

HB 568 Testimony

My name is Jim Linne and I farm 200 acres in Highland County producing 100% grass-fed, grass finished beef that I direct market. I have focused on soil health from the time I purchased my farm in 2005. Rotational grazing with short periods of grazing followed by long periods of recovery has been an integral part of building healthy soils. Recent soil tests conducted by Ohio State University as part of a multistate study on soil organic matter showed my soils to have between 4-6% organic matter. The average soil organic matter was 1.5% in 2005. The increased water infiltration and water holding capacity associated with the increased soil organic matter really paid off this year when we experienced a D4 drought. The rain shut off for about 100 days from June till the end of September. I was able to continue grazing throughout this time, supplementing with hay for about 4 weeks to allow me to allow longer recovery periods. We received 5 inches of rain the last week of September. My pastures recovered rapidly, and I now have around 3,000 pounds of dry matter in most paddocks to graze this winter.

Inputs such as fertilizer, fungicides, and pesticides are substitutes for a healthy soil. Increasing soil organic matter will increase farmer profitability while improving watershed function. Establishing a Soil Health Task Force is an opportunity for the Ohio legislature to help Ohio farmers and communities. This bill will bring together a diverse group of stakeholders whose soul focus will be to develop actional plans to improve soils across the state. I'm now going to switch from my farmer hat to my physician hat. There has been a complete paradigm shift in our understanding of the microbial world. In recent years, scientists have successfully sequenced the human gut microbiome and discovered that it is an integral part of our health. Our bodies contain 100 times more microbial DNA than human

DNA. Similarly, the soil and plant microbiomes have been sequenced and there is 100 times more microbial DNA than plant DNA. The new agricultural paradigm is that the soil is a living, breathing ecosystem. Not to get too far into the weeds, but the field of metabolomics has clearly demonstrated the increased nutrient density of food grown in biologically alive soils.

By focusing on soil health, we can improve farmer profitability, watershed function, and human health through nutrient dense foods. As a farmer, father, and physician, I ask for your support of the Healthy Soil Task Force.