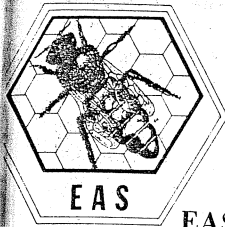


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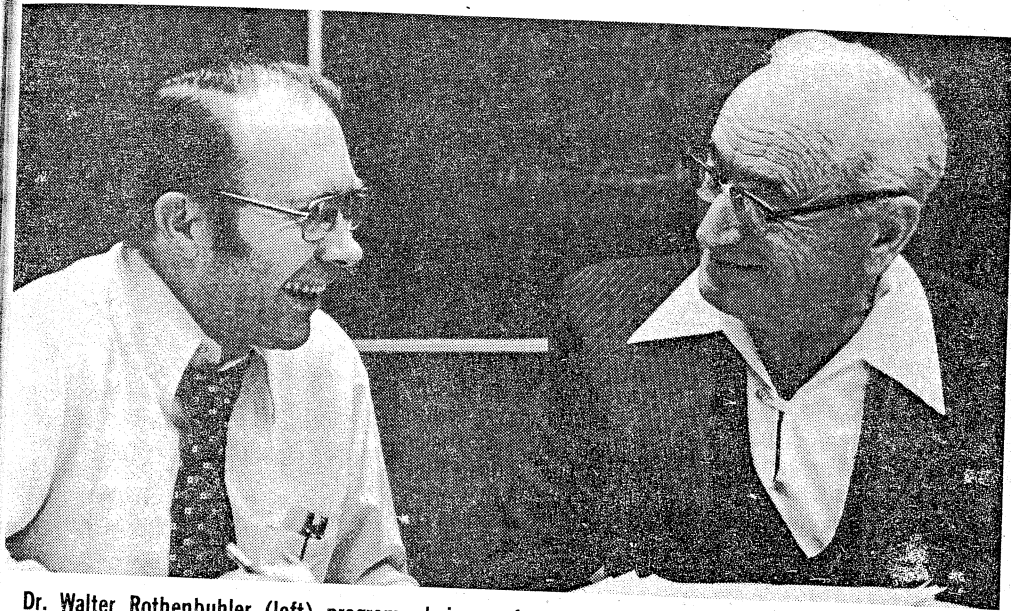
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EAS JOURNAL

EASTERN APICULTURAL SOCIETY OF NORTH AMERICA, INC.

FEBRUARY, 1978



Dr. Walter Rothenbuhler (left) program chairman for the August 9-12 Eastern Apicultural Society meeting in Wooster, Ohio, and E.A.S. Vice President Charles Divelbliss wrap up the final details on a program that will appeal to all levels of beekeepers from commercial to hobbyists.

New Beekeeping Dictionary

A new volume of the Dictionary of beekeeping terms has just been published in the most important languages for beekeeping: English, French, German, Russian, Spanish. Volumes 1-3, which previously covered these languages, are now out of print. The new book, whose full title is Volume 5 of the International Bee Research Association Dictionary of beekeeping terms, contains the original 1002 terms of the earlier editions, plus 34 additional terms that have recently come into prominence. The terms are entered in the Main Section in English alphabetical order, with equivalents in the other languages side by side; full indexes in French, German, Russian and Spanish then give the reference number to each entry concerned. Instructions for use are given in all five

languages, and useful list of conversions from non-metric to metric units is included.

The Editor is Dr. Eva Crane, Director of IBRA, and Professor V. Harnaj, President of Apimondia, has written the Preface. The Dictionary is printed by Apimondia Publishing House in Romania, and published by APH in collaboration with IBRA. The legibility, quality of printing, and accuracy are all of a high standard, and IBRA is indebted to APH for making the translated terms available once again in the five languages which are the official languages of Apimondia.

The book costs \$4.50 & \$.45 postage and packing, or \$7.50 & \$.75, from International Bee Research Association, Hill House, Gerrards Cross, Bucks. SL9 0NR, England.

**FALL BOARD OF DIRECTORS MEETING
TRENTON, NEW JERSEY
OCTOBER 22, 1977**

President, John A. Root called the meeting to order at 8:40 a.m.

ROLL OF OFFICERS - John A. Root, Pres., Ohio; R. E. Ross Hopkins, 2nd Vice Pres., Ontario, Canada; Mrs. Liz Rodrigues, Sec., N.J.; Mrs. Marie Morse, Treas.-Hist., Conn.; Dale F. Bray, Past Pres., Del.; Homer "Pat" Powers, Past Pres., Va.; Hugh J. Macleod, Past Pres., Canada; Jack C. Matthenius, Jr., Past Pres. & Editor, N.J.; David T. Hampton, Dir., Ontario, Canada; Victor C. Thompson, Dir., Ohio; Riv Perry, Dir., Rhode Island; Anthony C. Melgey, Dir., Conn.; Paul S. Ziegler, Dir., Pa.; John V. Lindner, Dir., Md.; Charles Mason, Dir., Del.; L. Lester Shimp, Dir., N.J.; George O. Rigby, Dir., Mass.; Arthur C. Holmes, Life Membership Chr., Md.; Richard W. Corrigan, Honey Show Chairman, Mass.; Robert Wellemeier, Alternate Director, Va.; and Elizabeth P. Corrigan, Assistant, Show Committee, Mass. Also present were: Lena W. Rigby, Joanna Melgey, Marge Perry, Estella Holmes, Doris Macleod, Jean Hopkins, Bert Lindner and Art Rodrigues

MINUTES - George Rigby made a motion, seconded by Anthony Melgey that the minutes of the Annual Board of Directors Meeting of August 17, 1977 be accepted as they were distributed. All yes, motion carried.

