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## Conservation

Free online magazine from village earth

Volume Four December 2016



**Wildlife as Persons**  
**Dr Margi Prideaux**





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Cover photograph of monkey by Mark Ulyseas



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## Guest Editorial - Wildlife as Persons...

**Dr Margi Prideaux**

Dr Margi Prideaux is an international wildlife policy writer, negotiator and academic. She has worked within the conservation movement for 27 years. Her forthcoming book *Birdsong After the Storm: Global Environmental Governance, Civil Society and Wildlife* will be released in early 2017. She writes at [www.wildpolitics.co](http://www.wildpolitics.co) and you can follow her on twitter @WildPolitics.



## Field Notes

**Kathie Stove**

Kathie Stove is a freelance writer and editor who lives on Kangaroo Island, South Australia. For more than 20 years, Kathie has written on topics such as ecology and biodiversity, arts, cycling, social services and education, for newspapers, magazines, websites and newsletters. She is a keen promoter of, and volunteer for, the natural Kangaroo Island environment and for island's visual arts.



## Helping Restore Kalimantan's Degraded Forests

**Dr I Gede Nyoman Bayu Wirayudha**

Bayu has done Veterinary Medicine, Udayana University, Bali. Founder director of FPNP, Yayasan Bebal, which works with traditional cultural revitalisation, and previously with the Begawan Foundation, where he oversaw the program breeding the critically endangered Bali Starling (*Leucopsar rothschildi*) and their subsequent release by FPNP onto Nusa Penida. 2003 and 2007 nominated for Indonesia's Kalpataru (Hero of the Earth) Award for his work with conservation. 2007 Bali Governor awarded him Environment Pioneer.



## De-constructing the Canned Lion Industry

**Chris Mercer**

After a career as an Advocate practising law in Zimbabwe and Botswana, Chris came back to South Africa in 1984, and decided to retire young. He farmed in the Western Transvaal for ten years, before he and Bev moved to the Kalahari to establish a wildlife rehab centre and Sanctuary. This they ran for seven years. Now retired at Wilderness in the Cape, Chris keeps busy running the NGO which he and Bev founded, called the Campaign Against Canned Hunting (CACH), a registered non-profit and public benefit organisation. [www.cannedlion.org](http://www.cannedlion.org)



## King of the Amazon Rainforest

**Donna Mulvenna**

Donna Mulvenna is a horticulturalist and nature writer living in the Amazon rainforest in French Guiana and the author of *Wild Roots - Coming Alive in the French Amazon*. Her writing offers a close-up glimpse into the fascinating world within the rainforest, reveals the profound effect it has on each of us and encourages people to form a personal connection with the natural world. When she isn't writing from her treetop office she is hurtling along the wild untamed rivers in a sprint canoe.



## Wolves: Return to the Wild

**Suzanne Asha Stone**

Suzanne Asha Stone has specialized in wolf conservation in the western USA since 1988. She served as a 1995/1996 Yellowstone and Idaho wolf reintroduction team member and is Defenders of Wildlife's regional wolf expert. She is currently developing and testing adaptive nonlethal deterrent methods to help livestock managers successfully avoid losses to wolves and other native carnivores. She has tracked, aerial surveyed, and howled with wolves in the wild; teaches about their ecological importance; and helps support state, federal and tribal wolf conservation efforts. [www.defendersblog.org](http://www.defendersblog.org)

## Celebrating 7 years 2010-2016

**VOLUME FOUR  
DECEMBER 2016**



## Message from the grand son of Tatanka Iyotake (Sitting Bull) of the non-Treaty Lakota

**Ernie La Pointe**

Earnest (Ernie) Wayne LaPointe, a disabled Vietnam veteran, was born on the Pine Ridge Indian Reservation of South Dakota in 1948. He has authored the book "Sitting Bull - His Life and Legacy" and helped produce two documentaries with Bill Matson - Sitting Bull: Authorised Biography, and, Sitting Bull's Voice. [www.sittingbullfamilyfoundation.org](http://www.sittingbullfamilyfoundation.org)



## Teaching Environmental Education: Trends and Practices in India

**Dr Chong Shimray**

Dr Chong Shimray is Assistant Professor in the Department of Education in Science and Mathematics, National Council of Educational Research and Training (NCERT), New Delhi; Master of Science in Life Sciences (Zoology) and Ph.D. on thrips biodiversity from the Department of Life Sciences, Manipur University; Recipient of the prestigious Fulbright-Nehru Fellowship in 2009 during which she was affiliated to the School of Forest Resources and Conservation, University of Florida, Gainesville, Florida, USA. As a Fulbright Fellow, Dr Shimray undertook a study to look into the implementation of environmental education in the schools in United States.



## The Dangs - Sacred Green

**Randhir Khare**

Khare is an award winning author of twenty one volumes of non-fiction, fiction, translation and poetry. Executive Editor of Heritage India, the International Culture Journal, a Director of The Rewachand Bhojwani Academy and Visiting Professor to the Dept Of English, Pune University. Recently he was given The Residency Award by The Sahitya Akademi (India's National Academy of Letters) for his contribution to Indian Literature and the Human Rights Award for his efforts to preserve and celebrate marginal and minority cultures.



## Masumi's Story - Agents of Change

**Tony Bartram**

Tony Bartram, a former teacher / principal retired to devote his life to protecting the marine environment and particularly Cetaceans, around Kangaroo Island and Victor Harbor, South Australia. As well as coordinating the award winning Kangaroo Island / Victor Harbor Dolphin Watch project for 10 1/2 years, he worked as a project officer for Whale and Dolphin Conservation. He has made presentations to a number of international conferences including ICMMPA, WEEC, IPMEN, Australian Citizen Science Conference, Australian Marine Mammals Symposium and various stakeholder groups nationally.



## Van Dhan Yojana - A game changer for forest India

**Valmik Thapar**

Thapar, Foremost Tiger Conservationist, Naturalist, Film-maker and Founder of Ranthambhore Foundation is author of over 25 books on tigers and conservation. His latest, *Tiger Fire*, is a magnum opus on 500 years of the tiger in India from the 16th century till date. He has also produced many documentaries on India's habitat for the BBC, Animal Planet, Discovery and National Geographic. He is married to the theatre personality *Sanjana Kapoor* and the couple have a son, Hamir.



## Garbage created by religious practices

**Mark Ulyseas**

This essay was written and published in 2008. Since then I have updated it every year. Except for a few lines here and there the basic essay has remained in its original form. It is a reminder to us that the inhumanity of humanity has not changed. In fact it appears to be growing in intensity. Sadly the more things change, the more they remain the same.





Dr Margi Prideaux is an international wildlife policy writer, negotiator and academic. She has worked within the conservation movement for 27 years. Her forthcoming book *Birdsong After the Storm: Global Environmental Governance, Civil Society and Wildlife* will be released in early 2017. She writes at [www.wildpolitics.co](http://www.wildpolitics.co) and you can follow her on twitter [@WildPolitics](https://twitter.com/WildPolitics).

## WILDLIFE AS PERSONS: TANTALISING NEW WAYS TO SEE OUR WILD KIN

Dr Margi Prideaux

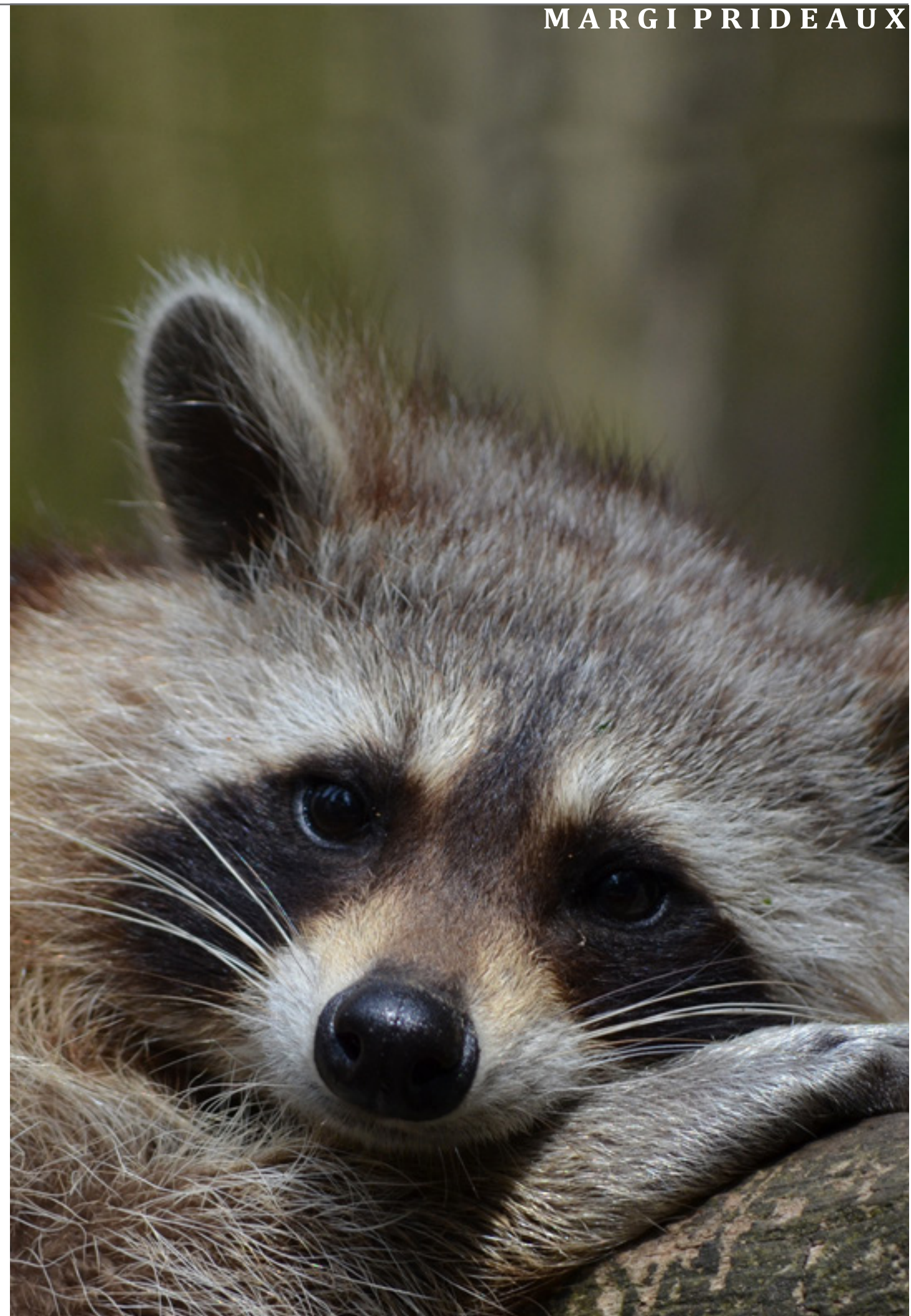
International wildlife policy writer, negotiator and academic

Our illusions about human superiority are shifting as scientists and philosophers explore the social complexity and intelligence of other species. At least some wildlife qualify as persons, creating tension in how we perceive the world.

For the past two decades, scientists have mapped the breadth and depth of communities or societies of dolphins, elephants, wolves and apes, among other species. They have recognised social complexity and intelligence. Their results have been startling, even to the researchers. Despite preconceived Judaeo-Christian notions of human superiority, scientists have discovered that many species engage in complex social interactions with each other. A tantalising insight emerges – that knowledge transmission exists beyond humans. Our assumption about our superiority is undermined.

Until recently there were only a small handful of academics willing to speak openly about this subject. Speaking out confronted, sometimes violently, the inherit bias of human superiority in western society. Being vocal risked accusations that tarnished reputations; brought scientists into conflict with deeply conservative religious views; or risked association with radical activists.

Five years ago when I published a mainstream review of the latest knowledge about dolphin culture,[1] online commentators labelled my article ‘preposterous’ and ‘outrageous’. That reaction was only a sliver of what the scientists at the time experienced. Despite the difficulties, the commitment of scientists has continued to grow.







Sperm whale, Mauritius. Photographer: Gabriel Barathieu <https://commons.wikimedia.org/wiki/>



Iberian wolf. Photographer: Juan José González Vega <https://commons.wikimedia.org/wiki/>

The last decade of studies into dolphin, elephant, wolf and great ape behaviour has highlighted how complex their communications are. It is difficult not to draw parallels with human communication. Empirically, their brains have many key features associated with high intelligence. We have underestimated their capacity, and while their intelligence is different in form, it is difficult to dismiss. Scientists can now confidently state their findings as scientific and justifiable, speaking over the accusatory claims that have sought to dampen them.

The high-profile studies on the great apes continue to lead the field, but there is progress for other species too. For instance, Lori Marino's informed position is that dolphins have distinct personalities, a strong sense of self, can think about the future, and have the innate ability to learn language; both their own and a rudimentary symbol-based language created to bridge the communication chasm between dolphins and humans. She asserts that because of their complex intelligence, it is morally wrong for us to treat them in psychologically harmful ways; that they are due our respect.[2, 3] Luke Rendell and Hal Whitehead agree, having explored the presence and nature of cultural processes in whales and dolphins, as an independent evolution of social learning and cultural transmission.[4, 5] Philippa Brakes and Mark Simmonds also believe the weight of science warrants a shift in global perception of this group of animals.[6]



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Elisabetta Palagi and Giada Cordoni have found the social status among wolves is dependent on sophisticated cooperative relationships and conflict resolution.[7, 8] These abilities have significant impacts on group dynamics in wolf packs. Other scientists are delving into the cognitive abilities in dogs and wolves and discovering they are similar to that found in humans.[9] Individual wolves share intentions – they understand each other's mental states.[10]

Michael Garstang profoundly explores the existence of memory, morality, emotions, empathy and altruism, sophisticated communication and language, learning and teaching in elephants.[11] Karen McComb has presented evidence that elephants have the ability not only to identify human voices but also to identify specific cues in human vocalisations – broad age, sex, and ethnic identity – as a signal of potential threat to the herd.[12] Caitlin O'Connell has illuminated the complexities of elephant communities and communication abilities.[13]

Philosophers are also considering the implications of what this new knowledge means for humans. Thomas White has considered the ethical issues connected with human/dolphin interaction – for example, deaths and injuries of dolphins in the fishing industry or dolphins held in captivity. He contends that *“dolphins have intellectual and emotional abilities sophisticated enough to grant them ‘moral standing’; they should be regarded at least as ‘nonhuman persons’”*.[14]



Atlantic spotted dolphin, Turks and Caicos. Photographer: Bmatulis <https://en.wikipedia.org/wiki/>



Centuries of religious ideologies and the science informed by those ideologies has created an illusion of space between ourselves and other animals. Through a tradition that reaches over 2000 years to both Greek philosophy and Judaeo-Christian religious doctrines, a western idea of human exceptionalism and unique dignity has developed.



