Animal instinct

OUR UNIQUE NATURAL HISTORY CAPTURED

When he's asked to list his most memorable Australian Geographic assignments, Perth-based photographer Jiri Lochman will often launch into an impassioned account of the endangered marine turtles he was sent to photograph on Bare Sand Island, in the Arafura Sea 50 km west of Darwin.

He'll describe in meticulous detail the area's stark, stunning scenery. And after a little helpful prodding from wife and fellow photographer Marie Lochman — also a regular AG contributor — he might recall a few other notable aspects of that trip. "Oh, that's right," he'll eventually offer. "I broke some ribs when I slipped, trying to stop a collision between our boat and a yacht. And the sand ruined two camera bodies. But apart from that, it was one of my favourite AG assignments."

During two weeks in 2002, Jiri assembled a portfolio of stunning wildlife images (page 101) from the tiny low-lying cay, so windswept it supports just two stunted trees — only one of which provides any shade. Jiri's recollection of the shoot's difficulties as nothing out of the ordinary comes as no surprise.

"Must be able to endure tough conditions in remote locations while pursuing hard-to-find creatures" has been a routine part of the brief for the photographers responsible for AG's wildlife imagery for the past quarter of a century.

Most of them would readily endure mind-altering dehydration, hidden under camouflage in 40°C Northern Territory heat, for the chance to glimpse a rare finch in its natural habitat. They'd all accept that waking to a flash flood lapping at the tent flaps after camping next to an ephemeral inland lake for a waterbird shoot was a run-of-the-mill occupational hazard. And that riding stomach-churning waves on a fishing trawler on the wild Southern Ocean was just another day at the office — as long as it involved looking for great white sharks.

If photographers with the sort of stamina and initiative required to capture nature for AG are a rare breed, then Esther Beaton is an endangered species: one of only a few women to specialise in Australian nature photography and to have been sent on regular AG assignments.

"I think a lot of women don't like going out bush, particularly

on their own," Esther says. "But I'm okay with it. This kind of photography really challenges you and stretches your resources and I revel in that."

Looking back, however, she agrees she's found herself in some "potentially dangerous" situations with people in remote locations. "Once, I was sleeping in my four-wheel-drive in a dry creek bed in South Australia and woke in the middle of the night to the sound of cars circling me. I kept my head down and they eventually went away without bothering me, but it was scary," she admits. "Perhaps they left me alone because they thought I might have been a big bloke with a shotgun!"

Esther's professional credo is to "show that everything has its place". "And I like to show the dangerous, or the ugly, or the poisonous," she adds. Not surprisingly, then, her list of favourite AG pictures includes those of funnel-web spiders (page 72). "I like to amaze people and get them to confront their fears," Esther says.

Her image of high country brumbies (right) flies right to the heart of the conflict between those charged with protecting the fragile habitats through which these beauties run and our admiration for this aristocratic, yet feral, species.

Assignments with particularly challenging physical aspects are the toughest, Esther says. She's waded thigh-deep through snow, stood for hours in a swamp outside Sydney and been driven to despair by flies in the Simpson Desert while on location for AUSTRALIAN GEOGRAPHIC.

"But a funny thing happens to you when you're compelled to get a shot. You really do get caught in the moment and there's a timeless spacelessness that surrounds you, and nothing else exists for that moment except for what your attention is on," she explains. "Sometimes, even a seemingly simple, straightforward macro shot can be difficult. I might be holding my body in a stiff awkward position, maybe leaning forward to one side, with a couple of flash units at arm's length waiting for the action to happen, and will have to hold that pose for five, six, eight minutes."

While each of AG's wildlife photographers has a slightly different approach to their craft, they all share a passion for Australian plants and animals. An adventurous, independent spirit and well-developed bush-survival skills are givens. Perhaps the single unifying feature that truly sets them apart

Tainted beauty Esther Beaton

With hoofs thundering and manes flying brumbies (*Equus caballu*) gallop through snow near Mt Stirling, in Victoria's high country. More than those of any other region, mountain brumbies have found their way into our hearts and our folklore through works like 'Banjo' Paterson's immortal *The Man from Snowy River*, but thriving feral herds cause untold damage to fragile alpine environments and debate over culling still divides opinion.

Brumby AG 26, April—June 1992



Magnificent capture Jonathan Poyner

The white-bellied sea eagle (*Haliaeetus leucogaster*) was a natural subject for Jonathan Poyner when he moved to Dalmeny, on the NSW south coast. The area around his home on Lake Mummuga is a favoured hunting ground for these majestic creatures and their proximity to home provided him with ample opportunity to observe their behaviour, a vital prerequisite of successful wildlife photography.

"Eye Contact" AG 94, April—June 2009

as a professional group is their extraordinary understanding and knowledge of the ecology and biology of the plants and creatures they shoot for the journal.

Steve Wilson's nature knowledge is so extensive that he also works as an information officer for the Queensland Museum. Like AG's other wildlife photographers, Steve — who usually contributes the text as well as the images for his stories — carries out extensive research before an assignment, identifying the right habitats and optimal conditions he'll need to get the best photographs.

Steve's particular area of expertise is reptiles and he's personally photographed in the wild about 80 per cent of Australia's 900-plus species of snakes, lizards (page 100), turtles and crocodiles, many of them for AG. He grew up with a passion for dinosaurs that developed into an interest for keeping native animals as pets — such as bluetongue lizards, bearded dragons and an assortment of frogs.

"But I was never really any good at keeping them. So when I finally got a camera — when I was about 20 — it meant I could 'collect' all sorts of creatures without having to actually look after them," Steve says.

