

FAST TRACKING

A PEREGRINE DIARY



MORE THAN 20 YEARS AGO, CAPE TOWN-BASED ORNITHOLOGIST ANDREW JENKINS BEGAN WATCHING PEREGRINE FALCONS ON THE CAPE PENINSULA. LITTLE DID HE KNOW THEN THAT HE WOULD STILL BE MONITORING THESE BIRDS NEARLY HALF A LIFETIME LATER OR THAT HIS STUDY POPULATION WOULD MORE THAN TRIPLE IN SIZE DURING THAT TIME. ▶

TEXT & PHOTOGRAPHS BY ANDREW JENKINS



fast & furious

Jenkins's study of this remarkable and spectacular bird is centred on a colour-ringing scheme that allows him to follow the fortunes of marked individuals from cradle to grave. The aims are to identify factors that determine the success or failure of these individuals (or their genetic fitness) and to understand the net effect of these factors on the status of the population. Direct human support as a result of urbanisation and the incipient effects of climate change have so far been implicated as important drivers of the upward trend in numbers of the Cape's fastest inhabitant.

Here, in the first of two articles, Jenkins shares his diary tracking the progress of Peregrine Falcons *Falco peregrinus* during a typical breeding season on the Cape Peninsula.

18 August

The metal of the tripod slung over my shoulder is uncomfortably cold to the touch and my laboured breathing condenses in slight vapour clouds with each step I take up the steep pathway. It's a chilly morning and I'm walking to the tourist look-out area at the southern extremity of Cape Point. There's a hint of mist over the open Atlantic to the west and the rollers are roaring in onto Diaz Beach far below. The air is fresh, with a tang of kelp, and as I reach the old lighthouse at the crest of the hill a light breeze flurries the anemometer on the communications mast that stands just to the north.

Steep, sun-drenched fynbos slopes slip away to my left as I look south-east towards Cape Hangklip, and shadowy crags on my right drop a startling 200 metres straight into the sea. There are hundreds of Cape Cormorants perched on the white-stained sea-cliffs and many are wheeling around the rocky tip of the point on their way to and from the open ocean. Suddenly, from the shadows of the tallest rock-face, panicked cormorants start peeling away from the cliff ahead of a Peregrine surging up and along the cliff-line. Wings pumping hard in the cold, dead air, the falcon cuts across the ancient rocks and beats up towards the sun.

As she reaches the light, she simultaneously catches the breeze, and what was a heavy, pulsating shape achieves calmer buoyancy, turning in a glide just below me. Blue-grey, white and black, with a dark, liquid eye ringed in yellow. She turns again, loses the support of the wind and resumes flapping, all hefty shoulders and purpose, heading north. She circles, then approaches the mast into the breeze, coming in fast and low and throwing up suddenly and steeply to drain all power from her flight in a stalled landing. Her claws making a slightly metallic sound as she grasps the steelwork, she settles to look over the bay.

I hurriedly arrange the spotting scope and train it on her, tweaking the focus into sharpest relief. Since landing, she's had time to relax slightly, and her plumage is slackened and ruffled against the cold, with one leg retracted into her belly feathers and only the scarred toes of her gripping foot visible. She shifts her weight and extends her resting leg, then proceeds with a meticulous bout of preening. After several minutes of intensive work, she pauses to look around, rouses or shakes out her feathers, then stretches out the right wing and leg together, followed by those on the left. The latter movements are slow and limber and afford me the chance >

Previous spread A male Peregrine in defensive mode.

Above Self-portrait after visiting the Maitland silo site without adequate protection. Hands-on work at the nest is a necessary part of this kind of study, but can be traumatic for both falcons and biologist.

Opposite Braveheart. Levels of aggression by parent falcons (mainly females) during visits to the nest vary from highly irritated in some birds to borderline murderous in others. The Maitland female tops the list of maniacal mothers, and has both the equipment and the temperament to inflict serious damage.





