January 2000
Vol. 4, Number 1

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Western Wildlife

NEWSLETTER OF THE *LAND FOR WILDLIFE* SCHEME

Registered by Australia Post Print Post: 606811/00007

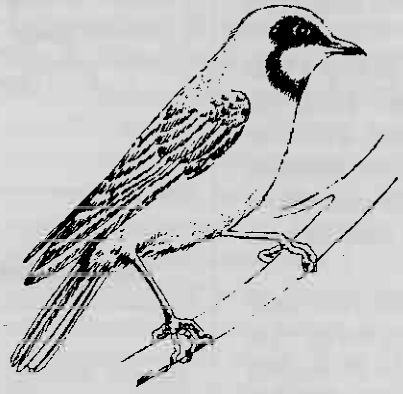
THE FUTURE OF AUSTRALIA'S BIRDS: A PERSONAL OPINION

by Harry F. Recher

BIRDS are the most conspicuous native animals in the Australian landscape. Being active during the day, their song and movements make them part of our daily lives. Birds are part of human culture and are used as symbols of valour, death, heraldry, peace, war and beauty. In an agricultural landscape, birds do more than enliven the day. Birds assist in the control of pests, spread weed seeds and disease, and damage crops. But on balance, birds are probably of greater pleasure and benefit to the landowner than they are nuisance and a rich avifauna signifies a healthy and productive environment. Few of us would like to see fewer birds and most of us would like to keep or increase the numbers of birds we already have. It would be hard to imagine the day devoid of the sight and sound of birds. Yet, this is the reality that Australians need to face as we enter the 21st Century.

A Personal Opinion

I've been a bird watcher for as long as I can remember. For 40 years, I've studied birds professionally: first in North and South America, then, since 1967, in Australia. Spending that much time with a group of animals, you acquire a feel, a sense, of how they behave, even what they might be thinking about. You also develop a sense of how they are doing. There is nothing



exceptional in this. After time you come to know where to look for birds, where different species live, how common or rare they are, when they nest, and when, or if, they migrate. You notice when new birds arrive or old friends decline in numbers and disappear from familiar haunts.

The numbers of all plants and animals change with time. Some years are better than others and breeding is more successful: numbers increase. Other years are not so good: numbers decrease. Habitats change - forests mature, fires burn mature plants and young ones grow in their place: the changes favour first some species of birds and then others. Biologists expect these changes, but in the mid-1980s, after I had been studying birds in Australia for nearly 20 years, I began to notice other kinds of changes. Birds that I had grown accustomed to in city and country were becoming less abundant, or simply disappearing from the places I expected to find them; disappearing even when their preferred habitats remained intact.

The extent of the losses that I was noticing (or just feeling) among Australia's birds alarmed me. In 1988, at a meeting of the Ecological Society of Australia at Geraldton, I presented a paper with Leong Lim in which we analyzed these concerns and predicted that the rate of loss of Australia's birds would accelerate, just as it had for the continent's mammals nearly 100 years earlier. Our paper was not just based on 'feelings'; everything we read about changes in local bird communities confirmed that Australia's birds were in decline. The losses were greatest and most obvious in the southern half of the continent, but there was evidence of loss in the north as well.

To be candid, the views we expressed in the Geraldton paper were not treated seriously. After all, the dominant concern among the nation's biologists and conservationists was for Australia's mammals, large numbers of which were already extinct, while many others perched precariously at the edge of extinction. Even in 1999, only one bird on the Australian mainland has become extinct, the Paradise Parrot. Birds were everywhere! Singing, flying about and generally enlivening the lives of Australians from farm to city: there was no problem. But there was a problem.

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The problem was that the birds which were disappearing were mostly the small brown ones that few people, even keen conservationists, notice. It was a problem of not appreciating that even very abundant species can rapidly disappear into extinction. Less than a lifetime after John James Audubon described flocks of Passenger Pigeons blacking out the sun of the American mid-west, the last one died a lonely death in the Cincinnati Zoo. But the most important problem was the emphasis that biologists and legislation placed on extinction: action to save a species does not really begin until it is already on the verge of extinction.