The biggest demand for a photographer trying to capture Australian wildlife, Steve says, is time. "And Australia, of course, is so damned big that you also have to travel a lot of miles to see things."

Mitch Reardon has also meandered many thousands of kilometres across Australia — "all up, perhaps twice around the continent" — in a well-equipped 4WD in pursuit of animal images. Mitch, like Steve, writes and takes photographs for his AG stories. He grew up in South Africa, came to Australia as a young adult and at first found his new home's wildlife

perplexing. "It was initially a huge learning curve for me because I found such a huge difference between Australian and African wildlife," he remembers. "I was very used to doing behavioural stuff and here I was now working with cryptic, nocturnal, shy and a lot less demonstrative animals."

These traits of Australian wildlife made it hard for Mitch to follow his passion for 'representational' photography — "to show how animals make a living out in the wild". But he came to specialise and excel in capturing Australian animal behaviour. "I'd be up for hours on end in the dark with a spotlight waiting for things to happen and they never did," Mitch says. "I used to curse and wonder what I was doing with these bloody beasts. It was really hard work but I persevered and usually got them in the end."

For all of AG's nature photography specialists, the work meets a personal need for adventure and discovery. But longterm satisfaction comes from raising public awareness about Australian plants and animals and providing the imagery that supports their conservation.

They all lament the decline of Australia's natural heritage, commenting that — apart from feral animals — it's been getting harder and harder to find their photographic subjects during the past decade.

"But through the pages of AG, what we do has had a flow-on effect and it's meant we can help contribute back," says Jason Edwards. "If our work can help raise [conservation funds] for struggling species — and that money helps keep research projects on these animals going for years to come — then that's fantastic. To help secure the future of Australian species is unquestionably the best part of what we do."

Karen McGhee



National bird Mitch Reardon

The emu (*Dromaius novaehollandiae*) (below) is a natural resource at the Kurrawang Aboriginal Community emu farm near Kalgoorlie in WA. The emu farm project was seen as a way to provide employment for local people who found it difficult to get work in the mainstream.

from The Nullarbor, 1996, by Mitch Reardon



Dawn chorus Murray Spence

Brolgas (*Grus rubicunda*) and sarus cranes (*Grus antigone*) stand proud in the dawn light on Pandanus Lagoon (right), near Mareeba in far north Queensland. Both species are found across the plains and wetlands of the Gulf Country and often intermingle. They dance in graceful highleaping, wing-flapping displays and their croaking, trumpet calls are almost identical.

from **The Gulf Country**, 2000, by Susan Neales and Murray Spence

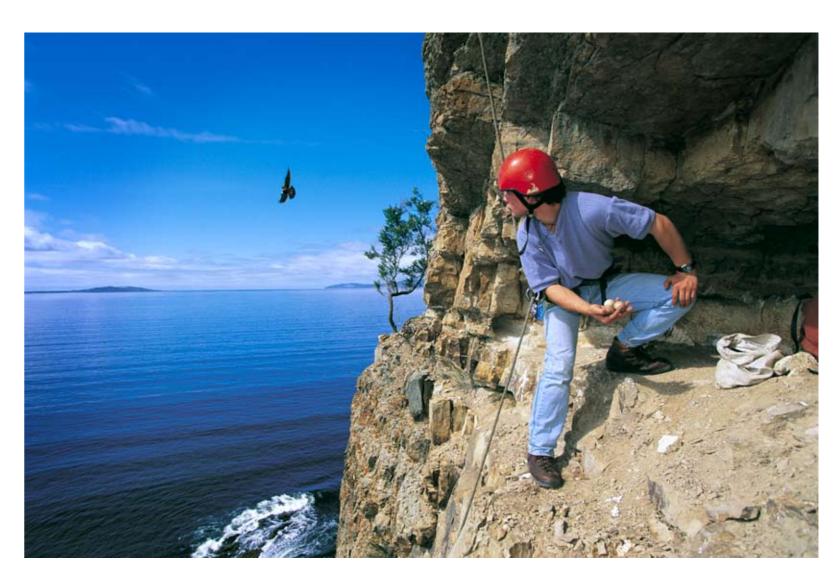




Bowler's end with bite Esther Beaton

Trevor Ryan shows where this male Sydney funnel-web spider (*Atrax robustus*) was sheltering when it bit him on the foot. The 12-year-old lifted this board in preparation for a game of backyard cricket with his dad Steven, at rear, in suburban Narara, on the NSW Central Coast. Trevor made a full recovery after receiving antivenom treatment at Gosford Hospital.

Funnel-webs AG 53, January—March 1999



High drama Simon Carter

Above the Derwent River estuary in Tasmania, a female peregrine falcon (*Falco peregrinus*) circles her target: raptor researcher Jason Wiersma, who's been caught redhanded collecting her eggs. He'll shelter from her outstretched talons before climbing a rope back to the cliff top. In this eyrie the eggs were addled, necessitating their removal for laboratory tests to determine the cause. A top-order predator, the peregrine is the world's fastest bird and can swoop on its prey at speeds of up to 300 km/h.

Flight of the falcon AG 49, January—March 1998



Planet of the iguanas Tui De Roy

Against a steaming lava backdrop, marine iguanas (*Amblyrhynchus cristatus*) warm themselves at Cape Hammond on the island of Fernandina in the Galápagos archipelago. A scattering of volcanic islands that rose from the seabed 3–5 million years ago, the Galápagos have more recently hosted a raft of Australian researchers, including naturalist Robert Tindle in the 1970s.

