

CANADIAN BEEKEEPERS' COUNCIL

MINUTES

SEVENTEENTH ANNUAL MEETING

NOVEMBER 4 - 6

1957

EDMONTON, ALBERTA.



CANADIAN BEEKEEPERS' COUNCIL

MARITIME BEEKEEPERS' ASSOCIATION

M. S. Horsburgh,  
Cambridge, N.S.

\*

ASSOCIATION DES APICULTEURS  
DE LA PROVINCE DE QUEBEC

Rene Brasseur,  
306 East Craig St.,  
Montreal, P. Q.

\*

LES PRODUCTEURS DE MIEL DU QUEBEC

O. Paradis,  
St. Simon, Co. Bagot,  
Quebec.

\*

ONTARIO BEEKEEPERS' ASSOCIATION

Victor Mesley,  
Kemptville, Ont.

\*

ONTARIO HONEY PRODUCERS CO-OP LTD.

H. C. Allen,  
27 Glenellen Drive, W.,  
Toronto 18, Ont.

\*

MANITOBA BEEKEEPERS' ASSOCIATION

S. J. Lye,  
Oakville, Man.

\*

MANITOBA CO-OP HONEY PRODUCERS LTD.

Paul Uhrin,  
Austin, Man.

\*

SASKATCHEWAN BEEKEEPERS' CO-OP ASS'N

C. E. Mellicke,  
102 - 23rd St. E.,  
Prince Albert, Sask.

\*

SASKATCHEWAN HONEY PRODUCERS CO-OP LTD.

R. M. Pugh,  
Tisdale, Sask.

\*

ALBERTA HONEY PRODUCERS CO-OP LTD.

P. Kowalski,  
11219 - 101st St.,  
Edmonton, Alta.

\*

BRITISH COLUMBIA HONEY PRODUCERS ASS'N

G. V. Wilkinson,  
1870 Ruby Road,  
Victoria, B. C.

\*

G. W. H. Reed,  
R.R. 1, Glenmore Drive,  
Kelowna, B. C.

\*

CANADIAN HONEY PACKERS ASSOCIATION

F. R. Garland,  
123 Bannatyne Ave.,  
Winnipeg, Man.

HONOURARY MEMBERS

J. W. Braithwaite,  
Brandon, Man.

P. C. Colquhoun,  
Maple Creek, Sask.

C. B. Gooderham,  
Ottawa, Ont.

G. H. Pearcey,  
Kelowna, B. C.

T. H. Shield,  
Toronto, Ont.

J. N. Dymont,  
Smithville, Ont.

Mrs. H. Grace,  
Madison, Wis., U. S.A.

F. R. Armstrong,  
Ottawa, Ont.

W. H. Turnbull,  
Vernon, B. C.

PAST PRESIDENTS

1940-1	W. R. Agar, Brooklyn, Ont.
1942	S. M. Deschenes, Montreal, P. Q.
1943	J. W. Braithwaite, Brandon, Man.
1944	P. C. Colquhoun, Maple Creek, Sask.
1945	A. T. Brown, Peterborough, Ont.
1946	W. E. Phillips, Dauphin, Man.
1947-9	F. R. Garland, Winnipeg, Man.
1950-1	J. N. Dymont, Smithville, Ont.
1952	P. Kowalski, Edmonton, Alta.
1953-4	W. H. Turnbull, Vernon, B. C.
1955-6	H. C. Allen, Toronto, Ont.

PAST SECRETARY-TREASURERS

1940	W. T. Patterson, Winnipeg, Man.
1941-8	R. M. Pugh, Tisdale, Sask.
1949	W. G. LeMaistre, Edmonton, Alta.
1950-7	R. M. Pugh, Tisdale, Sask.



MINUTES

CANADIAN BEEKEEPERS' COUNCIL

Seventeenth Annual Meeting

Monday, November 4th, 1957, 9 A.M.

\* \* \* \* \*

Present: Members: S.J. Lye, O. Paradis, Rene Brasseur, F.A. Anderson, H.C. Allen, P. Uhrin, S.L. Hand, R.M. Pugh, Leo Fuhr, P. Kowalski, Alan Graham, G.W.H. Reed, F.R. Garland.

Visitors: C.E. Meilicke, Prince Albert, Sask., D.R. Robertson, Provincial Apiarist, Manitoba, 153 Legislative Bldg., Winnipeg, Man., D. McCutcheon, Provincial Apiarist, Sask., Plant Industries Branch, Admin. Bldg., Regina, Sask., F.R. Armstrong, Honey Specialist, Ottawa, Ont., C.A. Jamieson, Dominion Apiarist, Dominion Experimental Farm, Ottawa, Ont., J. Smith, Beaverlodge, Alta., J. Edmonds, Supervisor of Apiculture, Terrace Bldg., Edmonton, Alta., S.E. Bland, Assistant Apiarist, Plant Industries Branch, Admin. Bldg., Regina, Sask., G.F. Townsend, Provincial Apiarist, Ontario, O.A.C., Guelph, Ont., Paul Pawlowski, Manager, Alberta Honey Co-op, Edmonton, Alta., T.H. Shield, Manager, Ontario Honey Co-op, Toronto, Ont., Pete Pankiw, Apiarist, Dominion Experimental Farm, Beaverlodge, Alta., H.C. Bird, General Manager, Hodgson Bee Supplies, New Westminster, B.C., Jack Read, Red Deer, Alta., J. Corner, Provincial Apiarist, Vernon, B.C.

The Secretary read the Notice of Meeting.

The President asked for nominations for scrutineers.

C.A. Jamieson was nominated by Kowalski.  
J. Edmonds was nominated by Graham.

There being no further nominations, the President declared Jamieson and Edmonds scrutineers.

Moved by Kowalski, seconded by Brasseur:

1. THAT D. R. Robertson and J. Edmonds be a Press Committee. CARRIED

Moved by Pugh, seconded by Allen:

2. THAT the Minutes of the November 26th-28th, 1956, Annual Meeting be approved. CARRIED

Moved by Pugh, seconded by Allen:

3. THAT the audited financial statement for the period ending January 31st, 1957, be approved. (Appendix I) CARRIED

Moved by Kowalski, seconded by Reed:

4. THAT the interim financial statement for the period ending October 31st, 1957, be approved. (Appendix II) CARRIED

President Lye reported the progress on:

1. Farm Improvement Loans for Beekeepers.
2. Unemployment Insurance Investigation.
3. The visit to Ottawa re Embargo.

Moved by Garland, seconded by Allen:

5. THAT the Executive of Council watch the honey market closely and take all necessary action to secure an Embargo on importations of honey.

CARRIED

Moved by Paradis, seconded by Allen:

6. THAT a committee be formed to study the levy question and Council's activities.

CARRIED

Moved by Reed, seconded by Uhrin:

7. THAT discussion on the levy and Council's activities be scheduled for 1:30 P.M., November 5th.

CARRIED

Moved by Garland, seconded by Allen:

8. THAT a letter of appreciation be forwarded to Mr. Harry White for his assistance to the Council Executive during its recent visit to Ottawa.

CARRIED

A report of the Advertising Committee was given by F. R. Garland.  
(Appendix III)

Moved by Garland, seconded by Uhrin :

9. THAT the report of the Advertising Committee be accepted.

CARRIED

Moved by Allen, seconded by Garland:

10. THAT the report of the Royal Winter Fair and Canadian National Exhibition Committee as presented by H. C. Allen, be accepted.

(Appendix IV)

CARRIED

Moved by Garland, seconded by Uhrin:

THAT Council adjourn until 1:30 P.M.

CARRIED



Monday, November 4th,  
1:30 P.M.  
-----

Present: Members: Lye, Paradis, Brasseur, Anderson, Allen, Uhrin, Hand,  
Pugh, Kowalski, Graham, Reed, Garland, Fuhr.

Visitors: Charles Armstrong, Fruit & Honey Inspector, Edmonton,  
Alberta, Jim Ferguson, Fruit & Honey Inspector,  
Edmonton, Alberta.

A report was received from each Province on their levy position, and the whole matter of levy and Council was thoroughly discussed.

