

Native birds and reptiles

George R. Wilson

Introduction

Many Australian native birds and reptiles have much higher economic value in foreign markets than they have at home. An industry based on them is appealing.

However there are major constraints to the development of an export industry because, notwithstanding domestic trade, the commercial export of all live wild animal species is not permitted. This chapter discusses the opportunities of a native birds and reptiles export industry and the changes that would be necessary to enable it to reach its potential.

A carefully regulated industry should also focus on the conservation of wild species and the reversal of environmental degradation. By enhancing the protection of habitat it could increase the distribution and numbers of wild species. If wild populations have a commercial value, landholders are encouraged to improve the resources on which they depend. Wild species are thus able to compete with non-native species for habitat.

In addition to realising commercial benefits from

international trade, controlled trade would reduce smuggling, while allowing pet owners and fanciers personal freedom.

Markets and marketing issues

The international market is large and people throughout the world own birds and reptiles as pets. This meets social needs, improves wildlife awareness and is generally within acceptable animal welfare standards, especially for smaller species.

Australian parrots and reptiles are already sold all round the world. Two species – the budgerigar and cockatiel – are the most popular caged birds.

Some Australian species which are also found to the north of the continent enter international trade after being trapped overseas. Indonesia, for example has a CITES (Convention on International Trade in Endangered Species of Flora and Fauna) quota to export 189,000 rainbow lorikeets; and the Solomon Islands can export 800 *Eclectus roratus*.

Within Australia there is a large, long-established avicultural industry and an emerging herpetocultural industry based on breeding native species. However, these two markets are not connected because of export

prohibitions and there are substantial price differences between market values in Australia and overseas. (Figure 1) The price gaps apply both to the less common species such as gang-gang cockatoos and to the very common species – galahs, long-necked tortoises and blue-tongued lizards. There is mark-up of 1600% for gang-gang cockatoos and, most strikingly, 6000% for galahs.

Birds

Commercial-scale breeding overseas is also growing. Tanzania and New Zealand have established captive-bred facilities for galahs to supply the international market demand.

In the United Kingdom, an estimated 4000 parrot breeders produce tens of thousands each year. The most commonly traded birds are the genera *Neophema*, *Platycercus* and *Psephotus*. Of the larger Australian parrots, the most common species, *Cacatua galerita* and *Eclectus roratus*, are mainly imported from Indonesia according to TRAFFIC (1991). Information on volumes and prices is held by TRAFFIC, the International Union for the Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF) agency. However much of it is anecdotal.