THE SEASON LIES BEFORE ME LIKE A COMPLEX SOAPIE, COMPLETE WITH EQUAL DOSES OF FATIGUE AND TEDIUM, FASCINATION AND EXHILARATION

to inspect each of her tarsi through the scope, as she moves them towards the tips of her flexed wings. She carries both numbered SAFRING and coloured aluminium rings on her legs, and the colour combination (red/silver right and SAFRING left) confirms that she is the same bird that has occupied the Cape Point territory for the previous six seasons. I ringed her as a nestling in a territory more than 20 kilometres to the north and now, at eight years old, she is in her prime.

Having confirmed her identity, I can relax a little, watching her with the naked eye while I make a cup of coffee and update my notes. I have just enough time for a much-needed hit of caffeine before her casual demeanour changes. I revert to the scope as she turns and bows forward, her plumage clenched tight, uttering a loud, rather strange, grating call 'Krrchuck...krrchuck...krrchuck...'. Searching the sky ahead of her with my binoculars, I pick up the male, gliding in fast from the south-east. His taut wings tear the air as he scorches around and past me, his long-toed, orange-yellow feet hanging slightly, his eyes glazed with the intensity of his powerful display. He is instantly distant, turning across the wind in a razor-sharp arc of grey, soaring up and back before dropping towards the mast. The female has been calling throughout and as he

approaches she lowers her head still further and raises her tail invitingly. The pair copulate in a brief confusion of fluttering wings and wailing and chittering calls. Afterwards, the male circles the mast again and then lands near the top. Before he settles fully at the perch, I get him in the scope to study him in detail. Like her, he is colour-ringed, and is the six-year-old product of a territory about 18 kilometres away.

By just after 08h00 I have completed my tasks for the morning at this, the most southerly territory in my study area. I have confirmed that it is still occupied by a pair of adults and that they are the same individuals that were present in the previous season. Mission accomplished, I start walking back down to the car park.

So begins my annual round of surveying and monitoring Peregrine Falcon nests on the Cape Peninsula. In a few weeks' time I will need to visit the cliff where this pair generally breeds, to determine whether they have laid and are incubating a clutch of eggs. Then, if I can confirm a breeding attempt, I will have to make at least one more visit to the site, this time lugging ropes and ringing equipment, to try to access the nest ledge and ring and colour-ring the brood of chicks.

This is just one of nearly 50 such territories within my area, ranging in nature



from the remote rock-faces of Table Mountain to stone quarries, palled in dust, and grubby, condemned buildings in industrial Cape Town. Each territory presents unique challenges and each must be studied with a similar level of detail if I am to develop and maintain a complete picture of how the population works. The pending season lies before me like a huge, complex soapie, complete with equal doses of fatigue and tedium, fascination and exhilaration. 'Here we go again,' I mutter to myself as I put my vehicle in gear and drive north.

8 September

The breeding season is fully under way. I try to get clutch sizes and measurements at a representative sample of 15 to 20 nests each year and need to get the early-laying sites in the bag to stay ahead of the game. This means heading for the suburbs. While the nests on buildings are relatively easy to visit, they usually require me to work closely with owners or residents and quite often involve managing the bird-people interface; for example, trying to ensure that building

maintenance is scheduled for before or after the breeding season, or putting up nest boxes to encourage the birds to nest where they are safest and least likely to compromise human interests.

At the Red Cross War Memorial Children's Hospital in Rondebosch, the staff show plenty of interest in the welfare of the resident Peregrines. Sister Knobel is once again more than happy to let me use her office window as an access point for the exterior of the building on the sixth floor. There are two boxes at Red Cross, which I put up a few years ago after the birds had tried to nest behind an air-conditioning unit, without much success.

As I inch up to the side of the nest box, which faces out into the hospital car park, I talk quietly to the anticipated occupant and then knock on the roof once I get there in an effort to alert the possibly incubating bird to my presence. If I create a sudden disturbance, the bird might damage the clutch as it rapidly exits the box. I sense movement within, but nothing flies out, so I slowly peer around the side of the box. The female Peregrine is there, backed into the far

