# One Hunting on a no-good shore

*Huff, huff.* I'm running. Pretending I am agile, stomping on mounds of wet seagrass, trying to keep my feet. *Huff, huff.* 

Forty metres has never seemed so far. Alongside me another runner, a young woman, trips and pitches into the seaweed. I keep running. For two hours I've waited with an instruction burning in my head: 'When the cannon fires, run as fast as you can to the front of the net.'

*Huff, huff.* I reach the net. The young woman, Emilia Lai, is there before me. She's already on her knees at the tideline. How did that happen?

'Move the net up the beach, but don't lift it. The birds might escape.'

So—with experienced catchers, local coastal workers, stray birders and hangers-on like me—I kneel and ease the net up out of the salt-water-and-seagrass soup.

Under the net are a few sodden grey-and-white rags of birds. So meagre. A bunch of wet tissues. Their swamped heads rise far enough for them to see us crowding around.

The birds do not struggle or cry out. Their amazed eyes speak for them.

Escape? There is no escape. People around them are jubilant, high-fiving each other.

I take a breath and watch as the catchers begin to disentangle the birds from the net. Lai is head down in concentration, her right hand holds a bird and her nimble left fingers work the net away from it, feather by feather. It is popped into a linen bag and disappears before I can properly look at it.

But I know it is a Grey Plover and this, of all birds, is the one I have come to see.

When it's over, I ask Lai, reserved and slight, why she has come all the way from Taiwan to do this.

'I fell in love with shorebirds from the first time,' she says. 'Because they are so tiny, and so strong.' She pumps her fist.

I've come to Thompson Beach, north of Adelaide in South Australia, to see these birds that are part of a group called 'migratory shorebirds'. I am looking for the little-known and exotic.

I had half a memory of something I may have seen when young; of a strange curve-billed bird standing on a sand-spit across the other side of a lagoon mouth. It has stayed on the rim of my mind ever since.

In talk with friends I keep disentangling them from other birds. They're not seabirds; they're *shorebirds*. People also call them *waders*. They don't feed at sea, or rest on the water like gulls or shearwaters. Many don't even float. Shorebirds scurry along tidelines of ocean beaches, they're the spindly stalkers of mudflats, the still and watchful birds of wetlands. Birds of an ephemeral, marginal world.

Their daily rhythm is driven by the tide. They are constant in their connection to it—for the food it exposes, or conceals. Many shorebirds are resident on coasts and wetlands. Migratory shorebirds are fleeting visitors, and often have a global domain. Some are born in the far Arctic north, and they migrate each year to escape impossible cold, bound to return there to breed. They routinely cross hemispheres.

We might expect glamour in such birds. Mostly they do it humbly. You have to look twice to distinguish them from mud or seaweed, and they are often 'out there', away from people. 'Waders typically are the "grey birds" that live far from the spectacle of human cause, human glory and human misery,' said the Dutch ornithologist, Theunis Piersma.

The greyest of these is the Grey Plover—a dovish wallflower at the shorebird dance. It spreads thinly around the world's margins and is often overlooked, not just by people who don't know shorebirds, but by those who do. For many it's a secondchoice bird, and for that reason it interests me. In life there are many surprises to be found among the overlooked.

As well as the bird, I am out to discover shorebird study itself. I think it might stand as a beacon of the grind that makes good science; the kind to power biodiversity protection. This, at a time when it's often easier for the frightened to deny what science plainly tells us about our earth. So I am freighting this small, unknown bird with hope.

The first Grey Plover I glimpse on the shore of Thompson Beach stands taller among a group of sandpipers, and it has seen me. I get a quick look at a short-billed head, different in profile from the little long-bills around it. Even as I begin to emerge

from the scrub it's gone. So fast! I keep track of it to a landing away in the distance, off the edge of a sandbar. It stands in water up to its knees, alone and dismissive, like Peter Pan on Marooners' Rock. I am intrigued.

Until recently the word 'plover' has mainly meant to me a noisy, common bird that is not very bright: a lapwing. The Masked Lapwing and its many relatives around the world have adapted well to living with people. On grass near my home, dozens gather to stand and study the ground, as if they are looking for the same lost car key. Pairs sometimes try to nest in our garden, and all of them willingly rasp out a grating alarm call.

Masked Lapwings do not push migratory boundaries. They might move from drying inlands to wetter coasts, but most live near where they were born, spreading out to claim nesting territories. I have seen lapwings collect in a protest vigil on a piece of new highway that was previously their ground. I've watched heart-in-mouth as newborn chicks try to follow their calling parents off a city traffic island. And I admit to waving a rake to discourage them from setting up their territory in mine. They are odd birds, but really, they are not so much plovers. Think of the lapwing as the gateway bird.