BY-LAWS - George Rigby reported that

according to the 1967 By-Laws, only Directors, current Officers and the last two immediate past presidents have a vote at the Board of Directors meetings. He said that improvements were made in 1972, but that there has been no basic structure change. Also, that the By-Laws were revised in 1975, but nobody but he, has a copy of them. He was asked to have some copies made.

A motion made by George Rigby, seconded by Ross Hopkins, "that the above rules be suspended so that all of the Past Presidents now in the room will have a vote, motion carried, all yes votes.

PRESIDENT'S REPORT - John Root, President, reported he had appointed Jack Matthenius to represent EAS at the organizational meeting of WAS September 9 -11, at Davis Campus of the Univ. of Calif. and Dewey M. Caron will be EAS representative at the Spring Board of Directors Meeting and that he approved extending a loan of \$1,000 to WAS to help them get the organization started. The loan will be repaid without interest.

COMMITTEE APPOINTMENTS - President Root made the following appointments:

SITES - Chairman, Dale F. Bray, C. A. Divelbiss and Ross Hopkins

BY-LAWS - Chairman, Hugh J. Macleod, Art Holmes and Riv Perry

NOMINATING - Chairman, Jack Matthenius, Jr., Earl P. Cockran and Dale Bray

RESOLUTIONS - Chairman, George O. Rigby, John Lindner and Norman Sharp

AUDITING - Chairman, Riv Perry, Art Holmes and David Hampton

LIFE MEMBERSHIP - Chairman, Art Holmes and Hugh Macleod

CONFERENCE MANAGEMENT - John Root, Marie Morse, Liz Rodrigues, Earl Cochran, Pat Powers

JAMES I. HAMBLETON - Dr. John Ambrose, Dr. Walter C. Rothenbuhler and Art Holmes

RESEARCH ADVISORY - Dewey Caron, Vic Thompson, Charles Mason and Pat Powers

SHOW COMMITTEE - Chairman, Dick Corrigan and Betty Corrigan

LEGISLATIVE PROGRAM - Chairman, Pat Powers and Dale Bray

PROGRAM CHAIRMAN - Walter C. Rothenbuhler

SECRETARY'S REPORT - Secretary, Liz Rodrigues had no specific report to give at this time.

TREASURER'S REPORT - Mrs. Marie Morse, Treasurer said that she cannot give a detailed report at this time because she had not received the full Annual Conference financial accounting to date.

BALANCE ON HAND - October 15, 1977 - \$19,928.13.

Marie reported there is still some money to be collected for Trophies, and one outstanding bill for 1977. She said the circulation of the Journal is around 1,000. President Root requested a copy of the Financial Report. Charles Mason made a motion, seconded by Pat Powers, that the report given by Marie Morse be accepted, subject to audit. Co. Crd.

EAS JOURNAL
Eastern Apicultural Society
of North America, Inc.

President Dr. Dale F. Bray
University of Delaware
18 South Parkway, Newark, Delaware 19711

First Vice President Dr. Charles Mason
University of Delaware
18 South Parkway, Newark, Delaware 19711

Second Vice-President John Root
820 Lindenwood Street, Medina, Ohio 44256

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109 N. Feltus St., South Amboy, N. J. 08879

Published every other month at 109 No. Feltus St., South Amboy, N. J.

E.A.S. Journal \$2.00; Member \$3.00*; Joint membership \$4.00*; Family Membership \$6.00*; Commercial Membership \$50.00*; Life Membership \$100.00*; Association Membership \$25.00*.

*Of which \$2.00 is subscription to Journal.

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EDITOR - E.A.S. Journal Editor, Jack Matthenius said he has around \$200, on hand to use for expenses for the Journal. He recently spend \$12 for pictures. Six issues per year (Oct., Dec., Feb., Apr., June and July) of the Journal are being printed, and there has been some talk of increasing it to a monthly issue, but the cost probably would be double. It is not self-sustaining and Jack will look into the costs of a larger issue. Jack would like to have some input as to news items for each State. Three issues of the Journal are almost completely dedicated to the Annual Conference information.

SITES - Lester Shimp, Director from N.J. read a letter of Invitation to the Sites Committee and the Board, from the N.J. Beekeepers Assn. requesting that New Jersey be considered as a possible Conference Site for August of 1981. Roger R. Locandro, Associate Dean of Cook College, Rutgers University, stated that they are looking forward to serving EAS as the Host State in 1981, and are anticipating approval by the EAS Sites Committee.

The letter was presented to Dale Bray, Chairman of the Sites Committee for its consideration. Ross Hopkins reminded the Sites Committee that they visit the Site of the 1979 Conference within 6 months so that they could determine its approval.

BY-LAWS - Hugh Macleod stated to update the By-Laws at this time, would be a stupendous task. That the files and records would have to be searched through in an effort to update it. He was asked to see what he could do in regard to the matter.

NOMINATING COMMITTEE - Jack Matthenius, Chairman asked the Directors to please get in to him, any changes, and the new Slate of Officers by the April Board of Directors meeting.

