



After inspiring an entire generation of environmentalists, David Suzuki has just one last thing he wants to say. **Kate Arneman** sits down with the Canadian geneticist and reflects on his past and his hopes for the future.

Web of life



KENT KALLBERG/DAVID SUZUKI FOUNDATION; DAVID SUZUKI

I'M IN THE Death Zone," David Suzuki is fond of saying. It's a line from the Canadian environmentalist's most recent book, *The Legacy*, and one that he delivers deadpan to a full house at the Sydney Opera House. He's in the middle of giving a public lecture as part of his farewell tour of Australia in October 2010 and he's not being melodramatic or morbid, just characteristically frank and perhaps a little playful. He will turn 75 in March, he points out, and, well, human life expectancy is what it is. This morbid announcement is at such odds with Suzuki's energetic presentation – he actually bounces on the balls of his feet for emphasis – that it is met with a few giggles around the concert hall.

When I sit down to talk with him the following day, Suzuki is no longer in his high-energy performance mode. He's gracious, polite and somewhat reserved, and true to his form he is wearing a jacket that features the design of an eagle's wings by indigenous Canadian artist and friend Dorothy Grant. It's evident that the term 'elder' – which Suzuki often uses to describe himself – is far more applicable than 'elderly', with its connotations of frailty and decline. It's only when he's holding his hands up to demonstrate the twisted structure of proteins that I notice his fingers look arthritic.

His latest book, subtitled "An Elder's Vision for our Sustainable Future", is the distillation of a lifetime of ideas: cataloguing the extent and rate of environmental degradation; condemning the prioritisation of economy over nature as the ultimate hubris; arguing that a shift to a more holistic worldview, individual by individual, is the only way out of the ecological crisis we have brought on ourselves. It's an intensely personal book, starting with a "happy

childhood in racist British Columbia" and it's filtered through the lenses of science, ecology, environmental activism and the traditional ecological wisdom of indigenous cultures around the world.

Suzuki is an honorary member of eight indigenous tribes, including the Kaurna people near Adelaide, who dubbed him Karnumeya ('Mountain Man'). He has 24 honorary degrees (including a doctorate in science from both Griffith University on the Gold Coast and Flinders University

Following Pearl Harbour, six-year-old Suzuki and his family were sent to an internment camp in the Rocky Mountains.

in Adelaide), he has hosted the award-winning Canadian television series *The Nature of Things*, for more than 30 years, and in his 25 years as a research scientist he published more than 170 scientific papers. His 18-page CV lists no less than 98 awards, including the E.W.R. Steacie Memorial Fellowship for the Outstanding Research Scientist in Canada under the age of 35 (1969-1972), the UNESCO Kalinga Prize for the Popularisation of Science (1986) and a Companion to the Order of Canada (2006).

A teenage David Suzuki holding a carp caught in the Thames River in London, Ontario.



However, it is the 2009 Right Livelihood Award, or so-called 'alternative Nobel Prize', that best encapsulates the wide-ranging nature and influence of his achievements. Since 1980, four Right Livelihood Award laureates have been chosen each year "for outstanding vision and work on behalf of our planet and its people". The award is not presented in categories in the way that the Nobel Prizes are allocated to physics, physiology, medicine, chemistry, literature and peace. This reflects the organisation's view that "in striving to meet the human challenges of today's world, the most inspiring and remarkable work often defies any standard classification."

INDEED, HIS ENTIRE life defies any sort of classification or stereotyping. His parents were first-generation Japanese-Canadians who, prior to World War II, ran a laundry and dry-cleaning business on the outskirts of Vancouver beside the Fraser River. They spoke English at home, using Japanese as a parents-only private language. Suzuki credits his father – "garrulous, generous and inquisitive about everything" – with sparking a lifelong love of the outdoors that began with camping and fishing trips from the age of four. His mother was a traditional Japanese wife and mother who unobtrusively nurtured Suzuki's interest in bugs, animals and the other treasures he brought home, sodden, muddy and elated.

Following the Japanese attack on Pearl Harbour in December 1941, laws were introduced that revoked the citizenship rights of Japanese-Canadians. So, in 1942, Suzuki's father went to work on the Trans-Canada Highway in Solsqua, about 500 km northeast of Vancouver, drilling holes for dynamite charges into the rock by hand. The Japanese-Canadian workers were paid 25 cents an hour and lived in a road camp patrolled by armed guards.

