

presumably provide some indication of the average times taken in some bird of paradise species for female clad immature males to commence visible plumage transition, and of the duration of some transition periods.

Paradisaea raggiana, *P. minor* and *Cicinnurus magnificus* have been, and continue to be bred successfully in captivity at the Baiyer River Sanctuary. This achievement in itself indicates a well balanced and close-to-natural diet, but this diet is one that is undoubtedly less varied than that enjoyed by the same species in the wild. Any possible effects of a limited variety in diet on plumage transition rates are, of course, unknown.

In the wild other factors may come into play as LeCroy (1981) has suggested. If plumage stages reflect individual hormone levels rather than age, subordinate males in a population may not develop fully adult plumage until they are sufficiently dominant to join a display arena. Thus the age at which captive birds acquire fully adult plumage may be a minimum age as they are usually without a dominance framework.

This paper was researched and written at the suggestion of Cliff and Dawn Frith, and their advice and encouragement are gratefully acknowledged. We are also grateful to Mary LeCroy of the American Museum of Natural History, and to Bill Peckover for their helpful comments, suggestions and editorial assistance.

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PAPUASIAN ORNITHOLOGY: THE PAPUA NEW GUINEA BIRD SOCIETY AND ITS NEWSLETTER

BILL PECKOVER

NEWSLETTER HISTORY

The newsletter was born in December 1965 and christened "New Guinea Bird Society Circular No.1", with the June 1966 issue (No.8) it was renamed "New Guinea Bird Society Newsletter" and was issued under that name until No.145, which appeared in July 1978.

On July 4 1978 the name of the Society was changed to the Papua New Guinea Bird Society. Newsletters from No.1", went under that title.

EDITORS

Harry Bell

Roy Mackay

Win Filewood

Bill Peckover

Warwick Dyson

Tony Layton

Brian Coates

Charles Nicholson

Ted Patterson

Inez Weston

John Hansen

John Seale

Brian Finch

Brian Finch

Brian Finch

Nigel Hartley

PERIODS OF RESPONSIBILITY

No. 1, December 1965, No.3, February 1966, Nos. 6 & 7, May & June 1966.

No.2, January 1966, Nos.4 & 5, March & April 1966, Nos.8 - 45, June 1966 - August 1969, Nos.48 - 52, November 1969 - March 1970, Nos.65 - 72, April 1971 - January 1972.

Nos.46 & 47, September & October 1969, Nos.53 - 61, April - December 1970, No.64, March 1971, Nos. 73 - 75, March - May 1972, Nos.85 & 86, April & May 1973.

Nos.62 & 63, January & February 1971.

Nos.76 & 77, June & July 1972.

Nos.78 - 83, August 1972 - February 1973, No.91, September 1973.

No.84, March 1973, Nos.87 - 90, June - September 1973, Nos.92 - 96, November 1973 - April 1974, Nos.100 - 106, August 1974 - March 1975.

Nos.97 - 99, May - July 1974.

No.107, March 1975.

Nos.108 - 129, April 1975 - February 1977.

Nos.130 - 138, April - December 1977, Nos.142 - 152, April 1978 - February 1979.

Nos.139 - 141, February - March 1978.

Nos.153 - 174, March 1979 - December 1980.

assisted by Alison Pound

Nos.175 - 186, January - December 1981.

assisted by Joan Lipscombe

Nos.187 - 202, January 1982 - April 1983.

Nos.203 - 210, May 1983 - August 1984.

- Judith Hornabrook Nos.211 - 218, September 1984 - December 1985, Nos.222 - 228, July 1986 - August 1987.
 Mike Hopkins Nos.219 & 220, January/February & March/April 1986.
 Helen Hopkins No.221, May/June 1986.
 Jenny Hicks Nos.229 - 232, November 1987 - March 1988.
 Bill Cooper Nos.233 - 253, March 1989 - January 1990.
 Roger Hicks No.254, March 1990.
 Bill Eddie Nos.255 - 261, April - December 1990.

Note: from No.189/190 (March/April 1982) until No.228 (August 1987) inclusive the Office (later Department) of Environment and Conservation assumed responsibility for publishing the Newsletter.

