

**REPORT OF THE SASKATCHEWAN ADVISORY COUNCIL  
ON SOILS AND AGRONOMY**

to the

**SASKATCHEWAN AGRICULTURAL SERVICES  
COORDINATING COMMITTEE**

December 9, 1985

Submitted by J.W.B. Stewart,  
Chairman

## **A. MEMBERSHIP LISTS**

The membership lists of the Advisory Council on Soils and Agronomy, and the four committees that report to it are attached. We would like to recommend that R.K. Foster, Research Scientist in the Crop Development Centre, replace J.W.B. Stewart as chairman of this Advisory Committee and that all other committees remain as outlined for another year.

### **SASKATCHEWAN ADVISORY COUNCIL ON SOILS AND AGRONOMY MEMBERSHIP LIST (as of April, 1985)**

#### **CHAIRMAN:**

J.W.B. Stewart, Dept. of Soil Science, U. of S., Saskatoon, Sask. S7N 0W0.  
966-6827 (until December 31, 1985)

R.K. Foster, Crop Development Centre, U. of S., Saskatoon, Sask. S7N 0W0.  
966-4972 (as of January 1, 1986)

#### **SECRETARY:**

R. Ashford, Dept. of Crop Science & Plant Ecology, U. of S., Saskatoon, Sask.  
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#### **COMMITTEE CHAIRMEN:**

##### **Soil Fertility:**

H. Ukrainetz, Agriculture Canada Research Station, 107 Science Cres. Saskatoon,  
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##### **Weeds:**

Rick Holm, Dept. of Crop Science & Plant Ecology, U. of S., Saskatoon, Sask.  
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##### **Special Soil Problems:**

T. Wakelin, Saskatchewan Agriculture, 105 Provincial Building, North Battleford,  
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##### **Tillage:**

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#### **SASKATCHEWAN DEPARTMENT OF AGRICULTURE REPRESENTATIVES**

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**AG. ENG. COUNCIL:**

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**966-5301.**

**EX OFFICIO:**

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**Saskatchewan Advisory Council on Soils and Agronomy**  
**December, 1985**

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**WEED CONTROL MEMBERSHIP**  
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**December, 1985**

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R. Holm - Chairman	Crop Development Centre
D. Dabbs	Horticulture Department
B. Reed	Agricultural Engineering Dept.
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G. Bacon, J. Waddington	Agriculture Canada (Swift Current)
K. Bowren, N. Malik	Agriculture Canada (Melfort)
K. Kirkland	Agriculture Canada (Scott)
H. Kydd	P.A.M.I.
B. Neill	PRFA Tree Nursery
R. Ambach, W. Squires, A. Irvine	CACA
Vacant	Sask. Horticulture Council
K. Smith	SARM
D. Billett, Secretary	Sask. Agricultural Weed Specialist
L. Grammiak	Extension Service, Sask. Ag.

**TILLAGE COMMITTEE MEMBERSHIP**  
**Saskatchewan Advisory Council on Soils and Agronomy**  
**December 1984**

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**SPECIAL SOIL PROBLEMS COMMITTEE**  
**Saskatchewan Advisory Council on Soils and Agronomy**  
**December 1985**

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## B. SUMMARY OF ACTIVITIES

### 1. Structure of Council

The Saskatchewan Advisory Council on Soils and Agronomy has operated for the past 7 years with four committees: Soil Fertility, Weeds, Tillage, and Special Soil Problems. The council meets in April and November. Each committee meets separately once or twice annually.

### 2. Education and Communication Activities

- 2.1 Publications: The Weed Committee revised the publication entitled "Chemical Weed Control in Cereal, Oilseed, Pulse and Forage Crops" and this publication will be available in December. The publication has been expanding rapidly in recent years as new products are introduced and product labels are expanded. The 1986 edition will consist of approximately 90 pages compared with 59 pages in 1984. New sections on Weed Control, and Winter Storage of Herbicides have been added.

The Soil Fertility Committee revised and prepared new editions of the following publications: "Nitrogen Fertilizers in Crop Production", and "Phosphorus and Potassium in Crop Production in Saskatchewan". The committee has also prepared new bulletins dealing with "Sulphur Fertilizer in Crop Production", and "Micronutrients in Crop Production". Both these publications will be available in 1986. In addition, a special bulletin on "Winter Wheat Fertilization" has been prepared in cooperation with the University of Saskatchewan. Also, information on the fertilization of forage crops have been compiled.