Australians in the Galápagos AG 69, January—March 2003



Coral spawning Kevin Deacon

At Myrmidon Reef, on the Great Barrier Reef 130 km north-east of Townsville, tiny egg and sperm bundles from *Goniastrea retiformis* (left) begin to rise into the current at 10 p.m. on the fifth night after a full moon. In the hours before their release, the bundles can be seen 'setting', or appearing in the mouths of the polyps; moments before they float free, they slowly spiral in the polyps' mouths.

Explosion of life AG 32, October—December 1993



Fooling the enemy John Kleczkowski

The gumleaf torbia's (*Torbia viridissima*) (above) camouflage is impressive in its detail — right down to its prominent central 'vein' and legs that resemble a leaf stalk. With a convincing masquerade, creatures can evade predators, find food and survive to pass their advantageous disguise gene on to future generations.

The great pretenders AG 96, October–December 2009



Sunning serpent David Hancock

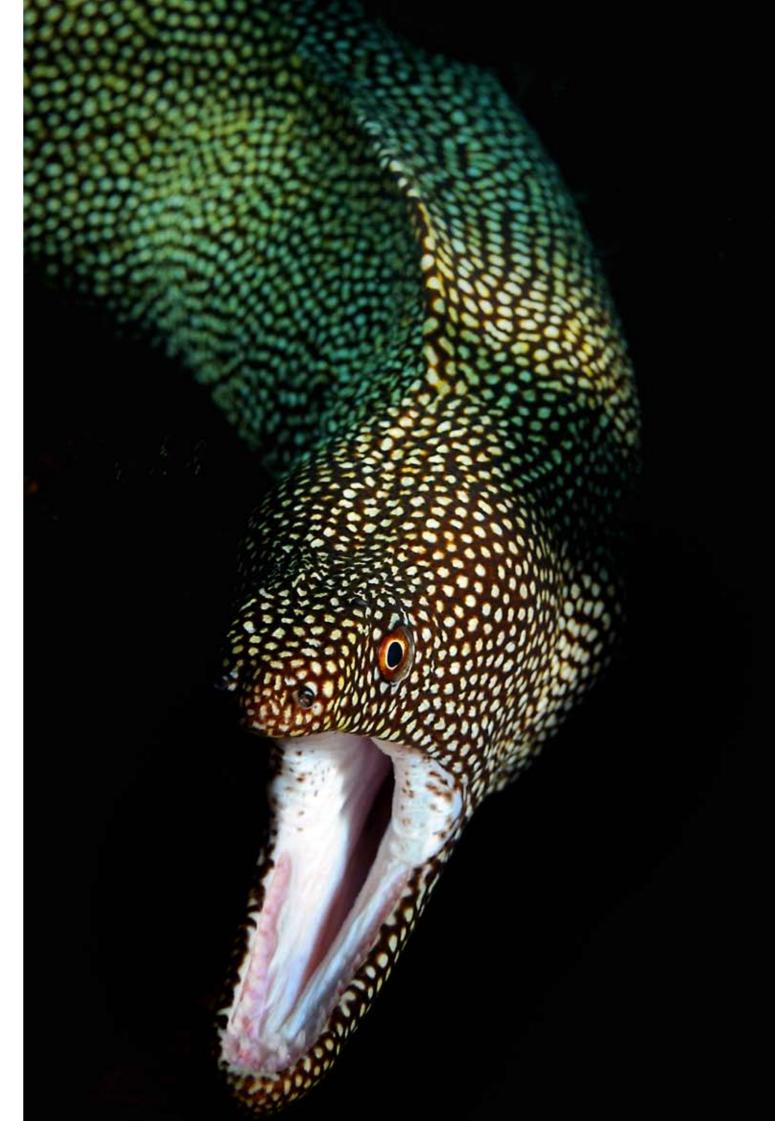
Coiled on a rotting log, a 1.5 m water python (*Liasis fuscus*) (above) has adopted Fogg Dam, 50 km south-east of Darwin, as its habitat. Built in the 1950s to service a since-failed rice-growing project, the dam and its surrounds are a refuge for these fascinating reptiles and population densities there can run to several hundred snakes per hectare. Unfortunately, it's also a perfect habitat for invading cane toads, which favour the same diet as the pythons: baby dusky rats.

Snakes alive! AG 74, April—June 2004

Toothy customer Justin Gilligan

A white-mouthed moray (*Gymnothorax meleagris*) (opposite), gapes for marine biologist Justin Gilligan's camera during a marine survey at Lord Howe Island. Although it lives up to 36 m below the surface, the white-mouthed moray can also be seen at low tide, hunting for fish and crustaceans amid partly exposed reefs.

Finding Lord Howe's Nemo AG 96, October–December 2009





Gone fishing
Justin Gilligan

A mob of grey nurse sharks
(Carcharias taurus) muster schools
of black-tipped bullseyes and
stripeys at Fish Rock Cave,
near South West Rocks, NSW.
Critically endangered because
of overfishing, the grey nurse is
docile and relatively harmless
to humans, a character trait
masked by its rows of menacinglooking teeth.

