CANADIAN BEEKEEPERS' COUNCIL

MINUTES

Fifteenth Annual Meeting

FEBRUARY 17 - 19

1955

Winnipeg, Manitoba

Index

☆

The President welcomed members and visitors to the Meeting and gave a brief resume of the year's operations.

The report of the Advertising Committee was presented in three parts. H.C. Allen reported on Sports College, Mrs. Harriett M. Grace on the American Honey Institute and Mr. H.C. Allen on the Royal Winter Fair and the Canadian National Exhibition Booths.

Mr. Allen reported that Sports College promoted honey in the Sports College weekly broadcasts over a 43 station hookup of the CBC; through news releases to 200 weekly newspapers; through the Research Guide, with a mailing list of 43,000; through Sports College bulletins, and through lectures and clinics held. (Appendix 111)

Thursday, February 17th,
1:30 P.M.
- - - - - - - -

Present: Members: All Council members.

Visitors: Coulthard, leMaistre, Jamieson, Robertson, Corner, Bland, V.L. Barrett, Sales Dept., Continental Can Co. of Winnipeg, Manitoba, Strad, Arnett, Townsend, Paul Uren, Armstrong, John M. Hay, District Inspector, Fruit Branch, Winnipeg, Les M. Ford, Senior Inspector, Fruit Branch, Winnipeg.

Mrs. Harriett M. Grace, director of the American Honey Institute, reported that the work of the Institute was expanding in Canada, and that regular news releases and pictures were issued in both English and French. Mrs. Grace also advised that plans were being finalized to place an assistant in charge of the Canadian work so that better coverage could be obtained during 1955.

W.G. leMaistre reported on his study "The Changing Honey Market" in Canada. He found that production and consumption varied widely from year to year and that the average production was approximately 34,000,000 pounds per year. The average per colony production was 76 pounds, plus or minus 12. A study of the Jam Price Index and the National Expenditure for Food showed a steady increase in both instances, while honey price increase did not show this continued rise. With a static production and a rising population, it was Mr. leMaistre's opinion, that if honey prices maintained their same relative position with National Expenditures for Food and the Jam Price Index, that producers should net substantially more for their product than they are now obtaining. (Appendix 1V)

H.C. Allen reported that Council's Booth at the Royal Winter Fair and the Canadian National Exhibition was attracting increasing attention each year. (Appendix V)

Moved by Allen, seconded by Heighway:

5. THAT the report of the Advertising Committee be received.

CARRIED.

Moved by Deschenes, seconded by Kowalski:

6. THAT Council express its thanks for apricot juice supplied by Mr. P. Walrod, Tree Fruits Processors Limited, Kelowna, B.C., and for the apples supplied by the Advertising Manager of Tree Fruits Limited, Kelowna, B.C.

CARRIED.

Moved by Kowalski, seconded by Heighway:

7. THAT Mr. L.A. Inkster be appointed Council auditor for the Canadian National and Royal Winter Fair Honey Booths.

CARRIED.

Moved by Hand, seconded by Deschenes:

8. THAT the sincere thanks of Council be extended to Mr. & Mrs. H.C. Allen for their interest and enthusiasm in making the Council Booths of the Canadian National Exhibition and Royal Winter Fair such a success.

CARRIED.

Moved by Deschenes, seconded by Kowalski:

9. THAT Council's thanks be extended to Mr. F. Whittall, President, and Mr. E.E.Fry, Sales Manager, General Line, Continental Can Co. for the favours supplied Council members and visitors.

CARRIED.

Mr. Ed. Bland gave the results of the Consumers Survey on honey conducted by the Canadian Association Consumers in Saskatchewan. Highlights of the survey showed that a very high proportion of the families used honey; that price did not seem to be a governing factor in its purchase; that in practically every instance, honey was used as a spread and that a fine, smooth granulation was preferred. (Appendix Vl)

The Honey Competitions and Exhibitions Committee Report was presented by D.R. Robertson. (Appendix Vll)

Moved by Paradis, seconded by Heighway:

10. THAT the report of the Honey Competitions and Exhibitions Committee be received.

CARRIED.

F.R. Armstrong presented the report of the Export - Import Committee. (Appendix Vlll)

Moved by Garland, seconded by Lye:

11. THAT the report of the Export - Import Committee be received.

CARRIED.

Adjournment was moved by Heighway.

Friday, February 18th,
9:00 A.M.
- - - - - - -

Present: Members: All Council members were present.

Visitors: Townsend, Jamieson, Corner, Bland, Strad, Coulthard, leMaistre, Robertson, Armstrong, Jas. Jack, Mono Containers Ltd., Winnipeg.

The Research Committee Report was presented by Townsend. (Appendix lX)

Moved by Allen, seconded by Heighway:

12. THAT the report of the Research Committee be received.

CARRIED.

Moved by Allen, seconded by Paradis:

13. WHEREAS the Report on Research as presented by the Provincial and Dominion Apiarists is most comprehensive, covering a wide range of subjects of vital interest to the beekeepers, and

WHEREAS this work shows a high degree of co-operation between the Provincial and Dominion Apiarists and the U.S.D.A., and

WHEREAS this work is already of considerable direct financial benefit to the beekeeping industry,

THEREFORE BE IT RESOLVED THAT Council commend most highly the work of the Provincial Apiarists and most particularly the Apiarist in Ontario and the Dominion Apiarist; and that expression of Council's high regard of the value of their work be forwarded to the Provincial and Dominion Departments of Agriculture involved.

CARRIED.

Moved by Lye, seconded by Ciphery:

14. THAT research investigation be continued on:

(a) Effect of 2-4-D and other Herbicides on nectar secretion.
(b) All phases of bee disease.
(c) Liquid Honey.
(d) Honey straining and filtering.
(e) A hand refractometer.
(f) Pasteurizing equipment.
(g) Honey processing and handling.
(h) Honey house and apiary equipment design.
(i) Bee breeding.
(j) Nectar secretion.
(k) Colony management problems, eg. wintering bees, supercedure.

CARRIED.

Moved by Heighway, seconded by Anderson:

15. THAT Council continue its support to the British Bee Research Association.

CARRIED.

Moved by Hand, seconded by Kowalski:

16. THAT the Canadian Beekeepers' Council take membership in Apimondia at 10£ per year.

CARRIED.

Moved by Garland, seconded by Anderson:

17. THAT Council renew its request for a survey of consumer preference in honey by the Dominion Department of Agriculture.

CARRIED.

Moved by Deschenes, seconded by Garland:

18. THAT Council appoint a committee to organize a uniform provincial survey of consumer preference in honey through such provincial agencies as may be available.

CARRIED.

Reporting for the Bylaws Committee, Paradis advised that there had been no requests for changes in the bylaws, and that the Committee did not wish to make any recommendations at this time. After a brief discussion, several possible changes were suggested.

Moved by Paradis, seconded by Deschenes:

19. THAT a committee be appointed to review the bylaws of Council and report at the next Annual Meeting.

CARRIED

Moved by Heighway, seconded by Kitson:

20. THAT at least one issue of Council News be printed during 1955.

Moved by Garland, seconded by Lye:

21. THAT this motion be amended to read, two issues of Council News, one before November 1st.

CARRIED.

Friday, February 18th,
1:00 P.M.
- - - - - - -

Present: Members: All Council members present.

Visitors: Jamieson, Arnett, Bland, Strad, Coulthard, Ford, John M. Hay, A. DeRockney, Earl Ramey, leMaistre, Armstrong, Robertson, Corner, Townsend, John Stewart.

Heighway reported for the Marketing Legislation Committee. (Appendix X)

Moved by Heighway, seconded by Lye:

22. THAT the report of the Marketing Legislation Committee be received.

CARRIED.

Garland reporting for the Grading Committee, presented a number of resolutions.

Moved by Garland, seconded by Lye:

23. THAT the Grading Committee Report be received.

CARRIED.

Moved by Deschenes, seconded by Ciphery:

24. THAT no action be taken in respect to the prohibition of the sale of filtered honey.

CARRIED.
Opposed, Anderson, Allen.

Moved by Garland, seconded by Kowalski:

25. THAT neither type nor size of crystal, nor firmness of set in granulated honey shall constitute a grade requirement, but that the Honey Industry recognize the necessity of seeding all honey to achieve controlled granulation.

CARRIED.

Moved by Garland, seconded by Paradis:

26. THAT a differential be established in respect to foreign material between Grades 1 and 2, and that the standard be wire cloth of specified apertures which approximate the present standard of Grade 1 and slightly raised for Grade 2.

CARRIED.

Moved by Hand, seconded by Lye:

27. THAT any honey which includes a blend of any sour or seriously damaged honey shall be graded as substandard.

CARRIED.

Moved by Allen, seconded by Heighway:

28. THAT the grades of honey shall be Grade 1, Grade 2, and substandard.

CARRIED

Moved by Deschenes, seconded by Allen:

29. WHEREAS the term No. 1, No. 2 and substandard are detrimental to the sale of honey, and

WHEREAS the Canning Industry has long ceased using these terms for the same reason,

THEREFORE BE IT RESOLVED THAT motion # 28 be amended and that the Canadian Beekeepers' Council recommend that the term No. 1 should be replaced by Canada Fancy, the term No. 2 be replaced by Canada Standard, and the term No. 3 be replaced by Canada Substandard.

The Amendment was lost.

Moved by Allen. seconded by Horsburgh:

30. RESOLVED that all honey showing foreign material in excess of Grade 2 requirement be graded as substandard.

CARRIED.

Moved by Hand, seconded by Kowalski:

31. RESOLVED that the moisture requirement for Grade 1 liquid honey, so declared, be increased from 17.8% to 19% and the moisture requirement for Grade 2 liquid honey be increased to 20%. (Liquid honey be defined to ensure pasteurization).

CARRIED.

Moved by Heighway, seconded by Paradis:

32. THAT the moisture requirement for No. 1 pasteurized honey be reduced from 20% to 19%.

A tie vote resulted and the Chairman ruled that the motion was lost.

Moved by Garland, seconded by Allen:

33. RESOLVED that the moisture requirement for unpasteurized honey which has not been treated and declared as liquid, remain unchanged at:

Grade 1,	17.8%
Grade 2,	17.8% - 18.6%
Substandard	18.6% - 20%

Moved by Hand, seconded by Allen:

34. THAT the regulations provide a restriction on the number of specks of foreign material permitted over a specified area for Grade 2, and that Grade 1 shall have a clean appearance.