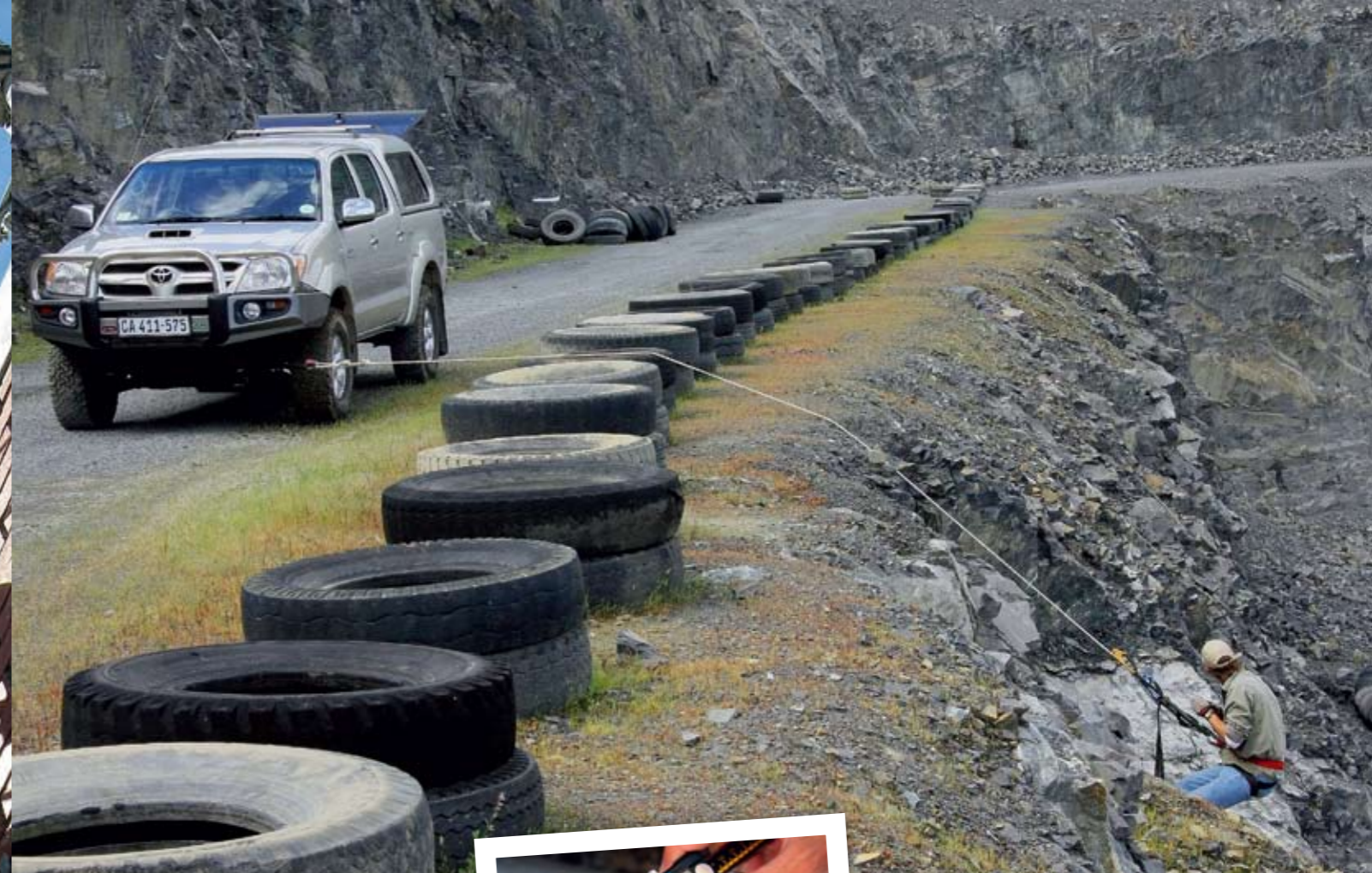
Above A female Peregrine perched at her nest box on the cooling towers of the Athlone power station. Peregrines have bred here since the author installed nest boxes in 1989. The future of this site is now in the balance, as municipal officials contemplate the demolition of the now-disused towers and stacks.

