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Rochester Sentinel Article
Long Lasting Weeds

One of the headlines last week was, “Microbes revived after 100 million years.” A team, mostly Japanese, went to a South Pacific Ocean location around 3 miles deep and drilled down 225 feet into the sediment and brought up bacteria samples. They were able to grow the bacteria in those samples that was as old as 101.5 million years.

I thought it was amazing how long some weed seeds could persist in the environment but they don’t hold a candle to bacteria. The weed lambsquarter will take over 70 years for a 99% reduction in seed viability. Those same numbers for velvet leaf and cocklebur are 56 and 37 years. For those of you lawn lovers, crabgrass seed is good for up to 8 years with a good chance for germinating at around 25-75 percent, even up to 90 percent.

Archeologists who excavated a 14th century English monastery that had been closed by Henry VIII in 1539 found seeds of mullein that were still viable. One single mullein plant can produce 200,000 seeds.

According to an article in the National Geographic, “A Russian team discovered a seed cache of *Silene stenophylla*, a flowering plant native to Siberia, that had been buried by an Ice Age squirrel near the banks of the Kolyma River. Radiocarbon dating confirmed that the seeds were 32,000 years old.” They were able to germinate the seeds found in the permafrost.

With our lack of permafrost here, our seed survival would not rival that world record. It just seems like records are just made to be broken and some day they will find a seed that lasted longer.

According to Ohio State University, “Undisturbed weed seeds tend to persist longer than seeds subjected to periodic tillage. Weed seeds in deeply worked soil tend to last longer than seeds in shallowly worked soil. Seeds deep in the soil are “stored” below the germination zone.” Sounds like the same is true for the under-ocean bacteria.

That university also stated, “Grass seeds tend to be less persistent than broadleaf weed seeds. The number of surviving seeds of most weed species declines rapidly the first year. But thereafter the rate of weed seed decline slows. Some seeds can persist for decades.

As many as 130 million seeds per plow acre were found in a Minnesota study.” An Iowa study found up to 600 million per acre.

Allowing the weeds to go to seed just makes the matter worse by increasing the seed bank. Some people do not see it that way. They have a defeatist attitude and say if you have hundreds of millions, what’s a few more hundred thousand. I just think that is a whole lot more weeds to pull.

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