



The Avicultural Society of New South Wales (ASNSW)

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The Golden-Shouldered Parakeet

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Introduction

The [Golden-shouldered Parakeet \(*Psephotus chrysopterygius*\)](#) is one of the most beautiful of the Australian parrots, as well as being one of the most sought after species by most aviculturists. It is moreover, a very notable bird, with a great deal of publicity surrounding it. Most writers display a complete lack of understanding of this species, both in the wild and certainly in captivity. In this article, I wish to record for the benefit of other members of the Society, details of the bird from personal observations in the wild over a period of fifteen years and the results of keeping this most celebrated of Australian parrots in my own collection here at Rodney Park. It is hoped that members will be able to gain some benefit from this article which may help to breed more of these birds, which are becoming increasingly plentiful in aviaries, and also that people will be able to have a more balanced view as to the problems surrounding the species.

A description of the Golden-shouldered appears on page 240 of "Parrots of the World" (1973) by J Forshaw, opposite an excellent painting of the species. The male has forehead and lores pale yellow; crown and nape black; underparts turquoise blue; lower abdomen, thighs and under tail coverts scarlet tipped with white; upper parts brown; rump turquoise blue; median wing coverts golden-yellow; under wing coverts and outer web of flight feathers blue; tail greenish-blue, lateral feathers tipped with white; wing stripe absent; bill greyish; iris dark brown; legs greyish brown. The female has crown and nape pale bronze-brown; upper parts and breast dull yellowish-green; lower underparts pale blue with some red and white markings towards the vent; wing stripe present. Immatures resemble female; males are brighter on sides of head and under tail coverts; wing stripe present.

The search for Golden-shouldered in their wild home

I was always interested in aviculture and had the pleasure to be invited to the aviaries of [Sir Edward Hallstrom](#) and saw my first Golden-shouldered there. I was immediately captivated by this bird, and resolved to do what Sir Edward had never been able to do, and that was to breed a pure strain of this lovely parrot and establish it in captivity. At no time was any assistance received from Sir Edward, in that he never mentioned where the birds came from and it was only through "the grapevine" that a very hazy picture emerged as to where he had obtained this almost unknown bird.

We travelled to Cairns in 1960 and went to the Department of Agriculture to try to obtain further clues, on the whereabouts of "ant-bed parrots", as they are known in the north. This was fruitless, but an official assured us that if we were successful we would be given a permit for our birds, and eventually we were fortunate enough to secure four males and one female which under permit became the nucleus of our aviary stock here. Sir Edward subsequently gave me one of his hybrid breedings - a cock, which was consequently disposed of. The stock of Sir Edward's, as far as we can ascertain, was not received under permit.

In those days bird keeping was quite different, and it wasn't so illegal to do the sort of thing Sir Edward did, and that was to send collectors out after an unheard of species. Hallstrom received two consignments from the north, by Lear and Turner who paid indigenous Australians to collect them; the first consignment was four birds and second was twenty. People should try to understand the situation in those days; the bird was plentiful in areas, however as we have found out, plentiful only in restricted localities, and no one thought much about the legalities of the situation. Of course, it is a different situation now and the bird is heavily protected within its range.

Returning to the search for our Golden-shouldered; in Cairns having left the Department of Agriculture we chartered a [Cessna aeroplane](#) and travelled to every station on the peninsula. It was unfortunate that at this very time the Leura picnic races were on, and everyone from the stations were away, with only a few people left. We eventually came to [Musgrave Station](#) and the pilot was immediately invited into the homestead for a cup of tea as is the custom in the north. While he was having his tea I wandered about a little and asked an indigenous lady, my by now usual question, as to whether she had seen any Ant-bed parrots around? To my surprise she answered "Ant-bed Parrots? Yes I see!" and continued "You come and I show you".

Under the homestead we found a young girl, a cook who was working for the cattle station, and there in a box were three baby Golden-shouldered which a "fella" had brought in to her. She was hand rearing the little babies and one died, but the other two were absolutely gorgeous. I subsequently wrote to the lady in charge of Musgrave, who very kindly invited me up the following year so that I might find and study this bird, and I have done that for ten seasons since.

