

The art of conservation

As the World Wide Fund for Nature (WWF) turns 50, **Henry Nicholls** traces how the evolution of conservation practice has been echoed in the various incarnations of WWF's iconic pandas, and other conservation logos.

The World Wide Fund for Nature (WWF) came up with its famous panda logo 50 years ago. According to Max Nicholson, the mastermind behind the charity (then called the World Wildlife Fund) it was “one of the most valuable trademarks that has ever been devised, and it took about twenty minutes”¹.

It is natural that conservation organizations should borrow motifs from nature, but the motives that lead to the final designs of their logos are not always obvious. In 1961, as the WWF's founders mulled over the choice of their symbol in a plush town house in London's Belgravia, the most important consideration was that it should reproduce well on the organization's letterhead. With colour printing then out of the question for a fledgling charity, this narrowed the options to a shortlist of black-and-white species, and the popular panda emerged.

This mundane explanation is probably also behind several other famously two-toned conservation brands. One was the oryx chosen by Fauna and Flora International (FFI) in 1950 (Fig. 1k), another the avocet first used in print by the UK Royal Society for the Protection of Birds (RSPB) in 1966 (Fig. 1i). With advances in printing technology from the 1950s onwards, more colour — notably greens, frequently blues and sometimes

browns — crept into conservation imagery. But monochromatic species continued to be popular. Birdlife International chose an arctic tern in 1991, its simple contrasting lines helping the organization to get noticed in our busy digital world (Fig. 1a).

Since 1961, just about every conservation brand has changed — including the WWF's panda. They have evolved in response to shifts in the media landscape, corporate life and conservation practice. This logo evolution, sometimes slow and incremental, sometimes rapid and radical, traces the story of how conservation charities have weathered the past half decade.

HOMESPUN LOOK

It is fair to say that 50 years ago most conservation outfits, including the WWF, were run by a close-knit core of passionate individuals operating on a shoe-string budget. It is no surprise, then, to find that conservation logos from this period were frequently homegrown. One option was to run a competition. This is how, in 1954, the International Union for the Conservation of Nature (IUCN) settled upon its ‘flaming artichoke’: an unspecified organic growth emerging from a cumbersome acronym (Fig. 1h). An alternative approach was to lean on an artistic friend. The Fauna Preservation Society (the forerunner of the FFI), for example, collared a lifetime member to ink out the black-and-white face of a gemsbok for the cover of the

society's new journal. Better still was to call upon ornithological enthusiast, environmentalist and accomplished artist Peter Scott. He produced a sublime gannet for the British Trust for Ornithology (BTO) in the late 1940s (Fig. 1g), and a pair of forward-looking Bewick's swans for another British charity, the Wildfowl & Wetlands Trust (Fig. 1e).

What's striking about these early examples of conservation artwork is that many of the species on show were not in peril, probably because so little was known about population sizes and extinction risk in the mid-twentieth century. This was certainly the case for the giant panda. When the WWF alighted on its emblem in the early 1960s — also drawn by Scott — China's first dedicated census of the species was still more than a decade away. Even if the panda was having a hard time of it, as seems likely, this was not something the WWF chose to emphasize. Instead, they preferred to spin the idea that the panda “owes its survival to the sort of careful conservation which all wild creatures deserve”².

Soon, however, logos began to portray species that did have a clear conservation message. The dodo, the icon of extinction, was a perfect image for the Durrell Wildlife Conservation Trust, founded in 1963 to support Gerald Durrell's pioneering conservation-focused captive work at Jersey Zoo in the Channel Islands (Fig. 1d). There were also more upbeat emblems. The moving tale of Elsa the lioness (star of Joy Adamson's novel

➔ NATURE.COM
For the biodiversity
special collection,
visit:
go.nature.com/d1kgn9

FROM BACKROOM TO BOARDROOM

As conservation has changed, its logos have evolved, from literal, fine-art creations to abstract images that make only a passing reference to nature.

