



# The Avicultural Society of New South Wales (ASNSW)

(Founded in 1940 as the Parrot & African Lovebird Society of Australia)

## Torres Strait Pigeon in Captivity *Ducula spilorrhoa*

(ASNSW Meeting - June 2014)

Presented by Ryan Leahy

### Introduction

I have just complete my Certificate 3 in Captive Animals which is essentially Zoo Keeping. Throughout the course students are encouraged to compile a Husbandry Guideline Manual and I chose *Dacula spiloorhoa* which is the Torres Strait Pigeon. I started my assignment with the Pied Imperial Pigeon which is *Ducula bicolor* and then identified *Dacula spiloorhoa* as the Australian Species. They are remarkably similar and were once classified as the one species. There are slight differences that separate the species. The Asian

version doesn't have the grey head and the bar underneath the tail which the Australian one certainly does.



Torres Strait Pigeon ([Melbourne Zoo](#))  
File courtesy of [Wikipedia](#)  
Taken by [flagstaffotos.com.au](#)

### History

They were the first Australian bird identified by Europeans. [Luis Vaez De Torres](#) was the first to note them in his travelling journals... *"Proceeding thus at the end of three days we reached a flat island with good bottom where we anchored and found plenty of very large pigeons all white and trees of plums they call of Nicaragua, they have big stones and little flesh."*

White settlement blamed them for crop damage and for a pigeon that thrives on fruit it would appear they were not all that observant back then, they didn't realise that they weren't actually eating all their grain. Either way they were shooting away at this poor pigeon and it nearly went extinct in the 1960s essentially following the similar trend of the now extinct [Passenger Pigeon](#). However, it took some environmentalists (they weren't professionals) who realised that their numbers were plummeting around their nest sites and they got quite vocal through the newspapers of the day. It wasn't long before they were declared protected and so numbers have shot back up again. That was the Europeans.

The Torres Strait Islanders knew these birds long before this time and they were an important food source for them. There is a [Torres Strait Islander painting by David Bosun](#) depicting the story of a rather gluttonous young warrior that was keeping all the fat pigeons for himself and giving his mother all the lean pigeons. So, essentially he was a teenage son with quite an appetite.

### History

- First Australian bird identified by Europeans
- Luis Vaez De Torres, sailed through Torres Strait in 1606, recording '...plenty of large pigeons, all white and trees of plums....'
- Nearly went extinct in 1960's
- Numbers back up to 30,000 in Australia

## Wild Habits

They range in the wild we are looking at all throughout northern Australia along the coastline certainly extending into the Kimberley's as well. There are two distinct populations. The Kimberley's population feeds and nests very much on the mainland, the larger eastern and northern population roosts on the mangrove swamps along the side of New Guinea and the Torres Strait and they fly to the mainland every morning to their feeding grounds in Australia. So they do quite a bit of travelling on a daily basis and certainly when it comes to the breeding season and the species alternate incubating. They literally go out for a full day, feed and then come over and swap over at night. So the birds go every second day without food.



It does occur in New Guinea. As it reaches the upper northern parts of New Guinea the Asian species *Dacula Bicolor*, which is the Pied Imperial Pigeon, starts replacing the Australian Torres Strait Pigeon (*Ducula spilorrhoa*) where it finishes off.

It likes to be up high; it is completely arboreal and flies in large flocks. There are reports back in the early days of it [blocking out the sun \(À la Passenger Pigeon\)](#).

Often one bird will act as a centaur keeping watch. They are quite a wary type of species. Certainly the Torres Strait pigeons that I looked after in the [Wirrimbirra Sanctuary](#) at Bargo were, then again I have seen them in other zoos and parks and you can get quite close to them due to the aviary dimensions.

## Aviculture

### Aviary recommendations

They require quite a large aviary. They are very much an arboreal species and like to be up high. Danny Brown's book "[A Guide to Pigeons and Quail](#)" mentions 2.4 to 3 metres tall which is quite extensive for a private keeper. That is about 8ft high. Most of you would use either a standard finch aviary or certainly a small parrot aviary. Danny Brown's book also mentions you can keep them in similar aviaries to those that a breeder would use for small parrots.

Ideally the aviaries should be 6 metres square per bird (as suggested in Danny Brown's book) and Glen Holland in his book "[Encyclopaedia of Aviculture](#)" also mentions 3 metres x 2.4 metres floor space. They do like a bit of space to fly about. They are fast flyers like all of the pigeons and they tend to fly straight up which can damage their head. They are a rapid straight flyer so you want a bit of length to the aviary too. Suspended aviaries are fantastic for these arboreal birds.

I have kept some of the smaller fruit doves in these open aviaries too and they seem to do quite well. However, you would need to have some brush or browse at each end as they do tend to crash into the wire when they are spooked.

