

Minimizing negative impacts on breeding birds during reed bed clearing activities

Standard Operating Procedure

Environmental Resource Management Department

City of Cape Town

January 2016

Background

Cape Town has numerous water bodies entrenched in our City. These form valuable natural habitats which allow a wide range of birds and other wildlife to persist in the urban areas which would otherwise be absent. The management of these wetlands is often problematic due to eutrophication of almost all our systems and we have to contend with excessive plant growth. The three main reeds which can form dense stands in the City are *Typha capensis* (Bulrush / Papkuil), *Phragmites australis* (Fluitjiesriet) and *Schoenoplectus scirpoides* (Papgras). Most of our reed clearing needs involve Typha. There is often intense pressure placed on council to control Typha. This is mainly due to the perceived nuisance value of the Typha seeds which can negatively impact on neighbouring communities. Requests to clear also occasionally mention that the reeds create cover for illegal activities, that it is a fire risk and that it transforms the habitat.

Whatever the reasons to clear Typha, any disturbance in a wetland habitat should not be taken lightly and every precaution should be taken to minimize negative impacts on fauna associated with these habitats. During 2015 there was a public outcry following the council clearing of reeds in spring. It was claimed that numerous active bird nests were destroyed. The City needs to ensure that every effort is made so as not to clear reed beds which house active nests. This Standard Operating Procedure (SOP) is designed to avoid and/or minimise any unnecessary impact on bird life which is dependent on these reed bed habitats.

Legal Framework:

The planned removal or management of reeds must be preceded by a detailed review of all applicable legislation. The onus remains on the implementing line function to undertake this review and confirm that there are no legislative approvals required for the proposed works prior to the work commencing.

As a start the applicability of the National Environmental Management Act, 1998 (NEMA) listed activities and the National Water Act, 1998 (NWA) must be taken into consideration.

Manual clearing and brush cutting of reeds:

In general, manual clearing of reeds and brush cutting of reeds, where the bed and banks of the watercourse remains unaffected (i.e. no removal, infilling or movement of soil), would not require any approvals in terms of the NEMA or NWA. However, please note that the clearing of indigenous vegetation, other than reeds, can also potentially require approval. Please confirm the legalities prior to commencement.

Mechanical clearing:

Mechanical clearing, however, could potentially negatively impact on the system and the applicability of the above-mentioned legislation must first be confirmed. The district Environmental and Heritage branches from the Environmental Resource Management Department can be contacted to assist in any related matters.

The use of chemicals:

The use of herbicides, especially in combination with mechanical or manual clearing, or removal of invasive plant growth by fire can be very effective in reducing re-growth. The use of herbicides is however controlled by legislation as these chemicals are considered hazardous substances. One must be very selective on the type (active ingredient) and formulation of herbicide: Some are particularly damaging to wetland fauna and an alternative must be sourced. The herbicide application team must be suitably trained and experienced to ensure collateral damage, from drift for example, is minimised. Please ensure that all legislative requirements are met should chemical control be considered for implementation.

The use of fire:

The use of fire to control invasive reed growth could be relevant in certain instances within the natural fire season (January to end of April). Please ensure that the necessary legislative approvals (i.e. permits) are in place prior to commencement.

Species of concern:

Table 1: A list of the bird species which regularly breed in reed beds in Cape Town (NB this list is not exhaustive)

Common Name	Scientific Name	Breeding Season (W Cape)
Lesser Swamp-warbler	<i>Acrocephalus gracilirostris</i>	Sep – Dec
Little Rush Warbler	<i>Bradypterus baboecala</i>	Sep – Nov
Levaillant's Cisticola	<i>Cisticola tinniens</i>	Aug – Oct
Cape Weaver	<i>Ploceus capensis</i>	July – Oct
Masked Weaver	<i>Ploceus velatus</i>	Sep – Feb
Red Bishop	<i>Euplectes orix</i>	July - Dec
Yellow Bishop	<i>Euplectes capensis</i>	Aug – Nov
Common Waxbill	<i>Estrilda astrild</i>	Sep – Jan

STANDARD OPERATING PROCEDURE - ACTIONS:

Planning phase

- Determine the legislative requirements associated with the scope of works (including method of clearing / removal / control) proposed.
- When considering reed bed clearing operations one must confirm on the PHOWN database (http://weavers.adu.org.za/phown_map.php) as to whether it is an identified breeding site. Even when the birds are not breeding, identified breeding sites should not be disturbed.
- In the Western Cape the majority of birds, which breed in reed beds do so in spring and early summer and impacts should be avoided during these times. As such, all clearing operations

(manual, mechanical and chemical) should only be conducted from **January to June** each year.

- If a section of reed bed is to be left, where possible this should be left as an island and separated from the land by a gap of water. This isolation of the reed bed promotes bird breeding, making the island reed bed less vulnerable to predators.
- If a gap is to be created through a reed bed to open water this is best done at a slight angle from the bank rather than at right angles. The gap should not be aligned directly into the local prevailing wind as this promotes wave action through the newly created gap and causes bank erosion.
- Management of invasive plant growth with fire can only be considered during the natural occurring dry period from **January to end of April** of each year.
- If emergency clearing has to be conducted between **July and December**, a site visit must be conducted to confirm if there are any active breeding birds. If any breeding activity is noted or suspected, the Biodiversity Management Branch should be contacted to offer further advice.
- All teams who are involved in clearing of reed beds should be made aware regarding the importance of birds and the sensitivity of the breeding sites. All people conducting the clearing should know what to do if they encounter an active nest.
- For formal conservation areas, any management of Typha or other reed beds should be covered in the Environmental Management Plan for the site.

Clearing phase

- Clearing activities should only occur during **January to June**.
- Teams that are appointed should have experience in clearing reed beds.
- Once on site, the team leader should walk carefully through the area to be cleared looking for any active bird nests.
- If a reed bed is not to be cleared, old inactive weaver nests should not be removed as these are sometimes used by other bird and mammal species as roosting places.
- If a previously overlooked nest is only discovered during the active clearing, the workers must immediately cease clearing activities and contact the Biodiversity Management Branch for guidance.

Conclusion

If clearing operations can be conducted between and including **January and June** there will be a much reduced chance of disturbing breeding birds. For this period, in the unlikely event that an active nest is discovered, Biodiversity Management Staff can be contacted to go out and assess the situation. This SOP will be used on a trial basis to see if it is effective and must be reviewed annually to ensure it is meeting its objectives.

Contact details:

Table 2: The following Biodiversity Management staff must be contacted by the contractor as soon as an active nest is encountered.

Name	Position	Email Address	Phone number
Dalton Gibbs	Regional Manager - South	Dalton.Gibbs@capetown.gov.za	021 444 7792
Roy Ernstzen	Regional Manager - East	Roy.Ernstzen@capetown.gov.za	021 444 9746
Bongani Mnisi	Regional Manager - North	Bongani.Mnisi@capetown.gov.za	021 514 4164
Erika Foot	Regional Manager - Central	Erika.Foot@capetown.gov.za	021 912 9902
Cliff Dorse	Biodiversity Coordinator	Clifford.Dorse@capetown.gov.za	021 514 4159