CONFERENCE AND TRADE
SHOW EVALUATION RESULTS

SITE SPECIFIC MANAGEMENT...

Keys to the Future

December 11 and 12, 2001
Edmonton, Alberta
Mayfield Inn

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SITE SPECIFIC MANAGEMENT...

Keys to the Future

Evaluation Results of the 2001 Site Specific Management Conference and Trade Show

December 11 and 12, 2001

Mayfield Inn
Edmonton, Alberta, Canada

Copies available from**:**

Agriculture, Food & Rural Development
Conservation & Development Branch
Resource Management & Irrigation Division
#206, 7000-113 Street
Edmonton, AB T6H 5T6

www.agric.gov.ab.ca/conference/ssm/

Introduction

On December 11 and 12, 2001 there were over 330 producers, municipal, consultants and agribusiness representatives in attendance at the **Site Specific Management…Keys to the Future Conference and Tradeshow.** This Alberta wide attracted participants from Saskatchewan, Manitoba, Ontario and Montana. The Conference provided information on improving the economic efficiency and increasing the environmental friendliness of management practices in for producers, government and agribusiness industry. The tradeshow gave a "hands on" opportunity to discuss and view the tools used in site specific management (SSM).

At the conclusion of the conference and tradeshow, participants completed an evaluation to answer questions on how what they thought of the conference and tradeshow. There were also questions on the use and value of site specific management.

Some highlights from the evaluation are:

- Most agreed that the conference was valuable and increased their understanding in SSM.
- Most felt the breakout sessions were very valuable, but felt that more time for question and answer/discussion was needed.
- Participants currently using tools for SSM ranged from 20% to 58%, with 56% using GPS equipment and 58% using aerial photography.
- Over half agree that SSM is heading in the appropriate direction for agriculture in the Prairies. 26% strongly agreed.
- The main barrier to implementing SSM technology was identified as cost.

Comments and information provided in this report are the results from the entire survey. This includes opinions on the conference and tradeshow specifically as well as issues related to SSM use and value. This report is a summary of the results and highlights the broad-spectrum of answers given. If you would like further information on site specific management please contact Tom Goddard at:

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The Conference Planning Committee thanks all those who attended the conference and tradeshow and completed the evaluation.

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Survey Results

Approximately 330 people attended the Site Specific Management (SSM) Keys to the future…Conference and Tradeshow December 11 & 12, 2001 at the Mayfield Inn, Edmonton. Participants represented farming, research, government and agribusiness interests. They traveled from Saskatchewan, Manitoba, Ontario, Montana and other regions in Alberta.

A diverse range of information and expertise about SSM was brought together to help participants make decisions on management practices unique to each particular situation. The Conference and Trade Show featured a wide range of applications of SSM in both agricultural and municipal contexts, to stimulate ideas and to help determine which tools and strategies will be most successful.

Provincial, national and international speakers covered many topics about making SSM useful, profitable, and environmentally friendly. Part of the program broke into concurrent sessions directed to producer, industry and municipal audiences. A poster session highlighted the latest research results in SSM, and a tradeshow gave opportunities to learn about new developments in products such as Global Positioning Systems (GPS), Geographical Information Systems (GIS), and grain protein monitors.

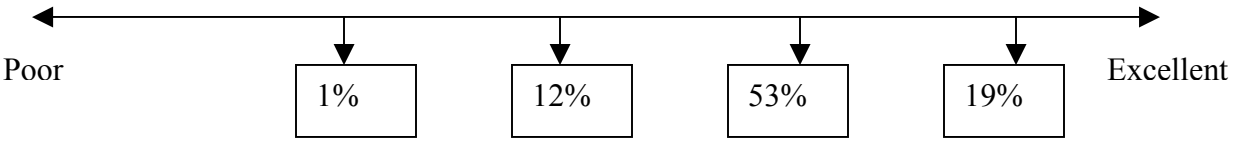
At the beginning of the Conference and Tradeshow, proceedings and evaluation forms were handed out. The participants were asked to return the completed evaluation before the end of the conference. As part of our appreciation, door prizes donated by JONA GPS Systems and Prairie Goematics were given to successful participants. The survey received a 61% return (a total of 202 evaluation forms were collected) with farmers making up the majority of replies, followed by government, other, agribusiness and consultants. Statistically, we can be 95% sure that the other conference participants would have responded similarly, 19 times out of 20.