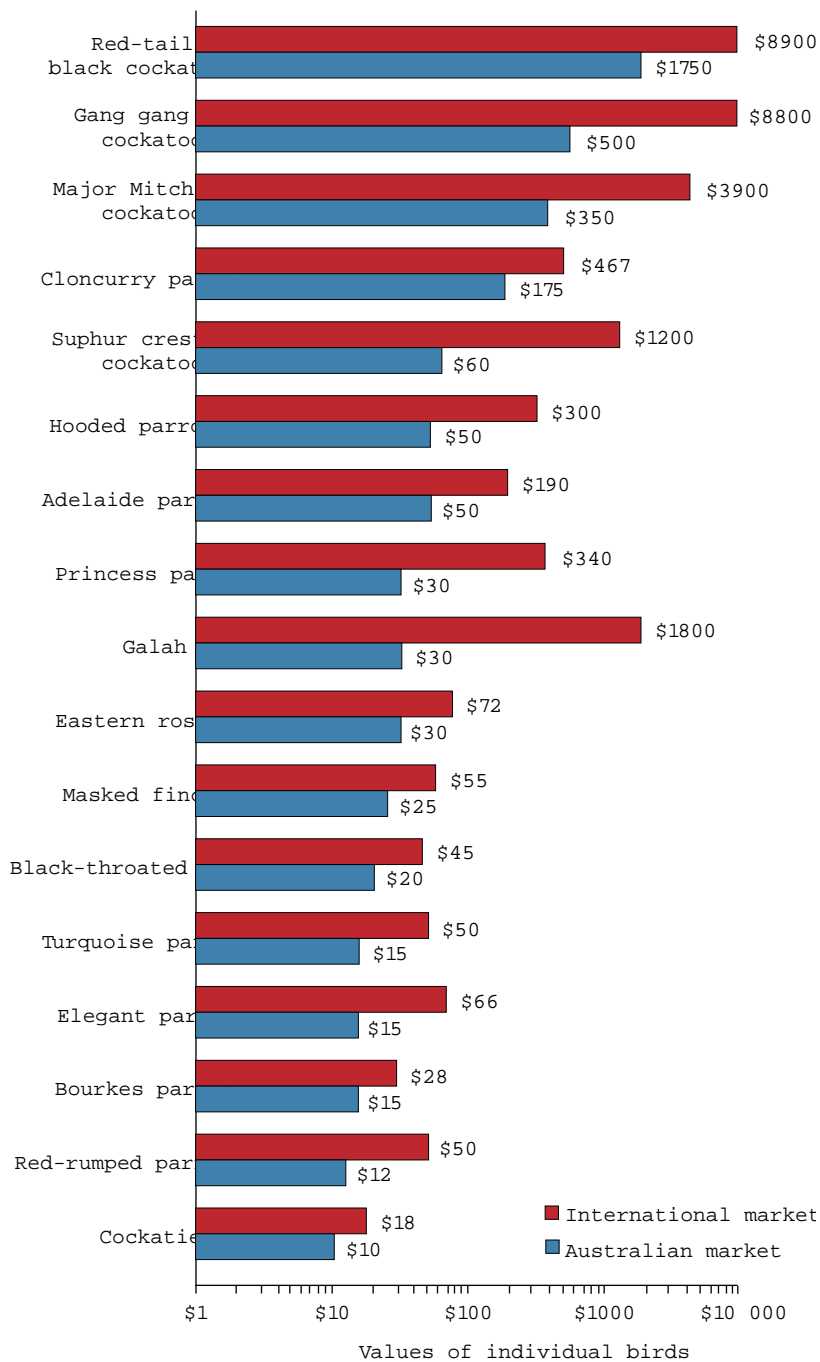


Figure 1. Comparison of bird prices on the international and Australian markets (note logarithmic scale)

Reptiles

Price differences for reptiles are generally not as wide.

The Australian herpetocultural industry is not well developed and the prices for species which are harder to breed such as the green

python are actually higher in Australia than they are overseas. (Figure 2) Overseas expertise in breeding of reptiles is greater. There are nevertheless some significant export opportunities. Market prices for blue-tongued lizard are 800% higher overseas and long-necked tortoises 300%.

About the author



Dr Wilson has a long background in wildlife management and emerging industries. His basic training was as a research scientist and he has had over 25 years experience in public policy and strategic analysis, particularly in emerging regional industries and indigenous economic development. He has recently worked with ACIL Economics and Policy Pty Ltd on a range of economic and resource use issues. Before that Dr Wilson was executive manager of research projects in the Bureau of Resource Sciences and at other times had extensive contact with the practical application of research work through assignments for the rural R&D corporations. See *Key contacts* for address.

The industry expects herpetoculture to increase in popularity, with ever more naturalistic and larger displays to satisfy more sophisticated and ecologically-oriented clientele. The aim of the US industry is to have a herpetological display in every living room, or at least

every living room that would consider having a tank of fish. The herpetological industry sees the transition as similar to that which affected the aquarium industry when it changed from a speciality hobby to a mainstream pastime.

Constraints to growth in wildlife markets

Despite the commercial opportunities, there are considerable constraints on growth in wildlife markets. Commercial use of wildlife is an emotive subject and in 1997 was the subject of a Senate Inquiry. Those who wish to maintain the trade barriers have moral concerns about interfering with native animals and their rights to roam or fly free. They are concerned about

animal welfare aspects and the suffering which commercial use inflicts on animals. They also fear that trade will aggravate the threat to endangered species.

Public opposition to trade in wildlife influences the policy of the Federal Government and the growth of the industry is therefore inhibited by the need to win public acceptance of commercial use.

Production requirements

There are two opportunities for the development of the domestic industry into an export industry. Both aim to produce live birds and reptiles for use as pets and for bird and reptile fanciers. Both are based on known techniques and procedures tested by the

established avicultural industry and an emerging herpetocultural industry. Rearing of larger species in captivity – emus and crocodiles – is also proceeding for agricultural production and is accepted by the community.

One production system involves the intensive breeding of birds and reptiles in captivity. The other involves the harvesting from the wild of juveniles and rearing them in captivity – a ranching operation as defined by the CITES. The latter production system would focus on the more valuable species that are difficult to breed in captivity. It would require that landholders maintain habitat and control predators on their lands. The outcome would be of benefit both to populations of the species being targeted and to other species that depend on the same habitat.