Observations of Golden-shouldered in the wild

The breeding habitat of the Golden-shouldered is low scrub country typical of a lot of [Cape York](#). The actual breeding area is normally associated with a river or creek running through an area of from two to fifty acres which forms a black flat, so called, because of the black soil, and it is in this that the special termite builds its mound. Other [termites](#) build in the hillier country, in the red earth, but the Golden-shouldered breeds only in the [termitaria](#) on the black flats. The black flats are normally covered in water in the wet season, thus the parrot has a supply of seeding grasses growing right outside the nesting hole - a sort of millet, and the parents feed this extremely green feed, and in fact I have never observed the nesting Golden-shouldered to eat dry seed. In order to check this, I have caught wild birds after observing them to eat, and they have disgorged seeds, but never dry ones.



General view of a "Black Flat", breeding area of the Golden-shouldered in the wet season, showing luxurious growth of green grasses right below the mound. The opening is approx. 1/3 from the base.

The feeding and nesting area is therefore very moist. I haven't been fortunate enough to be in Golden-shouldered country for a full twelve months, but have a theory that if there is a late wet or a very dry season they will seldom breed. A major reason is that it needs a lot of rain to soften the ant beds, which will become puggy such that it is possible to poke holes in them with the finger. At this time the female will make as many as 10 "start holes" in the surface of the damp ant bed, as I have shown in lectures to the Society. We call them "start holes" because the hen makes many of them and none are very deep, perhaps because some may turn out to be unsuitable for her. While the ant bed gets very soft in the wet season, they become so hard afterwards that a pick is needed to penetrate the outer layers. Both parents feed the young and enter the nesting chamber. I have never seen a male feed a female before entering the nest, so assume that he also feeds the young ones.

Every year that I have observed them I would say that the hen spends the majority of her time off the nest during incubation. Most evenings you will observe the hen to enter the nest - at least in the late afternoon. Then during the first week of incubation she stays in the nest a fair amount but thereafter she will not be found on the eggs in the daytime; however, the pair will remain in close proximity to the nest.



A termite mound with the opening of an old nest taken in the drier period.

Now on one trip up to the Cape some indigenous Australians opened up a nest some three days prior to our arrival. When we arrived they told us about it and we immediately went out to the nest, and saw the ant bed which had been broken over but replaced. Spider webs were over the front opening and to the rear of the nesting chamber which had been broken, which indicated that the parents had not returned to the nest since the break.

I said to the man with me "What a shame! We could have put those eggs under a budgie back at the station had we arrived sooner" and then said "Oh well, no use crying over spilt milk" and tossed the eggs on the ground. To my surprise the eggs contained three embryos which were very much alive, and to my knowledge the nest had not been attended for 72 hours. The temperature range in the area is 30oC plus during this period, and because of the wet conditions I have already described, the humidity is also very high - tropical conditions. These conditions inside a termite mound result in a natural incubator being formed.

Golden-shouldered do not normally nest in [magnetic termite mounds](#), usually because these mounds are not wide enough, and moreover have many small side branches coming off the main mound which is flat and aligned in a N-S direction. I have followed Golden-shouldered tunnels for up to two feet in magnetic mounds always to find them abandoned because they have struck light, and not found an area large enough to excavate a chamber.

A question of course which arises is why do Golden-shouldered nest in termite mounds when there are hollows in trees around? I would think that one advantage would be the problem of ants which are very bad in the tropics. The big meat ants are everywhere, but are prevented from reaching the nests which are constructed in black flats due to the swamp forming a sort of moat around the mound. I have photographs of nests where meat ants have gained admittance due to the swamp at the base of the mound drying up, and all that was left of the babies were the skeletons. This could also be why they not only ignore trees, but also the termitaria in the red earth on the hillsides - the meat ants could be a significant selecting agent. The Golden-shouldered build in the cone shaped black termitaria from about two to three and a half feet from the ground, but I have seen holes as high as six feet from the ground.

Termite mounds do not necessarily last a long time in these areas. They are very rapidly built, and one only three feet high can be raised to six feet within a very short time. When termites are working their nest they may add a foot in two or three days, but the nests tend to fall apart rather quickly when the termites die. Termites will eventually seal a Golden-shouldered nest after it has been vacated since they cannot seal it while the birds are coming to and fro. The termites seal from the outside in, and I have broken open old mounds where I knew old nests had existed and they had completely closed up the tunnel and chamber until it was solid, but for their little galleries running through it. One can always see where the parrots have been, because the colour of the repaired part is always a different shade.