RESOLUTIONS - George Rigby, Chairman reported that he was very pleased with the five resolutions which were presented to and passed by the general body of the membership at the August 19, 1977 Annual Business Meeting.

AUDITING - Riv Perry, Chairman of the Auditing Committee said that he and the Committee are waiting for the Conference Report to assess the full accounting and the auditing of the report.

LIFE MEMBERSHIP - Art Holmes, Chairman reported that 4 new Life Members were received at the past Annual Conference, for the total of 33 Life Members to date. Pat Powers stated that maybe we should start thinking about a mission for our money. John Root said in defense of Urban Beekeeping, maybe some money could be used to pay for expenses for spokesmen. Aspects of investing, etc. will be assessed by the Committee.

ANNUAL CONFERENCE REPORT - Past President, Dale Bray distributed a detailed accounting, a report of all monies received and expended for the past Conference at Newark, Del. He said over \$31,000, was received, there were expenses of over \$30,000, leaving the balance of \$346.96 left in the bank account, and that it

appears we went in, the hole for around \$650. Including the advancement of \$1,000, by Marie Morse, Treasurer, it appears the total loss would be around \$1600.

He said the total group of Conferees expected was underestimated. Ross Hopkins said that possibly in the future we could or should consider the previous years totals of Conferees as a guide for estimating attendance. John Root said we have to know what our fixed costs are going to be--perhaps a 6%

It was suggested that we sell the extra Key Chains on hand for \$3.00 each at the next Conference. Dale was congratulated for conducting such a fine Conference.

HAMBLETON COMMITTEE - Art Holmes said there was no report at this time, but that there would be in the Spring. George Rigby suggested that the recipient speak on this topic.

LEGISLATIVE COMMITTEE - Pat Powers, Chairman reported that E.P.A. will hold a meeting on November 30, 1977 in Washington, D.C. He and John Root hope to be present. Discussions were held in regard to the Committee being helpful setting up guidelines for State or Municipalities that are encountering anti-beekeeping problems, and to assist beekeepers overcoming their legitimate Beekeeping problems.

I.A.A.D. - A long discussion was held in regard to the International Agency for Apicultural Development organization which held their organizational meeting at Newark, Delaware during our Annual Conference. They had asked us for our support. Pat Powers had been assigned to cover their organizational meeting held on Friday evening, August 19, 1977.

Pat gave a report based on the coverage of the meeting. However, a letter was received from Rev. Rodney Dillinger, Director of I.A.A.D. on October 5, 1977, which stated that in behalf of I.A.A.D., he was requesting the organization would like to withdraw their original request from EAS for their support.

Les Shimp made a motion, seconded by Dale Bray, that Rodney Dillinger's letter be printed in full in the EAS Journal. Motion Carried, all yes.

EDUCATING THE PUBLIC - A discussion was conducted in regard to helping educate the public

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in regard to properly identifying stinging insects so that the honey bee isn't always blamed for all the stings. Dale Bray said that prepared samples of stinging insects for this purpose would be very helpful, and that an attempt to try to work out a system that will be ideal will be tried.

WAS - WESTERN APICULTURAL SOCIETY - Jack Matthenius reported that he attended the organizational meeting of WAS held Sept. 9-11, at Davis Campus of the Univ. of Calif. He said they were happy EAS sent a representative, and that EAS had presented them with a check for \$1,000 in the form of a loan to help them get their feet off the ground. Jack spoke in details as to the progress they had made in setting up their plans. Norman E. Gary is the President, and Eric Mussen the Vice President. Jack said he was proud to have been selected and to be sent on this mission.

SHOW CHAIRMAN - Dick Corrigan reported the Show was very successful this year. He said he would like to see a new Class added, either niches or antiques--a non-competitive class. He said that this matter will be weighed. He also mentioned the possibility of using Silver platters for prizes instead of Sterling Silver Bowls. This was not resolved at this time, but will be considered for the future.

RATIFICATION OF LOAN - Ross Hopkins made a motion, seconded by George Rigby, "that the \$1,000, expended to WAS be ratified by the Executive Board and that the money is to be repaid with no interest." Motion carried.

CHAIRMAN OF THE BOARD - Hugh Macleod presented the following: "I propose to make a motion, that we accept in principle the printed outline for the office of Chairman of the Board of Directors, and that it be referred to the By-Laws Committee for further study."

Rationale: - "The past 25 years History of the ups and downs of EAS make it imperative that the structure of the Society be strengthened by this Office. This is now a growing and viable organization, and it behooves the Board of Directors to act at this point in time." This motion was seconded by Chuck Mason but it was rescinded later.

After a considerable amount of discussion, both Pro and Con, another motion was made by Jack Matthenius, and seconded by Chuck Mason, "that the "CHAIRMAN OF THE BOARD" Report prepared and presented by Hugh Macleod, and distributed to each Board member for study in September 1977, be accepted verbatim."

A secret, written ballot was taken with Tellers, Jean Hopkins and Art Rodrigues collecting and tallying the totals. The motion passed with 12 yes and 5 no votes.

President Root said he would meet after Lunch with the By-Laws Committee (Riv Perry, Hugh Macleod and Art Holmes) to discuss some of the specifics and aspects of the Chairman of the Board's duties because "it is a hugh problem."

