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Management Practices of Successful Family Farms

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Management Practices of Successful Farmily Farms

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"Success" has constantly been a difficult word to define both for family-farm managers as well for those individuals who work closely with them. Past research in successful farm management have tried to measure success through a wide variety of factors: profitability, achieving personal goals, farm survival, farm growth, and financial measures of success such as accumulated wealth or annual profitability. More recently, a successful farm operator could also be classified as successful if he was able to achieve the objectives or goals set forth for his operation. There in lies the conflict. If a farm operators goals for successful management of his operation differ from what past research has defined objectives of successful management, the farm operator could be deemed unsuccessful. Additionally, conclusions drawn from prior studies may not provide the proper guidelines for management strategies that achieve success on that operation. This conflict provided the need for this study to understand the producer's definition of success and examine their management strategies used to achieve this "success". The combination of management objectives and management strategies used by successful producers could then be jointly conveyed to the community of agricultural producers.

The producers' definition, as reported by Pflueger and

Lafferty, of success included farm and family life aspects as

well as farm achievements that did not always prove profitable.

Profitability was not unimportant as the farm's survival must, by definition, include self-supportive and profitable ventures. The ability to survive is based in part on management skills and in adapting those skills them to fit the needs of the farm unit. This can be accomplished only by, and recommendations made only after, first understanding the human resources on the farm and what motivates operators to make management decisions.

Carlson stated that in previous years it was possible to manage and control the farm with a mixture of experience and common sense. The farm was passed from one generation to the next with the successive generation gaining its management skills from the generation before. In this period farm managers did a good job of controlling the use of inputs and evaluating the farm performance.

Farm management has become increasingly more complex over the past 10-20 years. Price changes have been frequent, and often abrubt. New technology has confronted managers with an expanding flow of information and new ideas. Managers now operate on large amounts of borrowed capital and an increased reliance on government assistance. Planning, formulating goals, strategies, business ideas and controlling the results of the business are now and will be in the future, the most important tasks for the family farm manager. (Olsson, 1987)

For these reasons there was a need to observe, in an on-farm situation, management techniques farm managers are currently utilizing to obtain success within their operation. This report

contains conclusions drawn from a study conducted during the summer of 1988 in Brookings County, South Dakota. Management strategies and their implementation were examined on a whole farm as well as individual enterprise basis.

Research Development, Implementation and Information Gathering

The study observed "on-farm" situations of several family farm operations. By definition the family farm included agricultural production businesses that were primarily managed, and the majority of labor performed, by the family. Information was gathered from the family through interviews in the areas of family history, current resources, management, information processing and the managers' goals. Information was obtained through personal visits to each farm by the primary researcher. Visits were scheduled two weeks apart, lasting 2-3 hours for a total of 14-21 contact hours per operation. A broad outline of topics to explore was developed prior to the initial farm visit. A narrower outline was then developed later to tailor questions to each individual farm.

Two alternative methods exist to examine producers'
management strategies. (a) examining business records; (b)
surveying manager's practices by simulating a situation for their
response. While each method has certain strengths, the use to be
made of the responses has a bearing on the selected method of
elicitation. Analyzing business records would show the

characteristics of particular operations and comparisons of different operations may indicate managers' response to a particular factor such as government programs. However, these records would not be a homogeneous sample and inferences about managers' responses to one particular factor (i.e. government programs) may not be accurate since many other factors may differ among these operations. Also such a method would not account for objectives or goals of an operation.

Surveying managers' attitudes would provide an indication of their regard for the importance of management in the farm's business organization. Such a method, however, would not provide quantitative data as could be obtained from examination of business records. Additionally, as demonstrated by Carlson and other prior research, producers may indicate the "right answer" on the survey, but not actually demonstrate that in practice.

Surveys could be conducted either by mail or by personal interview. A mail-out questionnaire survey has certain advantages over the personal interview approach. These advantages are a wider sample base, especially over different geographic areas, and fewer resource requirements of time and money. Also, with a mail-out survey, interviewer bias could not influence the survey results. In contrast, however, a personal interview approach provides the researcher flexibility in administering the survey. Also the interviewer can answer any questions the managers may have and could gain considerable insight about various qualitative aspects of the manager responses. Either approach has

the potential of bias arising from the manner in which survey questions are stated; however, this presumably can be reduced through careful formulation of the questions.

Data collection was conducted on the farm to achieve one to one contact between the researcher and farm manager (or family). By interviewing and questioning on a personal basis it was felt that a more representative answer would be achieved compared to a mail in or telephone survey or examination of records.

