

Changing Our Food and Farming Systems: Making Peace with Nature

1. Farms are the foundation of our food system, but, according to John Ikerd, University of Missouri agricultural economics professor, our modern industrial, chemically-driven agriculture production systems "degrade and deplete the natural resources they ultimately must depend on to sustain productivity." Recognizing this problem, some farmers in Minnesota and the Midwest are working with Minnesota-based groups like the Land Stewardship Project to engage in **regenerative practices** that include no-till, cover cropping, increasing perennial crops, reducing chemical use, and developing environmentally beneficial livestock systems. This change requires time and money in order to make the transition, so urge our leaders to support the Minnesota Legislature's "100% Soil-Healthy Farming Bill," which proposes to have **30% of the state's farmland managed using "soil-smart" systems by 2030, including grass-based livestock production.**

2. According to the Minnesota Pollution Control Agency (MPCA), the largest source of Minnesota's Greenhouse Gas Emissions (GHG) comes from **agriculture (including forestry, animal ag and crop ag)**. Even with forest regrowth helping to off-set GHG, ag's emissions outpace **transportation, electricity generation, industrial, residential, commercial, and waste emissions**. A study published in the journal *Proceedings of the National Academy of Sciences* found that intensive farming of large-scale monocultures (vast acreage dedicated to single crops such as corn or soybeans) resulted in the loss of **one-third of our richest topsoil**, all of which contributes to the greenhouse gas emissions that drive climate change (global warming). But **regenerative agricultural practices** that build soil health and sequester carbon can be a part of the climate crisis solution, according to the Minnesota Environmental Partnership (MEPartnership.org). As climate change ravages food production capacity, support those who are working to meet the goals of reducing GHG emissions **45% by 2030 while being on a trajectory to zero emissions by 2050.**

3. We all have to eat. Farmer/author/poet Wendell Berry writes that "eating is an agricultural act," which makes our reliance on agricultural methods that disregard soil and ecosystem health a danger to us and all the living things on whose well-being we depend. The Nature Conservancy (TNC) reports that as complex grasslands continue to be converted to single crops, the loss of biodiversity has accelerated: from 1970 to 2016 there was a nearly **70% average decline in populations of birds, beneficial insects, amphibians, mammals, fish and reptiles**. The intensive use of agro-chemicals, such as synthetic nitrogen, herbicides, pesticides and fungicides, make their way into the food we eat and the water we drink. **Children are the most vulnerable**, because pound for pound, they drink 2.5 times more water, eat 3 - 4 times more food, breathe 2 times more air, and therefore absorb a higher concentration of pesticides than adults. Support efforts to fix our broken food system.

4. Farms are not only the foundation of our food system, they are also the foundation of rural communities and economies. Yet farms have been in crisis for a hundred years as the need to rely on increasingly expensive chemical inputs, machinery, and fossil fuels drove the consolidation of many small and mid-sized farms to ever larger, but fewer, farms. Often called "the hollowing out of U.S. agriculture," the same term can be applied to rural communities as people leave to seek jobs elsewhere. Rebuilding small and mid-sized farms that use regenerative practices to build soil and plant health and address climate change will require us to support an

"expanding, diversifying, creative community of farmers to meet those challenges," according to the Union of Concerned Scientists (UCS). This means both at the public policy level as well as engaging in direct-to-consumer marketing and building relationships and connections in business. Look for a list of community-supported agriculture (CSA) farms at land-stewardshipproject.org/csa-farm-directory.

5. The "essential workers" of 2,000 years ago were called the fellaheen, the farmers and fishers of Galilee who were the peasants of their time, subsistence farmers and fishers, vineyard and orchard keepers, who sold whatever extra they had beyond what they could use. These were the people to whom Jesus spoke, and who became his followers. They lived during a time when the Roman Empire extracted resources from them for global export, and Jesus gave them particular attention, according to agricultural ecologist, ethnobotanist, MacArthur "genius grant" winner, professor and Ecumenical Franciscan Brother, Gary Paul Nabhan. Today we hear that concentrated, industrialized agriculture is necessary to "feed the world," but according to the United Nations Food and Agriculture Organization, **most of the world's food comes from small farms close to cities, family-operated, often by women, and are on average less than three acres in size.** If we want to help small farmers and rural communities thrive, we should work with farmers and consumers to build an economy that provides a living income while increasing all people's access to nutritious food.