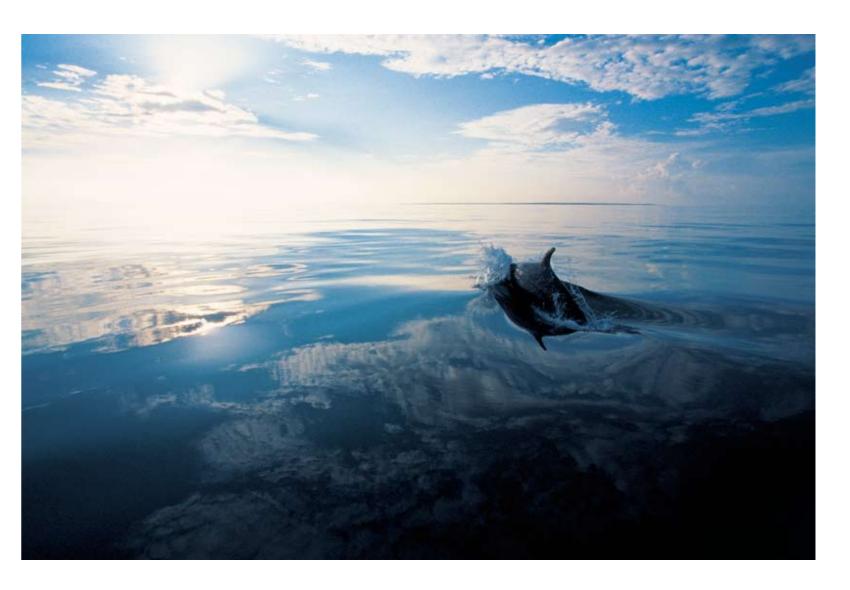
Blue water, white lies
AG 93, January—March 2009



Bird-world monkeys Mitch Reardon

Squabbling and chattering, a flock of rainbow lorikeets (*Trichoglossus haematodus moluccanus*) whiles away the last hours of the day. This rowdy mob won't quieten down until well after the sun has set. Writer and photographer Mitch Reardon spent more than a year studying and photographing Australia's six lorikeet species.

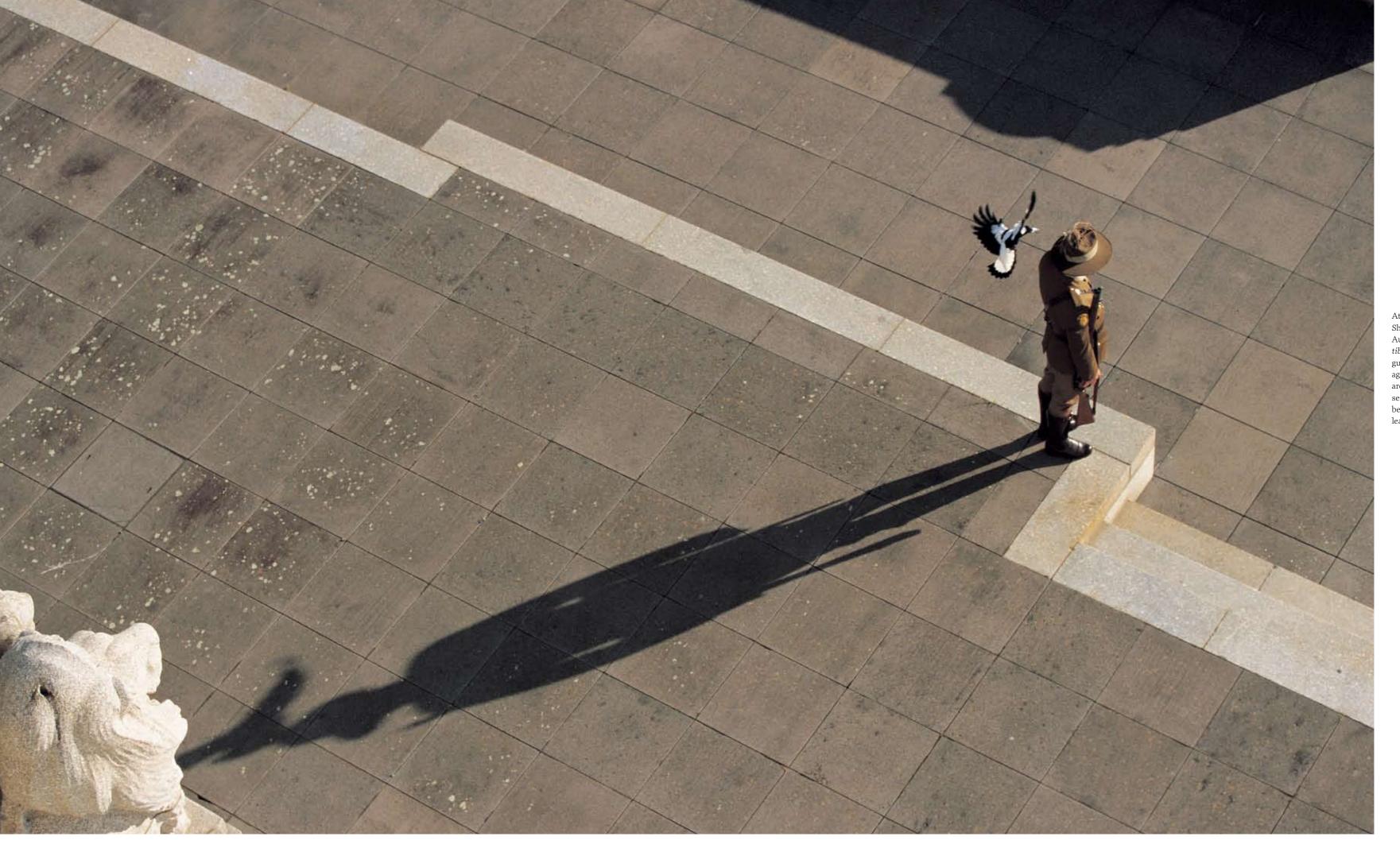
Rainbows in flight AG 63, July—September 2001



Safe waters Barry Skipsey

A pilot whale (*Globicephala macrorhynchus*) surfaces briefly in the glassy seas around Cobourg Peninsula, 170 km north-east of Darwin. The 2290 sq. km Cobourg Marine Park harbours endangered dugongs, giant manta rays, six species of turtle and 250 recorded fish species as well as crocodiles, sea snakes, box jellyfish and the blue-ringed octopus — and six known shipwrecks.