### Aviary recommendations

- 'A Guide to Pigeons, Doves and Quail' (Brown, D) recommends 6m<sup>2</sup> floor space with a 2.4-3 metre height per pair of birds.
- The 'Encyclopedia of Aviculture' (Holland, G) recommends 1.8 x 3.6 x 2.4 metres high, per pair of *Ducula* genus pigeons.
- Can be kept in unfurnished parrot breeder aviaries and suspended aviaries.

- As I mentioned before, they are arboreal and like to be up high so perches should be up high. You need to allow for flight paths because the Torres Strait Pigeon flies quite fast and direct so no brush or anything in the way.
- Ideally bowls should be kept off the floor because they rarely come down to feed. Water sources should also be kept up high.
- They do very well in a planted aviary; they are not a very destructive bird like parrots which can be quite destructive. Softbills and pigeons are not nearly as intrusive on their environment. It is a beautiful rainforest bird which is compatible with so many other birds so there is no excuse not to spruce up the aviary with plenty of brush and browse. You can get away with a fair bit with the Torres Strait Pigeon as it is a species that adapts easily and should do quite well.
- As briefly mentioned before, browse should be placed on the ceiling and on the ends of the aviaries to prevent the birds from smashing into the wire. They do a bit of damage when they hit and I have seen it with other pigeon species as well. They do seem to have the same sort of scatter complex. Their first instinct seems to be to either dash up or forward and they crash into whatever is in the way.
- Wire platforms are very good for nesting. You just need to cut a small square of finch wire and they will thread the sticks onto or through it.

### Aviary furnishings

- Arboreal - high perches advised. Allow flight paths.
- Ideally bowls off the floor.
- Does very well in planted aviaries.
- Browse on ceiling or ends of aviaries prevent typical pigeon crashes.
- Wire platforms for nesting.

The photo below is the Featherdale Wildlife Park's mixed species aviary featuring the Torres Strait Pigeon. It has the Buff-banded rail, the Regent Bowerbird, a smaller lorikeet species in there as well; the Green Catbird and a few other species and they do quite well all together.



Featherdale Wildlife Park's mixed species aviary featuring Torres Strait Pigeon

### **Question**

*Do they breed in there as well?*

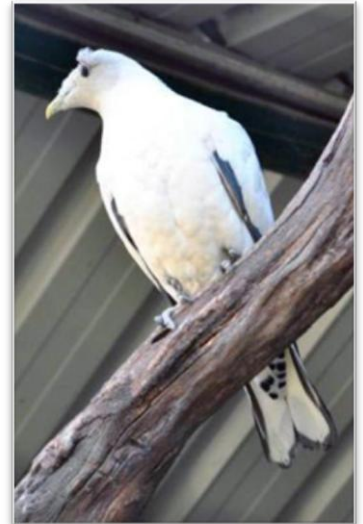
### **Ryan Leahy**

*Yes they do. I have photos of them compiling their nests. You would think that the lorikeets would be a little intrusive. I have nothing against parrots but I find that a lot of the parrots are highly intelligent and if they want something to do they start nit picking at things. When they see something new in the aviary it's like "oh here's a bird that has started compiling a nest I might just start picking away at that" or "oh there's an egg in there I'll play with that" and they start rolling it around and annoying the heck out of the incubating bird. I actually prefer to keep them with just softbills and the smaller species.*

## **Head Trauma**

I know coming from a reptile keeping hobby where everyone brags about their successes but they don't want to share their failures or any negativity - it is all look at me look what I've bred. However head trauma is something that is very important and it happens in public aviaries.

The photo on the right shows an example of head trauma caused from when these pigeons crash and damage themselves on the top of the aviary. It could be avoided by something like a softer netting however you obviously wouldn't be able to use that with parrots as they would destroy it that type of material. Something like browse up the top would soften the blow. It would certainly be a more visual barrier for the birds as well. I have seen head trauma with Wonga Pigeons, most of the fruit doves and certainly the smaller doves like Diamond Doves and birds like that.



A case of head Trauma (Ryan Leahy)

## **Dietary requirements**

The Torres Strait pigeon is one of the larger fruit pigeons about the size of the Brown Cuckoo Dove (if you are familiar with that species at all). It is probably the easiest to maintain or breed in captivity. They require an extensive diet; they are not as restrictive as some of the smaller species.

I have looked after Rose-crowned Fruit Doves in the past as well. These birds are fairly particular so restricted to fine fruit and the insectivore mix, etc. The Torres Strait Pigeon being a larger bird gets a similar diet of fruit that is just cubed up into larger portions but also things like Madeira cake, insectivore mix and nectar mix. You can also try things like poultry pellets. I haven't tried the poultry pellets myself but I would really like to try the Vetafarm Paradise Pellets which are made for Eclectus Parrots and Toucans and other frugivores. I haven't had a chance to try it with this species but I think there might be a bit of potential there in case you have a situation where you run out of fruit for whatever reason and you could have it there for a fantastic backup.

What I have found with the fruit dove species is that you can make up a very easy mix by just keeping a bag of frozen peas and corn kernels (that makes up half your mix anyway) then add some cubed apple and some cubed melon. They are not too fussy compared to a lot of the smaller fruit doves and fruit pigeons.