C. A. Jamieson gave a report for the Export-Import Committee.  
(Appendix V)

Moved by Kowalski, seconded by Anderson:

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

Moved by Allen, seconded by Reed:

12. THAT the report of the Honey Marketing Legislation Committee,  
prepared by G. V. Wilkinson, be received.  
CARRIED

Moved by Paradis, seconded by Allen:

13. THAT the report of the Council Publicity and Public Relations  
Committee, as given by P. Kowalski, be received.  
(Appendix VI)  
CARRIED

A report on Unemployment Insurance was given by George Reed.  
(Appendix VII)

Moved by Allen, seconded by Anderson:

14. THAT the Council reports on Workmen's Compensation be  
published in The Canadian Beekeeper.  
CARRIED

Moved by Allen, seconded by Reed:

15. THAT Council furnish the Hodgson Bee Supply Company with their  
current order of "The Story of Honey" on the same basis as  
supplied other Associations, one-half cost.  
CARRIED

Moved by Uhrin, seconded by Paradis:

16. THAT \$100.00 be granted by Council to the Alberta Beekeepers'  
Association towards the cost of a permanent Float, with the  
request that Council's name be incorporated on the Float.  
CARRIED

Adjournment was moved by Fuhr, seconded by Allen.

CARRIED

Tuesday, November 5th,  
9:00 A.M.

Present: Members: Lye, Paradis, Brasseur, Anderson, Allen, Uhrin, Hand,  
Pugh, Kowalski, Graham, Reed, Garland, Fuhr.

Visitors: Harry Bird, C. A. Jamieson, J. Corner, D. Robertson,  
Paul Pawlowski, C. E. Meilicke, D. A. McCutcheon,  
S. E. Bland, L. Regemy, Edmonton, Alberta, G. Townsend,  
T. Shield, Pete Pankiw.

The report of the Grading Committee was presented by Paradis.

Moved by Paradis, seconded by Allen:

17. THAT the following recommendations of the Grading Committee be approved.

CARRIED

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

THAT neither type nor size of crystal, nor firmness of set in granulated honey shall constitute a grade requirement.

THAT Canada No. 1 granulated honey shall have a firm set.

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

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

RESOLVED that the moisture requirements 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.)

THAT the maximum moisture requirement for No. 1 pasteurized honey be 20%.

THAT moisture requirements for unpasteurized honey which has not been treated and declared as liquid remain as follows: Canada No. 1 up to 17.8%, Canada No. 2 over 17.8% to 18.6%, Canada No. 3 over 18.6% to 20%, Substandard over 20%.

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.

(Garland Opposed)

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

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.



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

THAT creamed honey shall meet the minimum texture requirements of a No. 1 granulated honey as defined in the regulations.

THAT new containers shall be used for all consumer pack honey in Canada No. 1, Canada No. 2 and Canada No. 3 grades.

THAT use of bulk containers be permitted if condition clean and sound.

THAT honey imported in consumer containers be subject to Canadian grading regulations.

THAT all liquid imported or domestic honey be required to be marked 'Liquid'.

The meeting was adjourned.

Tuesday, November 5th,  
1:30 P.M.  
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Present: Members: Lye, Paradis, Brasseur, Anderson, Allen, Uhrin, Hand, Pugh, Kowalski, Graham, Reed, Garland, Fuhr.

Visitors: G. Townsend, D. A. McCutcheon, C. A. Jamieson, T. Shield, S. E. Bland, D. Robertson, Pete Pankiw, Harry Bird, Paul Pawlowski, J. Smith, J. Edmonds, F. A. Armstrong.

The report of the Research Committee was presented by G. F. Townsend, assisted by C. A. Jamieson and Pete Pankiw. (Appendix VIII)

Moved by Allen, seconded by Reed:

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

CARRIED

Moved by Allen, seconded by Anderson:

19. THAT the Research Committee be requested to study the effect of filtration on honey. (Garland Negative)

CARRIED

Report of Council Levy Committee was given by Garland. The main recommendations of the Committee were as follows:

1. THAT Council cease direct advertising.
2. THAT no further surplus be budgeted for.
3. THAT the 1958 Budget be \$15,000.00.

How 1958 Funds to be Raised

1. Reduce levy to 1/10th cent per pound in Manitoba, Saskatchewan, Alberta, British Columbia and the Maritimes, and continue to collect as at present, through the Container Companies.
2. Ontario and Quebec assessment to be 1/20th cent per pound based on D. B. S. figures of production for the previous year.

Moved by Garland, seconded by Kowalski:

20. THAT the container levy be reduced to 1/10th cent per pound and the provinces to have the option to continue their present deductions on this basis or 1/20th cent per pound of their production for the previous year.

CARRIED  
UNANIMOUSLY

Report of the Constitution and Procedure Committee was given by Paradis.

Moved by Paradis, seconded by Hand:

21. THAT the bylaws as printed be approved with the correction noted under "Quorum".

CARRIED

The report of the Honey Competitions and Exhibitions Committee was given by Robertson. (Appendix IV)

Moved by Garland, seconded by Paradis:

22. THAT the report of the Honey Competitions Committee be received.

CARRIED

Moved by Fuhr, seconded by Garland:

23. THAT Council request the removal of the special charges for Customs clearance of package bees and queens imported into Canada on Saturdays, Sundays and legal holidays.

CARRIED

Moved by Kowalski, seconded by Paradis:

24. THAT the question of setting up a Council Exhibit during the British Columbia Centennial at the Pacific National Exhibition be tabled.

CARRIED

Adjournment was moved by Kowalski.

CARRIED

Wednesday, November 6th,  
9:00 A.M.

Present: Members: Lye, Paradis, Brasseur, Anderson, Allen, Uhrin, Hand, Pugh, Kowalski, Graham, Reed, Garland, Fuhr.

Visitors: C. E. Mellicke, Pete Pankiw, D. A. McCutcheon, J. Smith, D. Robertson, J. Corner, C. A. Jamieson, S. E. Bland, Mrs. Harriett Grace, Director, American Honey Institute.



Moved by Hand, seconded by Uhrin:

25. WHEREAS Council considers the commercial class of National Shows a worthwhile effort to bring before the public well packaged, properly graded honey and,

WHEREAS this class is not sufficiently contested by the commercial producers,

THEREFORE BE IT RESOLVED that Council conserve means whereby commercial beekeepers might be encouraged to enter in the commercial class.

Moved by Allen, seconded by Uhrin:

26. THAT this question be tabled for one year.

CARRIED

Moved by Hand, seconded by Kowalski:

27. WHEREAS Honey Competitions do much to advertise honey and,

WHEREAS more exhibitors should be encouraged to enter in National Shows, and,

WHEREAS many would-be exhibitors are reluctant to enter in Competitions against the more experienced exhibitors,

THEREFORE BE IT RESOLVED that the Canadian Beekeepers' Council recommend to the Committee in charge of Honey Competitions, the institution of a novice class for liquid white honey, open to exhibitors who have not won a prize at the Show during the preceding five years.

CARRIED

The report of the Pollination Committee was given by Alan Graham.  
(Appendix X)

Moved by Graham, seconded by Reed:

28. THAT the report of the Pollination Committee be accepted.

CARRIED

Moved by Hand, seconded by Paradis:

29. WHEREAS the Express classification for package bees is one and one-half times the first class rate and,

WHEREAS this classification seems unwarranted, since no special service is furnished by the Express Company,

THEREFORE BE IT RESOLVED that the Canadian Beekeepers' Council take such action as is possible to have the classification of package bees lowered to first class.

CARRIED

Moved by Fuhr, seconded by Reed:

30. THAT an invitation be sent to Dr. Crane to visit all provinces in Canada during 1958.

An Amendment was moved by Paradis:

31. THAT the matter be referred to the Council Committee authorized to promote such a visit at no expense to Council.  
(Lacking a seconder the Amendment was ruled out)

An Amendment was moved by Allen, seconded by Hand:

32. THAT the Executive be authorized to pay one-third the cost if necessary.

LOST

Moved by Hand, seconded by Anderson:

33. THAT further action on this matter be tabled until after the Budget discussion.

CARRIED

Mrs. Harriett Grace, Director of the American Honey Institute, gave her report on the publicity work done in Canada for the Canadian Beekeepers' Council during 1957. She showed that a greatly increased number of widely distributed Newspapers and Magazines were requesting her material.

