

Birds of Paradise—Are They in Danger?

M. C. DOWNES, Officer-in-Charge, Wildlife Section

Did you recognize the bird on the cover as a bird of paradise? There are 32 different species of birds of paradise and they don't all look like Papua New Guinea's national emblem. Most people think of the Raggiana bird of paradise, with the brilliant red plumes, as "The bird of paradise". Although killed in great numbers to provide head-dresses for singings, this species is not in danger of extinction in the immediate future because of a widespread distribution in sparsely populated areas.

However in all areas where economic development is taking place, most species of birds of paradise are in danger of being so greatly reduced in numbers that eventually they will no longer be a feature of the lives and customs of the people.

It is no coincidence that Papua New Guinea's national emblem is a bird of paradise. The birds belong to the country as much as the people do. And from earliest times the people have used the birds' plumes—from rare species as well as common species—in traditional ceremonies.

But now population growth and economic development are threatening the birds. More bushland is being cleared for subsistence agriculture and cash cropping; large areas of land are being cleared by logging companies. This means economic development for the people, but for the birds it means eviction from their homes. When you look around, there still seems to be plenty of forest, and the birds only have to move. But quite apart from the fact that economic progress in some places is reaching the stage where there is no other suitable home for the birds to fly to, most forest is already holding as many birds as it can carry. It must be remembered that the forest provides food for the birds as well as shelter, and there is therefore a limit to the number of birds that an area of forest can support.

When a man buys a shotgun he feels he is making progress. Although it would be illegal if he used his gun to shoot birds of paradise, this cannot always be stopped. Birds of paradise live in lonely places, a long way from a Police Station, and it is difficult to enforce the law. In another way, the coming of government pacification has added to the slaughter of the birds. In the days when government patrols were unknown, a man could shoot birds of paradise (with his bow and arrows) in his own tribal area. But he did not dare go beyond it. Now he can, with confidence, go much further afield. The man

is safer but the birds are not, because the hunters and plume traders are killing birds in every area.

No Papua New Guinean would want to see the birds killed in such quantities that they died out completely. Yet this has already happened in certain areas.

Unless we plan now to save the birds, more and more will disappear as the land is developed. In 20 years' time there could be very few live birds of paradise. The few traditional plumes we will have left in the museums will be a sorry reminder of the glorious birds that used to be.

Some of the species which require special attention are:—

Lophorina superba—the Superb bird of paradise. This is the bird illustrated on the cover. Although fairly widespread at altitudes of 3,200 to 7,300 ft for the full length of the central mountain range, this bird is heavily used for head decorations. The plumes which appear blue in the photo are actually iridescent and vary in appearance as the angle of the light falling on them changes.

Paradisaea rudolphi—the Blue bird of paradise—lives along the central mountain range but only within narrow altitude limits (4,500 to 6,300 ft). It has a black head and brilliant blue wings and tail.

Epimachus fastosus—the Black Sicklebill bird of paradise—lives in the Highlands region at altitudes of 4,200 to 7,700 ft. It has long black tail feathers, up to 24 in long which are greatly prized for head-dress decoration.

Pteridophora alberti—the King of Saxony bird of paradise. The species may be found right along the central mountain range in both

