# TRIPARTITE AGREEMENT ON WILDLAND FIRE SCIENCE RESEARCH SIGNED

(IFFN No. 11 - July 1994, pp. 27-29)

One of the resolutions arising from the 1988 Conference on Bushfire Modelling and Fire Danger Rating Systems[1], as proposed by B.J. Stocks of the Canadian Forest Service (CFS) (formerly Forestry Canada), involved the idea of an international Memorandum of Understanding (MOU) as follows:

"That the time is opportune for the development of a Memorandum of Understanding between Australia, Canada and the United States on fire danger rating and fire behaviour modelling. Decreasing fire research resources in each country, coupled with the fact that the combining of empirical and physical modelling approaches is now seen as necessary, are strong reasons why an MOU that would facilitate co-operation and scientific exchange on a formal and consistent basis is necessary".

As the "wordsmiths" of the original draft agreement, we are happy to report that this proposal has now become a reality. A complete copy of the agreement as signed by representatives of Australia, Canada and the United States is included here in the following three pages. The contributions of D.E. Dubé and B.J. Stocks of the CFS, M.A. Fosberg and W.T. Sommers of the USDA Forest Service, and N.P. Cheney of Australia's CSIRO Division of Forestry are hereby acknowledged.

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## ARRANGEMENT ON COOPERATION IN WILDLAND FIRE SCIENCE RESEARCH BETWEEN AUSTRALIA, CANADA AND THE UNITED STATES

#### CONDUCTED UNDER THE AUSPICES OF

The Memorandum of Understanding on Scientific and Technological Cooperation in Agricultural Research and Development (1982) between

The Department of Agriculture of the United States of America and

The Commonwealth Scientific and Industrial Research Organization, Australia

and

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The Memorandum of Understanding (1990)
between
The United States Department of Agriculture
and
Forestry Canada on Cooperation in the field of forestry-related programs

### **Background**

Cooperation between Australia, Canada and the United States in areas of wildland fire science research was initiated formally in July 1988 at the conference on Bushfire Modelling and Fire Danger Rating Systems held in Canberra. Subsequent discussions took place between Canadian and United States representatives in Ottawa in 1989, and between representatives of all three parties in Missoula in 1991. As a result of these discussions, it was accepted that collaborative wildland fire research, conducted under the auspices of The Memorandum of Understanding on Scientific and Technological Cooperation in Agricultural Research and Development (1982) between the Department of Agriculture of the United States and The Commonwealth Scientific and Industrial Research Organization, Australia and the Memorandum of Understanding (1990) between the United States Department of Agriculture and Forestry Canada, would be beneficial.

There are sound reasons for seeking to maintain and expand research into wildland fire science. Knowledge gained through research is fundamental to an understanding of the role of fire in wildland ecosystem processes such as plant community response and nutrient dynamics. Objective information on fire characteristics is an important input into economic analyses of the costs and benefits of fire management programs. The success of community fire prevention programs may also be largely dependent on the adequacy of predictive models employed for fire danger rating, and on the accuracy of fire weather forecasts. Fire behaviour prediction systems and burning prescriptions are required by the agencies responsible for implementing wildland fire management programs.

In addition, a number of nations that lack an independent fire research capability have adopted fire danger rating and fire behaviour prediction systems developed in Australia, Canada or the United States. Successful application of these systems in practice depends upon initial selection of an appropriate system, provision of suitable data, and correct interpretation of outputs in the context of local conditions. Description of this collaborative research in this document will provide a forum to facilitate the consistent application of fire management support systems by other nations.

The fact that resources available for wildland fire research are tending to decline, together with the perceived advantages of combining the empirical and physical approaches to modelling, are strong arguments in favour of scientific cooperation and exchange on a formal, ongoing basis.

#### Objective of Project Area Description for Work on Wildland Fire Science

The objective of this document is to elucidate possible project developments for cooperation, scientific exchange and collaborative research into wildland fire science between Australia, Canada and the United States -- under the existing Memoranda of Understanding cited above.

#### Activities Within the Scope of Cooperation, Scientific Exchange, and Research

The following types of activities will be considered within the scope of cooperation, scientific exchange, and research in wildland fire science:

- exchange of personnel and equipment for participation in experimental programs, either field or laboratory based;
- exchange of data from field or laboratory studies;
- organization of workshops on issues of relevance to the participating countries;

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- provision of support to visiting researchers;
- notification, in advance, of comprehensive or special fire experiments which international observers might wish to attend.

#### Benefit of Collaborative Work on Wildland Fire Science

Benefits resulting from collaborative work on wildland fire science include:

- opportunities to optimize the allocation of research resources in areas of common interest such as fundamental combustion processes, fire meteorology, smoke management, fire spread data for key fuel types (e.g., grassland, pine plantation), prescribed fire ignition patterns, relationships between fire characteristics and effects, and studies of suppression effectiveness in relation to fire behaviour;
- maintenance of consistent scientific standards for data collection, storage and communication;
- opportunities for more rapid adoption of new technology implementation of research findings in practice;
- provision of a formal basis to applications for funding support for collaborative projects.

#### Principles for Operation Under the Auspices of Existing Memoranda of Understanding

- Collaborative work on wildland fire science will be coordinated by designated representatives from each country, as nominated by the signatory organizations.
- Signatories are not necessarily obliged to support activities undertaken under the auspices of this project area description.
- Detailed letters of understanding will be drawn up to cover the operation of individual projects, including the exchange of data and formal publication of results.
- Designated representatives will meet periodically to coordinate work plans covered under this project area description.
- This project area description will not affect the operation of any other arrangement entered into by the parties involved.
- This project area description may be amended, supplemented and extended to at any time, by mutual written concurrence of all parties.
- The intent for collaborative work in areas of wildland fire science between the United States, Australia, and Canada under the auspices of existing Memoranda of Understanding will enter in effect upon signature by the authorized representatives of all parties and will remain in effect unless terminated by any party upon 6 months written notice. In the event of termination, all parties will consult about completion of activities underway.
- In accordance with appropriate financial and budgetary processes, all parties will bear the costs of its participation and that of its personnel in cooperative activities unless the parties agree on other arrangements. Activities pursuant to project area description and intent for collaborative work in areas of wildland fire sciences are subject to the availability of appropriate funds and personnel.

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## **Existing Understandings and Agreements**

Nothing in this Project area Description will be interpreted to prejudice or modify existing understandings or agreements between the Parties.

The Tripartite Agreement was signed in Canberra, 1 October 1993, by G.A. Kile (Chief, CSIRO Division of Forestry), J.C. Mercier (Deputy Minister, Forestry Canada), and J.A. Sesco (Deputy Chief, Research, USDA Forest Service, for the United States Department of Agriculture)