CARRIED.

Moved by Garland, seconded by Lye:

35. THAT package numbers as presently defined be continued, and regulations enforced except that fluid measure sizes be permitted for glass pack on sufferance.

CARRIED.

Moved by Anderson, seconded by Lye:

36. THAT minimum size of letters for label marks be defined in fractions of inches for various types and sizes of containers and shown in actual minimum type size in the regulations.

CARRIED.

Moved by Garland, seconded by Kitson:

37. THAT no reference be made in grading regulations in respect to creamed honey.

CARRIED.

Moved by Garland, seconded by Paradis:

38. THAT new containers only shall be used for all consumer-packed graded honey, other than honey packed in glass containers, and the use of used containers for such honey be permitted only if their condition be clean and sound.

CARRIED.

Moved by Garland, seconded by Lye:

39. THAT the regulations in respect to honey packed in Canada, containing a blend of Canadian and foreign honeys, resort to the status prior to 1949.

CARRIED.

Moved by Garland, seconded by Lye:

40. THAT honey when imported in consumer containers, be not subject to Canadian grading regulations.

CARRIED.

Moved by Garland, seconded by Hand:

41. THAT the Executive be instructed to forward these recommendations of Council in respect to grading to the appropriate authorities and to take all necessary action to secure their implementation.

CARRIED.

Moved by Heighway, seconded by Paradis:

42. THAT Council extend a vote of thanks to the Grading Committee for the extensive and detailed work they have undertaken in preparing their recommendations.

CARRIED.

Moved by Pugh, seconded by Allen:

43. THAT Council make every effort to secure the most advantageous freight classifications for honey.

CARRIED.

Moved by Deschenes, seconded by Paradis:

44. THAT the Canadian Beekeepers' Council support and encourage the Provincial Apiarists' Ass'n. Meetings; and that Council make representation to the provincial authorities in the Maritime Provinces with a view to having Provincial Apiarists from the Maritime Provinces attend all future meetings of the Provincial Apiarists' Association and act in an advisory capacity to the Canadian Beekeepers' Council Annual Meetings.

CARRIED UNANIMOUSLY.

Moved by Ciphery, seconded by Kitson:

45. THAT the Secretary write to Sir Edmund Hillary expressing our best wishes for his success, and our appreciation of the sample of his honey brought to our meeting from New Zealand by Peter Kowalski.

CARRIED.

Adjournment was moved by Heighway.

Saturday, February 19th,
9:00 A.M.

- - - - - - -

Present: Members: All Council members present.

Visitors: Bland, Jamieson, Armstrong, leMaistre, Robertson, Coulthard.

A report on the Pollination Committee was presented by S.L. Hand. (Appendix XI)

Moved by Hand, seconded by Kitson:

46. THAT the report of the Pollination Committee be received.

CARRIED.

Moved by Ciphery, seconded by Heighway:

47. THAT Council reconsider motion # 32 dealing with the moisture tolerance allowed No. 1 pasteurized honey.

CARRIED.

Moved by Heighway, seconded by Paradis:

48. RESOLVED that the moisture requirement for No. 1 pasteurized honey be reduced from 20% to 19%.

CARRIED.
Opposed, Garland, Allen.

Moved by Deschenes, seconded by Paradis:

49. WHEREAS Harry Jones has always shown a great deal of interest in the work of the Exhibition Committee and has gone to considerable trouble each year in preparing its report, even though it has not always been possible for him to present it,

THEREFORE BE IT RESOLVED THAT Council extend sincere thanks to Mr. Jones for his continued interest and support.

CARRIED.

Moved by Garland, seconded by Kowalski:

50. THAT further consideration be given to the points allowed for the judging of honey.

CARRIED.

Moved by Deschenes, seconded by Ciphery:

51. WHEREAS it is essential to ensure a continuous and effective honey promotion campaign to keep honey prominently before the public at all times, and

WHEREAS Council feels this can be done most economically and most effectively by using such agencies as the American Honey Institute, Sports College, and by advertising at National Fairs, and

WHEREAS Council believes additional demand can be built up in periods of high production by direct advertising for which funds should be built up in advance.

THEREFORE BE IT RESOLVED THAT Council maintain and expand its continuous publicity as conducted by the American Honey Institute, Sports College, and displays at the National Fairs and conserve its further resources for periodic additional advertising, as may be required in seasons of high production.

CARRIED UNANIMOUSLY.

Moved by Paradis, seconded by Hand:

52. THAT the budget as amended be approved.

CARRIED.

1955 Budget.

Advertising:

American Honey Institute,	$4,500.00	
Sports College,	1,700.00	
National Exhibitions,	1,500.00	
Council News,	700.00	$ 8,400.00
British Bee Research Association,	$ 150.00	
Apimondia,	30.00	
Maritime Beekeepers' Association,	250.00	
Travel Expense,	800.00	
Annual Meeting,	2,800.00	
Office and Operating Expense,	2,400.00	
Sundry,	500.00	6,930.00
Addition to Reserve,		5,000.00
		$20,330.00

Moved by Deschenes, seconded by Kowalski:

53. THAT a majority vote of Council as a whole be required on all expenditures made from the Reserve Account.

CARRIED.

The President called for the election of the new Executive for 1955 and turned over the meeting to S. Coulthard to act as Chairman during the election of officers.

Coulthard requested nominations for the position of President.

Allen was nominated by Kowalski.

Moved by Turnbull, seconded by Paradis:

54. THAT nominations close.

CARRIED.

Hand was nominated by S. Lye, for Vice-President:

Kowalski was nominated by Hand.

Hand withdrew his name.

Moved by Heighway, seconded by Deschenes:

55. THAT nominations close.

CARRIED.

Pugh was nominated for Secretary-Treasurer by Deschenes.

Moved by Paradis, seconded by Hand:

56. THAT nominations close.

CARRIED.

Mr. Coulthard declared that the Executive for the forthcoming year were:

President,	H.C. Allen,
Vice-President,	P. Kowalski,
Secretary-Treasurer,	R.M. Pugh,

The meeting was adjourned for lunch.

Saturday, February 19th,
1:00 P.M.
- - - - - - -

Present: Members: All Council members were present.

Visitors: Armstrong, Jamieson, Hay, Townsend, Robertson, Bland, leMaistre, Corner, Jack, Barrett, Mrs. Grace.

Moved by Garland, seconded by Deschenes:

57. THAT the scale of points for judging honey at fairs be amended as follows:

LIQUID HONEY

Appearance, suitability and uniformity of containers,	5
X Uniform level of fill,	5
Freedom from crystals,	10
Freedom from impurities, including froth,	20
Uniformity of honey,	5
Color,	10
Brightness,	15
Flavor and aroma,	15
Density - 16% or less, full points,	15
	100

GRANULATED HONEY

Appearance, suitability and uniformity of containers,	5
X Uniform and accurate volume of honey,	5
Firmness of set,	20
Absence of impurities, including froth,	15
Uniformity of honey, including texture,	15
Color,	10
Flavor and aroma,	10
Texture of granulation (smooth and fine),	20
	100

X This refers to even appearance of fill in pack of container.

COMB HONEY

Suitability and uniformity of sections,	5
Z Uniformity and completeness of fill appropriate to section used,	25
Completeness and appearance of capping,	25
Uniformity of color of honey,	10
Cleanliness of section - wood frame,	20
Quality and flavor of honey,	15
	100

Z Refers to any standard beeway or no beeway section, having in mind that "completeness of fill" in no beeway sections would mean comb practically flush with wood, whereas with a beeway section the comb surface would be flush with beeways, and not with the other portions of wood.

CARRIED.

Moved by Hand, seconded by Garland:

58. RESOLVED that the Canadian Beekeepers' Council donate 3 trophies for honey competition at the Royal Winter Fair, the Canadian National Exhibition, and the Pacific National Exhibition, and these trophies be awarded to exhibitors showing the best granulated honey. The trophies to remain the property of the Canadian Beekeepers' Council.

CARRIED.

Moved by Horsburgh, seconded by Hand:

59. THAT the Executive be empowered to choose suitable trophies.

CARRIED.

Moved by Allen, seconded by Deschenes:

60. WHEREAS J.N. Dyment has long been a representative to the Canadian Beekeepers' Council from Ontario, and has during that time served faithfully and effectively on every important Council Committee, and

WHEREAS he has served as President for two terms of Council with marked success,

THEREFORE BE IT RESOLVED THAT he be made an honorary member of the Canadian Beekeepers' Council.

CARRIED UNANIMOUSLY.

Moved by Kowalski, seconded by Deschenes:

61. THAT the thanks of Council be extended to Mr. & Mrs. Jim Jack for the entertainment so graciously extended to Council by them.

CARRIED.

Moved by Hand, seconded by Horsburgh:

62. THAT the Airport Hotel be thanked for the arrangements it has made for the Convention.

CARRIED.

Moved by Allen, seconded by Heighway:

63. THAT Council express its appreciation to Mr. Tom Leach, C.B.C., Vancouver, and Mr. Norman Garriock, C.B.C., Jarvis Street, Toronto, for their interest in broadcasting honey news over the radio.

CARRIED.

Moved by Paradis, seconded by Hand:

64. THAT the report on European Foulbrood be left for issue in "Council News."

CARRIED.

Moved by Hand, seconded by Ciphery:

65. THAT the place of the next Annual Meeting be left to the Executive.

CARRIED.

Moved by Deschenes, seconded by Anderson:

66. THAT the next General Meeting of Council be held in November 1956, unless in the judgment of the Executive it is required sooner, and if required before November 1956, that the time and place be set by the Executive.

CARRIED.

Moved by Garland, seconded by Deschenes:

67. WHEREAS the Canadian Beekeepers' Council has been advised of the desire of the Ontario Beekeepers' Association to reduce its levy contribution to the Canadian Beekeepers' Council, and

WHEREAS Council does not consider such action either equitable or advisable.

THEREFORE BE IT RESOLVED THAT the Ontario Beekeepers' Association be requested to reconsider the problem and maintain the present basis of payment to Council, and further, that the Council Executive take such action as is required to maintain the present basis of levy contribution.

CARRIED.

