37: 47-48. 1929. [In German]. (On Alor just north of Timor).

PHILIPPINES

- (89) The name *Octocoris alpestris pallida* Dwight; a contribution to the ornithology of the Philippines. *Ornithologische Monatsberichte* 30: 88. 1922. [In German].
- (90) A note on *Collocalia unicolor amelis* Oberh. *Ornithologische Monatsberichte* 30: 112-113. 1922. [In German].
- (91) The name of the subspecies *Lalage nigra* in the Philippines. *Ornithologische Monatsberichte* 38: 19. 1930. [In German].
- (92) On the birds collected by Pierre Poivre in Canton, Manila, India and Madagascar (1751-1756). *Ibis* 94: 499-523. 1952. [In English].

CELEBES

- (93) Preliminary notes on the ornithological results of the Heinrich Expedition 1930-1931. I. Contributions to the ornithology of the Latimodjong Mountains in southern central Celebes.

- Ornithologische Monatsberichte* 39: 7-14. 1931. [In German].
- (94) II. New subspecies of birds from the Latimodjong Mountains. *Ornithologische Monatsberichte* 39: 44-47. 1931. [In German].
- (95) III. Contribution to the ornithology of the Matinang Mountains of the northern peninsula of Celebes. *Ornithologische Monatsberichte* 39: 77-85. 1931. [In German].
- (96) IV. Contribution to the ornithology of the Minahassa (northern Celebes). *Ornithologische Monatsberichte* 39: 102-105. 1931. [In German].
- (97) V. Contribution to the ornithology of Halmahera and Batjan. *Ornithologische Monatsberichte* 39: 167-171. 1931. [In German].
- (98) VI. Note on the ornithology of Lompo Batang (southern Celebes). *Ornithologische Monatsberichte* 40: 45-47. 1932. [In German].
- (99) VII. Contribution to the ornithology of south-eastern Celebes. *Ornithologische Monatsberichte* 40: 104-115. 1932. [In German].
- (100) VIII. Further supplements on the avifauna of Celebes. *Ornithologische Monatsberichte* 46: 45-49. 1938. [In German].
- (101) IX. Last contribution on the avifauna of Celebes. *Ornithologische Monatsberichte* 46: 147-149. 1938. [In German].
- (102) A nominal list of the birds of Celebes. *Ibis* 14th ser. 6: 356-369. 1936. [In English].
- (103) The birds of Celebes. I. and II. Biological contributions by Gerd Heinrich. *Journal für Ornithologie* 87: 299-425. 1939. [In German].
- (104) The birds of Celebes. III. Systematics and biology. *Journal für Ornithologie* 88: 1-135, 389-487. 1940. *ibidem* 89: 1-102. 1941. [In German].

MOLUCCAS

- (105) A bird collection from Misol (Zoological results of the 2nd Freiburg Moluccas-Expedition). *Journal für Ornithologie* 61: 597-611. 1913. [In German].
- (106) The birds of Seram (Zoological results of the 2nd Freiburg Moluccas-Expedition). *Novitates zoologicae*, London 21: 25-153. 1914. [In German].
- (107) Contributions to the knowledge of the avifauna of Buru. *Novitates zoologicae*, London 21: 358-400. 1914. [In German].
- (108) My travels to the Moluccas. *Journal für Ornithologie* 70: 509-511. 1922. [In German].
- (109) Travels to the southern Moluccas. *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin* 1925: 9-13. 1925. [In German].
- (110) *Ninox novaeseelandiae remigialis* subsp. nova. *Bulletin of the British Ornithologists' Club* 50: 61-62. 1930. [In English].

- (111) Birds collected by Dr F. Kopstein in the South Moluccas and Tenimber 1922-1924. *Zoologische mededeelingen*, Leiden 17: 15-19. 1934. [In German].
- (112) Characteristics of *Eos squamata atrocaerulea* Jany. *Journal fur Ornithologie* 96: 428. 1955. [In German].

