

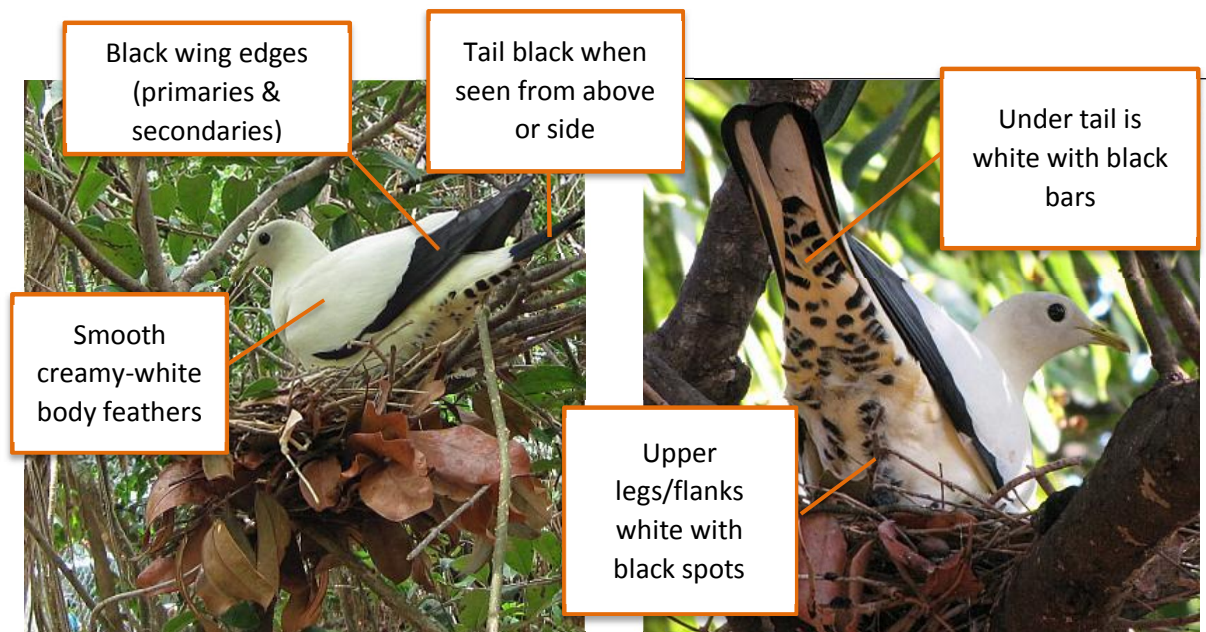
Digivol Tutorial: JCU Pied Imperial Pigeon NestCam Study

(Update 5 May 2017)

Thank you for joining this Digivol project! We need volunteers with a very good eye for detail, to help with analyzing images from automated cameras. The cameras are placed at bird nests on remote islands off the north-east coast of Australia. The focal birds are Pied Imperial Pigeons (PIPs). They are also known as Torres Strait Pigeons or Torresian Imperial Pigeons.

The procedure is simple: complete steps 1 to 6 on the screen. But you need to **take care with important details**. PLEASE take time to study unclear images carefully. Speed is not important, but **accuracy** is crucial in the project.

Adult PIPs – very important to identify correctly



Body feathers of adults are usually smooth (juveniles less smooth) although in some images adults (and juveniles) might have their feathers ‘fluffed out’.

The adult body usually looks whiter than a juvenile (juvenile very slightly creamy or greyish-white tint). But please don’t rely completely on colour, because it can be distorted by sun/shadow.

Look carefully at wings and tail in the example images above and below. Notice that adults have longer wings and tail, and wider, darker edges, almost black. Small and medium juveniles have short wings and tail, with narrow, greyish edges. Large juveniles have wings and tail only slightly shorter than adults.

When you see them together, the adult is clearly bigger than a small or medium juvenile, but only a little bigger than a large juvenile. Take extra care in comparing sizes if birds are at different distances from the camera. A bird farther from the camera will look smaller than its true size, whereas a bird near the camera will look bigger.

Juvenile PIPs

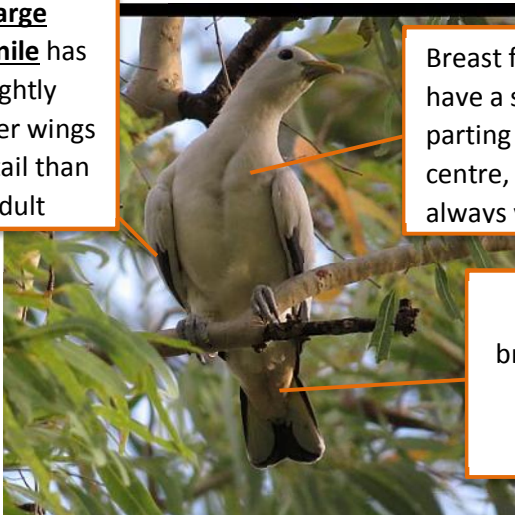
Small juvenile has fine grey fluff at first, then creamy-white pin feathers start to appear



Medium juvenile has body feathers white with pale buff tips. Pin feathers remain on head. Wing edges and tail tip grey and very much shorter than adult.