Wednesday, November 6th,  
1:30 P.M.

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Present: Members: Lye, Paradis, Brasseur, Anderson, Allen, Uhrin, Hand, Pugh, Kowalski, Graham, Reed, Garland, Fuhr.

Visitors: C. E. Meilicke, Pete Pankiw, D. A. McCutcheon, J. Smith, D. Robertson, J. Corner, C. A. Jamieson, S. E. Bland, Mrs. Harriett Grace, Tom Shield.

Moved by Kowalski, seconded by Reed:

34. THAT the Audit Department of Federated Co-operatives be Auditors for the Council for 1957 - 58.

CARRIED

Moved by Fuhr, seconded by Reed:

35. THAT we recommend that a special effort be made to have the Annual Meeting of the Canadian Beekeepers' Council held in British Columbia during their Centennial celebration.

CARRIED  
UNANIMOUSLY



T. H. Shield was asked to take the Chair and conduct the elections.

Nominations were requested for President.

S. J. Lye was nominated by Kowalski.

Moved by Fuhr, seconded by Hand:

36. THAT nominations cease.

CARRIED

Nominations for Vice-President were requested.

Paradis was nominated by Allen.

Moved by Garland, seconded by Anderson:

37. THAT nominations cease.

CARRIED

For the position of Secretary-Treasurer, Pugh was nominated by Paradis.

Moved by Reed, seconded by Uhrin:

38. THAT nominations cease.

CARRIED

The Chairman declared that the officers for the coming year were:

President	S. J. Lye
Vice-President	O. Paradis
Secretary-Treasurer	R. M. Pugh

Moved by Graham, seconded by Allen:

39. THAT the following Budget be approved.

Publicity:

American Honey Institute	3,500.00	
Council News and Publicity	600.00	4,100.00
Honey Exhibitions		1,500.00
British Bee Research Ass'n	150.00	
Apimondia	15.00	
Maritime Beekeepers' Ass'n	250.00	
Sundry	50.00	465.00
Travel Expenses		1,000.00
Office and Operating Expenses		2,400.00
Annual Meeting		2,900.00
Contingencies		<u>2,635.00</u>
		<u>15,000.00</u>

CARRIED

Moved by Garland, seconded by Allen:

40. THAT Council continue to be disturbed by the effect of imported honey on the Canadian honey market, and request the Executive to continue its efforts to secure an embargo on imported honey.

CARRIED

Moved by Fuhr, seconded by Reed:

41. THAT the Canadian Beekeepers' Council support a honey display from the provinces to the extent of \$200.00, for the British Columbia Centennial at the Pacific National Exhibition.

CARRIED

Moved by Kowalski, seconded by Allen:

42. THAT Council retain its 3%, 1966 Dominion of Canada Bond for the present.

CARRIED

Moved by Reed, seconded by Fuhr:

43. THAT a vote of thanks be given to the B. C. Tree Fruits for its donation of a box of MacIntosh apples, and that a letter of appreciation be sent to the B. C. Tree Fruits by the Secretary.

CARRIED

Moved by Graham, seconded by Kowalski:

44. THAT Council express its thanks through Mr. Brewer, to the Continental Can Company, for the gift packages distributed to Council members by the Continental Can.

CARRIED

Moved by Paradis, seconded by Garland:

45. THAT a letter of appreciation be forwarded to Jim Jack and the Continental Can Company for the enjoyable Luncheon.

CARRIED

Adjournment was moved by Graham.

CARRIED



CANADIAN BEEKEEPERS' COUNCIL  
Tisdale, Saskatchewan

STATEMENT OF RECEIPTS AND EXPENDITURES  
for the year ended January 31, 1957

RECEIPTS

Cash on Deposit, January 31, 1956			
Bank of Nova Scotia	\$ 1,228.34		
Advertising Fund	<u>12,340.12</u>		\$13,568.46
Dominion of Canada Bonds 1966			<u>15,000.00</u>
			\$28,568.46
Container Levy			
Atlas Paper Box Company	1,019.19		
Alberta Beekeepers' Association	59.91		
Continental Can Company	16,106.18		
Ontario Beekeepers' Association	6,905.15		
British Columbia Honey Producers	<u>300.47</u>		24,390.90
Interest on Bonds			722.02
Capital Gain on Bonds			<u>225.00</u>
Total Receipts			<u>\$53,906.38</u>

EXPENDITURES

Advertising			\$ 9,995.61
Publicity			
American Honey Institute		\$ 4,500.00	
Sports College - Regular Publicity	\$1,700.00		
- Special Publicity	<u>1,300.00</u>	<u>3,000.00</u>	7,500.00
Honey Exhibits			
Manitoba Beekeepers' Association		200.00	
CNE and Royal Winter Fairs		<u>176.56</u>	376.56
Trophies			57.05
Story of Honey			2,612.35
British Bee Research Association			150.00
Maritime Beekeepers' Association			205.92
Travel Expense			842.80
Annual Meeting Expense			3,194.23
Administration			
Stationery & Printing		\$ 168.17	
Postage		65.97	
Telephone & Telegraph		157.51	
Exchange		45.09	
Bond Premium		21.88	
Flowers		66.14	
Audit and Legal		75.00	
Salaries - Secretary-Treasurer	\$1,000.00		
- Others	<u>800.00</u>	<u>1,800.00</u>	
Miscellaneous		<u>8.90</u>	<u>2,408.66</u>
			\$27,343.18
Accounts Receivable			
Sask. Honey Co-op		203.08	
American Honey Institute		1,211.00	
Ontario Honey Producers Co-op		336.23	
Interest on Bonds		920.50	
Travel Advance (R.M. Pugh)		<u>50.38</u>	2,721.19
Dominion of Canada Bonds 1966			15,000.00
Cash on Deposit Bank of Nova Scotia, January 31, 1957	5,501.89		
Advertising fund	<u>3,340.12</u>		<u>8,842.01</u>
			<u>\$53,906.38</u>

CANADIAN BEEKEEPERS' COUNCIL  
Tisdale, Saskatchewan

STATEMENT OF RECEIPTS AND EXPENDITURES  
January 31, 1957 to October 31, 1957

RECEIPTS

Cash on Deposit, January 31, 1957		
Bank of Nova Scotia	\$5,501.89	
Advertising fund	<u>3,340.12</u>	\$ 8,842.01
Dominion of Canada "Bearer Bonds"		<u>15,000.00</u>
		<u>\$23,842.01</u>
Accounts Receivables Collected		
American Honey Institute	1,211.00	
Sask. Honey Producers Co-op	203.08	
Bond Interest	<u>450.00</u>	1,864.08
Container Levy		7,918.50
1957 Continental Can Company		<u>\$33,624.59</u>

EXPENDITURES

Advertising		\$ 736.01
Story of Honey (Hodgson's)		1,112.57
Publicity		
American Honey Institute		3,270.02
Honey Exhibits		
Canadian National Exhibition	\$ 485.00	
Royal Winter Fair	<u>700.00</u>	1,185.00
Trophies		70.92
British Bee Research Association		150.00
Maritime Beekeepers' Association		254.88
Travel Expense		629.30
Travel Advance		313.55
Annual Meeting Expense		20.00
Administration		
Audit	\$ 30.00	
Legal	52.00	
Stationery & Printing	465.94	
Postage	23.34	
Telephone & Telegraphs	85.06	
Exchange	15.31	
Miscellaneous	11.80	
Directors	15.00	
Salaries - Secretary-Treasurer	\$1,000.00	
- Others	<u>550.00</u>	<u>1,550.00</u>
		<u>2,248.45</u>
		\$ 9,990.70
Dominion of Canada "Bearer Bonds" 3% 1966		15,000.00
Bank Balance, October 31, 1957	\$1,793.77	
Advertising Fund	<u>6,840.12</u>	<u>8,633.89</u>
		<u>\$33,624.59</u>



REPORT OF ADVERTISING COMMITTEE

With an additional carry over of 1956 crop coupled with a substantial increased volume of white honey production from the 1957 crop it appeared to some members logical and sound for Council to again engage in direct advertising to the very limit of its resources.

