

April 3, 2016

### About Felt

**To:** The Vermont Senate Natural Resources and Energy Committee

**From:** L Owen Farnsworth, Lincoln, VT

**Ref: H570** - Sec. 10. 10 V.S.A. § 4616 – Repeal of the prohibition of felt soled boots and waders

Senators,

I support the repeal of the prohibition of felt soled waders and boots. My reasons of support for the repeal follow:

**SAFETY:** I am 65 with bad knees and have experienced three bad falls wearing soft rubber soled wading boots. I equate these falls to having your feet go out from under you on an icy driveway. For first two, I was wearing \$60 Cabela's boots. The third time I was wearing \$190 Simms G3 boots with "stream tread" rubber soles and cleats. Today, Simms retails the G3s for \$225. The required cleats (studded tires) are an additional \$60.

I fish out West a lot. I use my felt soled boots. They are safer, they rarely slip and, if so, quickly restore their grip on algae covered rocks. You can catch your balance with felt. The felt is not rigid like "stream tread". With felt, I can feel the rocks on the stream bed and adjust my balance.

In the UVM paper, the students describe a lack of research about wading boot safety. They go on to site an experiment by Simms using four anglers. Left feet using felt, right feet with "stream tread" rubber soled boots. Simms, the industry leader of wading equipment, concluded that their rubber soled boots were better than felt. (except on algae covered rocks!) (BTW, lacking algae, streams are pretty much sterile!). I also suspect those four anglers got to keep those two pairs of wading boots. Simms used these results in their marketing material and lobbying material. Good science / credible? not really!

Simms then discontinued felt and sold only their expensive "stream tread" boots, but for just one year! Experiencing a large loss of market share, Simms quickly reversed course and reintroduced felt the next year. Anglers decidedly expressed their skepticism and by a large margin "voted" for felt!

Lastly, Vermont's current ban on felt actually acknowledges the cost and safety issue, state employees and EMTs are excluded from the ban and allowed to wear felt. And, of course, they're a bit younger than I am.

**Is Dydimio really an invasive organism:** In 2007, it became a popular perception that Dydimio was an invasive species and that felt soled waders were a primary vector (the transport mechanism) moving it around. This was supported by scientific research. The recognized Dydimio expert was an Environmental Canada fisheries scientist named Max L Bethwell. He described felt soled waders as a primary vector spreading Dydimio. In turn, this research became popular and a principal reason for banning felt soled waders in 7 of our 50 states.

But, then in 2013, Bethwell published a different view based on his additional 10 years of research. The later research concludes that Dydimio is not invasive, but rather native to North America. In its benign form it is a somewhat common, but unnoticed algae. However, when water chemistry changes (Climate

Change?) it grows stalks reaching higher in the water, seeking potassium. It is in this state that it becomes a nuisance. Bethwell's more recent science contradicts his early research. It now suggests that climatic change is a principal factor causing *Dydimosira* blooms.

Interestingly, The Canadian government sought to muzzle Bethwell and his co-author. The press was denied interviews with them. But of course, the press pounced and the Prime Minister Steven Harper backed off. However, the results of the Bethwell research are still not welcome in some circles.

**Whirling Disease** hasn't done well in the North East. It certainly hasn't done well in Vermont. It was found in the Battenkill River in 2001. It's been 15 years, ten of which allowed felt soled waders. Yet, I couldn't locate any papers or reports indicating that it has been found elsewhere in Vermont. Fish and Wildlife studied the area for four years and did not identify any harm to the fishery.

Elsewhere, the principal vector of Whirling Disease is fish: the stocking of fish, bait fish moved from one stream to another, fish being cleaned and disposed of in another stream, and typically, it is transported by Herons and Mergansers. The pathogen survives the birds' digestive systems.

**New Zealand Mud Snails**, relative to the organisms above, are kind of big. An eighth inch long, they are the size of a BB. Importantly you can see them, but anglers need to be educated about where to look.

**Clean, Inspect, Dry** Wash off your gear, use a stiff brush to remove any dirt and debris. Do this on the river you're leaving or at home. The NZ mud snails are pretty easy to see on the outside of your boots and waders. But, you need to check the following:

The soles of the boot

Around the edges of any cleats on the bottom of your boot

The empty holes where the cleats screw in

The crevice between the boot and its sole

The laces, especially behind the laces

The tongue of the boot

The interior of the boot, under the foot pad

The seams inside and out

The neoprene booties on the waders.

Study the gravel guards closely

The wading belt

The cotton net

### **Dry the gear**

Put Boots on their side with the tongues held open and foot pads out

Waders should be open or rolled backwards, booties on the outside

Fly fishing woman and men pretty much have to have a good understanding of aquatic biota. As a group, we are sensitive to environmental issues that would impact the fisheries. And yet, many are skeptical of the rationale behind a ban focused only on felt soled waders.

**Finally, back to Safety.** There are two views concerning safety in this matter. There is "Play it Safe" and keep the ban in place, albeit on shaky grounds. Or perhaps, "Keep Anglers Safe", repeal the ban and provide better education.

