

LD 320

**An Act To Amend Shelter Provisions To Accommodate Rotational
Grazing of Livestock**



**Written Testimony
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My name is Ben Hartwell, my family has a farm located in Gorham named Sebago Lake Ranch. My Grandfather operated a dairy herd at the farm until the buyout in 1985, a few years later he passed away and we purchased beef cattle. I left for college, I earned my BS in Animal Science from Cornell University, eventually returning home. I currently own and manage our beef herd. I am also involved with Farm Bureau and Maine Grass Farmers Network. I have attended many conferences and stay up to date with publications about cattle and grazing management.

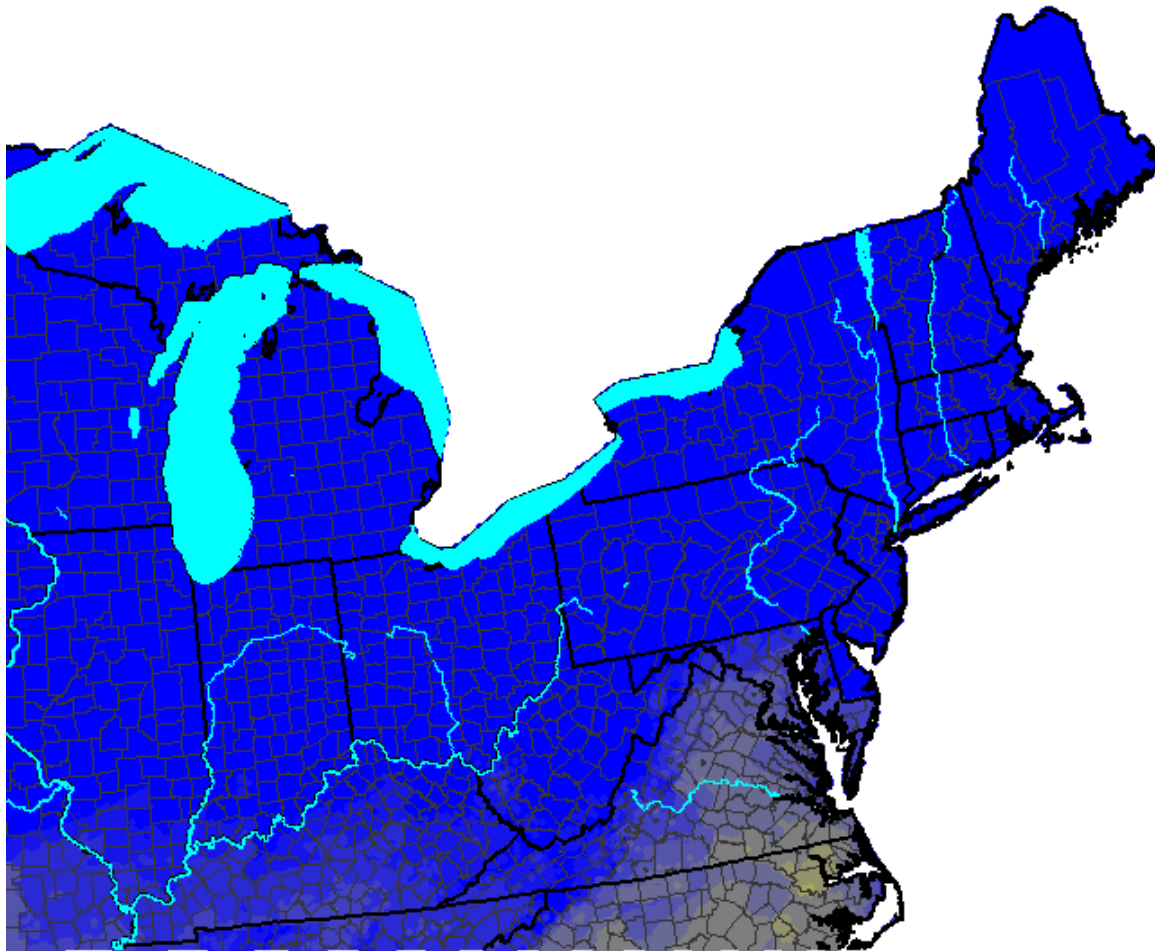
As farmers, the margins are often very small. Our prices for inputs constantly go up with relatively small increases in the prices we receive for the products we produce. It is always very important to become more efficient and reduce our cost of production. I believe that grazing is an important tool to become more efficient when raising livestock. It's hard to beat having a cow harvest her own feed and spread the manure herself. I choose to use Management Intensive Grazing or MiG to manage my pastures. This is the practice of subdividing your pastures into smaller sections and moving the animals more quickly, usually every few days. This allows the plant to rest and not have its re-growth consumed, therefore stunting the growth. The idea of MiG really comes from the buffalo herds that once grazed the plains in America and also the herds in Africa. In nature, the predators stay to the outside of the herds looking for the weak. This keeps the herd closer together; they graze an area then move on to a new one. Producers now have many options available to mimic their natural grazing behavior with quality electric fencing products.

The USDA Natural Resource Conservation Service dedicates a significant portion of their resources to grazing management. It is understood that properly managed grass creates a fibrous root system that is excellent at preventing erosion. Best management practices have included limiting access, or preventing access to shade. Shade trees are usually left on poorer land, often more hydric soils that are prone to damage from too much traffic. The animals congregate under the shade and the ground will become quite eroded. There is also the issue of what is called nutrient transfer. Animals may consume their diet in the pasture, but when ruminating under a shade tree, they deposit the manure under the shade. When you combine that with the eroded soil, you get nutrient run off, there is no way to absorb it all. There is also a study that showed Johnes disease lives far longer in the soil in shaded areas. (Whittington, 2004) Probably even more importantly, it is not practical to provide shade at all times to cattle managed under a MiG system. Current State law requires animals to have access to shelter/shade, man-made or natural, at all times.

As fuel becomes more expensive, it is going to make sense to turn some hay fields into pastures. Requiring shade puts Maine producers at an economic disadvantage to other States, the fact is it's not needed 99% of the time. As long as animals get a chance to cool down at night they can handle some heat. I personally believe in adapting animals to their environment through selection, not adapting the environment to the animals. It doesn't make sense to have a cookie cutter approach to legislating what an animal needs

when you have such a wide variety of genetics for different climates. In the South, they often add some Brahma genetics for heat tolerance.

Maine's climate has relatively few days where heat stress is at a dangerous level. USDA and NOAA have worked together to create a cattle heat stress model with a seven day forecast. The model uses temperature, wind speed, humidity and solar radiation to predict heat stress. They quantify heat stress by the respiration rate, animal's breathe faster to reduce body heat. It is far too difficult legislate when animals need shade/shelter, it should be up to the producer to manage this.



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USDA Heat Stress Forecast

I do believe there are times when animals will greatly benefit from shade, but to require it at all times is not practical. I believe in animal welfare, but rules need to be scientifically based. As long as animals have access to cool/fresh water, salt and good quality pasture, they can get by and perform well without shade the majority of the time here. The current law has the potential to prevent me from doing business in Maine.

References

Whittington, 2004

Survival and Dormancy of *Mycobacterium avium* subsp. *paratuberculosis* in the Environment

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<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC404446/>

USDA/NOAA Heat Stress Forecast

<http://www.ars.usda.gov/Main/docs.htm?docid=21306>