

to entomologists when a rock climber, returning from a 1964 expedition to Ball's Pyramid in the LHIG, produced a photo of what appeared to be the recently dead remains of one. That they could be living on a menacingly steep and barren volcanic outcrop, 500 metres tall and shaped like a needle, seemed implausible, particularly as there were no trees, only shrubs, on the island. Add to that the fact that Ball's Pyramid and Lord Howe Island, the only previously known home to the insects, have never been connected by land and it seemed impossible. But when a second rock climber reported seeing them five years later scientists began to take notice. After a series of expeditions failed to find any evidence of a live population optimism faded. But in 2001 a party of entomologists and conservationists found them again, desperately clinging to life on a lone *Melaleuca* (tea tree) bush. So few insects were found that they did not dare bring any back to the mainland, and they were able to make very few observations about them — this partly due to their surprising speed so that they rapidly went into hiding when approached.

A year later they returned to find 24 adults — a number still so low that the smallest event could eradicate them all. The risk of leaving them to their fate was matched only by the risk of removing any to set up a captive breeding program. Ultimately, though, this was done and two breeding pairs were brought to mainland Australia, one to Melbourne zoo and one to a private breeder in Sydney. After a number of scares these two breeding pairs have now led to a captive population that outnumber those in the wild — almost 100 including 10 adults.

The next, and most important, step will be to reintroduce the insects to Lord Howe Island but before this can be considered the rats and feral cats will have to be eradicated. There is, not surprisingly, great public support for this among the islands population of approximately 300, but they are less enthusiastic

about the release of a large, somewhat menacing, insect they perceive as a pest. Sadly for the phasmid, insects tend not to attract the same public affection as other endangered species, despite being essential components of any ecosystem

and fascinating organisms in their own right. Perhaps, though, an exception might be made for this one — the rarest insect in the world, endemic to a particularly significant ecology, and the only insect so far observed to cuddle its partner at night.

Captive readers

Nigel Williams notes the fiftieth anniversary of an influential conservationist's book.

Fifty years after it was first published, Gerald Durrell's *My Family and Other Animals* is being released in a special edition by Puffin for children and as part of a trilogy of books by the author on his life as a boy in Corfu by Penguin. Called by the zoologist and broadcaster, Sir David Attenborough, as a "one-man pressure group", Durrell is increasingly seen as one of the pioneers of conservation biology.

Although Durrell died 11 years ago, his widow, Lee Durrell, also a zoologist, hopes the new editions will introduce a new generation to his writings and the conservation work he began on Jersey in 1959, where he turned his concerns into a lifelong mission.

Well before the world at large had woken up to the dangers of environmental degradation and the impact on the planet's diversity, Durrell, a self-taught zoologist, championed the conservation message. He founded the Durrell Wildlife Conservation Trust with the aim of preserving species at risk of extinction in the wild. It now has 100 staff at its base in Jersey and 30 more in 50 projects across 18 countries, in programmes spending £5 million a year.

He set up on the back of his royalties, borrowing the money to start his own project in Jersey, including a major breeding programme. Its work included saving the Mauritius kestrel, which was down to only four birds

before the trust's efforts boosted the number to 1,000.

On Madagascar, there are about 10 endangered species that are being bred in captivity both on the island and back in Jersey as a survival insurance policy. And the government of Monserrat called in the Durrell Wildlife Trust for support after the volcano devastated large parts of the island and threatened the Monserrat oriole bird and the mountain chicken, which is, in fact, a frog. They are being bred in Jersey as a safety net in case the native population fails to recover.

Durrell was concerned that conventional zoos at that time were doing little towards the conservation of species. His Jersey zoo has now abandoned the name zoo because of the negative connotations, and preserves species by breeding them in captivity and reintroducing them into their original habitat when conditions become favourable. It has also provided professional training for many zoologists and conservationists.

The extraordinary thing, said Attenborough at a memorial service for Durrell, was "that everything he said, and then typically, did, seems now so obvious, so logical, and so much a part of everyday conservation language, that we easily forget how radical, revolutionary and downright opinionated these statements seemed at the time". He was a beacon to a generation of zoo directors who were to be inspired by his belief that their institutions could contribute to the preservation of wildlife, Attenborough said.

