



Cape York's Transformation



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with additional photos by
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AUSTRALIA INTO AFRICA

Visualize two hundred million years ago, being able to step from Australia into Africa and the fascinating wildlife that could be seen. Gondwana was an ancient supercontinent that included Australia, New Guinea, Africa, Antarctica, New Zealand, North and South America and Madagascar before it split into other continents and islands. Tectonic plates are sub-layers of our Earth's crust that float and fracture causing earthquakes, continental drift, volcanoes, mountains and oceanic trenches. Some of these ancient rock formations remain largely undisturbed in Australia's northeastern tip and is known today as Cape York. Fossil records of flowers and conifers exemplify their origin in Gondwana during the Cretaceous period, while Australia was a subtropical rainforest.

The late Dale Thompson (whom I rank with naturalist John Muir) and I chose an Australian vacation over the Galapagos Islands because of Australia's diverse and unique wildlife.

Dale was fun to travel with; he could summon many species of birds with his calls and had a uniquely trained eye for spotting them in the wild. Australia is a thrilling journey of discovery into diversity, with its insect life, egg-laying echidnas and platypus, marsupials, reptiles and, our favourites, the avian life. Even our discovery of huge dried cuttlebone on the beach from Australia's giant cuttlefish made us wish we could bring some back for our birds for significant calcium supplementation.

NATIONAL PARKS

Australia's national park system is one of the largest in the world containing over 24 million hectares (one hectare is equivalent to 2½ acres or 10,000m²) and on this particular trip several aviculturists from the United States went to see as many of the six black and, of course, white cockatoos in the wild as possible. Dale and I were photojournalistic partners for a few years and we hoped to see anything that flew, hopped, swam or slithered. Sixteen years have passed since we spent those three weeks in Cape York but experiences from that vacation will always be memorable. It's astounding how unique this area is from the rest of Australia. It was understandably dry when we visited at the end of the dry season, but with droughts in the years prior it seemed devastatingly dry. Yet we saw water lines on boulders 3 feet high from December floods when thousands of tons of water flowed through the hillsides. We drove hundreds of miles and saw darkened trunks of trees – some 40 feet (12.192 meters) high from government burns.

Here in the U.S. our government executes controlled burns in the spring before saplings begin to bud and while it's cool. The purpose is to reduce fungal disease, insect infestations, clear out thatch and control invasive weeds. But Cape York barely had vegetation under the trees. We were surprised yet pleased to learn that scorched land would provide insects and seeds to support birdlife, and in turn other forms of life.

ROSELLAS AND RED-WINGED PARROTS

One of our first thrilling sightings in northern Queensland was two Crimson (Pennant) Rosellas foraging in the woodlands. We were unable to get a photograph of them because of their swift flight but their extreme brilliance is forever etched in my mind. As colourful as these red and blue parrots are in captivity, the sun and food sources make their colours much more vivid in their native habitat.

Another pleasurable sighting was a striking pair of Pale-Headed Rosellas flitting across an open field as they fed on milky seeds. We had heard that due to the Pale-Headed Rosella and Eastern Rosella habitats overlapping, that they have crossbred. Here in the states controversy remains whether hybridization occurs in the wild, and we hoped to confirm this with a photograph. We had personally met with Smithsonian researchers in Central/South America and had been shown evidence it does naturally occur in nature, usually where rivers separate them or territories meet.

Ecstatic pleasure overwhelmed us when we spotted a family of Crimson-Winged Parakeets (Red-Winged Parrots) in Litchfield National Park. The stunning juveniles and their parents were feeding on berries amidst grassy plains. The two youngsters showed no fear of us but their parents flew away as we approached for some pictures. The adults returned shortly afterwards which allowed us to witness their artistic flight pattern. It was delightful to see these birds since I had a breeding pair at home named 'Prince' and 'Princess'. Realizing that these birds build a three foot deep



Crimson Wing



Crimson Wing



Rosella

nest about 40 feet off the ground, Prince and Princess were provided a 3 foot high nest box to accommodate that feature complete with a ladder and wood chips.

LORIKEETS

On another day we spotted a couple of Scaly-Breasted Lorikeets traveling with some Rainbow Lorikeets as they fed from one tree to another. We were absolutely in Heaven! It has always been very disappointing that most of the Australian parakeets and Rosellas aren't better known in American aviculture, as they are such dazzling beauties.



