Contingency Plans for Exotic Bird Escapes in Australia

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Introduction

Until now, no response mechanisms have been put in place to address the eventuality of a significant or gradual but prolonged escape of exotic birds in Australia. A workshop held in Canberra in November 1995 identified that either of these scenarios may eventually result in the establishment of introduced birds in the Australian environment. Such mechanisms, or contingency plans, are needed because the establishment of birds in a new environment may:

- have a deleterious effect on the natural environment, through competition with, displacement and/or hybridisation with or predation on native species;
- have a deleterious effect on agriculture and the environment, through crop or orchard damage, inhibition of livestock production, etc.;
- have a deleterious effect on both agriculture and the environment, through the spread of disease:
- result from unexpected events, such as that associated with a natural disaster, for example a cyclone;
- involve birds which have a high monetary and/or conservation value, necessitating a strategy of recapture rather than culling or eradication.

Introduced (exotic) animals or birds have the potential to:

 threaten ecosystems by competing with, hybridising with, or displacing native birds or other wildlife;

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- threaten ecosystems by preying on native wildlife;
- destroy or damage crops, farmland and/or other agricultural industries;
- cause harm to humans;
- introduce or spread disease.

Many aviculturists and ornithologists believe aviary-bred birds have a reduced potential to establish a wild population. It is claimed that breeding in captivity for several generations reduces the birds' natural instincts, such as foraging skills. However, as aviculture becomes increasingly popular both in rural and suburban areas, the potential for birds to escape is increased. While not all birds will be capable of living and breeding in a natural environment, they may have considerable impact on the environment through sheer pressure of numbers.

Implementation

To address this potential problem, ANCA held a workshop in Canberra in November 1995 during which input was heard from all relevant facets of the community, including birdkeepers, State and Territory government agriculture and conservation agencies, the Department of Primary Industries and Energy, Emergency Management Australia and others. The proceedings of this workshop have been published and are now available. It is intended that the skeletal plan, or template, will be developed by the Australian Nature Conservation Agency and made available for public comment in early 1997. After appropriate consultation with all relevant stakeholders, it is intended to present this template to both ANZECC and ARMCANZ for their endorsement.

The workshop identified a dearth of information, published and unpublished, about the current status of exotic birds both as feral populations and as aviary subjects in Australia. As there is presently no government control or licensing system in place nationally for exotic birds, there is no available data on the species currently housed in Australia or the number of individual birds. This lack of information will be rectified to some extent within the next few years as the Commonwealth implements it's National Exotic Bird Registration Scheme.

The workshop's aim was to discuss and record all of the components thought to be relevant to the development of generic plans for use in any situation. In actuality the workshop identified many related issues, other than the practicalities of developing contingency plans. These included political, social and economic opposition to such plans, responsibility for action, and the necessity for developing such plans in the first place.

Making an assessment of the situation

As a first step in the development of contingency plans, the extent and severity of the situation must be assessed. Specifically, the escape of a small number of birds of low pest potential in unsuitable habitat would not require the implementation of a plan, while release of a small number of birds in adequate conditions may require the responsible agency to institute a plan which would eradicate or reduce the escapees to a manageable level. The workshop identified several scenarios for release, including:

- natural disaster (cyclones, high winds, floods, bushfires, earthquakes);
- intentional release (owners of unwanted pets, criminal negligence);
- unintentional release (escapes due to inadequate housing, negligence).

These situations may arise quickly, such as natural disasters, or the releases may occur over a prolonged period. Therefore, an assessment of the situation should include:

- where the escape has occurred, how it happened, and how many birds were released;
- positive identification of the species involved (similarity to native birds);
- an analysis of the extent of the problem (number of birds, extent of dispersal);
- ecology of the species and the habitat of the release site(s);
- likelihood of establishment at the release site, and possibility for migration/movement to adequate habitat;
- potential for spread of disease.

The appropriate response mechanism will then depend on the circumstances of the release and the assessment of the situation.

In some cases, where a control program or contingency plan has been put in place to curtail a previous disaster or escape, it may be necessary or advantageous to consider the past history. Information on the frequency of escapes, potential for establishing a pest population and other data should be examined to establish the feasibility of implementing a contingency plan. Also, feedback on the relative success or failure of similar plans for the same or other animal species may be of use.

As a first step, an assessment should be made of what species of birds are involved, the number of birds which have escaped and/or established a feral population and the ecology of the species concerned.

Who should be responsible for implementing contingency plans?

Before any contingency plan can be developed or implemented, a system for notification that birds have escaped must be formalised. At present there is no one single organisation or government department responsible for collating information on the status of exotic birds, either captive, or escaped and existing as a feral population in Australia.