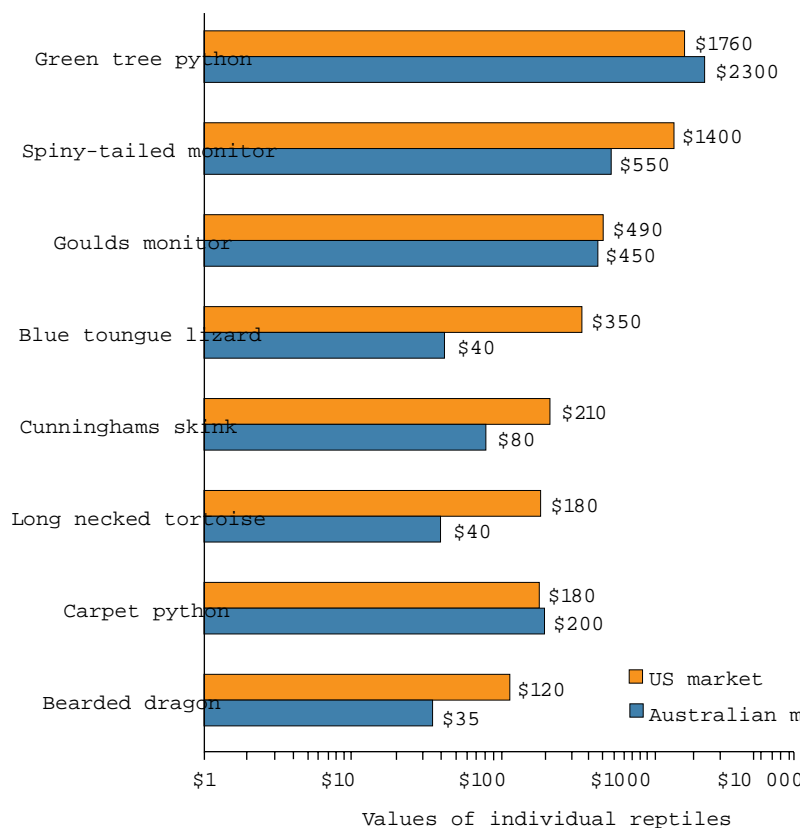


Figure 2. Comparison of bird prices on the international and Australian markets (note logarithmic scale)

Key statistics

- E Common birds and reptiles are up to 60 times more valuable overseas than here.
- E More than 1 million Australian households have birds as pets and annual expenditure on them is estimated at more than \$150m.
- E More than 200,000 'Australian' parrots are traded from Indonesia per year under CITES controls.
- E In the U.K. alone there are more than 4000 breeders of Australian parrots.



Galah (*Cacatua roseicapilla*), adult male: Chambers Gorge, Flinders Range, SA. Credit: Ross Whiteford/ Nature Focus.

Current management regimes for Australian birds and reptiles administered by States and the Commonwealth would need to be altered to allow the export of specimens of a limited range of species in a pilot or feasibility study. Strict controls are needed to meet the community concerns referred to above.

Species

The first opportunity focuses on captive breeding of smaller species which are currently in commercial production in Australia and overseas and to which animal welfare concerns are less likely to apply. These include:

- budgerigars and cockatiels;
- long-necked tortoises, blue-tongued lizards; and
- Adelaide, Cloncurry and hooded parrots.

The second opportunity involves harvesting surplus young from the wild with a view to hand-rearing in captivity ('ranching'). This opportunity has considerable scope for Aboriginal people. Species of potential include:

- galahs, sulphur-crested cockatoos; and
- goannas and carpet pythons.

At a later stage, ranching operations could be extended to less common species, but only as part of a management plan that includes prior habitat improvement, mortality control and agreement to release back to the wild. This opportunity could include less common species such as:

- gang gang, Major Mitchell and red-tailed black-cockatoos;

- birds of prey such as peregrine falcons;
- cassowaries, bustards; and
- other tortoises, pythons, geckos and frogs.

Key messages

- E Keeping pets brings joy to people, improves wildlife awareness and is generally within acceptable animal welfare standards.
- E Australia is missing the opportunity to supply the large international pet trade.
- E The Australian avicultural industry has the technical skills on which to base an export industry.
- E Galahs and long necked tortoises are being bred overseas.
- E A policy change should allow pilot and feasibility study of export of common species.
- E The proposal must be linked to habitat preservation and means of increasing conservation of rarer, more valuable species

Management and husbandry

The technical aspects of the husbandry of birds and reptiles are relatively well known. The stages in the process are trapper

or breeder – dealer – transport – quarantine – dealer – wholesaler – pet shop and owner. The chain for overseas sale is longer.