AD-HOC - CHAIRMAN OF THE BOARD - Hugh Macleod made a motion, seconded by Chuck Mason, "that we get the Board's approval that John Root serve as an AD HOC CHAIRMAN OF THE BOARD at this point to have someone to fill in here." All yes, 1 no vote, motion carried.

PERMANENT ADDRESS - Hugh Macleod stated that hopefully, we could use the Chairman of the Board's address as a permanent address, or the Managing Director's. But after some discussion, this matter was not resolved.

EAS TERRITORY BOUNDARIES - Canadian Provinces - Ross Hopkins said that in addition to Ontario, Canada, the Province East of Ontario are to be included within the borders of EAS territory. The Provinces being: Quebec, New Brunswick and Nova Scotia. He said that this more or less had been agreed upon at previous discussions.

APIMONDIA - Jack Matthenius made a motion, seconded by Anthony Melgey, "that we write to the major National Beekeeping Organizations in North America about this Apimondia situation of: 1) Who's going to represent North America at the Apimondia Congress in 1979 2.) To call this to a head right now and contact these organizations in order to find out what their feelings are, and 3.) Act on it now without waiting for the time period that would be involved in talking with our Delegates (C. A. Divelbiss - 1977 representative - EAS).

Organizations to be contacted are: Canadian Honey Industry Council, WAS, ABF, American Honey Producers, Southern Conference, and the Honey Industry Council. Other questions to be asked are: 1.) Who's going to pay dues 2.) How the dues structure is set up and 3.) Who is going to represent North America at the Next Apimondia Congress session?

Jack Matthenius will draw up the letter and Liz Rodrigues, Secretary will send it out as promptly as it is practical. Jack believes that we are missing the boat on the Legislative parts of Apimondia. Therefore, we are not getting the results back from what we're putting out money into.

A consensus as to what we should do in regard to Apimondia in raising the funds to pay our membership, and in representation. The vote was all yes, 1 no, Motion Carried.

PROFESSIONAL APICULTURAL ASSOCIATION - Jack Matthenius explained that this organization was started in Maine in 1966. President is Bob Berthold. It is a regulatory organization and they try to meet in conjunction with the EAS Conference, to sit down and try to keep better informed as to what is going on. There are about 70 members and they would like to become a part of EAS.

They would like to know what kind of endowment or financial arrangement they could make to be able to consent and join and be a part of the Conference each year. They never officially attached themselves to EAS, although they have functioned in the EAS. He would like to see them

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BOUNDARIES - Canadian said that in addition to the New Brunswick and Nova Scotia more or less had been discussed.

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NTURAL ASSOCIATION - that this organization 966. President is Bob rganization and they try the EAS Conference, to ter informed as to what : 70 members and they of EAS.

know what kind of rangement they could nd join and be a part of They never officially S, although they have would like to see them

attached, as it would give them a double incentive. He would like to see them have a meeting preceding EAS, so they could duplicate some of the speakers and do it very nice. No stand was taken in regard to this matter.

STANDING COMMITTEE REPORTS - Secretary, Liz Rodrigues suggested that each Chairman of a standing Committee keep a log, or accounting of their activities (such as Pat Powers does) or accomplishments for their own benefit and records. They could then pass on an occasional report to the EAS Secretary for the record.

1978 OHIO CONFERENCE - John Root, President reported the Conference will be August 9-12, 1978 at Wooster College, Wooster, Ohio. A hall is available that will hold 1500 Conferees, and it is equipped with an Organ for music. Eleven speakers are scheduled. Plans are being formulated for a Chicken Barbeque, cash bar and trips to A. I. Root Company at Medina. John will have more details at the April Board of Directors Meeting.

PAST PRESIDENT'S PLAQUE - In behalf of the EAS Society, John Root presented Dale Bray with a Past President's Plaque for his outstanding service to the organization. Dale thanked everyone for the privilege of serving the Organization and said he would always treasure the plaque. He was given a round of applause.

NON-COMPETITIVE ARTS & CRAFTS &

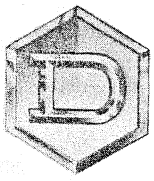
ANTIQUE SHOW - Bob Wellemeier made a motion, "that we have a non-competitive Arts & Crafts and Antiques Show at the Conferences." President Root asked Bob to withdraw the motion because Dick Corrigan has stated he is considering something along this line. Dicj is also considering establishing a new CLASS for 100% honey on total points for the HONEY COOKERY SHOW. Bob withdrew his motion.

SPRING BOARD OF DIRECTORS MEETING - President, John Root announced the Spring Board of Directors meeting will be held on April 7 and 8, 1978 at the Ramada Inn, Wooster, Ohio.

There being no further business, the meeting was adjourned at 11:40 a.m.

Respectfully submitted,
Liz Rodrigues, EAS Secretary

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Beekeeping Short Courses 1978
Delaware Valley College, Doylestown, Pa. 18901

Spring: Saturday, April 1, 8, & 15, 1978

Summer: Wednesday, Thursday & Friday, June 28, 29 & 30, 1978

Delaware Valley College will again be offering its Spring and Summer Beekeeping Short Courses. The courses are offered under the direction of Dr. Robert Berthold (Associate Professor Biology) in cooperation with Mr. Jack Matthenius (N.J. Supervisor of Bee Culture). Instruction will take place on the Delaware Valley Campus with the College apiary and honey house being utilized.

Over 200 persons attended the 1977 courses. Included in this group were experienced beekeepers, novices, and those considering taking up beekeeping as a hobby. There were also quite a few educators who were planning to use the information presented during the course in their own classroom situation.

