Birds and People: The Cultural Riches of Nature, the Social Cost of Extinction

Introduction

My book *Birds and People* is a collaboration between an international publisher and an international conservation organisation, but it is also a collaboration between an author – myself - and a photographer, David Tipling. It took seven years to pull together and five years to write and involved David visiting 39 countries on seven continents. I, on the other hand, largely stayed at my desk talking to the world by email. Because as well as the other forms of collaboration, the book incorporates the thoughts, words and reflections of 650 contributors from 81 countries. Together these many voices from all over the world make *Birds and People* a kind of global chorus about our relations with birds. The book is dedicated to them all.

Most books on birds, and, in fact, on wildlife tend to focus on the taxonomy, behaviour and identification of the creatures they seek to address. *Birds and People* doesn't do that.

It is a book about our relationships with nature and the environment expressed through our encounters with birds

For about a century now Western society has developed a matrix of ideas about nature and the environment. Most of this thought has been shaped by science and by the vocabulary peculiar to science. The processes of science are absolutely fundamental to our understanding and description of nature but scientific language sets limits when it comes to talking about the value of nature. It somehow constrains how we think of biological loss to a particular subset of ideas. A species that has declined such as a skylark or a corncrake is

described as a red data species or a species of conservation concern, but those terms do not begin to explain or narrate the nature of the loss inflicted by that decline.

Birds mean all sorts of things people in a social, political, psychological, literary and cultural context. In *Birds and People* we tapped into and explored those facets of our relationship with birds. We also explored the multifarious ways that we exploit, destroy, celebrate and enjoy birds.

Don't assume that biological loss is something simply to be measured by some arbitrary and external calibration of the physical environment. It affects us within, because birds live within us as well as all around us. The book is an exploration of that inner role that birds play. It argues that any loss of birds in the external environment carries with it implications that are inwards, difficult to measure but fundamentally part of the process. Essentially when we lose life we lose a part of what it means to be human and essential parts of the vocabulary by which we express our relations to other species and to the whole of life.

Family Case studies

In the course of the lecture I will explore some of these themes to show how birds affect the full 360 degrees of our experience. They are both practical but also spiritually uplifting. We eat them but we also create poetry from them. We keep them in cages to take part in specially designed songbird competitions, but we celebrate the vocalisations of wild birds as markers of the season and the passing year and as a way of measuring our private experiences. Some people for example, cannot think of their childhood without thinking of the sound of cuckoos. In my case, my early years are all somehow awakened by the music of displaying lapwings that I recall from my Derbyshire childhood.

Swifts and Edible-Nest Swiftlets

The nests of Edible-Nest Swiftlets are one of the stranger products that have been

harvested for the human diet. Yet some time in our past our ancestors stumbled upon the idea that the saliva-made nests that these birds cement to the walls of Asian caves could somehow be processed for our consumption. Not only were they deemed to be edible but the mucin-like glycoprotein was credited with special powers, it being valued as a sexual stimulant, especially in China, but also for its abilities to dissolve phlegm and alleviate gastric trouble.

For all these reasons the harvest of swiftlet nests has continued at some sites, such as the famous Niah Caves in Sarawak, for hundreds of years. These hot airless tunnels were carefully divided as the possession of hundreds of harvester families, who risk their lives scraping the saliva nests off the high walls. However it can take a pair of swiftlets anything up to 127 days to rebuild a new structure and replace the lost clutch of eggs. So the relentless harvest for the largely Chinese-based trade has lead to serious declines in many populations. It also triggered escalating prices for the raw products. If one takes into account that the so-called 'black nests' of Black Nest Swiftlets contain roughly 50 per cent feathers and that a skilled worker must work eight hours just to process 150gm (5.3oz) of edible material, one begins to see why this is among the most valuable and expensive bird products ever.

In Sarawak 1996-2001 white nests were being sold at the equivalent of c£1000 ($1550) per kg. In Kalimantan (Indonesian Borneo) in 2001 black nests were fetching £166 ($250) per kg. By 1996 the total harvest taken from natural cave sources in Indonesia had risen to 110,000kg (242,508lb).

The literary critic John Carey in his supposedly prestigious review in the *Sunday Times* latched on to the episodes of bird slaughter and other abuses documented in *Birds and People* and described the book as if it were only a catalogue of our crimes. He was wrong. Even when we have been really bad to birds, good things can come from it.