- 2.2 Soils and Crops Workshop: The Annual Soils and Crops Workshop is sponsored by this Council, together with the University of Saskatchewan. The 1985 Workshop chaired by Mr. M.C.J. Grevers was held on February 18 and 19, 1985. The theme for this conference was "Conservation for the Future". This meeting was particularly well attended and the plenary session was of special interest. Senator H.O. Sparrow gave the lead-off paper at the plenary session and specific papers were presented at this session on the "Conservation in Perspective" theme by C.A. Campbell on research, R.T. Wakelin on extension, farming by S. Njaa, and economics by J.C. Van Kooten. In addition, 21 papers were presented under the headings of Fertilizer Placement, Soil Fertility, Soils and Crop Management, and these were published in a 372 page proceedings. Preparations for the February 20 and 21, 1986 workshop are well in hand under the chairmanship of Mr. M.C.J. Grevers. The theme of the workshop is "Research in Agriculture".
- 2.3 Summer Tour: A most successful annual summer's tour sponsored by the Council was held in the Tisdale-Melfort area with provincial Soils and Crops Specialists' Roy Button and Ed Tanner in charge. This was particularly interesting as the northeast had some of the best crops on record and there were a wide range of insect, disease and nutritional problems that could be seen in the field and discussed. The Council that decided that an agronomy tour would not be held in 1986 because of the annual AIC meeting in Saskatoon in July and the many tours associated with that event. However, the next tour would be held in 1987 in the eastcentral region.

### 3. General Comments

The Council was very pleased with the activities that took place under the umbrella of the Canada/Saskatchewan ERDA agreements. The Council approved the manner in which the key areas for further research and development and on farm delivery had been discussed in committee before the agreement had been signed. They now find that there have been some delays in the translation of this agreement into practical ongoing programs and would urge that further delays be minimized. Council also noted that PFRA had set up soil conservation districts and applauded the appointment of extra soils and crops specialists by



PFRA in these areas. This program seems to be successful and there seems to be the development of good coordination between the existing extension service provided by the Province of Saskatchewan and with ongoing programs in the Agriculture Canada Research Stations, The Saskatchewan Institute of Pedology, and The Crop Development Centre.

The committee would like to report a list of priority items in which research work should be done to help produce committees in making allocation of research funds. The Special Soils Problems Committee reported that they had identified three major areas of concern, viz. 1) acid soils and the need for liming, 2) saline soils and the causes of the problem, and 3) management of Solonchaks soils. The Weeds Committee were concerned with 1) application techniques, 2) screening herbicides for efficacy, and 3) cost benefits of herbicides and losses due to weeds. The Conservation Tillage Committee reported that the three areas of concern listed in priority were 1) emergency recommendations for southwest part of the province, 2) research into alternatives for tillage, and 3) research on extended cropping. Finally, the Soil Fertility Committee reported that they needed more research work on 1) sulphur fertility, 2) fertilizer practices for maximum utilization of nutrients, 3) winter wheat fertility, and 4) micronutrients.

### C. RESOLUTIONS

Resolution 1: WHEREAS the Saskatchewan Herbicide Usage Planner which was instituted on the Grassroots telidon service in early 1985 has proven to be very popular (approximately 12,000 pages accessed by 400 users from January to June 30, 1985) and,

WHEREAS this program has the potential to be an extremely popular and useful source of information on herbicides for extension workers, agribusiness and farmers and,

WHEREAS the introduction and maintenance of an electronic information service such as this demands a significant portion of the provincial weed control specialist's time,

THEREFORE BE IT RESOLVED that Saskatchewan Agriculture ensure that sufficient resources are made available to expand and update the herbicide data base on an ongoing basis.

Resolution 2: WHEREAS there has been a long-standing need for information on areas such as aquatic weed control (including farm dugouts), weed control on roadsides and industrial vegetation management,

THEREFORE BE IT RESOLVED that Saskatchewan Agriculture make available the resources required to prepare, print and distribute a publication or publications to cover these areas as soon as possible.

Resolution 3: WHEREAS a computer retrieval system now exists to provide data summaries from research abstracts submitted to the Expert Committee on Weeds (Western Canada) and,

WHEREAS such data summaries would be of great value to the committee in its development of herbicide recommendations for the province,

THEREFORE BE IT RESOLVED that Saskatchewan Agriculture take the steps necessary to provide the provincial weed control specialist with access to this retrieval system.

Resolution 4: WHEREAS fertilizers are a necessary and relatively expensive major component of total inputs for successful crop production in western Canada,

and accurate rates and nutrient content are very important when fertilizers are applied according to soil test recommendations, and

WHEREAS various kinds of untested and unproven special products continue to be offered to producers, and

WHEREAS there is a critical shortage of staff and resources for adequate sampling and inspection of special products submitted for registration, and for monitoring fertilizer products at the manufacturing and especially at the blending and distribution outlets for adherence to specified quality and nutrient contents,

THEREFORE BE IT RESOLVED that Agriculture Canada support the inspection program of the Food Production and Inspection Branch, Feed and Fertilizer Division, by providing adequate resources to continue and expand the present level of service.

Resolution 5: WHEREAS there is urgent need for continuing and additional research on various aspects of soil fertility and crop production in Saskatchewan, and

WHEREAS recent additional funding through the ERDA and other programs is an indication of the recognition of the importance of such research for the farming industry,

THEREFORE BE IT RESOLVED that Agriculture Canada and Saskatchewan Agriculture be commended for providing additional funding through the ERDA program for continuing research on sulphur and micronutrients in Saskatchewan soils.