Beak and Feather Disease

What is it?

Psittacine Beak and Feather disease (PBFD) is a potentially deadly disease that predominantly affects parrots, cockatoos and lorikeets (psittacine birds). It is caused by the highly infectious Beak and Feather Disease Virus (BFDV). It doesn't cause disease in humans.

Where is it found?

PBFD is present in South Australia, and all other states and territories of Australia. The first known outbreak of this disease was reported in wild red-rumped parrots in the Adelaide Hills in 1888. It may have originated in Australia and is now widespread.

What species are commonly affected?

The disease is prevalent in species that are widespread, such as the galah, crimson rosella, eastern rosella, little corella, long-billed corella, musk lorikeet, rainbow lorikeet, red-rumped parrot, sulphur crested cockatoo and yellow-tailed black cockatoo. It is quite common for a flock of these birds to have one or more members visibly affected by PBFD. The disease is not often found in cockatiels.

The BFDV has occasionally been reported from non-psittacine bird species in the wild, including the Australian magpie and raven, rainbow bee-eater and white-bellied sea-eagle.

What are the symptoms?

Symptoms vary greatly depending on the species and age of the bird. The virus may affect the feathers, beak and claw and suppress the immune system.

Consider PBFD in any parrot, cockatoo or lorikeet showing abnormal loss, colour or development of feathers. Cockatoos, galahs and little corellas may also develop abnormal beaks. The majority of affected birds will eventually die from a secondary infection. PBFD can cause high mortality rates in young or fledging birds.



Deformed beak and feathers in sulphur crested cockatoo with BFDV Picture: David Phalen - University of Sydney

What is at risk?

PBFD does not present a major threat to the conservation of wild parrots, cockatoos and lorikeets. However, for species with only a few populations or limited numbers of birds, such as the critically endangered orange-bellied parrot and the endangered swift parrot, PBFD infection may have a severe impact. PBFD has been recorded in wild birds of both these threatened species and its occurrence poses a risk to the survival of these species.

The endangered Kangaroo Island glossy black cockatoo is known to be susceptible to PBFD. However, the BFDV is not known to be present in the small population on Kangaroo Island.

How does PBFD spread?

The BFDV is spread from bird-to-bird in feather dust, faecal droppings, in crop secretions when feeding chicks, and through successive use of the nest hollow or box. Birds can contract the virus at feeding, roosting, nesting and watering sites.

Psittacine birds commonly live in flocks and nest in tree hollows, which favour spread of the virus within a population. The virus may remain viable in tree hollows for many years.





Some birds, such as the rainbow lorikeet, are able to recover from the disease. Individuals that recover become a carrier of the virus and will excrete and spread the virus for the rest of their life.

People that have been in contact with an infected bird can spread the disease through their clothing and hair.

What can I do to prevent the spread of PBFD?

There is no treatment available for PBFD. Eradication of the disease is not feasible because the virus occurs naturally in Australia and is widespread. The preferred management strategy is preventing and slowing down the spread.

Diseased birds, particularly if birds are weak and the beak and nails are affected, may need to be euthanased for the protection of healthy birds. If only the feathers are affected and the bird suffers no other symptoms, it can usually experience an acceptable quality of life. In South Australia, a wild bird with PBFD may be rescued, if practicable, and taken to a vet to be euthanased.

Do not release captive parrots, cockatoos and lorikeets into the wild because they may have the BFDV. Symptoms of PBFD are not always obvious.

Wherever possible, isolate diseased birds in captivity to prevent spread of the BFDV to other healthy birds.

Good hygiene and husbandry of parrots, cockatoos and lorikeets in captivity is essential to protect them and wild birds from PBFD through the following hygiene measures:

- Quarantine and monitor any parrot, cockatoo or lorikeet for two months before allowing it to enter your aviary with other parrots, cockatoos and lorikeets, in particular when they are younger than two years. Preferably have the birds tested for PBFD.
- Place food and water receptacles, and water baths away from possible bird droppings. If possible, move them around to ensure the area around the bowl or

- water bath is not heavily contaminated with bird droppings.
- Clean surfaces of your aviary or cage, including feeding table, food and water receptacles; water bath and nest boxes, regularly with water and detergent.
- Disinfect with a chlorine-based disinfectant or 2% Virkon-S solution and then rinse with water. Dispose of bleach solutions and rinse water responsibly.
- Shower and change clothing after handling a bird suspected of having PBFD, and before getting in close proximity to other parrots, cockatoos and lorikeets.

Please report a group of three or more sick or dead wild non-psittacine birds, i.e. birds other than parrots, cockatoos or lorikeets suspected with PBFD, to your local DEW office to increase our knowledge about PBFD in non-psittacine and wild birds.



The critically endangered orange-bellied parrot is susceptible to PBFD, which may threaten the survival of this species, especially while the wild population is in such perilously low numbers.

Picture: Chris Tzaros

More information

Can be found from Wildlife Health Australia fact sheet

- or **Department for Environment and Energy fact sheet**
- or National Wildlife Biosecurity Guidelines
- or Contact your local DEW office

http://www.environment.sa.gov.au/contact-us