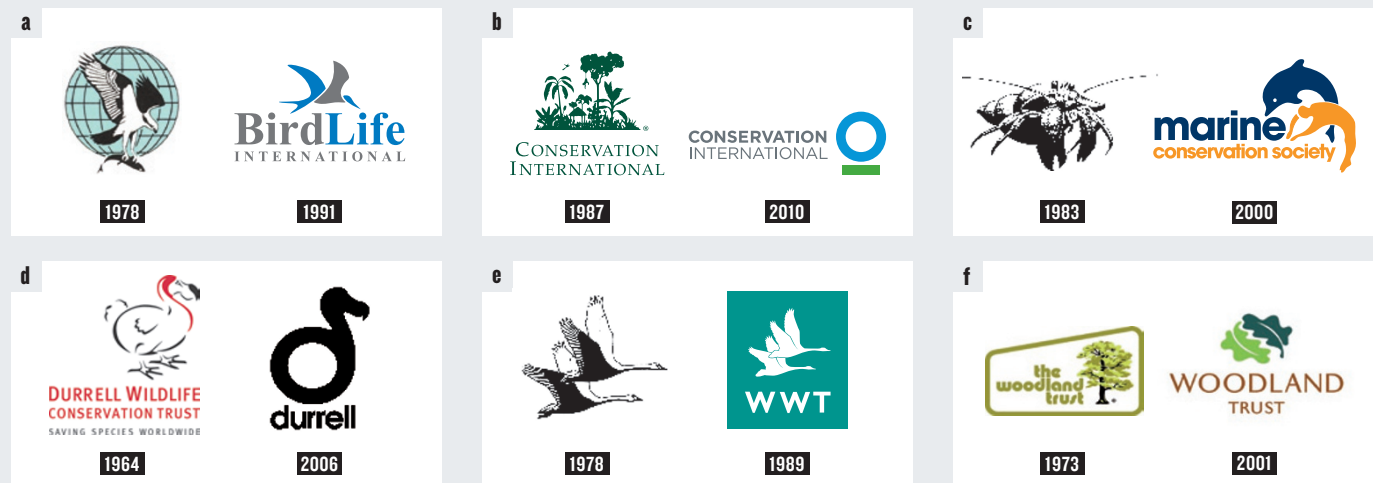


Figure 1 | Changing logos. a, BirdLife International. b, Conservation International. c, Marine Conservation Society. d, Durrell Wildlife Conservation Trust. e, Wildfowl & Wetlands Trust. f, The Woodland Trust. g, British Trust for Ornithology. h, International Union for the Conservation of Nature. i, Royal Society for the Protection of Birds. j, The Nature Conservancy. k, Fauna and Flora International. l, Friends of the Earth International.

Born Free (Collins and Harvill; 1960) and its 1966 Hollywood adaptation and memorable soundtrack made her an exemplary face of the Born Free Foundation, established in 1984 to campaign against zoos and promote conservation in the wild. The RSPB's success in recreating the habitat suitable for breeding avocets in Britain during the 1940s made this species an obvious choice as an emblem (in addition to its being monochrome).

The FFI's common gemsbok (*Oryx gazella*) took on new meaning in the wake of Operation Oryx, a 1962 effort to save the critically endangered Arabian oryx (*Oryx leucoryx*) in which the FFI played a leading role³. For all but the most nerdy naturalists able to tell their *O. gazella* from their *O. leucoryx*, the FFI's logo suddenly became a celebration of a conservation triumph. Several artistic mutations later and the metamorphosis is nearly complete, with the FFI's latest logo (launched in 2010) looking more like the Arabian oryx than the gemsbok. It also has a spray of vegetation thrown in as an acknowledgement of the organization's commitment to flora.

CORPORATE CONSERVATION

By the 1980s, the conservation movement had gathered significant momentum. Between 1961 and 1981, for example, the WWF had raised some US\$55 million in support of 2,800 conservation and education projects worldwide⁴. With awareness and funding on the increase and organizations growing from local concerns to national and international affairs with burgeoning overheads, it was inevitable that the bigger players should begin to show more corporate swagger.