The study was conducted over the three month summer period, allowing for six visits per operation. Due to time constraints the number of farm managers participating was limited to seven producers. The study was not intended to be statistically definitive but was conducted to gain an insight into current management techniques as well as prior and future goals for each individual operation and relate objective of success management with practices that achieve that objective.

The operations selected for this study ranged in size from 2 to 7 quarters with a variety of types of crop and livestock enterprises and tillage practices. All business structures were represented: sole proprietor, partnership, father-son and family corporation. The study included a unit recovering from bankruptcy to a unit in the upper income range set prior to the study. See Pflueger and Lafferty for more detailed discussion of the survey sample.

Successful Management Strategies

Historical Influence on Successful Management:

It was realized that farm operators draw on several resources in making the decisions that effect management. Farm management skills have developed through parental influence, experience, knowledge from farm seminars, and other factors have been important in forming successful management skills. Each producer within the study was observed to understand how he takes both historical information as well as current information to make his operation successful.

The historical textbook definition of farm management is concerned with the decisions which affect the profitability of the farm business. This definition brings out two important ideas. One, that profitability is the primary objective of the business and second, it specifically identifies decision-making as a part of the management process (Carlson, 1988). However, this definition fails to account for what was hypothesized in the study to be the driving force that keeps many farm families bound to their land. Most farmers place a high value on the life-style offered by the farm and to them success is more aptly measured in terms of the achievement of specific goals that may seldom show a profit to the operation. This study was conducted in a manner to observe and account for those decisions that provide benefits to the manager in forms other than profit.

The physical aspect of farming has changed drastically over the past century. All of the farms included in the study could trace their ancestors back at least two generations and in one case three. History of the operation was important and demonstrated by most farms knowing which quarter was purchased first and the year in which it was purchased. Also, managers were able to relate stories of the type of farming that was done in those early years and what motivated their ancestors to continue farming.

Historical influence on farming could be noted in some operations as a basis for developing skills that could be adapted to today's' technology. These operators used the experience of their forefathers to develop skills that could be used to benefit their operation. Farm management skills can be traced from one generation to another through almost all farms and all farm enterprises with only a small variation due to personal preferences. One example is a producer that puts 100 head of 400-500 pound steers into his feedlot every year to be fed to slaughter weight. His father and grandfather always put the same amount of steers into the feedlot. The only difference was in type of animals; the current producer liked cross-bred animals compared to the purebred animals his father put in the feedlot. This producer managed these animals similarly to, and using the same techniques utilized by, his father. This type of farming practice is labeled "historical management" or "historical farming" since little changed from year to year. This does not

denote that these operations were wrong in choosing this type of management practice. They have found something that works for their operation and see no need to change.

Management's Motivation for Success:

The majority of the farm managers were unable to generalize or specify management goals for the whole farm operation. On site interviews examined specific goals, which could include profit maximization, the family's involvement in labor or management, and the producers' management decisions. These examinations provided one indication of the goals or objectives for each operation to be achieved through management.

One producer remarked that if they weren't making a profit he wouldn't be farming very long. The farm operator also stated that there is more to farming then just "profits", but it would be difficult to survive without showing a profit. Almost every operator, when questioned if they knew which specific enterprise was making a profit, were not able to conclude how much profit an enterprise generated or even if it was profitable. On a whole farm basis, profitability was measured at the end of the year when the operator's accountant summarized their books. One operator said that if the number was negative, he knew he hadn't made a profit. There seemed to be a heavy reliance on producer's ability to provide an accurate summary of their farms'

performance. The information gained from accountants was not used to plan for the next year's farm plan. Operators such as this are hypothesize to be those who would respond to a questionnaire that detailed records were important and should be used in managing a farm operation.

Efficiency is always a difficult concept to judge on a whole farm basis since each individual operator was more efficient in some areas of farming than in others. It is agreed that it would take a super-farmer to be ultra-efficient in every aspect of farm production. Efficiency was then better measured by observation on an enterprise basis on each individual farm.