NEW GUINEA

Faunistic, nomenclature, miscellanea:

- (113) Eleven new birds from the Sepik River district (northern New Guinea). *Anzeiger der Ornithologischen Gesellschaft in Bayern* 5: 33-38. 1921. [In German].
- (114) New birds from New Guinea and New Pomerania. *Ornithologische Monatsberichte* 30: 7-9. 1922. [In German]. New Pomerania = New Britain).
- (115) New birds from New Guinea. *Ornithologische Monatsberichte* 30: 35. 1922. [In German].
- (116) A note on the synonymy of the birds of New Guinea: De Vis' names from 1894. *Ornithologische Monatsberichte* 30: 111-112. 1922. [In German].
- (117) New birds from Papua (*Cicinnurus*, *Mino*, *Pitohui*, *Micropsitta*, *Trichoglossus*, *Megapodius*). *Journal fur Ornithologie* 70: 405-408. 1922. [In German].
- (118) Dr Burger's ornithological results from the Sepik River area. A contribution to the avifauna of New Guinea. *Archiv fur Naturgeschichte* 89, Abteilung A (7): 1-96, (8): 1-92. 1923. [In German].
- (119) New contributions to the ornithology of German New Guinea. *Journal fur Ornithologie* 72: 424-428. 1924. [In German].
- (120) ——— & Paludan, K. Preliminary account of the ornithological results of Stein's expedition 1931-1932. — I. Ornithology of the island of Waigeu. *Ornithologische Monatsberichte* 40: 13-18. 1932. [In German].
- (121) ——— Rothschild, W., & Paludan, K. Ornithological results of Stein's expedition 1931-1932. I. Waigeu, Numfor, Japan. *Novitates zoologicae*, London 38: 127-147. 1932. [In German].
- (122) ——— Hartert, E., & Paludan, K. Preliminary account of the ornithological results of Stein's expedition 1931-1932. II. On the ornithology of the Weyland Mountains of Dutch New Guinea. *Ornithologische Monatsberichte* 42: 43-46. 1934. [In German].
- (123) ——— & Paludan, K. On a small bird collection from the Merauke district (southern New Guinea), founded by Dr H. Nevermann. *Mitteilungen aus dem Zoologischen Museum in Berlin* 20: 447-463. 1935. [In German].
- (124) ——— Hartert, E., Rothschild, W., & Paludan, K. Ornithological results of Stein's expedition 1931-1932. IV. The birds of Weyland Mountain and foreland. *Mitteilungen aus dem Zoologischen Museum in Berlin* 21: 165-240. 1936. [In German].

Non-Passeriformes:

- (125) *Accipiter leucosomus* (Sharpe): a leucistic mutation of *Accipiter etorques* (Salvadori) ? *Ornithologische Monatsberichte* 31: 127-131. 1923. [In German].
- (126) A crane from New Guinea. *Ornithologische Monatsberichte* 35: 45, 87. 1927. [In German].
- (127) *Podargus papuensis pumilus* subsp. nova. *Ornithologische Monatsberichte* 35: 87. 1927. [In German].
- (128) *Centropus phasianus thierfelderii* subsp. nova. *Ornithologische Monatsberichte* 35: 111-112. 1927. [In German].
- (129) The Papuan forms of *Accipiter fasciatus*. *Ornithologische Monatsberichte* 43: 110-111. 1935. [In German].
- (130) Asymmetry in the external ears in the Vulturine Parrot (*Psittirichas fulgidus*). *Ornithologische Monatsberichte* 47: 147. 1939. [In German].

Birds of Paradise Paradisaeidae:

- (131) What did the authors of the 16th century know about the birds of paradise ? A contribution to the history of ornithology. *Novitates zcologicae*, London 21: 13-24. 1914. [In German].
- (132) The home of *Paradisaea maria* Reichenow. *Ornithologische Monatsberichte* 33: 128. 1925. [In German].
- (133) Distribution of species of birds of paradise in the area between the rivers Digul and Fly. *Ornithologische Monatsberichte* 35: 111. 1927. [In German].
- (134) Which species of birds of paradise in the literature are of hybrid origin ? *Novitates zcologicae*, London 36: 6-15. 1930. [In German]. Also summary in *Proceedings of the VIIth International Ornithological Congress*, Amsterdam 1930: 284. [In German].
- (135) The courtship display of *Parotia sefilata* (L.). *Ornithologische Monatsberichte* 39: 4-6. 1931. [In German].
- (136) Four new subspecies of birds of paradise. *Ornithologische Monatsberichte* 42: 144-147. 1934. [In German].
- (137) A new bird of paradise. *Ornithologische Monatsberichte* 49: 60. 1941. [In German].
- (138) Belon's "Phoenix" was not a bird of paradise. *Journal fur Ornithologie* 95: 361-362. 1952. [In German].
- (139) The history of discovery of the birds of paradise. *Journal fur Ornithologie* 95: 263-291. 1954. [In German].