In the case of swifts, people have learnt that rather than climb on precarious ladders to take nests from wild colonies, they can actually entice the birds to breed in manmade buildings purpose built as nesting locations. These structures mimic the internal conditions of 'real' swiftlet breeding locations, and are often maintained with levels of high humidity and in semi-darkness. Given that their final product is more valuable than some precious metals, they are guarded around their perimeters by armed patrols. Here is a classic instance where human self-interest has actually been the stimulus for supportive and protective measures that have directly benefitted the bird's population.

Passenger Pigeon

Not all episodes of our exploitation have a happy ending. In B*irds and People* I devoted considerable space to a story that that has the moral force of a parable. The tale of how the Passenger Pigeon went from being the most abundant bird on Earth to extinction in just 3-4 generations should be familiar to every living person. I will read a short passage that outlines not only its extraordinary lifestyle, but also the vast riches - whether culinary, economic, practical or aesthetic – that flowed from our engagements with this species. It also emphasises exactly what we lost with the passing of the Passenger Pigeon.

> The basic biological facts of the species are fairly standard. The Passenger Pigeon was a medium-sized dove, measuring about 40 cm (16.5 in) with a noticeably long tail. Its plumage was predominantly beige-grey with dark spots on the wings and a lovely vinous blush on the male's upper breast. It nested in April-May. It laid one white egg. Its main food was the fruit of several deciduous trees, but especially beech mast, oak acorns and chestnuts. It was the periodic and localised abundance of these natural crops that determined the pigeon's nomadic lifestyle.
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> What separated the Passenger Pigeon from most of its family and, indeed, almost all other land birds was the size of the congregations. These vast

protean flocks represented a concentration of life usually associated only with oceanic shoals of fish or the rains-oriented game on the African plains. The great American naturalist, John Muir, recalled the birds in his adopted homeland of the 1850s:

'Of all God's feathered people that sailed the Wisconsin sky, no other bird seemed to us so wonderful. The beautiful wanderers flew like the winds in flocks of millions from climate to climate … I have seen the flocks streaming south in the autumn so large that they were flowing over from horizon to horizon in an almost continuous stream all day long, … like a mighty river in the sky, widening, contracting, descending like falls and cataracts, and rising suddenly here and there in huge ragged masses like high-plashing spray.'

In Kentucky, the American pioneer naturalist Alexander Wilson saw a flock and basing his calculation on the speed at which it passed, worked out the length at 400 km (240 miles) with a total number of 2,230,272,000 birds. In fact he over-estimated the speed at 100km/h (60m/h), when it was probably half that figure. Even so, he felt his guesstimate of the flock's width to have been highly conservative and he had certainly seen well over a billion birds.

This speed gave the species its nickname the 'blue meteor.' En masse, however, they were avian tornados. Their impact was astonishing and traumatic. One hunter was said to have been so overcome he threw himself to the ground in terror. As they passed, their droppings fell like rain and their outspread wings turned day instantly to night, so that chickens went prematurely to roost as in an eclipse. A geologist in Arkansas noted how 'Our horse, Missouri, at such times has been so cowed by them that he would stand still and tremble in his harness, whilst we ourselves were glad when the flight was directed from us.'

The flock's appearance was sometimes taken as a kind of prodigy foretelling cataclysm. 'It is a common observation in some parts of this state,' wrote one eighteenth-century Pennsylvanian, 'that when the Pigeons continue with us all winter, we shall have a sickly summer.'[56] On some occasions the damage to crops was so feared, communities sought divine intervention. The dove may have been the enduring symbol of the Holy Spirit, but with this species they were taking no chances. More than once the Bishop of Quebec excommunicated Passenger Pigeon flocks.

The birds across an empty sky elicited images that were aqueous, flowing and riverine. Yet birds at roost among the forest or in their nesting congregations, which could cover as much as 2,460 sq km (950 sq miles), demanded a language that somehow bridged scenes of impossibly random, noise-filled chaos and which yet resolved into a kind of functioning whole:

The noise which they made, though yet distant, reminded me of a hard gale at sea, passing through the rigging of a close-reefed vessel. … The Pigeons, arriving by thousands, alighted everywhere, one above another, until solid masses as large as hogsheads were formed on the branches all around. Here and there the perches gave way under the weight with a crash, and falling to the ground, destroyed hundreds of the birds beneath, forcing down the dense groups with which every stick was loaded. It was a scene of uproar and confusion. I found it quite useless to speak, or even to shout to those persons who were nearest to me. Even the reports of guns were seldom heard, and I was made aware of the firing only by seeing the shooters reloading.