Your Advertising Committee however was hampered by two considerations, namely:

- (1) Limitation of revenue
- (2) The expressed viewpoint of some members that Council should "Divorce itself from advertising except on a publicity basis such as Fairs, American Honey Institute, etc."

Nevertheless, a small direct advertising campaign was conducted in Western Canada consisting of sixteen insertions, of fifty line advertisements on Wednesdays and Fridays, September 11th to November 1st. Initially this advertising was planned for insertion in each of the leading papers from the Lakehead to and including British Columbia. On the recommendation of the Alberta members, the campaign in Alberta and British Columbia was cancelled. (See schedule 1 for details)

Total cost of space in Ontario, Manitoba & Saskatchewan	- \$ 840.00
Total cost of space in Alberta and British Columbia	- \$ 183.00
	(Before cancellation )
	<u>                    </u>
Total Cost	<u>\$1023.00</u>

Respectfully submitted on behalf of your Advertising Committee.

F. R. GARLAND

1957 FALL ADVERTISING

Running: 16 insertions of 50 line advertisements on  
Wednesdays and Fridays, September 11 to November 1  
(Space requested on Women's Page)

<u>PLACE</u>	<u>PUBLICATION</u>	<u>CIRC.</u>	<u>TOTAL SPACE</u>	<u>RATE</u>	<u>COST</u>
Port Arthur	News-Chronicle	13,320	800 Ls.	.10	\$ 80.00
Fort William	Times-Journal	14,713	"	.10	80.00
Winnipeg	Free Press	117,997	"	.30	240.00
Winnipeg	Tribune	72,604	"	.22	176.00
Regina	Leader-Post	48,352	"	.17	136.00
Saskatoon	Star-Phoenix	38,202	"	.16	128.00
					<u>\$ 840.00</u>

September 11 to November 1, 1957

Schedule in Daily Newspapers

Port Arthur News-Chronicle	)	<u>September 11</u>	<u>September 13</u>	<u>September 18</u>
Fort William Times Journal	)	Ad. 501	Ad. 502	Ad. 503
Winnipeg Free Press	)	School Lunches	Quick Snacks	My Family
Winnipeg Tribune	)	50 x 1	25 x 2	25 x 2
Regina Leader-Post	)			
Saskatoon Star-Phoenix	)	<u>September 20</u>	<u>September 25</u>	<u>September 27</u>
		Ad. 504	Ad. 505	Ad. 506
		Mom Don't Forget	Mealtime Favourite	Energy
		50 x 1	25 x 2	25 x 2
		<u>October 2</u>	<u>October 4</u>	<u>October 9</u>
		Ad. 507	Ad. 501	Ad. 502
		Good Mornings	School Lunches	Quick Snacks
		25 x 2	50 x 1	25 x 2
		<u>October 11</u>	<u>October 15</u>	<u>October 17</u>
		Ad. 503	Ad. 504	Ad. 505
		My Family	Don't Forget	Mealtime Favourite
		25 x 2	50 x 1	25 x 2
		<u>October 22</u>	<u>October 24</u>	<u>October 30</u>
		Ad. 506	Ad. 501	Ad. 504
		Energy	School Lunch	Don't Forget
		25 x 2	50 x 1	50 x 1
		<u>November 1</u>		
		Ad. 507		
		Good Mornings		
		25 x 2		



REPORT OF OPERATION OF BOOTH AT C. N. E.

1 9 5 7 .

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The management of this Booth has been a lot of work, a lot of pleasure and a lot of education. We, Mrs. Allen and myself, meet and talk to thousands each year who are eating our product. If we had on paper the good things that we have been told and what it has done for them, it would fill a book. The most of them come from people who like myself, are past middle age. I will just relate one. A medical doctor who was a neighbour, told me several times that when he was sixty years of age he was sent home from the hospital with a heart condition and was advised to straighten up his business as he didn't have long to spend in this world. He died recently, eighty three years of age. He said that honey was the main contributing factor in keeping him going. About the same story comes from hundreds, mostly elderly people with heart conditions, so be sure to keep the honey pot on the table.

You will see by the financial statement that we are still forging ahead. I believe that last year I told you that we had just about reached the limit. You will not hear me say that again, because in spite of the fact that there have been beautiful buildings built, the Food Building is still the favourite with the ladies and visitors are increasing in numbers, also their questions about honey are on the increase.

Judging from the voluntary statements given us from honey users, our product will cure or help about all diseases except cancer.

H. C. ALLEN

ROYAL WINTER FAIR

1 9 5 7

OPERATING ACCOUNT

			<u>LAST YEAR</u>
SALES		1,964.72	<u>2,354.75</u>
<u>COST OF SALES</u>			
Honey purchases		<u>1,405.80</u>	<u>1,719.20</u>
		558.92	635.55
<u>OPERATING EXPENSES</u>			
Shopping Bags	142.80		
Labels	8.90		
Management	150.00		
Wages	148.00		
Booth	<u>112.97</u>	<u>562.67</u>	<u>375.95</u>
Surplus			259.60
Deficit		3.75	

BOOTH OPERATIONS

C N E and R W F

1 9 5 7

SURPLUS ACCOUNT

Balance forward from Canadian National Exhibition			354.99
Advance from Council		700.00	
Less C N E Deficit		<u>345.01</u>	
<u>D E D U C T</u>			
Special Honey Advertising			
Canadian Grocer	183.69		
Toronto Telegram	<u>70.00</u>	253.69	
Rose Bowl		18.76	
Replicas and Shields		30.25	
Deficit from Royal Winter Fair (1957)		<u>3.75</u>	<u>306.45</u>
SURPLUS			<u>48.54</u>



CANADIAN NATIONAL EXHIBITION BOOTH

1 9 5 7 .

OPERATING ACCOUNT

		<u>LAST YEAR</u>
SALES		\$5,541.78
		\$5,737.63
Purchases		
Honey	4,791.22	
Less - Inventory of Honey on Hand	<u>594.00</u>	
		<u>4,037.08</u>
		4,197.22
Gross Margin		1,504.70
		1,540.41
Expenses of Operation		
Booth	1,167.99	
Wages	496.80	
Administration	150.00	
Bank Charges	6.75	
Freight	36.88	
Parking and Passes	17.00	
Audit	<u>10.00</u>	
		<u>2,175.64</u>
		1,885.42
Operating Deficit		670.94
		<u>345.01</u>

RECONCILIATION

Cash in Bank		\$1,253.38
Cash for deposit		<u>44.92</u>
		1,298.30
Inventory on Hand		
Honey (54 cases Comb)	594.00	
Shopping Bags	230.17	
Labels	<u>35.60</u>	
		<u>859.77</u>
		2,158.07
Accounts Remaining to be Paid		
C. N. E. Rent		845.00
Garfield Stewart		<u>958.08</u>
		<u>1,803.08</u>
		354.99
Receipts from Canadian Beekeepers' Council		700.00
Less Operating Deficit		<u>345.01</u>
		<u>354.99</u>
		<u>354.99</u>

BOOTH OPERATIONS

C N E and R W F

1 9 5 7

RECONCILIATION

Cash in Bank		1,840.67	
Accounts Receivable			
J. F. Anderson		25.00	
Cash for Deposit		24.75	
Inventory			
2,500 Shopping Bags	87.37		
3,000 Labels	26.70	114.07	
	<u>          </u>	<u>          </u>	2,004.49
Outstanding Cheques		1,104.33	
Accounts Payable			
W. J. Bell	6.62		
CBC for rent at CNE Exhibit	845.00	891.62	
	<u>          </u>	<u>          </u>	1,955.95
Surplus			<u>48.54</u>

EXHIBITION BOOTH OPERATIONS

YEAR 1957

C E R T I F I C A T E

I have examined the books and records, relevant to the within accounts, and find that these, as presented, give a true picture of the conduct of these operations, together with the net result. All my requirements as Auditor have been complied with.

