

Report to the Soils and Crop Workshop
from
Saskatchewan Advisory Council on Soils and Agronomy
by
F.B. Dyck, Chairman 1991

1. Introduction

Soils and Agronomy is one of twelve Advisory Councils that report to the Saskatchewan Agricultural Services Coordinating Committee (SASCC). SASCC is the agency which provides a mechanism for the coordination of agricultural research, extension and education activities in Saskatchewan.

2. Function and Membership

The Soils and Agronomy Council performs the following functions related to soil, weed and crop management:

- (1) Identify and coordinate research activities and develop research priorities;
- (2) Coordinate education and extension needs and requirements and encourage development of extension material for farmers;
- (3) Advise SASCC on agriculture policies and programs;
- (4) Provide a forum for discussion of policies and programs related to soil, weed and crop management.

Membership in the Council includes representation from Dealers, Producers, Agriculture Canada, University of Saskatchewan; Crop Science and Soil Science Departments; PFRA, Saskatchewan Agriculture and Food, Saskatchewan Rural Development and Chairperson of Sub-councils. The current membership is listed in Appendix B. There are three functional Sub-councils; Weeds, Soil Fertility, Soil and Crop Management.

The Sub-councils met separately twice during 1991. The Soils and Agronomy Council met in May and November 1991.

3. Advisory Council Activities

Two meetings were held dealing with the following issues.

(1) Soils and Crops Workshop

Council would like to thank the committee chaired by Zane Lewchuck and the University of Saskatchewan Extension Department for organizing the 1992 Soils and Crops Workshop.

(2) Publications

Council continues to be concerned about the lack of funds provided for publications. Generation of new Fact Sheets has virtually ceased because funds are not available to publish them even if they are written. Extension personnel and producer groups continue to push for printed material since it is an effective economical method of extension.

(3) Research Priorities

A revised list of Research Priorities is attached in Appendix A.

(4) New Technologies for Demonstrations

Council would like to suggest the following points be considered:

- (a) Demonstrate proven technology (new or old) appropriate for a specific problem in an area. Local agrologists are best able to identify specific needs. Local agrologists need to keep updated via attendance at workshop and meetings where the latest results of research are reported.
- (b) Demonstrate cost cutting measures that can be used with existing equipment rather than promoting the use of new, expensive technology.

(5) Key Issues and Concerns

- a) The administration of the SOS program could be improved by insuring that participants provide information on the outcome of projects for which they have received assistance; and by ensuring that funding for various conservation practices go to the "unconverted" who need to adopt new technology, rather than to the "converted" who are already practicing conservation technologies.
- b) Lack of funds for publication of technology transfer. The membership of various councils and sub-councils of SASCC represent a body of sound technical expertise which should be involved in the writing or editing of technology transfer publications.
- c) The minor use program for registration of pesticides should be continued, especially in light of the current emphasis on crop diversification in Saskatchewan.
- d) The GRIP program has many negative effects on agronomic practices such as reduced use of fertilizer and herbicides.

5. Resolutions

The following resolutions were presented to SASCC for considerations.

(1) Non R & D (High Priority)

WHEREAS Soil Conservation Canada does not now appear to meet the need for a national soil conservation agency,

and WHEREAS there are on-going conflicts in the role of conservation stewardship between S.C.C. and local grass roots conservation groups,

BE IT RESOLVED that S.C.C. be restructured or a new body be formed which will provide advice on program policy and

awareness activities, lobby on behalf of local organizations to access additional corporate and federal government funding, provide representation and leadership at a national level through close linkage with local conservation organizations, and act as a national agency to monitor national soil conservation issues and status.

Forward to CASCC and Saskatchewan Agriculture and Food

(2) Non R & D (High Priority)

WHEREAS the Save Our Soils program is deemed to be beneficial to local soil conservation efforts,

and WHEREAS the current program is scheduled to terminate shortly,

THEREFORE, BE IT RESOLVED that the Save Our Soils program be continued or a similar program be established which will allow local organizations to continue to tailor soil conservation programs to their own needs, and that such a program be announced well in advance of the termination of the existing program.

Forward to CASCC, Sask. Agriculture and Food,
Agriculture Canada

(3) Non R & D - (High Priority)

WHEREAS fact-sheets are known to be a good means of extension publication,

and WHEREAS funding to publish fact-sheets is lacking,

THEREFORE, BE IT RESOLVED that the mechanisms blocking the writing and printing of fact-sheets be examined, and that increased funds be provided to appropriate agencies to print and distribute fact-sheets direct to Saskatchewan Department of Agriculture and Food, Saskatchewan Department of Rural Development.

Forward to Saskatchewan Agriculture and Food,
Saskatchewan Department of Department of Rural Development
and SACAES (for information).

