May 14, 2020

Carey Feierabend  
Acting Superintendent  
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Via email to carey_feierabend@nps.gov

Dear Park Service Acting Director Fierabend,

As the world grapples with the COVID-19 epidemic, there is growing awareness of the dangers of spillover -- infectious diseases that jump from species to species, including animals to humans. Therefore, at this critical time, we are reiterating our concern regarding Johne’s, an infectious and fatal cattle disease present at Pt. Reyes National Seashore.

A chronic wasting disease commonly found in dairy cattle and to a lesser extent, beef cattle, Johne’s crosses species and infects domestic and wild animals throughout the nation and the world. AN estimated 68 percent of U.S. dairy herds and 18 percent of beef herds are infected.

The disease is well documented at Point Reyes National Seashore where elk, deer and perhaps other animals are being infected by the cattle that graze lands the Park Service leases to private ranchers who routinely spread manure from infected cattle on thousands of acres of parkland providing wildlife habitat and public recreation.

In recent years, dozens of rare native Tule elk at the Seashore have been “taken” for testing. Through necropsies, the Park Service confirmed the presence of Johne’s, likely passed to elk through the manure of infected cattle. Spreading the cow manure on park pastures is a controversial practice that has resulted in Seashore waterways having some of the highest pollution levels in the state. The number of the Seashore’s cattle infected is unknown because the Park Service doesn’t require that any of the 5,500 cattle in the National Park be tested for Johne’s disease.

Johne’s is not only a danger to wildlife. An additional -- and alarming -- concern is the growing evidence that bacteria may be contributing to the increasing rates of Crohn’s Disease, a similar chronic and painful inflammatory gastrointestinal condition in humans.
that afflicts nearly one million individuals in the U.S. alone. The bacterium that causes
Johne’s, *Mycobacterium avium* subspecies *paratuberculosis* (MAP), in cattle is now in
our food supply. The live MAP bacteria, which can persist in water and soil for over a
year, have been found in ground beef, pasteurized milk, cheese and powdered infant
formula. MAP is also the suspected causal agent in a range of diseases including irritable
bowel disease, rheumatoid arthritis, and Type 1 diabetes (most likely in individuals who
have a genetic susceptibility).

While the specific causal link has yet to be proven, new antibiotic therapies that target
MAP bacteria in patients with Crohn’s Disease and have shown positive results –
supporting a cause and effect relationship– and are in advanced clinical trials.

Recently, RedHill BioPharma, announced the completion of its advanced clinical trials
for an anti-MAP treatment for Crohn’s disease, with positive findings. According to the
National Johne’s Information Center, it could represent “a final piece of evidence
indicating that MAP is a cause of Crohn’s disease.” The Center, based at University of
Wisconsin School of Veterinary Medicine, is the definitive source for the diagnosis and
control of Johne’s in the U.S. The Center tracks the worldwide spread of Johne’s in
domestic and wild animals and its economic impacts. The Center’s lead researcher,
Michael T. Collins, has described Johne’s as the “ticking time bomb for the dairy
industry.”

The Center has developed a protocol of regular testing and removal of infected cattle and
manure that can eliminate the disease from cattle herds and, ultimately, from the food
supply. Further, the Center cites scientific evidence that MAP bacteria remains viable in
soil and water for up to a year, signaling the danger of using infectious manure for
fertilizer or carbon farming, as is the practice at Point Reyes Seashore.

Beyond shooting the elk to test them, the Park Service has not taken steps to address the
threat of Johne’s at Point Reyes. Practical solutions exist, such as the Center’s protocols,
WHICH are in widespread use in New Zealand, Australia, Denmark, and other countries.
Sweden, in particular, implemented a rigorous national program, becoming the first
country to successfully eliminate Johne’s disease from its cattle.

At Point Reyes National Seashore, the risk goes well beyond the possibility that MAP
bacteria are present in dairy and beef products. The 2.5 million annual visitors hiking,
exploring and picnicking in the National Park may be at risk for MAP and other
infectious diseases from water and land contaminated by cattle manure.

Ranchers in the Park receive waivers from the Clean Water Act, and every year, hundreds
of tons of manure are washed into the streams and creeks that drain down to public
wetlands and beaches. Cattle waste has forced some public beaches to close. In addition,
the practice of liquefying (manure) and spreading manure as fertilizer on grazing land
further raises human health concerns. Can the National Park Service ensure that these
agricultural practices pose no significant human health hazards in an intensely visited
recreational destination such as Pt. Reyes National Seashore?
The current GMPA AND Environmental Impact Study are the opportunity for the Park Service to address questions raised by the presence of Johne’s disease at the Seashore. Currently, there is no mention of the Johne’s threat in either the EIS or NPS’s preferred plan. In fact, Alternative B, which approves livestock diversification, could increase the spread of Johne’s in the Park since sheep and goats are known to also carry Johne’s disease.

Under the Organic Act, the National Park Service is required to manage the park “unimpaired” for generations to come. The threat of zoonotic disease to humans and wildlife cannot be ignored.

Sincerely,

Deborah Moskowitz,
President

Cc: Cicely Muldoon, Superintendent, Point Reyes National Seashore (cicely_muldoon@nps.gov)
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Relevant Research Publications


Hruska, K., & Pavlik, I. 2014. Crohn’s disease and related inflammatory diseases: from many single hypotheses to one “superhypothesis”. Veterinarni Medicina 59(12):583-630. [REVIEW with 72 references]