Shortly afterwards, a six-year-old Suzuki, his twin sister Marcia, younger sister Aiko Geraldine and mother were sent by train to an internment camp in the Rocky Mountains, >>

>> where they were incarcerated for three years. Slocan City, established as a prospecting town in the late 1880s, was a ghost town filled with crumbling hotels, casinos and dance halls when they arrived. Suzuki's family, along with other evacuees, moved into a dilapidated old hotel with rotten porches. Living conditions were cramped and unhygienic – waking up with itchy bedbug bites was a given. With the buildings full to overflowing, tents provided short-term accommodation for later arrivals through the first winter. His youngest sister, Jenny, was born there.

For the first year of their incarceration, there was no school. Suzuki was free to explore the surrounding wilderness, parts of which are today designated Valhalla Provincial Park. He went mushroom hunting, collected stones and flowers and found elk, deer and even a black bear. In the autobiographical *Metamorphosis: Stages in a Life* (1987) Suzuki recalls: "I remembered Dad's instructions not to panic or make sudden moves. So I just stood there and said, as bravely as I could, 'Go away bear.'" The bear wandered off the path and Suzuki continued on his way.

Fishing was officially forbidden in and around Slocan City, but the Mounties tended to turn a blind eye. Suzuki learned how to collect grasshoppers as bait in the cool of the morning when they were too slow to hop away. In winter, whitefish would spawn on the shores of Slocan Lake. "The snow was usually deep on the ground. Looking out from the dock, as far as you could see in the crystal-clear water, the lake bottom was carpeted with whitefish. Occasionally, you would see a silver flash as one of them flipped on its side to expel milt or eggs. It was spectacular."

When he did finally begin school, he accelerated quickly, moving to grade four by the age of eight. After the war, during which the Canadian government sold his family's business, Suzuki's parents found work in Ontario as farm labourers.

The experience may have deepened Suzuki's fascination with the natural world, but the racism and injustices encountered by his family and fellow Japanese-Canadians in those years have shaped his life with equal intensity. In his 2006 self-titled autobiography, he wrote: "All my life as an adult, my drive to do well has been motivated by the desire to demonstrate to my fellow Canadians that my family and I had not deserved to be treated as we were."

AS A YOUNG MAN in the 1960s, Suzuki launched himself into genetics, determined to make a name for himself in a field that was abuzz with possibilities. Watson and Crick had published their work on the double helix structure of DNA in 1953. Suzuki received his doctorate in zoology at the University of Chicago for research into the behaviour of chromosomes in fruit flies (*Drosophila*) in 1961. By 1963 he had the funding to set up his own lab at the University of Alberta and relished the sense of community and shared purpose.

"The thing I loved about research was I could go in the lab in the morning and everybody there is interested in the same thing. They talk about it, read about it, do it for days and days on end. I miss that focus." There is no longing, Suzuki charges on with typical intensity: "You're just thinking about it all the time. You go out for a beer and you're talking about it and it's fun."

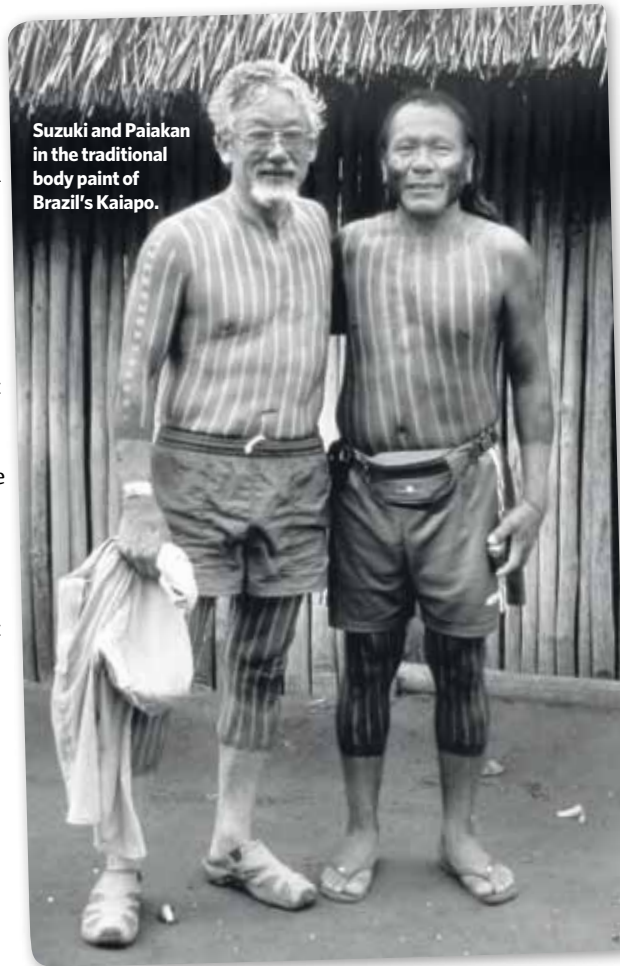
His love of the "elegance and precision" of genetics research and the camaraderie of the lab was on a collision course with his sense of social responsibility. In the 1960s, while teaching at the University of British Columbia in Vancouver, Suzuki first became aware of how genetics had been appropriated to back up racist ideologies, not only in Nazi Germany through the Race Purification Laws, but also in Canada and the U.S. to justify the measures taken against citizens of Japanese heritage.

