dysseus was the first great mariner in

Western literature. According to

Homer, he was also the first to expe-

rience the mystery and magic of seabirds. To

release Odysseus from the overwhelming

attentions of his lover Calypso, Hermes (the

messenger god) was dispatched to her remote

island, "speeding over the waves in the form

of a seabird that skims the dread swells of the

restless ocean and dips its feathered wings in

nesses, much of it unvisited and little known.

For about 350 of the world's bird species, how-

ever, it is very much their home. These "sea

birds" comprise a range of different families,

each with a different set of physical attributes

and habits to enable them both to exploit the

sea's resources and to escape its dangers. Each has evolved a distinctive relationship with all

three of the elements in which they, uniquely

among animals, must exist – land, sea and air.

Their differing life-styles and adaptations for

this purpose gives Nicolson's book its struc-

Cormorants and shags, for example, are

Feathered wings dipped in the salt sea

On the behaviour of oceanic birds

JEREMY MYNOTT

Adam Nicholson

THE SEABIRD'S CRY
The lives and loves of puffins,
gannets and other ocean voyagers
400pp. HarperCollins. £16.99.
978 0 00 816569 7

the salt sea". That sounds rather like a shear-Each of the ten central chapters describes in water. After his escape on a raft, Odysseus arresting detail one or more of the chosen spethen faced drowning in a storm, until another cies. Nicolson has himself travelled the seas to bird (this one perhaps a tern) alighted to speak study and, as far as he can, share in their lives. to him and to offer a holy veil that would carry He is drawn to their habitats and locations him to safety. Seabirds have continued to capalmost as much as to the birds themselves, in tivate the human imagination ever since, and particular to his beloved Shiant Isles in the in this loving study Adam Nicolson explains Hebrides, the topic of an earlier book in his what it is about their lives, wanderings and remarkable output. As with all great nature extraordinary capacities that may account for writers, it is the relationship between wildlife and place, and the fusion of the two in his own The seas cover some two-thirds of the responses, that brings out his deepest insights earth's surface, but despite mankind's increasing occupation and control of the planet they represent for us one of the last true wilder-

track the extraordinary journeys of albatrosses, making "local" foraging trips of 10,000 miles and covering over 5 million miles of (to us) featureless ocean in a lifetime.

This is a work of both poetry and science. Nicolson refers to (and himself translates) the two passages from Homer, and he follows the trail of later seabird evocations through Milton, Pope, Coleridge and others. The title of his book is taken from the lines by Seamus Heaney, "What came first, the seabird's cry or the soul / Imagined in the dawn cold when it cried?", and Nicolson's own prose is shot through with imagery of great force and intensity. But he is also insatiably curious about the physical facts that underlie the charisma of these species. The link between the poetic and the scientific here is Nicolson's sense of wonder. Modern scientists have made huge advances in our understanding of seabird biology and behaviour through painstaking observational research, and by using the latest feats of navigation performed by shearwaters. More generally, we may be enlarging and redefining our sense of what constitutes "intelligence" in the evolved behaviours of seabirds. They must negotiate the narrowest of margins between life and death, and they emerge as master strategists and accountants in the mathematics of survival.

This leads in turn to Nicolson's reflections on the connections between our human world and that of the seabirds. The relationship has traditionally been seen in determinedly anthropocentric terms, with the cognitive capacities of other species ranked on a single human - scale. "Clever" birds like ravens and parrots are so judged by their ability to progress some distance along our own measures of cognitive and linguistic competence. But once one recognizes the variety and subtlety of some seabird adaptations one can begin to acknowledge the distinctive subjectivity of other species, which perceive their environment in quite different ways and have their own conceptual understandings of it. The shearwater, for example, lives in an olfactory universe unimaginable to our intensely visual lives. Nicolson traces such ideas to the work of the little-known German scientist Jakob von Uexküll (1864–1944). Uexküll was a marine biologist, but had also read his Kant and posited the theory that each organism has its own Umwelt, or "surrounding world", defined and limited by its unique sensory equipment, so that the number of "possible worlds" expands to infinity.

Our anthropocentrism emerges in more practical and destructive ways, too, when Nicolson considers the future prospects of the seabirds whose wondrous lives he has been celebrating. In the past sixty years the world population of seabirds has fallen by twothirds, and a third of all seabird species are now threatened with extinction. There is no one cause and no one pattern, but we are much implicated in all the likely explanations: overfishing, the entanglement of birds in fishing gear, introductions of invasive species like rats and cats to their breeding grounds, pollution of the seas through oil spills, plastics and other toxins, destruction of nesting sites through development, and the multiple effects of climate change and the acidification of oceans. Active conservation measures can reduce some of these threats to a limited extent, and there are too many variables and unknowns to make secure future predictions, but the overall trends seem relentlessly depressing. The hope may be that the seabirds themselves have enough resilience and adaptability to respond to some of these threats, but, given the timescales of evolutionary change, this seems unlikely in most cases. Adam Nicolson's own wishful manifesto looks forward to a time when what is now dubbed the Anthropocene, the epoch in which man is the dominating factor, gives way to an Ecozoic age, respectful of the different understandings and shared futures of all living beings in our earthly oikos, the Greek word for "home" that is at the root of both economics and ecology.



"Gannet" by Isabel Alexander, c.1985

mainly birds of the coast, highly skilled fishermen and divers in those waters. Gulls too are great coastal scavengers, opportunists in marginal territories and now, increasingly, in urban areas. The auks - puffins, guillemots, razorbills and the now-extinct great auk – are deep-pursuit divers, whose short wings are better adapted for driving them through the water than for flying. Kittiwakes are gulls that have largely abandoned the life of the coast for that of the ocean, except for nesting purposes; while the gannet is the mighty plunge-diver of the North Atlantic, nesting in dense and aggressive colonies on isolated plugs of rock. Finally, fulmar, shearwater and, supremely, the albatross are the heroes of Nicolson's story, perfectly adapted to life over the ocean and thriving in the maelstrom of storm, wind and waves. The only families I hoped for and missed in this roll-call were: first, the terns, surely among the most graceful aerial performers, with the arctic tern also one of the greatest long-distance migrants, making an annual journey from the Antarctic to Arctic and back again to ensure a perpetual summer; and secondly, the storm and Leach's petrels, the Hydrobatidae or "walkers on water", surface feeders that patter and flutter over the waves and make eerie music from their hidden nesting sites. But The Seabird's Cry contains riches enough.

and strongest passions. We visit St Kilda, where the vast fulmar colonies once formed the staple diet of the inhabitants of that most far-flung (and now uninhabited) outpost of the British Isles. We witness the miraculous spring arrival of puffins in the Shiants, when they suddenly return *en masse* from the open seas. We accompany Nikolaas Tinbergen and his student researchers as they record every detail of kittiwake intrigues and interactions in their nesting colonies. We travel to the foggy shores of Newfoundland, where each summer some 2.5 million guillemots gather, once central to the livelihood, and thus to the mythology and culture, of the native Beothuk. And we

technology of tiny satellite transmitters attached to the birds they can also now track their journeys in precise detail. These remarkable discoveries greatly increase, rather than diminish, our sense of astonishment and wonder at nature's ingenuity. We are beginning to understand, for example: the "aggressive camouflage" of the white underparts of most gulls; the links between brain-size and marital fidelity in fulmars; the variable geometry of a diving gannet; the environmental logic that gave great auks the same body-shape as penguins; the tendon lock that enables albatrosses to support their huge wings without muscular effort; and the role of smell in the amazing