

Update on black-fronted tern population research

The breeding season for black-fronted terns/tarapirohe has now finished and so has my field work. Over the last three months, together with the help from Richard Maloney, Simone Cleland, Mike Bell, Claudia Mischler and Jamie Cooper I tried to find as many black-fronted tern colonies as I could in the South Island to catch, band and take a small blood sample from adults or chicks. Using genetics, these samples are the first step to understand the relationships between colonies, rivers and regions of birds. This will hugely help to plan the right level of predator and weed control required to give these unique birds the protection they urgently need.

It has been a very hectic past three months. Black-fronted terns incubate for about 20 days and only then, it is possible to catch adults. Chicks need to be about 10 days old to take samples, however with about 20 days of age they are able to fly and are impossible to catch. This gives overall very little opportunity to catch birds in each colony. On top of this, many black-fronted tern colonies start up, but unfortunately are never successful due to predation, disturbance or floods. So often a colony can be discovered and gone by the next visit 4 days later. The catching of adult birds is only possible in fine weather with not too much wind. The unsettled weather and the many Western fronts this spring meant, that my assistant Jamie and I would often need to move to opposite parts of the South Island where we knew of, or were told about a potential colony. For example we would use a small weather window up north while waiting for the weather to clear down south. Therefore decisions of where to go were often made on a day-to-day basis depending if the weather was good enough to catch birds or rather spent searching river stretches for colonies. It was mostly not possible to say where we would be in 2 days time and plans made quite often changed just as quickly.



P. Guildford



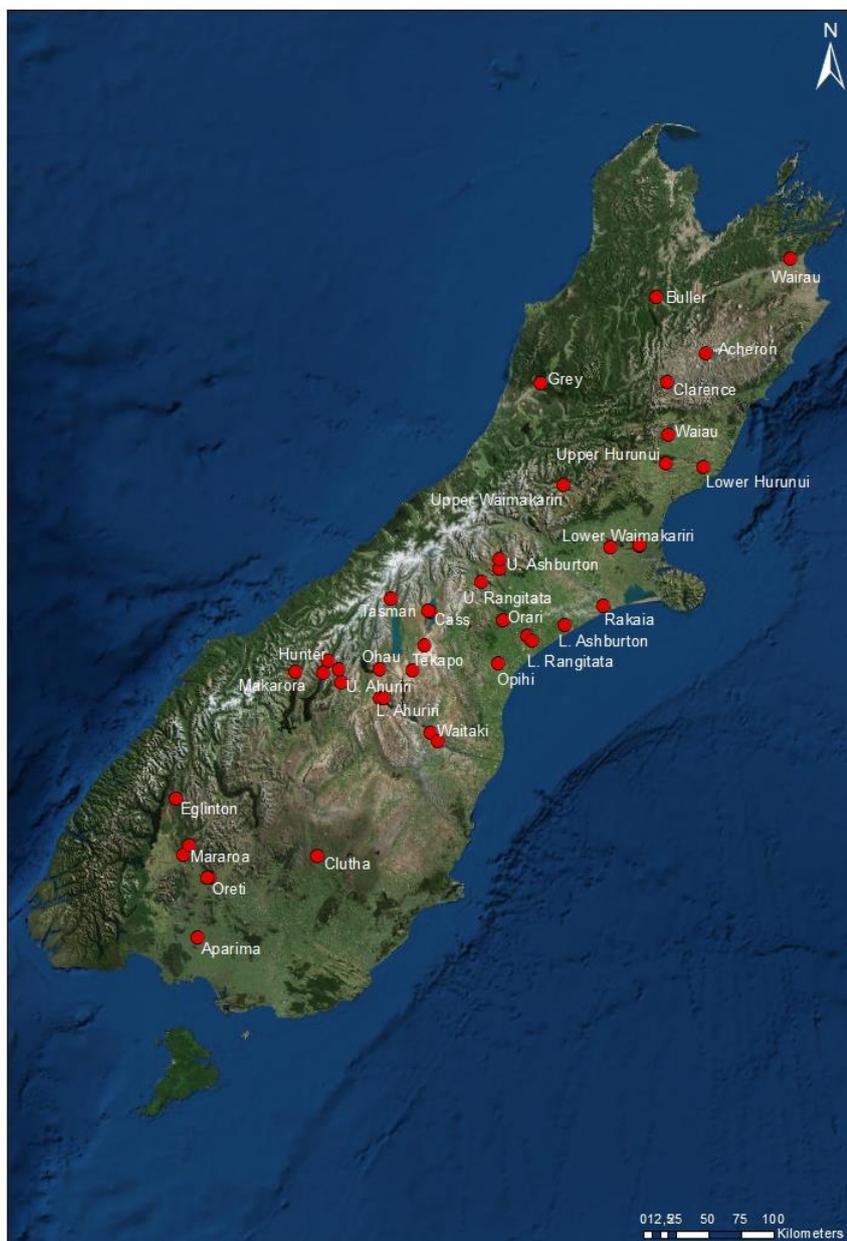
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From top to bottom: Black-fronted tern in flight, adult just before being released again, a young chick in the Tasman, crossing the icy water of the Tasman, Anne banding an adult in the Oreti and Jamie releasing a bird in the Eglinton after banding and taking a sample.



In numbers this means that Jamie and I spent more than 60 days straight living out of a car, most nights in a different place and driving about 14,000 km in that time. We have been as far south as the Aparima river in Southland to all the way up to the upper Buller river. By sheer chance, Richard Maloney and I discovered a colony in the Grey river only about 40 km from Greymouth. Generally terns do not venture onto the rivers on the West Coast, so this was a very exciting discovery. All the driving and hard work was absolutely worth it, because overall we managed to sample over 500 terns from 24 different rivers. In four rivers we sampled colonies from upper and lower reaches to have a closer look at how the colonies are connected. This is much more than I ever hoped to get when starting this project and will provide a very good basis for finding more about terns, so we can protect them better!

From next week, I will be busy in the lab. First I will extract DNA from the blood samples and then analyse the differences between individuals and colonies. First results can be expected in winter.



A map showing all sample locations. In 24 different rivers over 500 tern adults and chicks were sampled. This provides a good basis to better understand the relationship between colonies,

Thanks again for all the support and help.

Anne Schlesselmann