One year in one little area only, I found a few nests with an insect of some sort attached to a dead Golden-shoulder. I have since found that they were the head and jaws of the protector or soldier termite. Whether they killed the birds I don't know, but some nests had three to five dead young in them with these insects attached to the feathers which made them look like blood suckers at first, since they were attached to the ends of wing and tail feathers which as is known are blood filled shafts when they are sprouting.

On one occasion I saw a hen emerge from a nest and act strangely, and thought that something was wrong with her so chased her and caught her in the grass. All around the eyelids were these termite soldiers looking like so many ticks, and causing her not to be able to see properly.

I have also noticed that parent birds will at some time during the day before entering the nest go and pick bark from a eucalyptus tree. They always seem to do this, and I don't know why, but even captive birds will begin chewing in the breeding season, and will even chew the corner from a brick, for what reason I don't know.

The aviculture of Golden-shoulderedreds

As is known, Sir Edward Hallstrom had birds prior to me, and I think perhaps he may have bred Golden-shoulderedreds, but he certainly bred many hybrids. His birds were also over tame; whereas mine are tame but not spoilt. Hallstrom was in an unfortunate position because he couldn't go to study the bird in the wild and then apply what he had learnt to the avicultural situation, which is what I did. Had he been able to do so, so many mistakes would not have been made, for example, his birds were all in concrete floored and concrete walled aviaries which were the sort Sir Edward liked, but totally inadequate for the Golden-shoulder. You must have good flooring, and we have ground that is a mixture of coarse sand to a depth of a few inches is the best.

We have observed in the wild that the Golden-shouldered will nest in rather close proximity, and we have found three nests within a radius of fifty yards. As is well known the *Psephotus* genus parrots are fighters and cock birds in the wild will fight, climbing higher and higher in the sky until they are almost out of sight. The parrot has a very musical call and they are continually uttering this during the breeding season. We have therefore constructed a block of aviaries sixty feet long. This is divided up into fifteen aviaries four feet wide and six feet deep, seven feet high at the front going down to six and half feet at the back. The back wall and roof are clad in small ripple iron, and the divisions are fibro, with only the wired front open, with a perch at the front and at the back.

We have found that when a pair get into breeding condition it has a very profound effect on the other birds. When one pair get into condition, the adjoining pair may not be as advanced, and the one on the other side may not be in condition at all. When the adjoining birds hear the sounds coming from the next aviary, especially the little musical chuckling mating song of the male, they get very anxious, and they will bite a little hole in the fibro where there may be a small chink. If the adjoining male can see the displaying and mating of the pair next door, he will



very soon display to and mate with his own hen. I think that this shows that if you have only one pair of Golden-shoulderedreds your chances of breeding them would be much less than if you had two or three pairs.

Part of the view of Mr Mattinson's main range of breeding aviaries which house 15 pairs of Golden-shoulderedreds.

Now it would certainly not be better to have wired divisions so that adjoining pairs were completely visible, because in this situation the cocks spend too much time fighting instead of mating with the females. Breeding records from such aviaries are never as good as in aviaries such as I have described. By giving the Golden-shoulderedreds the conditions I have outlined, such that the "imagination of slower breeders are stirred", if I may use this term, then these not-so-good pairs are greatly improved. It is a theory which certainly appears to work, and is the main reason for transferring most of the Golden-shoulderedreds into this front block.



When I was still living in Sydney, a lot of Golden-shoulderedreds were reared, but it wasn't until I moved here that I found out what sort of nest box was required. When I moved here I had only five pairs of Golden-shoulderedreds. A range of aviaries was built and they were supplied with nests, - boxes of various sizes and logs. Back in Sydney the best hen reared young in a box which had a little narrow spout in front of the nest hole, a homemade spout of four pieces of timber forming a tunnel. I made boxes from 1" pineboard with internal measurements of 12" x 7" x 9" high with a 2" hole in the front with a little perch. It dawned on me that my birds should be nesting much better than they did, and remembered the box of the old hen at home. Perhaps the entrance was at fault, because the birds would go to the hole but not enter as if they were afraid of going in. We searched in the forest for some appropriate natural spouts of about 6" and attached them to the boxes and within three weeks we had every pair down. Now, every Golden-shouldered nest has a spout, although the original hen did nest in a log once.

The nest box of one of the breeding pairs of parrots, showing five young Golden-shoulderedreds. Note the six inch spout attachment which has proved so successful to the Mattinson's in breeding these rare parrots.