Moved by Garland, seconded by Deschenes:

68. THAT the executive give consideration to the expenses incurred by the Ontario Beekeepers' Association, in respect to the cost of collecting the levy in Ontario and the additional expense incurred by Ontario in promoting honey competitions at the Canadian National Exhibition and the Royal Winter Fair.

CARRIED.

Moved by Kitson, seconded by Lye:

69. THAT Council extend its sincere thanks to Mrs. Grace for attending the Council Meeting and so ably presenting the work of the American Honey Institute.

CARRIED.

Moved by Heighway, seconded by Hand:

70. THAT R.M. Pugh be appointed to represent the Canadian Beekeepers' Council on the Directorate of the American Honey Institute.

CARRIED.

Moved by Ciphery, seconded by Deschenes:

71. WHEREAS Mrs. Harriett M. Grace has always exhibited keen interest in the promotion of honey, and

WHEREAS her work as director of the American Honey Institute has been eminently successful in publicizing honey in Canada to the great benefit of all Canadian beekeepers.

THEREFORE BE IT RESOLVED THAT, Mrs. Grace be made an honorary member of the Canadian Beekeepers' Council.

CARRIED UNANIMOUSLY.

Moved by Deschenes, seconded by Hand:

72. THAT the Committees as listed be approved.
(See Inside Back Cover)

CARRIED.

Adjournment was moved by Heighway.

CARRIED.

Appendix I

CANADIAN BEEKEEPERS' COUNCIL

Tisdale, Saskatchewan

Statement of Expenditures

for the fiscal year ended January 31, 1954

Expenditures:			
Advertising			$3,281.29
Publicity:			
American Honey Institute		$4,020.00	
Sports College		1,000.00	
Sundry		12.70	5,032.70
Honey Exhibits:			
Canadian National Exhibition and Royal Winter Fair			411.10
Trophies:			
Pacific National Exhibition		50.28	
Canadian National Exhibition		30.75	
Royal Winter Fair		30.66	111.69
British Bee Research Association			150.00
Maritime Beekeepers' Association			267.84
Travelling Expenses			564.46
Annual Meeting—Member's Exp.	$2,247.08		
—Sundry	130.85		2,377.93
Administration:			
Express		14.60	
Audit		30.00	
Bond		21.47	
Registration Fee		2.07	
Exchange		28.12	
Stationery		8.79	
Printing		375.45	
Postage		12.43	
Telephone and Telegrams		54.82	
Sundry		21.45	
Salaries—Sec.-Treasurer	1,000.00		
—Others	750.00	1,750.00	2,319.20
Contingency Reserve			4,022.66
Cash on Hand		70.25	
Bank Balance Jan. 31, 1954	6,663.17		
Less O/S Cheques	2,057.79	4,605.38	4,675.63
			$23,214.50

Statement of Receipts

for the period January 31, 1953, to January 31, 1954

Cash in Bank January 31, 1953			$ 573.77
Container Levy:			
Continental Can Co.		$ 8,563.92	
Atlas Paper Box Co.		1,334.18	
Ontario Beekeepers' Association		11,783.00	
American Can Co.		48.93	
Canadian Sealright Co. Ltd.		25.18	
			21,755.21
Miscellaneous Receipts:			
Amisk Bee Association		13.00	
Refund on Sales Tax		465.22	
Sale of Honey Recipes		75.00	
Interest on Shares		27.05	
			580.27
Reserve Fund			305.25
			$23,214.50

Audited by: Audit Department, Sask. Federated Co-operatives

Appendix II

CANADIAN BEEKEEPERS' COUNCIL

Tisdale, Saskatchewan

Statement of Expenditures

for the period January 31, 1954 to January 31, 1955

Expenditures:		
Advertising		$ 270.51
Publicity:		
American Honey Institute	$3,605.11	
Sports College	1,500.00	
The Story of Honey	2,031.05	7,136.16
Honey Exhibits:		
Canadian National Exhibition and The Royal Winter Fair		601.79
Trophies:		
Pacific National Exhibition	$ 6.70	
Canadian National Exhibition	5.10	
Royal Winter Fair	27.51	39.31
Council Minutes		329.82
British Bee Research Association		150.00
Maritime Beekeepers' Association		236.88
Travelling Expenses		1,012.00
Administration:		
Audit	$ 30.00	
Postage	31.35	
Telephone and Telegraph	80.05	
Express	2.70	
Exchange	37.69	
Printing	9.07	
Sundry	42.84	
Bond	21.72	
Salaries: Sec.-Treas. $1,000.00		
Others 800.00	1,800.00	2,055.42
Contingency Reserve		5,000.00
Bank Balance as at Jan. 31, 1954		17,684.55
		$34,516.44

Statement of Receipts

for the period January 31, 1954 to January 31, 1955

Cash on Hand	$ 70.25	
Cash on Deposit, Bank of Nova Scotia	4,605.38	
Reserve Fund, Tisdale Credit Union	4,022.66	8,698.29
Container Levy		
Atlas Paper Box Company	$ 1,186.30	
Continental Can Company	16,879.06	
Montambeault	82.84	
Ontario Beekeepers' Association	7,482.62	
Sealright Containers, less overpayment	2.93	25,627.89
Interest		190.26
		$34,516.44

Appendix III

Operations Report — 1954

(February to December 31st)

For: Canadian Beekeepers' Council

Submitted by: Sports College

SUBJECT: HONEY TESTING AND PROMOTION

—— PREFACE ——

The following is a report on the activity of Sports College (per the arrangement with the Canadian Beekeepers' Council) in sustaining a continuous testing program designed to: evaluate the uses of honey in the athletic and fitness field; develop special purposes and uses for it and—publicize these findings throughout the Sports College media and to the public generally

SPORTS COLLEGE NATIONAL RADIO SESSION

(C.B.C. Network—43 Stations)

MENTIONS: Eleven—These were all tied in with a direct application and recommendation of honey in the regular athletic and fitness diet. The feature was the description of Dr. Roger Bannister's pre-race meal (before he ran and won the Miracle Mile).

SPORTS CLINIC

(Sports College Column—appearing in over 200 weekly newspapers across Canada)

MENTIONS: Eleven—Feature was the Bannister tie-in as on the radio broadcast.

RESEARCH GUIDE

(Official monthly newspaper of Sports College—distributed to average of 43,000 per mailing)

MENTIONS: Nineteen (Including mentions in body of copy as well as definite single stories.)

Features were: Bannister; use of honey by O'Brien (world's shot put champion) and honey as a recovery aid.

SPORTS COLLEGE BULLETINS

(74,000 distributed)

MENTIONS: In nine bulletins. Suggested as part of regular diet; for pre-activity use; replenishing after activity; during activity, etc.

LECTURES AND CLINICS

MENTIONS: Fourteen—Honey as ideal energy food was recommended during nine lectures and five clinics—to coaches and trainers mainly. Average attendance was 104! Not counted are times honey was recommended during personal visits and phone calls to office.

CORRESPONDENCE

MENTIONS: 209—Honey was mentioned in this number of letters answering requests for training schedules for schools, clubs, teams, etc.

SPECIAL APPEARANCES

MENTIONS: Twelve—Either Lloyd Percival or a member of the Sports College staff appeared and recommended honey on seven radio and five television programs. In our promotion of honey we have stressed its value as: pre-game energy fuel; replenisher after activity; sustainer during activity; aid in gaining weight; help to finish reducing meals feeling satisfied; general daily energy food, especially for breakfast; general sweetener; as an ideal "spread," etc.

SPECIALS

During 1954 a special attempt was made to popularize honey through "name" mention—the Bannister pre-race emphasis is an example.

Besides telling the Bannister story in Sports College media, Director Lloyd Percival mentioned this several times during his C.B.C. international radio reports of the British Empire Games!

Honey was given a strong recommendation in the "How To Be Physically Fit" booklet written for and distributed by Orange Crush Limited—thousands went to schools all over Canada.

A "list" of famous athletes using honey (and trainers and coaches advocating it) is now under preparation.

We have also supplied your advertising agency with data excellent for good selling copy.

FUTURE

Besides continuing general work we plan to stress the use of honey in candy form; in cooking and as a spread—the idea being—"Honey sandwiches for athletic snacks" is sound and very "promotable."

WE ALSO PLAN TO PUBLISH A COMPLETE, DETAILED REPORT ON ALL OUR WORK WITH HONEY TO THE PRESENT TIME.

Honey will also receive prominent coverage in the following book, "Fitness Is Easy" which will be distributed extensively in 1955.

NOTE: Sports College will, in 1955, be operating a Canadian Amateur Sports Development Service and this will greatly increase our influence, authority and coverage.

IN 1954 WE TURNED DOWN SEVERAL VERY LUCRATIVE CONTRACTS OFFERED TO US BY MANUFACTURERS OF OTHER "ENERGY FUEL" PRODUCTS. IT SEEMS APPARENT THAT OUR INFLUENCE IS BEING NOTICED!

A copy of a report of our work presented at the recent American Beekeeping Federation is attached.

LLOYD PERCIVAL, Director.

Appendix IV

The Changing Honey Market

Some very considerable changes in beekeeping have been taking place over the last thirty years. These changes are being forced on the industry by changing conditions in Canadian living. The survival of beekeeping depends to quite an extent on how well the industry can adapt itself to these changes.

Thirty years ago virtually all the honey produced in Canada was packed in retail containers and sold by the beekeeper. Today more than half the honey entering regular trade is packed in retail containers and sold by honey packers.

The modern trend is for greater specialization. The producer becomes an expert and efficient producer and the marketing is taken care of by experienced and resourceful business men. In some instances—co-operatives—the producer has retained control over the marketing of his product.

Thirty years ago there were literally thousands of small stores throughout the country which any beekeeper could approach to handle his honey. Today many of these are amalgamated in one way or another. They generally buy established brands of foods in large quantities. They have a tremendous bargaining power against which most individual producers would have difficulty in prevailing.

Honey in Canada is in a new era. The 8-pound tin is rare, the 4-pound tin is becoming less common, small packs are more numerous.

Years ago honey was almost a staple, today it is of the order of a delicacy. Most urban dwellers prefer to buy in small, attractive containers that do not get messy and clutter up a limited storage space. Rural people would still buy in large containers if they could get them. The industrial and institutional use of honey might well be greatly expanded.