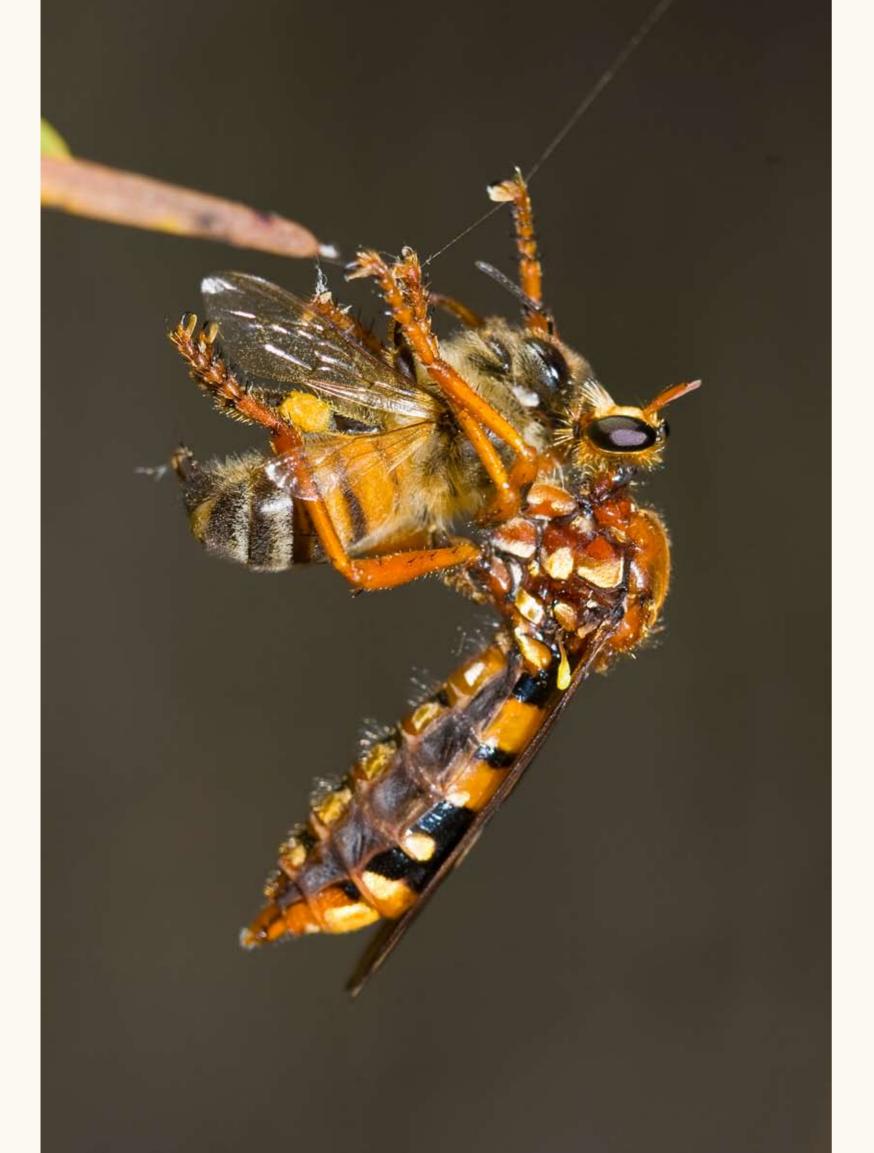
Splendour in isolation AG 53, January—March 1999



Defence forcesBill Bachman

At dawn outside Melbourne's Shrine of Remembrance, a male Australian magpie (*Gymnorhina tibicen*) tries to persuade a guard to move on. Males often aggressively defend their nesting area during the spring breeding season. Most Australians have been swooped by magpies at least once in their lives.

The magpie
AG 68, October—December 2002



Animal instinct: a photographer's insight



JIRI LOCHMAN

Biography

At the forefront of Australian wildlife photography and an Australian Geographic contributor for over 20 years, Czech-born Jiri, together with his wife Marie, is a recipient of the AG Award for Excellence in Photography and an author and co-author of several books, the most recent being 'Wildlife of Australia.'

Early morning on a what would develop into a very hot summer's day in the heath land of Moore River National Park, WA, my wife Marie and I were eager to start photographing, having just finished a breakfast. Marie disappeared into nearby bush to photograph wildflowers and I was heading in the opposite direction to look for an exquisite wasp-mimicking fly that I had glimpsed around there the previous day.

I've always loved exploring heath lands because they hold many surprises, but this time it was different. I felt a rising sense of excitement at the prospect of observing and possibly photographing this most remarkable and elusive fly. I knew that at such an early hour I didn't need to rush as my quarry wouldn't be active until the day got a bit hotter. These are the times when patience is its own reward and I took the opportunity for some quiet reflection.