Orangutan. Photographer: Sergey Uryadnikov/Shutterstock <http://www.shutterstock.com/pic-172145393.html>



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Fellow philosopher, Kristin Andrews, agrees with White that other species deserve moral standing. She argues that non-human apes are “autonomous agents with their own projects that need to be respected”.<sup>[15]</sup>

There is of course much more research than has been highlighted here. The science and the philosophy are clear. Yet, it is difficult information to resolve through the dominant political context of our time – the ‘sustainability paradigm’ – which premises all of ‘nature’ as a resource for humans.

This paradigm is not based on fact. It is born of the dominant Judaeo-Christian belief about human dominion and has been successfully imposed into every corner of the globe, complete with some uncomfortable ironies – a tree has become timber; a gorilla has become an ecotourism destination; a school of bluefin tuna has become a fishery. The inherent moral standing of any species is outside consideration.<sup>[16]</sup> The ripples of this paradigm have shaped new shorelines and a neoliberal market environmentalism agenda has become mainstream in the western world.<sup>[17-19]</sup> It values everything non-human as a resource to be used.<sup>[20, 21]</sup>

To reflect consciously on this emerging science we need to remove our well established, uniquely western, blinkers that are masking important information from view.

Centuries of religious ideologies and the science informed by those ideologies has created an illusion of space between ourselves and other animals. Through a tradition that reaches over 2000 years to both Greek philosophy and Judaeo-Christian religious doctrines, a western idea of human exceptionalism and unique dignity has developed.<sup>[22]</sup>

Despite the knowledge that humans are animals, our label ‘animal’ distinguishes them (non-human) as separate from us (human). We choose to believe there is difference, even though a biological one does not exist. They are our wild kin. Even with Darwin’s compelling logic that similar traits should equal similar abilities – that differences in cognitive abilities and emotions among animals are differences in degree rather than differences in kind – an unreasonable weight of evidence is demanded to prove the assertion that we are the same, rather than the more logical requirement to disprove our connection.

The blinkers we wear impede how we consider the effects of our actions on other animals; animals that many non-Judaeo-Christian societies regard as having moral significance. These are human communities and cultures that we can learn from, if we choose to listen.





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Those who live near wildlife share the wind and the rain, the dawn and the dusk, the ebb and flow of the seasons of their region with their wildlife community kin. They share the pain when their home is destroyed. People around the world reflect wildlife in their myths, symbols and rituals. Many call it a kinship with all life.[23] The wild tapestry of the Earth is better described as ‘a communion of subjects not a collection of objects’.[23]

In Jainism, the spiritual well-being of human is tied to the physical well-being of all forms of life. [24] Buddhism encourages kindness towards animals and instils a sense of community with all sentient beings.[25] Rich and diverse animist worldviews also weave traditional environmental knowledge with the notion of personhood.

The Chewong of Malaysia consciously share the rainforest with other life-forms and have a sophisticated understanding of the fundamental difference and likenesses between humans and non-humans. The Chewong cosmos does not credit humans any superiority. Freed of such partitioning, they believe that different species poses their own ‘med mesign’, or ways of seeing. Each animal species in the forest inherits a med mesign that is different from others species. In their moving account, Peter Knudtson and David Suzuki explain “[t]here is a ‘siamang way’ of perceiving the world. A ‘tiger way’. A ‘fruit bat way’. A ‘hornbill way’. A ‘monitor lizard way’. A ‘tapir way’. An ‘anteater way’. A ‘slow loris way’. An ‘elephant way’. A ‘water snail way.’” The distinct sensory worlds of the exquisitely adapted species within the lush Malaysian jungle is fully recognised and respected.[26]

The Mentawai in Sumatra, Indonesia, do not believe they have a right to kill, consume, or use any animals at will. The Mentawaians are generous toward non-humans, crediting a soul and personhood not only to animals and plants, but to almost all of their surroundings.[27] There are rituals performed when killing animals for human food that confer a deep respect for and connection to that soul.[27]

In describing the animistic traditions of the Lakota, Cree and Salish peoples of North America, each embedded with a deep respect for non-human persons, John Grim highlights the inherent tension in arguing the sustainability paradigm:

*“... where indigenous peoples have maintained these anthrocosmic rituals focused on animals, sustainable bioregions are evident. These sustainable fields break down where historical events have brought invasions of peoples, ideas, and ways of interacting with the surrounding world that fragment indigenous knowing and being known by animals.”*

While in common speech we interchange the term ‘persons’ with ‘people’ or ‘humans’, they are not the same. A person is actually any individual being – elephant, human, clone, entity from another galaxy – that we respect enough to confer them a basic moral right. We respect their right to live a meaningful life, to have their individual liberty protected and to be free from torture.

Despite our common misuse of the word, ‘person’ is simply a legal concept that affords basic rights to a group of individuals. In the west all humans are now considered persons (although not so long ago women, children, non-landowners, minorities, slaves and other unfortunates were not). While in common speech we interchange the term ‘persons’ with ‘people’ or ‘humans’, they are not the same. A person is actually any individual being – elephant, human, clone, entity from another galaxy – that we respect enough to confer them a basic moral right. We respect their right to live a meaningful life, to have their individual liberty protected and to be free from torture.

No one in these emerging scientific and philosophical fields suggest that wildlife be granted a right to vote, to hold a driver's licence, or to receive a free and fair education. Such knee-jerk arguments simply reveal a poor understanding of the core meaning of a ‘right’.

I don’t propose the west shifts its religious philosophies either. I only seek to highlight that these philosophies are born of belief, not facts. I mean to unlock the potential for people to look at the world in different ways – for people to see the forests, the tundras, the skies and the oceans are filled with many forms of non-human persons.

I don’t discount or dismiss the tension this discussion creates. I welcome it. Such tensions propel humans to explore more layers to our existing world view. We can learn from the scientists as well as the Mentawai, Chewong, Lakota, Cree and Salish peoples and accept wildlife as persons. Adopting new ways of seeing our wild kin may help us find our way out of the spiralling destruction we are committing across the world.

Profound? Yes. Preposterous or outrageous? I don’t think so.





Moon bear. Photographer: Jeep2499/Shutterstock <http://www.shutterstock.com/pic-275844617.html>



Mountain gorilla. Photographer: Gudkov Andrey/Shutterstock <http://www.shutterstock.com/pic-355160669.html>

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Dr Richard Glatz in his research collection of insects from Kangaroo Island. Photo: Jasper Savage [www.jaspersavage.com](http://www.jaspersavage.com)

Kathie Stove is a freelance writer and editor who lives on Kangaroo Island, South Australia. For more than 20 years, Kathie has written on topics such as ecology and biodiversity, arts, cycling, social services and education, for newspapers, magazines, websites and newsletters. She is a keen promoter of, and volunteer for, the natural Kangaroo Island environment and for island's visual arts.



Kathie Stove

## FIELD NOTES

Once upon a time in a world far away, gentleman and lady naturalists spent countless hours exploring nature. They took a deep and close interest in their natural world, and collected specimens of the known and unknown to examine in laboratories and preserve in museums. For some, this became their life's pursuit; for others, the hobby absorbed their leisure hours.

Now, both the field naturalists of old and the nature they loved to explore are in much rarer supply. Entomologist Richard Glatz is a living example of this old school. He has a field naturalist's soul, the means to indulge his interest, and the sense to have chosen [Kangaroo Island, South Australia](#), with almost 50 per cent native vegetation, as a fruitful source of new insect knowledge.

Here, Richard is waist deep in entomological heaven. He and his collecting apparatus are rarely separated. By day his sweep net takes Richard to the insects wherever he goes; by night a lit sheet on the veranda brings the insects to him. His collection is so stuffed with specimens that he and his desk have little space in the room.

Richard and partner [Janine Mackintosh, a notable artist](#), moved from inner city Adelaide to Kangaroo Island several years ago. Richard left a secure government science job and Janine is now the main breadwinner – a neat reversal of an artist's usual situation.

Richard's unpaid "day job" is time in the field, and in sorting and examining his findings without the constraints of paperwork and office mores. It's a mistake to think this PhD is an amateur though the definition might strictly fit. His expertise is often sought, he supervises postgraduate students, and he edited the recent [Molecular basis of olfaction](#) – just one notch in his extensive publication and report list.





Female enigma moth (*Aenigmatinea glatzella*) on its host plant, southern cypress pine (*Callitris gracilis*).  
Photo by George Gibbs

On the island he's found an insect buddy, a genuine amateur, Andy Young, and they make a formidable collecting pair, mostly in the almost continuous strip of native vegetation along the island's south coast. "We explore different habitat types and microhabitats within them." Richard estimates he has enough material to keep him busy for life, but he and Andy still spend plenty of time in the bush.

Richard cannot remember forming a conscious wish to "become" an entomologist. He does remember he and a mate running round Loxton in the Riverland, South Australia, with a butterfly net when he was about fourteen.

"We were just catching things and looking at them. I remember we caught a spider, put it in jar, and it had babies.

"At school and then at university, I was doing what I thought I should do. I never considered biology – that was what you did if you couldn't do other stuff."

The stuff he "should have done" got him a computer programming degree and a job in a service station where he had time to think about where his life was going.

He decided on a second degree in agricultural science because of his interest in insects and plants. "I still didn't know the job I wanted existed."

He hated doing the second degree as much as the first, but he applied himself and maximized the entomology. Still with an eye to what he should do, Richard majored in molecular biology, "where the future lay".

*Right* - Female (top) and male (bottom) green carpenter bees (*Xylocopa aerates*). Now extinct from mainland South Australia and Victoria, this species exists as two disjunct populations on western Kangaroo Island and in New South Wales around Sydney. Photo: Richard Glatz







Female Enigma moth (*Aenigmatinea glatzella*) on its host plant, southern cypress pine (*Callitris gracilis*).  
Photo by George Gibbs

His results scored him a University of Adelaide Medal and PhD scholarship in molecular biology. He became one of very few people in Australia with proficiency in engineering proteins using an insect virus. The potential was in screening systems for human drugs. CSIRO snapped him up and he entered the world of the “science professional” – in a lab and at the desk.

Richard had made an insect collection for a subject during his degree course, and soaked up taxonomy and ecology. Soon after, he and Janine first visited Kangaroo Island.

“I made a conscious decision to concentrate on Kangaroo Island insects and collect them in my own time. I knew the insects were not well known, and those vast areas of native vegetation had to hold much to be discovered.” But the penny still hadn’t dropped on making his interest his day job.

Within a year of their first visit, they’d bought a bush block on the south coast. “I loved the dense high-quality mallee. We could have a place of our own better than a conservation park on the mainland.”

Richard collected every time they visited the island, which was as often as possible. He paid minute attention to detail with meticulous and rigorous data keeping: location, vegetation type, time of day, weather, what the insects were doing. “That’s where the knowledge is.”

He can’t fathom the lack of recognition for the “movers and shakers” of the ecosystem. “Along with fungi, invertebrates keep the biological world functioning. They decompose and degrade, they pollinate flowers – sometimes in a highly specific relationship – and can even spread seed. Beneficial insects keep pest insects regulated in both natural and agricultural systems.”

Of the estimated [11 million species in the world](#) (it could be up to 50 million), fewer than two million, half of which are insects, have been described. Ecologist and [author of \*Where song began\*](#), Tim Low, has bemoaned the lack of time for modern day biologists to spend in the field, where they can make the many discoveries still to be made.



Female large eastern bronze azure butterfly (*Ogyris halmaturia*). Although first collected from Kangaroo Island and described from those specimens, this species was not seen on Kangaroo Island from 1934 until 2014 when it was rediscovered. The larvae live their entire lives within nests of the ant, *Camponotus terebrans*. Photo: Richard Glatz

Keeping in mind the hierarchy of living things – species group into a genus, genera group into a family, and families group into an order (e.g. Lepidoptera: moths and butterflies) – let’s check Richard’s tally of discoveries. He has found one [new family of moth from the wild](#), the first described in the world in 40 years; a new wasp that parasitises the moth (probably a new genus); a new species of robber fly; four new species of stiletto fly; new records of insects for South Australia and Kangaroo Island; an interest in insects generated among the locals, one of whom found a butterfly not seen since the 1930s; and the Green Carpenter Bee declared as endangered (one of the few insects to be paid such attention) and its welfare being taken into account in burning regimes. And his collection will almost certainly reveal more in time.

The Australian National Insect Collection recently visited Richard’s home museum and used his expertise to find collecting sites. They left with “a stash” of Richard’s specimens for further research. When the destructive grain pest, Khapra beetle, was found in freight to Kangaroo Island this year, Richard was on hand as expert entomologist for definitive identification and a crucial role in the search and destroy mission, and ongoing monitoring program.

That crisis and its control gave Richard some income and kudos in the farming community, but has also taken him away from his collection curation for many months.

In the past two decades, wilderness areas with their myriad values “as critical strongholds for endangered biodiversity, for carbon storage and sequestration, for buffering and regulating local climates” [suffered extensive losses world-wide](#). Over-exploitation, and expansion and intensification of agriculture, [are the largest drivers of biodiversity loss](#).

These pressures are alive even on Kangaroo Island. The field naturalist is needed more than ever to keep knowledge alive and decline at bay.