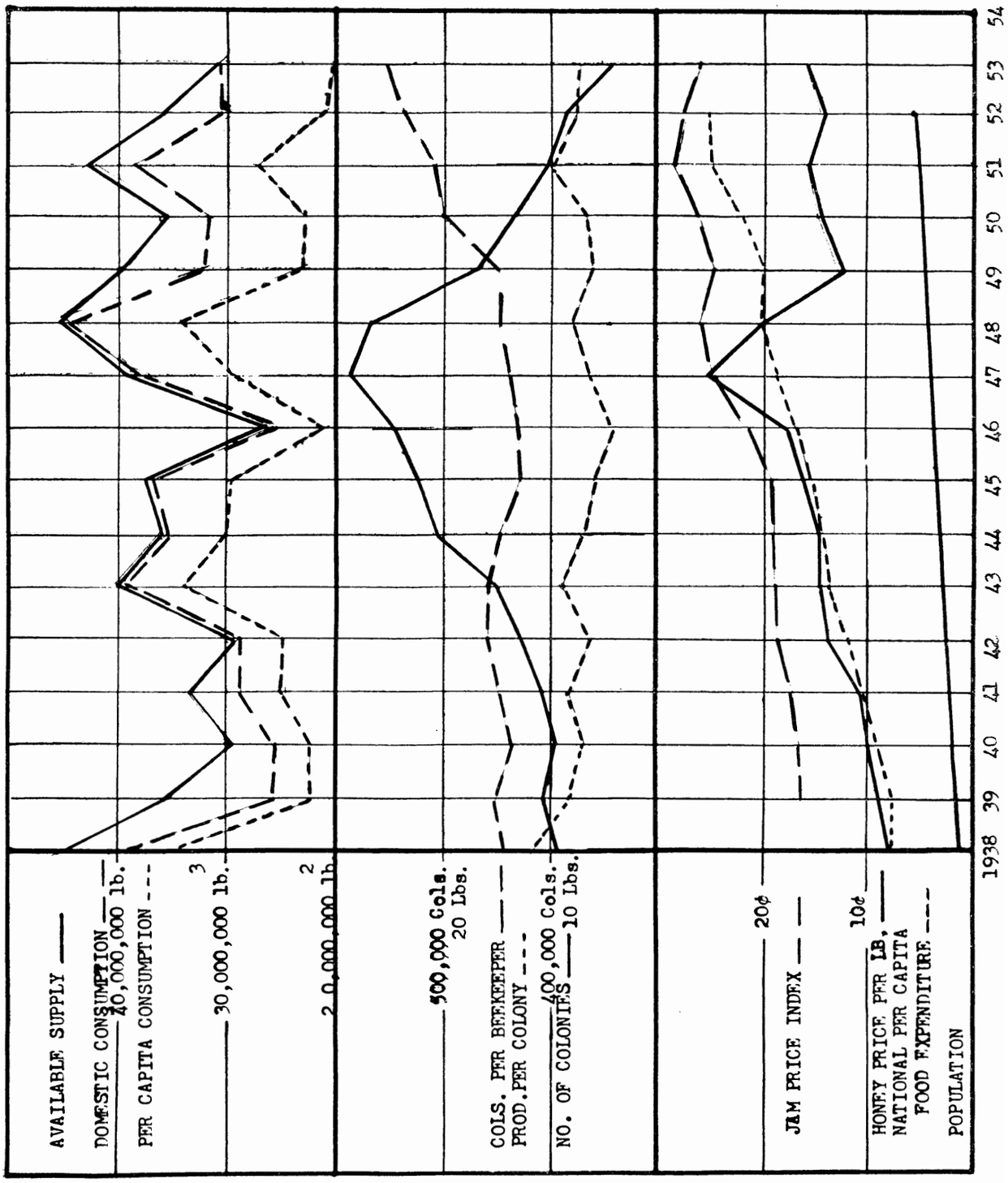
In this change-over when applied to present day circumstances there are certain obvious advantages such as quantity buying of retail containers, efficient packaging equipment, standardization of the food, carlot shipments and various trade arrangements incident to quantity handling, financing and so on. There are also some less obvious advantages that nevertheless are very real.

The average producer knows about the weather and crop conditions where he lives, perhaps even in his province. What he does not know is the national or international situation regarding honey. Is the crop large in Western Canada? What is it in Eastern Canada? Is it large in the U.S.? Has there been a large carry-over from the previous year? What is the per capita consumption of honey? What is Canada's population? Is it increasing or decreasing? How rapidly is it increasing? Are the number of colonies increasing or decreasing, if so at what rate? And finally, what effect will the answers to any of these have on the market for honey?

Statistics Are Useful

Those entrusted with the responsibility of marketing honey can learn the answers to these questions. There are quite reliable figures to be had on most of the factors which will affect honey prices. But these figures to be useful must be examined and analyzed carefully.

Figures show that honey consumption has frequently increased or decreased as much as 50% from one year to the next. It is thus apparent that there is no such thing as normal consumption. The demand for honey can be increased or decreased. Full application of this knowledge could be very valuable to the industry. It makes it possible through co-ordinated


AVAILABLE SUPPLY
DOMESTIC CONSUMPTION
40,000,000 lb.
PER CAPITA CONSUMPTION
3
30,000,000 lb.
2
20,000,000 lb.
500,000 Cols.
20 Lbs.
COLS. PER BEEKEEPER
PROD.PER COLONY
400,000 Cols.
NO. OF COLONIES
10 Lbs.
20¢
JAM PRICE INDEX
10¢
HONEY PRICE PER LB.
NATIONAL PER CAPITA
FOOD EXPENDITURE
POPULATION
1938 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54

effort to market either an extra large or an extra small crop to the best advantage. The Council has already demonstrated the effectiveness of such co-ordinated effort. The advertizing program on the 1951 crop was an outstanding example. In 1951 one of Canada's largest crops was sold and realized higher prices for the beekeeper than were realized in the two previous years and in the following year when crops were much smaller.

Figures also show that the 1954 Canadian crop is only large enough to provide 1.3 pounds per capita for the 1954-1955 crop year. Honey will have to be spread very thinly if it is to last until the 1955 crop is harvested. It should be realized that it is often difficult and expensive for a product, once it has disappeared from the market, to gain public attention when it reappears.

Changes to Come

There is still a great deal of headway to be made by the industry. It is not generally known that the per capita consumption of maple products in Canada was 1.8 pounds in 1953 and that producers averaged 39c per pound. The per capita consumption of honey was very little more—2.0 pounds—and that producers averaged 16c per pound the same year. Honey in England is often priced at 60c per pound. There is U.S. honey in Canadian stores at 48c per 8 ounces. Surely Canadian honey is much better and worth at least as much as these honeys or maple syrup.

We should not exclude the possibilities of further technical changes in food production. Artificial sugar has already been made in the laboratory.

Changes in our national economy, in the size of the honey crop, in eating habits and in distribution of national income will affect honey markets. If the signs of the times are properly read and beekeepers can make the necessary adjustments, beekeeping can be a profitable occupation.

The accompanying graphs give some idea of figures that tell a story. Following is a brief summary of a few facts that can be learned by examining figures:

What Statistics Say

Canada's honey crop for the last 16 years has averaged 34,000,000 pounds. There have been wide swings away from the average,—45,000,000 pounds in 1948 and 20,000,000 in 1954. But in the main the fluctuation has been in the neighborhood of plus or minus 4,000,000 pounds, or less than 12% of the average production.

The number of colonies in Canada is 340,000. A change in number of colonies in any year seldom exceeds plus or minus 30,000 (10%).

The number of colonies per beekeeper has been increasing: there are fewer beekeepers but these are larger operators.

It is suspected the average age of beekeepers has increased—this, if true, would be significant.

The yield per colony has the greatest influence on the size of the crop. The Canadian average is 76 pounds, plus or minus 12 pounds, (minus 18 pounds in 1954). High yields seldom occur in all provinces in any one year.

Per capita consumption has varied widely from 3.6 pounds to 1.3 pounds. It varies precisely as the size of the crop. The all time low of 1.3 pounds is for the 1954-1955 crop year. There is probably no such thing as a normal honey consumption figure.

Canada's population is 15,000,000. It is expected to be 16,000,000 by 1957 and 17,000,000 by 1960.

In the last 30 years there has been a change in the relative sizes of urban and rural populations. In 1921 the rural population was 1% greater than the urban. In 1951 the urban population was 23% greater than the rural. In the same period the average size of family became less. In 1921 it was 4.62 persons while in 1951 it was 3.7 persons.

It would require a supply of 40,000,000 pounds to provide a 2.5 pound per capita consumption rate in 1955-1956. Only in 1938 has the yield per colony been high enough to do this with the present number of colonies (340,000).

	Consumer's Price Index For All Foods		Price Received by Honey Producers	
Year	**Index**	**% Change**	**Cents**	**% Change**
1938	50	—	8	—
1949	100	100	13	62.5
1953	112.5	125	16	100.

W. G. LeMAISTRE

Appendix V

Report of Canadian National Exhibition and Royal Winter Fair

In the spring of 1949 the Directors of the Ontario Beekeepers' Association felt that we should have a display and sales booth in the Food Building at the Canadian National Exhibition. A committee was formed to explore the possibilities of obtaining this, and estimate the probable cost. After this information was obtained, we submitted it to the Executive of Council. They voted $1,000.00 to start it off. Mr. Wm. Agar, a past president of Council, was engaged to manage the booth. After the Canadian National Exhibition was over the management of the Royal Winter Fair advised us that they were willing to grant selling privileges for one booth to an organization representing beekeepers; again we applied to Council and they voted $500.00 to carry on. The final result was a cost of $1,442.83, and a sale of $2,800.00 worth of honey.

In the following year, Mr. Agar resigned and I was left with the whole task. There wasn't any other person to carry on, so I had the option of seeing the booth closed up or operating it myself. After a lengthy argument with my wife, I persuaded her that she should enter a partnership with me in operating the booth and we, as partners, have now run the booth for five years.

Over this period, the sales have varied from the first year of $2,800.00 to $4,800.00 in 1952, and then this year to $7,600.00. As I said before, the first year's cost was $1,442.00, but this has gradually been brought down to the low of $411.00 last year. This year, the cost to Council has been $592.00 which includes about $300.00 of capital expenditure. This effort has been a joint one with the Ontario Beekeepers' Association. In former years, we had a single space, but with the new Food Building, it was felt that we should have a double space on a corner, and the Ontario Beekeepers' Association paid the rent of one space and stood the expense of constructing the booth.