Now in the wild the parrot burrows into a termite mound about 12" - 18" and makes a chamber at the end, so the spouts may give the birds a greater sense of security. We have found these nests to be by far the most successful and most of the birds will not nest any other way; however, one exception is the hen in the third aviary which has nested in the ground. On two occasions, the eggs and nest were flooded, and another time I took the eggs away. Another hen in number eight aviary raised young in the ground. The seed hoppers were on the floor at this stage, not hung on the walls as they now are. This particular hen dug a tunnel under the hopper and made a chamber and laid eight eggs of which five hatched and three were reared. I notice that number three hen will lay her first clutch every year on the ground. The base of the aviary is coarse sand - a mixture of creek sand, and sea sand which we top up by an inch every year. This is quite similar to the washed sand in their native habitat, where you will always find some feeding.

When we lived in Sydney humidity and heat was always a problem, and I put plastic sheeting around the aviaries to try to keep the heat level and moisture level up, but here at Fairy Meadow it isn't necessary at all, as the aviaries are well protected and much better built. One breeder in South Australia solves these problems by keeping Golden-shouldered in a garage in indoor flights. Infrared lamps are hung over the nest boxes to maintain heat.

Females have a tendency to leave the young ones unattended at night after about four days. This behaviour in the wild is not detrimental because of the climate, but in our aviaries it is disastrous. If this happens, we take the chicks and keep them warm during the night and return them to their parents the next day, who will often take them back each day with no trouble. If the parents refuse to take back the chicks we transfer them to Hooded Parakeets, or hand rear them. Early breeding successes utilised these techniques. Once over ten days old, the young ones don't succumb quite so easily to nocturnal desertion.

We have twenty pairs of Golden-shouldered, not all of which are of course in breeding condition, and this year raised about 60. There is still a significant death rate in Golden-shouldered, and we should be raising well over a hundred each year, but we are limited to the number which we can hand rear as this is very time consuming.

In the wild I have seen nests with three eggs and some with nine; the average is five eggs. The most young I have seen in a wild nest was eight. In captivity the results are almost identical except that in the aviary one can have three nestlings whereas in the wild there is usually only one. The hen incubates for twenty one days, and some hens will incubate for twenty four hours solid, while others will leave their eggs for periods of up to three hours. Young remain in the nest for five weeks. If the mother is not feeding properly they may leave early, and some adventurous ones may leave at four weeks but can't really fly properly. After hatching and drying, the young Golden-shouldered is covered with a grey-white down and fluff. The down is gradually replaced by pinfeathers, and there is a period when the body areas are almost naked. This is a very critical stage, and occurs at 10-11 days. The eyes open at 8 days.

We feed the birds two diets here. The ordinary maintenance diet is white and Hungarian millet, canary seed, sunflower, spinach, and biscuit. The don't like apple. Cuttlefish is provided. For minerals I used to supply them with Vita-Budgie blocks, but they don't eat these and chew the brickwork instead. The base of the aviaries is washed coarse sand. During the breeding season the diet is much the same but much more spinach is supplied, plus more biscuit. I grow spray millet for them, and also Sacchaline seed heads, milo heads - and these are all fed in the milky stage. This is to what I attribute my early successes in Golden-shouldered.

Status and Distribution

The breeding areas of the Golden-shouldered were centres on Musgrave Station, as is well known to many people, but Musgrave is now out. We have observed that their numbers declined in two other areas, but they are nearly out there as well. In the early days there was no trouble in seeing up to 500 Golden-shouldered, but now it would be hard to find fifty in the same areas. Ten years ago in a breeding area, on horseback, I counted 164 Golden-shouldered. It is possible that I counted some more than once; but six years later I counted 23 in the same area at a similar stage in the breeding season. The numbers may be slightly out, but it gives an indication as to the sort of decline. I have frequently observed flocks of up to eighty birds in the breeding season.

There was one lady who had some twenty pairs come to water near her homestead. She used to count them every day, and some days would get 23 cock birds and on other days only 17 cocks; but the young ones and hens were too hard to distinguish so she only counted the cocks. She said that every evening she observed between thirty to forty birds coming to drink at the waterhole virtually at her back door. This was in 1968, and the lady has since died, but the birds are now only seen in odd pairs at this same waterhole.