Signed:           L. A. Inkster       CPA



## REPORT OF EXPORT AND IMPORT COMMITTEE

1957.

Honey Exports

To:	<u>1955</u>		<u>1956</u>		<u>1957</u> *	
	lbs	\$	lbs	\$	lbs	\$
United States	32,085	3,943.00	145,266	20,502.00	2,834	445.00
Belgium	15,125	1,962.00	405,136	64,242.00	.....	.....
W. Germany	11,970	2,023.00	154,000	21,560.00	.....	.....
Netherlands	.....	.....	301,275	42,571.00	336,522	49,950.00
Greece	14,000	2,367.00	.....	.....	.....	.....
Others	13,190	2,035.00	3,210	794.00	.....	.....
<b>TOTALS</b>	<b>86,370</b>	<b>12,330.00</b>	<b>1,008,887</b>	<b>149,669.00</b>	<b>339,356</b>	<b>50,395.00</b>

1957 \* - 6 monthsHoney Imports

From:	<u>1955</u>		<u>1956</u>		<u>1957</u>	
	lbs	\$	lbs	\$	lbs	\$
U.S.A.	5,265,526	787,204.00	3,268,037	513,050.00	2,958,839	440,006.00
Others	292,272	41,912.00	77,136	16,694.00	11,756	4,930.00
<b>TOTALS</b>	<b>5,557,798</b>	<b>829,116.00</b>	<b>3,345,173</b>	<b>529,744.00</b>	<b>2,970,595</b>	<b>444,936.00</b>

Bee Imports - From United States

<u>Year</u>	<u>No. Packages</u>	<u>Value \$</u>
1956	131,781	471,626.00
1957	135,730	496,706.00

Recently the United Kingdom announced that they would permit the importation into their country of a quantity of honey up to the value of \$100,000.00. This purchase is open to those countries in North America operating on a dollar currency.

Commencing in July, 1957, previous import restrictions which practically prevented Canadian honey into West Germany were lifted.

The Dominion Bureau of Statistics have not completed their preliminary report of the crop statistics for this year (1957), but the situation with respect to exports, imports and carry-over to the 1957 - 58 crop year are available.

Honey Supply and Price Situation (Crop Year July 1 to June 30)		
	<u>1956 - 57</u>	<u>1957 - 58</u>
Stocks at July 1	4,683,000	4,213,000
Production	24,272,000	
Imports	4,807,000	
Total Supply	33,762,000	
Exports	1,226,000	
Available for domestic use	28,323,000	
Carry-over at end of year	4,213,000	
Average farm price	.18¢	

C. A. JAMIESON

Appendix VI

PUBLICITY & PUBLIC RELATION & STATISTICAL REVIEW COMMITTEE

British Columbia

The Annual Meeting of the B. C. Honey Producers' Association held in Vancouver received a full report on Council's activities.

All Divisional meetings of the Association were kept advised of the work Council is doing.

A report of the Annual Meeting of Council held in Toronto was carried in "Bee Wise", a publication issued by the Department of Agriculture from the Apiary Office and each issue of "Bee Wise" during the year had an item of interest with reference to the Council.

The Pacific National Exhibition gave considerable publicity to the Silver Shield awarded by Council and the Exhibition of 1958, British Columbia's Centennial Year, promises to be the best ever in the honey classes.

The "Story of Honey" was distributed by a number of producers throughout the province and met with a good reception.

A pamphlet prepared by the Provincial Apiarist on the work Council is doing was sent to every registered beekeeper in the province.

Alberta

Much work was done by the Provincial Apiarist in outlining the work and aims of Canadian Beekeepers' Council at all the Alberta Beekeepers' Association meetings. The Alberta Beekeepers' Association directorate was enlarged to include eight members from all parts of Alberta. Local Beekeepers' Associations were set up and three meetings held, at which time Canadian Beekeepers' Council was a main topic. Through these meetings Alberta beekeepers have become more aware and familiar with Canadian Beekeepers' Council.



The Alberta Beekeepers' Association motions which were presented to Council have been acted upon by Council and the Association and members have been informed on what action has been taken in regards to:

- (1) Farm Improvement Loans - nothing can be done this year and have requested that the Act be changed during the next session of Parliament to include beekeeping.
- (2) Honey containers design change - to date no report from the Committee.
- (3) Lowering of Duty on beekeeping equipment - equipment imported from the U.S.A. is 22% unless it is of a kind not made in Canada, then a duty of 7½% can be claimed.
- (4) Council Advertising of honey in the province was not done this year, because the members felt that it was not needed in Alberta at this time.
- (5) The Alberta Honey Producers Co-operative have held up payment of their levy to Council pending the decision of the Ontario Beekeepers' Association regarding their levy.

Council information on crop reports and request for an embargo on U. S. honey was circulated to all beekeepers.

Council's name was prominently displayed at the Honey Booth at the Edmonton Exhibition. The Alberta Honey Producers Co-operative distributed the "Story of Honey" and recipe booklets. The Alberta Beekeepers' Association purchased and distributed materials from Mrs. Grace of the American Honey Institute.

Council's name was omitted from the Alberta Beekeepers' Float as Council refused to contribute to same. Council should discontinue direct advertising and contribute more towards publicity work, such as Recipe Booklets, Council News, including such articles as "Eat Your Troubles Away" by Lelord Kordel and other valuable information.

### Saskatchewan

A report of Council activities is given at the Annual Meetings of the Beekeepers' Association and the Honey Producers Co-operative. Some mention of Council activities is usually made in Newsletters sent to the beekeepers by the Apiary Division. Council is discussed at some of our beekeepers' Field Days and short courses.

The Provincial Apiarist works closely with Mr. Gray of the Dominion Bureau of Statistics in finalizing the figures on beekeeping in the province. The Apiary Division sends out one questionnaire each Spring asking the number of packages purchased and the number of colonies overwintered. The Dominion Bureau of Statistics sends out questionnaires later in the season, asking beekeepers the number of producing colonies which they have and the yield per colony, also the price per pound which they expect to receive for their honey. Our provincial figures and estimates are used to some extent to bring any obvious over or underestimate in Dominion Bureau of Statistics figures into line.

### Manitoba

The Canadian Beekeepers' Council is publicized to beekeepers at every opportunity. Each year the Manitoba Beekeepers' Association Annual Convention and the Annual Shareholders Meeting at the Manitoba Co-op Honey Producers Limited, the respective Council representatives give reports on



activities of the Canadian body. Council news is written up in issues of Newsletters sent out by the Co-operative and the Provincial Apiarist. The activities of Council were discussed at all Beekeepers' meetings in the province. The Manitoba Co-operative distributes the booklet - "Story of Honey" through which publicity is given to Council.

### Ontario

This season Ontario produced one of the best crops that it has produced for a good many years. The very wet season during 1956 apparently assisted materially in producing an abundance of clover plants. This was followed by a very wet Spring of 1957, which assisted in the growth of these plants and then was followed by ideal weather during July and August for honey production in most sections of the province. The crop was of good quality white honey. There was very little dark honey produced. Honey at the present time is selling quite well. The overall production will likely be 13,000,000 to 14,000,000 pounds from about 140,000 colonies.

The present prospects for next year's crop are fair to good, and there has been an increased interest in beekeeping caused by the production of this year.

The levy situation, however, is not good. Every effort possible was put forward by the Directors of the Ontario Beekeepers' Association towards trying to have our levy situation either strengthened or changed. New legislation was drafted by the Ontario Department of Agriculture in the Fall of 1956 for presentation to the Parliament in the Winter of 1957. However, the House rose before this new legislation was discussed and this, along with many other Agricultural Bills, was left over to 1958.

The levy is still being collected on all honey containers sold to beekeepers within Ontario, except those sold to or through the Ontario Honey Producers Co-operative. The total receipts in levy this year from January 1st, to October 31st, has been \$2,908.35. The bulk of this came up in March, less than \$400.00 having been paid to the Association since the 1st of April. However, at that time there was a \$1,200.00 amount owing to the Continental Can Company on payments which they made to us out of cans sold to the Ontario Honey Producers Co-operative on which they had expected to collect the levy and which was not paid to them. This has been deducted since then. We recently received a cheque for the amount of \$86.00, the balance after clearing up this account.