The Food Products building is the first new building in a long time, and was a big attraction. Exhibitors went all out to make it a real success. The management took a count at the doors at various times and came up with the figure of 1,500,000 people entering the building. Our booth is on one of the two main aisles near the centre of the building, and the greater part of this crowd saw our booth.

At the Canadian National Exhibition booth, about 11,000 shopping bags, one to each sale, were distributed; 1,800 copies of The Story of Honey booklet and $5,100.00 worth of honey were sold and thousands of pamphlets, supplied by the Ontario Agricultural College, were distributed. The Mono Division of the Continental Can Co. supplied over 1,800 5-oz. cups which were filled by Mr. T. Haines of Cheltenham, and they were all sold at 15c each before the Fair was half over. I have ordered 5,000 for the coming year.

At the Royal, we again saw an increase in sales and general interest. Sales reached a new record, over $2,500.00 against a first year sales of $1,200.00 and an average of $1,850.00 since the beginning. The publicity representative of the Royal has time on the air daily, just ahead of the 11:00 p.m. news to give a feature of the fair and a highlight for the next day. On one of these days he asked me to go on the air with him for a talk on honey and bees, which I was very pleased to do. Another source of publicity was a booth selling a machine called a Marvilizer which extracted juice from vegetables and to each cup of juice, he recommended adding a spoon of honey. I supplied the 8 pounds of honey that he used in his demonstration.

H. C. ALLEN

Royal Winter Fair Booth — 1954

Sales			$2,501.60
Cost of Sales:			
Honey in Tubs and Glass		$ 980.34	
Comb Honey		760.40	1,740.74
			$ 760.86
Expenses:			
Booklets (The Story of Honey)		$ 91.50	
Booth		62.76	
Wages and Management		286.60	
Labels		18.20	
Freight		38.40	
		$ 497.46	
Less Credits Received from Booth Expense:			
Paper Bags	$1.65		
Photos	1.00	2.65	494.81
			$ 266.05

Reconciliation Statement

Cash on Hand per Statement from Bank			$2,456.37
Outstanding Cheques:			
D. Stevens		$ 14.00	
Garfield Stewart		534.00	
H. C. Allen		13.00	
L. A. Inkster		10.00	
Ontario Beekeepers' Ass'n.		64.65	
Erle Byer		143.40	
H. C. Allen		174.00	
Ont. Honey Producers Co-op.	$1,051.83		
Garfield Stewart, Freight	17.22		
	$1,069.05		
Less Collection A. Anderson	48.90	1,020.15	1,973.20
			$ 483.17
H. C. Allen will deposit the following Cash on Hand		$ 57.54	
		13.00	70.54
			$ 553.71
Accounts Payable:			
Half Counter Cost at C.N.E.		$ 150.00	
Pictures for R.W.F.		9.00	159.00
			$ 394.71
Surplus Cash from C.N. Exhibition		$ 128.66	
Surplus from Royal Winter Fair		266.05	$ 394.71

Schedule of Expenses

Booth 293—C.N.E., Toronto, Ontario

1954

Sales			$5,131.29
Cost of honey sold	$3,800.00		
Selling expenses	2,337.63		6,337.63
Deficit			$1,006.34

	Booth	Wages	Freight	Summary
Flowers	$ 6.43			
Stool	3.25			
Bags	578.39			
Sundries	4.25			
Clerks		$310.11		
Freight			$17.67	
Hydro and Hardware	11.15			
Counter	300.00			
Management 27 days		270.00		
Rent and Selling	485.00			
Association Fee	15.00			
Plumbing	70.00			
Ont. Honey Prod. Co-op			41.63	
Picture	7.00			
	$1,480.47	$580.11	$59.30	

Advertising	$ 160.00
Bank Exchange	4.75
Parking and Car Expense	53.00
Booth	1,480.47
Wages	580.11
Freight	59.30
Total Expense per Statement	$2,337.63

Reconciliation Statement

Cash in Bank	$4,542.34	
Cash on Hand	69.29	$4,611.63
Outstanding Cheques:		
Ontario Honey Producers Co-op	$ 608.03	
Food Products Association	15.00	
Ontario Honey Producers Co-op	1,500.00	
E. G. Allen	189.00	
Allan T. Brown	210.00	
Stuart Byers	674.80	
Garfield Stewart	408.00	3,604.83
		$1,006.80
Accounts Payable:		
H. C. Allan	$ 48.24	
W. J. Bell	207.90	
Canadian Grocer	160.00	
Counter	150.00	
Management	270.00	
Picture	7.00	
Car Expense	35.00	
		878.14
Deficit as Shown	$1,006.34	

Receipts:			
From Council	$500.00		
½ Counter Cost	150.00		
Selling Rights and Rent	485.00	1,135.00	
		$ 128.66	$ 128.66

Appendix VI

Survey of Honey Consumers

SASKATCHEWAN

Many of us connected in one way or another with honey production have formed rather definite opinions as to what the consumer's preferences are about honey. Frequently the opinions of one beekeeper differ sharply with those of another. It seems obvious that the person who should have the last say in matters of this kind is the consumer. To obtain the answers to some questions regarding honey, the Apiary Division prepared a questionnaire. The Canadian Association of Consumers very kindly offered their services and circulated the questionnaire among their members in Saskatchewan. In addition, some house to house canvassing was done in Regina. Replies from 375 families were received. It is hoped that the answers may be helpful to those of us who are packing, grading or advertising honey.

It was found that:

1. 89% of the families used honey to some extent.
2. 11% did not use honey for such reasons as they:
   (a) did not like it.
   (b) were allergic to it.
   (c) did not eat sweets.
   (d) considered it too fattening.
   (e) used homemade jams and jellies.
3. Only 2 of the 41 families not using honey said it was too expensive.
4. Another point was noted which may or may not be significant: 75% of the families not using honey had no children in the home.
5. 86% of those using honey had it in the house at the time the survey was made.

Why do people buy honey? Much of our advertising has stressed the value of honey as a quick energy food.

1. Only 9% of the people buying honey did so because of its food value.
2. 82% of the families said they bought honey because they liked it.
3. 4½% bought it because the children enjoyed it.
4. 4½% mentioned the fact that they considered honey a cheap food.

How do families use honey in the home and where is it purchased?

1. 98½% used it as a spread.
2. 33½% used it to some extent in cooking.
3. 10% used it in treating a cold.
4. 6½% indicated that they used it as a sugar substitute in tea, coffee, etc.
5. 87% bought honey from the store.
6. 20% bought honey from the beekeeper either entirely or partially.

The housewives were asked to estimate the number of pounds of honey used each year but they found this question difficult to answer accurately. This is understandable and too much confidence cannot be placed in the way the averages worked out. The questionnaire gave an annual average of:

1. 5.6 pounds per adult.
2. 4.4 pounds for each child.

We asked the consumers the size of container they usually purchased.

1. 36% bought 1 lb. containers.
2. 24% bought 2 lb. containers.
3. 27% bought 4 lb. containers.
4. 15% of the consumers preferred the 8 lb. size.

The preferences of liquid and granulated honey were pretty well divided.

1. 52½% preferred liquid honey.
2. 47½% preferred granulated honey.

The type of granulation preferred was also a question put to the consumer.

1. 96% preferred fine granulation.
2. 4% preferred the coarse granulation.

We also wanted to know whether they preferred a firm honey or a soft granulated honey.

1. 15% indicated that they liked the honey to be firm.
2. 85% were in favor of a soft set.

These results are to be expected when it is remembered that honey is used mainly as a spread.

The consumers were also asked to express their dislikes in honey.

1. 66% said that there was no honey they disliked.
2. 27% disliked dark honey.

We grouped such statements as "dislike buckwheat honey" and "dislike strong flavored honey" into the one class as disliking "Dark Honey" since we felt that it would be the dark honeys that had the strong flavor, and in many cases the so-called buckwheat honey which they disliked might actually be honey from some other source since the amount of buckwheat honey reaching the consumer in Saskatchewan is negligible.

3. 7% expressed a dislike for coarse granulation.

How important is the price of honey? The consumer was asked whether price was a factor in their purchase of honey.

1. 26% said it was.
2. 74% of those buying honey said it was not.

Does the consumer pay attention to the grade of honey they purchase?

1. 30% said that they did not.
2. 70% said they did buy according to grade.

In this regard, we are inclined to suspect that "Grade" was confused with "Brand." In our house to house canvass we found that many housewives could tell you the brand name, or the name of the beekeeper, but they had not actually noticed that the honey was marked, "Grade No. 1."

The question of preference for white honey or dark honey is not too important in Saskatchewan where practically all the honey classifies as "White." The question was asked, however, and:

1. 92% preferred the white honey.
2. 8% indicated that they preferred dark honey.

We tried to have the consumer indicate their preferences in spreads. They rated in the following order:

1. jam
2. honey
3. marmalade
4. syrup

We have wondered if the beekeeper was correct when he compared the price of his honey with that of strawberry jam. We wondered what the favorite jam was and found that:

1. 195 people indicated that strawberry was their favorite jam.
2. 35 people said "homemade."
3. 23 preferred raspberry.
4. 10 preferred black currant.
5. 6 preferred cherry.
6. 6 preferred loganberry.
7. none of the other fruits received more than 5 votes.

The consumers were also asked 2 questions which have a relation to grading. They were asked if they had ever noticed specks on the surface of the honey.

1. 160 said they had.
2. 156 had not.

The consumers were then asked if they considered these wax specks objectionable.

3. 38 people considered the wax particles objectionable.
4. 129 did not.

At first glance, it would appear that a large number of people do not consider wax specks objectionable. However, 38 people of the 167 who answered this question considered them objectionable, representing approximately 23%. Since 23% object to the wax particles, it would seem important that the beekeeper make every effort to remove them from his honey with proper straining. No business can afford to risk losing 23% of its customers through carelessness.

We hope this survey will prove useful to Saskatchewan honey producers and we would be pleased to have comments on the results.