This fly-pusher (as *Drosophila* geneticists were known) was about to become a gadfly

"I liked that he was an academic, obviously very smart and widely read and that he gave a damn," says Cullis. "And he was very funny."

of the scientific establishment. "There was always an edgy relationship because I spoke out about the dangers of science as well as the benefits," says Suzuki. "Scientists are like any other vested interest group ... They want their funding and support and respect. And to have it criticised – then people bridle at that."

While coming to grips with the social context of genetics, and science in general, Suzuki also began to analyse



the reductionist approach that scientists used to describe and understand the natural world. "The whole objective is to objectify nature so that you don't feel emotionally drawn to it and you can look at it dispassionately," he says. "So, better to measure numbers and break down that system that you admired so much to look at the parts and lose the sense of wonder and awe. That is deliberately extirpated from the way we report to each other, even though that is the primary driving force behind what we do! It's one of those terrible contradictions. We have to remember that sense of wonder and awe in the natural world because that is critical in instructing us in how we live within that world."

Reading Rachel Carson's groundbreaking 1962 book, *Silent Spring*, which is widely credited as helping to start the environmental movement, had a profound effect on how Suzuki viewed his work. "I had always thought that by doing an experiment in the lab, I was mimicking a small part of nature. So then you find out the behaviour of genes in the test tube, or in an organism in the lab, then you could extrapolate to the whole world," he explains. "But what Rachel Carson's book said is, you're really studying an artefact."

DAVID SUZUKI: DAVID SUZUKI FOUNDATION

For Suzuki the naturalist, the cautionary tale of DDT revealed by Carson is a classic example of human hubris in thinking that, based on lab tests, we can fully and confidently anticipate the results of manipulating natural systems. "How could we manage DDT properly when we didn't even know about biomagnification?" he says, incredulous.

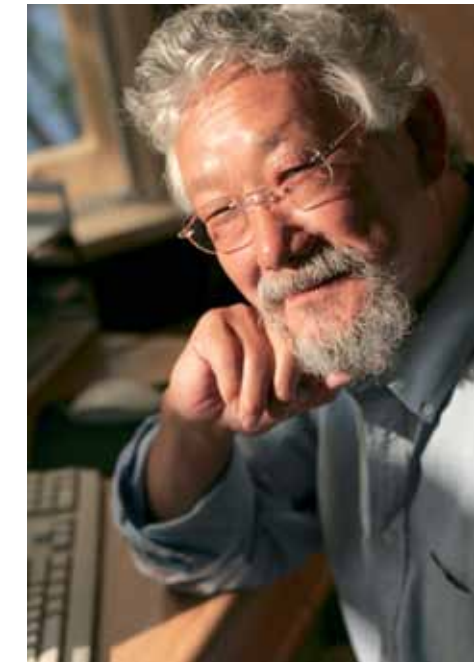
"That's what we do over and over again. DDT and CFCs ought to be warning signals for anyone who has the temerity to say: 'Oh, we know what we're doing with genetically modified organisms.'"