Any new legislation could not be much better than the legislation which is presently in effect, in that our present legislation is on honey containers which are sold within Ontario and delivered within Ontario, **whereas** if the levy were placed on honey it could not be collected on honey shipped into Ontario or honey produced in Ontario and shipped out of Ontario for sale. All phases of levy collection have been checked with the Department at Toronto and with the Solicitor for the Ontario Federation of Agriculture, Mr. Harris. None of them are convinced that our legislation is not still quite legal and until it is proven otherwise it should still be workable on containers sold within Ontario. However, many can buy containers outside Ontario and it does create a problem on the border of Quebec. It appears at the present time no matter what we do, the system will not be 100% workable, or may be quite a piece from this.



REPORT OF THE UNEMPLOYMENT INSURANCE COMMITTEE

Gentlemen:

At the last Council meeting held in Toronto, Ontario, during November 26th - 28th, 1956, I was appointed as Chairman of the Unemployment Insurance Committee for the purpose of conducting a survey into the question of commercial beekeepers obtaining unemployment insurance for their hired help.

A form letter was drawn up, similar to the one below, and thirty-five copies of this letter were mailed to commercial beekeepers in all provinces with the exception of the Maritimes and Quebec. A list of commercial beekeepers in each province was obtained through the Provincial Apiarists. It is estimated that sixty per cent replies were received. Of those replying to the letter, ninety per cent were in favour of paying unemployment insurance to persons employed during the season's operations.

It would appear that the employees should be made aware of the fact that unemployment insurance is available to them if working entirely for the beekeeping operation, which also includes work in the extracting plant.

Through a Canadian Beekeepers' Council circular letter dated February 23rd, 1957, most Council members were advised of the regulations with respect to the paying of unemployment insurance to beekeeping help. The following extracts from this letter should help to clarify the situation:

1. Beekeeping is an insurable industry if carried on as a separate operation and not as part of mixed farming operations.
2. Employment in honey extracting is also covered by unemployment insurance unless carried on as part of a mixed farming operation.
3. Persons who do not ordinarily derive their livelihood from insurable employment can claim exception while engaged in honey extracting provided they are not employed in excess of 20 weeks per year or more than 10 days in any one period of thirty days. But to comply with Section 75-1(E)(1) they must lodge form 587 A with the employer.

George Reed,  
Chairman,  
Unemployment Ins. Comm.

Dear Sir:

At Council last November I was made Chairman of the Committee to look into the feasibility or possibility of beekeepers receiving Unemployment Insurance for their hired help.

Would you kindly answer the following questionnaire and return to me:

1. Do you hire steady or seasonal help?
2. Are you interested in receiving Unemployment Insurance for your hired help?
3. Does your hired help now enjoy the privilege of receiving Unemployment Insurance? If so, under what category are they hired?

Your information will form the basis of my report and information from individuals will be treated as confidential. Thanking you for your co-operation.

George Reed,  
Chairman,  
Unemployment Ins. Comm.



RESEARCH REPORT

APICULTURE DIVISION  
CENTRAL EXPERIMENTAL FARM

OTTAWA

MANAGEMENTHybrid Stock Testing - Ottawa

The testing of hybrid stock is continuing at Ottawa, Brandon, Kapuskasing, Ste. Anne de la Pocatiere, and Charlettetown. The Experimental Farm is presently testing the two most promising lines against commercial stock obtained from five breeders in the U S A.

Repellents

Tests were conducted with three repellents, glacial acetic acid, "Off", N-N diethyl-m-toluamide and "6-12", ethyl-hexanediol, to determine their potentialities in clearing bees from honey supers. None of these materials was repellent to the honeybee.

Laying Worker Colonies - Beaverlodge

Preliminary tests with nitrous oxide (Laughing Gas) indicate the possible use of this gas in successful introduction of queens in laying worker colonies.

Correlation between the body weights of queen bees and egg production - Ottawa.

Investigations in the Apiculture Division have shown a significant positive correlation between the body weights of queen bees and egg production; the bigger the queen the more eggs produced. The mean weight of 63 queens was found to be 272 plus 4 mgms.; or, the average queen weighs 0.0096 oz.

Royal Jelly Production

We have undertaken a study to examine the economics of royal jelly production. In 1957 we produced slightly over 6 pounds. This jelly is being supplied to certain institutions for research.

DISEASESToxicity of Fumidil B - Ottawa

In studies designed to determine the dosage level of Fumidil B which would control nosema disease in package colonies it was established that this antibiotic was detrimental to the development of the colony. The effect of Fumidil B on the larvae and pupae was investigated but no evidence of mortality was observed.

In subsequent studies in which Fumidil B was fed to bees in cages it was shown that the recommended dosage was definitely toxic. As a consequence new recommendations of the amount of Fumidil B to be used by beekeepers will be established early in 1958.

E.F.B.: Control and Prevention - Beaverlodge

The antibiotic, achromycin, was found to be effective in the control and prevention of E.F.B. Calcium hydroxide or limewater did not show any promise in the control of the disease.



Toxicity of antibiotics to adult honeybees at 1000 ppm.

Terramycin poultry formula 25 was the most toxic followed by terramycin animal formula 25, achromycin, erythromycin and streptomycin.

Nosema

Feeding tests with Fumidil B on colonies with less than 10% infection of nosema, showed a small reduction in yield as compared to colonies not fed Fumidil B.

Control of Nosema and Wax Moth by acetic acid fumigation -Ottawa

Some degree of control of the nosema disease of bees has been secured in the Apiculture Division by fumigating infected comb with fumes from glacial acetic acid for a period of five days. Infection was effected by spraying the comb with viable Nosema spores. Bees placed on the treated comb became only slightly infected with the disease, whereas they became highly infected on untreated infected comb. Evidently, acetic acid fumes are lethal to the Nosema organism at the spore stage.

Acetic acid fumes also killed all stages of the wax moth.

Quinidine Sulphate ineffective against Nosema disease

Quinidine Sulphate, an amoebicidal drug, was found to be ineffective against the Nosema disease of bees, in a test conducted by the Apiculture Division. The drug was fed to inoculated bees at two concentrations. Spore counts taken on the 13th day after inoculation showed the drug to have been ineffective.

Summary of Queen Mortality Survey - 1957

Queens submitted over period from April to July.

	<u>No. Queens Rec'd</u>	<u>Nosema Infected</u>	<u>Per cent Infection</u>
Queens dead in Shipping Cages	77	14	18.0
Queens Superseded	145	30	20.7
Others	8	-	-
<hr/>			
Total of all Queens	230	44	19.0

Note

- (1) One queen was observed to have Melanosis
- (2) None of the superseded queens after June 30 was infected
- (3) In several cases eggs of queen did not hatch.

Amoeba

Some preliminary studies were conducted on Amoeba disease during the year. A badly infected colony was received from New Brunswick. Both Amoeba and Nosema were present in the bees. Attempts to inoculate bees held in cages with the organism causing Amoeba were unsuccessful. The infected colony developed slowly during the summer and wintered without excessive loss of bees.

Septicemia

Septicemia disease of the honeybee adult is caused by bacterium,



Bacillus apisepcticus, which attacks the blood of the insect. The organism penetrates the host through the spiracles and intersegmental membranes only. The symptoms of this disease are similar to those of other diseases of adult bees except that the head, thorax and abdomen separate when handled. Cage trials in which inoculated bees were treated with fumagillin, terramycin and streptomycin failed to inhibit the development of this disease.

The importance of this disease in Canada has not been established.

## BEHAVIOUR

### Drones - Ottawa

In observations on the duration of flights of drones from the hive over 8000 exits and returns of 380 drones were recorded during 1957. The time spent away from the hive ranged widely between a few seconds up to 94 minutes. The duration of the flights was in close relationship to the time of day and to prevailing weather conditions. Most of the drones commenced to fly when they were seven days old. By special treatment one lot of drones was made to shift their flight to the forenoon. This phase of the work will receive further study in 1958.

