FWP Response to Questions Regarding the Potential Impacts of Pheasant Release

One or more questions have been raised by the Fish and Wildlife Commission about possible negative consequences of releasing pen-reared pheasants into the wild. Potential concerns regarding wild birds include 1) potential disease transmission to wild pheasants or negatively affecting genetic fitness of wild birds and 2) the attraction of predators to concentrations of released pheasants, potentially impacting other wildlife (Flake et al. 2012).

Pheasant releases are a common annual occurrence involving many state wildlife agencies (Wyoming, Idaho, Washington, Oregon, Utah, California, Wisconsin, Pennsylvania, Michigan, etc.) as well as private shooting preserves in the US and around the world. By and large, these are "put and take" operations because of the overall poor survival of pen-reared pheasants in the wild (Flake et al. 2012). Recent research on the topic of disease, has suggested concerns may be warranted as pen reared pheasants have been shown to carry pathogens that may be less prevalent or non-existent in wild populations (Dwight et al. 2021). However, despite extensive release activities, FWP is not aware of any documented pathogen transmission (or genetic issues) between pen-reared pheasants and wild pheasants. The relatively short-lived nature of released pheasants may be of benefit for reducing the likelihood of such concerns coming to fruition. As part of the release efforts, FWP employs two preventive measures to further address disease concerns. First, pheasant raisers providing birds to FWP are required to derive their source birds from NPIP (National Poultry Improvement Plan) certified hatcheries that meet certain biosecurity standards to ensure continued health of their flock. Second, the condition of the birds is assessed by a department staff before release to assure a general healthy condition.

Regarding concentration of predators, this would be a temporary, localized phenomena. Pheasant release areas are selected, in part, based on habitat features that includes sufficient hiding cover, to reduce predator impacts. That said, based on decades of research, naïve pen raised pheasants are likely to succumb to predators and various forms of accidents, in addition to hunter harvest (Musil and Connelly 2009, Lief 1994, Hill and Robertson 1988, Hessler et al. 1970).

Citations:

- Dwight, I.A., P.S. Coates, S.T. Stoute, and M.E. Pitesky. 2021. Health Surveillance of a Potential Bridge Host: Pathogen Exposure Risks Posed to Avian Populations Augmented with Captive-Bred Pheasants. Transboundary and Emerging Diseases Health. https://doi.org/10.1111/tbed.14068
- Flake, L.D., A.E. Gabbert, T.R. Kirschenmann, A.P. Leif, and C.T. Switzer. 2012. Ring-Necked Pheasants: Thriving in South Dakota. South Dakota Department of Game, Fish, and Parks, Pierre.
- Hessler, E., J.R. Tester, D. B. Siniff, and M.N. Nelson. 1970. A Biotelemetry Study of Survival of Penreared Pheasants Released in Selected Habitats. Journal of Wildlife Management 34:267-273.
- Hill. D., and P.A. Robertson. 1988. Breeding success and wild and hand-reared ring-necked pheasants. Journal of Wildlife Management 52:446-450.
- Lief, A.P. 1994. Survival and Reproduction of Wild and Pen-reared Ring-necked Pheasant Hens. Journal of Wildlife Management 58:501-506.
- Musil, D.D and J.W. Connelly. 2009. Survival and Reproduction of Pen-reared vs Translocated Wild Pheasants *Phasianus colchicus*. Wildlife Biology. 15:80-88.