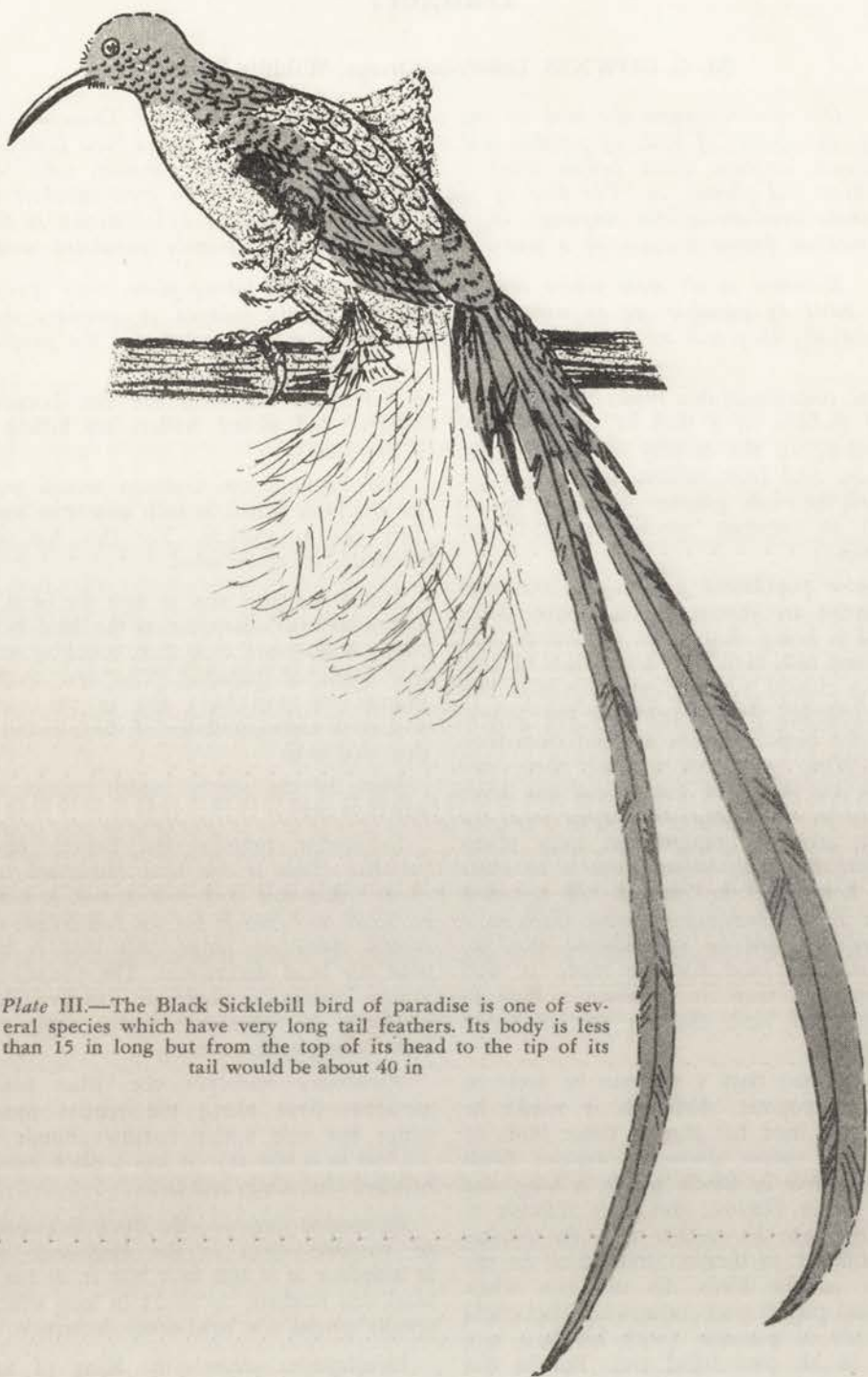


Plate III.—The Black Sicklebill bird of paradise is one of several species which have very long tail feathers. Its body is less than 15 in long but from the top of its head to the tip of its tail would be about 40 in



Plate I.—The King of Saxony bird of paradise. These line drawings indicate the great variety in appearance of birds of paradise. This bird is about 10 in from head to tail, but the head feathers are twice this length

Papua New Guinea and West Irian at altitudes of 4,800 to 8,900 ft. It is unique in the long enamelled feathers of the male. These are popular for nose decorations by the Wahgi people. This bird was featured on the 5 cent stamp issued in May, 1970.

Astrapia rothschildi and *Parotia wabnesi* are both limited to a very small area north of Lae, on the Huon Peninsula, and could easily be shot out.

Paradisaea decora—Goldie's bird of paradise—is found only on Fergusson and Normanby Islands, off the south-eastern tip of Papua. Because of the small numbers of birds confined to a very limited area, any increase in hunting activity will have a serious effect on the bird population.

PLANS TO SAVE THE BIRDS

In August, 1971, the Administrator's Executive Council approved plans for a National Project to save the birds of paradise against the threats of increasing shotguns, cutting of special forest habitat and uncontrolled slaughter for commercial sale of plumes.

Special effort will be made to enforce the law, thus preserving the traditional right of the people to use plumes in ceremonies and for cultural purposes, to hunt birds of paradise using traditional weapons, not shotguns, and to exchange plumes for native customary considerations, not money.

In September, 1971 a joint application was made to the World Wildlife Fund in Switzerland for a grant of \$78,000 representing approximately 40 per cent of the total cost of a 3-year programme. The application has been approved by the World Wildlife Fund, which is now seeking the funds by public subscription.