The first name change, from 'Circular' to 'Newsletter' when the Society was only seven months old was six months overdue! Circular No.2 was in fact a Newsletter, in that it recorded a 'first' and a doubtful first for New Guinea, the Redshank, *Tringa totanus*, and the Marsh Sandpiper, *Tringa stagnatilis*. The Redshank record was the doubtful one. Its rare presence in New Guinea was later confirmed by Brian Coates (Newsletter 81:3, Nov. 1972).

The second name-change, to the 'Papua New Guinea Bird Society Newsletter', was also overdue, not only because there was a need to recognise the Society's activities and members in the Bismarck Archipelago and Bougainville, but also to be in keeping with the independent status of Papua New Guinea.

In Newsletter 207 (Sept. 1983), Brian Finch foreshadowed the demise of the Newsletter as such and the birth of a quarterly ornithological journal the Muruk. To those looking on from afar it seemed to have been a long, difficult gestation that culminated with a premature birth more than two years later (the publication date of Volume 1 No.1 is not known). Unhappily all three issues of Volume 1 were poorly presented. Volume 2 No.1 was a tremendous improvement, and from here on, Muruk looked like an ornithological journal. Perhaps the Society should consider a reprint of those first issues in the present format. [The Society did reprint volume 1 as a single issue in late 1990, after this article was written, Ed.]

Maybe to some small degree caused by delays in getting out the first issue of Muruk, there was obvious confusion between the respective Editors as to whether an item should appear in Muruk or the Newsletter. This unresolved dichotomy continued until Newsletter No.228, July/August 1987.

The Editorial in MURUK Volume 2 No.1 announced changes which in effect rechristened the Newsletter minus "Society business" the Muruk and confined the contents of future Newsletters to "Society business". One can only have praise for the persons responsible for the speed and decisiveness with which this was done, and it was a decision which puts

Muruk on a similar footing to that of some older international journals during their formative years; it put down a good base on which Muruk may grow.

BEFORE THE NEWSLETTER

A short review of the history of Papuasian ornithology before the Society was formed provides helpful background information to a review of the achievements of the Society.

The first published use of 'Papuasian' I have found is in the title of Count Tommaso Salvadori's 1875 paper - "*Catalogo di una collezione di Uccelli gruppo di Halmahera e di varie localita della Papuasias, inviata in dono al Musse Civica di Geneva dal Sig. A.A. Bruijn*". Salvadori used the term to describe in one word New Guinea, the Bismarck Archipelago, the Solomon Islands and the Kei Islands. Today the Kei Islands are considered to have 'Moluccan' not 'Papuasian' fauna.

Papuasian Ornithological History: Phase I (From 1521 to 1850)

For the 330 years after the explorers had returned to Spain from the Magellan circumnavigation in 1521, carrying their treasured mutilated skins of *Paradisaea minor*, Papuasian ornithology was almost solely concerned with male bird of paradise skins taken by traditional hunters. Other than to establish that New Guinea was the 'home' of birds of paradise this 330-year period contributed little to the knowledge of Papuasian bird life.

Papuasian Ornithological History: Phase II (From 1851 to 1965).

Activities during Phase II were concerned with the gathering of representative bird-skin collections in the areas worked by independent collectors and the collectors associated with institutional expeditions.

Missing from Papuasian ornithology for the whole 115 years of Phase II is first-hand information that comes only from the studies and observations by short- and long-term resident ornithologists, whether they be ornithologists by vocation or avocation.

P.L. Sclater's 1858 paper "On the Zoology of New Guinea", was possibly the first 'technical' paper about New Guinea fauna. It was during the decade commencing about 15 years later (1873 to 1882) that the foundation documentation of Papuasian ornithology was laid down. Daniel Giraud Elliot published his important "A Monograph of the *Paradisaeidae* or birds of paradise" in 1873. This was followed in 1875 with the first parts of John Gould's "Birds of New Guinea and the adjacent Papuan Island" which was completed after Gould's death by R. Bowdler Sharpe. Both of these works were important but were completely overshadowed in their importance by Tommaso Salvadori's monumental works, "*Prodromus ornithologiae Papuasiae et Moluccarum*" in 15 parts, and "*Ornitologia della Papuasias e delle Molucche*" in 3 volumes (supplements to each of the

three volumes followed between 1889 and 1891). It is this latter work which established Tommaso Salvadori as the indisputable founding father of Papuan ornithology.

