C O L O R A D O P A R K S & W I L D L I F E

Avian Botulism

- Avian botulism is a toxic disease that causes large die-offs of Colorado waterfowl.

Species Affected in Colorado

- Waterfowl
- Potentially other birds

What to Look For

- Large numbers of dead or sick waterfowl, especially mallards
- Birds that seem weak or unable to move

Cause and Transmission

Avian botulism typically occurs at shallow lakes and ponds during the warm summer months when conditions support growth of bacteria. Avian botulism is caused by a toxin released by the bacteria *Clostridium botulinum*. Birds ingest the toxin when they feed in contaminated water. The toxin causes paralysis with affected birds showing inability to move or fly, or in severe cases, inability to lift the head ("limber neck"). Affected birds may drown. Dead birds in the water, and the maggots feeding on the dead birds, are a major source of toxin during outbreaks. The bacteria can also form spores that are difficult to get rid of from the environment; this is why avian botulism die-offs tend to occur in the same locations year after year.

Public Health Considerations

Avian botulism is caused by a specific *C. botulinum* toxin, and this toxin is not typically associated with human disease. Humans usually become infected with botulism when they eat improperly stored food items. It is rare for domestic dogs and cats to become infected with avian botulism, but cases have been reported. Pets should not eat or play with dead or decaying bird or animal bodies. Lakes and ponds with large numbers of dead birds may have other diseases present and it is not recommended to swim in affected waters. Do not consume birds or animals that are found dead. Please report large numbers of dead waterfowl to Colorado Parks and Wildlife for diagnostics and refer to CDC for additional information on human botulism:
https://www.cdc.gov/botulism/index.html

Additional Information/References:

Avian Botulism, in *Field Manual of Wildlife Diseases* (Technical Editors: Milton Friend and J. Christian Franson)

Rev 09/2019