

Disturbance to Birds and their Habitats due to Recreational Activities Policy

Purpose

This policy will equip BirdLife Australia to address and respond to disturbance to birds arising from recreational activities in a way which increases the conservation outcomes for birds. This policy sits alongside and should be read in conjunction with other relevant BirdLife Australia policies and guidelines including our Recreational Waterfowl Hunting Policy and Ethical Birding Guidelines. Note that BirdLife's other policies cover non-recreational disturbances to birds including both natural (wildfire, flood) and anthropogenic disturbances (land clearing, grazing by domestic livestock). The "Background" section below describes some of the concepts and issues around disturbance to birds due to recreational activities, as an aid to interpreting this policy.

Policy

1. BirdLife Australia holds that disturbance to birds and their habitats due to recreational activities should be avoided and minimised wherever possible where these activities may have potential negative effects on native bird populations.
2. BirdLife Australia will apply this policy in a precautionary manner, basing decisions and actions on the best available knowledge and not avoiding conservation action solely due to lack of scientific certainty.
3. BirdLife Australia urges that particular attention is paid to avoiding actions that reduce the use, accessibility, quality or security of birds' roosting, breeding or feeding sites or food supplies, and that impact on the survival of a bird or its eggs or chicks or limit a bird's fecundity or breeding success, thus negatively affecting a bird population.
4. BirdLife Australia encourages the development of appropriate policy, regulations, access restrictions and activity guidelines to avoid, minimise and manage the impacts of disturbance from recreational and other activities on bird populations, and to promote improvement in the welfare of birds and their habitat.
5. BirdLife Australia supports public education and community engagement aimed at avoiding and minimising the impacts of recreational disturbance on bird populations.
6. BirdLife Australia encourages monitoring of the impacts of recreational and other activities on bird populations.
7. BirdLife Australia supports the retention of vehicle-free status for all beaches, lake-shores and wetland areas which are currently designated as vehicle-free and where there may be adverse impacts on bird populations or habitats. BirdLife urges the assessment of impacts on bird populations at beaches and sites where vehicles are currently permitted, in order to identify further vehicle-free areas (whether seasonal or permanent) which may be necessary for the protection of bird populations and their habitats.

8. BirdLife Australia supports the identification and observance of “dogs prohibited” and “dog on-lead” areas for the protection of bird populations from disturbance, and, where dogs are permitted, encourages dog-owners to walk their dogs on-lead wherever potential negative impacts on bird populations may arise. Where dogs are to be walked on ocean beaches during late spring and summer, BirdLife Australia strongly encourages that walking of dogs be on-lead, close to the water’s edge. In general, BirdLife believes that domestic dogs should not be permitted in national parks, in line with the high natural values for which these areas have been reserved.
9. BirdLife Australia encourages careful management of horse-riding, particularly on beaches, lake shores and wetlands, to avoid and minimise negative impacts on and disturbance to bird populations and habitats, including designation of appropriate exclusion areas and implementation of permit systems. BirdLife does not support horse access in sensitive areas such as where beaches are narrow and impacts on beach-nesting bird populations cannot be readily avoided. Where horses are to be ridden on ocean beaches in late spring and summer, BirdLife encourages riders to follow the water’s edge, avoid high tide and to slow down to walking speed when approaching beach-nesting birds.
10. BirdLife Australia encourages careful management of off-road vehicles (trail bikes and four wheel drives) to avoid and minimise negative impacts on and disturbance to bird populations and habitats, including designation of appropriate exclusion areas, enforcement of “no off-road access” regulations and seasonal closures where appropriate. BirdLife does not support motorised vehicle access in sensitive areas such as dunes, riparian systems and woodlands where impacts on bird populations cannot be readily avoided.
11. BirdLife Australia encourages careful management of any other recreational activities, particularly those in National Parks and other sensitive areas, to avoid and minimise negative impacts on and disturbance to bird populations and habitats, including designation of appropriate exclusion areas, implementation of permit system and seasonal closures where appropriate.