Conservation imagery tracked this

transition, with organizations turning to advertising agencies (which sometimes donated their time) for input into their public appearance. These interventions have not always been popular, particularly with the old-school membership. In 1986, for example, when the WWF invited Landor Associates of San Francisco to rationalize the several panda variants then in use, the brand consultants were critical of a slightly streamlined incarnation that Scott had approved. Landor judged that its nose was "too soft", its legs "too bow legged", its mouth "one-sided" and overall it just looked a bit "old, sick, depressed"⁵. Scott, it is said, was mortified by the disappearance of his anatomically faithful, playful panda. But the new abstracted panda suggested by Landor was better suited to life in the rich, digital environment that was on the horizon.

Through the stylized output of these advertising agencies, conservation organizations were also able to move quietly away from the narrow species-specific remit that a fine-art logo implied. Counterintuitively, the simpler and more abstract the design, the better able it seemed to communicate the increasingly complex business of conservation.

The case of the Wildlife Conservation Society (WCS), which currently manages the Bronx Zoo, several other wildlife attractions in New York and more than 500 projects in over 60 countries, offers one of the most punctuated examples of logo evolution. In 2001, also with assistance from Landor, the

"It was inevitable that the bigger players should begin to show more corporate swagger."

WCS dropped its animal brand for an image that reflected the breadth of its twenty-first-century interests: out went a pair of excitable antelopes — its 'leaping lopes' — and in came a dappled green square that could be either a forest canopy or coral reef.

It was during this phase of abstraction that we first got a glimpse of a human element in logos. Conservation International began life in 1987, represented by a rainforest with a hut tucked away beneath the canopy, emphasizing the multi-species complexity of ecosystems (Fig. 1b). Also in the late 1980s, the UK-based Marine Conservation Society ditched a finicky hermit crab in favour of a dolphin and human diving together, a logo that was updated in 2000 (Fig. 1c). In the 1990s, Friends of the Earth (FOE) International came up with an avian squiggle superimposed on a circle that could be either the Sun or a human hand (Fig. 1l). These are some of the earliest graphic acknowledgements of something that all conservation organizations now understand: humans are part of both the problems and the solutions. The BTO's new logo, launched last year, is a recent example of this human dimension to conservation artwork: the head of a generic bird replaced Peter Scott's gannet and doubles as the pupil of a human eye.

If there is one drawback to this shift away from depicting charismatic creatures, it is that an organization is probably less likely to catch the eye of a mass audience for whom animals still have perennial appeal. But this might be a price worth paying if the substitute makes the right impression on the governments, agencies, foundations and corporations that have become a major source of conservation funding.



The IUCN, for example, has never sought a fluffy image. This is partly because that public appeal was provided by the WWF, which was founded to raise funds for the cash-strapped union. It is also because a hefty chunk of the IUCN's revenue is clinched in diplomatic dealings, which might explain why, after the extinction of the 'flaming artichoke', the union was content to spend several decades tinkering with various permutations of its acronym. Finally, in 2008, the IUCN (with advice this time from New York advertising agency Young and Rubicam) settled for a blue ring encircling the organization's initials. "The blue 'C' of the logo represents the planet and the union," says John Kidd, the IUCN's head of global communications. "The IUCN works on complex issues, often with complex solutions, but the logo is clean, clear, simple and, over time, hopefully memorable."

GLOBAL APPEAL

With the emergence of a truly global culture, and global concerns such as acid rain, nuclear fallout and climate change, it makes sense that this kind of holistic, planetary design has become more common. Most of the Friends of the Earth network swapped the charity's abstract sun and hand for a bright green, marker-pen circle in 2001. "It is a very simple design, and the idea was to represent the Earth, sustainability, cycles and unity," says Ann Doherty, communications coordinator at FOE International.

Similarly, in 2007, the international environmental organization the Nature Conservancy wrapped its trademark oak leaves around a green sphere (Fig. 1j). "As we've expanded outside the United States, now to

more than 30 countries, we've incorporated the round, globe-like symbol to represent our focus on protecting lands and waters around the world," says Valerie Dorian, director of brand marketing and strategic partnerships. Even more nationally focused outfits, such as the United Kingdom's Woodland Trust, have adopted circular or spherical designs that give a nod to the scale of the problem (see Fig. 1f).