Practically all of the early knowledge about Papuan birds was based on museum collections made by "professional" collectors.

Between 1909 and 1964 there were five important 'Institutional' expeditions or groups of expeditions to New Guinea. These were i) The British Ornithologists' Union and the Wollaston Expedition to Dutch New Guinea, 1909 - 1911 and 1912 - 1913, the subject of an extensive report by W.R. Ogilvie-Grant (1915); ii) The 1933 - 1934 Archbold Papuan Expedition; iii) The 1936 - 1937 Archbold New Guinea Expedition; iv) The 1938 - 1939 Archbold New Guinea Expedition. The three Richard Archbold Expeditions are the subjects of many reports in the Bulletins and Novitates of the American Museum of Natural History, New York, by Richard Archbold, Ernst Mayr, Austin Rand and Leonard Brass; v) The 1948 - 1964 E. Thomas Gilliard/American Museum of Natural History Expeditions to New Guinea. These are the subjects of a number of Novitates and Bulletins of American Museum reports by Gilliard, Mayr & Gilliard, and Gilliard & LeCroy.

THE NEWSLETTER: ITS CONTENTS

It is the missing element of Phase II that the Society and the Newsletter have provided. An indication of the relevance of the Newsletter to Papuan ornithology is the listing for the New Guinea Subregion* of no less than 83 references by author and title published in the Newsletter, plus 126 localities for which one or more bird lists are referenced, for the 12 years to 1977 in Clifford Frith's bibliography (Frith 1979). An update of that bibliography would, no doubt, double the number of New Guinea Subregion references therein.

The Newsletter is not unique in ornithological literature by being free from errors of fact and/or opinion. Harry Bell's (1978) outstanding review of J.P. Croxall's feeding and ecology paper in *The Ibis* (Croxall 1977) shows that even the most prestigious of journals sometimes propagate what appears to some others to be ornithological misinformation. That particular example was selected because first, it is a high-quality piece of work, and second, because it shows no-one is infallible. Throughout that review, Harry was guilty of consistently misspelling Croxall's name. The point being made here is that there are some errors and misinformation in the Newsletters, as there are in every other ornithological journal. Some of those in the Newsletters have been 'noticed'; others are unnoticed, lie dormant and at some time in the future may catch the unwary. That gentle warning is not

* The so called "Papuan Subregion" is a misnomer and should not be confused with the term Papuan. For some unknown reason the New Guinea Zoogeographical Subregion was called the Papuan Subregion in Rand & Gilliard's Handbook (1967). This change of title has found little acceptance. The island described is New Guinea not Papua; also in view of the increasing acceptance of 'Papuan' it is a confusing term.

meant to detract in any way from the vast resource of factual data, reliable ornithological information and good opinions recorded in the Newsletter throughout its 25 year life.

The importance of the Newsletter as a unique Papuan ornithological resource is demonstrated below by the simple expedient of listing just ten of its early milestone papers.

1. John Beach. The display and mating of the King of Saxony Bird of Paradise 109: 1-2.
2. Harry Bell. Some results of the study of a bird community in lowland rainforest. 147: 3-20.
3. George Clapp. Selected unusual observations in Popondetta Town 1976-1979. 158: 5-14.
4. Brian Coates. Magnificent Riflebirds in display (an adult male-male display). 87: 3.
5. Bob Draffan. A defence of his display ground by the Magnificent Bird of Paradise. 156: 2-3.
6. Steve Feld. Ethno-ornithology of the Mount Bosavi Region. 132:9-10
7. Brian Finch. Observations and notes on the Bat Hawk *Machaerhamphus alcinus* in Papua. 146:8-12
8. Chris Healey. Exploitation of birds of paradise in the Bismarck Mountains. 115:14-15, 116:9-10, 117:8
9. Karol Kisokau. A study of the biology of the megapodes of West New Britain. 121:18-20
10. Mary Stringer. Taxonomical ordering of birds by the Waffa. 156:3-7

These few examples are from 'skipping' through early issues of the Newsletter, having first decided to stop at ten and not list an author more than once.