The differences in the involvement of the farm family in management decisions were evident through the four different types of business. These included decisions made by a single person, jointly in the partnership or divided among several people as in the corporate farm. In the single proprietorship the manager made the majority of the decisions and only occasionally asked for the spouse's opinion on decisions. Consequently, he may or may not use this information. In one case the farm management decisions were made primarily by the woman as she was more inclined to handle decisions. The older member within the father-son partnership seemed to be the primary decision maker. The more open the elder was to listening or to trying new concepts, in the father-son partnership, the smoother the decisions were made. One farm was impressive, particularly in their ability to sit over coffee to discuss current management

decisions. From this discussion they were able to draw conclusions based on both of their ideas. It was felt by the members of this operation that the farm was in a better management position when the responsibilities were shared. The family corporation farm divided management and decision making by enterprise to those individuals who either expressed an interest or showed skills better fitting the needs of particular enterprises. In areas where they lacked expertise they relied on outside management skills to assist in goal attainment.

Labor Management of Successful Operations:

Labor was divided mainly by the manager and adapted to meet the needs of the enterprises chosen. Outside-of-the-family labor was only considered when a family member was not able to physically or knowledgeably do the work himself. This labor consisted mainly of veterinarians, co-ops (coop spraying, feed mixing, etc.) and seasonal labor. Seasonal labor would include help during planting, harvesting, calving, fall tillage, and was generally employed on a full-time basis.

Children were incorporated into the family farm labor force as soon as they expressed an interest or the farm required their help. On some operations the contribution of children labor was necessary for the continuation of the operation. One operator said that when he was growing up, his help on the farm was expected and he rarely considered doing anything off the farm or on his own time unless all of his "farm chores" were done. This

isn't, however, the way he is raising his children. Their labor is expected on the farm to a smaller degree and they are encouraged to participate in school and off-farm activities.

The Role of Farm Women in Successful Management:

The role of the farm wife in the success of the family farm may have undergone the most dramatic change over time and today may be more important than ever before. She now plays an important role in sharing management decisions. One operator said that the farm runs smoothly because of her participation in the management as well as her help in the field and barn. They considered their operation a partnership between them and have adapted their personal skills to aid in the smooth operation of the unit.

Farm women in the study were devoting more of their labor time to working off the farm. Seventy one percent of the women in the study had either full or part-time off farm jobs. Each seemed satisfied with their job, and felt they were better able to contribute to the family income through the outside job. In two of the cases, the part-time job did not relieve the farm wife from meeting farm labor needs. While she may be able to encourage some assistance from the children she was still responsible for household chores as well as farm chores.

Successful Farm Management Strategies:

Each of the farms within the study implemented management skills that were tailored not only for their own farm but also to the attainment of a product that they were satisfied with. This section of the report looks at the types of decisions that managers make, how they derive their choices and why they chose to or not to implement them.

The enterprises implemented on the farms within the study were representative of the different types of enterprises being produced in the Brookings County area. All of the operations were diversified in the types of enterprises chosen and produced a mixture of crops and livestock. Survey data allows for generalizations of several conclusions pertaining to successful operations and how these operations are currently maintaining a successful management program.

The objective of this report is to generalize those types of skills that successful producers have in common and illustrate unique management skills that have been adapted to particular operation. Enterprises have been grouped into crop and livestock divisions. Management strategies per enterprise classification are discussed and summary conclusions are included at the end of each section.

Crop Production:

Pre-Planning:

Planning for small and large grain crops began, for most operators, two or three years prior to the current planning period as they planned their crop rotation pattern. For others it began mid-winter as they planned their participation in the government program. Whatever crop they chose, pre-planning the crop was important to all of the operators. Pre-planning decisions included choosing a cropping pattern, whether or not to participate in the current government farm program, and deciding whether or not to use crop insurance as a form of risk management.

The majority of the managers participated in one or more government farm programs. When questioned whether or not the producers felt that government involvement in farming had an impact on planning, all felt that it did place constraints, but also felt that they were bound to participate due to monetary gains from deficiency payments. These managers were also unanimous in acclaiming they would prefer decreased government involvement but felt they were currently dependent on the government payments for farm survival. Pre-planning cropping enterprises for those participating in government programs involved signing up for the program, estimating the number of set aside acres, selecting base acres, and then planning the cropping pattern for the rest of the farm.

Some managers find that participating in government programs could leave them without enough feed grain to meet their livestock feed needs. One operator in the study found himself in this situation. This operator was then forced to purchase additional grain at the higher grain prices that were evident during the drought. When asked why he then chose to participate in the government program even though he knew he would not be planting enough grain, he replied the deficiency payment made it worth the risk of running short of feed grain. This operator was the only one observed to have made this decision, but this does point out the impact the government programs have had on management's pre-planning strategy for each year's crop.