Participant Profile (See Appendix B, Table 1 for details):

- 82 farmers responded. The majority of farmers were cropping producers, followed by mixed farm operations. The average farm size was 2,464 acres, almost 3 times the average farm size in Alberta which is 970 ac according to Statistics Canada (2001)
- 53 government employees responded. The majorities were from municipalities, followed by provincial and then federal.
- 31 agribusiness and consultants responded. Agribusiness included fertilizer/chemical operations, retailers, GPS suppliers, crop insurance, equipment suppliers and information technologists.
- Some of the "other" participants were researchers, agronomists, instructors, manufacturers and students.

Evaluation of Conference and Tradeshow

Overall, most participants who attended the conference thought it was worthwhile, rating it good to excellent.



- Almost all agreed or strongly agreed that travel, time of year and cost were reasonable.
- Most felt the proceedings, poster session and trade show were valuable and useful.
- 62% agreed and 30% strongly agreed that the conference increased their understanding and knowledge of SSM. The breakout sessions were particularly effective in delivering specific information needed.
- Some other information participants felt would be useful include: a list of ongoing projects, costs for research, ratings on software and hardware and more demonstrations of Global Positioning Systems (GPS) and Geographical Information Systems (GIS).
- Most heard of the conference through their local municipality, Internet, or through a brochure that was mailed to them. Some participants also heard from AAFRD staff about the event.
- Only 7% of the participants collected the Certified Advisor Continuing Education Units.
- The breakout sessions and networking were identified as the most valuable aspects of the conference.

For detailed results see Appendix B, Tables 2 – 4.

Some suggestions for conference improvement included (top 7):

- More time for presentations to allow for question and answer/discussion periods.
- More information on GIS, GPS, satellite systems and their different applications. with demonstrations of these systems.
- Larger trade show with more booths.
- More time for trade show.
- More breakout sessions so participants could attend a variety of them.
- More careful selection of plenary speakers.

See Appendix B, Table 5 for more details.

Evaluation of Site Specific Management information, usefulness and implementation

Participants felt the best source of information on SSM is through workshops and conferences (66% ranking a 4 out of 5). They also felt that other farmers, government and Internet were good sources. For more details see Appendix B, Table 6.

Use of SSM tools:

Participants were asked if they presently use specific technologies and if they anticipate using them in the future. Table 7 in Appendix C gives an overview of the combined results from all respondents to this section of the survey. 37% of all participants are currently using SSM on their farm, municipality or agribusiness. The top six tools used are: GPS, yield mapping, site specific soil sampling, GIS, variable rate applications and weed spraying and inspection.

The following graphs show how responses differed according to whether the respondent's group was producer, government, agribusiness or consultant. The graphs indicate the number of participants that checked present use of SSM tools and the anticipated use in the future. It was assumed that if the participants are using the technology presently, they will continue to use the same technology in the future, so anticipated future use responses listed in Table 7 were added to present use responses in the graphs below.

Producers (41%) showed the highest present use of all the SSM technologies (Fig.1). This group also indicated an increased use of these tools; especially yield monitors, GPS, variable rate, GIS, soil maps and satellite imagery.

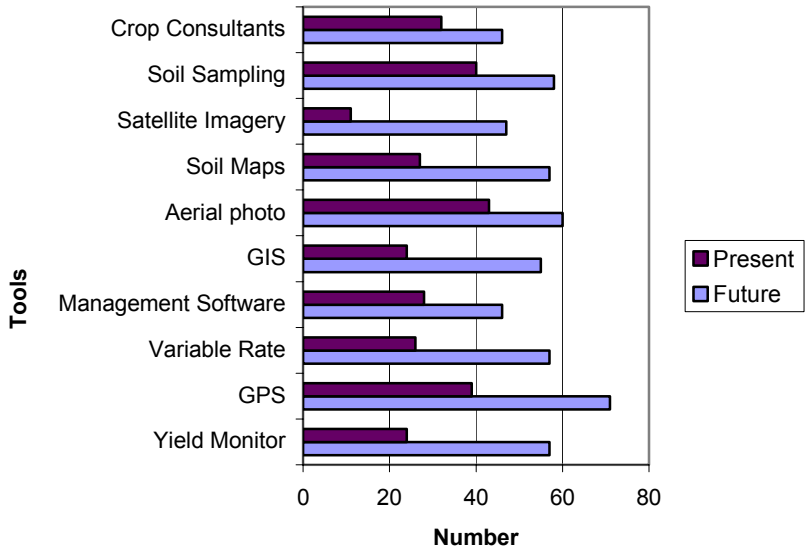


Figure 1: Farmer - Use of SSM Tools

Those in government (26%) indicated they were presently using all the SSM tools, with an emphasis on GPS, GIS, aerial photography and soil maps (Fig.2). Increased future uses were indicated in the areas of GPS, management software, aerial photography, soil maps, satellite imagery and soil sampling.