And many conservationists believe Durrell's influence can



Beacon: Gerald Durrell was considered ahead of his time in the conservation potential of zoos. (Photo: Penguin Books).

be traced back to *My Family and Other Animals*. “That book and his subsequent books bred a whole generation of zoologists,” says Lee Durrell. And although captive breeding has its critics, there is no doubt for some species it has been crucial. A report last month from BirdLife International described the existence of 31 bird species in conservation efforts, including captive breeding. Californian condors now number more than 100 through such a programme and the Bali starling was reduced to an estimated six in the wild, but is now breeding successfully in a number of captive programmes, and available for release when conditions permit.

The need for captive breeding programmes is greater than it has ever been, says Lee Durrell. “The situation is probably more alarming than when he started.”

On Jersey, an initiative between Ottakar’s bookshop and Penguin is encouraging every teenager and adult on the island to read *My Family and Other Animals* with a donation of £1 to the Durrell Wildlife Trust for each book sold. And the Durrell Wildlife Conservation Trust continues to be run according to the principles he laid down in the early days. Lee Durrell believes her late husband would be overwhelmed at the new flurry of attention but would hope it has a positive outcome.

Q & A

Nicholas Wade

Nicholas Wade worked for Nature from 1967 to 1971 and for the news staff of Science until 1982, when he joined the New York Times. He is the author of several books including The Nobel Duel (Doubleday, 1980), Betrayers of the Truth (Simon and Schuster, 1982, written with William J. Broad), A World Beyond Healing (Norton, 1987), Lifescript (Simon and Schuster, 2001) and Before the Dawn (Penguin Press, 2006).

What first got you interested in science? Greek iambics. Being forced to write them as the major focus of my education for five years gave me the idea of studying something completely different at university.

How did you get into writing about science? I was working unhappily at a publishing company and saw an ad one day for a job at *Nature*. John Maddox, the editor, managed by maelstrom, sweeping up new projects and rapidly discarding them into the hands of almost anyone standing nearby. I soon found I had been delegated the task of generating a daily column of science news which he had contracted to write for *The Times* of London. This provided the opportunity to continue my science education, though unfortunately under conditions in which all one’s mistakes were made in public.

What was the best advice you ever had? It came my way when through a confusion in dates I arrived early one morning at *Nature*’s printing plant in St. Albans. John Maddox, who sought to avoid boredom by running things close to the wire, liked to write *Nature* editorials against the roar of the printing press. This afforded him the rush of a real, tangible deadline, such as that the entire weekly print run might be lost, or a

prominent blank page appear, if he didn’t finish on time. He would shout out his editorial musings to his loyal secretary, Mary Sheehan, with the printer’s foreman hanging at the door to snatch each paragraph from her typewriter. When I arrived unexpectedly he told me to make myself busy by taking over one of his editorial themes that day, the performance of the world’s first heart transplant by Christiaan Barnard. I protested that I didn’t know anything about heart transplants. “That,” he said, “is the best possible qualification for writing an editorial.”

Quelling my doubts, I did the best I could as the presses rattled the room. John threw in a few paragraphs and my faltering words were rushed into hot metal. I was astonished the next week to see the editorial quoted in *Scientific American*, “As the distinguished scientific journal *Nature* has observed...”. Later in life, during the ten years I spent writing editorials for the *New York Times*, I had many occasions to reflect on John’s advice. Of course, it wasn’t really a prescription for ignorance but for not being afraid to tackle hard subjects. I think.

What is the hardest thing about writing about science? That the prettiest ideas are the most perilous. It’s not that nature is deviously setting traps for us, but that scientists are optimists, the rigors of basic research having culled the pessimists at an early age. So everyone wants to believe that neat ideas, like gene therapy, or the Onyx-015 adenovirus that targets tumor cells, or cell therapy, will actually work. Scientists are skeptical by nature, but even they are not always skeptical enough.

What gave you the idea of your recent book, Before the Dawn? In writing stories about human population genetics, I saw that not only had DNA opened a rich new window into prehistory, but the many other disciplines bearing on the human past had also made great strides in recent years. Since specialists rarely write outside