

HAPPY WORLD CURLEW DAY!

Micha Jackson, Amanda Lilleyman, Brad Woodworth, Eduardo Gallo Cajiao

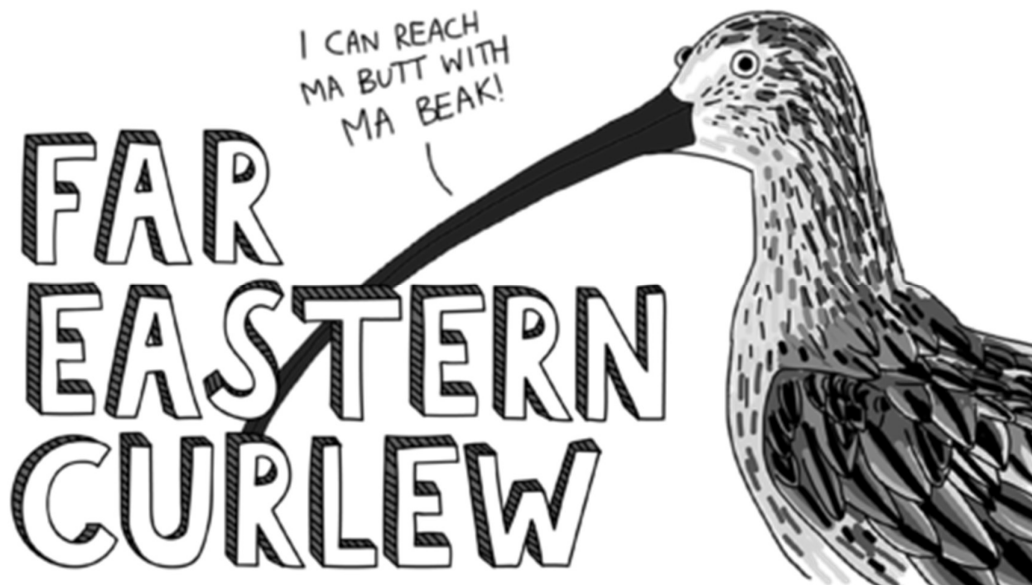
Did you know that tomorrow is [World Curlew Day](#) – a global celebration of a remarkable group of birds – the curlews!

April 21 was chosen for World Curlew Day because of [a traditional Welsh tale that identifies St Beuno as the first curlew conservationist](#). The story goes that St Beuno was sailing and dropped his prayer book into the ocean; when a curlew picked up the book and took it to the shore to dry, St Beuno decreed that it should be specially protected.

But hang on, what is a curlew exactly?!

The *Numeniini*

The curlews, or more precisely the *Numeniini*, are a group of 13 shorebird species most well known for their amazingly long bills. Some curve up and some curve down, but all are incredibly well adapted to probing for food in the soft mud of the world's shorelines. Some people have even associated sinister motives to these incredible appendages, as in [The Night of the Curlews](#), a short story by Colombian author Gabriel Garcia Marquez in which three men have their eyes pecked out by curlews and are left to wander in confusion when nobody believes their story.



This hilarious rendition of a Far Eastern Curlew was done by Australian artist Milly Formby and highlights the most famous feature of the curlew group – their long bills! Milly is undertaking an amazing journey of her own to raise awareness of migratory shorebirds – you can follow her story at <https://wingthreads.com/>. © Amellia Formby 2017

Numeniini occur on all continents except Antarctica. Most of them are long-distance migrants and make huge journeys every year between breeding areas in the boreal/arctic and non-breeding areas in the southern hemisphere. A full list of *Numeniini* and their whimsical names is as follows: Upland Sandpiper, Bristle-thighed Curlew, Whimbrel, Little Curlew, Eskimo Curlew, Slender-billed Curlew, Long-billed Curlew, Eurasian Curlew, Far Eastern Curlew, Bar-tailed Godwit, Black-tailed Godwit, Marbled Godwit, and, Hudsonian Godwit.