Total cost for the three days of instruction is \$18.00. An application for the course or further information may be obtained by writing Dr. Berthold, % Delaware Valley College, Doylestown, Pa. 18901, or by calling him at Area Code 215-345-1500.

-Program-

Saturday, April 1 or

Day 1 - Wednesday, June 28, 1978

8:30 a.m.	Registration and Coffee (Mandell Hall Auditorium)
9:15 a.m.	Welcome to Delaware College
9:30 a.m.	Introduction of Participants
9:45 a.m.	Honey Bee Life History (Film)
10:30 a.m.	Avoiding Stings
11:00 a.m.	Bee Yard - Manipulation of Colony and Members of Hive
12:00 a.m.	Lunch
1:00 p.m.	Beekeeping Equipment and How to Assemble
2:00 p.m.	Major Honey Bee Diseases and Enemies
2:45 p.m.	Bee Yard - Colony Manipulation Class Assembling of Equipment

Saturday, April 8 or

Day 2 - Thursday, June 29, 1978

9:00 a.m.	Obtaining Your Bees
9:45 a.m.	Bee Yard - Establishing Colonies
10:00 a.m.	Coffee Break
10:30 a.m.	Summer Management including Swarm Prevention & Control
12:00 a.m.	Lunch
1:00 p.m.	Managing for Honey Flow
1:45 p.m.	Managing for Honey Flow
1:45 p.m.	Successful overwintering
2:15 p.m.	Queen Rearing
2:45 p.m.	Bee Yard - Queen Rearing and Introduction

Saturday, April 15 or

Day 3 - Friday, June 30, 1978

9:00 a.m.	Nectar Producing Flora
10:00 a.m.	Coffee Break
10:30 a.m.	Beekeeping Organizations and Services
11:15 a.m.	Cooking with Honey
12:00 a.m.	Lunch
1:00 p.m.	Presentation of Certificates
1:15 p.m.	Removal, Extraction and Processing of Honey Corp.
1:45p.m.	Marketing the Honey Crop and Beeswax
2:15 p.m.	Bee House - Removal, Extraction, and Bottling of Honey. Handling and use of Beeswax. Mead Making.

Dates:

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Phone: ___

Age: _____

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Application - Delaware Valley Beekeeping Short Courses - 1978

Dates: Saturday, April 1, 8, 15, 1978
Wednesday, June 28 through Friday, June 30, 1978.
Time: 9:00 a.m. to 4:00 p.m.
Cost: Total \$18.00 (does not include meals or lodging).
Deposit: Check or money order for \$5.00 should accompany application with balance due at registration on April 1st or June 28th.

Place: Deposit refundable up until Saturday, March 25th or June 17th.
Mandell Hall
Delaware Valley College
Route 202, about 1 mile south of Doylestown, Pa.
Area Code: 215-345-1500

Equipment: All those having their own bee veils should bring them. It is also suggested that you bring a 3-ring loose-leaf binder to hold various prepared materials which will be distributed.

Age: Participants must be 13 years of age or older. Younger participants must be accompanied by an adult.

Lunch: Though there are restaurants nearby, it is suggested that you bring your lunch.

(Keep this part of application for your information)

(Detach & Mail This Portion of Application With Your Deposit)
DELAWARE COLLEGE 1978 BEE SHORT COURSES

Check One: Spring Course Summer Course

Your Name: _____
(Please print or type)

Address: _____

Phone: _____ Number of Colonies of Bees _____

Age: _____ Profession: _____

Date _____

Deposit of \$5.00 _____ Check No. _____

(Refundable until Saturday, March 25th or June 17th.)

Balance of \$13.00 due at registration on first day of course.

Ethylene Oxide Fumigation to Decontaminate American Foulbrood Disease in Bee Hives

Introduction

American foulbrood is a brood disease of the honey bee *Apis Mellifera*. It is caused by the spore forming bacteria *Bacillus larvae*. Because of its resistance to antibiotics, this disease (AFB) is a serious threat to beekeepers. For many years, the only means of control was to completely burn the infected hive. This constitutes a loss of well over \$50 in bees, wax and wooden parts, plus a substantial future income per hive burned.

As an alternative to burning, there is a strong trend to fumigation processes to decontaminate AFB diseased equipment. These hives can then be restocked with bees, and the result is a huge equipment savings for the beekeeper.

Research has shown that fumigation with ethylene oxide will control several honeybee diseases, and there is no reluctance by the bees to accept fumigated combs.¹

Although ethylene oxide fumigation is seeing increasing use, and several hundred thousand pieces of bee equipment have been successfully fumigated, the process still remains in its experimental and testing age. There are many variables and limits to the process that must be considered in order to kill enough spores to prevent a recurrence of the disease. We should note that the process of fumigation is designed to reduce bacterial levels, as opposed to sterilization where all organisms are killed to a sterile condition. The results are affected by the type of fumigation chamber used, for example whether the gas is drawn in by vacuum, or if the gas pressure forces the air out of the system. The many variables in temperature, pressure, humidity, dosage and etc. all affect the degree of kill, as do many uncontrollable limits. Temperature must be held below 110 degree F, to prevent comb melting, although an increase of 30 degree F above this level would double the fumigant's effectiveness. Another major limit is penetration. The ethylene oxide will not penetrate great thicknesses of wax, scale, or honey, and a spore that is encased in a sugar crystal is permanently protected from ethylene oxide.