Background

Recreational access and use of land and water can result in disturbance to native birds, leading to breeding failure, avoidance and abandonment of habitat, and significant energetic and physiological impacts related to disturbed feeding and roosting. At times and in places, this may amount to population-level impacts. This policy is aimed predominantly at avoiding and minimising impacts on bird populations (interpreted in a precautionary manner as indicated in point 2 on the previous page). This recognizes that some disturbance to individual birds is inevitable and may be acceptable where recreational activity brings people and birds into proximity, but that disturbance to individual birds or nesting pairs may at times have population-level impacts (see BirdLife Australia’s Ethical Birding Guidelines for further discussion of subtleties in the interaction of people and birds).

The growing threat to birds from recreational disturbance is driven by:

- Increasing human population size and desire for recreational use of natural areas;
- Increasing use of recreational vehicles such as four wheel drives and jet skis;
- Increasing population of domestic dogs combined with a reduction of open space associated with urbanization, leading to increased use of parks for dog walking.

birds are in our nature

The impacts of recreational disturbance include:

- Domestic animals associated with recreation such as dogs and horses can have significant impacts on native birds, via predation of birds, eggs and chicks, disturbance impacts leading to breeding failure and/or significant energetic and physiological stresses, avoidance or abandonment of habitats and degradation of habitat (for example through trampling or the introduction of weeds).
- Use of vehicles such as four-wheel drives, trail bikes, motor-boats and jet-skis can lead to habitat fragmentation, suppression and loss of food resources, abandonment and avoidance of habitats by native birds, degradation and loss of habitat (for example through erosion), breeding failure, and injury and mortality associated with vehicles striking birds.
- Recreational activities such as prospecting, fossicking and recreational shooting may disturb birds especially where it occurs in inappropriate areas such as national parks and habitats likely to be used by sensitive species (for example: ground-nesting birds, Plains Wanderer).
- The creation of recreation-related infrastructure and facilities such as roads, access paths, rubbish bins and artificial lighting can also fragment bird habitat and alter birds' ecology (for example by attracting predators).

The Birds most heavily affected by recreational disturbance are:

- Beach-nesting birds: Significant human disturbance impacts lead to breeding failure and nest abandonment; vehicles on beaches crush invertebrate fauna or may compact sand leading to food declines; vehicles strike adult birds and crush eggs and chicks; horses on beaches above the high-tide mark crush eggs and chicks and trample the dune environment; domestic dogs predate eggs and chicks and have significant disturbance impacts that lead to breeding failure. Beach Stone-curlews may abandon or avoid beaches used by people. Access to beaches along paths and tracks may result in habitat modification and/or prompt erosion control techniques that make habitat unsuitable for nesting.
- Migratory shorebirds: As above (although as these birds breed in the northern hemisphere there is no impact on breeding, eggs or chicks from disturbance in Australia). Recreational disturbance may impact on migration by wholly or partly limiting their ability to make use of staging areas and stepping-stones where they would normally rest and feed.
- Birds of prey: Osprey and some other birds of prey will sometimes avoid areas used by people, and abandon nests if disturbed.
- Ground-nesting birds: may be disturbed by domestic dogs, people, or recreational vehicles such as quad bikes and trail bikes.

Methods which have been used to protect birds from recreational disturbance include signage, temporary fencing and erection of artificial shelters where appropriate, public awareness-raising, regulation and use of best practice guidelines for particular events and recreational activities (and for any works associated with such activities).