Bayu has done Veterinary Medicine, Udayana University, Bali. Founder director of FNPF, Yayasan Bebali, which works with traditional cultural revitalisation, and previously with the Begawan Foundation, where he oversaw the program breeding the critically endangered Bali Starling (*Leucopsar rothschildi*) and their subsequent release by FNPF onto Nusa Penida. 2003 and 2007 nominated for Indonesia's Kalpataru (Hero of the Earth) Award for his work with conservation. 2007 Bali Governor awarded him Environment Pioneer.



**Drh (Veterinarian) I. Gede Nyoman Bayu Wirayudha**  
 Founding Director of **FNPF** (Friends of the National Parks Foundation/  
 Yayasan Pecinta Taman Nasional), Bali, Indonesia.

## FNPF KALIMANTAN - HELPING RESTORE KALIMANTAN'S DEGRADED FORESTS



Volunteers and staff of FNPF taking care of the nursery.

*FNPF (Friends of the National Parks Foundation) is a non-profit organisation which works in conservation in Bali, and Kalimantan in the island of Borneo. Most of FNPF's conservation work is focused on improving the wellbeing of local communities in ways that protect wildlife and habitat. By improving local community options for employment and income generation (through education, agro-forestry, eco-tourism, mixed and organic farming, and so on) FNPF reduce their need to work in environmentally destructive sectors such as illegal logging and mining, slash and burn farming, and palm oil cultivation. By helping local communities, FNPF win their respect, support and participation for conservation objectives.*

*Here, FNPF Founder and Director, Drh Bayu Wirayudha, describes the work of FNPF in Kalimantan and highlights a growing threat to their conservation efforts, annual dry season forest fires.*

“Looking out over a desolate landscape of white sand and low, stunted shrubs, nothing moves except for small bushes which are stirred by a warm wind that sweeps and moans across this desert. But this is not the desert savannah of Africa or the plains of the western US. It's Lamandau River Wildlife Reserve, Central Kalimantan on the island of Borneo, more associated with lush tropical rain forest than arid desert scrub. And of course this was once a green tropical paradise, vibrant with plant-life, animals, insects and birds. Until, that is, logging companies clear-cut the forest for valuable timber. That was many years ago, and since then this huge area has lain dormant, and unused. An ugly scar on the face of the earth. Under Indonesian law, the loggers are required to replant the trees that they have cut, but this is easily circumvented, often by closing the original company, and starting anew somewhere else in the forests.”

FNPF has been working in Kalimantan, on the island of Borneo since the year 1997, with several project sites around Tanjung Puting National Park, Central Kalimantan, an area of high natural biodiversity. By 2015 FNPF reforestation projects had successfully planted more than 281,400 trees, and created 40 kilometres of new forest corridors, also 246,800 seedlings that have not been planted yet. These forest strips are a vital refuge for wildlife such as deer, monkeys, orangutan, gibbons, wild pigs, sun-bears, and a huge variety of bird life.





Fire in Beguruh.



Forest fire in 2015 in Jerumbun.

Forest fires, some set deliberately, particularly near palm-oil plantations, are a constant source of worry for FNPF. Several developing forest areas have been damaged by fires, and it is heart-breaking for FNPF workers to see trees that they have nurtured for years, destroyed in the blink of an eye.

The recent 2015 “fire season” was particularly devastating, and we have noticed that these dry season fires are becoming more prolonged and uncontrollable as time goes on. The particularly severe 2015 fires, which ran from August through October, 2015, were said to be due to the “El Nino” weather phenomenon, and we can expect more in the future.

Most of our sites in the Tanjung Puting area were badly affected by forest fires in 2015, despite the dedicated efforts of our FNPF staff, and local volunteers. One of the biggest issues we face is the lack of proper fire-fighting equipment, and water sources.

Our teams, boosted by volunteers from other parts of Indonesia, do heroic work despite this, sleeping near the fire locations, and snatching water and food when they can. At the height of the fires our teams were in the field for two weeks without a break, and only broke off when they became too exhausted to continue.

The oldest of our project sites is at Pesalat, where FNPF has been busy planting tree saplings for the past nine years, and luckily Pesalat was one of few areas not affected by fire.



Conservation education in Beguruh.

The oldest of our project sites is at Pesalat, where FNPF has been busy planting tree saplings for the past nine years, and luckily Pesalat was one of few areas not affected by fire. A focus in Pesalat is researching and developing local plant species that have traditional medicinal properties. The results are heart-warming, and spectacular.

On a recent visit a flock of black hornbills crossed the young forest, and other bird species flitted from tree to tree. The Pesalat forest is also home to deer and pigs, and other animals, and most exciting of all, orangutan, who come here to feed on fruit from the replanted trees. We saw the remains of fruit eaten by orangutan, and explained that they feel safe to enter the replanting zone, even though they must spend some time on the ground as they traverse the forest.

As with other FNPF sites in Kalimantan, there is an office with accommodation for workers and volunteers. The one at Pesalat is particularly pleasant, surrounded by shady trees, and a nursery for saplings of many different tree species.

FNPF has other replanting sites including Beguruh, inside the Tanjung Puting National Park, where you can climb a fire-watching tower to view the developing replanted forest below, and Padang Sembilan, a newer site in an area of former farming and rice-growing fields, where the tiny saplings must compete with ferns and other vegetation that makes this a particularly challenging replanting task.

In Padang Sembilan we are developing a community support project that involves elderly women (many are widows) from a local village, who earn an income by tending and selling saplings to individuals and organisations who wish to undertake reforestation work in the National Park.

Both of these sites were badly affected by fire-damage, we lost more than 210 hectares (about 84.000 seedlings) of our reforestation site in Beguruh and 80 hectares (about 32.000 seedlings) in Padang Sembilan. We have started replanting in both areas in January, 2016 little by little.

At Jerumbun, also badly impacted by the 2015 fires. Fire in Jerumbun has destroyed our reforestation site with total loss of seedlings are about 20.000 seedlings. FNPF is encouraging staff and local villagers to experiment with agro-forestry crops, such as rubber, gaharu and watermelons. This area is the buffer zone of Tanjung Puting National Park and surrounded by large palm-oil plantation.





Conservation education for kindergarten students at the main office of FNPF at Kalimantan.

Our goal is to turn Jerumbun into a comprehensive information centre for sustainable farming, reforestation and agroforestry, also a model of sustainable tourism that can be used as a resource facility by volunteers, students, scientists, and tourists.

All of the replanting work carried out by FNPF has resulted in a substantial body of knowledge about how best to carry out this important work, and the spirit of experimentation has infused the work of our team.

Years of experiences made us now know which tree species suits for different soil, climate and vegetation conditions; the optimal interval to leave between saplings and other vegetation; the best season to plant, and so on.

As with any land-use issue, though, there are abundant potential conflicts with the various stakeholders, and in Central Kalimantan they include the local communities, palm-oil companies, logging both legal and illegal, gold miners, the local government, and even other NGO's. It is vital that these various stakeholders support, or at least do not hinder, the work of FNPF.

At the nearby village of Tanjung Harapan a small house will be used as a library for the village children to learn about their environment, and the importance of preserving the local forests.

FNPF is also supporting village ecotourism and agroforestry initiatives in Tanjung Harapan, encouraging the development of livelihoods that do not depend, like logging and gold-mining, on the unsustainable exploitation of local resources.

Back at Lamandau, the task is particularly challenging. Not only is the destroyed area a large one, but the soil, and climatic conditions are unfavourable. The soil in many places is simply white sand. In the 2015 fires, only 2 kilometres of forest corridor remained, out of 15 kilometres that FNPF had created in Lamandau. The rest had been destroyed by fire.

FNPF have started the recovery process, however. The office and centre nestles in the lee of a sliver of surviving forest, which holds an all-important water supply, rare in this area. Replanting has already started, and tiny saplings reach for the sky around the FNPF center. Experimentation by the FNPF team has shown that saplings grafted from larger trees grow quicker, and are stronger once planted, and this promises to speed up the planting process.



Reforestation project in Pesalat.

It is hard, now, to see this blighted land being transformed into a sea of green. But with the willpower and experience of the FNPF team, and the support of generous and far-sighted donors, such as Humane Society International, The Boeing Corporation and Taronga Zoo, the vision will become a reality.

As Michael Kennedy of Humane Society International said after his visit -

*"The forest rehabilitation work of FNPF is truly inspirational. Their commitment to protecting Tanjung Puting National Park is second to none, and we are very proud to be associated with their on-going conservation achievements."*



Volunteer Program: Volunteers planting trees.





**CAMPAIGN**  
AGAINST CANNED HUNTING

**CHRIS MERCER**  
DIRECTOR, [WWW.CANNEDLION.ORG](http://WWW.CANNEDLION.ORG)

## De-constructing the canned lion industry.

### CITES COP OUT 17

The much publicised CITES conference in Johannesburg has come and gone, leaving lions and elephants at the mercy of the hunting industry. Contradicting their own experts, US and EU delegates traded them away. The outrageous back room deals and horse-trading are well reported by acclaimed lion conservationist Dereck Joubert [LINK](#)

So utterly captured by the rich hunting gang are the southern African states (Botswana excepted) that their support for hunting borders on the fanatical. A relatively small nation by world standards, South Africa had the highest number of conservation officials at COP 17, 63 in all. 63 useless officials all taking up conference space for only one purpose – to protect the hunting industry at all costs.

**In the words of SA President Jacob Zuma: 'compassion for animals is un-African.'**

In this cesspit of sustained abuse of wildlife, our NGO Campaign Against Canned Hunting (CACH) understands that canned lion hunting will never be banned until the hunting industry itself, calls upon government to do so. Why would it do so? To protect the whole trophy hunting industry from being pulled down by the public anger against canned lion hunting. Self-preservation; not an ounce of compassion. Money is everything.

There is no doubt that the trend, certainly in the developed world, is against trophy hunting. CACH is actively promoting the trend, and the dominos are starting to fall: see reasons to change below. Taking the initiative away from a hostile or at least supine government, CACH has got together with a whole range of role players and stakeholders to form a Captive Lion Forum. The aim is to come up with a blueprint for de-construction of lion farming and the canned lion industry which has critical mass support from most stakeholders, and which can be given to government to implement, when the tipping point is reached.



Photograph © Mwana Bermudes, wildlife photographer

© Chris Mercer





Photograph © Mwana Bermudes, wildlife photographer

As can be imagined, CACH has been subjected to abusive posts on social media for ‘collaborating with the enemy’ but we believe in maximum effectiveness rather than maximum popularity. Shouting on social media will never change canned hunting, but constructive engagement can bring about change – if only incremental.

Here is the plan:

### Executive Summary

Step 1: establish the need for, and inevitability of, de-construction in order to get critical mass support from all roleplayers and stakeholders. Engagement is key.

Step 2: Separate the industry in to its component parts and debate a timetable for the cessation of each component.

Step 3: concurrently, focus on demand reduction. For trophies in the developed world.

#### Step 1.

1. Gather all stakeholders together with roleplayers, viz the Captive Lion Forum, and set out the reasons why change is inevitable, and that the industry is better off agreeing an orderly de-construction than having drastic change forced on it in due course.

2. Reasons to change include:

- Tiger farming already banned. CITES Decision 14.69 for reasons that apply equally to African lion.
- IUCN Motion 009.
- US Fish and Wildlife restrictions on lion trophy imports
- Import bans in Australia, France, – the dominos are starting to fall.
- Nash Review of damage to Brand SA tourism
- Poaching of wild lions to supply lion bone trade has already begun with mass poisoning in Limpopo Park, Mocambique

3. Change has to be regulated across the whole industry; Lion and Safari Park attempt to abandon cub petting shows that individual entities cannot bring about change on their own.

Focus on demand reduction, seeking bans on the import of lion trophies in as many countries as possible, and educating tourists and volunteers on the reasons for not indulging in cub petting or other forms of animal interaction.

#### Step 2.

Once it is accepted that in the words of Nobel prizewinner Bob Dylan, the times they are a-changing, then we look at the life cycle of a captive bred lion in order to work out a timetable for stopping each phase. Initial requirement: national online register of all captive lions to avoid dysfunctional provincial conservation structures.

#### Breeding

If max period for gestation is 110 days, a ban on further breeding should take this in to account. From date of breeding ban (DoBB) all males must be sterilised; all females contracepted. Permit conditions must be altered to reflect this, and to criminalise non-compliance.

#### Cub petting

A profitable spin off and method of externalising the cost of rearing lions to huntable size. Identify max age for cubs to be handled safely eg six months and then ban cub petting from six months from date of breeding ban.(DoBB)  
Permit conditions to specify.

#### Lion Walking.

Another profitable spin off from lion farming. Identify an age when most lions will be too old to safely walk with humans eg 4 years, and implement a ban, supported by permit conditions on all lion walking after the period four years from DoBB.

#### Trophy hunting

Agree a date eg 7 years from DoBB for a total ban on all lion hunts to come in to effect. This will allow lion farmers to ‘run down their lion stocks’, recoup their infrastructure and other business expenses, and transition to another form of land use.  
Lion bone trade  
Like ivory, and for same reasons, lion bones should be surrendered to a credible authority for destruction. Time frame?

#### Step 3.

Focus on demand reduction, seeking bans on the import of lion trophies in as many countries as possible, and educating tourists and volunteers on the reasons for not indulging in cub petting or other forms of animal interaction.



Donna Mulvenna is a horticulturalist and nature writer living in the Amazon rainforest in French Guiana and the author of *Wild Roots - Coming Alive in the French Amazon*. Her writing offers a close-up glimpse into the fascinating world within the rainforest, reveals the profound effect it has on each of us and encourages people to form a personal connection with the natural world. When she isn't writing from her treetop office she is hurtling along the wild untamed rivers in a sprint canoe. Amazon book link: <https://www.amazon.com/dp/B01IAC3C9U/>



DONNA MULVENNA

# KING OF THE AMAZON RAINFOREST



Black Caiman (*Melanosuchus niger*) local: Uacari Sustainable Development Reserve, Amazon.  
Photograph by Whaldener Endo (Own work) CC BY-SA 4.0-3.0-2.5-2.0-1.0 (<http://creativecommons.org/licenses/by-sa/4.0-3.0-2.5-2.0-1.0>), via Wikimedia Commons nas, Brazil.