Many of these trends — the abstraction, a human presence, the appearance of a global element — have come together in Conservation International's new brand. Part of the reason for axing the long-standing rainforest logo was that it did not reproduce well in miniature, a quality essential in today's relentlessly digital world. It also failed to reflect the breadth of the organization's twenty-first-century mission "to empower societies to responsibly and sustainably care for nature for the well-being of humanity"⁶. In other words, Conservation International is about more than just rainforests.

The logo was the result of a consultation with New York design agency Chermayeff & Geysmar. "What Conservation International needed was not a literal picture that illustrates every single area of their activities, but rather a new, suggestive, and potentially expansive mark," says Sagi Haviv, the agency's principal designer. His solution — a blue circle underlined in green — is supposed to represent "our blue planet, emphasized, supported and sustained"; it also evokes an abstract human figure into the bargain.

The WWF's symbol is the most obvious exception that proves this trend towards global imagery. The organization never got type-cast in a species specific role; this is

probably because the Chinese Cultural Revolution prevented the WWF from becoming involved with pandas until 1980. By then its panda had become established as a symbol with a truly global appeal.

So what should we make of a journey that began with literal, fine-art creations and has reached abstract images that make only a passing reference to nature? The answer, like the logos we're left with, is pretty simple. Conservation is no longer just about a single species on the brink of extinction, the habitat it's found in or some wider ecosystem. Now it's about the future of the planet. That, of course, means it's really all about us. ■ [SEE BOOK REVIEW P. 290](#)

Henry Nicholls is a science writer based in London. His latest book is *The Way Of The Panda* (Profile, 2010).
e-mail: henry@henrynicholls.com

1. Bonner, R. *At the Hand of Man: Peril and Hope for Africa's Wildlife* (Simon & Schuster, 1993).
2. 'This is the symbol of the World Wildlife Fund.' Max Nicholson Archive, Linnean Society of London, EMN 8/7.
3. *Oryx* **24**, 118–119 (1990).
4. Hughes-Evans, D. & Aldrich, J. L. *The Environmentalist* **1**, 91–93 (1981).
5. Schwarzenbach, A. *Saving the World's Wildlife: WWF's First Fifty Years* (Profile Books, 2011).
6. New Logo for a New Mission — Conservation International. (2010); available at <http://go.nature.com/us6yap>

CORRECTION

In the Comment article 'NASA: what now?' (*Nature* **472**, 27–29; 2011), the picture of the space shuttle *Challenger* disaster in 1986 was wrongly identified as that of *Columbia* in 2003.

▶ alternative to petrol as an energy source for cars. So we are developing a wide range of products based on hybrid-vehicle technology, combining an electric motor and a petrol engine. Our approach is to develop the best cars for the consumer in each different market.

We currently have a strong focus on batteries for future electric vehicles. Although lithium-ion batteries are becoming more widely used, it is hard to see electric vehicles completely replacing conventional passenger cars, even if we push the performance of lithium-ion batteries to the limits. We have to solve problems of energy storage density and cost. We are researching and developing all-solid and metal-air batteries, which are two promising alternatives to lithium-ion.

Another possible game-changing technology is solar power. More and more households are using solar cells. At the moment, some of our hybrid Prius cars have solar-powered ventilation systems that operate while the car is parked, but it may also be possible to use solar power to drive the vehicle if we can achieve a breakthrough in the efficiency of generating electricity from solar energy.

In the long term, we believe that the use of vehicle telematics will revolutionize the car industry. We are seeing rapid development and innovation in automated driving and accident prevention. As vehicle-control technology advances, more cars may be able to avoid collisions. Then it may become possible to change vehicle structures and make cars much lighter. That will in itself reduce energy usage.

The Japanese idea of *monozukuri*, which could be translated as making things, is at

the heart of Toyota's approach. We think that new ideas are created by digging into the root causes of problems and by finding out facts through *genchi genbutsu*, which means actually going to a site and discovering the real situation for yourself. It is important that we nurture our employees to take this practice to heart. For the past 50 years, this approach has been the driving force behind the innovation and originality in our development processes.