In the early days of the Society not all observations or extensions of ranges given in Rand & Gilliard (1967) were reported in the Newsletter. A classic example was that of the Common Kingfisher *Alcedo atthis*, enthusiastically reported by Brian Finch as a 'first' for Papua in Newsletter 145: 6-7 and 146:13. This species was discovered to be a visitor to Ilimo Farm pond soon after the society was formed and before long it was also recorded at the Brown and Veimauri Rivers. Early observations of this species missed being reported at the appropriate times during meetings for inclusion in a Newsletter. Fortunately for the record though, Win Filewood reported it as "common here" in the Port Moresby Post-Courier in May 1970 and later that year, referring to the Dwarf *Ceyx lepidus*, Azure *Alcedo azurea*, Little *Alcedo pusilla*, and Common Kingfishers, he wrote "Only one species occurs in Europe, and the same bird occurs right across to P.N.G., and the Solomons, where we call it the River Kingfisher (*Alcedo atthis*)", and "All these birds occur together at Brown River, but the Dwarf is the commonest, especially away from water" (Filewood 1970a and 1970b).

The Filewood articles in the Post-Courier ran from mid-1969 to about May 1973 and were a major source of funds since Win donated all of the proceeds to the Society. Furthermore, they played an important role in popularizing the Bird Society and bird watching throughout Papua New Guinea.

THE 'ALPHA HELIX' EXPEDITION.

The most significant event of the Society's first quarter of a century - and perhaps for the next century - was its support of the 1969 "Alpha Helix" Expedition to New Guinea. The scientific work using the biological material collected during that expedition culminated in the discoveries by Charles Sibley and Jon Ahlquist that put beyond any doubt Papuan/Australian passerine avifauna has two (not one) geographic sources of origin. An ancient source (the 'old endemics') and a more recent Eurasian invasion source (Sibley & Ahlquist 1985). The material was also used by Sibley and Ahlquist in developing a more objective basis (i.e., one requiring less subjective judgement) for the classification of birds into orders, families, genera, etc. (Sibley, Ahlquist & Monroe 1988) using DNA-DNA hybridisation. This new basis for classification is arguably the most significant advance in systematic ornithological theory in more than 200 years.

In June 1968 Charles G. Sibley, Professor of Biology at Yale University, led a three-man team to arrange for a U.S. natural history research vessel the "Alpha Helix" to be the base for a scientific collecting expedition in New Guinea in the next year. Sibley addressed a combined meeting of the Papua and New Guinea Scientific Society and the New Guinea Bird Society about the proposed expedition (Newsletter 32, June 1968). In Government circles there was much cynicism about the proposed expedition and some quite active lobbying against it. However, that opposition was overwhelmed by the strong unanimous support of members in government of both the Scientific and Bird Societies. Years later Sibley told me it was the enthusiasm of members of both these societies that persuaded him and his colleagues to go ahead with New Guinea despite its much higher costs in preference to the 'second choice', South America, when their budget for the expedition was cut in half early in 1969.

A number of Bird Society members participated in the expedition and all benefited from the experience.

"Knockers" there were: before, during and after the event; they were both vocal and annoying! Their one and only persistent cry was that the only result of the expedition would be bigger and better bird skin and other natural history collections in American museums.

Blood and tissue samples were taken from the birds that were collected and the carcasses were frozen for later preparation as voucher specimens at the Peabody Museum of Natural History at Yale. The blood and tissue samples provided proteins and DNA for extensive

comparative studies using several methods, including DNA-DNA hybridisation. The laboratory studies were undertaken at Yale over many years - the processes involved were complex, precise, tedious and slow. Supplemented by comparative material from Australia, New Zealand, Asia and other parts of the world, the results were published over a number of years by Sibley & Ahlquist, and formed the basis for the two major papers cited above.