*"To sit back hoping that someday, someday, someone will make things right is to go on feeding the crocodile, hoping he will eat you last - but eat you he will."* – Ronald Reagan

CRIKEY! A word made famous by one man, Crocodile Hunter, Steve Irwin. That he loved and respected crocodiles so much is evident in his daughter, Bindi. She is named after his favourite pet, a saltwater crocodile of the same name.

Despite Irwin's work in spreading the virtues of saltwater crocodiles (*salties*), visions of them propelling their bodies out of the water to eat whole chickens and stories of them stalking their prey, often for days, have many tourists too terrified to venture north of Sydney. In fact, ask any Australian what they know about crocodiles and they will tell you, *"to stay the hell away from them!"*

Not too long ago, a fisherman in Weipa was attacked by a croc just down from his local pub. The croc locked its jaws around his leg and started to pull him backward toward the water. The fisherman held fast to a mangrove root until his pub mates, alerted by his screams, ran down and group tackled the croc.

Later, over a cold beer, the fisherman admitted to throwing his little dog into the water as a diversion. Any sympathy he had coming quickly vanished as all focus switched to who was looking after the poor dog. That little dog made the local news. The crocodile was the cold-blooded, grinning killer in the background.

My fear of crocodiles does not make logical sense when you consider I drive a car to the river, an undeniably risky business, and that the stifling, energy-sapping humidity of my home in the French Amazon presents a greater risk to most than an errant crocodile. But fearful emotions are seldom logical. To me, all crocodiles including their alligator and caiman cousins were the reptile world's equivalent of the great white shark.

So, when my boyfriend suggested I accompany him to the local swamp where children feed a one-metre long caiman, I found that as about appealing as jumping out of a plane.



## AMAZON RAINFOREST



<https://pixabay.com/en/>

*“Donna, just come and watch,” he said. “There is something I want you to see.”  
“And bring some bread.”*

A small timber pontoon stretched out over a muddy bank that was lined with thick tufts of razor grass. The water was shallow and completely still, not stagnant but not inviting either, and there was a half-metre band of water-weed lining the edge.

*“Throw a piece of bread into the water and see what happens,” my boyfriend said.*

I watched and waited, for what I didn’t know. The previously blue sky began to cloud over and a dark shadow crept across the pond shifting my thoughts to the Rupununi river people in nearby Guyana. They absolutely live in fear of caimans after the attacks and deaths of several of their loved ones.

So here I was throwing bread to one of the most ferocious beasts in the jungle in a scene fast resembling that of a horror movie when it happened!

The long flat snout and bulging eyes of a yellowish Spectacled caiman pushed away from the bank and carved a path through a carpet of river weed toward the bread. It immediately snapped it up. I expected it to take a big gulp before turning its attention toward me.

But it didn’t do that.

It held the bread in its mouth, turned around and headed back toward the bank. It then placed the bread on the edge of the green sludge where it joined the water and retreated to about 20cm away. It sunk down below the weed and waited, completely motionless, until a few moments later when a fish surfaced to eat the bread, and — *Splash, Snap!*

*“No way!” I said. “That caiman is using the bread to catch fish!”*

Rather than being a lethargic, stupid and boring survivor of an age of dinosaurs and not much else I thought it was, this caiman was smart. At one point the fish were onto him so he swam a short distance away before rapidly doubling back on himself and — *Pow!* Another fish swallowed whole. Was it intentionally swimming away to lull the fish into a false sense of security? Could it be that clever?

## DONNA MULVENNA



Black Caiman © Leonardo C. Fleck (leonardofleck@yahoo.com.br) <https://commons.wikimedia.org/wiki/>

Zoologist Vladimir Dinets who studies the predatory behaviour of crocodiles, alligators, and caimans, seems to think so. “They might be second only to humans in their hunting prowess,” he said.

They learn to avoid snares and hide after just one encounter with scientific researchers, dance in scenes resembling those of Jurassic Park, and drive fish from deep water into the shallows where more agile alligators block their escape. In one instance, a saltie scared a pig into running off a trail into a lagoon where two crocodiles were waiting in ambush, suggesting that the three crocodiles had anticipated each other’s positions and actions without being able to see each other.

They watch and learn the habits of their prey, just like that cunning old croc had watched the fisherman leaving the pub to throw in a line each day.

The caiman episode convinced me to rethink everything I thought I knew about the unfeeling and mechanistic mind of a crocodile. Wasn’t my mind superior to this reptile because I knew how to use tools, grasp past and future, communicate effectively, and have a sense of self? And hadn’t that caiman just tipped that assumption on its head?

Perhaps they are more intricate and complex than I assumed and their intelligence isn’t higher or lower than ours, just incomparable. Even more bewildering is the possibility that their brain is only the size of a walnut because it is somehow superior to ours, not unlike a computer chip — smaller and faster.

Recognising this level of intelligence made them seem so much scarier to me than they were before. Fortunately, most caiman species are too small to be dangerous to humans, with the exception of one: the black caiman, the super-predator of the Amazon that rivals the Saltwater and Nile crocodile as the world’s most dangerous.

Not even a jaguar will take on a full-size black caiman, which explains why a policeman so hastily unsheathed his gun when he found himself standing face to face with one in the city of Cayenne.

The adult black caiman had left his inland home at the Kaw swamp by simply drifting along in a river current stronger than usual. No doubt he was just as surprised as terrified bathers when he washed up on a popular swimming beach. I can imagine the scene,  
*“Is it a leatherback turtle, a sheet of black plastic, a beached whale?”  
“Oh, my word! Run for your life, it’s a black caiman!”*



## AMAZON RAINFOREST



Spectacled caiman (Caiman crocodilus) Monterrico, Guatemala. Photograph by Bruno [www.flickr.com](https://www.flickr.com/photos/brunobonini/)

There was once a time when nobody in their right mind would have threatened one of these big fellas, the largest species of crocodile in the Western Hemisphere. But it is amazing what a group of policemen, the Paris Fire Brigade, a herpetologist, and the staff from the Kwata conservation association can do. Within a short time the caiman's body was bound in rope, and those powerful jaws, strong enough to shatter a turtle shell, were duct-taped shut. It was then carried up the beach, loaded into an enclosed vehicle and promptly transferred back to where he came from.

Not surprisingly, panicked beachgoers started to ask how many more caiman might be lurking off the coast. How long would it be before someone was attacked and why and how was this allowed to happen? It was almost as if they expected a barricade to be erected around the reserve to protect them from further encounters.

Human interaction with these dangerous animals has been reflected in myths and legends dating back to earliest recorded history. However, feared as a symbol of ruthless predation and voracious appetite, they have never been, nor are they ever likely to be, allies of humankind.

Yet, after a 200 million-year run on the planet, no crocodilian species has gone extinct since humans became dominant, a testament to their resilience and adaptability.

In South America, they were pushed to the brink of extinction during the 1960's and 1970's when 6 to 7 million skins were sold in Brazil alone. This lucrative leather trade hired light aircraft to fly low across the Amazon rainforest to locate pockets of caiman. Armed with this information, hunters and trappers then hacked their way through the impenetrable jungle killing the caimans so their skin could be made into human indulgences such as handbags.

Today, black caiman are strictly protected in French Guiana, but they still face threats from habitat loss and climate warming, making it unlikely they will reach numbers to rival those of alligators in Florida that frequent golf courses, infest lakes, splash in backyard pools, or devour family pets anytime soon.

Nobody likes to have a crocodilian in their backyard, but we do love to identify with them. We embody them in tattoos, corporate logos, bumper stickers, and clothing, use them as mascots and celebrate sports achievements by raising one arm, lowering the other and quickly snapping them together in a gesture known as the chomp.

## DONNA MULVENNA



[https://commons.wikimedia.org/wiki/File:Esteros\\_Ibera\\_Caiman\\_Yacare.jpg#](https://commons.wikimedia.org/wiki/File:Esteros_Ibera_Caiman_Yacare.jpg#)

However, when it comes to coexisting with them, we are positively terrified. That is human nature. *"We strive to be wild on the inside, while we wipe out the wild on the outside."*

In many ways, crocodilians represent the ultimate test of human willingness. To coexist with them we have to accept them as much a part of nature as dolphins, woodland, and hurricanes, and stop destroying their habitat through development, logging, mining or turning large tracts of land into pasture for domestic livestock.

Crocodiles, like all apex predators, provide ecological stability to their habitat. If they are removed from the picture, there are consequences. In South America, two animals the caiman preys upon is the piranha and the capybara, the world's largest rodent. Corresponding with a decrease in caimans the capybara population increased, wreaking havoc on crops throughout Bolivia and Brazil, and an unchecked outbreak of piranhas meant that cattle were being attacked and killed as they moved across flooded grasslands.

*"A lack of apex predators absolutely tips the balance and can kill off entire ecosystems rendering them lifeless."*

So, if you see a caiman, smile back. They were here before the dinosaurs, alongside the dinosaurs, and survived the dinosaurs, and their amazing resilience will help to save us.

However, keep a safe distance as even Steve Irwin said, *"Crocodiles are easy. They try and kill and eat you...."*



Suzanne has specialized in wolf conservation in the western USA since 1988. She served as a 1995/1996 Yellowstone and Idaho wolf reintroduction team member and is Defenders of Wildlife's regional wolf expert. She has tracked, aerial surveyed, and howled with wolves in the wild; teaches about their ecological importance; and helps support state, federal and tribal wolf conservation efforts.

[www.defenders.org](http://www.defenders.org)



## WOLVES: RETURN TO THE WILD

**SUZANNE ASHA STONE**  
NORTHERN ROCKIES REPRESENTATIVE  
DEFENDERS OF WILDLIFE, IDAHO

It was a bitterly cold winter morning when the convoy departed down the ice covered forest service road near Salmon, Idaho. Our cargo was of immense controversy – so much so that Idaho's governor threatened to call out the National Guard to stop us at the state border. Decades after scientists first called for the restoration of wolves in the Northern Rockies, the first four wolves had arrived in Idaho and were being transported to their release in the Frank Church River of No Return, the largest federally managed forested wilderness in the continental USA.

In 1995, local opposition to wolves was dangerously high. Although generations had passed since the last wolves in the region were killed by cattle and sheep ranchers, their descendants still felt there was no room for wolves. Anti-wolf rallies had taken place. Amidst this political maelstrom, we arranged for the wolves to be held in a secure warehouse for the next night until we were ready to take them to the release site.

In the early dawn on the morning of their release, I returned to check on the wolves. They were quiet but keenly observant of every move. I approached one of the cages and looked inside. It was the first time I locked eyes with a wild wolf and I was surprised by the depth of intelligence and curiosity that met and held my gaze. These were not a dog's eyes. They were far more ancient and wild, and piercingly self-aware. He was the first wild wolf I'd met in such proximity but he would not be the last.







Photo Credit: US Fish and Wildlife Service -Nez Perce elders blessing wolves on their way to the Idaho release 1995 USFWS. And Suzanne Stone,1996, British Columbia Yellowstone/Idaho Wolf Reintroduction Transport Station.

Not all local communities opposed the return of wolves to Idaho. In a simple but heartfelt blessing ceremony, Nez Perce tribal elders welcomed the wolves back personally and blessed their restoration. Former Chairman of the tribe and my college internship mentor- Charles “Pete” Hayes - had stepped forward to assist with restoring wolves. He explained that the Nez Perce believed wolves were their elders and by restoring them, an important part of Nez Perce culture would also be restored. The quiet, patient support of the tribe for wolves was an important contrast at a time when fear of wolves’ return among many locals persisted.

Despite the political controversy on the morning of January 14, 1995, a group of biologists, wildlife advocates, and local officials set out in a caravan of heavy duty trucks following behind a large snowplow that cleared our road to the edge of the Frank Church River of No Return Wilderness. The “Frank” as dubbed by locals is a posthumous tribute to Idaho Senator Frank Church who, twenty years before his death in 1984, was the floor sponsor of the national Wilderness Act. The Frank remains the largest forested wilderness area in the continental USA.

The journey into Idaho’s backcountry that day was perilous. The road was covered in a thick sheet of ice as it edged above the ice-choked but deep Salmon River. We removed our seat belts to avoid being trapped if our vehicle slid off the ice covered road and down into the freezing waters below. The slow crawl down the road took hours of white knuckle driving before we reached our destination. The campground at Corn Creek was peacefully quiet but walking on the ice turned out to be harder than driving on it. We all slipped around in walk-skate fashion doing our best to carefully unload the shipping crates with the four bewildered wolves inside. Within minutes of our arrival, the first wolf with her radio collar -- vividly decorated with the name “*Moonstar Shadow*” by the students in Idaho’s Blaine County -- was bounding her way through the snow. I realized I was still holding my breath when after running a few hundred feet, she stopped and turned back to look at us before disappearing into the woods. The next wolf, the large silver male I’d met the night before, ran about 15 yards before stopping to make his mark on his new world. The students at Lapwai Nez Perce School had decorated his collar with the name “*Chat Chaht*”, which means “older brother” in their language. Tears blurred my vision as I thought of Pete Hayes, who would have approved deeply of this name, but who passed away only months before the wolf reintroduction.

Suddenly aware that people were staring at me, I heard my name called by the lead biologists on the team. “*Suzanne, this one is yours...*” they said. Her name was spelled out in a colorful design on her radio collar: “*Akiata.*” She was a young black wolf with green eyes and very reluctant to leave the safety of her travel kennel. After some shaking and a few encouraging words, she shot out of her kennel, gracefully sprinting through the snow without looking back. The students of McCall Donnelly Junior High had chosen her name and designed her radio collar. They would stay connected with this wolf by monitoring her wide roaming adventures through the Track-A-Wolf program. And, nearly 18 years later, I met one of those students who decided to pursue a doctorate in wildlife conservation, which was inspired by his experience following Akiata. The last wolf was named “Kelly”, her collar simply decorated by the students of St. Maries School in northern Idaho. After the wolves disappeared, we felt the gravity of what just happened. Wolves were back in Idaho after an absence of nearly a century. The Frank Church Wilderness was wild again and wolves would soon fill the forests with their ancient soulful songs. We cried, hugged each other, opened champagne and gave our toasts to the wolves.



