Improving Pasture Profitability

**Situation**
Butte County and central Idaho are high elevation farming and livestock production areas. In the recent past, under the influence of USDA farm programs, farm operators gravitated toward the production of cash grain crops. Although cereals, particularly barley, can occasionally be profitably grown in the Lost River Valleys, the likelihood of frost at any time, as well as severe hailstorms, increases the “environmental” hazards of cereal production. In addition, the current trend in farm programs is to reduce support payments and transfer price and production risk to commodity growers. The lower world price of cereals will not support local cereal production. Local operators simply cannot afford the machinery and other purchased inputs necessary to grow a profitable crop in only 2 out of 3, or 3 out of 5 years.

Butte & Custer counties form a significant cow-calf livestock production area. Current trends in government policy with respect to the use of public lands for grazing and endangered species restoration, as well as the recent lack of profitability in the cattle business has many livestock operators searching for ways to replace their existing production system with more profitable and less troublesome enterprises or methods.

**Our Response**
Operators in other countries, particularly New Zealand, and other parts of the US, have long been proponents of “Management Intensive Grazing” (MIG). This is a management philosophy that focuses on improving the capture and conversion of solar energy to salable animal products with lowered purchased inputs and the higher economic conversion efficiencies. MIG focuses on increased management and understanding of the economic, physical and biological systems that farm operators manipulate, in order to reduce off-farm purchased inputs and improve productivity.

Since little MIG has been done in Idaho, and the process focuses on livestock as harvesting equipment rather than the direct product, many operators are interested, but reluctant to “jump in” to MIG. We have been working with interested operators to set up demonstration grazing cells, plant materials demonstrations, and operator workshops that focus on developing an understanding of the physical, biological and economic systems grazers manage. In addition, we have written articles, and given talks and workshops on MIG, most recently a 3-day hands-on workshop in July of 1998.

**Achievements**
We have worked closely with several operators who have invested in the MIG philosophy to help them learn to operate their systems. In return, these individuals have cooperated in conducting applied field research and workshops for other operators. A one-day workshop was held in 1993 and attended by 15 operators. As a result, two additional operators began MIG grazing cells in 1994.
In 1994 we conducted a 2-day workshop attended by 30 operators that included field activities to help operators evaluate their own pasture situation, and determine the intensity of management they could economically achieve.

In 1998 we conducted the “Lost River Grazing Academy II: Intensive Management of Irrigated Pastures,” attended by 39 participants, including 8 extension agents and 10 NRCS & FSA personnel, who are interested in expanding their knowledge of MIG. The grueling 3-day program included managing live cattle on pasture, as well as lecture and field exercises in plant physiology, pasture ecology, resource evaluation and low-stress livestock handling. The program was highly regarded by the participants who indicated that they would all return for a similar program, if offered in the future. The program was staffed by Idaho extension agents and specialists, and featured Jim Gerrish, from the University of Missouri Forage Systems Research Center.

Results of our pasture growth rate studies indicate that irrigated pasture productivity can be in excess of 100 lb. of dry matter/ac./day. These well managed pastures can result in gains of stocker cattle in excess of 2 lb./animal per day at stocking rates of as high as four 500 lb. calves per acre. At these conversion rates, 2000 to 2500 lb. of beef can be produced per acre, with a gross value of $1300 to $1600 per acre. This compares favorably with barley which has a gross revenue of only $200-$300 per acre.

While production expenses for irrigated pasture are well below those of barley, and machinery expenses (direct and capital) are considerably lower, advanced financial management, production management and livestock marketing management skills are required to make an individual MIG system profitable. No “boiler plate” system or “silver-bullet” is available to solve an operator’s financial problems. MIG can be applied to large or small acreages, but the principles and practices of MIG must be fully implemented on those areas to be effective.

**The Future**

We will continue to work with individual operators, write articles and give talks and workshops covering the principles and practices of grazing management. The Lost River Grazing Academy III is tentatively planned for the summer of 2000.

**Cooperators and Co-sponsors**

Jack Jensen, Jensen Livestock, Moore, Idaho
Troy Buxton, Buxton Farms, Moore, Idaho
Callister Dairy, Howe, Idaho
JP Ranches, Arco, Idaho
Dr. Kleal and Susan Hill, Lost River Veterinary Clinic, Arco
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