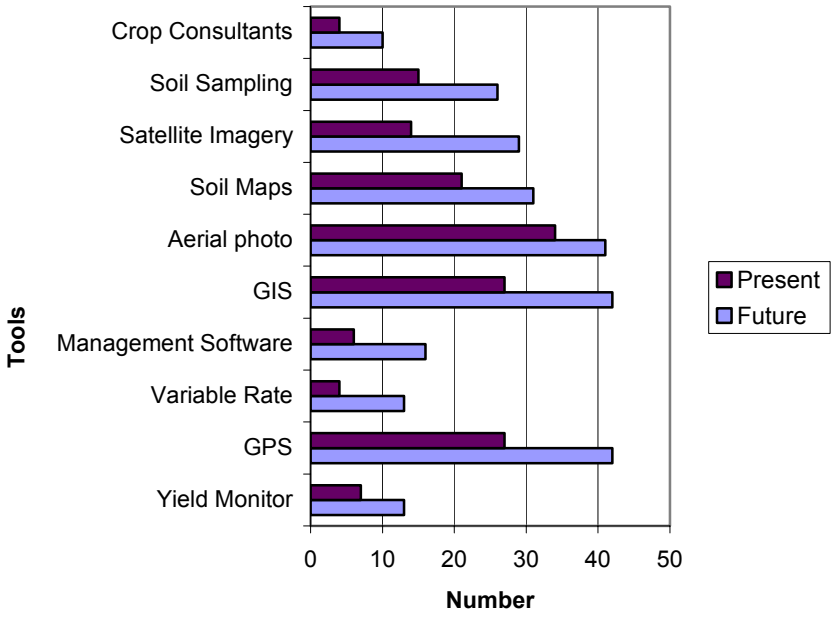


Figure 2: Government - Use of SSM Tools

Agribusiness professionals (4%) indicated they are using GPS, GIS and aerial photography currently (Fig.3). They also indicated the greatest increase in use of variable rate tools and satellite imagery.

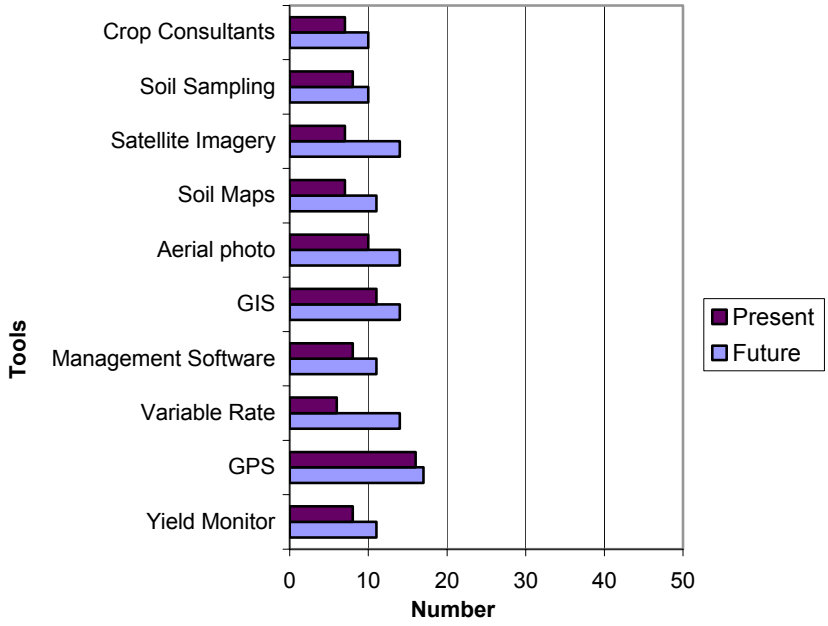


Figure 3: Agribusiness - Use of SSM Tools

Consultants (3%) had indicated they use all of the listed SSM tools, except yield monitors and variable rate technologies (Fig. 3). They foresee an increase in the use of both of these in the future. Today, most consultants are using GPS, GIS and aerial photography. Greatest increased uses were noted in variable rate technology and satellite imagery.