One curlew species, the Bar-tailed Godwit, holds the record for [the longest single flight ever recorded](#) by any bird – a non-stop 9 day flight of 11,700 km! This unbelievable trip took place from breeding grounds in Alaska to non-breeding grounds in New Zealand over the vast expanse of the Pacific Ocean and is known because the bird had been fitted with a satellite transmitter.



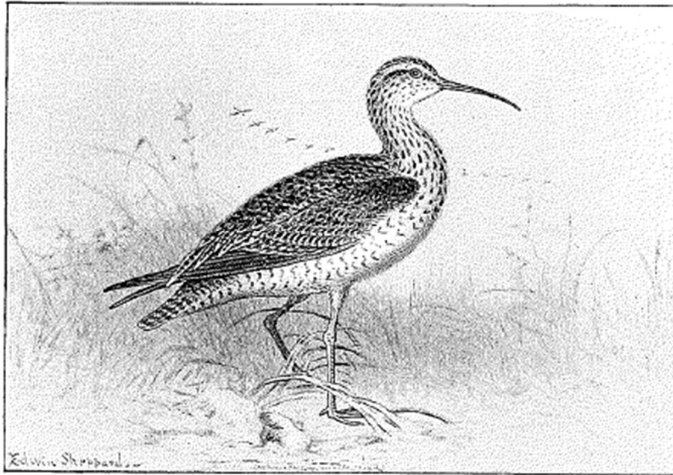
A group of beautiful Bar-tailed Godwits getting ready to migrate from Australia to their arctic breeding grounds. Photo: Micha V Jackson.

Curlews in trouble

Last year, scientists consulted a large group of experts to review the status of the world's curlews. Unfortunately, seven of the world's 13 curlew species are of conservation concern, and some are in very serious trouble due to widespread threats across their global ranges.

Some of the threats identified by this group of experts as having the biggest impacts on curlews include: habitat loss in non-breeding areas, disturbance, invasive species, pollution, and climate change...and most of these are getting worse. You can read the full paper [here](#).

Tragically, we have already lost at least one species of curlew – the once-abundant Eskimo Curlew. In his book *North American Shorebirds* from 1895, Daniel Giraud Elliot writes of the Eskimo Curlew: “In the Mississippi Valley this species is the most abundant of the Curlews, and in immense numbers scatters over the prairie in every direction...When feeding about in such large flocks, they keep up a constant low chattering noise, as if indulging in an uninterrupted flow of conversation.” But by the early 1900s this species had been effectively wiped out by unregulated hunting. The last time it was recorded with certainty [was in 1963](#), and it is now considered extinct. Devastatingly, we may have lost another curlew species even more recently – the Slender-billed Curlew has not been seen for more than 20 years.



Missing from our skies: The Eskimo Curlew – already considered extinct. Drawing by Edwin Sheppard extracted from North American Shorebirds by Daniel Giraud Elliot © Francis P. Harper, 1895.

Migratory shorebirds that spend their non-breeding season in Australia follow a route known as the [East Asian-Australasian Flyway](#) to complete their annual migrations. One species, the Far Eastern Curlew, is endemic to this flyway, occurring nowhere else on earth. Unfortunately this is one of the curlew species that is declining rapidly and is listed as [Critically Endangered by the Australia government](#).

Far Eastern Curlew is one of several shorebirds in Australia that are heavily reliant on the Yellow Sea region as a place to stopover – that is to rest and refuel – during their long migrations. It seems that those shorebird species that are most reliant on the Yellow Sea for stopovers are also the [ones that are declining most severely](#), likely due to a [high concentration of threats](#) and particularly severe [loss of tidal habitat](#) in this important region.



