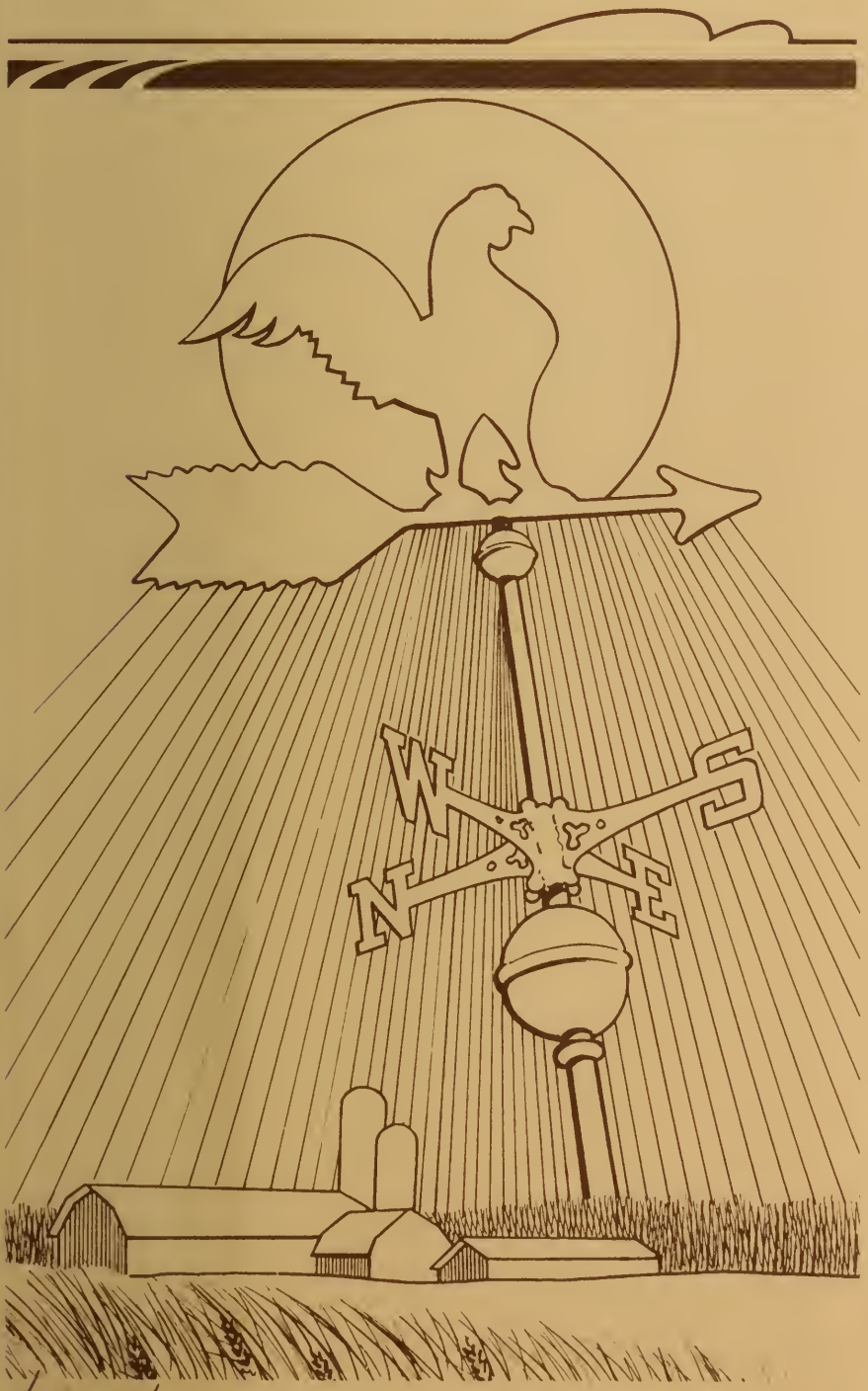
Improving Canada's farm weather service

Agriculture Canada

Publication 1743/E



Canada

All too often a fatalistic attitude is taken about the weather and its effects — "After all, what can you do?" Not very serious if you're talking about a rained-out picnic, but for farmers such an attitude could mean serious losses in income.