### **Diet**

- Apple, paw paw, grapes (whole), honey dew melon, kiwi fruit, watermelon, rockmelon, berries, peas, corn chopped into cubes.
- Can add poultry pellets, madeira cake, insectivore mix, nectar mix.
- Need to try 'Vetafarm Paradise Pellet'.
- Easy mix would be defrosted peas/corn mix, cubed apple and cubed melon



Examples of Captive Diet

In the examples above the mix on the left is a version I made up myself. It has got very finely diced paw paw (which they love). When you put out a mix they tend to pick out the paw paw and corn first and then they go for the green fruit last. There is a bit of Kiwi fruit and some honey in that mix as well.

The example on the right is a [Featherdale](#) diet, all sorts of mixed fruits finely diced, but I believe this is for a mixed exhibit so it is probably catering for a few different species with other things in there too.

## Courtship and Nesting

There isn't a lot of sexual dimorphism between them. The cock bird tends to be larger and of a heavier build. He has a larger and rounder head and a longer neck when compared to the female.

### *Courtship -*

You may have seen this in other species like the Crested-pigeons just amongst the parks and places like that, very exaggerated bowing; he puffs up his chest and bobs up and down as he casually advances towards the female, and if she is reciprocal she will allow the mating.

### *Breeding season -*

The breeding season occurs between August and January in the wild. In captivity breeding can occur all year round. The photo taken of the breeding pair at Featherdale was taken mid-winter the year before last.



Breeding Pair (cock on the left)  
Photo © Laura Morgan taken at  
[Featherdale Wildlife Park](#)

### *Nests -*

Like a lot of the pigeon species their nest is fairly flimsy. It is essentially a small platform of sticks kind of huddled together and you hope that the egg doesn't roll around. Both the male and the female are involved in building the nest and both are involved in the incubation process as well.

## Incubation and Rearing

Incubation is 26 to 28 days. Generally there is only one egg per clutch. Two eggs have been documented but it is incredibly rare. The Torres Strait Pigeon can triple-clutch in a season so once the first bird has fledged out of the nest it goes and they start with the next egg straight away.

I guess it would be a very tedious job to walk around with a pair of calipers and measure all their eggs, however you will have to take my word for it, the Torres Strait Pigeon has the largest pigeon egg which measures 45 x 31mm and weighs approximately 19 to 24 grams.

Fledging occurs at approximately 23 to 26 days of age.

## Compatibility with other species

I touched on this earlier. Featherdale has some really good exhibits. The Torres Strait Pigeon is housed with Regent Bowerbirds, Rails, Green Catbirds and Little Lorikeets.

[Taronga Zoo](#) has a fantastic Asian wetlands aviary. Now they might be relying on the fact that it looks so similar to the Pied Imperial Pigeon. The average punter is not going to realise the difference either. So they mix them in an exhibit with Ibis, Egrets, Spoonbills and ducks and a whole bunch of Java Sparrows.

You can see from the following photograph that Taronga Zoo's exhibit is a pretty lavish exhibit. On that you are probably never going to be able recreate in your own backyard, but it just shows you what you can do with this beautiful bird.



Taronga Zoo's Asian Wetlands Exhibit

## Incubation/Rearing

- Incubation is 26-28 days. Both sexes incubate.
- One egg per clutch, can triple-clutch in a season.
- Largest Australian Pigeon egg- 45x31mm and a weight of 19.0 – 24.0 grams.
- Fledging occurs at approximately 23-26 days of age

## Compatibility with other species

- Can be housed with finches, softbills, waterfowl and lorikeets.
- Featherdale houses them with Regent Bowerbirds, Buff Banded Rail, Green Catbird, and Little Lorikeet.
- Taronga houses them with Glossy Ibis, Cattle Egret, Royal Spoonbill, Mandarin Duck and Java Sparrow.

## Status in Aviculture

Danny Brown's book "A Guide to Pigeons and Quail" - I loved the book, it was fantastic and really helpful when I was compiling my Husbandry Guidelines for the Torres Strait Pigeon. However it may be showing its age a bit as there are some things in it that may need updating. He claims that it is the most commonly kept fruit dove in Australia but I think more recently the Brown Cuckoo Dove might take that top notch position. You certainly don't see them about nearly as much as a lot of the other Australian pigeons. As I said, I think it is probably taking a bronze medal at this point behind the Top Knots and the Brown Cuckoo dove.

Amongst zoos there are quite a few. I don't have access to keepers' records, but [Territory Wildlife Park](#) up north has 80 individuals and I really, really hope to visit that exhibit very soon. I would like to see how they are displayed. It seems to be that all of the northern parks and zoos seem to hold larger quantities than what we do down here in New South Wales.

In conclusion, I don't have the exact figures, but if we can compare how many Torrens Strait Pigeons are being held in public facilities to private aviculture, we can at least say that they are fairly stable.

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