

Management-intensive Grazing on the Snowcrest

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This past year we made some changes in grazing practices on a portion of the Snowcrest Ranch. We have one center pivot that was historically used for hay production. The price of bison and the cost to put up hay helped inspire change. With the full support and encouragement of our upper management in the Bozeman office we took a step in the direction of intensifying our grazing on a portion of the ranch.

The term that best describes it is Management-intensive Grazing coined by Jim Gerrish. The emphasis is on the Management. And there is certainly a requirement for a dedicated person to ensure the system works. We also strive to implement the foundations taught by Holistic Management and incorporate this into the overall planning process.

So I'm sure you are asking what did we do? The fenced pasture that includes the center pivot is 151 acres. The majority of this is under sprinkler irrigation and the periphery is under flood irrigation. We planned the installation of permanent division fences in strategic locations, and the ability to further subdivide with

temporary electric fences with stock water in each paddock. We used 2 wire high tensile fences for permanent divisions. Single and 2 wire bungee electric gates, and 2 and 3 wire poly wire temporary subdivisions.

Ultimately, we were able to utilize 22 different individual paddocks that we grazed for 2-4 days each. We put 215 yearling bison bulls in this system to graze starting May 18 and they stayed in the pasture until November 12. In the early fall we exceeded the forage



regrowth and had to remove the herd from the pasture for 35 days to allow for fall regrowth. And we supplemented the animals for the late October and November period to prepare them for finishing and to extend the pasture. Conservatively we were able to achieve 105 days of grazing off of 151 acres for a herd of 215 yearling bison.

This system is not fertilized. And if we put rough numbers to this the figures are staggering. Looking at gross revenue on pounds of meat produced versus hay revenue there is a \$75,000 advantage to grazing. In that number there are many variables such as cost to put up hay and cost to manage bison. But we were able to do this with a minimal capital investment and without adding additional labor on the ranch. And diesel



equipment was able to stay parked in the shed instead of making hay.

These animals left the ranch in the fall and we will be able to refine our grazing next summer on the pivot and apply much of what we learned. And ultimately the land health is much better in that we had an efficient nutrient cycle, water cycle, and healthy animals. And we were not using fossil fuels to capture energy, rather we were using grazing animals designed for the efficient capture and transfer of energy.

A few lessons learned are as follows: you measure forage left in

paddocks in hours not in days. Therefore the herd will deplete their food supply in a matter of hours and the forage recovery period is stifled. When we removed the animals from the paddock while grass was still in Phase II the recovery was the shortest and we could return to graze much more quickly. The minimal fencing worked great, but if we stayed too long the herd would push through our 1 and 2 wire fences into the next paddock and we had extensive time invested in re-training them to respect electric fences.

Due to the high prevalence of cattle in the region and the hot dry summer we dealt with pinkeye. We were slow to respond as we'd not had issues in the past. But we found that a simple metal frame structure with hanging oilers including Permethrin helped mitigate the issue. As we moved between paddocks the herd needed mineral and salt and the oiler frame for fly control. Both were on skids and could be moved with an ATV and one person. We speculate that the fly issues hampered average daily gains. And since the herd was not able to utilize larger more diverse pastures with trees and cover the flies were more of a problem.

This system worked great for our operation and would work in other irrigated systems. The sprinkler irrigation works well as we can begin to develop a consistent carrying capacity for this portion of the ranch in drought or wet years. Thus helping plan for future. The bison were happy, we handled and moved them extensively and our fall

weights and animal health have so far revealed that the benefits of applying Management-intensive Grazing fits well for bison in our operation. There are lessons learned we will apply to the system for next year, and improvements to be made that will simplify the operation. But all in all the results are quite favorable.



[If you would like to learn how to make this kind of transition on your ranch, check out the seminars that we teach at the Durham and North Star Ranch on our website: <https://www.crossroadsranchconsulting.com/educational-services>. Aaron attended the Durham Ranch seminar in 2012.]