Appendix VII

Honey Competitions

In spite of generally adverse weather conditions all across Canada during the crop season of 1954 and the smallest honey crop in 28 years, beekeepers collectively have shown enthusiasm in devising ways and means of promoting publicity for honey. Through fairs, expositions and rolling displays mounted on trucks and visiting important provincial centres and even Junior Clubs the good work is being carried on.

Looking back over reports of your committee for several years, the conclusion is obvious that the movement to advertise honey is increasing across the country. In this respect it would appear that leadership being given by the Canadian Beekeepers' Council may fairly be entitled to some credit.

In any developments of this nature it takes time to overcome initial inertia but this point seems to have been well passed.

By provinces the record shows:

BRITISH COLUMBIA

The major exhibitions are the Pacific National and Interior Provincial which gives beekeepers an excellent opportunity for displaying honey, beeswax and honey products. Aside from the big fairs there are thirty-six small fairs at which honey was exhibited. Honey was judged as an item of competition and display at nine exhibits and displays throughout the province. Honey was shown at the smaller fairs, mostly as an advertising effort rather than from the competitive standpoint.

The C.B.C. Trophy—Western Canada—was won by a Vernon beekeeper, Mr. J. Stann, with an exceptionally fine display in the novice class. It is noteworthy that there is a Junior Honeybee Club in Vernon which may have helped Mr. J. Stann's background.

Generally speaking, exhibits were well set up and attracted good, lively public interest.

ALBERTA

The biggest display undertaken is a joint Alberta Beekeepers' Association - Canadian Beekeepers' Council affair at the Edmonton Exhibition Agricultural Building and is the largest exhibition in the province. A demonstration hive of bees is shown, demonstrations of pollination work are given. A large attendance is always present and this affords an excellent publicity medium.

The Edmonton and Calgary Beekeepers' Association feature honey competitions at their monthly meetings but this is practically confined to their members and is not a public affair. A good bit of educational work is being done in the schools along the lines of beekeeping demonstrations which is bound to have very good home reactions which can not help being favorable to honey and possibly may develop some future beekeepers as well.

SASKATCHEWAN

In 1954 the Honey Show was held in conjunction with the Fruit Show at Indian Head. There were 34 entries and prizes were provided jointly by the Saskatchewan Department of Agriculture, the Honey Producers' Co-operative and the Beekeepers' Association. Advantage was taken of this opportunity to select the best exhibits of honey offering, which were later sent to the Royal Winter Fair for competition. This procedure resulted in the first place award for liquid honey going to Saskatchewan and winning exhibit was from apiary of Mrs. J. W. Kent of Pambrun. There was an average entry of exhibits notwithstanding weather conditions were unfavorable.

MANITOBA

Two major events were sponsored by the Manitoba Beekeepers' Association in 1954 and both took place at Brandon.

In conjunction with the annual honey competition held at the Provincial Exhibition, the Manitoba Beekeepers' Association, with full co-operation from the Manitoba Honey Co-operative, erected a large, elaborate display. The centre foreground of this display featured an electric train set up with pyramids of honey on either side and appropriate signs at the back for the advertising and promotion of honey.

A two-day Provincial Honey Show held in conjunction with the Provincial Fruit and Horticultural Show was held the latter part of August in Brandon. Entries of honey, beeswax, and beekeepers' individual displays were appropriately arranged and set up for display purposes.

Honey competitions are held at most local fairs throughout the province, and in some cases beekeepers make their own displays to advertise and promote honey. As is customary, a honey competition was held at the annual convention of the Manitoba Beekeepers' Association.

The interest and enthusiasm shown by the public at the two events in Brandon would lead one to believe there are unlimited possibilities to advertise honey by this means. Progress was made in 1954 and through continued support of the beekeepers and other interested parties, it can continue.

Your committee especially commends this Manitoba report—it seems to indicate that good leadership is offering and results are forthcoming accordingly.

ONTARIO

This province was plagued with the worst crop conditions that it has had to put up with for many years. The white honey crop was very meagre and the entire crop was far below normal. In consequence, show entries were less than usual. The biggest exhibition in Canada—The Canadian National Exhibition—staged a splendid showing of honey. They had new premises in a different location and much more accessible to the public. A display 40' long and 8' wide was set up, motor-operated turntables were arranged at each end with streamers and cards for decorations. The booklet "The Story

of Honey" was distributed also. The Royal Winter Fair, coming later in the season than the C.N.E., had more entries and a most attractive exhibit was put up.

These two big exhibitions—the C.N.E. and the Royal Winter Fair—have very aptly been referred to as the "show windows" of Canada and is very well expressed. The setting-up and planning of this exhibit and staffing are, however, largely the work of those identified with the beekeeping industry in Ontario and to them a generous measure of credit should be given for a job well done. While located in Ontario, they are really all Canada and exhibits come from all parts of the country from Alberta to New Brunswick. The Canadian Beekeepers' Council Trophy (Eastern) was won by Mr. Jacob Dick of Kitchener, Ont., a large scale professional beekeeper. It is interesting to note that an Ontario entry of dark honey was judged good enough to rate as reserve grand champion.

In the regional fairs in Ontario, London, Peterborough and Ottawa, especially the last two, honey shows are well staged and capably looked after by local beekeepers.

QUEBEC

So far as crop conditions were concerned, Quebec was the most fortunate of all provinces and the take was of excellent quality. A good show of honey was put on at the Quebec Provincial Exhibit and to lesser degree at Three Rivers and Sherbrooke. Something new was tried to create a more honey-conscious public. This was managed under the supervision of the Apiary Division of the Quebec Department of Agriculture, of which Mr. Jules Methot is Provincial Apiarist. Two large, white painted floats were arranged with extractors, uncapping equipment and a graphic arrangement of how honey is handled from the hive to consumer package; a public address system was included. During Honey Week these two trucks toured the important centres of the province. Brief stops were made wherever large groups of people collected—at schools and educational centres. Good press notices and pictures in papers helped to bring the word "Honey" before the public. Once more, the spirit of initiative and go-ahead seems manifest in promoting the cause of honey.

At the Quebec Exhibition they follow the practice of appointing "Kings" as winners in various classes and it is worthy of mention that one of our council members—Mr. Sam Deschenes—has carried off the honors as "Honey King" for Comb Honey.

NEW BRUNSWICK, NOVA SCOTIA, PRINCE EDWARD ISLAND

Four different honey shows are staged at local fairs in Fredericton and St. Stephen, N.B. and Middleton and Amherst, N.S. This represents a good level of activity in an area where beekeeping is thinly spread. The Amherst show held in conjunction with the Maritime Winter Fair is the largest and attracts a fairly equal number of entries from each of the three provinces. The 1954 show was well staged and photographs that appeared in the Canadian Bee Journal certainly show an attractive and pleasing set-up that reflects credit on those responsible for arranging. The exhibit aroused a lot of favorable comment and was viewed by a large number of people. On the overall picture the showing of honey is on a much higher level now in the Maritimes than what it was even five years ago.

Some of your committees have suggested that more prominence should be accorded to granulated honey and the suggestion is noted here. Honey is exhibited in various forms, however, at the discretion of the exhibitor and it is quite likely granulated honey is already being shown at some fairs.

Viewing the overall scene, the conclusion is that a more concerted and systematic effort is being made to show honey and to keep it before the public. Provincial Departments of Government, Beekeepers' Associations and beekeepers individually are all giving aid to advertising honey. In a comparatively small group such as beekeepers, all with limited financial resources, it is probably a fair statement to make that the efforts of the beekeeping fraternity itself expressed in terms of dollars would total up to a surprisingly outstanding figure.

HARRY W. JONES

— ★ — ★ —

Appendix VIII

Exports and Imports

Appended to this report are tables indicating exports and imports of honey for the years 1949 to 1954, and imports of beeswax and package bees for the same years. In all cases the 1954 figure is for the 10 months ending October 31.

It will be noted that our honey exports for the past year are the smallest since 1949 whereas our imports in 1954, largely from the United States, are far in excess of our imports in any of the other years listed.

Our low exports must be attributed to our very short crop although the exchange situation with our former European customers remains unchanged, with dollars still unavailable for honey and equiries for Canadian honey from abroad have been negligible.

Our high imports in the past year must likewise be attributed to our short crop although the vastly improved potentialities of our domestic market due to greatly increased population and an increasing industrial use of honey have no doubt been contributing factors. There has been considerable dissatisfaction expressed by beekeepers and packers at the inflow of U.S. honey to Canada this year but without these imports much of the Trade would now be without honey and would be offering cheaper substitutes to consumers whereas with them, supplies have been maintained and prices held at satisfactory levels.

Importations of beeswax to October 31, 1954 indicates a total figure approximating that of last year but well below the figures for 1950, 1951 and 1952.

Imports of package bees in 1954 show a considerably increased value over the importations of 1952 and 1953 indicating some revival of interest in beekeeping. This is borne out in our crop statistics of the past year which show some increase in both the number of beekeepers and the number of colonies kept.

F. R. ARMSTRONG

— ★ — ★ —

— HONEY EXPORTS —

	1949		1950		1951		1952		1953		(1) 1954	
	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$
Newfoundland	103	37										
United States	26,325	4,426	269,982	33,325	263,516	23,545	363,999	41,648	542,302	60,250	211,028	
Belgium			143,355	10,661					7,000	770	6,860	
Germany					91,215	11,998	87,360	10,700				
Netherlands			366,380	24,033								
Others	2,910	546	13,424	1,503			3,600	682	250	150	2,448	
Totals	29,338	5,009	793,141	69,522	354,731	35,543	454,959	53,030	549,552	61,170	220,336	24,810

(1)—Ten months ending October 31, 1954.

