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16 February 2015

Dear Louis Porter and the Vermont House of Representatives Fish, Wildlife and Water Resources Committee,

I am writing this letter regarding the association between felt-soled boots and the potential for introducing species, such as *Didymosphenia geminata*. I am a freshwater ecologist and one expertise of mine is the causes and consequences of *Didymosphenia geminata* blooms, hereafter Didymo. Below I convey two problems with the felt-sole ban.

First, current evidence suggest that **banning felt-soled boots will not prevent Didymo blooms and hence using this organism as a justification, or the “poster child,” for the felt-sole ban is wrong and misleading.** A potential result is that the ban could have negative consequences on current and future efforts to reduce species introductions. For example, **tying *D. geminata* blooms to felt-soled boots runs the risk of discrediting more comprehensive and more effective check, clean, and dry programs when blooms are not curtailed.** I have published several papers that provide strong evidence that *Didymosphenia geminata* blooms are not caused by this organism being spread around via felt-soled boots or other means. Current evidence shows that the cause of blooms is environmental conditions. Claims of range expansion or new introductions of Didymo should be interpreted with caution because the native distribution of this rare diatom is not well known and has likely been underestimated. Didymo occurs in many habitats but bloom only in those with specific environmental conditions, namely low phosphorus. One of my coauthors is Max Bothwell, who wrote the paper in *Fisheries* titled “On the boots of fishermen: the history of didymo blooms on Vancouver Island, British Columbia” that first associated felt-soled boots with Didymo blooms. Max repudiated the association between felt and Didymo blooms in our 2014 *Bioscience* paper. He is in the process of writing an update article for *Fisheries* that reiterates that the connection between felt and Didymo blooms was a qualitative correlation that now lacks support.

The felt ban may be effective for reducing introductions of other organisms, such as chytrid fungus; however, there are pathways in addition to felt by which organisms can be moved. Importantly, some of these pathways do not include fishermen and hence focusing on these will lead to a more comprehensive effort in thwarting new species introductions. Hence, the second problem is that **the felt-soled ban focuses on just one specific item** and, as a result, **detracts attention away from more comprehensive and effective programs as well as other items.** For example, fishing nets and porous lures, such as flies, are a few items that could easily retain a microorganism enabling them to be moved from one location to a new location. As a result, more comprehensive gear cleaning programs (e.g., Check, Clean, and Dry) are being overlooked and the felt-sole ban is providing a false sense of security. Taken together, shifting efforts to focus on multiple pathways and clean angling techniques rather than the emphasis on banning felt-soled boots will likely be more effective at reducing many species introductions.

Sincerely,

Brad Taylor, Ph.D.
Professor of Biological Sciences