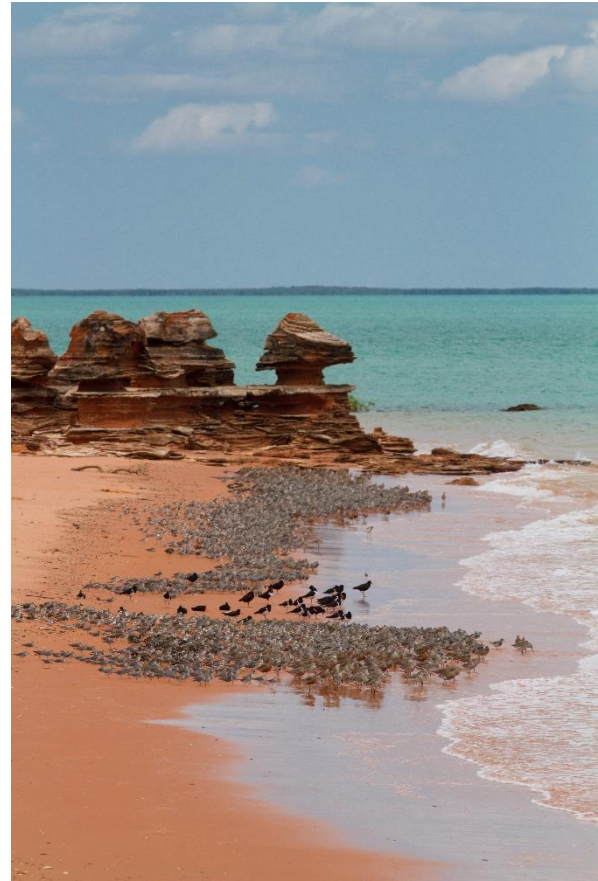


SHOREBIRD ANNUAL CYCLE - PART 5

LIFE IN ROEBUCK BAY

Written by Broome Ornithologist Chris Hassell

It would be nice to think that the shorebirds have some downtime while they spend about seven months in Roebuck Bay, however there is plenty for them to do. Mostly moulting. Moulting is when birds drop a feather and replace it with an entirely new one. Migratory shorebirds change their body feathers twice a year. Timing will depend on the species and its migratory schedule. From around February to April birds will do the majority of their moult into breeding plumage with some individuals finishing it off during their migration stopover in the Yellow Sea. When the birds return from their 5 months of migration and breeding, they will replace all breeding plumage body feathers to non-breeding plumage. This process of body moult will have started before they arrive in Roebuck Bay. The major moult, that requires most energy, is the birds' flight feathers, the large primary and secondary feathers and associated smaller wing coverts. This will take the birds in the region of 90 to 120 days. Birds may moult 3 or 4 of the smaller inner primaries at once. This can even be seen as birds fly past with a gap in their wings. However, as the moult reaches the outer wing and the largest feathers are growing only one will be doing so.



Shorebirds roost undisturbed on Roebuck Bay © Ric Else

The birds may get a respite from demands on their energy for a short time in mid-summer but, at that time of year they will have very high temperatures to deal with and the potential for extreme weather events.

Finding food in Roebuck Bay's rich mudflats is not a problem. There is an abundance and variety of prey for all the different species. The birds feed undisturbed on the vast mudflats during the low tide periods. The challenging time for the birds is when they are pushed off the mudflats on to the beaches. The sand holds no food suitable for the birds, so they roost during the high tide period.

During this time, they can become heat stressed as the red sands get above 50°C and they experience a lot of disturbance. This disturbance is mainly in the form of birds of prey gliding above the flocks and making the shorebirds take to the wing as the birds of prey look for weak individuals, to perhaps try and attack. While seeing actual attacks on shorebirds is rare, disturbance is very common. People can add to the disturbance of the birds roosting period. So, if you are a bay-user then please try and leave the big flocks as undisturbed as possible while you enjoy the bay.

The birds most often roost on the sandy beaches of the northern shores and on the large sandy spit in the south of the bay. However, these areas are not available to them on the biggest of tides as they are completely covered by the sea. This leaves just a few orange rocks available for roosting in the beautiful blue water. A fantastic sight for photographers but, not for the birds. Luckily these huge tides provide another roosting area, by flooding large areas of saltmarsh behind the mangroves in the east of the bay. These areas are inaccessible to people and the shorebirds therefore suffer less disturbance. With the addition of cooling water from the tide, this makes them ideal high-tide roost sites. However, they dry very quickly after big tides and birds return to the beach roosts.

So, for a shorebird, downtime involves big energy demands on it for moult, vigilance, and predator avoidance flights, not exactly relaxing. But once the tide recedes and the shorebirds are back out on the bountiful mud, surely, they are relaxed?