— HONEY IMPORTS —

	1949		1950		1951		1952		1953		(1) 1954	
	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$
United States	71,400	8,920	27,493	7,037	141,052	32,230	84,438	22,543	354,434	61,445	2,166,241	
Others	3,600	751	7,782	1,089	911	545	2,277	1,876	47,453	7,171	6,872	
Totals	75,000	9,671	35,275	8,126	141,963	32,775	86,715	24,419	401,887	68,616	2,173,113	303,200

(1)—Ten months ending October 31, 1954

— BEESWAX IMPORTATIONS —

	1949		1950		1951		1952		1953		(1) 1954	
	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$	Lbs.	$
United Kingdom			3,510	1,916	713	412	16,143	10,204	11,260	6,782	20,160	
United States	119,967	67,405	163,955	93,326	139,331	96,978	139,324	80,600	146,912	81,320	102,801	
France	7,680	3,690	5,797	3,067								
Brazil	32,969	17,563	93,483	52,505	13,082	9,452	11,515	6,059				
Chile	6,625	3,163	19,236	10,246	14,512	10,763	5,453	3,735				
Cuba	9,618	4,858	55,588	29,948	12,530	9,104	26,310	17,065	28,574	15,519	4,030	
Guatemala					12,712	9,030						
Dom. Republic			5,922	3,076	21,965	16,078					7,277	
Netherlands					11,098	7,297						
Others			2,240	1,158	4,480	2,284	4,320	2,307			*6,818	*N.Z.
Totals	176,859	96,679	349,731	195,242	230,423	161,398	203,065	119,970	186,746	103,621	141,086	77,492

(1)—Ten months ending October 31, 1954.

— BEES (PACKAGES) IMPORTS —

	1949	1950	1951	1952	1953	1954
	$	$	$	$	$	$
U.S.A.	484,492	340,469	346,467	301,203	297,213	326,329

Appendix IX

Research Committee

The following is a report on research conducted by the various agencies throughout Canada.

BREEDING—O.A.C., Guelph

The co-operative bee breeding programme with the United States Department of Agriculture was continued. Approximately 600 queens were produced on Pelee Island and shipped to various testing stations. Approximately another 600 were sold to beekeepers.

Seventy queens from seven hybrid crosses were tested for production. The season was very poor, but one line showed itself to be far superior to the others.

BREEDING—Ottawa

Queens from hybrid strains were tested in Quebec, Ontario and Manitoba against commercial stock. At Ste. Anne de la Pocatiere, Quebec, there was relatively little difference in brood development and egg viability between the hybrid and commercial strains. The commercial strain produced an average of 188 lb. of honey as compared with 163 lb. from the hybrid strain. At Ottawa the average production of 220 lb. was similar in both groups. In tests at the Brandon Experimental Farm, one hybrid (PXA) produced 30 lb. more honey per colony than the commercial stock, while another hybrid line produced an average of 31 lb. less than the commercial group.

The PXA line was the only outstanding superior hybrid tested in 1954.

BREEDING—Manitoba

Work was continued in 1954 on testing Rossman Island hybrid queens. Colonies headed by hybrid queens were superior in honey in 1954 to the check colonies.

NECTAR SECRETION—O.A.C., Guelph

The study of the influence of mineral nutrition on plant development and nectar yield has been continued. It has been found that, in general, a plant which is not too strongly vegetative and has a high level of carbohydrate in its tissues is a good nectar producer. The levels of supply of both nitrogen and potassium have an important effect on plant growth and composition. In the range of mineral supply used in these investigations—from the level of bare sufficiency to the luxury level—an abundant supply of N or K increased growth and depressed carbohydrate content and nectar yield. High levels of phosphorous also reduced nectar yield but did not exert any discernable concomitant effect on growth or tissue compostion. Much work remains to be done to establish optimal levels of the elements for the best nectar production. It is probable that the order of magnitude of possible improvement in nectar yield by means of nutritional control is somewhat lower than that which can be achieved by genetic control.

The effect of growth substances, or auxins, on flower development resemble changes taking place with fertilization under natural conditions. The marked inhibition of secretion which occurs may be either a subsidiary effect of these changes or may be indepedent of them. Effects of auxins are sometimes reversible with anti-auxins.

NECTAR SECRETION—Ottawa

The amount of nectar available to bees in the florets of clover plants varies with the species. The average amount found in birdsfoot trefoil was 0.7 microlitres; 0.04 microlitres in alsike clover; and 0.38 microlitres per floret in red clover. The average nectar concentration, expressed in total solids, was 32.9 per cent, 36.1 per cent and 40.4 per cent, for birdsfoot trefoil, alsike clover, and red clover respectively.

Comparison of two fields of red clover, mentioned previously, showed that the nectar volume ranged from .265 to .560 microlitres per floret with a total solid content of 32 to 42 percent on the 36-acre field as compared to .06 to .26 microlitres per floret with a total solids content of 21 to 33 per cent on the 12-acre field. This shows the wide range within a field and between fields about four miles apart.

DISEASES—A.F.B.-Ottawa

The effective dosage of sulphadiazine and terramycin against A.F.B.

was determined on duplicate colonies. The results of the experiment were as follows:

Sulphadiazine	Examination of Colonies (90 days after treatment)	No. of Colonies Infected
500 mg.	—	0
250	—	0
125	+	2
62	+	2
0	+	2
Terramycin		
250	—	0
125	+	1
62	+	2
31	+	2

— no disease
\+ disease

Two new antibiotics were tested against this disease. Achromycin and pyridinethione were fed at a level of 250 mg. of material in sugar syrup containing spores from one scale. Achromycin was effective, while pyridinethione was not.

In another experiment 500 mg. of sulphadiazine and 250 mg. of terramycin were found to protect colonies again ten times the amount of inoculum used in the preceding test.

DISEASES—A.F.B.-Manitoba

Observations were continued in 1954 on the use of sodium sulphathiozole as a spray on the brood chambers of package bee colonies as a preventative against American Foulbrood. This work was commenced in 1952, using two commercial apiaries of 750 colonies and 400 colonies. No disease was found in the treated or 50 check colonies at the time of inspection carried out during the first week of July.

DISEASE—E.F.B.—O.A.C., Guelph

Twelve apiaries of package colonies were installed in Rainy River District, a known E.F.B. area, between April 22nd and May 12th, 1954. Each apiary consisted (on installation) of 50 colonies. Forty colonies (80 per cent) were marked for T.P.F. 25 feeding and 10 (20 per cent) left untreated.

All colonies were handled in the same manner except for the addition of terramycin poultry formula 25 to feed of treated colonies. T.P.F. 25 was prepared at rate of ½ gram terramycin per gallon of 1:1 sugar syrup. One pound of T.P.F. 25 would treat 50 gallons of feed.

Colonies were fed one-third gallon of syrup each at three times, namely,—on installation, approximately two weeks later, and during the first week of June.

RESULTS

	% showing infected Larvae — June 14-19	Crop Produced
Treated Colonies	Less than 1%	157 lbs.
Untreated Colonies	60%	66 lbs.

The 8 untreated colonies (badly infected) in one apiary were selected for a further test. On June 24th, 4 of them were fed T.P.F. 25, as mentioned above, and the remaining 4 were given syrup only. The 4 treated with T.P.F. 25 produced 75 lbs. of honey each and the untreated colonies produced 30 lbs. each.

DISEASES—E.F.B.-Manitoba

Streptomycin gave good control when used to treat colonies infected with European Foulbrood. One-half gram of streptomycin dissolved in an 8-lb. pail of a 50 per cent sugar solution was fed to an infected colony. A similar solution was used as a spray on the brood combs of several infected colonies and in each case the disease disappeared.

DISEASES—E.F.B.—Alberta (Beaverlodge)

European Foulbrood, which has become active in several of the beekeeping areas of Manitoba, Saskatchewan, and Alberta, in recent years, can be controlled by treating colonies with terramycin or streptomycin. Extensive experiments were conducted with these antibiotics at the Beaverlodge Experimental Station in 1954. Two treatments of 0.25 gram of terramycin applied as a spray, dust or incorporated in a gallon of sugar syrup, gave excellent control .The treatments should be administered approximately two weeks apart.

Streptomycin gave the same degree of control with one treatment when applied at the rate of 0.5 gram per colony.

DISEASES—E.F.B.—Saskatchewan

Seventy colonies hived on infected equipment in hospital yard were inspected June 23rd.

Forty colonies showed fresh E.F.B. infection and were treated with T.P.F. 25.

Examined two weeks following treatment the following results were obtained:

Check Colonies —Infection was increased 104%
Dusted Colonies —2 teas. T.P.F. 25 in 6 tablespoons icing sugar—infection decreased 91%
—3 teas. T.P. F. 25 in 6 tablespoons icing sugar decreased infection 96%
Sprayed Colonies —½ teas. in 1 pt. syrup decreased infection 49%
—1 teas. in 1 pt. syrup decreased infection 84%

Colonies fed T.P.F. in sugar syrup stored syrup and treatment was abandoned as useless at this time of year.

DISEASES—E.F.B.—Ottawa

Two lots of honey were prepared with one lot containing 500 mg. and the other 250 mg. of terramycin. These were stored in a warm room to simulate hive temperature. Six months later the material was inoculated with A.F.B. spores and fed to two colonies. Within a period of one month disease was evident in both colonies, indicating that terramycin is not too stable.

GENERAL—Alberta

A Method of Treating Honey Bee Colonies with Drugs

The recommended practice of feeding drugs in sugar syrup to diseased honeybee colonies was not always practical and not always successful under Alberta conditions.

Tests were conducted on introducing sodium sulphadiazine and terramycin 25 (TM, 25) as dusts.

Sodium sulphadiazine was thoroughly mixed with icing sugar. One teaspoonful of this mixture was placed in the entrances of established heavily infested colonies (14). An air blast—car pump, cyanide gun—was used to dissipate the mixture in the hive.

This method resulted in the elimination of all signs of disease in 13 colonies and reduced it in the fourteenth colony to one cell three weeks after treatment.

Terramycin 25 grams active per pound was used extensively in the field for treating outbreaks of E.F.B.

The dosage used was .19 grams active terramycin or one teaspoonful per colony per treatment. Two treatments or more were needed.

Both mixing the drug with syrup and dusting as described for the introduction of sulpha were used. Control of the disease was obtained with both methods. As the season progressed the syrup treatment was abandoned since it was much more cumbersome and no more effective.

Conclusions—Dusting colonies diseased with either A.F.B. or E.F.B. with the appropriate drug and proper dosage is likely to produce better control of these diseases in Alberta than feeding these drugs in syrup.

NOSEMA

CONTROL OF NOSEMA DISEASE IN PACKAGE COLONIES—Ottawa

One hundred and twelve package colonies were fed sugar syrup, upon installation ,containing the protozoan organism, **Nosema apis,** at the rate of 16x106 spores per colony. Following a 6-day incubation period the colonies were divided into four groups with three of them fed Fumidil B at varying dates. A second feeding of the antibiotic was administered three weeks later. Samples of bees were collected from each colony on three dates for analyses. Infection was reduced significantly in all treated groups. The group fed the higher dosage, 172 mg. of fumagillin per colony, showed depressed brood production.