Opposite The Cape Point female prepares to take a freshly caught Common Starling from her mate in a mid-air food pass. Courtship feeding is a critical component of the breeding cycle: the frequency with which males provision females in July/August affects the ultimate success or failure of the season.

corner, feathers raised in threat display and with a foot resting on one of her clutch of four eggs. I gently nudge the bird a little further away from the clutch and proceed to measure, weigh and photograph her eggs while she stands by watching, shocked but determined to hold her ground. As I work, taxis down on Klipfontein Road hoot aggressively as their guards yell out the names of nearby destinations, and newspaper vendors shout 'Argie ... Aaaaargie!'

9 September

After arranging access with the management of the Tiger Oats plant in Maitland, I walk through the ground-floor processing area, dodging busy forklifts, and start the steps-and-ladders ascent of the grain store. Everything is covered in cereal dust and my nose and eyes start itching as I labour up into the dark, windy extremities of the tower. Hopping out of the window onto the silo roof, I keep a careful watch on my surroundings. This site is home to the most aggressive bird in my study population, and if she's not sitting on eggs just round the corner, she's liable to blindsides me. As I'd hoped, my nemesis is at her nest box, not incubating as expected but perched at the entrance and looking mean. I just have time to glimpse a single, untended egg in the box before the female's angry chatter rises in tempo and she takes to the air. Unprotected exposure to this bird when she's angry can lead to bloodshed: her approach to nest defence is lightning



ZELDA BATE (4)

fast, deadly accurate and full contact. She's sent a maintenance contractor off to the emergency room in her time, and in previous encounters has reduced me to a cowering wreck, bleeding profusely from my lacerated scalp, the whites clearly visible in my terrified eyes! I hastily take a few photographs and retreat.

This usually productive pair is very late this year and may well register a breeding failure. The probable reason is the replacement of the old, unmarked male of the past few years with a new, ringed bird. At only two years old, this newcomer certainly has my respect for pairing up with the old battleaxe (who is going on for 11), but he may not yet have sufficient maturity or experience to sire a full and fertile clutch.

12 September

I start the day at a working quarry set among the wheatfields north-west of Durbanville. It gets pretty noisy and dangerous in these places once the workday starts, so I must get there by 06h00 to get a clear, quiet hour to work in. The echo of the vehicle's engine has barely had time to dissipate across the dank, grey walls of the quarry when the male's



wailing food call heralds his arrival, carrying food (a fully plucked, medium-sized bird, perhaps a Laughing Dove). I pick him up in the binoculars as he rides the north wind and then angles across the quarry benches to his mate. She has risen carefully off her 'scrape' (a depression made in loose substrate on a more or less flat ledge) and waddles to the edge of the nest ledge in anticipation of his arrival. As he completes a rather compromised landing, one foot grasping the prey, the other fumbling for purchase on the rocky scree, she lunges forward, roughly grabs the prey parcel and exits the nest area to go and feed, rudely shouting the odds as she does so. He looks a little dazed in the face of her ingratitude, but soon recovers, hops across to the scrape and gingerly settles on what must be a clutch of eggs. During this interaction I manage to ▸

Above Working quarries are tough places in many respects, but the road infrastructure can be handy for falcon field work.

Inset Clutch and egg size are standard measurements which indicate commitment to breeding by each pair each season.

Opposite, left Monitoring urban nests involves clambering around in some fairly off-beat places. This Peregrine site is hosted by the Dutch Reformed Church.

Opposite, right Starting them young. The author's son accompanies him to help with data collection at an easy-access nest occupied by relatively calm falcons.



ZELDA BATE

THIS IS WHERE PEREGRINES REALLY BELONG, EMBRACED BY OPEN AIR, WITH ENDLESS VISTAS IN WHICH TO LOCATE AND CHASE DOWN THEIR AVIAN PREY

check the legs of both birds: she's unringed (damn!), he's ringed (the same bird trapped here as an adult six years earlier).

Quarries can be unattractive places to work in, especially those still being mined, and abseiling to nests on the quarried faces can be tricky because much of the recently blasted rock is unstable. However, one big plus is that it's often possible to drive to a point directly above the nest ledge and anchor the rope to the vehicle, which saves a lot of time and effort. This particular ledge is only about three metres down from the road, and 15 minutes later I've got my measurements (three eggs) and I'm on my way.

