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What We Know Now, Is What We Knew Then

Day by day, we're inching closer to the start of meteorological spring—even though it feels that spring had sprung weeks ago. I know I'm certainly excited to get back in the field and enjoy some warmer weather. Yet this also means I'll have to come out of my winter recalcitrance.

Most winters, I find warmth in reading books and other publications on topics in agriculture. This year, much of my chosen literary canon has been older publications ranging in topics from soil science to forage production to even business management. Taking a moment to reflect, it is clear that a general theme has emerged: we seem to have forgotten a lot of what we once knew.

This is not to say that we are worse-off today than what we were back then. Rather, I would argue that we are currently rediscovering a lot of what previous generations intrinsically knew.

Perhaps in the interim we became enamored with novel, shiny science–science for science sake—which led us down paths that strayed further from other meaningful destinations. Or perhaps, I'm just full of it and equally enamored with old, dull science–science for application sake—that does not advance the world at the rate the other does.

As an example, the practice of livestock management termed rotational grazing-moving ruminant animals between delineated zones within a field for optimal nutrition and forage production-has been a seemingly ever expanding notion since it was popularized in early 2000s. Much credit can be given to the "who's-who" names of regenerative and alternative agriculture who published a myriad of books and how-to manuals about the benefits of rotational grazing.

It appears common that those outside of production agriculture are first introduced to topics in soil science, regenerative agriculture, or agriculture most broadly by those publications that cite the very attractive benefits of rotational grazing. They note incredible rates of animal performance metrics, astonishing gains in forage production and quality, as well as incomprehensible ecological outcomes—remedies to previous environmental damages. These newcomers may see these publications as proof of new scientific discoveries.

Yet much of our current understanding of rotational grazing is built upon the work of a French forage agronomist, Andre Voisin, in the mid 20th century. His nearly forgotten publications were a combination of scientific research and observations in which he describes all the aforementioned benefits (and more) of rotational grazing on the rolling pastures of central France. Better still, the practices he describes take rotational grazing a step further to *rational* grazing in which time becomes a key component of managing grazing animals.

However, Voisin was still not the first to describe rotational grazing. Before him there was Arthur Sampson, rangeland ecologist of the early 20th century, Edwin Bessey, botanist of the 19th century; James Anderson, agriculturalist of the 17th century. And before all of them were the indigenous peoples of the world who appear to have observed the continuous



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movement of ruminant animals across the landscape, and the positive impact it had on their environments.

The mentioned parties above recognized these patterns without modern analytical equipment or quadruple-replicated, double-blind trials and experiments.

All this to say, though our understanding of "why" and "how" have improved through modern scientific advances, iterative nature of experimentation, and improvements in technologies, it may behoove us to recognize the power of observation and those who came before us.

In need of pesticide or nutrient management credits? Please join us on February 22nd in Urbana for the annual Central MD Agronomy Update. Register at https://go.umd.edu/2023cmau or call us at 301-600-3576.

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