Other perching birds Passeriformes:

- (140) The genus *Pitchui*. *Mitteilungen aus dem Zoologischen Museum in Berlin* 11: 413-416. 1925. [In German].
- (141) *Megazosterops novum* genus *Zosperopidarum*. *Ornithologische Monatsberichte* 38: 159. 1930. [In German]. (= *Rukia*, Palau Islands north of New Guinea).

- (142) The systematic position of the genus *Peltops*. *Ornithologische Monatsberichte* 40: 149-150. 1932. [In German].
- (143) *Petrochelidon nigricans nigricans* (Vieillot) as winter visitor in Papua. *Ornithologische Monatsberichte* 42: 24-25. 1934. [In German].
- (144) Two new weavers from southern New Guinea. *Ornithologische Monatsberichte* 42: 101-103. 1934. [In German].
- (145) ——— & Paludan, K. *Poecilodryas placens clara* nom. nov. *Ornithologische Monatsberichte* 45: 86. 1937. [In German].

MELANESIA

Petrels and albatrosses *Procellariiformes*:

- (146) Note on *Puffinus heinrothi* Reichenow. *Ornithologische Monatsberichte* 35: 86-87. 1927. [In German].
- (147) *Puffinus chlororhyncus* Lesson in the Bismarck Archipelago. *Ornithologische Monatsberichte* 36: 83. 1928. [In German].

Birds of prey *Falconiformes*:

- (148) A study of *Accipiter luteoschistaceus*. *Ornithologische Monatsberichte* 37: 12-14. 1929. [In German].
- (149) *Falco longipennis longipennis* Swainson in the Bismarck Archipelago. *Ornithologische Monatsberichte* 42: 157. 1934. [In German].

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- (150) *Eulabeornis tricolor convicta* nov. subsp. *Ornithologische Monatsberichte* 33: 17-18. 1925. [In German].
- (151) *Hypotaenidia philippensis admiralitatis* subsp. nova. *Ornithologische Monatsberichte* 37: 190. 1929. [In German].
- (152) *Habropteryx* novum genus Rallidarum. *Ornithologische Monatsberichte* 40: 122-123. 1932. [In German].
- (153) *Porzana tabuensis* as migrant in the Bismarck Archipelago. *Ornithologische Monatsberichte* 45: 24-25. 1937. [In German].

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- (154) *Himantopus himantopus leucocephalus* in the Bismarck Archipelago. *Ornithologische Monatsberichte* 37: 47. 1929. [In German].
- (155) *Terekia cinerea* in the Bismarck Archipelago. *Ornithologische Monatsberichte* 38: 158. 1930. [In German].

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- (156) The hosts of *Eudynamis scolopacea salvadorii* Hartert. *Ornithologische Monatsberichte* 35: 86. 1927. [In German].
- (157) An egg of *Eudynamis scolopacea salvadorii*. *Ornithologische Monatsberichte* 36: 83. 1928. [In German].
- (158) *Urodynamis taitiensis* (Sparrr.) in the Bismarck Archipelago. *Ornithologische Monatsberichte* 41: 153. 1933. [In German].

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- (159) Note on a leucistic specimen of *Dupetor flavicollis nesophilus* (Sharpe). *Ornithologische Monatsberichte* 34: 118-119. 1926. [In German].
- (160) *Lorius amabilis* species nova. *Ornithologische Monatsberichte* 39: 182-183. 1931. [In German].
- (161) A second specimen of *Tyto manusi* Rothsch. & Hart. *Ornithologische Monatsberichte* 41: 153. 1933. [In German].

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- (162) *Zosterops longirostris ottomeyeri* subsp. nova. *Ornithologische Monatsberichte* 38: 90. 1930. [In German].
- (163) New bird species from Lihir (Bismarck Archipelago). *Ornithologische Monatsberichte* 41: 114-116. 1933. [In German]. (Three passerines: *Lalage*, *Pachycephala*, *Rhipidura*, and an *Accipiter* hawk).
- (164) *Pachycephala pectoralis neuhausi* subsp. nova. *Ornithologische Monatsberichte* 42: 24. 1934. [In German].