### Queens

The flights of three queens were recorded by means of a geiger counter wired to a recorder. Radio-active zirconium mixed with cellulose acetate paint was daubed on the thoraces of the queens. The following data are shown regarding the flights of these queens:

	<u>Date hatched</u>	<u>Date of 1st flight</u>	<u>Number of flights</u>	<u>Total duration of all flights</u>
Queen No. 1	Aug. 5	Aug. 11	9	86 minutes
Queen No. 2	Aug. 21	Aug. 26	16	473 "
Queen No. 3	Sept. 18	Oct. 8	1	27 "

### The Importance of Scent in Mating of the Queen Honeybee

Experiments conducted by this Division during the summer of 1957 have shown that the scent gland on the queen bee plays a vital role during the mating flights. Of 33 queens having their scent glands covered with cellulose-acetate paint, only two mated successfully during the normal period. In a control group of 34 queens which were similarly marked but without covering the scent glands, 33 mated.

## HONEY

### Hydroxymethyl furfural and Colour Development in Honey - Ottawa

When levulose and dextrose are heated in an acid medium part of these sugars break down to form hydroxymethyl furfural. This substance undergoes further complex reactions to give rise to coloured material which darkens the sugar solutions. These conditions are approximated in the pasteurizing of honey and hence the hydroxymethyl furfural (HMF) content of honey may be used to measure how much different pasteurizing methods are likely to bring about colour development in honey.

Honey samples were heat-treated in simulation of flash and batch pasteurizing methods. Samples from each treatment were stored at 57 degrees F., at 72 (plus or minus) 5 degrees F. and 100 degrees F. The samples were assayed spectrophotometrically before and at various intervals after treatment. Additional samples were held at the temperature of treatment for 15 minutes to simulate filter-press conditions.



HMF development seems to be independent of treatment temperature and holding times within the limits tested. Storage temperature, however, has a profound effect on the development of HMF.

Heating honey tends to darken its colour during storage. This is shown both by spectrophotometric assay at 550 m/μ and by Pfund readings.

#### Crystallization Inhibitors

Isobutyric acid was added to samples of liquified honey in increments from 0.1% to 1.0% at 0.1% intervals. At additions up to 0.5%, the acid had no effect on crystallization (i.e. samples granulated as rapidly as controls). At 0.6% and above some decrease in crystallization was noted. Unfortunately, isobutyric acid has a pungent sour odour and even at the lowest increment used (0.1%), renders the honey quite unpalatable.

Isobutyric acid was added as above to samples which were recrystallized by a standard technique. The firmness of set of these samples was measured by a penetrometer. The treated samples (up to 0.4% isobutyric acid) set just as firmly as the controls. Samples with 0.5% or more added acid were somewhat softer - the 1.0% samples never firmed sufficiently to give readings.

#### POLLINATION

##### Bees in the Pollination of Cucumbers - Charlottetown

The role of bees in the pollination of cucumbers is illustrated by results obtained at Charlottetown, P.E.I. In this study the yields per acre of cucumbers, under different exposure to pollinators, were as follows: open pollination, with plots visited by apiary bees as well as wild bees - 9,093 lbs; bees caged on plots - 6,665 lbs; bees excluded from plots by cages - no yield.

##### Rape - Brandon

Investigation on the pollination requirements of the rapidly expanding oil-seed rape crop has been conducted at Brandon. Large plastic screened cages were placed over the crop when it commenced to bloom. Half of these cages were supplied with nuclei and the other half contained no pollinators. The seed produced in cages without pollinators was of the same magnitude as that in cages with pollinators. Evidently, rape does not benefit by cross-pollination.

##### Sweet Clover - Beaverlodge

Seed yields of sweet clover fields with honeybees placed for pollination purposes at the rate of one colony per acre were as follows:

White blossom sweet clover (arctic)	1704 pounds per acre
Yellow blossom sweet clover	705 pounds per acre

In cage tests of Arctic the yields were 1600 pounds per acre with bees and 88 pounds per acre without pollinators.

##### Alsike Clover

At one colony per acre an alsike clover field yielded 375 pounds per acre compared to 60 pounds on another field where no bees were provided. Cage tests indicated a yield of 360 pounds with honeybees as against 43 pounds without bees.



## RESEARCH REPORT

ONTARIO AGRICULTURAL COLLEGE

GUELPH

### MANAGEMENT

#### Queen Rearing and Breeding

The hybrid queen production programme continues in co-operation with the United States Department of Agriculture. During 1957, 820 queens were produced and shipped to testing stations.

The programme was varied considerably by doing all the grafting at Guelph and Wisconsin. The queens were hatched in an incubator, marked and shipped to Pelee Island for mating. All queens were produced by double grafting, which seems necessary to partially eliminate variances caused by nutrition.

#### Royal Jelly Production

During the 1957 season approximately 40 pounds of royal jelly was collected from 35 colonies, to be used for research purposes. The jelly was all strained through 100-mesh silk and stored in a deep freeze.

#### Requeening in the Fall

Eighty-four (84) marked queens were introduced in the fall in two yards without dequeening.

In the spring only 15 marked queens were still alive in the colonies.

### HONEY

#### Improvements on Pressure Strainer

Further work on the pressure strainer has shown that maximum efficiency can be obtained by completely filling a 12-inch strainer with specified layers of granite and feeding the honey from the bottom. Details may be found in the O.A.C. Revised Circular 218.

#### Portable Unit

A portable unit for straining honey is now available. This embodies a sump tank, pump, a hot water heat exchanger heated with propane gas by gravity, and a pressure strainer. The unit is available in a 300-pound-per-hour size and can be increased by any multiple of this unit.

#### Honey Refractometer

Through the co-operation of Cave & Company and a Tokyo instrument firm it is expected that we will have available in the near future a refractometer which is designed specifically for honey. It will sell for about \$55.00, and with a drop of honey will immediately indicate whether the moisture is Number 1 or Number 2. This refractometer will only be available at this price if sufficient interest is shown.

### BEE DISEASES

#### Paralysis

A type of bee paralysis has been quite evident in several yards of bees in Ontario during the past two years. In 1957 it affected over 50 per cent of the colonies in some yards. The disease appears to be spreading and little or



no honey was produced from the infected colonies. Microscopical examination did not reveal the cause of the condition. The stomach of the bee seems to be affected similar to poisoning with arsenic. The bees are not in an area where spraying is used or arsenic is refined. Sectioning of the gut and further feeding trials are continuing.

#### Colour Reproductions

A leaflet containing colour reproductions of normal brood and American Foulbrood has been printed within the past year.

#### POLLINATION

##### Tree Fruit

An attempt was made to help control fire blight in pears by distributing streptomycin through pollen inserts attached to colonies of bees. Pollen cannot be mixed with the streptomycin as it will be destroyed immediately.

This work will be continued for several years as it will take some time to assess the results.

It is quite possible that honeybees may be quite useful in the distribution of several types of antibiotics in the control of plant diseases.

#### NECTAR SECRETION

##### Some Aspects of the Relation Between Nectar Secretion and Nitrogen, Phosphorus, and Potassium Nutrition

For maximal production of nectar by the plant, the following conditions of fertility would appear desirable: A level of nitrogen low enough to avoid excessive vegetative growth, a level of phosphorus sufficient to promote good flowering, and a level of potassium which is neither low enough to limit growth severely nor high enough to reduce flower production.

#### MISCELLANEOUS

##### Queen-Worker Differentiation

M. V. Smith of the Apiculture Department staff has been working on this problem for several years, and is carrying on with these investigations. He has developed a fairly successful technique for rearing honeybee larvae in the laboratory. Larvae just hatched from the egg were placed on dishes of royal jelly in an incubator and maintained at a temperature of 94.5 degrees F. and a relative humidity of 96 per cent. By transferring the larvae to fresh food once a day it was possible to rear a fair proportion through to the adult stage.

##### Photography

Micro and macro photographs relating to beekeeping are continuing to be produced. Many copies have been made to satisfy requests received from various countries, states and provinces.

##### Royal Jelly

Using cartesian diver apparatus, it has been shown that an oxidation takes place in royal jelly for the first five hours after it is secreted. The action is chemical rather than enzymatic, as it is inhibited by nitrogen.