We must continue to test the effectiveness of ethylene oxide fumigation so that recommendations can be made for standardized decontaminations procedures that will result in an acceptable level of kill.

Methods

In July 1977, five single story colonies started from packages were chosen. They were inspected and shown to be free of AFB disease. Two colonies that had completely died of AFB disease were fumigated in the N.J. chamber at Rutgers University, under the following conditions:

Dosage 314.6 mg/l ethylene oxide
Temp. 95 degree F

Pressure 26 inch vacuum drawn, chamber filled to 16 psig with 3lb. EtO and 27 lb. CO₂

Time 8 hours

Humidity 80-90% RH

30 pounds of carboxide pre-mixed gas were used. This is available from the Linde Corp.

Each single story hive received a second story with ten frames of drawn comb from the fumigated equipment, each containing a minimum of the following:

300 in2 AFB killed brood and scale

150 in2 sealed honey

15 in2 stored pollen

The five colonies were inspected at weekly intervals after receiving their second story.

Results & Discussion

In one week, the bees had moved up into the second story, and had begun propolizing. After two weeks, all scale had been removed and about one quarter of the honey had been uncapped. New eggs were present in the second story. In three weeks, nearly all the honey and pollen had been moved or consumed. An average of two frames of brood was present, some capped. At four weeks, large amounts of brood was present in all five second stories, and an average of four frames/super had new honey. All the colonies remained healthy during the experiment for 10 weeks, and developed normally forcing the laying pattern of the queen down and filling the second story full of honey for winter stores.

Finding no breakdown of AFB after several brood cycles, (21 days/cycle) indicates that the disease infestation was killed to an acceptable level.

The only control available in the experiment were the other hives present in the beeyard. They were supered at the same time, and no AFB was present. The fumigated hives seemed to progress stronger and at a faster rate than the others, which could indicate a more healthy bee environment from killing other organisms that stress the colony.

To complete the proper scientific procedure, controls with unfumigated AFB infestations should be tested, and scale samples should be tested before and after fumigation. Larger numbers of test hives would give more accurate analysis of effectiveness, and the test hives should be grouped for replication.

The fumigation of frames of honey is not an approved use of ethylene oxide because honey is a food product. It is also not recommended because of the lack of penetration of the gas in honey. Honey can act as a reservoir of AFB spores, and when nurse bees feed this to the brood, AFB breakdown will occur again. It is therefore recommended that only extracted and brood combs be fumigated.

Acknowledgements

The expertise in operating the N.J. chamber by Mr. Jack Matthenius, Jr. is gratefully acknowledged.

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Shimanuki, Knox, Herbert 1970. Fumigation with ethylene oxide to control diseases of honey bees. Jour Econ Ent 63(4):1062-3.

Shimanuki and Lehnert 1968. Ethylene oxide for the control of American Foulbrood in Honey Bees. Jour of Econ Ent 61(5):1456-7.

References

Cantwell 1975. The use of ethylene oxide to decontaminate bee equipment on a state-wide basis. Amer Bee Jour 115:394,408.

Matthenius and Cantwell 1976. The use of ethylene oxide as a fumigant to decontaminate honey bee equipment in the state of New Jersey. Amer Bee J. 116(8):374-5,386.

Shimanuki, Knox, Herbert 1970. Fumigation with ethylene oxide to control diseases of honey bees. J of Econ Ent 63(4):1062-3.

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Dale R. Morse
Nov. 1977 Rutgers Univ.
New Brunswick, N.J.

Dr. Collison Will Address Beekeepers At Delaware Valley College

Robert W. McClelland - Director of Public Relations

Dr. Clarence Collison, the Pennsylvania State University Extension Specialist on Beekeeping, will be the guest speaker at the March meeting of the Bucks County Beekeepers Association. The meeting will be held on Thursday, March 9th in the Mandell Hall Auditorium on the campus of Delaware Valley College which is located approximately one mile west of Doylestown, Pa. on Route 202. The meeting will start at 8:00 P.M. and is open to the general public. Dr. Collison will be speaking on the timely topic of Spring Management to Increase Colony Vitality and Maximize Money Production.

In addition to his evening talk, Dr. Collison will also be meeting with those students enrolled in the College's three credit beekeeping course as well as being the guest of honor at the annual banquet of the Delaware Valley College Apiary Society to be held preceding the evening talk.

Other Bee News

Delaware Valley College will again offer two short courses in Beekeeping. Spring Courses will be Saturday April 1, 8 and 15. Summer courses will be Wednesday, Thursday and Friday on June 21, 22, and 23.



The logo for Root Quality Bee Supplies features the word "Root" in a large, stylized, cursive font. Below it, the word "QUALITY" is written in a smaller, bold, sans-serif font, and "BEE SUPPLIES" is written in a similar bold, sans-serif font at the bottom. The entire logo is enclosed in a rounded rectangular border.

The dealer who displays this trademark is the exclusive dealer in Root Bee Supplies. He is the only bee supply dealer in your area who sells New Three-ply and Wire-ply Foundations Triple-locked frames, Galvanized Steel Smokers, 35-lb. test Frame Wire, Zipper Bee Suits, Supers with rounded, undercut handles, and many other supplies with exclusive features.