Contingency plans may be developed by any organisation or individual responsible for recapturing or eliminating the target. Plans may be as simple as a list of telephone numbers to contact in an emergency or as complex as a defined and practised series of procedures used by a zoological institution.

The RAOU and other ornithological groups collect information on the status of native birds, and have the expertise to do so for exotic birds. The workshop recommended using pre-existing networks such as these groups for detecting escaped birds and identifying emerging feral populations. The workshop also suggested formalising the process of notifications so that a single agency or organisation is responsible for deciding on the appropriate response. In this way, situations which require an urgent response will be treated accordingly.

When should a contingency plan be implemented?

Situations which may require the implementation of contingency plans are:

- escape of large numbers of birds of more than one species during a natural disaster;
- release of a small number of birds, either by accident or on purpose, where the species concerned is either of high monetary or conservation value, or has significant pest potential;
- frequent release of small numbers of unwanted pet birds in urban areas;
- "mop-up" operation of an established feral population in an identified area.

The generic term "target" is used to cover each of these situations.

The use of these plans for targeting native species which have established feral populations outside their native range should not be overlooked.

How do we measure success?

The success of a contingency plan will ultimately be gauged against its capacity to meet its aims. Therefore, when an assessment is made of the scope of the problem and the best method to tackle it, the objective should also be defined. Three such objectives were illuminated by the workshop:

Eradication All birds in a defined area are removed/destroyed

Control The population is reduced to a non-viable number

Nil No action is taken on the feral population (in some instances, the nature of

the species, the sex of the birds released or environmental factors may act

as a population control and the population will not survive)

In each instance, the ecological characteristics of the species and its potential to establish a feral population should be used to make an assessment of the appropriate objective. Also reflected in this decision should be the number of birds or the area which is intended to be targeted by the plan.

by the plan.

While the eradication of escaped birds with recognised pest potential or established feral populations would be an ideal outcome, it may not be achievable in all circumstances. In some instances, control of the:

• number of birds of a particular species to prevent further spread;

- increase in numbers; or
- impact on the environment,

might be an attainable and acceptable solution. In the case of escaped pet birds, recapture might be the identified option.

The aims and objectives of the plan may also include a specified time limit in which to complete the operation. This can also be used to determine the overall success of the operation.

Developing the contingency plan

In developing the contingency plan, three phases must first be identified and described:

Pre-phase At this stage, the appropriate contingency plan is developed, the aims are

decided, and resources and technical requirements are organised.

Action phase A situation has occurred which required the activation of the contingency

plan. The plan has been implemented, following pre-determined procedures.

Post-phase Action under the contingency plan has been completed and its success is

measured against its aims.

Achieving a state where no further exotic species are introduced to the Australian environment, and those that have, are eliminated, is an ideal. It will be accomplished by:

- 1. Promoting accountable and responsible ownership of exotic birds through education.
- 2. Developing an action plan to respond to releases of exotic birds into the environment.
- 3. The National Exotic Bird Registration Scheme.
- 4. Developing a community reporting system for escapes of exotic bird species.

Prevention through education

Escapes are preventable through education of the owners/keepers about cage construction, and the risks associated with allowing exotic birds with high pest potential to escape.

Another issue which deserves consideration is that of the welfare of birds which are intentionally released and which have a limited capacity for survival. Birds with no pest potential but which are unable to find food or escape predation, will suffer unnecessarily. This is a message which could be spread to bird owners through contact with veterinarians, as well as the RSPCA and other organisations. An education program through such avenues would be of great benefit in preventing escapes before they occur.

Outcomes of the Workshop

The principal outcome of the workshop was agreement on the elements that needed to be contained in Contingency Plans for Escaped Exotic Birds in Australia, and the strategy for developing and implementing such plans. Significant recommendations included:

- (i) the need to establish, at the Commonwealth level, a national database for exotic birds in Australia, which will include a facility for reporting sightings, and
- (ii) in recognising the benefits of prevention, that a comprehensive education campaign be developed, aimed at aviculture and other relevant sectors of the community.

The workshop made several recommendations for consideration. They are as follows:

- That ANCA develop a template for generic contingency plans for use in any exotic bird escape situation in Australia;
- That a national database be established to record reported sightings of escaped exotic birds, to plot their survival and spread, and to provide useful information for the development of contingency plans;
- That the process for making these reports be formalised so that all records are accurate and substantiated:
- That an education program be instituted to increase public awareness about birds with pest potential and the dangers to both the birds and the environment should they be released.

Reference:

Moller, S, Barrett, J. Contingency Plans for Exotic Bird Escapes in Australia - Outcomes of a workshop held by the Australian Nature Conservation Agency at the Australian National University in Canberra, 29-30 November 1995. Australian Nature Conservation Agency, May 1996.