BROOKVALE PARK MANAGEMENT AND RELATED "AVIAN" BOTULISM DEATHS.



<u>Since around August 2018</u>, there have been many deaths of wildfowl at the lake at Brookvale Park, Erdington, a site operated and managed by Birmingham City Council.

<u>A number of swans</u> have historically been evidenced to have been suffering from <u>lead poisoning</u>, and together with the violently fluctuating water levels, birds such as swans and other dabbling ducks have been able to access contaminated sediment containing harmful bacteria, as well as discarded lead shot.

"Avian" botulism is not spread by the birds themselves, but is a result of <u>a poor habitat</u>, and <u>man-made consequences and often inactions</u> which result in ideal conditions for the spread of the illness, usually in the summer months, but also in periods of dry weather in the Autumn. Birds ingest contaminated maggots or invertebrates and then a cycle of death is initiated.

The process can be summarised in the diagram below.

Carcass-maggot cycle of avian botulism 60-92⁰F Toxin production takes place in decaying maintail carcasses. Flies deposit eggs on carcasses which are fed upon by resulting maggots Toxic maggots are ingested Death and additional carcasses for toxin production and toxic maggots for other birds to feed on

Carcass-maggot cycle of avian botulism

Cycle accelerates - major die-off occurs

It is therefore important to remove all dead birds from the lake in a timely manner to reduce infection, as well as removing dead tree debris from the water which could act as an "energy source" for the bacteria. Raw sewage is noted to have entered into some lakes and acted as this source of the death.

Table 38.2 Human activities speculated to contribute to avian botulism outbreaks in wetlands

Action	Consequences of action	
Fluctuating water levels for flooding and drying	Deaths of terrestial and aquatic invertebrates and fish	
Pesticides and other chemical inputs into wetlands from agriculture	Deaths of aquatic life	
	Nutrient enhancement resulting in "boom and bust" invertebrate populations and oxygen depletion causing deaths of aquatic and plant life.	

The Animal and Plant Health Agency who monitor and carry put post mortems in situations such as this have published a guidance pdf what to do in the face of such an occurrence.

Responses in the face of an avian botulism outbreak

- Vigilance for and removal of all dead birds, as before these are a potent source of toxin and toxin-contaminated maggets (such maggets can be eaten by waterbirds and cause disease).
- Sick birds should be removed, either for humane veterinary euthanasia or (with prior consultation) to a wildlife rehabilitation centre. Treatment regimes, including careful oral administration of warm water to flush toxin from the gastro-intestinal tract in early cases, and nursing can be effective.
- Increasing oxygenation of the lake by e.g. increasing circulation or raising the water level in the lake although care needs to be taken.

http://apha.defra.gov.uk/documents/surveillance/diseases/avian-botulism.pdf

July 2017 3 of 6

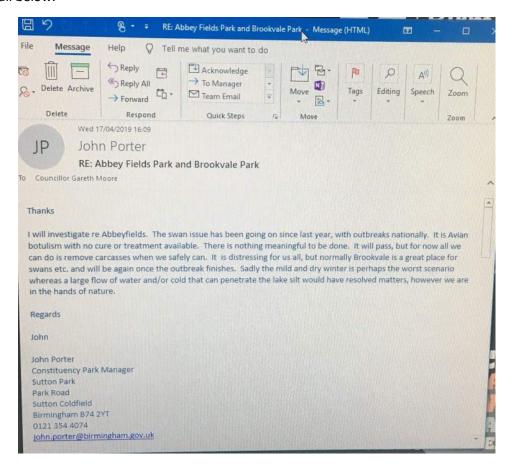
Birmingham City Council's animal welfare officer, and management at Sutton Park were sent this advice in August 2018, after the first spell of deaths were noted. It is also noted that on several occasions, <u>predating</u> the sudden deaths at this park, and <u>throughout the period</u> when freshly dead and ill birds were appearing, that West Midlands Fire service had been "open water" training, using pumps and disturbing the water, which is highly likely to have disturbed the sediment and caused further problems for the wildfowl at Brookvale.

It was only in <u>December of 2018</u>, and via the police, that BCC informed the public of the situation at the park, after getting <u>many complaints from members of the public</u>. The birds were also being left in the water for long periods, a failure on their part as managers to reduce the situation of bird deaths leading to "avian" botulism, and ignorant of the advice that they had already been given by the APHA.

Post mortems on some of the birds rescued or euthansed by the RSPCA showed <u>one with lead</u> <u>poisoning</u>, and the others with "presumptive" avian botulism, based on the clinical signs, of dropped wings, paralysis and lethargy.

The violent drop in water levels, such as <u>from this</u>, <u>to this</u> in just a matter of hours, (which BCC claim to not be responsible for), is causing the situation at this site to continue, and recent deaths have again been noted by local rescuers who have been going to the lake to try and do something "meaningful".

The actions of the council are to be regretted, as is the attitude of the management, as evidenced in the email below.



If birds can be identified as ill, and promptly removed from the source of infection for treatment, there is a chance that they may survive.



Please call 07923315954 if you see any birds in distress, and do something "meaningful" to save these beautiful creatures.