Papuan Frogmouth

LADY GOULDIAN FINCHES

We were overcome with elation while spotting some Lady Gouldian finches in the brush. When I think of this beautifully coloured finch, I think of what it must have been like when John Gould and his field assistant discovered enormous colourful flocks of this specie with their vibrant colours. It was surely awe-inspiring. Gould named these fantastically coloured birds after his deceased wife. Unfortunately the Lady Gouldian's current demise is partially being blamed on a limited growth of wet-season grasses in short supply due to the previous season's unfavourable fire regimes. Those fires also destroy their nesting hollows.



SYMBIOTIC RELATIONSHIPS IN TERMITE MOUNDS

Seeing our beloved parrots that we're familiar with in their wild habitat is always exhilarating. Learning about wildlife and how they interact and benefit other species of plants, insects or animals are the most fascinating of life lessons. They allow me the opportunity to share what I've learned about symbiotic relationships in the bird shows we that we produce in the US through our non-profit organization that provides bird shows for children through to the elderly, providing entertaining and educational live bird programs that focus on a commitment to conservation, positive reinforcement training,

and mentally and physically enriching lives the birds (www.wingsofloveinc.org). Often people recall a nature program focusing on a topic we're discussing or they later see something on Animal Planet, making it a more memorable connection for them.

My favorite symbiotic relationship was learned while in Cape York. Ten percent of parrot species nest in termite mounds. Lizards, snakes, small mammals and insects also use these mounds. Termite mounds are constructed from the termites' faeces, saliva and either grass or wood. Tunnels throughout the mound are arranged strategically to allow air currents to waft through them, maintaining heat and humidity for optimum incubation. The mounds absorb sunlight and hold its

heat through the evening hours which creates a natural incubator. The federally protected mounds play an important role in enriching soil from the recycled dead wood or grass, along with the droppings of insects and animals.

Australian avian termite mound nesters include kookaburras, Lady Gouldian finches, Kingfishers, Hooded Parrots and the Turquoise Golden-Shouldered Parakeets. It's interesting to note the birds nesting inside do not eradicate their own faeces. The *Trisyntopa* moth has a breeding season synchronized with the birds. The moth's larvae feed on the host parrots' droppings. This keeps keep the nursery clean, while at the same time providing the moth's crucial rare nutrients.



Golden Shoulder nest



Golden Shouldered Parrot



Frogmouth

MEGAPODS

What woman doesn't appreciate Australia's male birds that perform the parenting skills to raise their chicks? The females meander along their way and are courted by a male; the hen lays her eggs and she takes off to meet her next adventurous connection. Bowerbirds, brush turkey and cassowary are good examples of male Australian birds that totally assume parental duties.

Megapod is a term that means 'big feet'. There are 22 marvelous megapod species existing in New Guinea, Indonesia, the Philippines and Australia, with Australia having three megapods. Your lovely brush turkey is a large

mound building megapod that uses his hefty feet to scrape up leaves, twigs and other decaying vegetation on the forest floor to create an enormous mound. We found one mound that was 10 feet high by 12 feet across. Atop the center of this mound the male will kick away enough compost for the female to deposit her 20 or so eggs. What an ingenious method to use decomposing matter for the development and hatching of chicks. Even Salties (Australian crocodiles) lay their clutch of eggs in a nest made from plant matter.

Other megapods use the same mound so mounds are more productive in producing chicks throughout the year. During the incubation period, the males use an olfactory gland in their cheek to test the temperature of the

mound. If it gets too warm, he simply brushes away with his feet some of the upper layers to cool that portion of the mound's temperature. Before the cooler night air settles in, the male uses his feet to cover the eggs again with the compost material to keep them warm. When males move the mound's surface layer, the temperatures change due to the replenished oxygen supply and exposure of organic matter not yet decomposed. This slow method of incubation may last 50-70 days. The chicks hatch fully feathered and within a couple of hours are flying. Other types of megapods live around volcanic areas and dig deep into the warm volcanic ash or sandy beach to lay their eggs and rely on the thermally heated soil to incubate their eggs.



Above: Their laughter-like call ‘kook kook kook ka ka ka’ rises and falls in volume as family members join in to form a raucous chorus, and has been referred to as the “Bushman’s clock”.