For those managers raising livestock as a primary enterprise, their crop planning was based to meet the needs of the livestock. One producer, who raised hogs, planned his best acres toward raising good quality corn for his livestock enterprise. The rest of his cropping pattern was then devoted to a small grain, that would be harvested early in the summer, thus giving him idle land to haul waste from the hogs. Another operator derived his crop plan as a means of offsetting adverse price changes to purchased feeds. This operator felt that as soybean meal prices climbed he would be able to offset it by selling his soybeans at a higher price.

Insuring the current year's crop was considered by the majority of the producers within the study to be an unnecessary expense. Only one of the producers used crop insurance to offset

the risk associated with crop production. He stated that his reason for insuring this crop was to offset losses, while he was developing his management skills, since this was his first year to plant that crop. This strategy proved to be successful in 1988 as area producers experienced a drought.

It was noted that pre-planning varied from one operator to another. Some felt that it was an important part of raising crops and they devoted management time to planning. Other managers felt that setting time aside to formally pre-plan each year was unnecessary since they were satisfied with their farm's production. Those operators who had a written, formalized crop plan were not better managers than those operators that did their pre-planning while sitting in a tractor cab. Each of the managers had a pre-planning method that fit not only their operation, but also their style of management.

Seed Selection:

Several factors entered into choosing the seed to be planted at the beginning of the season. Each of the farms within the study analyzed their goals for the crop prior to ordering their seed stock. The decision factors of what seed to use could include; what seed grew best in their soil, what seed was economical to use or which was adapted to this climate. Each of the farms within the study felt that seed selection could have a big impact on their crops' production and took a good deal of time in researching their seed selection.

In analyzing the seed selection process it was evident that each of the farms had taken time in selecting a seed. One producer, who's primary enterprise was dairy cattle, felt it important to obtain a good straw crop from his small grain for use as bedding in the winter for the animals. While it is important to say this was not the only characteristic he looked for in a small grain, it did weigh equally as important as obtaining a good quality grain. He would not sacrifice straw quality at the expense of a better quality grain. For other operators within the study it was important to obtain a seed that provided good quality feed grain for their livestock. One operator in the study grew his small grain with neither straw or grain in mind. This operator needed the land in the late summer months to haul waste manure from his hog units. Since the small grain was harvested in the middle of the summer the land would then be available for manure.

Each manager had a goal in mind when they chose what type of seed they would be planting. With these goals in mind some operators chose a seed that would be compatible with their soil type. One operator stated that he did not have soil testing done prior to choosing a seed. This operator felt that he had grown small grains for several years and felt that, based on the historical performance of his land, he could make a judgement as to what seed to grow. Other operators within the study utilized the information gained from soil testing when choosing a seed.

One company furnished the operator not only the results of the test but also with a list of those seeds that would best fit his operation.

The farms within the study were divided when asked about choosing a seed that was economical to use. Part of the managers within the study felt that it was better to use the higher priced certified seed. Others felt that they could obtain the same yields by using a generic seed or one that was not certified. One operator said that he purchased certified seed on occasion but would then save seeds from the certified seed year to be used in the following year. He felt that as long as yields remained high there wasn't a reason to purchase seeds. Each farm manager was very individualistic in choosing seeds and part of this is evident by the goals they set for their farm.

Planting and Tillage:

Land preparation for, and planting of, crops was similar for each of the farms within the study. The only difference noted in land preparation was among those producers that utilized the ridge-till planting process. Each manager used their own judgement on when to begin preparation in the spring and when to plant. Since small grain was the first crop to be planted in the spring, managers felt that it was crucial to observe soil conditions and begin working the fields as soon as possible to take advantage of the spring moisture. All of the farms utilized the conventional method of planting the small grain crop and incorporated part of the chemicals during the planting process.

The current government farm programs encourage producers to plant small grains as a form of cover for idle acres. Some of the operators were then under obligation to disk or chisel the grain prior to the seed completely forming. Cultivation was also practiced by those farms that experienced some form of drought on their operation as a form of moisture conservation. These farms used their small grain as a form of cover for the set-aside acres which was then cut or plowed under in the middle of the summer to comply with government regulations.

Chemical Management:

All of the farms within the study were dependent on chemical usage for their cropping enterprises. There was, however, a marked difference in the amount of chemicals used, when they were applied and what types were used. Each farm operator felt that chemicals were an important part of their operation necessary to keep their yields high. The driving force for chemical usage appeared to be basis yields for participation in the current government farm program since deficiency payments are based on their past performance yields.

