Introduction

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1984 Chairman GPC-14

This Proceedings was prepared to document the third Leafy Spurge Symposium sponsored by GPC-14 since its establishment in 1981. GPC-14 is one of the Coordinating Committees of the Great Plains Agricultural Council (GPAC). Committee meetings don’t kill leafy spurge. However, since the first Leafy Spurge Symposium held in 1979, improved control technology through coordinated research efforts and increased awareness of the problem and how to deal with it through extension education, there has been a tremendous increase in coordinated control efforts. People working together at County, State/Province, National, and International levels have turned the corner toward an eventual acceptable economic level of control of leafy spurge in North America.

For those of you not familiar with GPAC and its committees, I present the following information:

- The main purpose of the GPAC is to provide an organization for effective cooperation among member agencies, in a voluntary, coordinated attack on problems of the Plains. For more information about GPAC, contact Dr. O. Wendell Holmes, Executive Secretary GPAC, 205 Filley Hall, East Campus, University of Nebraska, Lincoln, Nebraska 68583-0922.

- GP Coordinating Committees are established by the Research Committee of the GPAC when new research is not yet outlined, or new research may not be needed, but coordination of existing work is deemed desirable. The GPC Committees provide the forum for coordination of ongoing work and for coordination of planning of new work needed to properly address a particular problem.

- The objectives of the GPC-14 “Leafy Spurge Committee” as established in 1981 are:
“To develop and evaluate techniques for weed control and land management
to control leafy spurge in the field; to demonstrate through extension and other
educational efforts the methods of leafy spurge control and land management
to improve the productivity of agricultural and public lands; to increase the
knowledge of leafy spurge biology and physiology through basic and applied
research; and to coordinate the leafy spurge research and extension program
efforts of the cooperating agencies.” Note: The framework of the committee is
such that it could be revised to address any other weed problem should the
need arise.

A brief history of the development of the leafy spurge research, education and coor-
dinated control efforts in the Northern Great Plains will help the readers of this Proceed-
ings understand how the GPC-14 Committee came to be and what is being done to attain
its objectives.

For about 15 years, a number of concerned farmers, ranchers, land managers, educa-
tors, and scientists tried to bring public attention to the insidious leafy spurge problem. In
desperation, this group appointed a Steering Committee which organized the first Leafy
Spurge Symposium. It was held in Bismarck, ND in June of 1979. The Bismarck sympos-
ium was the first official coordinated attempt to draw lines around the leafy spurge prob-
lem and to identify needs. About 125 people attended and it was very successful in
meeting its objectives.

Following the Bismarck Symposium, a committee was established to prepare a re-
search project proposal and a request for funding was submitted to the Old West Regional
Commission (OWRC). The project entitled “Leafy Spurge Control Using the Integrated
Management Systems” was approved by the OWRC with funding of $123,684 for the
period March 1, 1981 to February 28, 1982. Research conducted with the OWRC funds
provided the basis for additional research, funded primarily by re-direction of existing
resources at state and federal research facilities, supplemented with some funding specifi-
cally appropriated for leafy spurge control research.

The Bismarck June 1979 Symposium was followed by a conference in Billings, Mont-
tana in December of 1979. The Billings Conference provided the impetus for the next
step toward an active research, extension and coordinated control program by providing
an action-oriented program. This conference was also very well attended and was very
successful. A proceedings was published and a pro tem steering committee was named
which then appointed a Leafy Spurge Working Committee. The Working Committee was
given several assignments, one of which was to recommend to the Steering Committee a
plan for keeping the leafy spurge effort moving and to insure continuity and coordination
among the federal, state and province agencies concerned with the problem. The working
committee explored the possibility of GPAC establishing a GPC Committee. The Steer-
ing Committee accepted the suggestion. An organizational meeting was held in Fargo,
North Dakota in January of 1981, The GPC-14 Committee was approved by GPAC at
their Annual Meeting in Garden City, Kansas on June 9-11, 1981, and the first annual
meeting of GPC-14 was held in Fargo on June 29-30, 1981. GPC-14 has been very ac-
tive. Following the Annual Meeting in Fargo in 1981, annual meetings have been held in
June at Bozeman Montana in 1982; Sundance Wyoming in 1983; and at Dickinson, North
Dakota in 1984. Proceedings of each of the Symposia held at the last three meetings have
been published, and in 1981 and 1982 summary annual reports were published covering research and extension efforts of the member agencies. The 1982 and 1983 symposia addressed survey of the problem and advances in chemical and cultural control. The 1984 symposium and the Proceedings presented herein cover various aspects of biological control of leafy spurge and of taxonomy as it relates to all types of control efforts.

