

Outcomes of Birds of Prey with Surgical or Traumatic Wing Amputation: A Retrospective Study from 1995 to 2017

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Abstract: Surgical amputation of a limb is often required to treat raptor orthopedic injuries at rehabilitation centers. In some cases, amputation is an alternative to euthanasia if the bird's welfare is deemed appropriate under human care. The outcome for raptors maintained in a captive setting following wing amputation is poorly documented. A retrospective study was conducted in a Canadian raptor rehabilitation facility to assess the outcomes and complications observed in captive and free-living raptors with partial or complete, surgical or traumatic amputations of the wing. Data from raptors admitted to the rehabilitation center from 1995 to 2017 were reviewed. Overall, 32 records were included in this retrospective study from 11 species of raptors with surgical or traumatic wing amputations. Survival times of the 23 birds with an amputated wing (median: 1070 days, range: 68 days to 13 years and 1 month) were significantly ($P = .02$) longer than the survival times of the 404 non-amputated birds (median: 696 days, range 37 days to 27 years and 3 months). Complications occurred in 13 of 30 birds (43%) during the recovery period, with 9 of 30 (30%) birds developing life-threatening complications. Maladaptation to captivity was the leading cause of euthanasia during this period. After placement in captivity, 3/23 (13%) birds developed complications related to the amputation site. Based on this study, we conclude that some birds can tolerate partial or complete wing amputation, but the decision to place a bird in a captive setting should encompass the bird's ability to cope with human interaction and the availability of an adapted and safe enclosure for the animal.