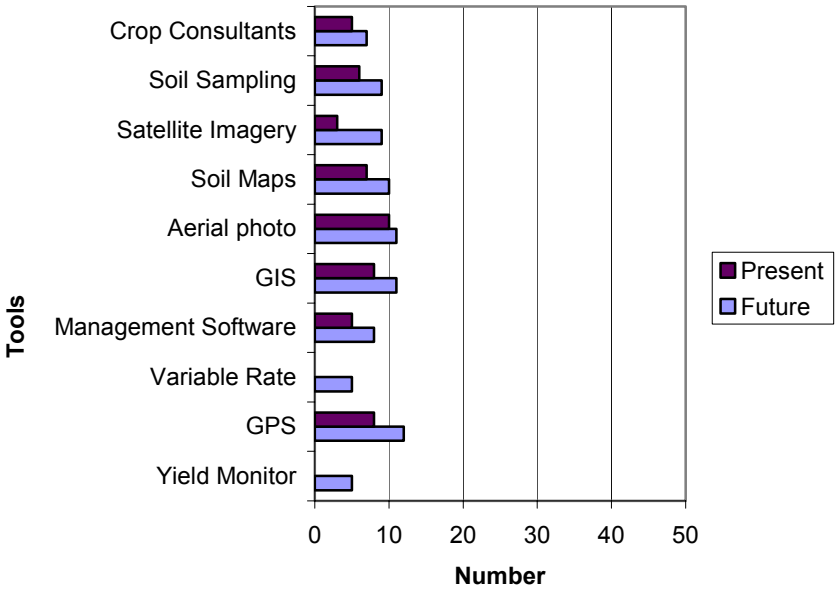


Figure 4: Consultant - Use of SSM Tools

Implementing SSM in Alberta (see Appendix C, Table 8):

- 92%, 8 total respondents agreed that SSM could provide environmental benefits.
- 92% also agreed that that the technology can be effective for improving management
- 90% agreed that uncertainty of weather is an important factor affecting profits.
- Majority of participants (83%) felt that SSM is the appropriate direction for agriculture to head in the Prairies.
- Only 49% felt that agronomic research is current with the state of technology.
- Agribusiness professionals and consultants felt that cost is reasonable, while many of government employees and farmers disagreed (approx. 36% of them).
- Most agreed that equipment is user friendly, about 1/3 disagreed.
- Most agreed that lack of training is a barrier to implementation (79%).

The top 5 items that would help participants implement SSM (identified by respondents in comments section (no prompting) (See Appendix C, Table 9):

- lower cost,
- better dealers and consultants,
- more research and proper data analysis,
- user friendly equipment*, and
- training, workshops and demonstrations.

** Note: although the majority many respondents noted that they felt the equipment is user friendly and would help them implement SSM, over 30% disagreed that equipment is user friendly in previous questions.*

The top 3 priorities identified by respondents (with no prompting) that should be addressed by institutions to help SSM progress are:

#1 Extension, education and training (59 participants)
#2 Research and development (51 participants)
#3 Economics and costs (30 participants)

Other priorities mentioned include,

- Increase user friendliness
- Increase sharing of results
- Identify environmental benefits
- Increase funding and incentives

Summary and Conclusions:

The results of this survey show that there is a clear and growing interest in Site Specific Management in Alberta. The interest is among large area farmers (respondent average was 3 times the Alberta average farm size), government employees, researchers, and dealers and is motivated by both economic and environmental concerns. Many producers have adopted SSM tools and anticipate increased future uses. Conferences and workshops that feature tradeshows and break-out sessions with question and answer format were identified as the preferred means of transferring needed information on technology and research results to adopters.

Appendix A **Conference and Tradeshow Evaluation Questionnaire**

Site Specific Management…
Keys to the future
Dec. 11 –12, 2001
Conference & Trade Show Evaluation

Dear Conference Participant:

Please take the time to fill out the following evaluation. Your input will be very valuable in helping us direct future efforts in site specific management. If you would like to receive the results in the mail, please leave your business card or address in the evaluation box at the registration desk.