There was a concern among the managers in their own ability to control chemical usage on their operation. When questioned what impact the chemicals had on their crop yields and the land, each of the operators said they weren't sure. None of them seemed to be completely confident that they were using the right amount or type for their operation. Some managers relied on soil testing and recommendations from an independent consultant for

information on chemical usage. Others relied on the information gathered from chemical sales people and from information gathered from farm magazines and neighbors. Still each felt that they were not satisfied with their chemical management skills for their operation.

Due to the complexity involved in chemical application it is difficult to give concrete data involving its use. What is important to note from this study is that each of the farms were dependent on chemicals to obtain high yields but each of the managers were not secure in their knowledge of proper chemical usage.

Harvest:

There seemed to be only two decisions involved in harvesting either the small or large grain crop: When to harvest, and who will harvest the crop. This may sound rather simplified but it is probably one of the most timely decisions that is made by the manager. Harvesting, like planting, seemed to be a stressful time for the manager and one that involved organization and planning.

Some managers within the study relied on outside help in harvesting the grain crop. Their reasons for hiring the combining done was two fold: 1). their operation was too small to justify the capital expense of purchasing combining equipment, 2). by hiring their neighbors to combine they were in effect supporting their local community. One producer had developed a cooperative among the neighbors that farmed closed to his operation. These operators exchanged their machinery for the use of their

neighbors' machinery. These farms were able to help reduce the costs of planting and harvesting their crops by sharing machinery. Another operator hired someone with a combine to harvest his crop. This operator felt by hiring his neighbor to harvest he was helping him to purchase the combine. The rest of the farms within the study harvested their own crops.

Livestock Management

Managing and meeting the requirements of livestock enterprises require substantial operator's time. Reasons for inclusion of livestock enterprises on successful operations varied with each operator. One operator remarked that the only reason he continued to raise livestock was that they provided a consistent form of income for the operation. All of the managers observed in the study raised some form of livestock on their operation. Some of these operators had specialized livestock enterprises while others were more diversified. Diversified producers felt it was better to divide their resources into different livestock enterprises and thus offset the risk presented by raising only one type. Enterprises observed in the study included: registered cattle and hogs, commercial cattle and hogs, feeder cattle, and dairy animals.

Dairy:

Of the livestock enterprises observed, raising dairy cattle was the most management intensive. One manager remarked that dairy animals were a 24 hour a day job and a 365 days-a-year commitment. This commitment was shown in the development of sound nutrition, health, and marketing programs and through continued improvement in the performance of their herd.

Each dairy producer attempted to maintain a one year calving interval for the dairy cow. Thus cows were bred and calved at approximately the same time each year. For the producer it meant following the open animals closely during the open period in order to re-breed by the third heat cycle after calving. This yearly interval allowed for a period of two months prior to calving that cows were taken out of the milking herd. Producers kept good records on breeding dates and anticipated calving dates in order to maintain the one year interval.

All dairy operators in the study utilized artificial insemination within their herd as a means of introducing different genetics, and as a method of herd improvement. These managers looked closely at the performance record of a bull to analyze those traits that they felt would be beneficial to their own herd. Part of this analization came from having their own cow herd analyzed for those traits that could be improved upon. One farm utilized an off-farm consultant to assist in an accurate

evaluation of his herd. The cows were rated for these traits and this information was taken into consideration prior to choosing a herd bull.

The dairy managers utilized more specialists than any of the other farm managers in decisions of nutrition and herd health.

One operator relied heavily on the university dairy extension specialist for not only feed rations, but also in utilizing available farm feeds economically. A feed analization and efficiency report was utilized from DHIA records and used in calculating specific animal feed needs. These managers realized that proper feeding was necessary to maintain high milking performance within the cow herd.

The veterinarian was another consultant that dairy managers used frequently. One operator said that if he lost a cow it would mean a substantial income loss for that particular period.

Therefore it was important to find a consultant that was willing to come at all hours and was committed to offering good advice in the area of herd health management. From this advice each of the managers had developed a sound health program that fit the needs of the cows and was cost effective for the operator.

All of the calves born to the farms within the study were either saved to be incorporated into the milking herd, were fed to be sold as market animals or were held for sale as breeding animals. Each of the farms in the study had a well thought-out calf program for the calf from the time it left its mother until

it was placed in the herd to be bred or fed for sale. The calves were on a feeding and health program that allowed for changes due to size and sex of the animal.