(4) Non R & D (High Priority)

WHEREAS there is continuing strong demand for the Guide to Farm Practice from various sources such as: farmers and landowners; Schools teaching Agriculture, University, SIAST, Community Colleges and Sask. Business needing basic information, International and Interprovincial educational missions; and

WHEREAS, the revisions for the crops section, should include information on crop utilization, value-added processing, diversification and basic marketing skills.

AND WHEREAS, the costs and distribution can be worked out in a cooperative manner among partners.

THEREFORE, BE IT RESOLVED that "The Guide to Farm Practice" be updated and re-issued for these and many other uses.

Forward to Saskatchewan Agriculture and Food,
Rural Development and SACAES (for information).

(5) Non R & D (High Priority)

WHEREAS extension publications need to be under continuous revision to reflect advisory changes stemming from procedural alterations, research results, etc.,

AND WHEREAS budgetary constraints have restricted the republication of many provincial extension publications after they have been revised,

AND WHEREAS the Saskatchewan Soil Test Laboratory have changed their method of making soil test recommendations, making existing advisory publications incorrect,

BE IT RESOLVED that funding be made available to publish a revision of the provincial bulletin "Nitrogen Fertilization of Spring Annual Crops" to reflect recently implemented changes in the method of making soil test recommendations.

Forward to Saskatchewan Department of Agriculture and Food,
Saskatchewan Department of Rural Development and
SACAES (for information)

(6) Non R & D (High Priority)

WHEREAS there is a continuing need for a single person to coordinate extension and research activities in the area of soil fertility in Saskatchewan,

AND WHEREAS such a person with an established expertise in the area is essential for the proper dispersal of accurate and timely information to the producer,

BE IT RESOLVED that the lack of a Provincial Soils Specialist continues to affect the transfer to the producer of information about soils and soil fertility and that the provincial government be encouraged to fill the position.

Forward to the Saskatchewan Department of
Agriculture and Food

(7) R & D (High Priority)

WHEREAS research into the practical aspects of soil fertility and fertilizer use by Agriculture Canada Research Stations in Saskatchewan has been greatly reduced through the retirement and position elimination of the soil fertility professional at Melfort, the impending retirement and probable position elimination of the soil fertility professional at Saskatoon, and the reduction in

professional staff and the placing of soil fertility research at low priority at Swift Current;

AND WHEREAS research at the University of Saskatchewan into soil fertility is becoming increasingly theoretical and less field oriented due to the reliance on graduate student research;

AND WHEREAS the lack of a provincial soil fertility specialist has resulted in a tendency to establish demonstration plots in which either no soil fertility data or poor or insufficient data are collected and collated;

AND WHEREAS there is a continuing need by producers for information on the effects of fertilizer rates, placement, timing, formulations, etc. on crops and the environment especially the new crops being introduced for diversification, and the relationship between fertilizer use and soil fertility,

BE IT RESOLVED that practical soil fertility research at the federal, provincial, and university be continued or reinstated at former levels. Forward to CASCC, Agriculture Canada, University of Saskatchewan, Saskatchewan Agriculture and Food.

Forward CASCC, Agriculture Canada, University of Saskatchewan
Saskatchewan Department of Agriculture

(8) R & D (High Priority)

WHEREAS reliable estimates of crop losses due to weeds are required to: provide farmers with practical guidelines on which to base weed control decisions, and provide a basis on which to base priorities for future research, and

WHEREAS most of the current estimates of crop losses due to weeds are based on an averaging of several subjective "best guesses" rather than research data,

THEREFORE BE IT RESOLVED that greater priority be given to research on crop losses due to weeds so that more accurate estimates of actual losses within various crops can be made.

Forward to Agriculture Canada, University of Saskatchewan
Saskatchewan Department of Agriculture and Food

6. Future Activities

- (1) Continue fulfilling mandate as issues arise under the leadership of a new chairman, Dr. Mike Grevers.
- (2) Soils and Crops Workshop - Plan another Soils and Crops Workshop for 1992.

APPENDIX A

Soils and Agronomy Council Research Priorities, 1990-91

1. Enhance soil conservation and erosion control through:
 - (a) the development of economic alternatives to conventional summerfallow.
 - (b) improved methods of conventional summerfallow.
2. Develop economical and environmentally sustainable weed control methods which will help to maintain and improve soil quality through maintenance of adequate crop residue levels.
3. Investigate the effect of weed populations on crop yields to provide guidance for producer weed control strategy and future research priority setting.
4. Evaluation of fertilizer response including interactions between nutrients, fertilizer placement, fertilizer sources, moisture effects and cropping practices taking into consideration effects on environmental quality and sustainability of production.
5. Investigate the effects of reduced tillage systems on seeding dates, seeding equipment requirements, seed and fertilizer placement requirements, plant diseases, soil and crop quality, weed control and crop yields.
6. Investigate the effects of various management systems on soil quality, water availability, and soil fertility. For example, investigate factors affecting sustainable production including the use of legumes and nitrogen fixation.

