

## Conservation Speech

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The dark ages during the 5th to the 15<sup>th</sup> century were caused by the destruction of knowledge and economic stagnation. An example of this from that time is how the people of the dark ages built amazingly gigantic cathedrals. However as they built them they did not pass down the knowledge of how they built them to the younger generation. So as the older generation started to pass they lost more and more qualified people and the history of past experiences until there was few to none left. So when the older generation died the knowledge of how to build these cathedrals died with them. This caused us to not be as advanced as we could be today because we were set back with lost knowledge. This was all caused by a gap of knowledge and experience between the older generation and the younger generation. This lack of knowledge and caring led to a collapse. The same thing that caused the dark ages is now causing the conservation generation gap. Fortunately our natural cathedrals of croplands, prairies, and forests, are going to be protected because, technology is bridging the conservation generation gap.

The 1930s and the 80s farmers have watched helplessly as their labor withered under the relentless sun. During this time farmers main goals were to make sure they could put food on the table for their families and keep their farms and ranches. They lived through some of the worst farm failures of all time. According to NPR the drought of the dirty thirties were exacerbated by erosion and soil degradation, caused by farming practices that resulted in over cultivation and bad land management. From their mistakes, our older generation learned how to prevent and mitigate ecological disasters. They started using better farming and ranching techniques that we still commonly use today like science based pasture management and crop rotation that replaces nutrients to keep the soil healthier. They also started to plant trees where there were none. These strategically planted rows of trees prevented the wind from blowing away the precious top soil. Unfortunately our memories are short, and the tree lines are being removed faster than they are being replaced to make room for farmland.

It would appear as history marches on we improve, unfortunately that is not true. The state of the environment of our older generation was better than it is now. We had crystal clear waters and tried to use little to no chemicals on the crops because, well, they didn't exist. We were totally organic. According to National Oceanic and Atmospheric Administration modern, or conventional, agricultural practices used intensive tillage, monoculture, irrigation, application of inorganic fertilizers, chemical pest control, and plant genome modification to maximize profit and production. These practices greatly increased crop yields. These conventional agricultural practices, however, have numerous long-term ecological impacts such as soil degradation, habitat alteration with drainage of crucial wetlands, water quality degradation, species composition impacts, and adverse effects of irrigation like aquifer depletion.

Our younger generation not only has to put food on the table for their families but many others as we continue to live in an increasingly growing and connected world. They are slowly creating the problems that our older generation had almost completely fixed like soil degradation because they now have to keep up with a bigger demand, and that demand challenges the idea conservation practices actually mean more, because we are only looking at the now.

We need technology to be able to fix the problems that we have now created like agricultural runoff. Digital mapping has allowed us to monitor source point pollution problem, a possibility that didn't exist 10 years ago but, we go old school to bridge the gap by planting repairing buffers and buffer strips.

The new technology that is being developed like vertical farming, smart irrigation, and air and soil sensors will help to inform and educate our younger generation about how to better manage our farms and environment. However for the younger generation to learn we need to look towards the older generation because the older generation has been through the same problems that we are currently facing or ones we will surely encounter if we destroy the gains of the past. Our older generation's past and knowledge can show us why we need this new technology to stop our problems that we are currently facing in the conservation world.

This new technology is the link between our older generation and our younger generation. This technology gives our older generation the opportunity to teach through it by showing why we need it, how it can be used effectively. The younger generation can then take what they have learned and apply it to what they are currently doing so we can fix these current problems. The dark ages were caused by the loss of knowledge. The difference between the Dark Age's generation gap and the conservation generation gap is that the conservation generation gap now has a link thanks to technology which means there will no longer be a conservation generation gap.