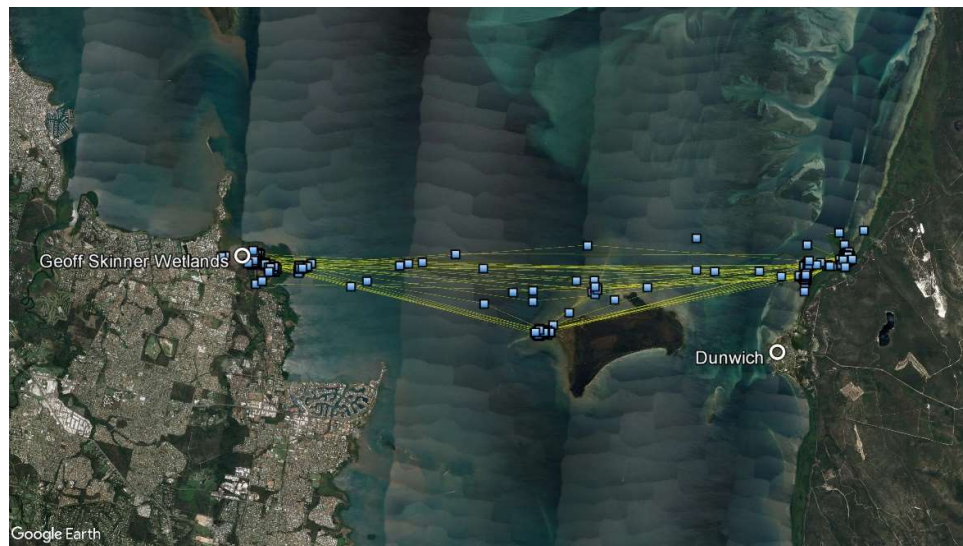
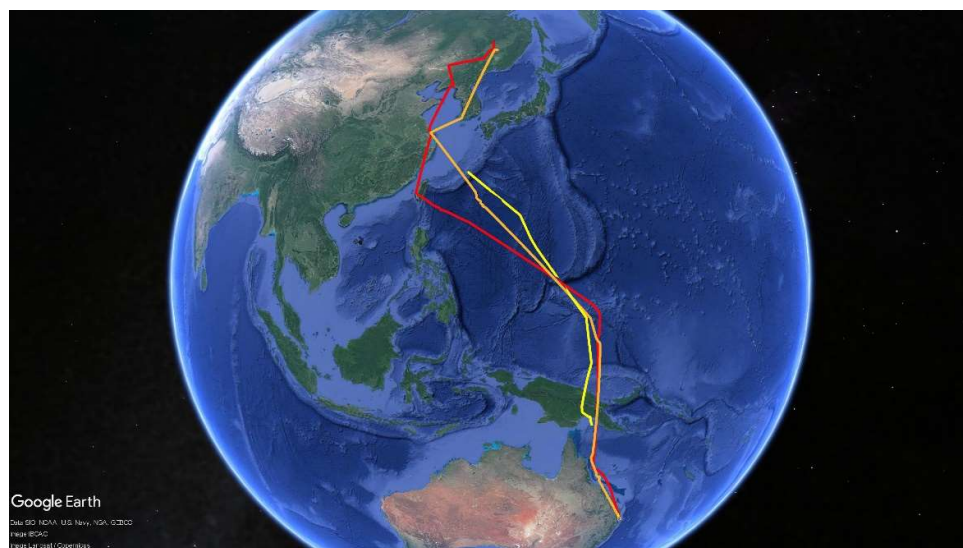
*Curlews in trouble: Far Eastern Curlew, endemic to our region, listed globally as Endangered and nationally listed as Critically Endangered under the Australian EPBC Act; Bar-tailed Godwit, listed globally as Near Threatened and its subspecies *menzbieri* nationally listed as Critically Endangered. Photos: Micha V Jackson.*

Curlew research

Efforts to learn more and better protect curlews in our flyway are being undertaken by many researchers, conservationists and organisations.

The [Queensland Wader Study Group](#) (QWSG) and the University of Queensland recently initiated a tracking study of Far Eastern Curlews in Moreton Bay to learn more about the non-breeding movements and habitat use of this species and build on a previous tracking study by QWSG to determine the precise migratory route(s) of this species through the East Asian-Australasian Flyway.