Honey production for all groups was similar. These results are in contrast to 1951 when the feeding of fumagillin resulted in a significantly greater colony yield.

NOSEMA CONTROL IN PACKAGES—Brandon and Charlottetown

At Brandon Experimental Farm and Charlottetown Experimental Station 140 packages were under experiment for Nosema. The shipper used Fumidil B in the feeder cans in part of the shipment. Infection was reduced by this treatment.

Several groups at each station were also fed Fumidil B when the packages were installed. It would appear that better control of the disease occurred when the packages were fed the antibiotic when installed. Availability of medicated syrup for packages enroute to their destination and their subsequent treatment when installed may ultimately be the best procedure to follow for the control of this disease.

CONTROL OF NOSEMA DISEASE IN OVER-WINTERED COLONIES — Ottawa

A group of 175 colonies were involved in an experiment to determine

TREE FRUIT—O.A.C., Guelph

1. Inserts

Tests were carried out to determine the value of pollen inserts by mixing one part fluorescent powder with three parts cherry pollen and placing it in the insert tray.

Results: Traces of the marker were found on every tree blossom examined in the orchard. The trees nearest the hive had more blossoms marked than trees farther away. In many cases the marker was found right on the stigma.

2. Wandering from Tree to Tree

A sweet cherry tree in the centre of the orchard was chosen and 225 bees were caught on this tree and marked with a fluorescent dust.

Results: On the marker tree a great many marked blooms were found, but on adjoining trees only a very few marked blossoms were found. No marks were found beyond two trees distant.

LEGUMES—O.A.C., Guelph

RED CLOVER—TABLE I

	Date of Cutt'g	Date of Count'g	Pollinators per 100 sq. yd. Hon'bees	Bum'bees	Other	Blossoms per Sq. yd.	Seed Yld. in bu. per acre
First Growth Not Cut		June 28....	5.6	1.6	3.2	49	3.2
		June 30....	15.1	13.4	0.8	56	
Early Second Growth	June 15....	Aug. 5....	22.5	6.4	0.0	40	1.6
Late Second Growth	June 25....	Aug. 5....	10.2	7.7	0.0	32	0.6

TABLE II

	Florets per Head	Wt. Seed per 100 Head	Wt. of 100 Seeds	Condition of Seed in % Norm.	Undev.	Dam.	
First Growth Not Cut	105	7.946 gm.	200 mg.	35	58	7	(4% Weevil (1% Midge (1% Chalcid
Second Growth Early Cut	130	15.768 gm.	154 mg.	59	31	10	

Uniform good heads only were chosen in each plot.

ALSIKE—TABLE III

Date	Pollinators per 100 sq. yd. Honeybees	Others	Blossoms Per sq. yd.	Remarks
June 28	136	13	140	Working alsike for pollen and nectar quite heavily
June 30	100	11	156	Yield: 8.5 bu. per acre based on sq. yd. samples

A technique is being developed for the use of fluorescent markers to determine isolation requirements for various clovers for registered seed production.

MISCELLANEOUS

PACKAGE ARRIVAL DATES—Alberta

Two-pound packages installed in Central Alberta in hives the first week in April have in each year over a period of three years, exceeded the production of 2-pound packages installed three weeks later. The increase in production has varied from 15 per cent to 36 per cent.

BEE BEHAVIOUR—Ottawa

The ability of bees to discriminate between syrups of different concentrations was determined in an experiment with a colony confined in a large screened cage. Bees were able to detect 2.5 per cent differences in concentration provided the solutions were less than 55 per cent sucrose. Above this level they could detect only 5 per cent increases.

When the proportions of dextrose, levulose and sucrose were varied the bees showed no preference for any one mixture over the rest.

RECOMMENDATIONS

1.—THAT investigations be continued on the effect of 2, 4-D and other herbicides on nectar secretion.

2.—THAT investigations be continued on all phases of bee diseases.

3.—THAT work be continued on the following problems:

(a) Liquid Honey
(b) Honey Straining and Filtering
(c) A Suitable Hand Refractometer
(d) Pasteurizing Equipment
(e) Honey Processing and Handling
(f) Honey House Design and Apiary Equipment
(g) Bee Breeding
(h) Nectar Secretion
(i) Colony Management Problems, e.g. Wintering, Package Bees, Supersedure

4.—THAT the support of Council to the Bee Research Association be continued and Apimondia be supported to the extent of 10£.

Appendix X

Marketing Legislation Committee

BRITISH COLUMBIA

No further legislation since our last meeting. Grading regulations are in force and are quite satisfactory.

ALBERTA

The Alberta Federation of Agriculture is still attempting to obtain provincial marketing legislation and legislation is now being prepared for consideration at this session of the Legislature.

SASKATCHEWAN

In Saskatchewan, the Honey Board is working well, but all honey is being sold well above Honey Board prices. Grading regulations are working well and beekeepers generally are abiding by the regulations.

MANITOBA

The Honey Board started to function this past year, and set a selling price on honey effective September 1st. We believe this helped to stabilize prices this fall, but prices are well above Board prices at the present time. No further legislation is necessary at the present time.

ONTARIO

There have been no changes, and therefore, the beekeepers of Ontario have decided to leave their Marketing Plan at present and await developments of changes that are now in progress.

QUEBEC

No legislation is in force and none is anticipated.

MARITIMES

There has been no legislation that will effect honey directly.

C. C. HEIGHWAY

Appendix XI

Pollination Report

BRITISH COLUMBIA

In British Columbia the crops that are using honey bees for pollination are: alfalfa, apples, small fruit, tree soft fruits, cucumbers, red clover and vegetable seeds.

It appears that in the fruit growing areas these crops are receiving adequate pollination by the honey bees. There has been research work done on pollination of Alsike Clover.

The beekeeper is interested in pollination, but the honey crop is of first importance in most cases.

The fruit and seed growers are definitely interested in honey bees for pollination. It is felt that in most cases the bee is doing an unrecognized job of pollination. Sixty colonies at the rate of 2 per acre, less than recommended were placed on Red Clover at Grand Forks. The results did not show up well on account of poor weather.

ALBERTA

In Alberta, Sweet Clover, Alsike and some Alfalfa and Rape crops are being pollinated by honey bees. It is reported that these crops are not receiving adequate pollination, but with better co-operation between the beekeeper and the grower this could be improved. Research has been done on Alsike pollination here. Beekeepers are interested in pollination, but few are deriving much benefit from it. It appears that about 10% of the growers are aware of the value of the honey bee. It is agreed that the honey bee is doing a better job of pollination than it gets credit for.

Some individual seed growers are co-operating with the Department of Agriculture on pollination studies in Alberta. Alberta reports that wild bees are noticeably fewer this year due to poor weather this spring.

SASKATCHEWAN

In Saskatchewan, Rape, Alfalfa, Sweet Clover and Red Clover are being pollinated by the honey bee. It is thought that these crops are not receiving adequate pollination in Saskatchewan. There has been research work done on Alfalfa and some preliminary work started on Red Clover in 1954.

Beekeepers do not seem to be interested in pollination work, other than to obtain locations for honey production.

The seed growers are interested, but not to the point where they will pay for bees for pollination, except in a very few cases. Bees are doing an unrecognized job of pollination here.

The Dominion Entomological services are carrying on some pollination studies in Saskatchewan.

MANITOBA

Crops that are being pollinated by the honey bee are: Sweet Clover, Alsike, Alfalfa, Red Clover, Sunflower and Cucumber. These crops are not being adequately pollinated.

In Manitoba, there has been research work done on pollination of Red Clover and Sunflower.

Beekeepers are interested in pollination, but are not doing anything about it.

The seed growers are interested in bees for pollination of Sunflowers, Red Clover, Sweet Clover and Cucumbers.

Beekeepers of Manitoba think that bees here are not getting credit for the work they are doing for the grower.

The University, the Altona Co-operative Oil Plant and the individual seed growers are helping with the pollination research work here in Manitoba.

ONTARIO

In Ontario the following crops are being pollinated by the honey bee: tree fruits, small fruits, Red Clover, Alsike, Ladino Clover, Birds Foot Trefoil and Cucumbers. In Ontario cucumbers are receiving adequate pollination, but it is thought that the other crops are not being pollinated as well as they should be.

Pollination studies have been carried out on Alsike, Red Clover, Ladino, fruit and cucumbers.

Very few beekeepers seem to be interested in pollination in Ontario, but the seed growers are interested in some areas of Ontario. The honey bee is being recognized for the pollination work that it is doing. More interest is being shown in fruit pollination.

The legume research committee and the tree fruits research committee are doing work on pollination in Ontario.

QUEBEC

In Quebec the fruits and cucumbers are being pollinated by the honey bee. In some cases, the bees are given credit for the work that they are doing. A few beekeepers are showing interest in pollination work.

The fruit growers here are interested in improved pollination. In the small orchard the bees are not given full credit for the pollination they are doing. Some cucumber growers and larger apple growers are renting bees for pollination purposes.

MARITIMES

Mr. Horsburgh reports that crops being pollinated by bees are apples, peaches, pears, Red Clover, Alsike, Ledeno, Alfalfa and cucumbers, and in Prince Edward Island and New Brunswick vegetable seeds, especially turnip seed. None of these crops are being properly pollinated. The honey bee can be used successfully on all of these crops. Beekeepers are interested in pollination, especially in the Annapolis Valley. A few growers of blueberries and cranberries are showing interest in the bees for pollination this summer, with good results. Bees in the Maritimes are doing a better job of pollination than the growers realize. There is a greater demand for package bees for pollination purposes in the apple orchards in 1955, than has been shown before.

There is some research work being done on pollination of apples in the Maritimes. The Provincial and Dominion Entomologists are co-operating with the Provincial Apiarists in taking counts of bees visiting trees in orchards. The United Fruit Company is assisting in supplying pollen and bee inserts and is giving publicity to the pollination by honey bees through their paper, the "Post Road."

A large number of the provinces listed alfalfa as one of their crops, but all seemed to think that the bees were of very little value for pollinating this crop.

There was not much research work done on alfalfa in 1954 on account of the poor weather that prevailed across Canada.

S. L. HAND