A 'minor' paper of great interest increased the bird of paradise family by one, and possibly two, species (the Lesser and Greater Melampittas) and also rearranged the taxonomic order of nine genera (material for the remaining genera was not available) (Sibley & Ahlquist 1987)

THE SOCIETY AND SOME ACHIEVEMENTS

From the very beginning - the inaugural meeting - and throughout its life, the Society has had a broad membership with a mixture of experienced ornithologists and beginners. Even from the first day it has never been a forum for the benefit of 'experts'. I went along to that first meeting with practically no knowledge of birds anywhere let alone those of New Guinea. There were others too who had come along out of curiosity and probably, like me, to satisfy a latent desire to learn a little about something called a bird of paradise! (The meeting had been advertised by Roy Mackay with an open invitation to the public.)

In those early days, as I have no doubt is the case today, it was the beginners who benefited most from the Society's activities. Harry Bell, the Mackays and Win Filewood each brought with them a virtual lifetime of practical ornithological experience; this knowledge they willingly and generously shared - their enthusiasm was even more catching than a common cold. Another important 'player' of those early times was the indefatigable Lady C., who used her well honed ability to get people doing the things which would broaden their knowledge or ability and/or be of benefit to other members. (The wife of the administrator of Papua New Guinea, Lady Cleland, now Dame Rachel Cleland, was then affectionately known throughout PNG as Lady C.)

This enthusiasm for the 'work' of increasing the record knowledge of Papuan birds is a continuing feature and the great strength of the Society. Inez and Tom Weston's team work resulted in reformatting the Newsletter toward a more professional product, and Tom produced the species index upon which all subsequent indexes have been based. Alison Pound and then Joan Lipscombe produced the Newsletters 153 through 186 edited by Brian Finch. Brian's own prolific output of articles and observations throughout the four years of his editorial reign are examples of the continuing enthusiasm. Membership changes, but the enthusiasm lives on.

'Before Society' practically everything known about New Guinea birds was based on collections in museums and the field notes kept by some collectors. The data base of first-

hand knowledge about Papuan birds in the wild which has been created by Bird Society members is undoubtedly the Society's greatest achievement. This data base is not confined to information in the Newsletter. Roy Mackay (1970) led the continuing book and booklet output by members. Harry Bell still, by a very wide margin, leads the field in the production of technical papers in overseas journals, probably with Matt Heron running second. Win Filewood is in front in popular articles. These, plus works in preparation are all part of that data base.

The very helpful suggestions and comments on early drafts of this paper by Brian Coates, Alison Pound and Inez Weston are gratefully acknowledged.

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A COMMENT ON THE SLATY-BACKED GOSHAWK *ACCIPITER LUTEOSCHISTACEUS*

STEPHEN DEBUS

Finch & McKean (1987) recorded observations on the Slaty-backed Goshawk *Accipiter luteoschistaceus* on New Ireland. Their description of the wings "projecting slightly beyond the short, squared tail" is puzzling and would certainly not be a general field character for the species. The individual described must have had a damaged or regrowing tail, because the tail projects beyond the wing tips at rest in all *Accipiter* species, including the Slaty-backed Goshawk (D. Mead pers. comm.). The Slaty-backed Goshawk is described by Wattel (1973) as having wing and tail proportions of the *A. novaehollandiae* type, but with a comparatively long tail. Even the other small *A. accipiter* of the Bismarcks, the New Britain Sparrowhawk *A. brachyurus* (literally "short tail"), has the tail projecting beyond the wing tips at rest, as revealed by the museum skins (D. Mead pers. comm.; see also Wattel 1973).

A small hawk with white underparts and slaty wings projecting slightly beyond a short, squared tail would suggest the Black-winged Kite *Elanus caeruleus* perched individuals of which may have the black shoulders hidden by scapular and breast feathers. It is possible that a Black-winged Kite could stray into the Bismarcks. I take this opportunity to draw attention to a useful paper on the Black-winged Kite in New Guinea (Wood 1970), not mentioned by Coates (1985).

I will conclude by saying that much remains to be learned about the raptors of PNG, particularly those on the islands. For instance, the juvenile plumage of the New Britain Goshawk *A. princeps* still remains to be satisfactorily described. Now that the PNGBS has assumed the role of PNG area co-ordinator for the Australasian Raptor Association, perhaps some detailed raptor studies and publications will result.

I thank David Mead for helpful discussion on *Accipiter* species.

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