16 September

Early this morning I completed the long walk out to the Paulsberg cliff-line on the east coast of the Cape of Good Hope section of the Table Mountain National Park, and was in position below a long-occupied Peregrine nest cliff just as the rock on the upper lip of the central overhang caught its first glimpse of the rising



sun. Since then, I've watched Rock Kestrels and White-necked Ravens skirmishing over space on the cliff-faces to the north, and Jackal Buzzards hanging on the south-easter over the broken rock to the south. But after a litre of coffee, a full packet of ginger-nut biscuits and seven hours of eye-strain and sunburn, I still haven't managed to squeeze out of the soaring crag even the slightest glimpse of a Peregrine.

Patience rewards in the end, and I see the male swinging in from the north-west with a decent-sized payload tucked up neatly beneath his tail. As he passes back across the cliff, the female emerges. The restless surf on the rocks behind me drowns out all sounds from above, but she is surely calling and obviously eager to feed after a long stint on the eggs. She flaps aggressively up towards him, out into the open blue sky, takes delivery in mid-air, then skives off to have her meal to the south of the cliff, while he drops directly to their nest ledge. I make notes and sketches, marking the best anchor point for a long abseil later in the season.



26 September

It's getting towards the end of the laying season, and I spend the morning on the eastern back table of Table Mountain. The huge cliffs on this heavily forested side of the mountain can only properly be worked from the top. Thankfully, South African National Parks allows me to drive up the access road from Constantia Nek to the overseer's hut, so I'm on the footpath to Maclear's Beacon by sunrise. After a 30-minute walk from the vehicle, I'm at my first site. It's a remarkably wind-still day and, revelling in the fresh perfume of the fynbos, I watch as Black and Alpine swifts hawk insects in the warming air of the void.

I hear the Peregrines before I see them – loud wailing and chucking calls – then locate the female, and soon afterwards the male, perched close together on the outer extremity of the cliff opposite and below me. I set the scope on them, turning the eyepiece to full power. The clarity of the Swarovski glass comes into its own in these situations and in the cold, clear air, the image presented at 60x magnification is outstanding. It takes a while, but eventually I manage to determine that the male is unringed and get the combination of the colour-ringed female.

Unfortunately, these birds seem way off the pace behaviourally and will breed either very late or not at all this season. We've had plenty of cold, wet weather this spring, which my study predicts will lower the proportion of pairs in the population that try to breed and will reduce breeding success overall. Exactly how or why this happens is not yet clear, but the high-mountain birds seem the worst affected.

28 September

A long, steep, early-morning bundubash gets me to the top of a coastal



cliff on the southern Peninsula and a 45-metre abseil brings me to another clutch of three eggs. Before leaving the ledge I take a moment to register my surroundings: the grim darkness at the foot of the cliff contrasting with the bright blue of the sea, and whales blowing just offshore. It's another world on these big, exposed cliffs, where gravity rules and one's perspectives on life get shifted. This is where Peregrines really belong, embraced by open air, with endless vistas in which to locate and chase down their avian prey at speeds the human eye can barely comprehend. The screaming of the falcons and the rapid approach of a sudden squall of rain prompt me to hasten my clumsy ascent of the rope.

8 October

I revisit three of the sites of the early-breeding birds. At Red Cross Hospital the female is obviously sitting up and brooding young, rather than lying flat and incubating, so I decide not to disturb her further. At the other sites, both clutches are partially hatched.

With the arrival of young, activities at the nests and my efforts to monitor them are about to get a lot more hectic. □

Above In the temporary absence of their mother, two four- to five-day-old hatchlings use each other and their unhatched sibling for warmth and support.

Above, left The Red Cross Hospital female stands her ground while her eggs are weighed and measured.

Opposite, above Abseiling down to cliff nests can be fun; ascending the rope afterwards, less so! At sites with aggressive females, the author wears a soft scrum cap to shield his head from attack and simultaneously protect the birds from potential injury in collisions with his head.

Opposite, below A clutch of three Peregrine eggs on a cliff ledge in the central Peninsula mountain chain.

FOLLOW THE ACTION

Continue tracking the progress of these clutches in Part 2 of 'Peregrine Diary', in the April/May issue of *Africa – Birds & Birding*.