KOOKABURRA

The Kookaburra is the largest member of the Kingfisher family. Females can weigh a pound (454 grams) and grow to 18 inches in length (45 centimeters). Their laughter-like call ‘kook kook kook ka ka ka’ rises and falls in volume as family members join in to form a raucous chorus, and has been referred to as the “Bushman’s clock”. They believe their concert of laughing calls signaled the sky people to light the sun in the early morning. Kingfishers patiently await their prey to come toward them or pounce on it from a branch above. Small prey like insects and lizards are killed by the crushing action of their beak and eaten whole. Larger prey like snakes and small mammals



Scrub Turkey

are whacked repeatedly against a branch or dropped from high above until it is pulverized. It is such a well-known bird globally that Perth Mint created a lovely silver coin with its image on it.

DAINTREE RAINFOREST

Near the end of our trip we went through Daintree Rainforest. This beautiful moist rainforest is more like what we’re familiar with, having trekked mostly in Central/ South America. Being a horticulturist it was fabulous to see king ferns, orchids and other flowers I grow in my greenhouse growing in the wild. Daintree has possibly one of the richest concentrations of ancient flora species in the world. It also contains 65% of Australia’s bat and butterfly species. It disturbed us to see an earthmover and other large machinery in a very steep area of Daintree opening the road to primitive land for ‘progress’ development. We environmentalists would like to see places like this be



Black Cockatoo

protected in order to remain pristine and undisturbed. Daintree has a lot of diversity within an area that occupies 0.2% of Australia’s landmass.

All in all, a trip to Australia was a very memorable and educational vacation. I cherish the time Dale and I spent together and now cherish the time I can spend with his fantastic widow Katie, who is also a great person to travel with. **PSOA**

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Part 2: Our Interference in Nature

At the beginning of our journey to Cape York, Dale Thompson and I left Cairns and flew up to Iron Range National Park.

We hired a driver and a cook so we were better able to focus our days entirely on birding. We toured in a 13-passenger 4-wheel drive vehicle with a winch in the front and manifold on top so we could plow through creeks without getting stranded. Other vehicles and their occupants weren't so fortunate. People certainly got wet from a high tide or from their vehicles becoming stranded in a creek. Our large rented 4WD vehicle was excellent for getting us through any type of rugged terrain desired.

We shared a magnificent drive through the Jardine River National Park, and the hiking was remarkable with its perpetual fresh watering holes. Here you find endemic species of wildlife, which evolved from Gondwanan rainforest ancestors during long periods of isolation and climate change. This area was a shallow sea, which through the millennia, formed sandstone ridges separated by swamps, grassland, rainforest and woodland. The sandstone bedrock absorbs and restricts the water and slowly releases it through springs, which feed this area's beautiful streams and rivers.

I was literally star-struck while gazing at the radiant Milky Way, which is much more brilliant in Australia than in the United States. I fell asleep near a small lake gazing into the fantastic starry night without pitching a tent. Had we encountered by then some of the spiders and snakes we saw later on this trip, I certainly would not have slept unprotected on the ground.



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GOLIATH PALM COCKATOOS

One of the most exhilarating moments was observing a total of five Goliath Palm Cockatoos. What a dream-come-true watching one of these black beauties drum with a large stick in his foot as he pounded on a dead tree trunk. Looking through the binoculars we could see the red cheek patch which becomes redder from excitement. This reminded us of some macaw species (Buffon's, Blue-Throated, Military) who blush when excited. We couldn't help wondering if the resonance from drumming proved to the female the robustness of that tree's hollowness?

It is sad to realize that survivability of this magnificent bird is being threatened due to fire regimes and mining of bauxite, the most common aluminum ore. Australia is the world's largest source of bauxite, producing more than twice as much as any other nation. Aluminum is the third most plentiful element in the earth's surface, after oxygen and silicon. Unfortunately nowhere in nature is aluminum found in a pure form; it is always mixed with other elements. Cape Alumina's proposal to mine 135 hectares for bauxite has motivated the activist within me to help the late Steve Irwin's family fight to save a portion of the Cape York reserve named after him. The formation of bauxite takes millions of years from mineral-rich sedimentary rock in forests and rainforests. Miners using very large intrusive machinery quarry through many layers of rock to expose the bauxite. What remains are huge open pits in forests containing unwanted weeds and miner's trash.

BANKSIAN COCKATOOS

While visiting a dry woodland area in northern Queensland, impressionable loud vocalizations of the largest subspecies of the sexually dimorphic Banksian or Red-Tailed Black Cockatoos was heard. We were amazed to be close enough to see the females' conspicuous spots and stripes on their feathers. The genus name *banksii* honours Joseph Banks, the botanist who traveled with Captain Cook. After inheriting his father's fortune at 20



years of age, Banks joined a Royal Navy scientific expedition to the South Pacific aboard Captain James Cook's famous ship *Endeavour*.