State of Australia's Birds

Australia and most of the states have lists of threatened species of plants and animals. Some states, such as New South Wales, even list threatened ecosystems or unique communities of plants and animals. Threatened species include those that are already extinct, those that are endangered (on the verge of extinction), those that are vulnerable or at risk for one reason or another of becoming endangered, and some naturally rare species. In 1992, on behalf of the Commonwealth, Stephen Garnett prepared a report on the status of Australia's birds. Garnett listed 100 taxa of birds (his taxa included species and unique varieties or subspecies) on Tasmania and mainland Australia as threatened with extinction. This is nearly 11 % of Australia's avifauna or about the same percentage of birds as are threatened around the world. Garnett also listed another 71 taxa, about 7 % of the avifauna, as birds of special concern - birds which could be threatened, but for which there was insufficient information on their status to be certain. Thus, Garnett's 'official' list of threatened birds listed 18% of the continent's unique avifauna: a revision being readied in 1999 will increase this to nearly 20%.

Although only 171 of the 941 taxa of birds on Tasmania and mainland Australia were listed as

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threatened or of concern, it did not mean that the other 82% of birds were secure and not threatened. Garnett was required to operate within specified limits as defined by international criteria for listing threatened species, as well as the legislative and policy requirements of government. For most of us, listing nearly 1 in 5 birds as threatened or of special concern should prove that Australia's birds are in trouble. However, I thought Garnett's assessment of status was too conservative and too constrained by government policies. In my opinion, the status of Australia's birds was much worse than 1 in 5 being threatened: to me, birds were as endangered as Australia's mammals where more than 20 species or nearly 10% of the known species are already extinct as a result of European settlement.

Official assessments of the status of species, whether on a continental or regional scale, have been unable to project the effects of threatening processes into the future. The system is reactive, rather than proactive: action is not taken until a species is clearly endangered. As a result, official assessments have been unable to anticipate cumulative losses of populations which would result in a change in status of species from 'not threatened' to 'threatened' or even 'extinct'. To be proactive, requires recognition that many seemingly abundant species are at risk. One of the best examples of birds in this category are birds which feed and nest within the tree canopy in the agricultural regions of southern and eastern Australia. Here the progressive loss of mature trees from tree death and continuing land clearing will inevitably lead to precipitous declines in abundance. Some of these birds, the Weebill for example, are extraordinarily abundant, but totally dependent on mature trees which are being lost to old age and continued land clearing and habitat degradation. An entire family of birds, the honeyeaters, is affected in precisely this way. The Regent Honeyeater, now a fashionable icon of national efforts to save endangered birds, is just one of a dozen or more honeyeaters dependent on mature woodlands and in precipitous decline in eastern Australia. Planting new trees helps, but it is very much a race against time.

Prediction for the New Millennium

Taking up where Garnett left off, and based on my own experience, discussions with other ornithologists, and a comprehensive review of the literature, I reached the conclusion that over most of southern Australia entire avifaunas are threatened with extinction: parallel changes are underway in northern Australia. When allowance is made for habitat loss and degradation, 30 to 90% of bird species across the continent have already declined in abundance by as much as 90% of their original numbers. The extent of this decline is that the survival of many bird species in the 21st Century is threatened. Over much of Australia, many species are already ecologically extinct.

I do not deny that while a majority of birds have declined in abundance and/or distribution, others have increased. This is also evidence of human impacts on Australia's environment and its wildlife. When it comes to evaluating such impacts, increases in abundance and a change in the composition of avian communities are as significant as extinction. Increases and decreases both adversely affect patterns of continental biodiversity and are evidence of environments which are ecologically dysfunctional and unsustainable.

I expect fewer than half of Australia's terrestrial bird species will survive the next one hundred

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years. If I am wrong, it will only be because birds are tenacious and the rate of extinction will be slower than I anticipate, or because Australians modify their behaviour and change the ways they manage and exploit the continent's lands, waters and natural resources. However, at the close of the 20th Century, there is no evidence that this will happen and all trends are towards a continued, rapid decline in the avifauna with the progressive loss of regional populations culminating in continent wide extinctions. As I write this, massive land clearing in Queensland, New South Wales and the Northern Territory coupled with increasing land degradation, changed fire regimes and intensified logging of forests are evidence that the rate of loss of birds will accelerate in the next decade, not decrease. Even with the most Herculean efforts, concerned farmers cannot plant and grow trees or replace native vegetation fast enough to compensate for today's losses of mature vegetation from clearing and land degradation.

