SPFG Project Tracking Form **Project Number: 2020-06**

Project Title	Blackhead Epidemiological Data Collection and Comparison
Date submitted	December 21, 2020
Submitted by	Michel Benoit, General Manager, BCTMB
Summary	Histomoniasis (blackhead) is a serious and ultimately fatal protozoal disease of turkeys, chickens, peafowl and gamebirds. The transmission cycle of Histomonas meleagridis is complicated by the prolonged environmental stability enabled by physically protective vectors such as the cecal worm (Heterakis sp) egg and common earthworms. Earthworms are mobile, can move significant distances and are attractive to gallinaceous birds, making birds raised on range especially susceptible to infection. There is currently no approved treatment for blackhead therefore there is strong reliance on prevention through biosecurity, confined rearing and litter management. The BC turkey industry is currently experiencing an unprecedented multi-farm outbreak of blackhead that has serious economic consequences for the growers, the processors and the hatchery. The entire production stream, including retailers, has been negatively impacted as on-farm mortality has risen to significant levels. Farm gate losses so far in 2020 exceed $500,000 and there has been significant disruption to the supply chain and the Province's food security. Producers are worried and discouraged by the lack of a readily available treatment or effective intervention. The goal of this multi-faceted collaborative study is to gain a better understanding of the epidemiology of the current blackhead outbreak, identify on-farm reservoirs and risk factors, and to formulate an effective treatment and disease prevention strategy. The study will include six sub-projects. 1. Data Capture & Analysis - establish baseline disease prevalence through coordinated diagnostics 2. Validate the Histomonas PCR for environmental testing 3. Evaluate efficacy of Paromomycin 4. Identify environmental reservoirs - identify potential reservoirs of infection in common on-farm vectors (rodents, flies, darkling beetles) on positive farms using PCR. 5. Cecal worm prevalence in BC commercial turkey farms - compare the prevalence of cecal worm (Heterakis sp) infection in positive and unaffected flocks 6. Blackhead producer seminar The project will involve private vets as well as vets from the provincial vet lab. Virtual presentations will be given by well respected North American blackhead researchers.
Request	$12,500 in funding
Proposed budget	$50,000
Proposed funding source	The BC Turkey Marketing Board is contributing $12,500; they've requested an additional $25,000 from CAP (matching industry's contribution)
Decision	Project funded
Additional comments	Approval received via e-mails on December 30, 2020