The main concerns are ownership, commercial sale, compliance with community standards and management. Australian policies, laws and procedures dealing with the keeping, trade and conservation of wildlife are very complex. They consist of overlapping State and federal laws to protect animals and control trade; preservation of areas of habitat in national parks and reserves; and programs and schemes for safeguarding habitat outside the reserve system.

Australian laws enable Aboriginal and Torres Strait Islander communities to use native flora and fauna on their land for their own consumption but they can not sell wildlife. Even the sale of an animal to another person within an Aboriginal community is not exempt.

Export control laws

Captive-bred products. Private and commercial trade in wildlife products, but not live animals, is permitted if the products are derived from captive-bred animals or artificially propagated plants. Australia has an established export trade in skins of captive-bred crocodiles, emu products, artificially propagated native plants, including orchids, and captive-bred native butterflies and fish.

Wild-harvested products. Commercial trade in products of animals and plants taken from wild populations is also permitted, provided the species

is not listed on Appendix I of CITES and is not a member of the cetacean group (whales, dolphins, porpoises), where a management program has been approved under the Act, or the specimen has been declared a controlled specimen. Management programs currently allow the export of products derived from a range of species including kangaroos, brush possum, mutton-birds and wildflowers from Western Australia.

The export of wildlife also has to comply with the CITES (see box) and the powers the Commonwealth derives from it under the Wildlife Protection Act. These affect both the development of intensively managed wild animal ‘farms’ and the extensive harvesting of native wildlife species. For export to proceed, management plans must be prepared.

Animal welfare standards for the care and keeping of birds and reptiles that cover capturing, transporting, sale and keeping are promulgated by State jurisdictions. They stipulate codes for husbandry, feeding, water, accommodation, minimum cage sizes, health and quarantine processes. In some States these codes are backed up with the power of legislation.

Stress on wild-caught birds

It is sometimes suggested that capturing wild birds that are a nuisance and selling them will solve pest problems. However, capturing adult birds can be cruel particularly if they cannot adapt to captivity and transport.

These animal welfare issues need closer examination. Young, hand-reared birds which are tame and easily handled make the best pets and are most sought-after. The larger companies that sell wild birds in the domestic market state that although birds are trapped all the year round they make it a practice to sell only young birds suitable for taming and training.

Convention on International Trade in Endangered Species (CITES)

Under CITES, more than 124 nations are now regulating international trade to prevent the decline of species threatened or potentially threatened with extinction. Trade, which is defined as import, export, or re-export, of a long list of such threatened animal and plant species, is either virtually prohibited (Appendix I species) or restricted (Appendix II or III species). The Convention requires that international shipments of these species, and products made from them, possess an import or export permit, or both, issued in advance by the official management authorities of the countries involved. Permits are issued after findings by scientific authorities that the trade will not be detrimental to the survival of the species in question.



Eastern snake necked or long necked turtle (*Chelodina longicollis*).
Credit: G. Little/Nature Focus.

Adult, wild-caught birds can make reasonable pets if experienced or dedicated bird trainers handle them. However it is much more difficult to train an adult bird that has no human contact, or worse, negative human contact, than it is to bond with a baby that has only ever had positive contact with humans.

Pests and diseases

Wild-caught birds could succumb more readily to diseases. The stress of trapping, collective housing and distribution leads to the suppression of their immune systems. Clinical presentation of psittacine beak and feather disease (Pbfd) and infections due to enterovirus, psittacosis virus, gram negative bacteria and occasionally megabacteria and polyomavirus are more likely. Older birds are more likely than younger birds to be carriers and transmit disease to other birds at the dealers, pet shops or eventually the destination aviaries.

Effective quarantine is necessary to ensure that exports do not expose foreign birds to Australian diseases. Countries importing birds and reptiles are likely to require rigorous pre-export testing and certification of health status in order to protect their own birds. Pbfd is believed to have appeared in South American psittacines in North America after they were exposed to birds of Australasian origin. Further introductions of Australian psittacines could increase the risk to rare and valuable birds.

Imports to the USA of some species of animals and from some countries are prohibited; others must be held in USDA animal import centres or quarantine stations for 30 days after entry and inspected by veterinarians of the Animal and Plant Health Inspection Service (APHIS).

Transport and welfare

Many thousands of birds are currently exported from Australia including wild-trapped exotic

green finches, gold finches and canaries, and Australian species exported as bonafide pets. These birds are subject to IATA Live Animal Regulation and most to CITES regulations. All parrots except three are in CITES Appendix II or higher. (see box above)

CITES requires importing countries to note and comment on the health of imported birds; any suspicion of disease; whether the type of box and its construction correspond to IATA prescriptions, are overcrowded or the boxes damaged; ventilation problems; or lack of water/food. Mechanisms are available for reporting back to the CITES Animals Committee.