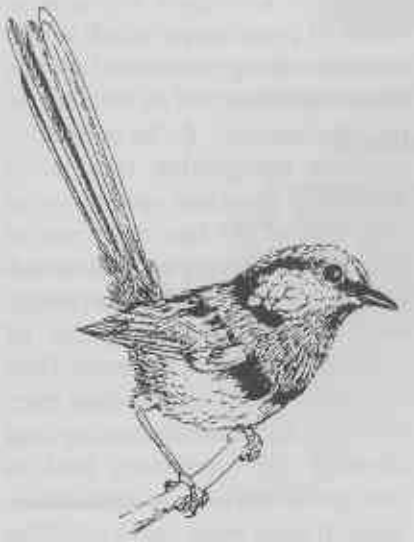
Even if the loss of species is not as great as I predict, Australia will still lose most of its avian biodiversity through the decline and extinction of populations and massive change in the species composition of bird communities. The great majority of birds will be diminished, while a few will continue to be extraordinarily abundant. Regrettably, the conspicousness of these few, superabundant commensals of humanity will mean that few Australians will notice the losses and governments will continue to fail to act.

My analysis and prediction is not novel: it is simply a description of events as they have happened over the past 200 years.

Sustainability

Much needs to be done to reverse the decline of the terrestrial avifauna and achieve ecological sustainability in land use. The most urgent actions are to end the clearing of native vegetation, reduce grazing pressure, remove inappropriate fire regimes, control feral and native animals whose abundance threatens native species, and restore functional ecosystems, with an emphasis on native vegetation, to a minimum of 30% of the landscape. These need to be accompanied by an aggressive program to improve water quality in fresh water habitats and restore environmental water flows, and the creation of a comprehensive, adequate and representative reserve system across the continent irrespective of land tenure.

We should view the decline of Australia's avifauna as a symptom of more serious problems and seek to remedy them by correcting the underlying causes and not by treating symptoms. Australia has approached the conservation of native wildlife species by species. If Australia is to conserve its terrestrial avifauna, it must take a different approach. Emphasis needs to shift from species preservation to the management of ecosystems; the landscape must be managed in its entirety. This can only be achieved by the full co-operation of land managers, land owners and politicians alike, working towards specified national objectives: Australians need to question the sustainability of their demands on the continent. The decline of the avifauna is evidence that these demands are not sustainable.



Our Choice

As we enter the 21st Century, Australia and Australians are committed to growth. Governments fall or are elected on how well the economy performs. The success of a government is measured by how many jobs are created during its term of office and by how much the economy has grown. Each year we need to produce and to consume more than we did the previous year. As Tim Flannery put it, *we are eating the future*. The price we will pay for our affluence and our lack of thought for those who will follow us includes the loss of our birds.

If we are to achieve anything to conserve our birds we must include concepts like 'production of new bird habitat' in economic analyses, and 'how many landscape restoration jobs were created and sustained during a government's term of office' in our political and economic report cards and the teaching of our children. Perhaps it is time to copy Britain's lead and select 'birds' as indicators of national sustainability (along with more usual measures such as the GNP, air quality and unemployment figures). It also seems clear that landcare activities will not reverse the problems we are faced with unless they take into account the 'big picture' approach. After all, it was big government policies and big economic styles that gave us the problem.

There are many encouraging signs that people are thinking like this. But if we, as an entire community, do not act ...yes, some birds will survive. Our towns and cities will host their hordes of pigeons and sparrows. Our farms will still waken to the cacophony of Kookaburras and Galahs. Some of us may still enjoy a Willie Wagtail tormenting the cat from the clothes hoist, but much will be silent. Those who follow may never regret the absence of a lone Yellow Robin announcing the end of the day or the

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wings of countless honeyeaters chasing flowers across the landscape as first one bit of bush and then another bursts into flower. Even now, who knows or cares that many are already gone, but it will be a deeper silence than just the absence of a bush song or the clap of wings. It will be the silence of our own prison; a continent of four ocean walls and a dusty dirt floor devoid of life and meaning.

Further Reading

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