Large juvenile has slightly shorter wings and tail than adult



Breast feathers have a slight parting in the centre, not always visible

Under tail is light brown, no black bars
No black spots on upper legs/flanks

Tips:

Please **zoom in**, look closely, and make the best assessment you can.

Record what you can **SEE** in the image. Please **DON'T GUESS**. If you have a difficult image, please post it in the Forum so we can discuss it and help everyone pick out subtle details.

Don't mistake a patch of sunlight or the head of a tiny juvenile for an egg!. A PIP egg is very smooth and white, with a hard edge, perfectly 'egg-shaped'. A tiny head will be pale grey with a slightly uneven surface. A patch of sunlight will usually have irregular edges.

The juvenile grows slowly. For several days it will be in transition between two size categories. In that case, please always **select the smaller size**.

When being fed, the juvenile inserts its head deep into the parent's gaping mouth. This is more easily seen with medium and large juveniles, tricky with a very small juvenile. If the adult PIP in the nest is bending forward, look closely at its head, to see whether it is feeding a small chick. If unsure, don't just guess "feeding". Instead, at Step 2 choose Other behavior, and write a note at Step 5 e.g. "possibly feeding but unclear"

Please see next page for examples and more tips.



Q: Is this an adult?

A: Adult *and* Small Juvenile

Important details:

The bird facing the camera is big with smooth, white body, so we know it is an adult.

Under and beside the adult we need to search for anything that is neither twigs nor part of the adult.

To the right of the blue marker, we spot a patch of not-quite-parallel feathers. They are nearly horizontally oriented, creamy colour, in contrast to the adult's feathers that are white and more-or-less vertically oriented. So, that patch of feathers would not be part of the adult's breast or belly. We can be confident we have a juvenile present in this image.

Only a small part of this juvenile is visible, not enough to decide 'small' or 'medium'. We follow the guideline: pick the smaller size in any borderline case.

Q: Is this an adult or juvenile?

A: Medium Juvenile.

Important details:

The bird is facing away from the camera. We can see its tail and right wing quite clearly. Narrow grey edges on wings and tail tell us this is a juvenile (an adult would have wider, blacker edges)

Un-smooth "lumpy" appearance of body and wing feathers also suggest juvenile (adult usually sleek and smooth)

Hint of creamy colour on body and wing feathers also suggest juvenile (adult usually almost pure white body).

We cannot see any pin feathers, so this juvenile is not 'small'. It could be medium or large. When uncertain, we pick the smaller size, in this case 'medium.'

We already noted the narrow dark edges on wings and tail, further indication that this juvenile is not 'large'. A large juvenile would have wider dark edges on wings and tail, although not quite as wide as an adult.





Q: Is this two adults on the nest?

A: Adult and medium juvenile.

This dark image is very challenging. It is helpful to view it on a big, bright screen if possible.

Important details:

Bird on the left is adult – big white body, wide dark edges on wing and tail.

Looking very closely we can see the bird on the right has short/stubby wing, body size and head size slightly smaller than bird on the left, body feathers less smooth. So we know bird on the right is a juvenile.

It is not a ‘small’ juvenile. Could be medium or large. When uncertain, pick the smaller size, in this case ‘medium’.



Q: What’s going on here? Looks like a big bird with feathers going in odd directions...

A: There are two birds side-by-side, juvenile in front, adult behind.

Important details: Zoom in and notice that the adult (large white body) is facing left with only the top part of its head visible. You can see the wide black edge of the adult’s wing and black tip of its tail sticking out to the right.

In front, the juvenile is facing right but its head is turned out of sight.

Notice the juvenile’s wing has a narrow grey edge and its tail is quite short, indicating medium juvenile. Perhaps you might think it’s ‘nearly a large juvenile’, but remember the rule: choose smaller size for borderline cases, so record ‘medium’.

Please see next page about Validation of tasks.

Understanding the DigiVol validation process

Each transcribed task needs to be checked by a Validator. This will be either a very experienced volunteer, who has been appointed to the role of Validator, or one of the project Administrators.

If your task is correct in every detail, it gets marked as Valid. This is what we hope for every time!

But, we all make mistakes occasionally. So, what happens if your task has errors/omissions?

If it appears to be an isolated error, the Validator will correct it. You might be unaware of the correction, because unfortunately the DigiVol system does not provide notification about accurate and inaccurate transcriptions.

If a transcriber repeatedly makes errors, it is important that we notify them, otherwise people assume they are doing the right thing, when in fact that's not the case.

When necessary we email the transcriber privately, to advise about an issue and ask them to please make the necessary corrections to their tasks.

Please don't be annoyed if this happens to you. Correcting your own tasks is an essential part of increasing your skills to enhance your personal contribution to the wonderful DigiVol system of citizen-science teamwork.

Any time you need to access your tasks, just click on 'My Profile' and choose 'Notebook'.

If you are unsure about a task, or have other feedback, please post in the Forum. Please be aware that sometimes there is a delay in getting Forum responses because the forum cannot be monitored continuously. However, we will respond as soon as possible and meanwhile ask for your patience please.

Many thanks to all volunteers!