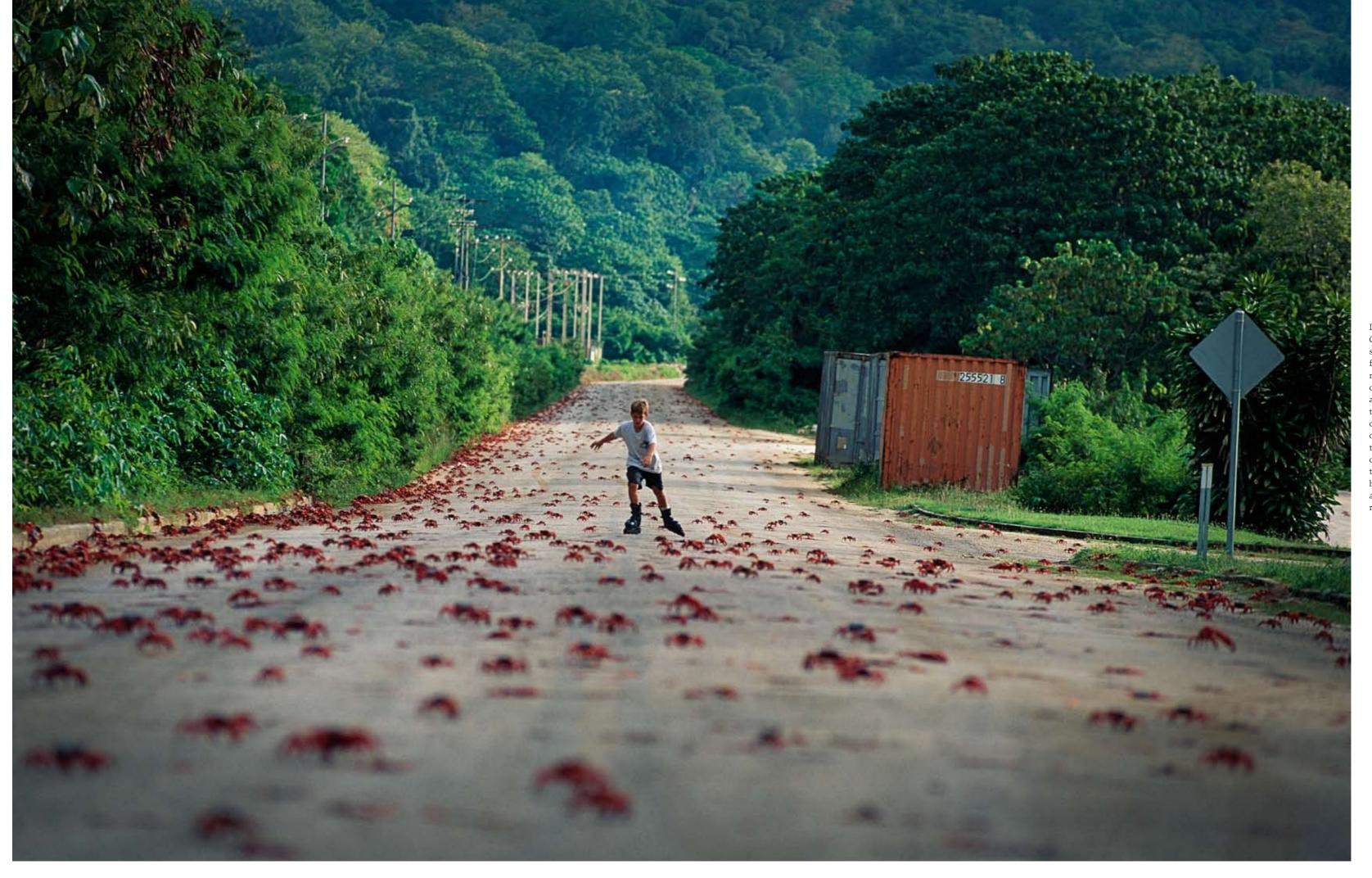
Suddenly I was roused from my reverie by the distinctive, deep buzzing sound I'd been waiting for. My wasp-mimicking robber fly (*Chrysopogon* sp.) flew quite far, but I knew roughly where it landed. I moved closer and it took off again, but this time I was able to keep it in sight. I followed it knowing I had a good chance

of catching up with it because its flight was quite laborious. On the next stretch I found out why: the fly was carrying its prey. After several more laps I was close enough to see exactly where it sat and that its victim was a feral honeybee. Finally it settled down to feast on its quarry safe in the knowledge that its wasp disguise will trick predators into thinking it has a fierce sting, which it does not.

I had to be very careful not to disturb it again. My every move had to be measured now and I was totally out of breath, as I did not dare to exhale. When I got to a distance of about 1 m I was able to take my first photograph. This was a crucial moment, and I needed to get closer still to achieve a greater magnification with my macro lens and show the fly's behaviour in a way that the naked eye cannot possibly see.

Afterwards, when I returned to my car, Marie was waiting there. "How about some lunch?" I asked. She looked up surprised. "You mean dinner — it's almost five."

The great pretenders AG 96, October–December 2010



Red sea crossing David Curl

It's a crab-eat-crab world on Christmas Island avenues, scene of many road-kill feasts, but at least the annual migration provides the red crabs (Gecarcoidea natalis) with a balanced diet. En route from their rainforest homes to the coast, many will enjoy a meal of fresh greens as they traverse the golf course. To reduce the carnage caused by cars, crab tunnels beneath one major road have been trialled and proved a success but the overall toll remains high.