Public concern about smuggling has led to many policy initiatives and reviews. It is also the focus of much of the enforcement of the Wildlife Protection Act. TRAFFIC is a non-government agency which also collaborates in these efforts.

The transport of birds and reptiles is given a poor image by revelations of cruel smuggling. Ironically, one step in reducing the cruelty is to allow commercial trade, remove the incentive and bring trade under the control of existing codes of practice.

Economics of production

The size of the Australian domestic market is already substantial. More than 1 million Australian households have birds as pets and expenditure on them is estimated at more than \$150m. Some of these are exotics such as

canaries or peach-faced lovebirds.

The production industry is also large. In WA for example, there are at least 4300 aviculturists, 100 bird dealers and three licensed trappers. Individual bird collections can be very valuable; some are worth over \$1 million each.

Many bird and reptile species could be profitably exported. An industry could build on Australia's unique genetic resources and the international demand for progeny.

Australian producers have an edge over competitors in regard to the price differentials of the initial breeding stock and its availability and fitness. Another commercial advantage comes to Australia from the difficulties overseas breeders have in emulating Australian conditions and other costs of producing the birds. For example, cold winters and cool to mild summers in the UK can create difficulties for some species. Imported bird-seed prices do not compare favourably and suitable land is not as readily available at a reasonable price.

In more spacious enclosures, Australian costs of production could be minimised by exporters concentrating on single species and developing specialised breeding procedures, (as is being done by the breeders of galahs in Tanzania). The current practice in Australia is to breed a variety of orders and species more intensively..

Some international competitors such as Birds International in the Philippines may provide considerable competition when

they target markets with low animal-health standards. However, the relatively high avian health standards and certification procedures in Australia may facilitate the export of birds to countries with correspondingly high standards of avian health, such as Scandinavia.

There seems to be little prospect for exporting low-value birds such as budgerigars and cockatiels. Captive-bred birds overseas are closer to their destination, have less time in quarantine and in the wholesale/retail channels, and so receive positive human contact sooner after they fledge.

Pest birds could be exported at minimal cost but the market demands pet birds in good condition. Wild-caught cockatoos that are currently sold for the domestic market are young animals; older birds have less market value because they squawk and might bite.

Effects on the Australian industry of access to overseas markets

The export of captive-bred birds could generate export revenue and local employment. It would benefit aviculturists, farmers and entrepreneurs who may wish to enter the trade. Some Australians in the industry, however, are opposed to a change. They are concerned that Australian prices would rise to the international levels. Major Mitchells, for example, could rise in value to \$1200. Others see it as our salvation, noting that the

Australian market has been suffering from over-production and prices have been falling. For example, hooded parrots which were worth thousands of dollars 20 years ago now fetch \$80 per pair.

There is hardly any purely commercial activity in reptiles in Europe. In the US trade is more substantial. Size and other attributes are important to the value of a specimen. Snakes are also valued for producing venom.

The provisions and requirements of CITES in regard to ranching, breeding species in captivity and transport should be used as the minimum criteria set to test a pilot study of the commercial export of Australian birds and reptiles. A project is needed to develop the details of the proposed management regimes. It would outline habitat improvement procedures that deliver enhanced conservation status and recommend methods for determining the numbers of surplus animals available for harvest. Birds trapped for pest control suffer stress and present animal welfare concerns. They are unlikely to make good pets and the activity is not recommended.

Key contacts

Dr George Wilson
Australian Wildlife and
Conservation Services
Canberra
Phone: (02) 6281 2160
Fax: (02) 6285 1195
Email: gwilson@awt.com.au

Dr Grahame Webb
Wildlife Management
International
Darwin

Phone: (08) 8999 2355
Fax: (08) 8947 0678

Bill Love
Glades Herb Inc
Florida
Phone: +1 813 693 1077
Fax: +1 813 693 1901

Brian Byles
Cage and Aviary Birds Magazine
London
Phone: +44 71 261 5000
Fax: +44 71 261 6095

John Allen
Avi-ark
Phone: (08) 9524 1424

Glen Sant
Traffic Oceania
Phone: (02) 9299 6582
Fax: (02) 9299 6557

Peter Mirtschin
Venom Supplies
Phone: (08) 8563 0001
Fax: (08) 8563 0020

Michael Suaquet
La Ferme aux Oiseaux
Phone: +33 57 49 13 02
Fax: +33 57 49 15 46

Howard Voren Aviaries
Phone: +1 407 793 5528
Fax: +1 407 790 2687

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