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Putting Out the Fire: A Review of Wildlife Agency Responses to Chronic Wasting Disease

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Managing the fire: A review of wildlife agency responses to chronic wasting disease in free-ranging cervids – a presentation given at TWS 2020 Virtual Conference by Miranda Huang

Abstract

Chronic wasting disease has been spreading throughout free-ranging cervids in North America since its discovery in the 1960s. This prion disease is unlike any other wildlife disease state agencies have ever had to manage and the learning curve has been steep. With 26 US states and two Canadian provinces historically or presently positive for CWD in free-ranging cervids, a plethora of management experience exists. Despite the potential value of this acquired knowledge, a synthesis is lacking. We reviewed approaches by state/provincial agencies and their resultant effects. US states and Canadian provinces have been finding CWD in free-ranging cervid herds since 1981. So far, the year with the most states/provinces finding CWD in a free-ranging captive for the first time is 2002 (4 states), which corresponds with the year US Congress started providing states with large funds to support CWD responses. The next most common years for initial CWD discovery in free-ranging cervids was 2005 (2 states, 1 province) and 2012 (3 states). The most common surveillance technique used to find the first positive in a state was hunter harvest (16), followed by suspect clinicals (9), targeted sampling in a high-risk area (2), and road killed deer (1). Hunter-harvest surveillance is cost efficient and effective. The number of states and provinces that had their first CWD positive in a free-ranging deer (15) was only slightly higher than the number that first detected in a captive cervid (13), which emphasizes the importance of sampling both populations. We expound on four phases of response by wildlife agencies to CWD: prior to disease detection, initial detection, initial response, and altered response. This synthesis of past responses by government wildlife agencies to CWD and known outcomes can provide guidance for future management of CWD.