Fencing design for islands at Victoria Park and the "Waterworks"

The fencing needs to fulfil four criteria;

- To reduce the level of use of the islands by feral Greylag Geese both for nesting and for roosting/loafing
- To allow access to wildfowl species that contribute to the biodiversity of each site
- To be aesthetically acceptable in view of the recreational use of each site
- To present a minimal threat of injury/death to wildlife

Greylag geese currently use both sites for feeding, breeding, loafing and roosting ("Waterworks" only). Both sites have attractive islands that provide predator-free nesting and roosting areas. To reduce the attractiveness of both sites, the islands will be fenced to render access from the water difficult. While geese are capable of flying over any fence onto the islands, the difficulty for geese in flying within heavily vegetated areas should make this an unattractive option.

While geese are a nuisance, other wildfowl species contribute to each park's biodiversity and should not be discouraged. Indeed, the removal of geese may make the sites more attractive to other nesting wildfowl species. To allow access to species such as Tufted Duck, gaps/holes of no greater than 4" wide should be left at 4-10 points around each island.

A review of methods used to control wildfowl movements reveals several approaches used in a range of scenarios. Of these, netting options are inappropriate on aesthetic grounds and as they could potentially result in injuries or entrapment to other species.

The edges of the islands are uneven, with shallow sloping beaches, eroded "cliffs" and overhanging willows. This rules out several other techniques.

The most appropriate approach in view of the four criteria, practicality and cost is a mixed system of horizontal wood barriers (picture 1) and cleft chestnut fencing (widely used in the area and therefore "vernacular" – picture 2).



Picture 1 – Horizontal wood barriers

Picture 2 – Cleft chesnut fencing

Where practically possible, cleft chesnut fencing should be used on level ground, slopes or uneven ground where gaps below are not greater than 5" high. Where this is not possible, horizontal wood barriers should be used, attached to posts, or where appropriate, to existing trees. A minimum of two barriers should be used, at 5" and then 5" above the top edge of the lower barrier. Where possible a third barrier should be used 5" above the top edge of the second barrier i.e.

Barrier 3 5 inches gap Barrier 2 5 inches gap Barrier 1 5 inches gap

Cross-section of horizontal wood barriers

The fencing/barrier needs to be continuous around the whole island and installation will require the cutting back of some vegetation to allow construction. Existing vegetation can only be used as part of the barrier if it is rigid and prevents access at least as well as the barrier fencing.

To ascertain the effectiveness of the fencing, monthly goose counts should be made for at least 1 year after the erection of the fences. A comparison of numbers of geese before and after fencing should be made as part of the airport's annual birdstrike hazard review.

Any queries call Armstrong McCaul Biological Consultants on 016973 52222