I hope this Update finds you well amid the COVID-19 pandemic. The pandemic has serious implications for our health and well-being, as well as to the economy and countless other ripple effects. Unfortunately, one of these downstream impacts is to our elk hoof disease research.

While COVID-19 does not appear to affect non-human animals (except in a few rare instances in the cat family), the crucial restrictions that have been put in place to minimize disease spread and save lives impact our immediate ability to conduct research as planned.

Like so many others who are adjusting to the new world in which we find ourselves, our elk hoof disease research team is also adapting. This has required revising the first experiment planned at the new elk research facility that was described in the last Update.

Following capture and acclimation of the initial four study elk in early February, later that month we met our objective and successfully captured eight additional elk in collaboration with Washington Department of Fish and Wildlife. All the elk adjusted well to life in captivity while managed under strict protocols to reduce disturbance.

But just as we made final preparations to begin the study on April 1st, the risk of COVID-19 and implementation of measures to mitigate its impacts prevented us from capturing affected elk in western Washington and transporting them to the Pullman research facility.

Although delayed a bit, we plan to move ahead with the research when possible, and make some modifications to minimize the down time. Because of limitations related to the time of year that we can safely capture elk (without negative impacts on pregnant females and young calves, heat stress to captured animals, and disturbance during hunting season and the rut), we will postpone these captures until at least December.

However, as soon as we can again safely travel and work physically together as a team, we plan to implement a new step in the research approach. The objective of this new step will be to investigate the potential for disease transmission from a contaminated environment. Soil, particularly certain types of wet soils, are hypothesized to harbor bacteria that cause hoof disease. We will test this hypothesis by housing the captive elk in pens that contain soil contaminated with material from affected hooves collected from deceased elk.

Depending on results from this modified study, we will determine next steps, including whether to capture affected elk and conduct the study originally planned. We will keep you posted as we learn more.

This delay is very disappointing but absolutely necessary in these challenging and uncertain times. I appreciate our small team of staff and students that continue to provide exceptional care for the captive elk while practicing social distancing and other mitigations necessary to keep themselves and others safe until we can return to regular operations and begin the modified research trial.

Be well. Margaret A. Wild, DVM, PhD