

# Adoption of Integrated Resource Management Concepts by Kansas Veterinarians

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## Abstract

Seventy-eight Kansas cow/calf veterinarians were surveyed utilizing a personal interview format. The objectives were to determine the current level and future projections for adoption of Integrated Resource Management (IRM) concepts. Determination of IRM continuing education needs and potential marketing strategies were an integral portion of the format.

Results from the Kansas Cow/Calf Practitioner Survey indicated there is a current and growing demand for herd management consultative services. Cow/calf practitioners indicated a need to incorporate expanded IRM services in their practices to meet producers' future needs and expectations, although the current adoption rate for selected IRM expanded services was low.

The projected usage rate for IRM continuing education programs was determined to be extremely high for the next two years, but most respondents indicated the current availability for IRM continuing education is inadequate. Respondents indicated production/economic analysis, nutrition, and marketing were the most important topics to be addressed in IRM continuing education programs.

The Kansas Survey indicated a low adoption rate for computer usage to provide IRM services. Most respondents plan to expand computer services in the next two years, with the expansion to include maintenance of client herd records. Half the practitioners in the survey indicated their current computer knowledge is inadequate to implement a computerized IRM program.

Only a small percentage of survey respondents indicated written reports are generated after IRM consultation. Almost all of the survey respondents stated producers would be more responsive to IRM consultative fees if written forms accompanied oral advice. These responses suggested enhanced written communication techniques will be crucial in future efforts to implement fee-for-advice beef herd services.

Various methods to increase the level of technology transfer and marketing of services to producers were investigated and discussed. Newsletters were determined to be underutilized by survey respondents. Producer educational meetings were conducted by the majority of survey respondents, with pharmaceutical companies sponsoring most of the programs. Survey respondents indicated they would be likely to attend IRM workshops with producers, veterinarians, and other professionals to identify problems and define goals. Respondents indicated these workshops would be attended by a median of ten clients per practice.

## Introduction

Throughout the past several decades, tremendous technological advances have been made in the beef

cattle industry. Despite these advances, serious problems in sustainability and profitability exist, particularly at the cow/calf producer level. Recent data from the Standardized Performance Analysis (SPA) program sponsored by the National Cattlemen's Association reveals that the average unit cost of weaned calf production (break-even economic cost) is \$87.00 per hundred weight. (The SPA Summary results were obtained from 88 herds in 14 states in 1990 and 1991.) Strong prices in recent years have covered this break-even cost. However, future downward trends could result in serious economic problems for cow/calf producers.<sup>1</sup>

Many ranchers are so busy with day-to-day projects that they lose sight of the bigger picture. Others fail to set out clear long-term objectives and goals. For some of these ranchers, balancing the ranch resources is like looking at a picture puzzle spread out on a table. They know the pieces all fit together, they just don't have the time or expertise to put it all together.<sup>2,3</sup> Experts from the various agricultural disciplines provide excellent information and technology transfer services. The problem often lies in fitting the pieces of this technology transfer puzzle into a practical total herd management program. Integrated Resource Management is a multidisciplinary team approach to problem solving that fits the pieces of the technology transfer and management puzzle into a cohesive unit. This management approach improves the economic efficiency of ranching operations.<sup>3,4-14</sup>

Integrated Resource Management (IRM) is an exciting opportunity for veterinary practitioners to become more involved in production enterprises by functioning as the facilitator or participant in an IRM program.<sup>4,15</sup> The veterinary profession has much to gain by actively pursuing an increased level of involvement in IRM. In many situations the local veterinary practitioner is the most available, the most knowledgeable and the one individual with the established trust required to enable progress to occur through utilization of an IRM approach.