Feeder Cattle, Commercial and Registered Cow/Calf Operation;

Three of the farms within the study raised some form of beef cattle by either purchasing feeder animals or finishing out those that they raise. One of these three units raised registered animals that were then sold as breeding stock or 4-H animals, or fed to market weight. Management skills varied greatly among those producers with beef cow herds. The discussions of these differences is not to note either poor management or good management, but to relate that specific goals of the operator are reflected in their handling of the herd. Since the difference in these two herds was due to a difference in goals for the enterprise, the discussion of the two herds is presented in terms of goal attainment instead of generalizations based upon enterprise differences.

While the handling of the animals was similar among the producers, there were other differences noted in the handling of the herds. The producer with registered animals, who produced animals for seed stock, placed importance on maintaining good records as evidence of his progress. For the commercial cow/calf operator, the herd was more a hobby than an income producing enterprise.

Management differences noted were reflected in record keeping, specific herd goals, improvement genetically, and producing a market quality carcass. The operator of the registered herd did a better job of keeping records for both his own information and for registration purposes as opposed to the commercial breeder. The commercial breeder strove for changes in the marketability of his market animals through cross-breeding where the registered producer looked more for changes genetically for improvement within his herd. The registered breeder realized that without crossbreeding it would be difficult for him to attain the commercial herd producer's goals. For this reason he was doing some crossbreeding on a smaller proportion within his herd. This change in management strategy illustrated to the producer that the registered cows, when cross bred, produce a calf that can compete well with the commercial cow's calf at the market level.

Nutrition was important to all breeders from the aspect of maintaining the cow herd and producing a good quality calf. None of the producers utilized a specialist when formulating their rations. Each of the producers said that they used information from farm magazines, extension publications and seminars attended as well as from friends and feed sales people when developing a feed program for their animals.

Animal health was maintained through a program that best fit the needs of each herd. One operator remarked that he stopped using the veterinarian when costs began to rise. He still felt that his herd's health was important, however he now does more of the veterinarian work himself. This operator does have the veterinarian help with the calf work in the fall, to bangs vaccinate the heifers and castrate the steers calves, but does not call him, for what the operator terms as, minor calls.

A major difference noted between the breeding herds was the age of the herd and the breeding program utilized. The average age of cows in the registered herd was approximately 8 years, while the commercial herd averaged 18 years. The older age of the commercial herd did not seem to hinder the production level of the market weight animals and subsequently the manager did not see a need to cull older animals and replace them with heifers. The registered breeder utilized accurate written records to continually evaluate the herd's performance and felt that a younger herd allowed him faster genetic improvement in his herd. The commercial breeder rented a herd bull for his cows, while the registered breeder artificially inseminated his cows during the first two heat cycles. Even though their management skills differed, both producers raised market weight calves of good carcass value in approximately the same amount of time.

The remaining beef producer adapted his management skills to purchasing feeder cattle and feeding them to slaughter weight. He remarked that one problem he had to overcome was finding an order buyer. After trying several buyers, this producer located a

retired livestock auctioneer to purchase his feeder cattle. He depends on this person to purchase the cattle to meet his specific needs and to deliver them when he is ready.

Thus, part of the solution to this operator's management problems was to employ the skills of others in areas where he was less qualified. This producer felt that because he purchased the cattle, as opposed to raising them himself, he had a smaller profit margin. For him, profit maximization was the management goal in evaluating the health, feeding and marketing program for each group of calves.

Farrow to Finish Hogs:

Raising hogs from farrow to finish was the most popular livestock enterprise observed within the study farms. The study included commercial breeders, a purebred breeder, and a family farm corporation that raised hogs as their main enterprise. While each of these farms were unique in their handling of the animals, the management skills did not vary due to the size of the operation.

The management cycle was observed from one farrowing to the next in the case of sows and from feeder pig to market weight for hogs. The observations included areas such as animal nutrition, herd health, and upgrading the herd to produce a marketable animal.

Each of the producers placed a high importance on the overall health of the animal herd. All of the producers were very protective of their herd and were concerned about disease being

introduced to the herd. One remarked that he had seen his neighbor's hogs destroyed by disease and was cautious with strangers on his farm. Only one of the producers consulted with a veterinarian on a regular basis. He used this information to make any changes in his regular vaccination program or herd management.