Photo Credit: US Fish and Wildlife Service





Suzanne Stone. 1996. British Columbia Yellowstone/Idaho Wolf Reintroduction Transport Station. Photo Credit: US Fish and Wildlife Service



There were several more wolf releases over the next year, totaling a founding population of 35 wolves. That spring, wolf pups were born in Idaho's mountain regions; the first generation of hope of restoring ecosystem diversity for wildlife conservationists and scientists and the restoration of a lost cultural wildlife heritage for native people. Still opposed to the return of wolves, when Idaho's state legislature made it illegal for state wildlife managers to help with wolf management, the Nez Perce tribe stepped up to take the formal lead on the ground instead. Their wildlife scientists carefully monitored the wolf population for the next decade. And as with most voids in nature, over the next decade, the wolf population grew and expanded their range.

Today, wolf range continues to expand as wolves have returned to Oregon, Washington, and California. And what was once thought impossible – the coexistence of wolves and livestock on the same landscape – is not only feasible but also desired by conscientious consumers who selectively prefer wildlife-friendly agricultural products. These wildlife friendly ranchers and farmers are pioneers in their own right of nonlethal deterrent strategies that better protect livestock by reducing impacts to wildlife.

They are developing new tools like siren alarms and strobe lights and enhancing old ones like livestock guarding dogs and fencing to keep livestock safer from wolves and other wild predators.

One of the best examples is the Wood River Wolf Project in Idaho. In 2008, a handful of ranchers, environmentalists, and agency wildlife managers began a landmark demonstration project in central Idaho to test if nonlethal wolf and livestock management could effectively minimize losses of livestock to wolves. Field technicians worked with sheep herders to monitor wolves and pack denning activity and to reduce attractants like livestock carcasses while using nonlethal deterrents including increased human supervision, sound and light deterrents, multiple livestock guard dogs after denning season, portable fencing, and other methods to keep wolves away. Over the past eight years, this pilot project has evolved into a full grown collaborative partnership among large sheep operations, state and federal agencies, and academic institutions. It has expanded in size from a few hundred miles to 1000 square miles and is successfully protecting approximately 20,000 sheep during the grazing season from June through October losing only 30 sheep to wolves in total.



Photo: Oregon Department of Fish and Wildlife [LINK](#)  
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Photo credit: Oregon Department of Fish and Wildlife [LINK](#)  
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Photo credit: Dan Stahler, Yellowstone National Park

This is a far lower loss rate than adjacent sheep grazing areas where ranchers and government agencies rely more on killing wolves rather than proactively using nonlethal methods to prevent conflicts with livestock. These practical alternatives to killing wolves don't require more money, greater effort, or even difficult training to adopt. However, they do require a different frame of mind. If historically-held animosity toward wolves is based on threats to livestock production, then it just makes sense to proactively prevent these losses by working with nature rather than against it. Together, we are finding these nonlethal solutions that are cost effective and more sustainable over the long-term.

Since the wolf reintroductions in 1995 and 1996, I have tracked wolves, howled with them, mourned their losses, and celebrated their expansion to Oregon, Washington and California.

I still feel there is nothing more magical in nature than hearing a family of wolves' song echo through the forests. It is a sound that resonates to the core of my being. Along the way, I've worked beside ranchers, researchers, tribal leaders, biologists and other conservationists to help all of us learn how to coexist with wolves and other wildlife.

If we can bring back wolves, we can and should restore other native species that enrich the world's biodiversity. They deserve our best efforts to protect their future as our wild elders and have much still to teach us of our own connection to the earth.

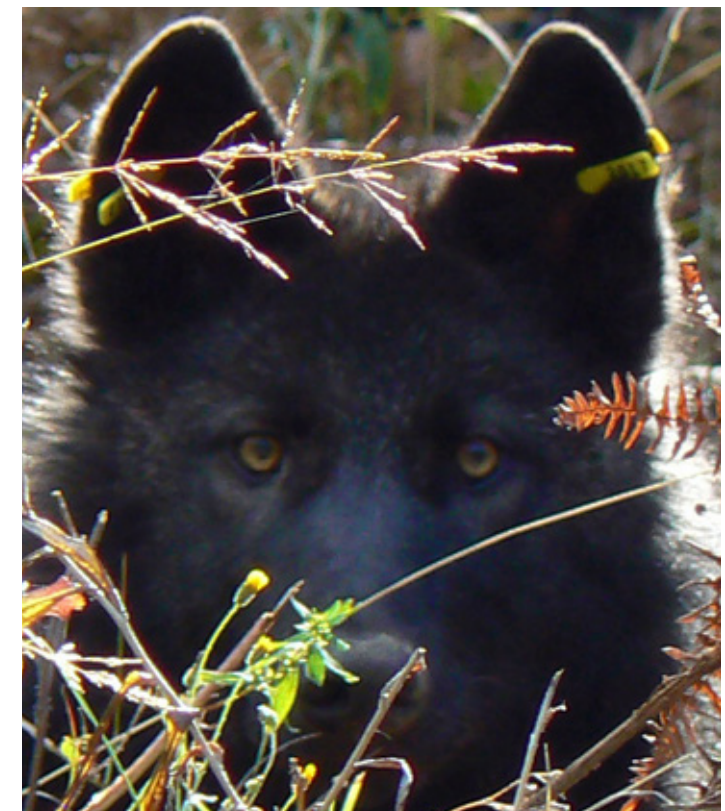


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“We need another and a wiser and perhaps a more mystical concept of animals. Remote from universal nature and living by complicated artifice, man in civilization surveys the creature through the glass of his knowledge and sees thereby a feather magnified and the whole image in distortion. We patronize them for their incompleteness, for their tragic fate for having taken form so far below ourselves. And therein do we err. For the animal shall not be measured by man. In a world older and more complete than ours, they move finished and complete, gifted with the extension of the senses we have lost or never attained, living by voices we shall never hear. They are not brethren, they are not underlings: they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendor and travail of the earth.”

— Henry Beston, *The Outermost House: A Year of Life On The Great Beach of Cape Cod*



L to R: Idaho Blaine County Commissioner Larry Schoen, Suzanne Stone and retired US Fish and Wildlife Idaho Wolf Recovery Coordinator Carter Niemeyer at Defenders' HQ in Washington DC.





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What is approaching from the future will create panic to the majority of the World, but there will be a chosen few that will welcome the purification. The chosen few will be the ones that are looking to the future with compassion and living a Spiritual way of life.

## A VISION FOR THE FUTURE

**ERNIE LAPOINTE**

**GREAT GRANDSON OF TATANKA IYOTAKE (SITTING BULL)  
WHO WAS A SUN DANCER, MEDICINE MAN  
AND CHIEF OF THE NON-TREATY LAKOTA**

I lived for 6 decades plus and approximately 4 decades I lived in the fast World of the Americans. In 1993, I started my journey back into the Ancient Sacred Life of the Lakota People. I started with participating in *Purification Ceremonies* (Commonly Known as Sweat Lodges) then I was called by the Ancient Spirits to participate in the Sacred Sun Dance. The protocol for the ceremonies began with a Purification Ceremony then a *Hanblechiya* (Crying through the Night for a Vision). I was troubled with how the American people lived. They lived for material, monetary gains and were egotistical, racist and were taking everything our true Mother, the Earth offered. They created a bubble and to fit into this bubble, a person has to give up their identity and natural gifts or talents. Their education systems are geared toward the past. They try to teach their children how to correct the mistakes of the past to create a better future, which is not the *Ancient Lakota* way. They are actually destroying the future for their children. The majority of the Americans are for Pro Life, but how are these future generations going to survive when they are destroying the air, water and food sources.

Our Mother Earth is crying out to those of us to try and save her very existence, but she is also a Mother and she does not want to harm her children, so her other children (The Elements) are showing the two legged ones that are hurting her with signs. The signs are extreme droughts in certain areas and extreme flooding in other areas and fires are burning the forests and also climate change. I was told through a ceremony that the Earth is going to shift from her axis. I sometimes feel as I am the only Human Being to recognize this. I do not have a religious person to tell me about who "god" is or what will happen to me if I don't fear him. I have a Sacred Pipe and with this pipe I can communicate with the Ancient Spirits and with Wakan Tanka (*The Great Mystery*). I was informed many times to not fear the Ancient Spirits or Wakan Tanka, because they are the future. I try to live my life as the Lakota people during the times of my Great-Grandfather Tatanka Iyotake (Sitting Bull).



Photograph courtesy Ernie LaPointe





These values are generosity, compassion, courage and visions for the future. I felt I had to explain who I am and my walk through this life, before I tell about my vision. Our Lakota way is shared orally and is not a written language, but through ceremonies, I was told the people cannot understand points in a story, because the American language is a backward language and one word or sentence can create misdirection and misunderstanding in storytelling, so I have to take the painstaking task of trying to translate my Native Lakota words into this backwards language.

My only hope is that the people reading my words will understand my points. The vision I was given was at Bear Butte in the Black Hills of South Dakota. My vision started right after the helpers set me in my *hochoka* (Alter). I started hearing people crying all around me and the crying was so mournful; I had tears flowing down my face. I started praying to *Wakan Tanka* why I am hearing this, but it just went on until dawn, then the helpers came for me. The helpers and I went into the Purification lodge and the Medicine Man asked me about my vision, so I told him about the men and women crying. The Spirit answered my vision, the Spirit said this is what is coming from the future, because the people are ignorant and haven't turned to face the future, but live for monetary and material wealth. I was told majority of the people think when what is approaching is emanate, they will just mention a man's name from their "good" book and they will be saved, but they will be in for a rude awakening, it will not happen.

These are the people who are crying I heard, the Spirit also said many of these will be from within my own immediate family. They will offer their money and material wealth for help, but these things do not have any value in the Spirit World. They have the chance to change their ways now, if they so desire, because the fate of the future is not set in stone, we can change the course, if the people of the World can act together. I was told to spread this vision to those that will give an ear, so at speaking events all over this country and many European countries, I share this, but it seems the people don't either understand or maybe they just don't care.

**Ernie LaPointe**

Black Hills, South Dakota, December 2015



My Great Grand Father, Tatanka Iyotake (Sitting Bull)





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## Dr Chong Shimray author of **Teaching Environmental Education: Trends and Practices in India** Published by **SAGE**

### An excerpt

As the world began to feel the need to take care of the environment, environmental education began to be talked about since the 1970s. However, it actually began to find some place in the curriculum much later, around 1980s. Environmental education could be as simple as simply talking about the environment or it could be as complex, complicated and controversial as making efforts to impact the affective domain of humans so that it would ultimately bring about attitudinal or behavioral change and take certain positive actions for the environment. Hence, it was necessary for the world to come out with a systematic approach to implement environmental education. To address this aspect, several conferences, workshops, meetings of experts, practitioners, civil societies and leaders of different countries led to the development of important documents wherein elaborate plans for its implementation were laid down. Strategies evolved and were given shape and so begun the systematic implementation of environmental education world over around 1980s though it was not without challenges and barriers.

This book is an attempt to put together all important topics concerning environmental education, especially in the context of formal school education—its evolution, its relevance, its presence in the curriculum, its transactions, its relation with education for sustainable development, its challenges in implementation and most importantly, how it can be implemented more effectively. A book, so comprehensive in its coverage, will be a handy companion for educators, practitioners, researchers, students and policy makers. Another important feature of this book is in adopting a balanced approach without imposing or advocating a particular viewpoint. Yet without taking a stand on environmental issues, one cannot initiate taking action. Hence, the author's overall point of view on environmental education is presented in the Afterword. However, some chapters have been written for targeted audience in the context of India.

The diversity of natural systems that is seen in a vast country like India, the vulnerability of habitats of different living organisms due to environmental problems, the exploitation and degradation of natural resources, etc. requires environmental education not as an option but as a necessity, and hence special emphasis given in the book concerning to its trends and practices and how ways for its successful implementation in India. In fact, the Hon'ble Supreme Court of India had to intervene and make studies related to the environment compulsory in all stages of education throughout the country. The details leading to this intervention is elaborated in the book.

The book comprehensively discusses about the relevance of environmental education in the present day. While lauding the role of technology in our daily lives and the comforts it has brought to us, the book also gives a caution to its readers that technology is not the ultimate solution to the problems facing the world since use of technology will bring with it another set of issues to be resolved. To drive home this point, the book cites simple illustrations, such as the production of polybags.

As we know, the technology that brought about the production of polybags was hailed as a landmark solution to human need but only to label it as a "bane" a few decades later, and scientists even today are still trying to find ways for its degradation. The ills of greed and its impact on the environment and the dire need for responsible consumerism have also found place in the book. It also features the importance of ethics, values, equity and justice in environmental discourses which is not anthropocentric but for all living organisms. As the book discusses human-nature relationship, it highlights the need for humans to nurture nature because nature can do without humans but humans cannot do without nature.



The book features the possible ways of approaching environmental education in the curriculum. Since the implementation of environmental education, attempts have been made to associate environmental education with science subject alone, and with geography to some extent. The book justifies why environmental education cannot be left to be the sole responsibility of teachers teaching “traditional” environmental education subjects such as science and geography, as has been the practice. It goes on to explain that environmental education is interdisciplinary in nature and inputs from all disciplines will be essentially required for its successful implementation.