John James Audubon saw a roost that stretched for 67 km (40 miles). Places where the flocks gathered nightly were deluged in dung sometimes to a depth of 30cm (1ft). The blanket wiped out ground vegetation and poisoned trees. However there was increase as well as ruin. An old roost near Troy in Geauga

County, Ohio, was eventually the site of the town's most fertile farmland. In addition, the crust of guano was used in the production of saltpetre (to make gunpowder). 'Thousands of wagonloads' was the assumed yield at a Mississippian roost. One intriguing speculation is how old some of these traditional sites might have been. An example in Scott County, Indiana, was known to have been occupied for at least 40 years, but usage of such places could have been hundreds, even thousands of years old. Now all we have to remind us of that immense backbeat of wings is the echo of an echo: the nearby settlement in Scott County is still known as Pigeon Roost.

Such a prodigious natural plenty was taken as a benediction by human communities wherever the pigeons alighted. For America's indigenous people, the birds were food, feathers, fat, and, in the imaginations of the Huron, they ferried the souls of the departed to heaven. Usually killing only squabs and not breeding adults, the Seneca made offerings of wampum and tobacco for the divine blessing, then whole communities would wigwam by the pigeon nest trees and gorge on the plenty. 'When the marauders departed, complained an eyewitness after one Native American harvest, 'they left the ground blue with dead birds, having killed twice as many as they knew how to dispose of.'

White settlers also treated the birds as limitless heaven-sent manna. They were stored in barrels of their own fat, or smoked for pigeon jerky, or salted, or pickled in spicy apple cider, and Alexander Wilson said he never ate one of any age that was not delicate or delicious. Their fat, sweet and buttery, was rendered down and poured into tubs that kept a whole year long, while the feathers filled a fine soft mattress. Around St Jerome, Quebec, it was said that no girl went to the altar without a pigeon-feather bed and pillows for a dowry.

The haphazard battening of settler or Native American communities upon

Passenger Pigeon flocks was probably no more than a temporary drain on numbers, while the Seneca people's focus on squabs rather than adults suggested a harvest ethic that may well have been sustainable. However all changed when the killing morphed into decades of systematic commercial exploitation.

At its peak during the last third of the nineteenth century there were large business houses with buyers and trappers following the movements of the birds relentlessly wherever they flocked. Some nesting sites attracted thousands of hunters. Meticulous in his ability to drill down through the hearsay of pigeon history, Schorger suggested that most of the estimates for birds shipped to market from these specific hunting episodes were exaggerated. Typically, a major nest flock in Van Buren County, Michigan, was said by the pro-conservation naturalist, William Hornaday, to have yielded 11,880,000 birds. A game dealer, by contrast, working from more reliable figures, gave a total cull of just 7,560,000. Schorger thought even this an over-estimate.

While the specifics may have been enlarged, it is difficult to understate the remorseless, cumulative, grinding, inexorable impact of all these separate episodes of depredation. The pigeons faded and faded fast; so fast, in fact, that most could not believe in the idea of their extinction. Right to the very end, some preferred a mythic solution, such as the possibility that the birds had all flown off to South America. Even Schorger remained a little mystified. While he sifts the data with great thoroughness, the Passenger Pigeon's most exacting scholar cannot really summarise the ecological mechanisms by which the world's most abundant land bird was steered down into the abyss at human hands. The best guess we can muster so long after the events is that they succumbed to multiple factors, but especially over-exploitation and systematic loss of habitat. Here is a momentary glimpse of how eternal oblivion is achieved:

> Day and night the horrible business continued. Bird lime covered everything and lay deep on the ground. Pots burning sulphur vomited their lethal fumes here and there suffocating birds. Gnomes in the forms of men wearing old, tattered clothing, heads covered with burlap and feet encased in old shoes or rubber boots went about with sticks and clubs knocking off the bird's nests while others were chopping down trees and breaking off the over-laden limbs to gather squabs. Pigs turned into the roost to fatten on fallen birds added their squeals to the general clamor … Of the countless thousands of birds bruised, broken and fallen, a comparatively few could be salvaged yet wagon loads were being driven out in an almost unbroken procession, leaving the ground still covered with living, dying, dead and rotting birds.