How exciting that 'Karak' a captive Red-Tailed Black Cockatoo, became the official mascot of the 2006 Commonwealth Games in Melbourne. It was inspiring to see how the recognition brought environmental awareness globally for this species. Australia's indigenous Tiwi people believe the Red-Tailed Black Cockatoo accompanies the dead up to Heaven. That legend depicts the respect and admiration the Tiwi have for birds.

GALERITA COCKATOOS

For us Americans, it is thrilling to see a flock of 100 or more of the gregarious Sulphur Crested Cockatoos *Cacatua galerita*. We loved watching them feed on the ground and interacting with each other. It was interesting to note the sentry birds in the trees that would alert the flock of encroaching danger. I recently read with interest an internet article on Galerita Cockatoos who were sold in New Zealand as caged birds years ago. It discusses how several escaped their captors, and often-strong winds occasionally blow in some 'new blood' from Australia.

'THE SMUGGLER'S TREE' WITH MACGILLIVRAY'S ECLECTUS

We spent three superb days observing two Macgillivray's Eclectus hens nesting in an enormously old fig tree *Ficus albipila*. It is my understanding this tree is now dying but Eclectus are still nesting in it. Each female's cavity entrance had its own exit so they'd have either direction to flee. These birds were twice as big as any red-sided Eclectus we've seen. It was a three-mile trek from our campsite in Iron Range National Park to the location of 'The Smuggler's Tree' where the Macgillivray's resided. This enormous white tree was near the ocean and people would boat their way from surrounding islands to steal chicks from nests for the pet trade. Stakes had been pounded into the trunk of this tree to climb the 100 feet up to the birds' nests. We felt like field biologists videotaping and photographing activity at this tree while comprehending relationships between the various birdlife residing there.



The Eclectus hens would lay on their eggs for over an hour before exiting to relieve themselves. One evening a male vocalized to its mate from about 60 feet away. She flew towards him and began bobbing her head to beg for food. The male was a little preoccupied until she raised her body above his and gave him a piece of her mind. It appeared as if he might fall off backwards from the branch. Dale had raised hundreds of Eclectus in captivity and stated this was very typical behavior of captive pairs.

Other residents in this massive 'Smuggler's Tree' were at least a hundred noisy Glossy Starlings nesting above the Eclectus nests. The Starling nests were oriole-like in shape and what we witnessed two times will be forever implanted in my mind. Every Glossy Starling clustered in a large group and suddenly flew off resembling a swarm of bees. After listening all day to the Starlings chatter amongst themselves for hours, the silence of their exit seemed deafening to our ears. This signaled to the Eclectus hens they should sit tightly on their nests as imminent danger lurked nearby. Immediately thereafter an ear-piercing scream filled the forest as a very rare bird of prey flew in, the Grey Falcon. It quickly grasped a juvenile Starling from a nest with its razor-sharp talons. A second later a convoy of Galerita flew in to drive off the predator. Perhaps these birds had been scoping a couple other unoccupied cavities in the tree for future nesting?

The next few minutes we observed the Cockatoo's scream, flap and raise their crests toward the predator. Finally, about five minutes later, the falcon left the parrots' territory with the Cockatoos following closely behind - squawking with pride. Without delay the Glossy Starlings returned bringing with them raucous babble. The Eclectus in the area knew this was an indication that

safety had returned. The only time we saw the males at the tree were the two times this scene took place after normalcy had set in. Both male Eclectus landed on their respective cavity opening with their tails anchored closely to the tree's trunk for balance. Quickly peering inside they squawked then bolted into the Melaleuca forest. Immediately thereafter both females flew out of the nest exits to relieve themselves and devotedly returned to their eggs.

The Grey Falcons usually reside in arid inland Australia but are known to fly north during the dry season. They have been referred to as the 'ghost of the desert' due to a pair suddenly appearing out of the desert haze flying low over the dunes, and then disappearing - never to be seen again. Even though the falcon we observed could have had easy pickings with starling chicks, it wouldn't be allowed to feast without the sentinel cockatoos' harassment. Tree cavities are scarce by a shortage of sites and placed in high demand not only for birds but mammals as well.