Environmental education attempts to address the following aspects—to create awareness, to impart knowledge, to bring about positive attitude, to nurture skills and to provide opportunities for participation to tackle environmental problems. Professionals have debated over decades about the best approach to incorporate environmental education in the curriculum and the debate continues. The book features the possible ways of approaching environmental education in the curriculum. Since the implementation of environmental education, attempts have been made to associate environmental education with science subject alone, and with geography to some extent. The book justifies why environmental education cannot be left to be the sole responsibility of teachers teaching “traditional” environmental education subjects such as science and geography, as has been the practice. It goes on to explain that environmental education is interdisciplinary in nature and inputs from all disciplines will be essentially required for its successful implementation. Environmental protection and conservation is about “doing” and not simply about “knowing”. Emphasis, so far, in the curriculum has been laid on the “knowing” part and the “doing” part has not received as much attention as it would have been expected to show some successful results. However, “doing” is not as simple as it sounds, but requires attitudinal and behavioral change in a person to let the “doing” happen. Professionals, educators, and practitioners have struggled to come out with a curriculum which can best address this aspect. The book explains the complexities that could arise as one attempts to bring about attitudinal or behavioral change in a person, and at the same time providing plausible factors that can be taken into consideration while attempting to address attitudinal or behavioral aspects. It is complicated, yet it is not impossible.

An important aspect in the successful implementation of environmental education is having the right policy and the right school and teacher education curriculum and trained teachers to meaningfully transact the contents. The lacunae that exist in these areas have been pointed out in the book and the possible solutions have also been highlighted especially in the context of India. Only concerted efforts of different stakeholders such as the different departments of the central governments, state governments, school and teacher education institutions, examining bodies, higher education institutes, non-governmental organizations, etc. will help us achieve the objectives of environmental education. The roles, functions and contributions of such bodies in India have also been discussed in the book. For the benefit of policy makers, implementers, researchers, etc. a road map for successful implementation of environmental education in India has also been provided. This will provide a useful guide to take environmental education forward in the country.

Though environment features more increasingly in all discussions and debates world over, the space and time set aside for environmental education is gradually decreasing in the daily class routine and hence the value of the contribution and commitment of individual teacher or teacher educator towards environmental education. The book concludes with a view that only individual commitment and conscience will ultimately play its part to innovate ways to “environmentalize” the classroom transactions.

Sustainable development has been around for quite some time now. With its popularity world over, the emphasis given to environmental education is dying down. In fact, the focus of the world is shifting from environmental education to Education for Sustainable Development (ESD) since late 1990s and more increasingly since the beginning of the 21st century. This trend is observed because it is assumed that environmental education focuses only on the protection of environment and cares little about the social and economic aspects of the issues.

This, however, is not exactly true since all the founding documents of environmental education discusses about holistic approach in addressing environmental issues. The book not only clarifies such misconception but also brings out the gaps and the lack of clarity existing in the concept of ESD. ESD has been seen to be used haphazardly to include population education, human rights education, peace education, sustainable consumption education, water education, gender education, etc. which in effect, are considered to be sustainable development related education which is different from ESD. This suggests that it is not so much about introducing environmental education or ESD since limitations could be listed in both. The book, therefore advocates that, if done right, both environmental education and ESD can address environmental issues, which have ramifications in the social and economic aspects as well. The book also raises concern regarding the possible negative impacts on environmental justice (here, nature) with the introduction of ESD. Apprehensions about biased decisions in the name of development that are purely anthropocentric with little concern for the environment is another concern mentioned in the book.

To conclude, the Afterword argues about the disturbing trend being seen globally to replace environmental education with climate change education. It also emphasizes the significance of individual attitude in tackling environmental problems. It opines that no matter what decision is taken at the intergovernmental level, nothing much will change unless each one of us will change our attitude towards the environment. Though environment features more increasingly in all discussions and debates world over, the space and time set aside for environmental education is gradually decreasing in the daily class routine and hence the value of the contribution and commitment of individual teacher or teacher educator towards environmental education. The book concludes with a view that only individual commitment and conscience will ultimately play its part to innovate ways to “environmentalize” the classroom transactions.





Khare is an award winning author of twenty one volumes of non-fiction, fiction, translation and poetry. Executive Editor of Heritage India, the International Culture Journal, a Director of The Rewachand Bhojwani Academy and Visiting Professor to the Dept Of English, Pune University. Recently he was given The Residency Award by The Sahitya Akademi (India's National Academy of Letters) for his contribution to Indian Literature and the Human Rights Award for his efforts to preserve and celebrate marginal and minority cultures. Founding Contributor of Live Encounters Magazine (2010). [www.randhirkhare.in](http://www.randhirkhare.in)

## THE DANGS SACRED GREEN

Every forest in the Indian sub-continent has its own special personality – Shivpuri with its multiple rhythms of tree cover, grassland and water bodies, Bharatpur with its mirroring jheels, Mudhumalai with its dense green and brown, the Sundarbans with its dramatic mangrove world...and others too, the variety is awe-inspiring. However, there is a lesser known, yet equally spectacular, natuescape flourishing in the South of Gujarat - the forests of The Dangs – which offer an unforgettable experience that the patient and strong-hearted can savour if they are willing to put themselves through the power of the encounter. This is because one is faced with an energetic ebullience that verges on the challenging when one enters these forests.

Despite the fact that human habitations have their places and spaces within this world and the familiar security of homesteads reassures the visitor, nature here displays her own wildness. In season, the roar of the rivers echoes through the wooded hills, pathways become streams, the green darkness is alive with mysterious creepers, flowers and fruits...bamboo groves and thickets release a horde of insects and reptiles and the very air is laden with presentiment.

These forests are the way they are because of the geographical location of the area, the geological make up, the soil and climatic conditions. One end of The Dangs falls from the range of the Sahyadris, in the east, towards the plains of Gujarat in the west. From rugged mountains, the land slopes towards low plateaus before it finally sinks to the plains, carrying river waters of the Khapri, Purna, Ambika and their tributaries seawards. This land is covered by lava flow from the Deccan, cooled over the ages. The traps are Plateau Basalt - dark grey, on the verge of green ... some hard, compact and others soft and crumbly. In the valleys and lowlands there's black cotton soil that is rich, ranging from a clay-like to a loam-like texture if one holds a piece between the fingers. It is very fertile and has a lot of alumina, lime and magnesia with varying amounts of low nitrogen and phosphorus. And, in the uplands, there's red soil that is light, porous and moderately fertile. But then, the divisions don't stand so firm. Because of the undulating surface of the land, varying composition of parent rock and the extent of erosion, there is often a mixture of both red and black soils, making it possible for an incredible variety of trees and shrubs to be neighbours.

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Contemporary (Tiger God) Vaghdev in stoneTotems

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Contemporary (Tiger God) Vaghdev in stone Totems

Summer stretches from March to the middle of June and then the monsoons take over, watering the land till late October. The months that follow bring in a mild winter.

There are two forest types here - south Indian moist deciduous forests and southern dry deciduous forests. The main feature of the moist deciduous forests is a leafless period in the dry season. The Dangs forests start becoming leafless from winter, the moment the climate becomes dry, the upper canopy of the forests becomes leafless whilst down below them there is a reasonably good spread of evergreen trees in underwood and shrub cover. Quite a number of the moist deciduous trees sprout new leaves long before the monsoons - as if it's an invitation to the coming rains. Teak is almost evergreen in these parts.

On the other hand, the dry deciduous forests in Dangs have a lower canopy which is made up of deciduous cover with a faint sprinkle of evergreen trees where it is sheltered and moist. There're few creepers in this sort of cover and the bamboo is sparse, dry and spiny. These two categories of forest have as many as eight types - very moist teak forests, moist teak forests, slightly moist teak forests, southern moist mixed deciduous forests, dry teak forests, dry mixed deciduous forests, dry bamboo clumps and dry tropical forests. But the nature of the forest being richly gregarious, these types don't exist like islands but are intermingled and in close proximity with one another.



The larger trees include Teak (*Tectona Grandis*), Sadad (*Terminalia Tomentosa*), Haldu (*Adina Cordifolia*), Kalam (*Mitragyna Parviflora*), Modad (*Lannea Coromandelica*), Kakad (*Garuga Pinnata*), Bahedo (*Terminalia Belerica*), Bondaro (*Lagerstroemia Parviflora*), Sisam (*Dalbergia Latifolia*), Tiwas (*Ougeinia Ogenensis*), Khair (*Acacia Catechu*) and a wealth of others whilst the trees growing beneath their canopies are the Ambado (*Spondias Pinnata*), Kumbhio (*Careya Arborea*), Kusum (*Schleicera Oleosa*), Kudi (*Wrightia Tinctoria*), Timru (*Diospyros Melanoxylon*), Amla (*Emblica Officianlis*), Asitra (*Buhinia Recemosa*), Aledi (*Morinda Tinctoria*), Garmalo (*Cassia Fistula*) and many more.

The undergrowth is made up of the Antedi or Murdasing (*Helicteres Isora*), Karvi (*Carvia Callosa*), Dhayati (*Woodfordia Fruticosa*), Karvand (*Carissa Carandas*), Nigodi (*Vitex Negundo*), Ukshi (*Calycopteris Floribunda*) and others and the ground cover includes Pular (*Leea Aspera*), Fulari (*Leucas Biflora*), Sevra (*Asystasia Coromandeliana*), Sonero or Zinzudo (*Achyranthes Aspera*), to name a few. The climbers are Vela Bivla (*Millettia Racemosa*), Palasvel (*Butea Superba*), Nandanvel or Panivel (*Vitis Repanda*), Kangvel (*Ventilago Denticulata*), Medhvel (*Cryptolepis Buchanani*), Vaghatvel (*Wagatea Spicata*), Gharvel (*Tinospora Cordifolia*) and a host of others.

There are several types of grasses. Among them are Polada (*Spodiopogon Rhizophorous*), Tokar-bund (*Panicum Monatanum*), Bhatado (*Themeda Ciliata*), Dabor Dhruvo (*Cynodon Dactylon*), Sukli or Kasur (*Hetropogon Contortus*) and Rosha (*Cymbopogon Martinii*). Many of the trees, shrubs, smaller plants and climbers have know medicinal properties.

Although two dozen mammals have been spotted in the past, a visitor may encounter Wild Boar (*Sus Cristatus*), Hyaena (*Hyaena Hyaena*), Ruddy Mongoose (*Herpestes Smithii*), Hare (*Lepus Ruficaudatus Geoff*), Jackal (*Canis Aureus*), Spotted Deer or Chital (*Axis Axis*), Honey Badger (*Melivora Capensis*), Jungle Cat (*Felis Chaus*), Common Palm Civet (*Paradoxurus Hermaphroditus*), Indian Grey Mongoose (*Herpestes Edwardsi*), Four Horned Antelope (*Tetraceros Quadricornis*), Barking Deer (*Muntiacus Muntjak*) and Rhesus Macaque (*Macaca Mulatta*). The Tiger (*Panthera Tigris*) is rare in these parts and the Leopard *Panthera Pardus*) is elusive. Among the reptiles are the Common Garden Lizard, Common Monitor Lizard, Common Wolf Snake, Trinket Snake, Rat Snake, Common Krait, Indian Spectacled Cobra, Russells Viper and Vine Snake

Birds, unlike mammals and reptiles, are relatively more visible. Apart from the common ones like Crows, Sparrows, Bulbuls (Red Vented, Red Whiskered, White Cheeked), Mynas ( Indian Myna, Pied Myna, Jungle Myna, Bank Myna and Brahminy Myna), Cattle Egrets and Pond Herons, there are a number of smaller birds like Wire-tailed Swallows, Spotted Munias, Small Green Bee-eaters, Weaver birds, White eyes, Tailor Birds and Purple Sunbirds. There were four types of doves too (Emerald Dove, Ring Dove, Red Turtle Dove and Spotted Dove), two types of Kingfishers (White Breasted and Pied), two types of Jungle Fowl (red and grey) and Grey Partridge. Apart from these one may see the Ashy Wren Warbler, a number of types of hawks, kites and eagles, Blossom Headed Parakeet, Black-headed Oriole, Black Drongo, Black Ibis, Common Peafowl, Common Hawk Cuckoo, Curlew, Crow Pheasant, Cormorant, Indian roller, Golden Backed Woodpecker, Indian tree pie, Jungle Crow, Magpie Robin, Hoopoe, Red Wattled Lapwing and Spotted Owlet (apart from other owls).

Many have a doomsday view of the forests of the Dangs. They believe that the forest cover has been pillaged and reduced to a withered mass by human habitation. Some even go as far as saying that there is little or no wild life remaining. Though part of what they say may be true, a large chunk of it is an overstatement because Nature here has a way of preserving herself. If you visit the Dangs and exercise patience enough and observe forest etiquette, you'll discover that there is a wealth of life in there. Birds, mammals, reptiles and other moving beings have a unique way of 'falling silent' and becoming almost 'invisible' when humans are passing through. When they don't feel threatened, they reveal themselves.



To illustrate this, let's spend a day in the Mahal area of the Dangs where most people say little or no wild life exists.

Imagine you are there...silent and respectful.

Standing beside the trickling stream which runs along the side of the jungle road, you watch sunlight drip through fissures in the green roof. Drop by drop silent sunlight falls on red and brown spears of bamboo leaves till it almost seems that the hulls of the curled leaves cannot contain them any more and overflow, pouring light on to the damp earth. The warmth brings beetles, bugs and insects of different colours, shapes and sizes out of their hiding places. Puffs of tiny yellow butterflies spring up from the foliage and spread out.

You sit down on the trunk of a fallen tree, waiting in anticipation for the performance to begin.

"Woop, woop, woop," calls a crow pheasant from the thicket.

It is like a signal.

A green barbet seems to return the call in translation, then a Magpie Robin joins in. Jungle Babblers fly noisily from one bush to another. A Grey Jungle Fowl flaps across the road from behind you. He isn't flying, but running and flapping his wings. If he really considers you dangerous he'd take off. But he hasn't. He is still on his feet. And then a Barking Deer shoots out into the open patch across the road. Stops dead in his tracks and trots off into the half-lit interiors of the grove.

The play has begun.

You get up and walk across the road, then stepped down along the slope that eased off into the jungle of bamboo. The Barking Deer is ahead of you. You can hear him moving over the carpet of leaves, somewhere ahead. Then there is a gentle splashing. He is walking across a stream. Stepping along inside a passageway of bamboo, fragrant with fresh shoots, you follow the retreating sound.