Of course, nothing can really be done to change the weather, but with modern technology farmers can minimize their losses due to weather and take full advantage of favorable weather conditions.

A team of farmers and meteorologists are now working to improve the Canadian Farm Weather Service. With cooperation and coordination of resources, Canada can develop the specialized service farmers need to carry out their work.

This publication outlines what is currently being done, what needs to be done and the role individual farmers can play.

What is a farm weather service?

Generally, a farm weather service gives farmers two types of information — weather forecasts and specialized weather facts. Forecasts vary from a 24-hour detailed forecast to a general 2-week indication of weather trends. The specialized facts can include such details as the suitability of conditions for hay drying, the likelihood of pest infestation, and soil moisture levels.

The ideal weather service, however, would provide this and much more.

Such a service would first give farmers an effective way to identify and define their weather-related problems. The service would then draw on a pool of available research, data and expertise from various government departments and organizations to seek solutions.

What's happening now?

Most of the functions necessary for an effective farm weather service already exist; it is a matter of bringing them together successfully.

At present, the Atmospheric Environment Services (AES) of Environment Canada provides basic weather information across Canada. This includes weather statistics and analysis as well as 1 to 2 day, 3 to 5 day, and long range 15-day forecasts. Currently,

AES is researching climatic change and variability, as well as developing and improving long range and seasonal forecast methods. AES could make available specialized weather information for farmers, such as frost warnings, dew forecasts, evaporation rates, spraying and hay drying conditions, irrigation requirements and pest warnings.

Agriculture Canada performs agrometeorological research at stations across the country. In cooperation with AES, the department collects information on evaporation, soil temperatures and soil moisture levels and is researching a number of weather-sensitive areas.

Certain provincial agricultural research stations and extension workers give farm weather information directly to the farmer through the "code-a-phone" (a local farm weather information number), personal contact, seminars and meetings. This close contact establishes the two-way communication needed to keep governments up to date on current farm management techniques and operations as well as identifying specific agricultural weather problems.

Universities, through courses in agrometeorology, supply the professionals to staff the service and often research specific agriculturally related weather problems.

The Canadian Federation of Agriculture (CFA), a national federation of provincial, regional and national farmers' organizations, has been fundamental in starting the dialogue between farmers and professionals seeking to improve the farm weather service.

Improving the weather service

Close participation and coordination of all the groups is essential. This was first discussed in a Joint Report issued by the CFA and Agriculture Canada in May 1977. After more discussion, they agreed that provincial committees were seen as the best approach. In 1980, the ministers of agriculture declared their support.

The provincial committee approach is based on a set of guidelines accepted by the Canadian Agricultural Services Coordinating Committee (CASCC). The guidelines recommend that the task of improving the farm weather service be focused in provincial farm

weather service committees. Each committee should have representation from farmers, federal and provincial departments of agriculture and environment, as well as any private institutions that can contribute. The committees will identify and define weather-sensitive agricultural problems, recommending solutions and monitoring results.

At the national level, the Farm Weather Service Coordinating Group (composed of one representative each from Environment Canada, Agriculture Canada, and CFA, plus a secretary) is keeping the farm weather service under review and acting as a clearing house and catalyst.

As early as 1978, some provinces set up working farm weather service committees with representation from all the interested groups. In 1981, such committees existed in British Columbia, Alberta, Ontario, Quebec, Prince Edward Island and Newfoundland.

Farm weather service at work

The information now available from Canada's farm weather service is already being put to valuable use across Canada. For example, an early warning system for apple pests is saving Ontario apple producers some $2 million a year in pesticide costs.