Your nearby Root Dealer will also be glad to give you advice on any beekeeping problem you may have. Stop in and see him soon.

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The A. I. Root Company
Medina, Ohio

African Bee Genes Blamed For Depleting U.S. Apiaries

By Edward Roby
United Press International

It was in the early springtime just over a decade ago when Harold Halbgewachs first noticed the mysterious "disappearing bee disease" that left some of the new hives empty on his Cozad, Neb., apiary farm.

"We had hauled new bees up from Texas and unloaded them in the bee yards," said Halbgewachs. "In a day or two, we had a lot of hives that there wasn't even a bee in them."

"I'd been doing this for years. Never had any trouble before," said Halbgewachs, who began commercial beekeeping in 1936. "That was the first it hit me. It's mainly what they determined to be 'disappearing disease'."

About the same time, other veteran beekeepers across the country started complaining about the puzzling springtime malady that depleted their hives just when valuable crops like apples, almonds and citrus fruits need the thorough pollination only honey bees can provide.

Some blamed the problem on pesticides, a recognized killer of foraging bees for which federal compensation is readily available to beekeepers. But scientists, who reasoned that local insecticide spraying could not affect bees over such wide areas, began looking for exotic bee diseases, including viruses.

Agricultural experts tried to link the disappearing phenomenon on poor bee management techniques or cold weather.

But it wasn't until 1974, after years of declining honey production, that Halbgewachs attended an apiarist seminar given by Dr. William T. Wilson and heard a chilling theory that made sense to him.

Wilson, a U.S. Department of Agriculture bee researcher at Laramie, Wyo., contends the problem began in the early 1960s with a scientific accident honey bee stocks with genes from their African cousins - that ferocious bee strain blamed for sometimes fatal attacks on humans and livestock in Brazil.

Besides foul-tempered aggressiveness, documented African bee traits include an industriousness unmatched by other honey bees as well as less resistance to cold weather.

Wilson traced the Africanization of American bees to bee semen imported from Brazil in 1961 for Department of Agriculture experiments at laboratories in Baton Rouge, La., and Davis, Calif.

Wilson believes, and USDA officials concede, that Africanized drones from 15 or 20 experimental hybrid bee colonies at Baton Rouge were allowed to fly free, despite the risk they would cross-breed with queen bees at local apiaries.

Because queen bees raised in apiaries

throughout the South are sold to Northern beekeepers seeking to replenish their colonies in the spring. The spread of African traits like weakened resistance to cold would have been vastly accelerated.

At the time the disappearing disease struck his colonies, Halbgewachs said, he had been buying some queen bees from Bill Debessonnet, a commercial beekeeper at Donaldsonville, La., not far from the USDA labs.

"I think I got into a lot of trouble buying queens," he said. "When we'd get a norther in and the temperature would drop, that's when we'd lose the bees."

He said Debessonnet finally went out of business because of the problem.

"We need to change our stock over the whole country," he said. "This has spread everywhere."

Wilson theorizes that African honey bees cannot withstand the rigors of the North because they evolved in a climate where their foraging instincts were triggered by sun lighting conditions. The normal European honey bee (*Apis mellifera*), however, will not forage for pollen and nectar in cold weather because they are attuned to both light and temperature stimuli.

Thus, he reasons, the new hybrid bees simply disappearing on cold spring days because their instincts send them forth to forage and freeze to death when it is sunny.

"Disappearing disease' is not a disease but a genetic problem," Wilson concluded.

Wintering Conditions

Unseasonably warm temperatures in early November and lack of a good fall nectar flow has placed many of the colonies in the state in a precarious situation for winter survival. Increased flight activity due to the warm temperatures along with continued brood rearing by many colonies has rapidly reduced winter stores. Normally between October and January, only 10 to 15 pounds of food are required to produce heat within the cluster. Most of the winter supply of food is consumed in brood rearing during the months of February, March and April. Therefore, beekeepers will need to keep close track of stores early in the spring. Using sugar boards or dry sugar at this time may help to alleviate this potentially serious situation.

Fumigation of Diseased Bee Equipment With Ethylene Oxide

The New Jersey Department of Agriculture is no longer accepting diseased bee equipment from outside New Jersey to be fumigated in their ethylene oxide chamber.

Wint

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Wintering Bees In Building

Dr. Clarence H. Collison

An indoor wintering system for honey bee colonies has been developed in Loup City, Nebraska that has been used successfully for several years now. Small colonies in a single brood chamber are placed in an environmentally controlled insulated wood frame building. These small colonies are made up about mid-August after the main honey flow, but while some nectar is still coming in. Producing colonies are split into nucs by the following method: two frames of brood and attached young bees are placed in a brood chamber and supplied with some food. Thus, one standard colony may supply enough brood and bees for 2 to 4 nucs. The queen is not directly searched out but if found she is destroyed. These nucs are then moved to another yard to prevent excessive drifting back to the parent colony. In two days these nucs are examined and a mature queen cell is introduced to each nuc. At this time it is easy to determine if the parent colony queen has been placed in one of these nucs. If so, she is destroyed and a mature queen cell is introduced.

The nucs are then left in this yard for the queens to emerge and mate. In two to three weeks the queens are checked to make sure they are mated and the colony is examined for stores. Each colony must contain the equivalent of three full frames of honey situated close to the cluster. In a month or so before the onset of cold weather these young queens lay about 2 to 3 frames of brood and so by the time the colony is placed into the wintering facility it contains about 2 to 3 pounds of young bees and a young queen.