IT MAY HAVE BEEN Rachel Carson who inspired his transition into becoming an environmental activist, but it was his wife Tara Cullis who would become his key collaborator. The couple met after Suzuki gave a talk at Carleton University in Ottawa in 1971. Cullis, who would go on to teach non-fiction writing at Harvard University in Boston, attended the talk out of homesickness for British Columbia.

"I liked that he was an academic, obviously very smart and widely read, that he cared about social injustice as well as poor public science policy, that he was an activist, and that he gave a damn," says Cullis. "And he was very funny."

While shooting an episode of *The Nature of Things* on clear-cut logging in Windy Bay that screened in 1982, Suzuki met and interviewed several members of the Haida Nation, the traditional owners of the land. Suzuki and Cullis became active in the campaign to protect the area, which was home to many endemic species of plants and animals, for the next five years. It was the first of many occasions where the couple were invited to work with indigenous people around Canada and further afield.

In many instances, these encounters led to long-lasting friendships, as was the case with Paiakan. Suzuki met the Kaiapo Indian in 1988 when filming for *The Nature of Things* in Brazil. Suzuki travelled with Paiakan and his wife Irekran to Aucre, a village in the rainforest, as the sole foreigners. The film crew joined him several days later. Paiakan spoke Kaiapo and Portuguese, neither of which Suzuki understood, so communication came down to hand signals and Paiakan's one specially prepared English phrase: "Let's go, Dave." What Suzuki witnessed was the living embodiment of the *National Geographic* magazines he had read as a child: a



"I'm in the Death Zone," says the geneticist and environmental warhorse, approaching his 75th birthday.

community living a largely traditional lifestyle that was "overwhelmingly idyllic to my North American eye".

Suzuki soon learned of the Brazilian government's plans to construct a series of dams, which involved flooding 18.7 million acres of rainforest, some of it Kaiapo land. Paiakan had a plan to galvanise the tribes of the area and oppose the scheme. He asked if Suzuki would be prepared to get involved. The answer was "Yes".

Paiakan agreed to travel to North

Einstein, too, wrote that humans labour under an "optical delusion" that we are distinct from each other and the Earth.

America, where Suzuki and Cullis organised a number of fundraising events. In preparation for a meeting between the Indian tribes and government officials at Altamira, the proposed site of the first dam, Cullis learned Portuguese and made travel arrangements for a group of 40 high-profile environmental activists, First Nation leaders, scientists and Canadian folk singer Gordon Lightfoot. With the exotic visuals, classic clash-of-cultures

story and a dash of celebrity in the form of rock musician Sting for good measure, the event gained substantial international media coverage. The World Bank withdrew its funding for the dams, which Suzuki attributes to pressure from a number of countries, including Canada.

After the event, Paiakan and his family flew to Vancouver to stay with Suzuki's family for reasons of personal safety. Cullis remembers "cooking white-fleshed river fish, corn on the cob, sweet potato, farina, beans and rice day after day." Both families have two daughters each of similar ages. Sarika, who was in grade one at the time, took the Kaiapo sisters to school for show and tell. Suzuki and Cullis introduced their guests to a number of Canadian indigenous communities to discuss land use strategies, with Cullis translating from Portuguese.

"THEY HAVE THE MOST important insight, which is that the Earth really is our mother," says Suzuki. "Scientists try to look from the outside, objectively. The Aboriginal worldview is they're deeply immersed in it. They would never think of trying to withdraw from it."

Feeling immersed or at one with nature is often mistaken for spirituality or religiousness, but it's not, says Suzuki. "There are sacred places that are so important and special you don't go looking for opportunities or resources, you go there to worship. That doesn't require a god – if we can just call it nature, that's good enough for me."

Einstein, too, wrote that humans labour under an "optical delusion" that we are individuals, distinct from each other, the Earth and the universe. Suzuki goes one step further to see this illusion as a destructive force. He believes that the success of global negotiations to fight climate change will only succeed if there is a widespread appreciation of the interconnectedness of the natural world. And if he has one last thing to say – the legacy he wants to leave – that is it.

"It will only work if everybody comes together and agrees that the atmosphere keeps us all alive," he says. "And as long as it's healthy, we're healthy. If everyone agrees that's our highest priority ... then we can negotiate." 📌

Kate Arneman is the former chief sub-editor of *Cosmos* magazine. She now works as a freelance editor and writer, specialising in sustainability and history.