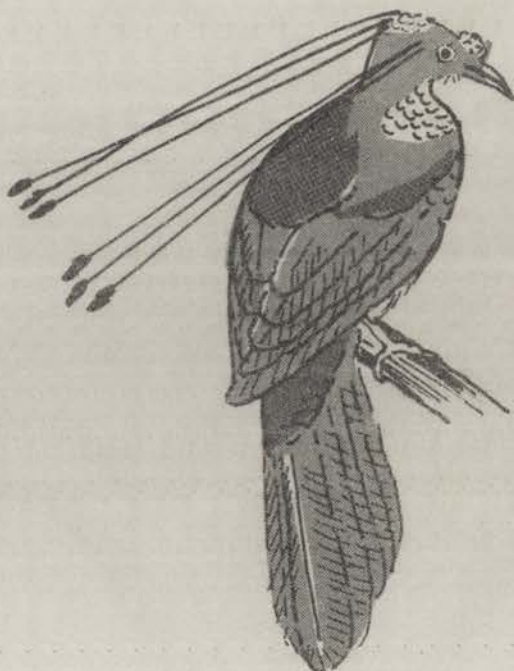


Plate II.—*Parotia wabnesi* is also known as the six-wired bird of paradise. It measures about 15 in from head to tail



Plate IV.—Traditional method of hunting birds of paradise. This print is taken from a book published in 1869—*The Malay Archipelago* by A. R. Wallace. The hunters have made mats of leaves under which they hide from the birds. Sharp-pointed arrows would draw blood which would spoil the feathers, so blunt-ended arrows were used

Officers from the Wildlife Section of DASE, and the National Parks Board commenced a survey of the most important bird of paradise forests. The objective is to establish a series of 15 to 20 bird of paradise conservation areas, throughout the country. All of this habitat is native-community-owned and most of it is likely to be cleared for subsistence gardens or for the sale of timber. Even where the forests remain untouched, there is still the danger of illegal shooting by native plume traders.

Each conservation area would be managed independently according to its particular requirements. The habitat would be protected from logging and other forms of commercial exploitation. It is envisaged that hunting, if permitted at all, would be carefully controlled and limited to traditional methods only. Wildlife officers would assist the indigenous land-owners to manage the wildlife in their area. In specially productive bird of paradise forests, it would be possible to harvest plumes for traditional use.

BEHAVIOUR OF THE BIRDS

Even in places which have been very heavily hunted in the past, it is surprising how quickly the birds can come back, if the shotgun shooting is stopped. With traditional methods of hunting, there was never any problem of the birds dying out completely.

The plumed species have a courtship behaviour in which only a relatively few fully adult males of each generation are needed for the species to survive, and the only birds having any commercial value are the fully adult males. No pair bond develops between the sexes and the males take no part in the duties of nesting or in the rearing of the young. Another reason for the resilience of these birds is that the males do not acquire their commercially valuable adult plumage until they are 4 or 5 years old.

But conditions are changing rapidly in Papua New Guinea and the very factors which up until the 1960s ensured that there was always a plentiful supply of plumes are being quickly altered.

In the first place the reservoirs of un hunted species beyond the last patrol post no longer exist in their untouched condition. New airstrips, forest access tracks, new highways, and most important of all, the possibility of hunters and plume traders travelling unmolested in new areas has greatly increased in the past few years.

Commercial plume traders, Papua New Guinean businessmen, can now fly into many undeveloped areas. By distributing ammunition and money to local hunters (quite illegally of course) they can fully exploit all the sources of birds of paradise. In addition they can buy cheaply and market the skins in the densely populated villages where plumes are scarce.

WHAT CAN YOU DO?

At this period of time the conservation of wildlife is attracting attention from all over the world. Particularly is this the case for countries such as Papua New Guinea with many unique types of wildlife not found elsewhere.

Much more information and scientific study of the birds' habits and distribution is needed.

If you know of bird of paradise forests which might be preserved in your district, write to the Wildlife Section, DASE, Konedobu. Talk to your Lical Government Council about the need to save birds of paradise from the shotguns and the clearing of the forests.

It will depend on the people of Papua New Guinea whether the excessive hunting of the birds of paradise is controlled sufficiently. It is the people who will lose if the bird of paradise conservation areas are not established where the birds can remain while the country is being developed.