



Title: 'Final Inspection'

Description: White heron (kotuku) in Waikawa Marina

Photographer's name: Noelle Bennett

Where and when: Waikawa Marina, Waikawa Bay. July 2021.

Sustainability: This beautiful large, pure white heron with a long yellow bill is generally very rarely seen even though it is apparently fairly well known in New Zealand. It is sometimes referred to as 'He kotuku rerenga tahi' or the bird of single flight, which might imply it is something seen perhaps just once in a lifetime

Whilst they are widespread throughout both Asia and Australia, their conservation status here in New Zealand is considered to be nationally critical. The population here is small at between 150 and 200 birds but is thought to be stable. Their sole breeding site is near the Okarito Lagoon in Westland. They have never been recorded as attempting to breed anywhere else in New Zealand, a situation that has remained unchanged since the location of the Okarito heronry was first revealed in 1865.

So how safe is this 'all eggs in one basket' approach that the white herons have adopted? Well, it didn't bode well for them when that colony was discovered in 1865 and the birds were killed for their beautiful long white feathers which were used to adorn women's hats! In fact, things were so dire that by 1941 only four nests remained. Now, following decades of protection and conservation intervention, there are estimated to be about 30 breeding pairs. This is a local example of the way fashion sometimes kills wildlife – one of the earliest and the most famous conservation organisations is the Audubon Society in the United States formed in 1896 as a popular response to the slaughter of millions of water and seabirds for making hats. That society now does brilliant bird conservation and habitat restoration work. So these are stories about overthrow of past mindless exploitation for conservation – they give us hope.

The white heron colony seems to be in good heart but the restricted breeding area remains a concern. Granted, it is well protected from predators (organised predator trapping) and levels of human visitation are carefully controlled, but this colony may be more vulnerable than it seems. The most common cause of mortality is being hit by cars because many roads run close to coastal wetlands and herons fly low and slow when they are first trying to get airborne. However, habitat loss and degradation by wetland drainage and surrounding land use impacts negatively on many species and the white herons disperse widely around Aotearoa to feed during the non-breeding season.

I captured this photo while the heron was preening. Birds preen to remove dust, dirt, and parasites from their feathers and align each feather relative to adjacent feathers to make flying efficient. They have a uropygial gland, or "preen gland", at the base of each feather that secretes oil when the feather is being preened. That oil keeps the

feathers waterproof and in healthy condition.

Photographer's notes: In spite of all the talk in the previous few paragraphs about Okarito, I found this bird in Waikawa Marina. We had seen a white heron a few times on and around the Waikawa Stream estuary but were uncertain just how transient it was. I just happened to look out from our boat (that we live on) one afternoon and there it was, sitting on the bow of a boat opposite, happily preening and generally checking its plumage out. Using the boat as a hide, I was able to get reasonably close to it and fired off some images whilst it continued on with its wing inspection.

I was really happy with the quality of the images but a little bit disappointed by the background and surroundings of the heron. But sometimes it's possible with photography to give your subject the surroundings they actually deserved to have as opposed to those they found themselves with.

Photo specs: This image is a composite produced from one single image which has been used multiple times with differing effects applied to each iteration plus one additional image to provide a more aesthetically pleasing end result. Technical specs: The image was taken using a Panasonic DC-G9 camera and a Panasonic Leica DG 100-400mm f/4-6.3 ASPH lens. Exposure details - 1/500 sec at f7.1 with an ISO of 100 and a focal length of 350mm (700mm full frame equivalent).

Digital specs: 7221 x 5777 pixels (41.72MP) @ 300dpi

Key words: birds, heron, white heron, kōtuku, native, critical, nationally critical, harbour, estuary, Marlborough Sounds, Okarito, lagoon, wetlands, *Ardea modesta*, Westland, car mortality, Audubon Society, preening, Noelle Bennett, Ecosystems Photography, sustainability.

Price: \$300 (incl. GST) for use of the digital image. Visit www.ecosystemsphotography/sales for details & to order, or to get a quote if you would like a high-quality print.

Donation: The price includes a \$100 donation to a sustainability organisation or project of your choice, or otherwise to *The Wildlife Hospital*, Dunedin. <https://www.wildlifelifehospitaldunedin.org.nz/>

We recommend that the donation goes to *The Wildlife Hospital*, Dunedin because of the amazing work they do, treating a wide variety of native species, including parrots, penguins, reptiles, and sea lions. The hospital is important to the survival of so many of our beautiful native creatures, including repairing animals that have been hit by cars, flown into windows, or blundered into powerlines.

Image ref: NB#005 (please use this reference in all orders and correspondence).

Noelle Bennett
6 December 2021