Breeding was done either by pen breeding, hand breeding or artificial insemination. The producer breeding by artificial insemination felt that even though it was more expensive, it was an opportunity to introduce new genes into his herd without having to purchase a new boar. This producer also hand bred young animals to prevent injury during breeding. He remarked that this also meant more labor in the form of watching the animals closely, but as this was a registered herd he felt that it was important to devote the extra time. The remaining producers were commercial breeders and utilized the pen breeding system with all their sows. Sows were grouped and were assigned a boar for the entire time they were on the farm. These breeders were not as concerned with genetic improvement but centered their goals on achieving a market weight animal in a relatively short period of time.

Confinement units were utilized on all of the farms within the study. All of the study farms confined the market animals from the time they were born until they were marketed. The sows were placed in confinement the week prior to farrowing and remained until five to seven weeks after. For most of these

operators the confinement system provided for a cleaner environment for the animals and a source of fertilizer for the crop land. An apparent goal noted for these operations was to keep the units as clean as possible. One producer remarked that since he started using the confinement system, he has weaned more pigs and the overall health of his animals has greatly improved.

The hog producers within the study had each developed a good system of feeding the animals. One producer consulted on a regular basis with a professional in the area of swine nutrition to evaluate the performance of his animals and to change those areas that needed improvement. Each of the producers had developed a system of feeding the animals with a minimum of labor. Most ground their feed in bulk and then either augered the feed to the animals or stored it in a nearby bin for ease in feeding. Each of these producers divided the animals according to their size and/or needs to eliminate competition among the market animals. The largest, by volume, producer remarked that the margin for a profit was so narrow that it was important to eliminate the feed waste and to ensure that the animals were getting all that they required for growth and maintenance.

It was noted that all of the swine producers within the study had developed a sound system of breeding and raising a good quality market animal. Each of these producers seemed to be aware of the costs involved and periodically evaluated their operation to eliminate unnecessary costs.

Role of Marketing in Management Strategies:

Each of the producers seemed to have developed a marketing program that fit the goals of their operation. Producers in the study did not currently participate in alternative forms of marketing such as futures and options. Twenty eight percent of the producers had used this form of alternative marketing in the past but felt the results were not satisfactory. Most of the producers felt that the lack of knowledge concerning alternative marketing kept them from participating fully. The producers' families were also concerned with being able to sell their lender the idea of futures marketing since they would also be involved in margin calls. These producers felt that their lending institution lacked an understanding of the special needs of farm managers. It is due to these constraints that these producers did not use a wider range of marketing practices.

Livestock was marketed through public auction, commission firm or directly to a packing company. The majority of the slaughter animals were marketed either directly to a packing company or through a commission firm. The cull animals were marketed through public auction. Each farm operator within the study had developed their own marketing plan that they felt best fit their operation.

Grain was marketed through the animals, sold directly to the local co-op, sealed in the government program or stored on the farm. The choice of how to market grain seemed to depend on goals for the operation. Should the whole farm goal be raising market

animals, grain was then raised second to the animals. If the grain was strictly a cash crop, and they lacked storage space for the crop then it was marketed directly to the local co-op. The government program seemed to be the only exception when they chose a marketing program. This program offered them a chance to be paid for storing the grain on the farm by sealing the grain. Role of Financial Management:

The farm study did not attempt to understand the complex nature of the farm's financial status. It was recognized early in the interview process that financial management was a sensitive discussion area and that it would be difficult to derive an accurate analysis. One operator stated during the initial visit that if the researcher had any connection with a bank, the researcher would not be welcomed on his farm. This operator had had a bad experience with a financial institution and was not willing to reveal any part of his finances. There was a general feeling of uneasiness or possibly a lack of knowledge on their part in understanding the complex nature of financial management. Each of the farm managers were aware of the financial management program that was offered through the local county extension office. This program contained the various aspects of financial management that operators felt were important, that is, the ability to analyze his current financial position as well as projections for the upcoming year. To date none of the seven producers in the study agreed to participate in a current financial analysis, offered to them free of charge, even though

several did express an interest in the program. It is not known why they chose not to participate, however, it could be the managers feeling of a lack of time to produce to required information.

Role of Farm Records:

Recent studies show a conflict among producers as to the importance of farm records and their likelihood of spending time developing a sound record keeping system. Carlson's study found that the producers surveyed felt that "keeping records and analyzing the operation" was considered to be the most important in a list of seven choices. When asked as the amount of time spent and enjoyment of keeping records the producers responded by stating that they did not spend more than two hours a week during the winter months and less than that during the summer. Carlson concluded that "without current, accurate records, good farm management is difficult." This study, while not disputing Carlson's conclusion, has found that to be successful managers, non-quantifiable issues are equally or more important.