Fording the stream, the climb becomes steep. At the top of the ridge the thicket begins again but thins out into a wide open grassy field that falls rapidly into bamboo groves that run along the banks of the Purna river. You know the animal will be hovering around near the rim of the field, so that it could make a quick getaway when danger threatens. Yes, that's exactly what he does. But then his curiosity gets the better of him and he trots out into the field. You get a good look at him in the sunlight which is growing increasingly brighter. His shoulder must be about two and a half feet off the ground. A beautiful chestnut brown coat, small antlers. He stands there surveying the scene around him ... then he bends down and starts pulling at the grass. There is a short dog-like bark, a warning call from another Barking Deer, from the jungle beyond and he stops chomping grass, raises his head, looks over his shoulder away from you then bursts into a run- straight in your direction. You duck as he comes your way – leaping clean over you and vanishing into the grove behind.

This is typical Barking Deer country - densely forested hills which offer open patches for them to feed in. It is also an ideal spot for the Jungle Cat which is just about three feet long, nose tip to tail tip. Like a largish domestic cat, sandy yellowish - with a grey cast. A graceful tail, ringed black and green eyes. Hardly has the thought crossed your mind when you nearly step on one of them hidden there amongst the tall grass. He sits crouched, looking up at you - then in a single leap bursts into the air almost past your face and lands a little ahead. It seems that you have chosen the wrong time to set out into the jungles of Mahal. The creatures are still feeding so you decide to stop and wait till the sun is higher. You climb up on to a low hillock, near a clump of bamboo and settle down. Riding the air, over the field, a Golden-backed Woodpecker with his stubby wings bobs into the jungle.



Roots of an ancient banyan tree

A Bhil infant asleep in a hammock

The sunlight loses its golden tint and a noisy party of Baya Birds come out, spreading themselves across the grassy field, swinging on the slim ends of grass blades till they touch the damp earth - then flying off, let them spring back again. Bright yellow blobs of colour on their heads, flash in the light. ... "chit-chit-chit" they call. Spotted Munias join them.

Three Chitals come out into the open, stand close together in the middle of the field and then swiftly glide through the grass and into a narrow passageway that is wedged between two groves on the other side of the field.

It is an interesting experience, lying quietly in a shady spot in Mahal, listening to the throb of life around. Initially, more obvious sounds pervade the air ... the wind, the call of birds, an occasional barking deer ... but as you relax, smaller sounds, quieter sounds, emerge. The sound of flipping blades of grass as Munias and Bayas collect nest-building material, the sound of Red Turtle Dove wings rising in flight, fine bamboo stems gently rubbing against each other to produce musical notes.





‘I heal them with herbs and roots and seeds and leaves and bark from the forest. This is possible because of the great power of The Dangs. The green spirits around me are the real healers. That’s why we honour them with shrines everywhere. They protect our forest...and if we don’t honour them, it means that we don’t value our forest anymore.’

**-Janubhai**

Kunbi shaman and healer



Late afternoon. Time for you to start moving towards the river. When you walk out into the field, there is a flurry of activity as birds retreat to safety. Silence again. There is enough water in the river bed to attract birds. You spot a couple of cormorants sunning themselves on rocks. Pond Herons poised near the water side, wait to strike at passing water creatures. A Black Winged Kite is perched high up on a bare branch and a few stray stilts dot the sandy strips.

It is a long walk and for some time the only sound you can hear is the soft lapping and grinding of the river. Outside the gateway of bamboo arches where the road vanishes into the jungle, you stop and sit down on a cluster of rocks. Given half a chance, you would like to sleep out in the open. But tonight, you aren’t ready for it. You need a soft bed with a fan whirring overhead, the comforting feel of two large cotton pillows, a thin sheet - and a good deep sleep.

As the forests of the world are rapidly vanishing, The Dangs survives and flourishes. This is because people from traditional communities who inhabit the region consider it to be the home of their numerous deities. Individual trees and often entire are sacred and treated with respect.

The Bhils were said to be among the earliest inhabitants. Driven by the Rajputs and Moghuls down south from their homelands around southern Rajasthan, many of them made the hilly forests of The Dangs their home. They protected their new home with their lives, fending off invading armies with their power long bows and guerrilla tactics. Even in early colonial times, The Dangs was considered ‘foreign territory’.

The British forces finally managed to enter the region by drawing up a pact with the Bhil Rajas, promising them an annual gift in exchange for precious wood from the forest. Not fully comprehending the implications of the deal, they agreed. And so, the invading forces managed to get a foothold and start pillaging the forests, carrying away valuable timber. Realising their mistake, the Bhils reacted.

The beginning of the nineteenth century found the Bhil Rajas and Naiks causing considerable turbulence in the regions surrounding the Dangs.

By 1825, they had even captured the fort of Mulher and defeated the Gaikwads’ ten thousand strong army. The East India Company formed the Bhil Corps to fight back the ‘plunderers’, but with little effect. Although the Company managed to get most of the jungle area of the Dangs on lease in 1842, they still could not stem the force of the people. By the time the war of 1857 broke out, the Bhils were pretty near breaking the spirit of the Company when major offensives were unleashed and they were virtually crushed.

But it didn’t end there.

**A three-fold programme of repression was pursued...“shoot wild pigs, tigers and Bhils.” The leased area was notified in 1879 as a reserved forest. under the Indian Forest Act. This prohibited cultivation in specified areas. The Rajas reacted. They were certain it was a step towards depriving them of their forest home. So, they went out into the forest and began to fell trees and forcibly cultivate land....**

The fuse had been lit again and the turbulence continued till 1907 when droves of discontented people, led by Rajas and Naiks, moved into Ahwa. Since news had reached the local residents in advance they hurriedly fled the place, leaving their homes and property to the mercy of the advancing gangs.

The success of the attack was broken when the Raja of Gadvi, fearing severe punishment, switched sides and the situation was brought under control. But the festering continued until 1911 when there was another revolt. The Bhils felt that the strict enforcement of the provisions of the Indian Forest Act was unbearable and unacceptable. The revolt spread from the north-east down to the southeast.

According to G.E. Marjoribanks, assistant political agent of the Dangs, “The Bhils in the locality around Kadmal were in an offensive mood and were setting the forest rules at defiance and likely to subject the officials to violence; that other Bhils of Mohanamal had robbed the Singana liquor shopkeeper at midnight after threatening him, had paid half the price and told him that the Bhils were now sole authority in the Dangs.”



**Memorial plaque of a family elder**

**Text & Pics © Randhir Khare**

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The first week of December 1914...

The Naik of Pimpri drew in the joint forces of the Rajas of Gadvi, Amala and other lesser chiefs. They were supported by the Rajas of Wasurna and Derbhavati.

Hundreds of Bhil guerrillas gathered in groups all over the Dangs and set the forests on fire. They intimidated anyone who tried to stop them. It took a long time for the trees to actually catch fire. There was winter dampness in the air and soil and wood. Strong winds beat flames into smoke. But along the southern slopes and exposed plateau areas, the trees burnt to cinders. Twenty-six square miles of land was laid waste.

Marjoribanks marched to Ahwa with joined forces from Surat, Broach and Khandesh, snuffing out the uprising. The Naik of Pimpri was imprisoned for six months and the Raja of Gadvi surrendered, handing over all the weapons he possessed. As for the Raja of Amala, he knew the jungles of the Dangs better than Marjoribanks, slipping out of the net on several occasions until the agent just gave up the chase.

Had anything really changed since then? At the beginning of the twentieth century the Bhils of the Dangs fought against outsiders who were preventing them from living freely within their own jungles. Their rights over the land had been challenged; their survival was at stake.

Post Independence, the situation hardly changed and the rights of indigenous people of The Dangs continued to be neglected. In the 1990s, the unrest increased and the Bhils particularly actively took part in hitting back at the Forest Department in region. 'Everywhere there was talk of freedom,' Jankiben, a Bhil, once told me, 'we were going to be our own masters.'

My husband never used to drink so much then. He was very strong and his mind was always awake. Day and night he moved with the other men in the jungle. Defending our land. I too went into the forest many times, side by side with my husband.

**'We stoned forest guards, threw lighted torches at their jeeps. Chased them into the jungle. I slapped one guard myself. I tore his clothes. I, Jankiben. I did it. I was proud**

**to do it because I am a Bhil. At home, we had no weapons so we carried knives, axes and thick bamboo poles. Some of the men had guns. But they were too frightened to fire them. But we didn't think anyone would die.**

**'They shot Taraben in Kosimada. I saw her body, sahib. And when I saw her I knew that it was all over. Freedom? Independence? Bah! Nothing.'**

**'But they say that the Peoples War Group, misled you all....'**

**'That's not true. That was only one thing.... It will happen again. Maybe. I hope it does.'**

The night was crowded with crickets and the rain had begun again. It fell on the tiled roof matted with vines of creepers, on shrubbery in the courtyard, on the battered and pitted track outside the gate, on the fields, the forests, the hills...the rain had begun again, growing from the gentle tap of fingers to the beating of a riot cane.

**'Do you think it will happen again, sahib?'**

**'Maybe it will.'**

The rain stopped suddenly. There was no breeze.

Like a camera flash, freezing that single moment so that I'd never forget it. I never have. Lying there on the veranda, on a mat spread over cow dunged flooring, I looked out into the night.

A decade and a half has passed since that meeting with Jankiben and I have returned to The Dangs innumerable times. The Forest Department is doing its utmost now to try and dissolve differences and become more respectful of the views and rights of the indigenous people.

And the forest survives and flourishes.

Not just because of the efforts of the Forest Department but more because of the indigenous people themselves and the sacred green that they have preserved.

Their relationship with the forest has inspired others too and today we find people from other faiths and beliefs also treating The Dangs with respect.

My friend, Janubhai, a Kunbi shaman and healer who lives in the village of Dhavalidod, actually runs a 'clinic' where he treats people (irrespective of who they are). In fact his patients include those coming from far away places in the sub-continent.

**'I heal them with herbs and roots and seeds and leaves and bark from the forest. This is possible because of the great power of The Dangs. The green spirits around me are the real healers. That's why we honour them with shrines everywhere. They protect our forest...and if we don't honour them, it means that we don't value our forest anymore.'**



Below : The writer with friends from the Dangs. Beside him, wearing a white topi is Janu Kaka, the bhagat of Dhavalidod.



Text & Pics © Randhir Khare



Tony Bartram, a former teacher / principal retired to devote his life to protecting the marine environment and particularly Cetaceans, around Kangaroo Island and Victor Harbor, South Australia. As well as coordinating the award winning Kangaroo Island / Victor Harbor Dolphin Watch project for 10 1/2 years, he worked as a project officer for Whale and Dolphin Conservation. He has made presentations to a number of international conferences including ICMPA, WEEC, IPMEN, Australia Citizen Science Conference, Australian Marine Mammals Symposium and various stakeholder groups nationally.

[www.facebook.com/KangarooIsland/VictorHarborDolphinWatch](https://www.facebook.com/KangarooIsland/VictorHarborDolphinWatch)  
[www.kangarooislanddolphinwatch.com.au](http://www.kangarooislanddolphinwatch.com.au)  
[www.youtube.com/watch?v=anzmDpk4Nvs](https://www.youtube.com/watch?v=anzmDpk4Nvs) "Kangaroo Island / Victor Harbor Dolphin Watch - 10 Years"



## Masumi's Story – Agents of Change

Tony Bartram

An excerpt from a forthcoming book *What IS it about dolphins?* by Phyll and Tony Bartram



Jubilation 2011 Tony Bartram

One of the hardest things to know when you are involved in any form of broad scale education or awareness raising campaign is whether you are succeeding. Are you having an impact? Is your message getting through, and if so, will it be maintained? Will your passion translate into another's behavioural change? I offer Masumi's story for all who are continually beleaguered by such questions.

Masumi was part of a group of Japanese University students undertaking a UNESCO sponsored programme about sustainability of resources, including biodiversity conservation. In 2012 the group from a top Tokyo University participated in one of our Kangaroo Island / Victor Harbor Dolphin Watch field research surveys, collecting data using photographic identification techniques from on board our ecotourism partner Kangaroo Island Marine Adventures. They all thoroughly enjoyed their encounter with 16 Bottlenose dolphins off North Cape, as was clearly evident from the groups' excited chatter and squeals of delight. For such shy reserved young women to show such emotion was truly heartwarming, but it was at a Dolphin Watch powerpoint presentation following the survey that the impact became obvious.

After finishing the talk Masumi approached my wife Phyll and myself and in halting English explained:

*"I live in Kobe. In Kobe there are many aquariums where they have dolphins. I have visited them many times because I love to see the dolphins. I will never go to the aquariums again because now I have seen the dolphins for real...."*

and raising a hand and touching her heart...

*"and they make me feel."*

Strangely at no time had we spoken about or even touched on the subject of dolphins in captivity in our discussions or presentation to the students.



## MASUMI'S STORY



Survey crew 2012 Phyll Bartram

Remarkably she had gleaned this message from another source. Having provided a simple opportunity for a productive interface between Masumi and another mammal, true behavioural change had been effected, for at least one person, and we suspect, many more.

It made our Dolphin Watch mantra *“Changing one heart, one mind at a time”* all the more relevant and meaningful.