In late November, the colonies are moved into the wintering facility. In this facility the colonies are stacked 5 high in rows with a walkway between the rows and the entrance facing the aiseways. The entire entrance is left open and no top ventilation is provided. A temperature of between 46 to 48 degrees F is maintained in the building. This appears to correspond to the internal temperature of the cluster thus reducing bee activity and honey consumption. The temperature is controlled by a heating and cooling unit produced for this purpose. Relative humidity is not monitored but the bees appear to be quiet and the hives very dry.

The exhaust ventilation system is set up in such a way that air is forced into the exhaust ducts along the floor between the rows of stacked colonies. As the heavier Co₂ laden air sinks to the floor it is forced by the positive pressure fans into the exhaust ducts out of the building. In this way there is never a build up of foul air in any part of the building.

Total darkness is maintained within the facility for the entire wintering period.

The colonies are normally removed from the building about the end of March or early April but

they have been left in as long as the beginning of May with no apparent ill effects.

Bibliography of Tropical Apiculture

Apiculture is capable of great development in the tropics and subtropics, to the benefit of rural populations. Hives of bees can be attended to in spare time, and they occupy very little land. Honey and wax produced in them can add significantly to a person's earnings from other sources, and the honey can improve the family's own diet.

With these aims in mind, beekeeping development programmes have been started in many countries, but often with little knowledge of what brought success or failure in other similar regions: the bees used, their management, and their pests and diseases; the hives used, and recognition of good or bad sites for them. If honey and wax are to be sold, especially for export (and there is a world shortage of both these commodities), quality standards must be known, understood, and achieved.

This lack of readily available information is now being remedied by a project carried out by the International Bee Research Association under the direction of Dr. Eva Crane, and funded by the International Development Research Centre, Ottawa, Canada.

A series of annotated Bibliographies is being prepared, with details of 2500-3000 or more different publications. The Bibliographies will be distributed free during 1978 to approved Centres in developing countries. These Centres will also be able to obtain free copies of certain original publications that are especially useful to them.

Apart from the free distribution of Bibliographies to approved Centres in developing countries, institutions and libraries anywhere in the world can obtain the Bibliographies, either by purchase or by advance subscription at advantageous rates (BOTA/4).

The word tropical is intended to include subtropical, but the emphasis will be on developing countries throughout.

Anyone interested can obtain the following leaflets without charge from International Bee Research Association, Hill House, Gerrards Cross, Bucks. SL9 0NR, England.

BOTA/2 Descriptive leaflet with provisional list of titles.

BOTA/3 Application form for prospective Centres in developing countries to receive Bibliographies free of charge.

BOTA/4 Advance subscription form offering advantageous rates to prospective purchasers (in any country).

IBRA would also like to hear from those who might have material to contribute to this project (leaflet BOTA/5).

Enquiries to Dr. Eva Crane

World Honey Production Down 4 Per Cent in 1977

(From USDA Foreign Agricultural
Circular, October 1977)

Following the record 1976 honey harvest of 665,000 metric tons, world honey output is expected to drop to 642,000 tons in 1977. Based on past experience, this preliminary estimate of world production probably will be within 5 per cent of actual world production. The primary reason for the 1977 decline is unfavorable weather conditions in a number of major producing areas.

World honey consumption is expected to exceed output by an estimated 18,000 tons in 1977 and world honey stocks will be smaller at the end of the year.

The major areas where production is expected to be down include North America, South America, Western Europe, and Oceania. In North America, a severe winter in the eastern United States was accompanied by drought conditions and lack of irrigation water in the west that extended northward across the border into Canada. Excessive rains in Argentina were instrumental in the output decrease in South America. Western Europe is expected to have an average honey crop following the record year of 1976. Poor weather conditions in Australia reduced the harvest in Oceania.

Gains in honey output during 1977 were registered in Eastern Europe, the USSR, Africa and Asia.

In contrast to Western Europe, Eastern Europe did not have a particularly good year in 1976, and 1977 should be more normal. The USSR continues to expand output in response to growing consumer demand. During 1977, there will be little change in

honey production in Africa. Output is expected to be up again in Asia as the People's Republic of China (PRC) continues to encourage beekeeping and honey production.

World honey trade expanded in 1976 for the second successive year in line with the record world harvest. Demand was strong and several exporting countries, including Mexico and Argentina, were able to work off excess stocks. In fact, Mexico shipped a record 47,800 tons of honey in 1976. Argentina's honey exports increased 8,000 tons in 1976 from those of a year earlier. Other notable gains were made by the PRC, Australia, Bulgaria, Chile, and Cuba. Exports fell from Romania, Czechoslovakia, Hungary, and the USSR.

In the import markets, the United States and Japan both imported much larger quantities of honey. The United States harvested another small honey crop in 1976 while apparent consumption was up. In Japan, consumption nearly recovered to the pre-1974 level. The only major import decrease was in the United Kingdom where rising prices and lessened ability to pay were important factors.

The average price (unit value) of U.S. Honey imports rose by nearly 10 per cent in 1976 above the 1975 average, than in first 7 months of 1977 prices subsided to 1975 levels.

Beginning stocks in several countries have declined in each of the past 2 years. This is particularly true in exporting countries such as Mexico, Argentina, and Australia, which have been able to work off unusually large carryover stocks.

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