ROCHE Collaborate with the public sector

Jean Jacques Garaud, global head of pharma research and early development, Roche Holding, Basel, Switzerland

The recession is diminishing the funding available for research at publicly funded scientific institutions. This compels them to be more open to, and more collaborative in, public-private partnerships. Since the integration into Roche of Genentech, a Californian biotechnology company, in 2009, Roche has operated two autonomous Research and Early Development units, pRED and gRED, with distinctive approaches. In the first 18 months of pRED, we've developed and driven external collaborations, ranging from relationships with individual academics to entire networks with leading academic and health institutions.

At the same time the economic crisis increases the pressure on drug prices and

forces us to home in on drug candidates that will add value from a medical and public-health standpoint. We are focusing efforts on personalized health care, because patients with the same condition can react to the same treatment in different ways — and sometimes even receive treatment that is inappropriate for them. To better fit the treatment to the patient, we must concentrate on better understanding the molecular basis of diseases and their heterogeneity.

I'm optimistic that these recessionary challenges can be turned into opportunities to make health care better, safer and more effective.

Our ultimate goal is to understand the biology of diseases and translate this knowledge into the clinic. New technologies that will help include cell-penetrating peptides that may allow the delivery of drugs into cells as well as therapeutic interactions on the cell surface. For peptides in general, we will need to develop synthesis methods to overcome difficulties, such as structural instability, that can weaken peptide interaction with targets and reduce activity and specificity.

Stem cells will also be increasingly important as translational-research tools. With differentiated cells derived from stem cells, we are able to study the effects of drug compounds on clinically relevant targets and observe cellular functions at an early stage.

Finally, computer modelling and simulation could also be game changers, if we can build more reliable drug-disease models to better design experiments and predict their outcome.

To encourage such innovation, Roche fosters an environment that allows our scientists to grow and experiment with new ideas and approaches. One way to do that is to talk about science itself, not just about managing science. We have launched a 'barn initiative' to provide informal environments for kindling creativity in settings from campuses and castles to converted barns. At these 'barns', away from their day-to-day projects, scientists can engage in positive and challenging scientific discussions on a specific theme.

It is also important to provide the recognition and the rewards that scientists deserve. Our publication strategy explicitly encourages publishing in scientific journals and we advocate the exchange of ideas at scientific conferences. ■

CORRECTION

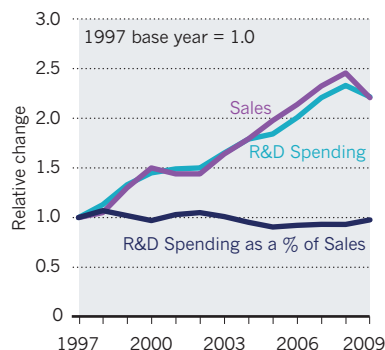
In the Comment article 'The art of conservation' (*Nature* **472**, 287–289; 2011), the 1964 Durrell Wildlife Conservation Trust logo and the 1961 Friends of the Earth International logo were actually from 1999 and the 1970s, respectively.

CORPORATE CHANGES

In 2009, corporate research and development (R&D) spending declined for the first year in more than a decade (see graph), according to a study of 1,000 of the world's most research-intensive companies by New York analysts Booz & Company.

Total R&D spending in 2009 dropped 3.5%, but revenues fell more sharply, by 11%. So R&D is still one of the last places that corporations make cuts. About half of the 1,000 firms cut their R&D portfolio in 2009, but nearly all the cuts came in three industries: car manufacturers, computing and electronics.

R&D AND SALES



THE INNOVATION TOP 5

2009 rank	2009 R&D spend US\$ millions (2008 rank in parentheses)	Change from 2008	As a % of Sales
1	ROCHE (3) \$9,120 m	▲ 11.6%	
2	MICROSOFT (4) \$9,010 m	▲ 10.4%	
3	NOKIA (2) \$8,240 m	▼ 1.0%	
4	TOYOTA (1) \$7,822 m	▼ 19.8%	
5	PFIZER (6) \$7,739 m	▼ 2.6%	

Research spending in the health-care sector grew by a modest 1.5% in 2009, as reflected in the rankings of the top spenders (see table). Toyota Motor Corporation and Nokia both dropped, while Roche Holding climbed two places to take the top spot ahead of Microsoft.