Lapwings are related to the Grey Plover the way that great apes are related to us. Truly but, we like to think, distantly. Both birds are from the family Charadriidae (waders or shorebirds); but the 25 global lapwings live in the sub-family Vanellinae, while the Grey Plover is in the parallel sub-family Charadriinae, and is one of just four species that make up the genus *Pluvialis*, the 'rainbirds'.

The Grey Plover is *Pluvialis squatarola*, the snub-faced rainbird—another claim against it. Its three closest relatives—the

Eurasian, Pacific and American Goldens—form with it an exclusive group called the tundra plovers.

To birders, a Grey Plover can quickly be distinguished in flight among a mixed flock of shorebirds because it's the one with the sweaty armpits. These are its black-feathered 'wingpits', visible in flight. In Americas—defiantly from the rest of the world—it is called the Black-bellied Plover.

For a second-choice bird it is held in curious regard. It's one of a handful of birds on the cover of the global standard text, *Shorebirds: An identification guide*. It turns up as the single bird chosen for wader study groups' own logos. It has a strong, historic place among the bird-hunting fraternity of the American south. At an auction in 2006, a world-record price of US\$830,000, was paid for a wooden carved hunting decoy described as 'Black-bellied Plover in Spring Plumage'. The work is a flowing sculptural miniature, like something the great Henry Moore might have shaped as a maquette. The bird bends over and looks down to persuade others flying past that there's food below, within range of a shooter.

Standoffish even from other shorebirds, Grey Plover in Australia are elusive, usually far out of human sight, and reach. Except at times like this, at a beach in a corner of Gulf St Vincent, South Australia, where a net has just exploded over them.

On the first morning of the catching expedition I join the birders on early reconnaissance, and walk the dawning shore. Here, where the gulf's head pushes into the heart of the continent, the meadows are of seagrass. The Australian surf is away down south. There is no swell. The tide rises soundlessly

from somewhere beyond the horizon, flooding over sand and seagrass piles, through mangrove clumps, up creek lines and into the marshland bogs. A flock of Australian Pelicans ease themselves off a seagrass bank into the water with their eyes on us. We startle a feral Red Fox nosing the weed. When we turn to retrace our steps, we find that, without notice, an empty creek has become thigh-deep. Later this water will leak back out.

Briny rot rises out of seagrass washed onshore. A squall rages in from the land behind and belts across the flats, lifting marine white caps. The wind subsides, mosquitoes and sandflies swarm in to bite, and bushflies drive me to arm-waving distraction. This is shorebird domain. It is a fertile tidal flat millions of years in the making.

The gash in southern Australia that is the St Vincent Basin emerged as the Australo-Antarctic Gulf expanded after the break-up of the Gondwanan super-continent around 50 million years ago. The shallow gulf alternately dried out and flooded as glacial maximums froze the water into ice, and then inter-glacial periods let it down. In the last maximum, about 20,000 years ago, this was a plain with a central salty lake.

Surrounded by semi-arid lowland, the northern gulf where we are is not river-fed. The only watercourse with that name, the Wakefield, is ephemeral with the seasons. The gulf is a rare 'inverse estuary'. Salinity is greater and the water temperature higher at its head than at its mouth.

Without river flow, marine life is nourished by ocean currents carrying in sediments to settle on the gulf floor. These currents deal with a tidal regime so restricted that in South Australia one set of tides has its own name: 'The Dodger'. This tide has almost no rise or fall. Sediments drift up to settle as the foundation for the seagrass that covers more than half of the gulf's 4098-square-kilometre bed. In the northern gulf, 6000 years' worth of seagrass washed onshore has decayed to extend the shoreline several kilometres out into the water. A scattered mangrove woodland, more expected in tropical Australia, pokes out through this tidal zone.

What makes this habitat attractive for shorebirds is less appealing for most of us. Beaches of seagrass sponge, muddy sand to infinity, biting insects, bright hot sun flaring off the flat water. Stink.

Stores of shorebird food are hidden here—in the sediments, seagrass, shoreline and nearby inland. Worms, small shellfish, cockles and marine snails percolate through the sandy mud. Prawns and small fish hug mangroves. Birds probe the wet edge of the tideline and roost on floating islands of coagulated seagrass. They work up the creek lines and into the saltmarsh, or feed on algal mats in ephemeral clay pans behind the shore. Further down the gulf, towards Adelaide, there is bounty in brine life held in commercial salt fields.

There are stories of the Kaurna Aboriginal people using this waterway they call Wongajerla. Clans of the Kaurna people extended north along the eastern shore of Gulf St Vincent to its head, hunting waterfowl and fishing with reed nets. Archaeological scrutiny of Kaurna stone implements shows they lived here since well before the last Ice Age.

