Kakapo mortalities caused by *Erysipelothrix* infection.

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Three juvenile Kakapo (*Strigops habroptilus*) died in July this year, shortly after the translocation of a group of 18 birds to Chalky Island in Fiordland. The translocation was part of the Department of Conservation's Kakapo Recovery Group program to improve breeding opportunities for the 86 endangered birds remaining, by expanding the Kakapo habitat which was formerly mainly on Codfish (one word) Island. All birds were monitored closely after translocation and five were noted to be moving more slowly than usual. The first of these birds died 3 days after arrival and the second and third birds on days 5 and 6. The necropsy findings on all three birds were similar. They had a swollen, irregularly reddened liver, which in one case had thin strands of fibrin on the surface. The spleen was also swollen and reddened and in two of the birds there was excess watery, bloodstained fluid in the proximal jejunum but no evidence of diarrhoea.

Microscopically, all birds showed some degree of hepatitis with mononuclear cell accumulation around blood vessels and the accumulation of large numbers of pleomorphic Gram positive rods within the cytoplasm of Kupffer cells and some endothelial cells. Similar bacteria were present within splenic histiocytes and some renal endothelial cells. The spleens of all birds showed moderate lymphoid hyperplasia and there was no evidence of prolonged immune suppression in other tissues such as bursa. *Erysipelothrix rhusiopathiae* was cultured from the liver, kidney and spleen of all affected birds. The isolate was resistant to penicillin but sensitive to amoxycillin/clavulanic acid, enrofloxacin and tetracycline.

The source of infection has yet to be established but it is known that the organism is often found in the marine environment in mammals, birds and fish and the possibility that these could be a source of infection is under further investigation. The remaining two birds showing clinical signs have responded well to antibiotics and made a full recovery. A killed commercial bacterin vaccine is being trialled on two older birds and will be used to vaccinate the remaining young birds that are at risk.