EXHIBITIONS AND COMPETITIONS COMMITTEE

Maritime Provinces

Honey exhibits are placed in many Fairs and Exhibitions throughout the Maritime provinces.

The largest Honey Show and Competition is held at the Maritime Winter Fair in Amherst, Nova Scotia.

Nova Scotia honey will be entered in the Royal Winter Fair at Toronto this year for the first time.

Quebec

Honey exhibits and competitions are held at all Country Fairs, regional Exhibitions and the Provincial Exposition. All honey entries receiving First Prize at Country Fairs and regional Exhibitions were entered in a competition called the "Grand Champion at Provincial". The happy winner is proclaimed the year's Honey King for the province of Quebec.

Ontario

Three major Honey Shows have been held thus far in Ontario - the Central Canada Exhibition, Ottawa; Canadian National Exhibition, Toronto and Western Fair, London. At the Central Canada Exhibition there were twenty-eight entries of honey; forty-six entries at the Canadian National Exhibition and twenty-seven entries at the Western Fair. Honey competitions and exhibits are also held at several smaller Fairs throughout the province.

Manitoba

Three major Honey Shows have been held in Manitoba. Red River Exhibition, Winnipeg; Provincial Exhibition, Brandon and Provincial Honey Show, Brandon. All three Shows are operated by the Manitoba Beekeepers' Association. Honey competitions are held at most local Fairs throughout the province and one is also held at the Annual Beekeepers' Convention.

Saskatchewan

A Provincial Honey Show is held in Saskatchewan each August. In 1957 the Honey Show was held in Swift Current with approximately thirty entries. The prize money is contributed jointly by the Saskatchewan Department of Agriculture, Saskatchewan Beekeepers' Co-operative Association and the Saskatchewan Honey Producers Co-operative Association.

Small Honey Competitions are held at many Summer Fairs, Fall Seed Fairs and Horticultural Shows. Maple Creek and Moosomin have outstanding local Honey Shows. At the Regina Exhibition in 1957, through the work of the Regina District Bee Club, a larger number of exhibits were entered in competition and a considerable amount of space was devoted to a Honey Exhibit.

Alberta

Honey Competitions were held at the Edmonton Exhibition, Country Fairs, Edmonton Beekeepers' Association and Calgary Beekeepers' Association meetings. At the Edmonton Exhibition a Honey Display Booth is sponsored by the Alberta Beekeepers' Association, Edmonton Beekeepers' Association and the Canadian Beekeepers' Council.

This year the Alberta Beekeepers' Association built a Float depicting bees carrying honey from flowers into a honey castle. It was



the highlight of many Exhibition Parades. Having won First at Taber, Third at Edmonton and Honourable Mention in several others, this Float gave prestige to beekeeping, made beekeepers show-minded and encouraged beekeepers in each area to work together in the promotion of the industry.

### British Columbia

Honey Competitions and Exhibits were held at two major Shows - Pacific National Exhibition and Interior Provincial Exhibition. Honey Exhibits were placed in at least twenty other smaller Fairs throughout the province. Competitions in Junior Beekeepers' Classes were conducted at the Pacific National Exhibition. At the Interior Provincial Exhibition inter-club competitions were held for the 4 H Honey Bee Clubs as well as 4 H Honey Bee Club judging competitions.

The Canadian Beekeepers' Council Shield and Trophy are a definite incentive to competition and make a valuable contribution towards improving the Pacific National Exhibition Honey Show. Beekeepers across Canada are urged to send entries to the Pacific National Exhibition in 1958 for the British Columbia Centennial Year.

### Recommendations

1. That Council appoint a Committee to compile a list of Fairs and Exhibitions in Canada that have open competitions for honey, the list also to contain open competitions outside of Canada and the compiled list to be forwarded to all Provincial Associations and the Provincial Apiarists.
2. That Council give consideration to contributing towards the establishment of a Premier Exhibition Award, Grand Champion Showman and Reserve Grand Champion Showman at the Canadian National Exhibition and the Pacific National Exhibition similar to what was established for the Royal Winter Fair.
3. That in the Premier Exhibition Award, an exhibitor be allowed to aggregate points in any five sections or less. The Exhibitor receiving the highest number of points will be declared Grand Champion Exhibitor, and the exhibitor with the second highest number of points will be considered Reserve Grand Champion Exhibitor.

Points: First - 5      Second - 4      Third - 3

Fourth - 2      and      Fifth - 1

4. That Council give consideration to making more Grants and contributing larger sums of money for Provincial honey exhibits.
5. Change score cards for judging honey as follows:

#### Liquid Honey

- |  |    |
|--|----|
| 1. Appearance and uniformity of containers                   | 5  |
| 2. Uniform level of fill                                     | 5  |
| 3. Colour  | 5  |
| 4. Freedom from crystals                                     | 15 |
| 5. Freedom from foreign material                             | 15 |
| 6. Freedom from air bubbles either in suspension or as froth | 15 |
| 7. Uniformity of honey                                       | 5  |
| 8. Brightness  | 10 |

9. Flavour and aroma	10
10. Density	15
	<u>100</u>

Granulated Honey

1. Appearance and uniformity of containers	5
2. Uniform level of fill	5
3. Colour	5
4. Firmness of set	15
5. Freedom from foreign material	15
6. Freedom from froth and frosting	15
7. Uniformity of honey, including texture	10
8. Flavour and aroma	15
9. Texture of granulation (smooth and fine)	20
	<u>100</u>

Comb Honey

1. Quality and uniformity of wooden sections	5
2. Cleanliness of wooden sections	20
3. Completeness of fill appropriate to section used	20
4. Completeness of capping	10
5. Cleanliness and appearance of cappings	20
6. Quality and flavour	15
7. Uniformity of combs	15
	<u>100</u>

Appendix X

POLLINATION.

The material for this report on the pollination activities in the various provinces has been supplied to the Committee by the Provincial Apiarists.

Prince Edward Island

There are no colonies rented for pollination here, but there is more interest shown in bees for that purpose. Cucumber growers are keen to have colonies established near their fields and the bees have proven to be good pollinators for this crop.

Nova Scotia

More than 50% of the colonies operated in Nova Scotia in 1957 were used for pollination.

The following is the approximate breakdown:

Orchard pollination (Apples, Pears)	700 colonies
Low-bush blueberries	450 colonies
Other small fruit (Strawberries)	45 colonies
Greenhouse cucumbers and tomatoes	40 colonies
Field cucumbers and squash	75 colonies
Red clover	37 colonies
Birdsfoot trefoil	8 colonies

No data on the actual number of colonies utilized for pollination are available. It is estimated however, that 600 - 700 colonies are used for apple pollination.



## Ontario

The number of colonies used for pollination in this province for 1957 were estimated as follows:

Orchard	3,513 colonies
Legume	453 colonies
Greenhouse	519 colonies

The Beekeepers involved in this service received rental fees.

## Manitoba

Many beekeepers place their apiaries in locations as a result of requests from seed growers. One beekeeper moved 112 colonies to 100 acres of sweet clover, receiving a rental of \$500.00 for the service. The yield of seed obtained from this field averaged 600 pounds per acre.

## Saskatchewan

There were large acreages of sweet clover and legumes in the province this past year. Many farmers requested bees for pollination and it is estimated that some 12,000,000 to 15,000,000 colonies were moved to legume fields. Both the farmer and the beekeeper were pleased with this arrangement.

## Alberta

In this province bees have been used as pollinators of legumes, from the South to the North. An estimated 1,500 colonies were used for this work, with the rental fee varying from \$2.00 to \$4.00. However, due to weather conditions accurate statistics on the number of colonies and yields per acre are not available.

## British Columbia

In British Columbia the following crops are now being provided with an organized pollinating service. The crops benefiting from this service were: Orchard crops; Nut trees; Legumes (Alsike, Red Clovers and Alfalfa); Small fruits, Hothouse cucumbers and tomatoes; Holly trees and Cranberries.

A total of 626 colonies were actually used for this purpose, with the average rental amounting to \$5.66 per colony.

A. GRAHAM