The gulf's first cautious European explorers tacked their way up in the 1802–3 Anglo–French race to explore Australia's coastline. The Englishman Matthew Flinders took the rowing cutter from his ship *Investigator* 'up to the head of this inlet to examine its termination' in April 1802. Even working around channels, they could not get the cutter closer than 800 metres to

the shore. Squelching through the mud, Flinders' party made it to land: they walked up a ridge and confirmed they had reached the northern point.

Flinders, the mapmaker, named the waters after a British Admiral, the Earl of St Vincent, and barely noted the wildlife. 'Numbers of stingrays came round the boat whilst upon the flat, but being un-provided, we were not able to succeed in getting any.' His expedition naturalist, Robert Brown, said that on the excursion Flinders shot a hawk: 'Several kinds of small birds were seen but none shot.' They were there at shorebird migration time, but left no account of them.

Just twelve days afterwards, Nicolas Baudin, aboard the *Geographe*, surveyed the same coast for Napoleon's France. Pushed up the gulf by a south-easterly gale—a migration wind—the explorers became confused by shoals and Baudin had to keep all hands on deck through the night while they worked their way out. 'I gave this gulf the name of Golfe de la Mauvais [The Bad Gulf] because of the fatigue that it caused the whole crew.'

As white settlement expanded, farmers moved north from Adelaide onto the plains, using the gulf's waters for transport. They loaded their wheat onto boats at 'ports' that were nothing more than the end of a track where a flat-bottomed ketch was beached at low tide so bagged grain could be carted alongside. Over time, commercial fishers began to work the northern gulf, but to the government its greatest use came by default. A century ago, it began to operate an army proof range. This 'empty' shore was perfect for testing artillery fire and thought to be absolutely no good for anything else. Guns and ammunition could be tested for reliability by firing from a point of land, southward over a 25-kilometre length of sandy flat. Soldiers shot shells, sometimes hundreds of rounds each day, out over the birds. At low tide, retrieval parties used horse and cart, and later vehicles, to drive out onto the flat, study a warhead's impact, and perhaps pick up remains.

Use of the proof range brought the first government acknowledgement of the existence of shorebirds in the upper gulf, though an official hand waved away any effects on their survival. Plans to enlarge the range for bigger and better explosions forced an environmental assessment. It was guessed that wildlife was not affected, and anyway: 'in time it is thought that the birds would adjust to the noise'. I am left to imagine how many birds learned to recognise the incoming whistle of bombardment and flee the danger, or instead disappeared in a sudden explosion of shrapnel, sand and water.

The range is still sometimes used for weapons testing but an expansion of its impact zone that would have razed 189 houses in coastal holiday-shack enclaves was rejected. That same decision gave a green light to a new subdivision at a place called Thompson Beach.

Hunched on a low dune between samphire marshland and wind-breaking scrub, Thompson Beach's houses raise themselves just high enough to cool down, and for people to be able to look through their living-room windows across the tidal flat and into the gulf.

To Australians used to ocean and surf, this is not the greatest coastal real estate. But generations have taken refuge or holidays in these off-track communities, and the hardscrabble shore has its enthusiasts. 'Thompson Beach. The Place To Be Beside The Sea. Because It's On The Coast That Has The Most' says a T-shirt. Sunsets across the gulf really do blaze the wide sky in dramatic reds and purples; otherwise there seems to be little to back this happy belief.

Without much water clear enough for swimming or deep enough for an outboard motor, choices of recreation are limited to a local tide-bound ritual. As it ebbs, people wearing wader overalls appear on shore. Their heads and faces are hidden from the glare in hats and bandanas. Keeping to the same prospectors' rhythm as the shorebirds, they go crabbing for Blue Swimmers. The crabbers fossick the seagrass with rakes that entangle the Swimmers' claws. They flip them into floating plastic boxes towed behind from the waist. Out on the wide flat, these spectral foragers trudge in slow motion to the horizon.

Such a modest coast for high ambition. The shorebird expedition came there wanting to chart new tracks in global migration: to the far north, and perhaps back again. The catching group were students of a retired Melbourne metallurgist; they were drawn there by a South Australian environmental bureaucrat and led by a former bookkeeper. Without these three, the South Australian Grey Plover's epic flights would never have been unlocked.

Clive Minton, a metallurgist who became a senior human resources executive, is the father of wader studies, a global figure in the field. He is also, in Australia, its general. Inside his square frame is a mind honed at Cambridge University in the 1950s, and he is still restless in his eighties.

'Yes, I have a thirst for knowledge,' Minton tells me. 'If there's a way not known of finding something out, then I'm challenged to do it. But I'm also a hunter by nature. I think all of us have probably got a little bit of it in us. I've got a lot of the hunter. I think that's one reason my unrest has been lifelong, 110 per cent.