APPENDIX B

SASKATCHEWAN ADVISORY COUNCIL ON SOILS & AGRONOMY
MEMBERSHIP LIST, JANUARY 1992

<u>Representative</u>	<u>Name and Addresses</u>	<u>Term Appointed</u>	<u>Expires</u>
	Mike Grevers, Chairman Sask. Institute of Pedology University of Saskatchewan SASKATOON, Sask. S7N 0W0 Phone: 966-6858 FAX: 966-6881	Dec 91	Dec 93
Crop Science & Plant Ecology	Rick Holm, Secretary Associate Professor Crop Science & Plant Ecology University of Saskatchewan SASKATOON, Sask. S7N 0W0 Phone: 966-5006 FAX: 966-5015	Dec 90	Dec 92
Weeds Sub-Council	M.D. Devine, Chairman Crop Science & Plant Ecology University of Saskatchewan SASKATOON, Sask. S7N 0W0 Phone: 966-4947	Dec 90	92
Soil Fertility Sub-Council	Regas Karamanos, Chairman Saskatchewan Soil Testing Lab. General Purpose Building University of Saskatchewan SASKATOON, Saskatchewan S7N 0W0	Dec 91	Dec 93
Soil & Crop Management Sub-Council	Vacant	Dec 91	Dec 93
Sask. Rural Dev.	Zane Lewchuck Soils & Crops Agrologist Saskatchewan Rural Development 38 5th Ave. North YORKTON, Sask. S3N 0Y8 Phone: 786-1508	Dec. '90	Dec. '92

<u>Representative</u>	<u>Name and Addresses</u>	<u>Term Appointed</u>	<u>Expire</u>
Agriculture Canada	Stewart Brandt Research Scientist Agriculture Canada Exp. Farm P.O. Box 10 SCOTT, Sask. S0K 4A0 Phone: 247-2011 FAX: 247-2022	91	93
Soil Science Department	Les Henry Professor of Soil Science Department of Soil Science University of Saskatchewan SASKATOON, Sask. S7N 0W0 Phone: 966-6856	Dec. '91	Dec. '9
PFRA	Bill Harron Soil Salinity Specialist PFRA Motherwell Building 1901 Victoria Avenue REGINA, Sask. S4P 0R5 Phone: 780-5155	Dec. '91	Dec. '9
Saskatchewan Agriculture & Food	Ken Panchuk Cereal Crops Specialist Soils & Crops Branch Saskatchewan Agriculture & Food 133 - 3085 Albert Street REGINA, Sask. S4S 0B1 Phone: 787-4664	Dec. '91	Dec. '9
Western Canada Fertilizer & Chemical Dealers	Bob Evans Sales Agronomist Gates Fertilizer Ltd. Box 336 NIPAWIN, Sask. S0E 1E0 Phone: 862-9811	Dec. '89	Dec. '9
Liason with Sask. Advisory Council of Agr. & Food Engineering	W.B. (Bill) Reed Dept. of Agronomy Engineering University of Saskatchewan SASKATOON, Saskatchewan S7N 0W0 Phone: 966-5317	Dec '91	Dec '9

<u>Representative</u>	<u>Name and Addresses</u>	<u>Term Appointed</u>	<u>Expires</u>
Farm	Art Walde Producer Representative (Soils & Agronomy Council) Box 596 KINDERSLEY, Sask. S0E 1S0 Phone: 463-3302	Dec. '91	Dec. '93
Sask. Representative to Expert Committee Soil & Water Management	Laurie Tollefson Manager Irr. Dev. Centre P.O. Box 700 OUTLOOK, Sask. S0L 2N0 Phone: 867-9951	Dec '91	Dec '93

Producer Representatives on Sub-Councils

Weeds Subcouncil	Sinclair Harrison Producer Representative Weeds Sub-Council Box 89 MOOSOMIN, Sask. S0G 3N0 Phone: 435-4100	Dec.'90	Dec. '92
Soil Fertility Sub-Council	Earl Mickelson Producer Representative Soil Fertility Sub-Council Box 3 HAGEN, Sask. S0J 1B0 Phone: 749-2415	Dec. '91	Dec. '93
Soil & Crop Management Sub-Council	Brett Meinert Producer Representative Box 1438 SHAUNAVON, Sask. S0N 2M0 Phone: 297-3159	Dec. '90	Dec. '92