Turtle Dove

The European Turtle Dove reflects humankind's extraordinary capacity to repeat its own recent past. In the last thirty years this species has declined by 90 per cent in Britain, while across 16 European Union countries it has sustained a 70 per cent reduction on its 1980 population.

Part of the answer can be attributed to c5,000-year old hunting tradition across the bird's Mediterranean range. There are Egyptian wall reliefs of doves being trapped in nets that date to about 2500BC. In Portugal, where the species' mass movements might once have been more spectacular than anywhere else, the ornithologist William Tait noted (in 1924) how, near the River Douro, there was 'a continuous fusillade … from shortly after sunrise until about 10 o'clock in the morning.'

Trapping turtle doves goes back to the fifteenth century in north-west Portugal. Today however the key killing fields are in Cyprus, the Gironde in southern France, central Iberia, but especially Malta.

In the last 25 years on this small island there were between 14,000-17,000 registered hunters or trappers (in a total population of c350,000). In 1990 their annual turtle-dove bag was put at 160,000-480,000 birds, which represented as much as almost one quarter of the estimated total across the whole European Union (2-4 million birds annually).

Although the Maltese government is a signatory to the birds directive, it has consistently asked for a derogation from this legislation on the grounds that the turtle dove, while it may be in plight locally, had large (and, it should be added, largely unknown) numbers in countries such as Russia and Turkey. At a global level, therefore, this rendered it a species of least concern.

At a personal level Malta's infamous hunters made much the same morally bankrupt claims as individuals. One such person argued 'If I don't shoot it, someone else will, so I'd rather shoot it myself.' To argue for your killing as a means to pre-empt one's predatory competitors is little more than a charter for the quarry's eventual extinction.

One factor possibly undervalued when assessing how a once abundant species such as European Turtle Dove, or even the Passenger Pigeon, could have collapsed so dramatically is the psychological response engendered in hunters by the bird's migratory behaviour. In the case of both birds, it is the shooter's inability to understand the cumulative total effect of his local actions, and that of all his peers wherever they may operate, that makes a highly abundant but seasonally distributed pigeon so vulnerable to over-hunting.

<u>Larks</u>

Few birds better exemplify our dichotomous – one might even say our schizophrenic - responses to birds than the larks of Europe. The Eurasian Skylark is among the most versified birds in the world, the volume of poetry it has inspired exceeded only by that written for the Common Nightingale. One

reason for the cultural prominence of both species is the nature of their songs. They are disembodied performances, each bird singing largely from an unseen location. While nightingales hold forth under cover of darkness from dense cover, skylarks are disguised high up in the sunlit ether. Their 'ownerless' voices have been taken possession by us and invested in all sorts of new meanings.

William Blake's lark verse perfectly illustrates how it was not so much a bird of flesh and blood, but a free-floating inhabitant found only in the human imagination

> His little throat labours with inspiration; every feather
> On throat and breast and wings vibrates with the effluence
> divine.
> All Nature listens silent to him, and the awful sun
> Stands still upon the mountain, looking on this little bird
> With eyes of soft humility and wonder, love and awe.

In Shelley's case, in his 'Ode to a Skylark', perhaps the most famous of all lark poems, the bird has become a symbol of human creativity, an ideal to express the unity of feeling and its expression:

Hail to thee, blithe spirit!

Bird thou never wert-

That from heaven or near it

Pourest thy full heart

In profuse strains of unpremeditated art.

Like a poet hidden
In the light of thought,
Singing hymns unbidden,
Till the world is wrought
To sympathy with hopes and fears it heeded not:

Although I make no claims at all for its higher merit as writing, a much more realistic representation of skylark was made by W H Hudson in his book *Nature in Downland*. Yet even in Hudson's imagination the song the bird, which is rendered with greater accuracy, it is elevated as a symbol of place.

> Only when they take to the wing and hover high up, trilling their complex and dipping cadenza does it properly become a skylark, filling the whole space and showing us why it's there. It shouts out to be admired and looked-at and heard. Once it's in the air then binoculars are useless, or rather they should be abandoned, in favour of taking in the whole of the picture: the fields, the crops, the grass, the big big drifting sky and that sound. It is absolutely and indescribably part of the landscape.

