

# MAF keen to hear about parrot disease, Psittacine poxvirus

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MAF is asking bird owners and enthusiasts to report any sick parrots that show signs of psittacine (parrot family) poxvirus, to help identify how far it has spread.

Psittacine poxvirus has been diagnosed in New Zealand for the first time, although other strains of avian poxvirus occur here. Experts believe that the disease could establish in New Zealand and cause high death rates among caged and wild introduced parrots, when factors combine to cause disease outbreaks.

Of even greater concern to New Zealand, however, is the potential effect on indigenous parrots such as the critically endangered kakapo, the threatened kaka and kea and the kakariki. The susceptibility of native parrot species is not known, but experts have cautioned to assume susceptibility. If native parrots are susceptible, the disease could be spread to them from introduced wild parrots, through transfer of contaminated items or by biting insects.

## **Disease outbreak and investigation**

In July 2002, two rosellas were presented to an Auckland veterinarian. The birds subsequently died and psittacine poxvirus was diagnosed. MAF eventually traced the birds to an Auckland aviculturist, on whose property there appears to have been a large number of bird deaths. Up to 200 rosellas caught from the wild were being prepared for export, along with other birds from a large number of sources. The mortalities appear to have largely been rosellas, and the birds were disposed of without the event being reported. Depopulation and decontamination has been undertaken on three Auckland properties linked to the outbreak.

Investigating the disease outbreak has been made difficult for MAF because of the non-cooperation of some of the parties involved. The poxvirus may have come from an untraced caged bird source, however, evidence to date is inconclusive. Investigations

involving other suppliers of birds to the outbreak facility continue.

## **Report birds showing signs of the disease**

MAF wants to find out how widespread the disease is. To do this, they need samples from sick parrots, particularly rosellas, galahs, lorikeets, cockatiels and budgerigars that show signs of poxvirus infection. An information sheet has been distributed to the bird fanciers community in New Zealand and posted on MAF's website ([www.maf.govt.nz/biosecurity/pests-diseases/animals/psittacine-pox/index.htm](http://www.maf.govt.nz/biosecurity/pests-diseases/animals/psittacine-pox/index.htm)).

Reports of suspect disease can be made to a veterinarian or the MAF Exotic Disease Hotline (0800 809 966). MAF will send information and forms to help veterinarians collect appropriate samples for testing. Diagnosis can only be confirmed by laboratory tests.

In the meantime, MAF is also tracing sources of birds to try and identify the source of infection. Birds are being checked for infection and, where necessary, properties are being disinfected. MAF is also working with the Department of Conservation (DOC) and the Aviculture Society's Avian Disease Management Council to develop plans for managing further cases. DOC is assessing a number of contingency actions, including:

- increasing biosecurity measures at important sites,
- instructing staff to be vigilant for signs of the disease,
- evaluating contingency measures to protect at-risk parrot populations, given that there is a risk that the virus may already be established in the wild,
- possible review of hygiene protocols, associated with parrot conservation management and disease screening procedures, along with the recovery plan for threatened parrot species,
- possible temporary restrictions on the transfer of parrots from the greater Auckland region, until more is known about the spread of the poxvirus in the wild,

## Parrot disease continued

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- increased enforcement under the Biosecurity and Wildlife Acts, to discourage illegal parrot liberations.

### Signs of disease

Psittacine pox can occur in various forms:

A cutaneous form (skin form, sometimes called 'dry' form by budgie fanciers) causes nodules on the unfeathered parts of the skin, the ceres, around the eyes and the feet. The nodules form blisters that erupt to scabby erosions. Secondary infections with other organisms may delay healing, but the mortality of birds affected with this form is low.

A diphtheritic form (sometimes called 'wet' form) causes lesions on the mucous membranes of the mouth, eyes, and throat. White plaques will be seen on affected surfaces, with fluid effusions. The disease may become systemic, with internal lesions in the throat, gastrointestinal tract, lungs and air sacs causing birds to be very ill and depressed. Mortality can be high with this form.

Birds affected with either form of the disease may appear weak and emaciated. In some cases there may be no or few outward signs, other than general depression, illness and death. There is no specific treatment or effective vaccine for psittacine pox.

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