Why the decline? Well, I don't think that it is due to illegal trapping as the authorities would like everyone to believe. It may be a contributing factor, but is by no means as important as most people think - it is always the way, with most people jumping to an almost too obvious conclusion, whereas we know that processes causing the decline of a species are usually many and varied. The Queensland Government* won't do anything for the Golden-shouldered except to prohibit people from going near them where possible. It is difficult to put forward suggestions when no one has done a thorough study of the Golden-shoulder, and without this much needed study it is impossible to do anything. The "head in the sand" attitude of the Queensland authorities is deplorable. I have not observed Golden-shouldered in the wild recently as it has become too embarrassing, since every time I go there I am watched like a hawk. Observation is now illegal in that disturbing them is illegal; you may not legally observe a nest except by binoculars some five hundred yards away.

Reasons for the decline could be as follows:

When the Queensland Government brought in equal pay for indigenous stockmen with white stockmen, it meant that stations which had indigenous workers couldn't afford to keep them on. People don't understand how the aboriginal society works. In a population of 60-70 there would be ten here, twenty there, and their friends may come for a visit, and every now and then a group would go walkabout. The young aboriginal people are born hunters and they would catch many goannas, a few snakes, and by using shanghais stone certain conspicuous birds such as butcherbirds. These species are all predators of the Golden-shoulder, especially the goannas in nesting times. The butcherbirds are also a significant predator, and I have seen a butcherbird alight on a mound and fly down and kill a Golden-shouldered cock bird as it emerged from the nest. On our original trip to the Cape, we took Many-coloureds with us to use as call birds, thinking that they would cause a Golden-shouldered to show itself. One Many-coloured was put in a wire cage up in a tree, and the Many-coloureds sang out. The butcherbirds attack so savagely that one broke its neck on the bars of the cage. I may mention that although in the same genus, Many-coloureds were not successful as callers.

I have also observed in recent years the decline in the number of nests of the parrot, and on asking station owners what they thought, received the suggestion that it was due to the cane toads which are moving northwards up the Cape at the rate of about fifty miles a year. They are in plague proportions and are extremely detrimental to the wildlife which is found from ground level up to about three feet. Their numbers are so unbelievably great that they have to be seen to be believed, and nothing I could say could convey to a member the millions of cane toads which are in the north. On a wet evening, a four wheel drive vehicle will run over countless thousands as one drives along the roadway. At one station, I remember drawing a four gallon bucket from a dam to find that there was three gallons of cane toads and one gallon of water. Station owners have said that Golden-shouldered have noticeably declined at the same time as the cane toads have become a menace.

I might mention that another species which has had a disastrous decline is the White-eared Masked Finch. Years ago we would count over 300 at a waterhole, and today we don't even see them. One man in the north counted only five in an entire season. It was possible for me to walk along a track and find 20-30 White-eared nests, but now I don't find any. This finch nests very close to the ground, and must suffer because of the cane toad. It has never been a popular bird in aviculture, and has thus never been trapped in any numbers.

I don't think that anyone can guess the number of Golden-shouldered in the wild. Station owners keep me informed of sightings by the stockmen, and I know the breeding grounds in some detail, thus I could get a count for a rough idea of numbers, given permission and the time being available.

Another problem which I would like to solve is where the Golden-shouldered goes out of the breeding season. I did observe two young Golden-shouldered in a mangrove virtually on Princess Charlotte Bay.

On the western coast of the Cape from Normanton north was the area originally described as their habitat. I have travelled extensively in this area; right across the peninsula 200-300 miles to the west to Mitchell River Mission. All of this area is no-man's land - it is desolate and barren country. The Gilbert River runs down towards Normanton. There are excellent possible breeding areas here but I have never seen a Golden-shouldered in the area; one dry season a Golden-shouldered was reported to drink at a tank hole at the Mitchell River Mission.

Conclusions

There is so much to record on Golden-shouldered, but one has to stop somewhere. I hope that members will have gained benefit from reading these notes, and people who have not been fortunate as I in studying the bird in its native home may be able to derive some benefit from the article, which they may then apply to their Golden-shouldered. The aviculture of Golden-shouldered has been my special interest for the last fifteen years and most problems have been solved by referring to the habitat and behaviours of these beautiful birds in the wild.

The problems of the wild population are very real, but can only be solved by the cooperation of everyone concerned. A prerequisite to any action is that a very thorough study must be commenced on the Golden-shouldered in its habitat, before there is any further decline in the populations of this beautiful bird.

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