Participant profile (please ✓ all that apply to you):

- ❑ Livestock producer, please specify # of head _____
- ❑ Cropping producer, please specify # acres _____
- ❑ Federal Government
- ❑ Municipal Government
- ❑ Agribusiness, Type _____
- ❑ Provincial Government
- ❑ Consultant
- ❑ Other (please specify)_____

Please indicate by checking (✓) the box that applies to you:

	Strongly Disagree	Disagree	Agree	Strongly Agree
Travel for this type of conference is reasonable.	❒	❒	❒	❒
Time of year for the conference is convenient.	❒	❒	❒	❒
Cost of the conference is reasonable.	❒	❒	❒	❒
The proceedings are valuable/useful.	❒	❒	❒	❒
The trade show was valuable/useful.	❒	❒	❒	❒
The research poster session was valuable/useful.	❒	❒	❒	❒
The conference increased my understanding/knowledge of site specific management.	❒	❒	❒	❒
The breakout sessions were effective in delivering the specific information I needed.	❒	❒	❒	❒

If not, what other information do you need? _____

How would you rate the conference on a scale of 1 (poor) to 5 (excellent)? _____

How did you hear of the conference (✓)

- ❒ Radio
- ❒ AAFRD
- ❒ Newspaper
- ❒ Television
- ❒ Local Municipality
- ❒ Brochure mailed to me
- ❒ Other (specify) _____

Did you collect the Certified Crop Advisor Continuing Education Units? ❒ Yes ❒ No

What aspect of the conference was most valuable to you?

_____

_____

Do you have some suggestions for conference improvement?

_____

Please rank the quality of the following sources of information about site specific management. (1=poor, 5=excellent)

_____Farm newspapers/magazines
_____Internet
_____Workshops/conferences
_____Farmers
_____Government
_____Dealers
_____Consultants
_____Other (specify)_____

Are you currently using site specific management on your farm, municipality, or agribusiness?

❒ Yes ❒ No

If yes, please specify how_____

_____

Have you used or do you anticipate using any of the following? (Please ✓ all that apply)

Present	*Future*		*Present*	*Future*	
❒	❒	Yield Monitor	❒	❒	Aerial Photography
❒	❒	GPS Equipment	❒	❒	Soil Inventory Maps
❒	❒	Variable Rate Equipment	❒	❒	Satellite Imagery
❒	❒	Economics Software	❒	❒	Soil Sampling Strategies
❒	❒	Management Software	❒	❒	Crop Consultant
❒	❒	GIS Software			

Other presently using: _____ Other anticipate using: _____

Please indicate using a ✓ all that apply to your opinion about implementing Site Specific Management (SSM) in Alberta.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Cost of SSM is reasonable depending on level of implementation (i.e. low tech or high tech.)	❒	❒	❒	❒
Equipment is user friendly.	❒	❒	❒	❒
Technology can be effective for improving management.	❒	❒	❒	❒
Agronomic research is current with state of technology.	❒	❒	❒	❒
Lack of training is a barrier to implementation.	❒	❒	❒	❒
Site specific management can give environmental benefits.	❒	❒	❒	❒
Uncertainty of weather is an important factor affecting profits.	❒	❒	❒	❒
Site specific management is the appropriate direction for agriculture to head in the Prairies.	❒	❒	❒	❒

What would help you to implement site specific management on your farm?

_____

_____

What top three (3) priorities should be addressed by institutions to help site specific management progress?

1. _____
2. _____
3. _____

Other comments:

_____

_____

Thank you for taking the time to complete the evaluation! Results will be mailed
to all conference participants that leave us an address in the evaluation box at the registration desk.

Appendix B **Detailed Survey Results: Conference & Tradeshow**

Table 1: Participant profile (% of 202) (may not add up to 100% due to rounding up)

Cropping Producer	21	Cropping Agribusiness	1
Federal Government	3	Cropping/Municipal	3
Municipal Government	15	Livestock/Municipal	5
Agribusiness	9	Livestock/College	1
Provincial Government	9	Cropping/Consultant	1
Consultant	6	Cropping/Provincial	1
Livestock/Cropping/Municipal	3	OTHER*	17
Livestock/Cropping	7	Did not respond	2

NOTE: OTHER* includes Research Association /Research, College, Agronomist, GIS Mapping /Instructor, Manufacturer, Ducks Unlimited, Watershed Coordinator, Tillage and Instrument Manager.