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Weaver-finches Estrildidae:

- (165) Mutation studies XXI. *Poephila mirabilis* des Murs. *Journal für Ornithologie* 72: 547-552. 1924. [In German].
- (166) Gynandromorphism in a Gouldian Finch *Peophila gouldiae*. *Ornithologische Monatsberichte* 35: 22. 1927. [In German].

Crows Corvidae:

- (167) The forms of the *Coryvus coronoides* Vig. & Horsf. group. *Verhandlungen der Ornithologischen Gesellschaft in Bayern* 12: 277-304. 1916. [In German].
- (168) The genus *Corvus* in Australia and New Guinea. *Journal für Ornithologie* 91: 121-135. 1943. [In German].

Other species:

- (169) The Formenkreis *Pachycephala rufiventris*. *Journal für Ornithologie* 72: 540-542. 1924. [In German].
- (170) *Meliphaga analoga* and its doubles. *Journal für Ornithologie* 73: 255-260. 1925. [In German].
- (171) *Cracticus rufescens* De Vis (Mutation studies XXX). *Ornithologische Monatsberichte* 51: 68-72. 1943. [In German].
- (172) Type localities of Australian birds collected by the "Expedition Baudin" (1801-1803). *Emu* 51: 65-70. 1951. [In English].
- (173) Black-breasted Buzzard destroys eggs by stone throwing. *Journal für Ornithologie* 96: 215. 1955. [In German].
- (174) Moults and migration of the Great Shearwater *Puffinus gravis*. *Journal für Ornithologie* 111: 378-393. 1970. [In German]. (Valuable paper on moults in a shearwater, comparison with *P. tenuirostris*).

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- (176) Mutation studies III. *Micronisus niger* (Bonn & Vieill.); *Rhipidura fuliginosa* (Sparrmann). *Journal für Ornithologie* 71: 512-515. 1923. [In German].
- (177) ——— & Hartert, E. The Indo-Australian shining cuckoos. *Novitates zoologicae*, London 32: 158-163. 1925. [In German].
- (178) The black oystercatchers (*Haematopus*). Mutation studies XXVI. *Ornithologische Monatsberichte* 35: 71-77. 1927. [In German].
- (179) Re-discovery of the "extinct" rail *Notornis hochstetteri*. *Ornithologische Berichte* 2: 54-55. 1949. [In German].
- (180) Life and love of the albatrosses. *Orion*, Innsbruck 9: 965-972. 1954. [In German].
- (181) ——— & Stresemann, V. The Moults of Birds. *Journal für Ornithologie* 107 (Sonderheft): vii + 1-445. 1966. [In German]. (The moults of several species and groups occurring in New Zealand are discussed in detail, including many visiting migratory waders; Long-tailed Cuckoo; Kakapo).

In addition to References 165-174 for Australia, and 176-181 for New Zealand, the following publications contain information of particular interest to Australian and New Zealand ornithologists:

- (7) on birds collected during Captain Cook's last voyage when he visited Adventure Bay, Tasmania, and Charlotte Sound, New Zealand
- (13) the distribution and taxonomy of the Marsh Harrier, *Circus aeruginosus*, from which our Australasian Harrier Hawk, *C. approximans*, has developed
- (19) subspecific differences of the Mongolian Dotterel, *Charadrius mongolus*; summer visitor to Australia and New Zealand
- (20) and (21) on taxonomy and migration of the Curlew Sandpiper, *Calidris ferruginea*
- (22) extent of migration of Red-capped Dotterel, *Charadrius alexandrinus*
- (23) general biology of the White Tern, *Gygis alba*
- (25) systematic review of the genus *Centropus* (coucals, Australia)
- (29) swiftlets (*Collocalia*) and their nests (Australia)
- (32) embryonic development of mound-birds *Megapodius* and Blue-billed Duck *Oxyura* (Australia)
- (33) structure of remiges in flightless rails
- (35) general biology of the Gannet, *Sula bassana*
- (37) on the generic names *Graucalus*, *Coracina*, *Calvifrons* and *Stoparola* (Australia)

- (43) the reed warblers *Acrocephalus* in the Indo-Australian Archipelago
 (47) taxonomy and distribution of silvereyes *Zosterops* in Australasia
 (52) and (53) on bowers and display of bowerbirds Ptilonorhynchidae (Australia)
 (131) - (139) on birds of paradise Paradisaeidae, mainly in New Guinea but also historical reviews
 (149) Little Falcon *Falco longipennis*, (153) Spotless Crake *Porzana tabuensis* (154) Pied Stilt *Himantopus h. leucocephalus*, and (155) Terek Sandpiper *Terekia* (= *Tringa*) *cinerea*, and (158) Long-tailed Cuckoo *Urodynamis taitiensis*, all recorded from the Bismarck Archipelago.