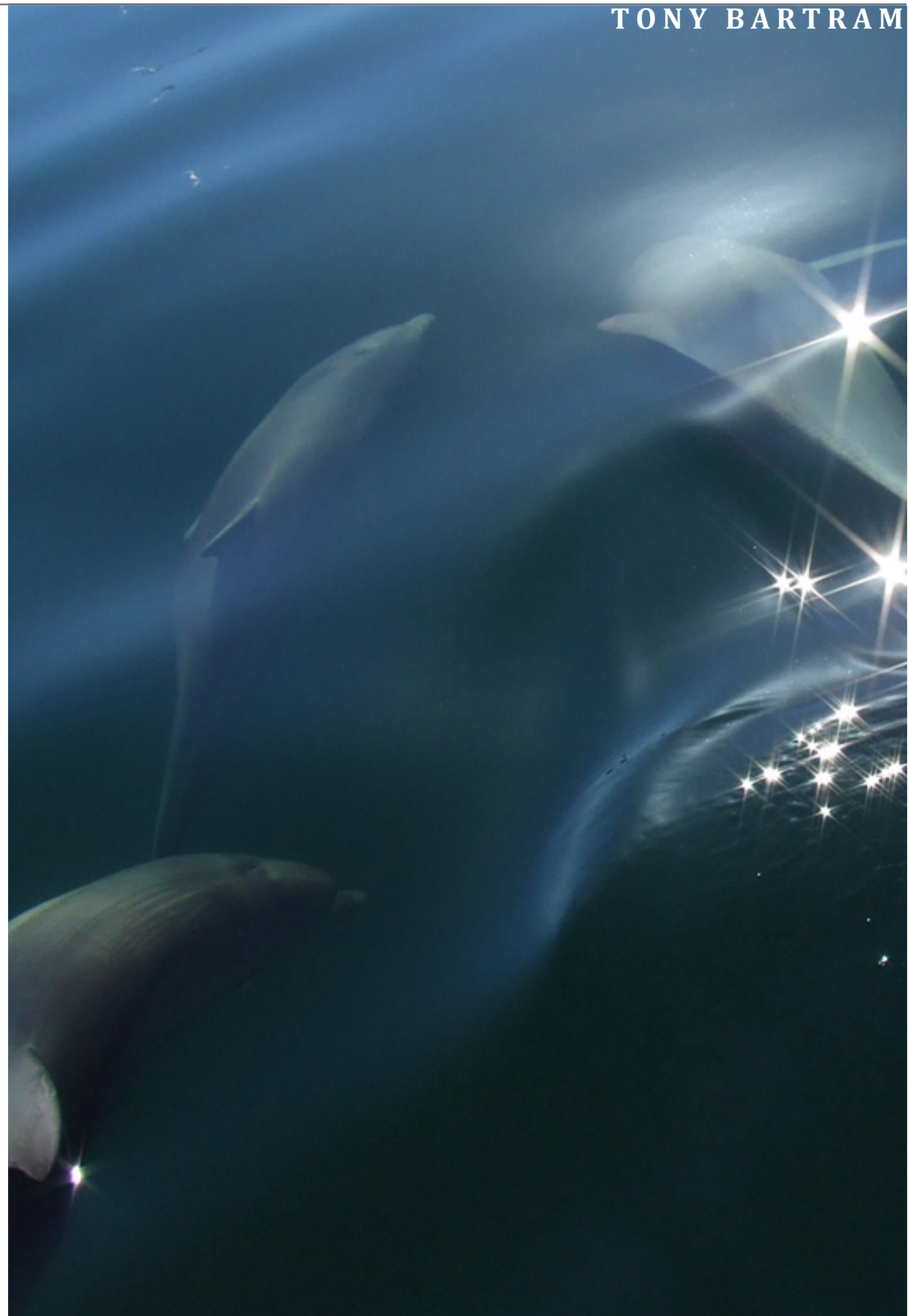
Masumi was not alone in expressing her change in fundamental attitude as we saw tears flow freely at the realisation that the marine animals they had enjoyed so much and connected with earlier, were like them - mammals. It was the oldest student, Sachiyo, who was working on her PhD who expressed it best:

*“We did not know these were mammals. In our country we are told they are part of our fishery....”*

So simply put, this underpins much of the issues related to dolphin and whale welfare which sees Japan at odds with much of the world. Japanese youth may in time be the catalysts of beneficial change.

One can only hope!

## TONY BARTRAM



Jolly 2007 Phyll Bartram





## VAN DHAN YOJANA - A GAME CHANGER FOR FOREST INDIA

A few months ago the Rajasthan Government led by Chief Minister Vasundhara Raje approved a new scheme THE VAN DHAN YOJANA. Van Dhan means forest wealth and is a strategy to involve local communities into the process of enhancing the wealth of the forest. I was lucky to create this scheme, work on it and then present the detail of it to the chief minister of Rajasthan, which is a state in northern India. I chose two people from government to work with. My colleagues were Giriraj Singh Kushwaha of the Indian Administrative Service [IAS] and GV Reddy of the Indian Forest Service [IFS] both of whom I had known for years and respected greatly. Three of us worked hard for two months across Rajasthan to flesh out the detail. As we finished our work we presented our plan to the entire government machinery of the state of Rajasthan. It got quickly approved. Within days of its approval the Maharashtra Government [another state in India] replicated the idea announcing the Shyama Prasad Mukherji Van Jan Yojana. It took 6 days for this to happen. Sometimes the speed at which state governments can work is startling. A new idea was born and for the betterment of both people and wildlife.

Van Dhan Yojana is a green mission that is flexible, site specific, holistic and helps in reducing the dependency of people on wildlife rich areas. People centred conservation outside our national parks and sanctuaries is a win-win situation to benefit people as well as wildlife. Van Dhan Yojana creates livelihoods for forest protection. Van Dhan Yojana works with people for wildlife. Van Dhan Yojana creates a foundation for ecological security. At its core it is about conflict resolution outside our best wildlife rich areas.

Van Dhan Yojana through “green” skill development and special training centres encourages employment and income generation in forest friendly activities and businesses and creates a green economic zone in the immediate area around our protected areas to boost local economies. We have so many skill development centres coming up that around our best forests they need to be redirected and focused on conservation skills. Tourism and the creation of both conservancies with local people and non-governmental wildlife refuges will be a part of the process to boost the site specific economy. This is a vital area for growth and generation of income for local communities and needs to be prioritized so that wildlife tourism plays a genuine role in conservation as it does through most of Africa.

*Van Dhan* means forest wealth and is a strategy to involve local communities into the process of enhancing the wealth of the forest. His latest book titled *Saving Wild India - A Blueprint For Change* is available on [www.amazon.in](http://www.amazon.in)

Photograph of tiger/Aditya Dicky Singh. Courtesy Valmik Thapar.



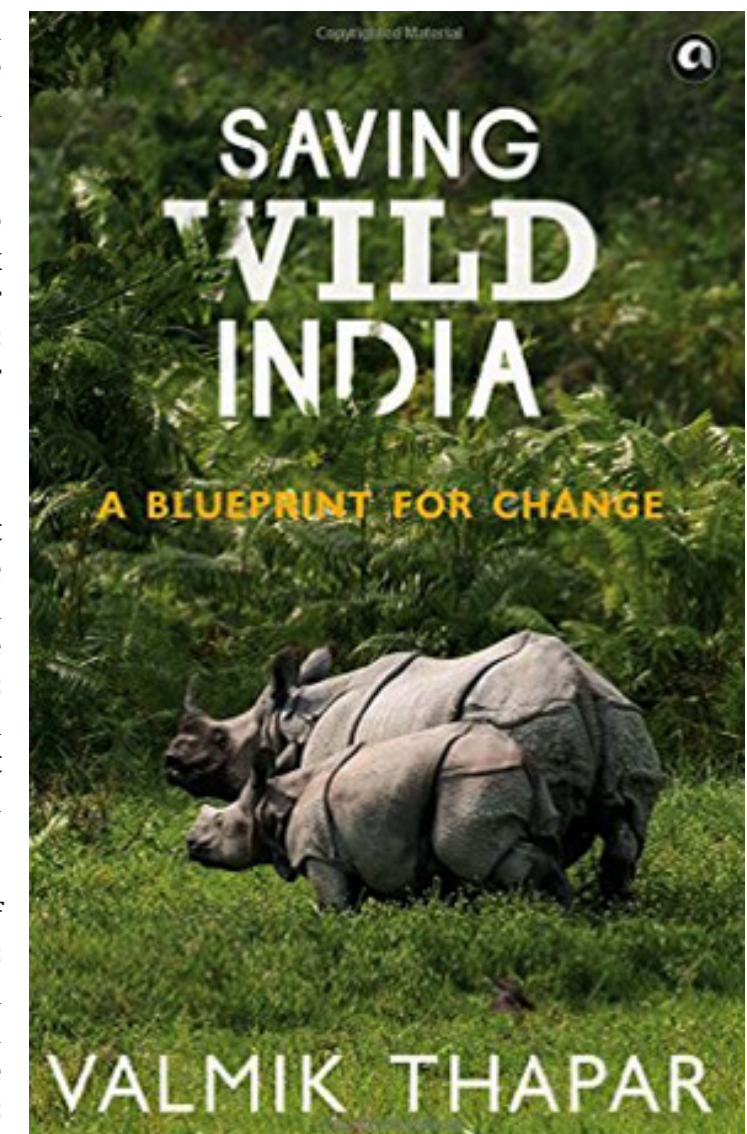
Valmik Thapar - Wildlife Conservationist, Naturalist, Author

For the first time India desperately needs both locals and other private players to enter the fray of managing our wilderness in new and innovative ways.

Conflict resolution is essential for effective conservation and Van Dhan will offer quick livestock and crop compensation and other grievance redressal measures when animals like tigers and leopards attack animals or when crops get devoured by wild animals.

Van Dhan Yojana is the convergence of all prevalent schemes in different government departments both of the central and state governments towards a green mission and modifies existing schemes to dovetail into the objective of protecting our best forest areas with the participation of local people. India has created hundreds of schemes in the last 68 years since independence. Most of them have been severely neglected.

Van Dhan recharges them and takes the best of all of them to strategically benefit both forests and wildlife. It is the ecological way forward to develop rural areas with a green mission in mind. There are scores of central and state government projects with approved budgets that are implemented in each district.







Forest/Mark Ulyseas



Forest/Mark Ulyseas

Van Dhan uses available money of all these schemes refocusing and redirecting them in a specified radius around our National Parks and Sanctuaries. To mention a few-forest programmes of social forestry and afforestation, bee keeping, animal husbandry, dairy, biogas, solar energy, pasture development, agro-forestry, plantation, water and soil conservation, environeducation, conservation of heritage sites - the list is endless and the skills that can be taught infinite. Schemes that can converge include the flagship financial schemes of the Government like Avas Yojana, Swatch Bharat mission, MPLAD, MLA-LAD, MNREGA, NRML or The National Rural Livelihood Mission and probably several dozen others that get dissipated in day to day governance never reaching the right beneficiary. New ideas and Schemes will be targeted through new donors like NABARD, World Bank, Asian Development Bank, Global Environmental Facility and so many other many other national and international organisations that search to fund more inclusive solutions in the forest and environmental sector. Our own corporate world can contribute enormously through their schemes. Van Dhan Yojana harnesses the talent of people to protect wildlife and forests, through using available schemes that can benefit both people and wild-life.



Samba deer/ Mark Ulyseas

Van Dhan Yojana will relieve the pressures on our finest protected areas by increasing forest cover on degraded forest lands and the non-forest government lands outside especially revenue wastelands. This will allow for greater spill-overs of wildlife into newly generated lands thereby increasing wildlife populations. Van Dhan Yojana is the Rajasthan Government's answer towards an inclusive approach to forest and wildlife conservation by creating innovative livelihoods for local people that strengthen conservation, rehabilitate traditional hunting tribes, improve forest cover and protect wildlife by better intelligence gathering and protection by locals and through a series of viable programmes that respect natural resources. Such a scheme will stress on the use of alternative energy that minimises the use of fuel wood and encourages stall fed, high milk yielding livestock, that can create a white revolution and provide renewable energy like bio-gas, reducing our dependency on fossil fuels.

The Van Dhan Yojana mission inside the protected areas will focus on innovative village relocation schemes, and assist district relocation committee for speeding up the process. This will not just enhance the forest but uplift local people. The end result of this innovative approach will be positive impacts on the global problem of climate change. This unique scheme is based on the fact of genuine partnerships between the government and all non-government players both in decision making and implementation. Private does not just mean the private sector. It means all those that are not in government. Public private partnerships will be a key in the implementation of this scheme. Because large budgets are not involved and most of the concepts are already budgeted for I believe this is a doable and practical scheme easily replicable in each state across India. It is also an idea that can be used in the fields of health and education and so many other vital areas where action needs to be redirected and refocused: It is a moment for all those in and out of government to join hands and make some of our vital schemes deliver time bound results that benefit our people.

By October 2015 the scheme was running in four pilot projects including the Ranthambhore Tiger Reserve and my fingers are crossed that it not only impacts on our wild landscapes but becomes a new idea for all the other regions in India to follow.





# RELIGION AND POLLUTION

Why can't we stop followers of religions from polluting the environment with their rituals and offerings; and monitor/control the volume of garbage generated by celebrants of festivals, both religious and cultural?

From floral and edible offerings (in plastic wrappers), effigies made with carcinogenic materials, senseless discarding of food, mindless disposal of non-biodegradable materials and more appears to be the rule rather than the exception. The volume is increasing every year.

The debris left behind in the aftermath of a cultural or religious festival reflects on the religious and community leaders' arrogance towards the environment. Perhaps this thinking stems from the fact that they view themselves as keepers of the earth, hence everything else is subservient and expendable.

The religious leaders must be held responsible for the clean-up, for what is the use of prayers when we spit on the very earth that nourishes us?

Religious leaders must also be community leaders. They cannot renege on their duty to society as a whole. They cannot propagate a selective approach to the problem. *It is not 'our' belief so why should we care. It is 'their' problem.* In a multi-ethnic society, this thinking is hara-kiri.

The faithful, and there are billions of them, can and must be educated by religious leaders that the desecration of the earth is tantamount to disrespecting the very Power they pay obeisance to.

If we want to prevent further mutilation of the earth we must begin by not creating garbage with our religious activities. And the faithful must be guided by their spiritual leaders.

Perhaps the problems we see today in a fragmenting world originates from this mindset – religious and/or cultural exclusivity.

Om Shanti Shanti Shanti Om



Photograph by Mark Ulyseas



Live Encounters celebrates 7 years 2010-2016

# Live encounters

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