Christmas Island

AG 45, January—March 1997

Pink tongue Jason Edwards

Jason Edwards had spent an afternoon swimming in the shallows of Port Phillip Bay, Victoria, with a lone southern elephant seal (*Mirounga leonina*) (below), which had recently arrived from southern waters. For many hours the seal exhibited the usual behaviours — sleeping, snorting and belching — then, moments before a huge cloud covered the sun, it rose out of the perfectly still sea and barked several times.

Melbourne's wild side AG 82, April—June 2006

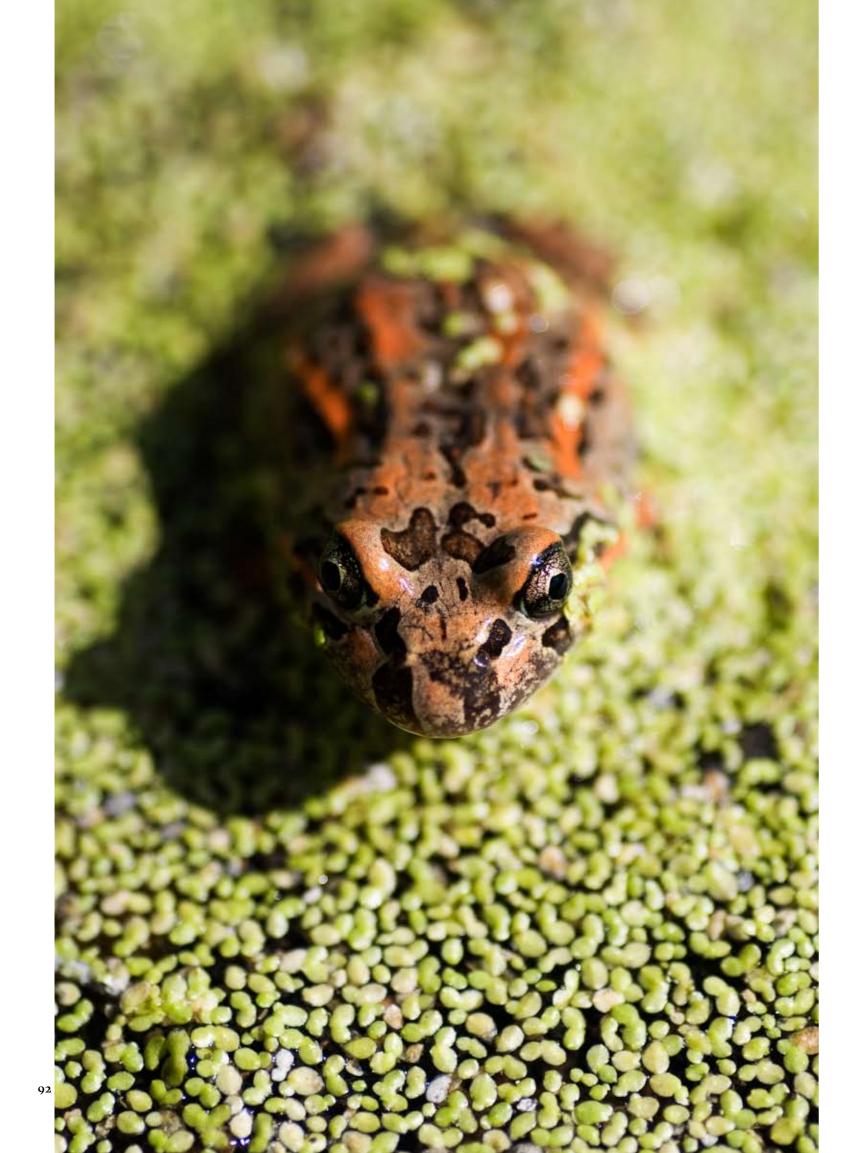


Blue tongue Randy Larcombe

Like other large bluetongue lizards, the sleepy lizard, or shingleback (*Tiliqua rugosus*) (right), relies on its fearsome jaw-gaping, tongue-extruding display for defence. But it isn't all bluff: a harassed bluetongue won't hesitate to bite if given the chance, hanging on with admirable — not to mention painful — tenacity. The shingleback holds the honour of being the first uniquely Australian reptile to be described — by William Dampier in 1699.

True blue AG 55, July—September 1999





Leaping to life Andrew Gregory

Thousands of dehydrated amphibians, including this salmon-striped frog (*Limnodynastes salmini*) (opposite), emerge from underground refuges as the floodwaters rise along the vast Cuttaburra floodplain in north-western NSW during drought-breaking rains in 2008. This frog of semi-arid regions reproduces rapidly after rain, each female laying up to 1500 eggs at a time in a floating foam nest.

Flood of ages AG 91, July—September 2008

Snack alert Jiri Lochman

Its tan coat blending with its surroundings, a dingo (*Canis lupus*) (below) fixes its gaze on a potential meal in the Kimberley, WA. Although they arrived in Australia 5000 years ago as tame dogs accustomed to human company, wild dingoes have since revived long-lost hunting techniques and are able to stalk and kill anything from grasshoppers to buffalo.

Bye-bye dingo AG 74, April—June 2004





Herd mentality David Hancock

Dust and leaves fly as wild buffalo are pushed towards mobile stockyards in Arnhem Land. Buffalo (*Bubalus bubalis*) generally move in family groups, with several cows and their offspring staying together — a trait exploited by musterers using helicopters and modified 4WD 'bullcatchers'.