Apple growers can spray when it will do the most good, reducing pesticide residues in the environment and cutting their pesticide bills by 40 to 50%.

Getting the information to farmers

Maritime farmers can get up-to-the-minute weather information any time of day by tuning in to Weatheradio Atlantic.

A number of cassettes compiled by AES are beamed to listeners 24 hours a day, 7 days a week. These broadcasts concentrate on material of interest to farmers, such as wind direction and speed, humidity readings, frost warnings and hay drying and potato blight indices.

This detailed local information helps farmers make important crop decisions.

How you can help

A great deal of government activity is taking place to improve the weather service for Canadian farmers. But what is done in the future will depend on the eagerness of the participants in the system to identify local problems and begin the search for solutions. Everyone, from farmers to government departments and universities, must take a hard look at how they can work towards improving the present system.

Farmers can help by making use of the services already available and by communicating any specific needs and problems. Keep in touch, share your ideas and make suggestions.

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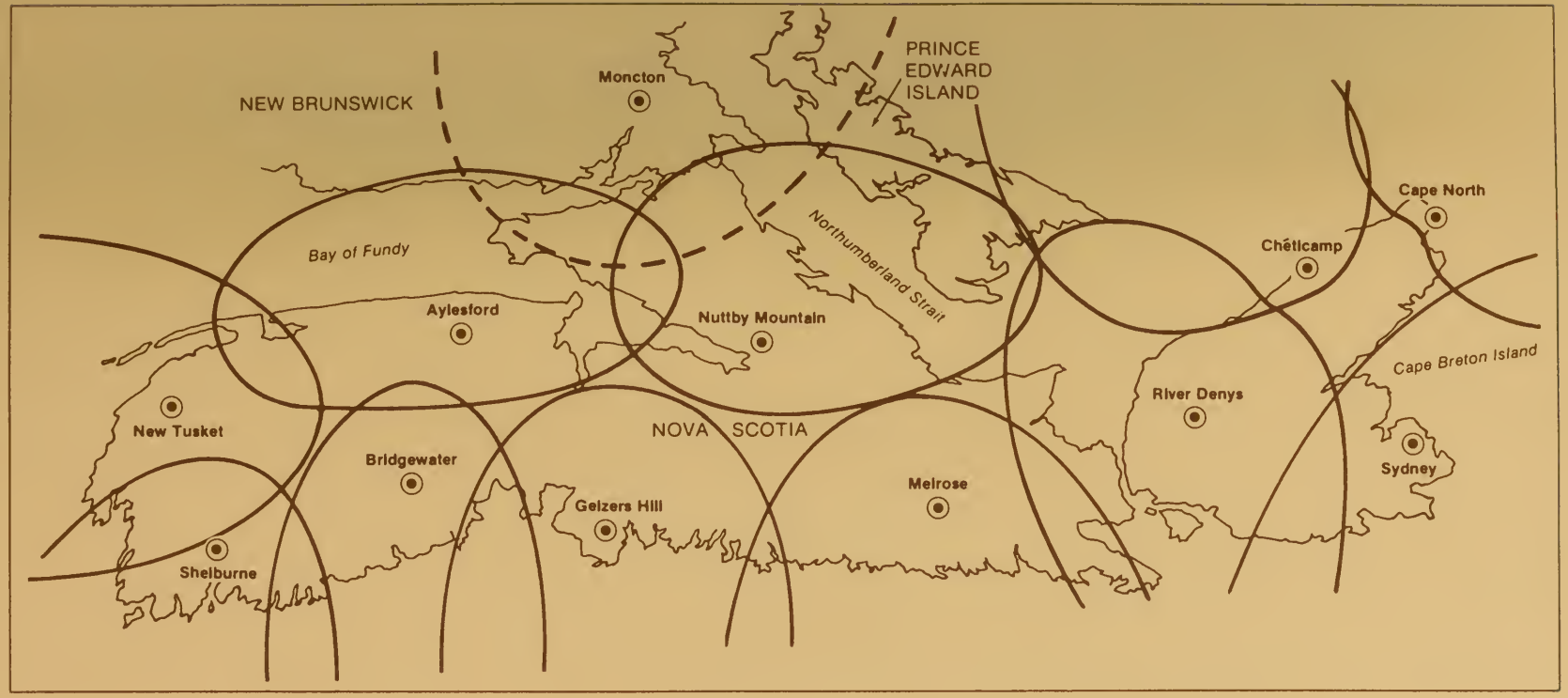
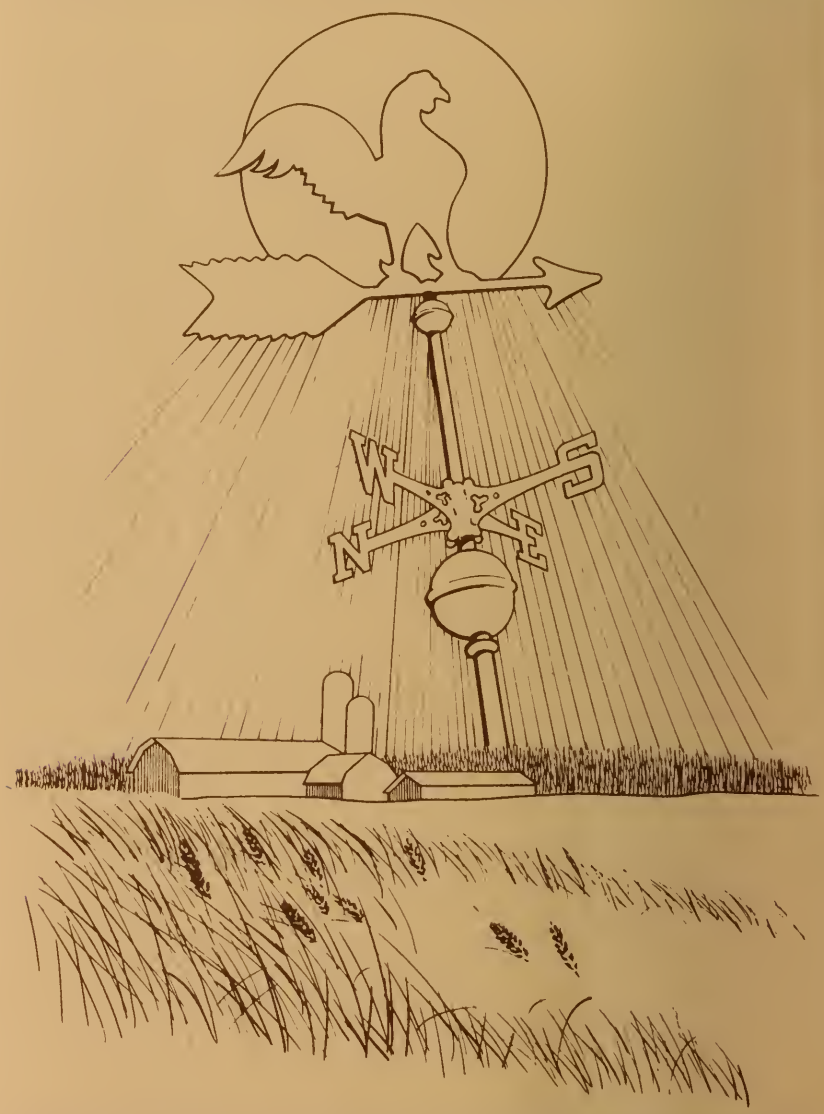
PUBLICATION 1743/E, available from
Communications Branch, Agriculture Canada,
Ottawa K1A 0C7

Cat. No. A15-1743/1982EISBN: 0-662-12053-1
Printed 19825M-7:82

Également disponible en français sous le titre
Amélioration du service agrométéorologique canadien



Weatheradio locations in Nova Scotia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