For more information on any of the topics, please contact the author of the paper of interest.

I wish to thank all of the Committee members for their endless effort this past year. On behalf of the Committee members I wish to thank all of those non-members who contributed to the 1984 meeting by presenting a paper or by participating in the very productive discussion sessions particularly the farmers, ranchers, land managers, county weed board members, and all others who are applying the control technology in what seems to be an endless effort. It was you who made the 1984 Symposium a success.

**GPC-14 Meeting and Program**

**Dickinson, ND**

**June 26**

6:00 p.m. Tour of leafy spurge plots.

**June 27**

6:30 a.m. Group Breakfast
8:00 Welcome and Introductory Remarks - Russell Lorenz
8:15 Leafy Spurge Taxonomy - Alena Stahevitch, Moderator
8:20 Alena Stahevitch, Ag. Can. -
8:40 Jurgen R. Schaeffer, MSU - Cytotaxonomic studies of the leafy spurge.
9:00 David Davis, NDSU - The chemotaxonomy program on leafy spurge in Fargo, ND and the confusion regarding numbering of plant collections.
9:20 Paul Mahlberg, Indiana - Chromatographic analyses of taxonomic affinities between leafy spurge.
9:45 Coffee Break
10:05 Don Galitz, NDSU - Physiological variants among leafy spurge.
10:25 John Evans, Utah State - Biochemical evaluation of the complex.
10:45 Taxonomy Discussion Groups
12:00-1:00 Noon lunch
1:00 Bob Nowierski, MSU - The status of biological control of leafy spurge in Montana.
1:20 Norm Rees, USDA, MSU - Matching proper bioagents to the proper leafy spurge.
1:40 R. J. Lavigne, Wyoming
2:00 Robert Carlson, NDSU - Preliminary studies in preparation for release of biocontrol agents.
Minutes of the GPC-14 Meeting, 28 June 1984
Ramada Inn, Dickinson, ND

The meeting was held in conjunction with a group breakfast and was brought to order by President Russell Lorenz at 7:05 a.m. Other members of the executive committee present were Dr. Peter Fay, Vice President, Dr. Rod Lym, Secretary, and Dr. Don Anderson, Administrative Advisor. The reading of the minutes from the 1983 meeting in Sundance, WY was dispensed with and there was no old business to discuss.

The first item of new business was a proposal to create a multiple state leafy spurge extension monograph or bulletin. The entire group felt this publication would be a useful and needed source of information. Dr. Calvin Messersmith felt the printing should be done by the state extension service in Montana, North Dakota, and Wyoming. Dr. Fay proposed the publication should be in the form of an extension bulletin and should be completed by June, 1985. His proposal was passed and charged to the executive committee for completion.

The second item concerned how often the GPC-14 should meet and where. Dr. Messersmith suggested a fall meeting at least every other year because meetings in June interfere with university leafy spurge research and extension programs. Dr. Lym suggested the meeting should be held every other year, since little new research data is generated from year to year. Mr. George Hittle suggested the meeting be held in Canada, whenever the group meets again. Dr. Anderson stated the purpose of GPC was to keep scientists meeting and communicating and suggested the group meet annually but stay in Montana, Wyoming or North Dakota. He felt a Canadian meeting site may prevent many people from attending. Dr. Fay proposed the GPC-14 meeting to be held in Bozeman in June.
1985 to be hosted by Montana State University. The motion passed and the executive committee was urged to consider meeting in Canada in 1986.

The third item concerned the Leafy Spurge Newsletter. The newsletter has been published by Montana State University since 1980 and the present editor, Celestine Lacey, will graduate in December 1984, at which time MSU would like someone else to take over as editor. Most people present felt the newsletter was a useful method of disseminating new leafy spurge research data, meeting information, field days, etc. and want it continued. However, after a lively debate, no person or state agency volunteered to take over the editorship of the newsletter.

The last item was the election of a new secretary. Dr. Dave Davis of the USDA in Fargo was nominated and elected. Dr. Fay became the President and Dr. Lym the Vice President for 1984-85.

The meeting adjourned at 8:05 a.m.

Respectfully submitted,

Rodney G. Lym
GPC-14 Secretary