This implicit identification of place, landscape even nation and song is now almost embedded in British culture. The wide currency of the idea is almost entirely down to the corresponding popularity of Ralph Vaughan Williams' *The Lark Ascending*. On that eternal measure of the British temperament, Radio Four's 'Desert Island Disks, it is the most frequently selected piece of music. In a programme about exile and isolation the music they want is the song of the British landscape.

Thus, transmitted through Vaughan Williams' composition, in turn, inspired by

the George Meredith poem of the same name, the voice of the sktylark has come to express key ideas about this nation's entire relationship with the British landscape. At the heart of this complex of responses is the sense that the lark is an expression of something dwelling in its rightful place. In a way the environmental arguments made for changing landscape use and agriculture in the interests of lark utilises precisely the same kind of arguments as are made in Meredith and in Vaughan Williams and in Hudson. Without the lark the landscape is incomplete.

Exploitation of larks

We should immediately acknowledge that all of this lark-song-inspired metaphysics co-exists with a long history of European exploitation of larks, often on an industrialised scale. St Francis of Assisi (1181-1226) is reputed to have said that were the Emperor Frederick II, himself a passionate falconer and celebrated student of birds, ever to grant him an audience, he would plead for a curb on the trapping of larks.

Across much of its continental range the bird was heavily trapped and hunted. In Germany the measures taken included the use of nets that stood 1.8 m (6ft) tall but stretched for 274 m (900ft). Twelve of them comprised a single wall, which were then arrayed in successive rows, all facing east and usually six in number, but occasionally with as many as nine walls altogether. At dusk the autumn stubbles were driven to flush the roosting larks into these vast traps.

The figures are rather fragmentary but they at least give some sense of the scale of the harvest. In the Paris market during 1832, total sales were 826,462 birds (thrush numbers, for comparison, were just 30,081). At Dieppe in the winter of 1867-8, the numbers were estimated at 1,255,500, while in October at Leipzig the German nets described above were thought to yield a regular harvest of 500,000 larks and as many as 1.5 million over the whole autumn season. English lark-catching had its main commercial centres in the London markets of

Leadenhall and Newgate, where the combined sales in the mid-Victorian period involved c300,000 birds.

This off-take of Europe's pre-eminent songster has continued until present day. In the 1970s c4 million Eurasian Skylarks were taken in France and the present legal harvest in that country is still 1.2–1.6 million birds, while the Italian total is 1.5 million.

There is an intriguing irony concerning the present concern for this species, which has declined by half wide in only two generations across all Europe. Through our ancestor's clearance for agriculture of the post-glacial wildwood we originally created the conditions that led to the initial flourishing of larks. We then exploited without regard for sustainability this avian abundance. We have now destroyed lark abundance in western Europe through agricultural improvement. What are the consequences of these lark losses not just for the bird itself but also for us? What happens when a creature that has played such a crucial role in British literary culture vanishes from our collective memory and our shared experience?

I inquired at four British educational establishments, and in three classrooms, one of 14-year-olds (12 children) and two of 16-year-olds (18 and 12 children) at a local fee-paying school, not a single child had heard skylark song. Among older biology students at two British universities the results were marginally better: with figures of five (from 18) and two (from 18). In a degree class of young adults studying creative writing, none (of 11) had ever knowingly listened to lark song. What will it mean to read Shelley's 'To a Skylark' but never actually hear the bird's 'harmonious madness' oneself? The British poet Alistair Elliot has fashioned a new kind of lark poetics that will serve as a conclusion of my Condry lecture.

Speaking of Larks

Suddenly larks are rare. A fertiliser kills
The reasons for their song. Their landscape fills
With whispers that some sharp-eared god enjoys,
Papery music, low botanical noise.

Friends give each other names of fields not drugged, where birds
Still practise their ascensions on transparent words,
Still disappear in light and silence where
Nobody else can hide: a span of air.

You think of following them. The sounds of summer now
Falls only from an aeroplane that echoes somehow
In the soft sky. I'll find and interview
A lark with my machine …
But will that comfort you?

Nature is leaving earth. The species one by one
Withdraw their voices. Soon the creatures shall have gone,
Leaving the subtle horns of rock for nitrogen
And oxygen and noble gas to play upon.