Historically, veterinarians have been perceived by producers as competent to treat sick animals, but somewhat lacking in knowledge pertaining to finance, nutrition, and overall management.<sup>2,16-28</sup> This attitude seems

### Sample Design

to be pervasive in the beef industry, particularly the cow/calf sector. Veterinary practitioners wishing to be “major players” in the dynamic, rapidly changing beef industry must be willing to adopt to new technology and new methods of delivery of these technologies. An image change is necessary from exclusively a sick animal diagnostician to a health management professional possessing a wide array of total farm or ranch industry knowledge.<sup>17,29,30</sup>

The typical cow/calf client will be more demanding in terms of veterinary services required as the year 2000 approaches.<sup>28</sup> What has always been thought of as the “cattle industry” is now more accurately described as the beef “food industry”. All individuals involved in raising cattle are in the business of producing meat for the retail counter.<sup>31</sup> A narrow “business-as-usual” approach to solving herd problems and reducing costs could result in missed opportunities for the veterinary profession. Private veterinary practitioners are in a unique position to expand their service opportunities through implementation of IRM programs for their cow/calf clients. In many cases increased training in nutrition, finance, computer skills, marketing, and data analysis may be required.<sup>2,16-27</sup> IRM continuing education should not be aimed at making nutritionists or economists out of veterinarians but should serve to augment traditional educational opportunities.

### Objectives

Although many articles have been published recently on IRM, no specific literature could be found which utilized findings from an in-depth questionnaire of practicing cow/calf veterinarians. To enable the Kansas State University Cow/calf Commodity Program to more effectively meet the needs of practicing beef veterinarians and their clients, an IRM practitioner survey was designed and implemented. The Kansas Cow/Calf Practitioner Survey on Veterinary Involvement in IRM addresses the following three objectives:

- 1) Determine the current level and future projections for adoption of Integrated Resource Management (IRM) concepts by Kansas veterinarians.
- 2) Determine continuing education needs for veterinarians interested in implementing IRM in cow/calf operations.
- 3) Explore marketing strategies for IRM that enable veterinarians to better meet the needs of cow/calf operators in the future.

A total of 287 Kansas veterinarians were mailed an initial qualifying questionnaire on January 7, 1992. This was the total number of Kansas veterinarians identified as Large Animal or Mixed Practitioners. The questionnaire was utilized to locate those practitioners which were involved in cow/calf practice and were willing to participate in an in-depth questionnaire process. One hundred eighteen responses were received. Of these 118 responses, 85 agreed to participate in an in-depth personal interview in the summer or fall of 1992. Seventy-eight of these positive respondents were successfully interviewed.

One hundred twenty-nine practitioners were represented by the 78 responding practices which participated in the in-depth questionnaire process. Of the practitioners surveyed, 64 were interviewed personally at their veterinary practice and 14 practitioners were interviewed by mail after telephone contact. Practitioners in the latter group were not able to be interviewed personally due to scheduling conflicts, distance, or time constraints.

Table 1. IRM Continuing Education 78 Respondents

QUESTIONS	DESCRIPTIVE STATISTICS		RESULTS (Frequency Distributions)*							
	Median	Mode	V	S	A	D	S	V	TOTAL	
			S	A			D	S	D	A
1. Would attend IRM continuing education programs in the next two years	Strongly Agree	Very Strongly Agree	32	22	21	2	0	0	75	2
2. Would bring clients to an IRM seminar	Strongly Agree	Agree	19	20	29	8	0	1	68	9
3. Would be likely to attend computer training short courses to increase expertise in IRM concepts	Strongly Agree	Agree	18	22	28	5	1	2	68	8
4. Have attended IRM CE programs in the last two years	Agree	Disagree	16	16	17	19	8	1	49	28
5. Overall availability of IRM CE from all sources is adequate	Disagree	Disagree	0	3	24	28	14	5	27	47
6. Increased need for CE will be generated due to expanded IRM services	Strongly Agree	Agree	15	26	33	2	0	0	74	2

\* VSA=Very Strongly Agree; SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree; VSD=Very Strongly Disagree