Styles of bookkeeping practices were very similar among the producers. It was noted that they did not vary due to the type of farm business operation. The types of books the corporate farm kept were similar to that of the single proprietor. No form of record keeping was noted above that required by the bank or IRS.

It was apparent that if the producers were not motivated to document under the direction of the above two institutions that very little bookkeeping would be done.

Bookkeeping practices observed seemed to have progressed at a slower pace compared to the farms' technological progress. Most producers felt that their bookkeeping system met their needs and thus did not see the need to change.

Most of the producers in the study relied upon someone else to finish their books and to prepare their income tax forms. Entries were made into farm journals as to expenses and income generated on the farm. Depreciation schedules were kept by the accountant to be used in developing their IRS report. Records were not kept on an individual enterprise basis. The corporate farm did prepare several financial statements for the year end report. These statements were used as a basis of reporting changes to stockholders within the operation and ultimately the manager's net income.

The farm operators were given notice ahead of time of the researchers' need for a simple cost breakdown on individual enterprises. The intention was that they would be prepared to show variable costs associated with production. Even with notice prior to the meeting, variable costs were difficult for the manager to produce. Part of these costs were taken directly from invoices while others were merely estimates of their true costs. It was found that while specific input costs were regarded as irrelevant, larger payments seemed to be more in the forefront of

their memories; items such as large principle payments, feed bills or other large cash flow expenditures along with their due dates. Producers did know when their cash flow needs were the greatest and tried to time livestock or grain sales to meet the increase in demand, but these costs were not anticipated in any other form, such as a cash flow plan.

Conclusion:

This research project was designed to look at those skills that are currently being implemented on successful operations. It was possible to note areas where the farm operator felt he was not strong at managing and those short term goals where applicable to the attainment of future goals. Several general comments on producers' concept of successful farm management can be made.

This study found that management varied not only among each farm but also within enterprises on each farm. It was found that each manager could have areas on the farm that he was stronger in managing than in others. Thus, even the successful farm managers are not "successful" in every aspect of their operation. On farms where the enterprises could be divided among several family members, the operation was better able to attain successful management. This includes those single proprietors that utilized specialists in areas where they lacked expertise.

On those farms where there were multiple enterprises it was noted that there were stronger management skills observed in a limited number of enterprises. This was primarily due to the lack of time to devote to managing a wide variety of enterprises. It was noted that successful managers devoted their management skills to their main enterprise interests and those enterprises that were not as important were allotted less time. Thus a lack of time spent on management does not denote a poor manager, only to say that there are only so many hours in the day that the managers set priorities as to their time and some enterprises were on lower priority.

While each successful farm manager recognized their farm as a business, most of the operators spent a small portion of their time treating it as a business. There was little time spent on all of the farms toward analyzing past performance of the business or setting goals for the future of the business. Each of the farms recognized bookkeeping as their weakest point, but were reluctant to give it higher priority. If all of the aspects of the farm do not progress at the same rate whether it be technologically or in analyzing the farms performance, the farm business in the long run suffers. One of the operators remarked: "If something isn't broke, why fix it". Some operators felt that their system has worked for several years and they see no need to change. Others said they could see the need to change but did not feel they were ready to devote the time or energy toward spending more time working on books.

This paper has reported an overview of several successful farm managers that were measured not by the amount of income generated on their operation, but in terms of success that can be measured by the operator and the farm family. It was noted that there are several influences that have encouraged the development of the system the producers are currently using on their operation. All of these influences and the ideals held by the managers should all be taken into consideration when consulting operators about the management of their operation.

Bibliography

- Hughes, Harlan. "The Management Difference: Future Information Needs of North Dakota's Commercial Farmers and Ranchers". The Courier of Agricultural Economics. Cooperative Extension Service. North Dakota State Unviersity. July 1986.
- Mu'min, Ridgely A. and Ralph E. Hepp. "Evaluating Managerial Effectiveness". Agricultural Economics Report, East Lansing, MI. Michigan State University, Report #507. (1988).
- Olsson, Rolf (Sweden). "Management For Success in Modern Agriculture". European Review of Agricultural Economics." (1988).
- Sonka, Steven T. "Factors We Observe on Successful Midwest Farms
 Today." <u>Determinants of Farm Size and Structure</u> (1988)
 29-46.