To date, the QWSG-led team has equipped four Far Eastern Curlew with backpack tracking devices, three of which are well on their way to the breeding grounds, having already travelled 6000+ kilometres to northeast China and Okinawa, Japan since early March 2018. The fourth curlew, like many other younger curlew, is expected to remain in the southern hemisphere for another year before making its first northward journey to the breeding grounds. [Fuller Lab member](#) Brad Woodworth is one of many researchers and volunteers contributing to this project.



(top) Northward migration routes of three Far Eastern Curlew equipped with tracking devices in Moreton Bay as of 12-Apr-2018; (bottom) local movements of a single Far Eastern Curlew between

Geoff Skinner Wetlands and Dunwich, North Stradbroke Is., a distance of ~16 km, over a two week period in early March.

You can read more and stay up-to-date with these birds on [the QWSG Whimbrel and Curlew tracking webpage](#).



One of the Far Eastern Curlews recently fitted with a satellite transmitter in Moreton Bay, Qld.

Another research project focused on protection of Far Eastern Curlews in Australia is the National Environmental Science Program's [Strategic planning for the Far Eastern Curlew](#) led by shorebird researcher Amanda Lilleyman at Charles Darwin University. This project partners with local industry Darwin Port, where at an artificial site managed by the Port, the Far Eastern Curlew population has increased over the years. The site is used by the birds for roosting at high tide and Amanda has counted close to 300 Far Eastern Curlew at this site. Amanda's research involves catching birds and attaching satellite transmitters to them to track their movements around Darwin Harbour. So far she has found that the birds do not move far between their roosting and feeding habitats, and use only a few sites each day. The Far Eastern Curlew also uses saltmarsh habitat, an ecological community that is considered endangered in some parts of the curlews' non-breeding range. The Far Eastern Curlew faces many threats along the coastline of the non-breeding grounds and this project will provide important information on the ecological requirements of the species.



Darwin-based researcher Amanda Lilleyman holds a tagged Far Eastern Curlew.

Shorebirds and their habitats are also the focus of [Fuller Lab member](#) Micha Jackson's PhD research focused on conserving migratory birds in human-dominated landscapes. A key theme in Micha's research is how migratory shorebirds, including Far Eastern Curlews, [use artificial habitats](#) as a result of the extensive changes that have occurred in coastal wetlands of the EAAF, and whether better management of these new environments could help them to recover.



Whimbrels at an artificial roost in Queensland. Photo: Micha V Jackson.

International cooperation

Because the migratory routes of shorebirds cross many country borders, international cooperation is an absolutely critical part of the effort to save the world's curlews.

The [East Asian-Australasian Flyway Partnership](#) (EAAFP) is a multi-actor voluntary agreement for conserving migratory waterbirds along the 22 countries of the East Asian-Australasian Flyway. Representatives from the countries in the flyway meet regularly to enhance cooperation and discuss the most pressing threats to its shorebirds. The [last Meeting of Partners of the EAAFP](#) took place in Singapore in 2017. One of the initiatives approved at this meeting was an [Action Plan for Far Eastern Curlew](#), which aims to coordinate research priorities and conservation action across the countries this species inhabits.

[Fuller Lab member](#) Ed Gallo-Cajiao's PhD looks at the important issue of global governance for migratory species and how well international agreements work to protect shorebirds. Specifically, he studies the role of state and non-state actors, as well as the history of some of the agreements from this flyway. In addition to the EAAFP, 27 other conservation agreements exist in the flyway, including global agreements such as the Ramsar Convention on Wetlands and the Convention on Biological Diversity, as well as a suite of bilateral agreements for migratory bird conservation involving countries such as Japan, South Korea, Australia, China, Russia, and the US.

Only time will tell if the dedicated efforts of people from around the world will ensure the survival of our remaining curlews!



This beautiful mural was painted by Queensland-based artist [Deb Mostert](#) and is located at Wellington Point, Qld. It highlights the precarious position that migratory shorebirds, including curlews, find themselves in as a result of the myriad threats they now face on their annual migrations. Deb will be showcasing some of her shorebird artwork at an [upcoming exhibit](#), which will feature works from her recent time in Broome, WA.