Table 2: Future IRM Trends

78 Respondents

QUESTIONS	DESCRIPTIVE STATISTICS		RESULTS (Frequency Distributions)*							
	Median	Mode	V	S	A	D	S	V	TOTAL	
			S	A			D	S	D	A
1. Plan to expand computer services as part of IRM program in the next 2 years	Agree	Agree	16	13	20	16	4	7	49	27
2. Anticipate increasing computer services to include client herd records in the next 2 years	Agree	Agree	14	7	23	19	6	8	44	33
3. Current computer knowledge is adequate to implement IRM	Disagree/Agree	Disagree	8	13	18	21	7	11	39	39
4. Would like to expand role in providing preventive medicine services as part of an IRM program	Strongly Agree	Agree	24	25	28	1	0	0	77	1
5. Plan to increase marketing of veterinary services to cow/calf clients in the next 12 months	Agree	Agree	24	10	33	9	0	1	67	10
6. Plan to increase fee basis consulting services in the next 12 months	Agree	Disagree	7	16	22	27	4	0	45	31
7. Plan to increase marketing of animal health products in the next 12 months	Agree	Agree	6	12	43	13	2	1	61	16
8. Plan to be offering expanded IRM services five years from now	Strongly Agree	Agree	19	22	25	8	0	2	66	10
9. Foresee an increased need for food animal veterinary graduates due to expanded IRM services	Agree	Agree	8	19	25	21	2	2	52	25
10. Intend to hire a veterinarian with a cow/calf interest in the next 2 years	Disagree	Disagree	5	5	8	42	10	7	18	59
11. Foresee an expanding role for technicians in beef practice due to expanded IRM services	Agree	Agree	6	8	38	19	4	1	52	24

\*VSA=Very Strongly Agree; SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree; VSD=Very Strongly Disagree

### Selected Summary Results

The following two tables provide summarized results of selected portions of the Kansas Cow / Calf Practitioner Survey on Veterinary Involvement in IRM.

### Discussion

Increased computer utilization is absolutely essential for modern production medicine programs. The Kansas Survey indicated a low adoption rate for computer usage to provide IRM services. Most respondents plan to expand computer services in the next two years. The majority of the respondents also anticipate this computer expansion to include maintenance of client herd records. Half the practitioners in the survey

indicated their current computer knowledge is inadequate to implement a computerized IRM program.

The projected usage rate for IRM continuing education programs is extremely high for the next two years, but most respondents indicated the current availability of IRM continuing education is inadequate. Respondents indicated production/economic analysis, nutrition, and marketing were the most important topics to be addressed in IRM continuing education programs. Survey respondents indicated they would be likely to attend IRM workshops with producers, veterinarians, and other professionals to identify problems and define goals. These workshops would be attended by a median of ten producer clients per veterinary respondent, according to survey results.

### Conclusion

Improved methods of technology transfer to practicing veterinarians and their producer clients will be required in the future. Continuing education topics will need to focus on non-traditional veterinary topics, such as nutritional management, integrated production and financial data analysis, and marketing innovative production concepts. Likewise, curricula in colleges of veterinary medicine must be expanded for production-oriented students. Production economics, data analysis, computer spreadsheet expertise, applied epidemiology, and industry knowledge are examples of topics that need to be accelerated in the veterinary curricula to prepare students for the demands of modern production medicine.

This survey is a preliminary study and could easily be expanded to other states and regions of the country. Results obtained in Kansas should mirror results from targeted beef practitioners in other major beef producing states. Follow-up of this survey with an investigation of producer attitudes toward increased veterinary IRM involvement in their operation would be beneficial. Particular emphasis on a producer survey should be to determine why certain large producers are non-users of veterinary services. Determination of improved methods for marketing veterinary services to large cow/calf operations would be a worthwhile endeavor. The question of overwhelming importance should be, "How can the veterinary profession change to provide the professional expertise needed to accommodate production management needs of the modern beef operation?"

Marketing myopia will lead to failure. Determining client needs and expectations and providing those services required (marketing) will lead to success.

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## Abstract

### Behaviour of lame and normal dairy cows in cubicles and in a straw yard

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The behaviour of normal cows in cubicles was compared with that of normal cows in a straw yard and that of lame cows in cubicles. The normal cows in a straw yard lay down for longer in total (9.6 hours vs 6.8 hours) and during the night (8.55 hours vs 4.75 hours) and for significantly longer at a time (3.95 hours vs 2.45 hours) than normal cows in cubicles. The normal cows in a straw yard spent more time lying down and ruminating

(5.1 hours) than normal cows in cubicles (3.3 hours). Lame cows in cubicles lay down for significantly longer during the day (3.3 hours) than normal cows in cubicles (2.1 hours). Although lameness did not affect the total time the cows spent in feeding and rumination, lame cows moved about less, and they adopted abnormal postures suggesting discomfort.