Buffalo rising AG 82, April-June 2006



Happy feet Peter Strain

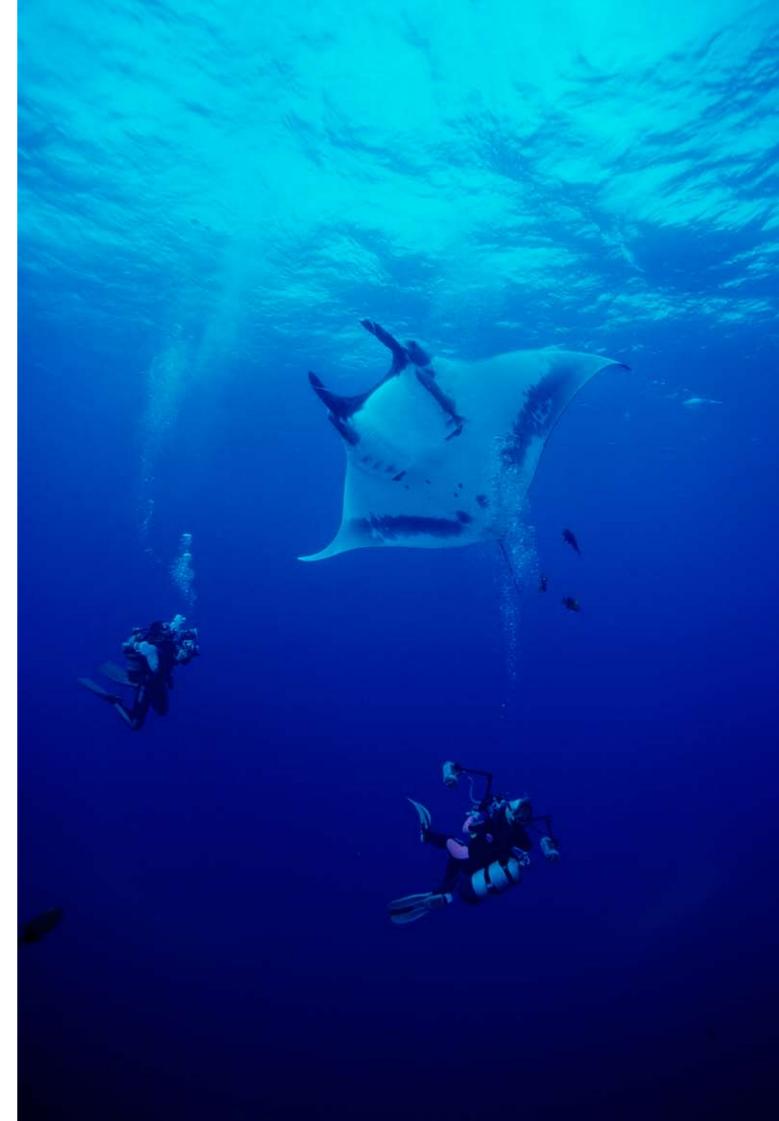
What appears as a gummy grin is actually a mangrove tree snail's muscular, folded foot (above). Its 'chin' is the operculum, or front door. When on the move, it spreads its foot flat against a surface; when retreating into its shell, it folds its foot across the middle, tucks its head in and shuts the door. Peter Strain has spent years photographing these intriguing, tiny *Littoraria* sp. of the intertidal zones around his hometown of Broome, WA.

Creature features AG 89, January—March 2008

Hanging with a glider Mark Spencer

Trailing plumes of bubbles and festooned with cameras, divers (opposite) marvel at a manta ray (*Manta birostris*) in the Gulf of Mexico. Growing up to 9 m wide and weighing more than 1.5 tonnes, these rays are members of the elite underwater 'megafauna' club, which includes whales and the plankton-eating whale shark.

Manta ray AG 66, April—June 2002





Technicolour dreamcoat Darren Jew

Oil, gas and steel bring heavy industry to the landscape around Whyalla, South Australia, but each winter, the cold water and rocky reefs adjacent to the town attract thousands of Australian giant cuttlefish (*Sepia apama*), in a breeding aggregation matched nowhere in the world. Surrounded by bulk loading facilities and now threatened by a proposed desalination plant designed to feed the expanding Olympic Dam copper/uranium mine, these chameleons of the sea are under threat from changing water quality in Spencer Gulf that will effect egg viability.

The great pretenders AG 96, October—December 2009



Looking for an angle Steve Wilson

Don't expect to find the southern angle-headed dragon (*Hypsilurus spinipes*) easily. Its crest of spines helps camouflage its outline as it clings discreetly to saplings. But you could get lucky — during an afternoon walk in Lamington National Park, 30 km southeast of Surfers Paradise, Queensland, herpetologist and photographer Steve Wilson found 11 females burying their leathery eggs in sunny clearings along track edges.

Dragon tales AG 92, October–December 2008



Time to shoot through Jiri Lochman

Three flatback turtle hatchlings (*Natator depressus*), sand sticking to their eyelids, emerge from their nest on aptly named Bare Sand Island, 50 km south-west of Darwin in the Port Patterson estuary. They've spent up to three days struggling through 40 cm of sand, but now speed is essential if they are to avoid predators. The nest's hatchlings must scurry to the tide line within minutes to start their ocean voyage.

Turtle Beach AG 67, July—September 2002



Shadow play
Barry Skipsey

Although attracted by the human prehistory at Mungo National Park, in NSW, 90 km north-east of Mildura, Victoria, visitors also delight in its abundant wildlife. An encounter with its most common native mammal — the western grey kangaroo (*Macropus fuliginosus*) — has an almost surreal quality on the eastern face of Lake Mungo's mobile sand dunes. Composed of sediments dislodged by erosion, the dunes are advancing about 1 m eastwards each year.

The life in Mungo AG 44, October—December 1996