HIRING GUIDES

It was doubtful anybody else in our group appreciated learning about how nature works hand-in-hand with itself. Being with some groups of people are often too noisy to spot wildlife (animals flee from noise), which is why Dale and I preferred birding on our own. After all, we both were experienced trekking through ancient virgin forests. Unfortunately, our two 'hired hands' were as far from naturalists as one could get. A good naturalist understands how relationships work within an ecosystem. Naturalists know where to find certain species and have fascinating stories of why animals live where they do.

We were reluctant to let anyone with us know the whereabouts of the Macgillivray's Eclectus, but the other aviculturists were curious to see what discovery had occupied three days of our time. We reluctantly shared with everybody - including the guides - the story of the Smuggler's Tree and showed them the nest entrances and exits.

What happened next horrified us both. One of the guides grabbed a huge branch

off the ground and slammed it against the side of the tree's trunk to flush the hens off the nest. This proved they had no respect or appreciation for wildlife. On another evening these two idiots (oops ... non-environmentalists) took us out searching for nocturnal species with a bright halogen lamp. A small group of flying foxes were pointed out using the intensity of the halogen beam to illuminate them. One bat was blinded by the light and crashed into the trunk of a tree - no doubt breaking its wing. One of the guides shouted "Wow that was cool" while our fellow American aviculturists laughed. By this time I was fuming mad and told the entire group they were THOROUGHLY pathetic to find such a rude act humorous, and that the tour company hired two pitiful representatives. With that, we two turned around and stormed back to camp. So choose your tour companies carefully.

PAPUAN FROGMOUTH

A couple very hot afternoons at the remote coastal Iron Range National Park had me badly sunburned. Had I not ducked under the shade of a paperbark tree within a riparian area (a healthy ecosystem existing along a riverbank) and looked up into the tree above me, I would have missed one of the most splendid birds I've ever seen. Looking down at us looking up at him, were two large red owl eyes belonging to a Papuan Frogmouth. Wow - what a find! We spotted its nest in close proximity, that being a small untidy flat structure of twigs in the fork of a tree.

While Dale was at the L.A. Zoo they had three Tawny Frogmouths on display with a pair of Palm Cockatoos and Argus Pheasants. His keen observation of animal behaviors enabled him to become a leader in wildlife photography (he taught me to focus on a bird's eye while taking its picture) and also achieve first breeding awards for several types of birds. He had noticed two of the three frogmouths pairing up but every time they'd build a flimsy nest of twigs in a tree or lay an egg, the cockatoos destroyed them. One day he found a frogmouth egg in a food bowl and it was obvious they weren't going to sit on it. Dale rescued the egg to artificially incubate it and successfully raised the first tawny frogmouth in captivity.



Photo: Yvonne Patterson

FAMILIES WHO VISIT FORESTS SEND A MESSAGE

It saddens me greatly that many people don't want to leave their native land to visit tropical rainforests. If families don't take the children to introduce them to pristine forests, where will the future environmentalists and animal protectors come from? It's anyone's guess how long undisturbed forests and rain forests will be around for us to camp or hike in. Monies spent toward forestry vacations demonstrate to governments globally that we care about the conservation of endangered species and the significance of saving them. Some countries are encouraging local people to make longer-term sustainable livings within the forest with ecotourism instead of deriving income from harvesting the trees. It also demonstrates to their

children a more humane and caring way to live within the forest. Case in point is the blue-throated macaw, which was believed to be extinct in the wild until trappers in the 1990's were illegally capturing and smuggling them out of Bolivia. Once the trappers and village people were trained for ecotourism, their numbers increased from 70 some birds to now over 300.

There will no doubt always be pockets of protected rainforest remaining but the elimination of all the rest will exterminate many endemic species of plants and animals. While in Australia we spotted a tree kangaroo, which spends its life in the treetops and never goes down to the ground. If the forest around their territory is eradicated, isolation occurs and that depletes their

chance for genetic diversity, which means they all die out from the same disease. Additionally, cures have always been found from plants in centuries-old forests that could save millions of people and animals from cancers and other unknown diseases. Man has studied one percent of rainforests for potential cures. Just recently, EcoBiotics reported that the seeds of the Australian Blushwood tree *Hylandia dockrillii* growing near Cairns contains anticancer properties (EBC-46) which destroy carcinomas, melanoma and head/neck tumors in animals within two weeks. The closing statement: if we don't save a place for wildlife, we will inevitably destroy ourselves. **PSOA**