STRESEMANN COLLECTION IN HOCKEN LIBRARY

This bibliography of Stresemanniana on Australasian ornithology should facilitate the utilisation of his many contributions, but it is realized that most of these publications have appeared in journals and series not readily (if at all) available in Australia and New Zealand.

As it happens, three-quarters of the references are found in two journals: about half (90) in *Ornithologische Monatsberichte*, and a quarter (39) in *Journal für Ornithologie*. The complete holdings of these journals (both publications of the German Ornithological Society) in public libraries and thus available through library interloan services are as follows:

NEW ZEALAND

Ornithologische Monatsberichte:

None.

Journal für Ornithologie:

Ornithological Society of New Zealand Library (Auckland Museum) vol. 93 (1951) —.

Department of Internal Affairs Library (Wellington) vol. 97 (1956) — 106 (1965).

University of Otago Library (Dunedin) vol. 106 (1965) —.

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Ornithologische Monatsberichte:

Australian National Library (Canberra) vols 1-45 (1893-1937).

Australian Museum (Sydney) vols 1-22 (1893-1914).

Journal für Ornithologie:

Australian National Library (Canberra) vols 1-57 (1853-1909) and 73-80 (1925-1932).

Australian Museum (Sydney) vols 1-36 (1853-1888) and 99 (1958) —.

State Library (Adelaide) vols 10-17 (1862-1869).

Division of Wildlife Research, CSIRO (Canberra) vol. 88 (1940) —.

Royal Australasian Ornithologists Union, (Melbourne) vol. 88 (1940) —.

National Museum (Melbourne) vol. 100 (1959) —.

University of Western Australia (Perth) vol. 104 (1963) —.

University of Adelaide (Adelaide) vol. 106 (1965) —.

As far as the other journals, proceedings and yearbooks are concerned, some of them are neither in New Zealand nor Australia.

Realizing the difficulty (bordering to near impossibility from here) of obtaining some of these (especially earlier) references, I have donated a 'Stresemann Collection' to the Hocken Library, University of Otago.

The aim is to complete this collection as early as possible to contain all of Stresemann's East Indies and Australasian ornithological works. Arrangements have been made with the Hocken Librarian, Mr M. G. Hitchings, that the collection stays together, can be studied in the Library, and that Xerox copies of publications will be made available to any ornithologist applying through a library on an interloan basis.

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J. A. DOUGLAS FLACK came to New Zealand to join the Wildlife Service in early 1971. He received his M.Sc. and Ph.D. degrees in Zoology from the University of Wisconsin, Madison. His research in North America was concerned with the influence of the structure, location and history of aspen forests on their bird populations (*Ornithological Monographs* No. 19). He pursued his interests in wildlife and wilderness during his ramblings and work all over North America to Alaska and in England and Kenya. He has worked on Black Swan and is currently studying the New Zealand Shore Plover on Southeast Island. His major research here has centred on the population biology of South Island Robins at Kaikoura and on three islands in Marlborough Sounds. This work is being applied to understanding the importance of introduced predators on the mainland and to the study of and attempts to manage the Black Robin in Little Mangere Island.

STEWART BISSET is interested in most aspects of biology, but especially wildlife biology and parasitology. His main field of interest has been the parasites of both native and introduced animals in New Zealand and particularly the biology of their transmission and how this relates to host ecology. He received his M.Sc. in Zoology (with distinction) at the University of Canterbury at the beginning of 1975 for his thesis on the helminth parasites of the Paradise Duck. After finishing his thesis he continued working at the University of Canterbury, initially with Professor A. M. Fallis, a visiting Erskine Fellow from the University of Toronto, and then with Mrs F. R. Allison, on protozoan blood parasites of the Fiordland Crested Penguin.