Table 2: Conference & tradeshow evaluation (%)

	Strongly Disagree	Disagree	Agree	Strongly Agree	No Response
Travel for this type of conference is reasonable.	0	3	75	20	2
Time of year for the conference is convenient.	0	45	73	22	1
Cost of the conference is reasonable.	0	2	71	25	3
The proceedings are valuable/useful.	0	2	64	33	2
The trade show was valuable/useful.	0	6	68	22	4
The research poster session was valuable/useful.	0	10	70	12	8
The conference increased my understanding / knowledge of site specific management.	0	3	62	30	5
The breakout sessions were effective in delivering the specific information I needed.*	0	5	67	19	7

Table 3: How participants heard of the conference (%)

Radio	5	Local Municipality	15
AAFRD	16	Brochure mailed to me	29
Newspaper	5	Other* (specify)	26
Television	0	No Response	4

NOTE: Other* includes Internet (Ropin' the Web), Word-of-Mouth, Agri-News, Email.

Table 4: Most valuable aspect of the conference (%)

Breakout sessions	37
Networking	16
GIS/GPS technology and applications	13
Trade show	9
Trade show and breakout sessions	4
Poster sessions	2
Record keeping/data collection	2
Networking and presentation material/presentations	1
Networking and inclusion of municipal as well as agricultural applications	1
Networking and breakout sessions	1
Trade show and poster sessions	1
Trade show and road side spraying application demonstration	1
Trade show and producer presentations	1

Table 5: Suggestions for conference improvement

More time for presentations to allow for question and answer/discussion periods.	28
More information on GIS, GPS, satellite systems and their different applications; and demonstrations of these systems.	19
Larger trade show (with more booths)	12
More time for trade show	9
More breakout sessions so a person can attend a variety	8
More careful selection of plenary speakers	5
Larger rooms with tables and more seating space	3
First session should start at least one hour later	2
Location	1
Better sound system	1
Include information on intensive/grazing practices	1
The room for concurrent sessions should allow for easy access	1
Better advertising	1
Vary dates between December, January and February	1
Presentations (and papers) should include more research	1
Should have the option to pay for conference without Dinner Theatre	1
Leave a little time between sessions, so that people can get to them prior to sessions starting	1
Conference should be held each year	1

Table 6: Ranking of information sources (%)

	Poor 1	2	3	4	Excellent 5	No Response
Farm Newspapers/Magazines	12	19	24	13	6	26
Internet	3	9	25	26	8	29
Workshops/Conferences	3	4	14	31	25	23
Farmers	11	14	17	20	11	27
Government	9	14	21	19	9	28
Dealers	11	11	22	15	7	31
Consultants	9	7	16	22	8	38

Table 7: SSM use - all survey responses (%)

	Present	Future*	No Response		Present	Future*	No Response
Yield Monitor	23	28	49	Aerial Photography	58	16	26
GPS Equipment	56	28	16	Soil Inventory Maps	36	28	36
Variable Rate Equipment	21	31	48	Satellite Imagery	24	35	41
Economics Software	20	21	59	Soil Sampling Strategies	39	22	39
Management Software	28	19	53	Crop Consultant	25	16	59
GIS Software	45	28	27				

*Does not include present use as graphed by group in Figures 1 - 4 of Survey Results section.

Table 8: Implementing SSM in Alberta (%)

	Strongly Disagree	Disagree	Agree	Strongly Agree	No Response
Cost of SSM is reasonable depending on level of implementation.	3	23	54	8	12
Equipment is user friendly.	4	26	59	3	8
Technology can be effective for improving management.	1	1	61	31	6
Agronomic research is current with state of technology.	5	37	45	4	9
Lack of training is a barrier to implementation.	1	13	54	25	7
Site specific management can give environmental benefits	0	0	47	45	8
Uncertainty of weather is an important factor affecting profits.	0	3	42	48	7
Site specific management is the appropriate direction for agriculture to head in the Prairies.	0	5	57	26	12

Table 9: What would help with implementation of SSM (%)(Identified Comments - no prompting)

Lower Cost	37
Better Dealers/Consultants	13
More Research and Proper Data Analysis	13
User Friendly Equipment	13
Training/Workshops/Demonstrations	8
More Technology	6
Better Environmental Conditions	4
More Land Base to Make Capital Cost worthwhile	3
Increased Certainty of Future of Canadian and Global Farming	3

Appendix D **Other Comments on SSM**

24 participants responded to this question, many with similar comments. They are summarized as follows:

- 58% said “Great Conference”
- 13% enjoyed the Dinner Theater
- 5% indicated the conference should be held every 2 years
- Alberta Agriculture should have a dedicated web page for precision farming. All on-going research should be readily available and up-to-date for producer access.
- Need for better opening speakers
- Work done by AAFRD Specialists is essential for the continued advancement and applications of SSM
- Need for consultants that can talk to producers on their level of understanding
- Keep the conference as a continuing program