Definitions

Recreational Disturbance

In this policy document, the term disturbance refers to human recreational activities causing alarm or distress to, harassment of, injury to or exposure to danger of birds or their habitat, such that population-level effects may occur. The term disturbance, in this policy, does *not* refer to non-recreational disturbances whether natural or anthropogenic (e.g: wildfires, floods, timber cutting, planned burning or grazing by domestic livestock) but is limited to recreational activities.

birds are in our nature

Selected References

- Anders, F. J. and Leatherman, S. P. (1987). Disturbance of beach sediment by off-road vehicles. *Environment, Geology and Water Sciences* 9: 183–189.
- Banks, P. B. and Bryant, J. V. (2007) Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology Letters* 3, 611–613.
- Bridson, L. (2000). Minimising visitor impacts on threatened shorebirds and their habitats. Conservation Advisory Science Notes No. 301. Department of Conservation, Wellington.
- Burger, J. (1981). Effects of human disturbance on colonial species, particularly gulls. *Colonial Waterbirds* 4: 28–36.
- Burger, J. (1986). The effects of human activity on shorebirds in two coastal bays in northeastern United States. *Environmental Conservation* 13, 123-130.
- Burger, J. (1994). The effect of human disturbance on foraging behavior and habitat use in Piping Plover (*Charadrius melodus*). *Estuaries* 17: 695-701.
- Burton, N. H. K., Rehfish, M. M. and Clark, N. A. (2002). Impacts of Disturbance from Construction Work on the Densities and Feeding Behavior of Waterbirds Using the Intertidal Mudflats of Cardiff Bay, UK. *Environmental Management* 30: 865–871.
- Dennis, T. E., Fitzpatrick, G. J. and Brittain, R. W. (2012) Phases and duration of the White-bellied Sea-Eagle *Haliaeetus leucogaster* breeding season in South Australia and the implications for habitat management. *Corella* 36(3): 63-68.
- Glover, H. K., Weston, M. A., Maguire, G. S., Miller, K. K., & Christie, B. A. (2011). Towards ecologically meaningful and socially acceptable buffers: Response distances of shorebirds in Victoria, Australia, to human disturbance. *Landscape and Urban Planning* 103, 326-334.
- Godfrey, P. J. and Godfrey, M. (1980). Ecological effects of off-road vehicles on Cape Cod. *Oceanus* 23: 56–67.
- Harrison, A. (2005). The impact of recreation on shorebirds at South Ballina Beach, Spring 2005, School of Environmental Sciences and Natural Resource Management, University of New England, National Marine Science Centre, Coffs Harbour, NSW
- Leseberg, A., Hockey, P. A. R. and Loewenthal, D. (2000). Human disturbance and the chick-rearing ability of African black oystercatchers (*Haematopus moquini*): a geographical perspective. *Biological Conservation* 96: 379-385.
- Lord, A., Waas, J. R., Innes, J. and Whittingham, M. J. (2001). Effects of human approaches to nests of northern New Zealand dotterels. *Biological Conservation* 98: 233-240.
- Pfister, C., Harington, B. A. and Lavine, M. (1992). The impact of human disturbance on shorebirds at a migration staging area. *Biological Conservation* 60: 115-126.
- Schlacher, T. A. and Thompson, L. M. C. (2007). Exposure of fauna to off-road vehicle (ORV) traffic on sandy beaches. *Coastal Management* 35: 567-583.
- Schlacher, T. A., Richardson, D. and McLean, I. (2008). Impacts of off-road vehicles (ORVs) on Macro-benthic Assemblages on Sandy Beaches. *Environmental Management* 41: 878-892.
- Taylor, A.R. and Knight, R.L. (2003). Wildlife responses to recreation and associated visitor perceptions. *Ecological Applications*, 13, 951–963.

birds are in our nature

Weston, M. A. and Elgar, M. A. (2005). Disturbance to brood-rearing Hooded Plover (*Thinornis rubricollis*): responses and consequences. *Bird Conservation International* 15, 193-209.

Weston, M. A. and Elgar, M. A. (2007). Responses of incubating Hooded Plovers (*Thinornis rubricollis*) to Disturbance. *Journal of Coastal Research* 23, 569-576.