

W.A.S.

Western Apicultural Society Journal

Winter 1994

The Past

"Get Eric!" "He'll do it!" "He'll do anything!" were the cries of the assembled spectators as Alex Elixor, multi-talented Vancouver street entertainer, worked the crowd at the 1993 W.A.S. Conference. Fortunately, he "got" me long before he started juggling flaming torches and machetes. All I had to do was simultaneously balance a spinning plate on the end of a stick in one hand, balance a metal rod on my forehead (he did it on end, I did it on its side), stand on one foot and drink a glass of water from the other hand. I did it, but the water spilled a little. Ian Farber was force-fed a banana by a blindfolded accomplice, while Alex raced him in a combination juggling / eating contest. Alex came in second in that one because he didn't get his apple "polished off" as quickly as Ian ate the banana. And, fortunately for Alex and Pamela Hill, the borrowed video camera did have enough mass to stay on the table when Pam yanked the table cloth out from underneath it. You should have heard the glee in the voices of the crowd (W.A.S. members, yet!) as they counted to three and anticipated the worst. Alex eventually paid the price - I talked him into wearing a bee beard. He wasn't nearly as comfortable doing that as he was dangling from a rope over our heads!

As always, the 16th Annual Conference of the Western Apicultural Society lived up to its reputation as being one of the most enjoyable events in beekeeping anywhere in the world. Dr. Mark Winston and his sizable crew of helpers planned and executed a great conference that included lectures, demonstrations, the group photo, many bee beards, nearby exhibitors' displays, the use of the faculty club for "buzzing," and lots of food. There was a little exercise at the beginning and end of each day, since they didn't completely level off the top of the mountain upon which the campus perches. The meetings were held a few stories above lodging level.

One of the earliest presentations, given by Denis McKenna who manages bees near the tundra (just kidding, but it gets real cold in central Alberta), really got my attention. He and area beekeepers have been experimenting with nuclei. Their nucs are started in the summer, the only time when they can rear queens. Given a little help, these nucs can develop enough to make quite a bit of honey that season. But that is not what surprised me. A five-frame nuc with plenty of food was able to winter over packed singly, three in a group, or six in a group, wrapped only in tar paper. The next spring there was no stopping their development and honey production. They far outproduced the packaged bees of the "good ole days."

This performance of nucs in the cold country is similar to reports I have heard about nucs in California and in the southeastern states. Given a bit of food and good weather, nucs can come on like gangbusters and catch up with or surpass established colonies in a relatively short time. More people should try to figure out how to work nucs into their management schemes. They really seem to work. Contrastingly, a colony that has dwindled down over winter to the size of one of those nucs is likely to sputter or die off the next spring. We still have a lot to learn about bees and their biological needs and abilities.

Bumble bees have been getting quite a lot of attention lately. One of our long-time W.A.S. members, Margriet Wyborn, absconded from the honey bee fold and became a researcher for the western Canadian company supplying bumble bees commercially to greenhouses in southwestern Canada. These greenhouse growers raise long-life tomato vines on adjustable strings. As the vines grow up the strings and produce fruits (even if we eat them as vegetables), the strings are lowered to keep things at a comfortable working level. Up to 30 feet of vine per plant can be wound around on the floor before the season is over.

Tomato flowers are self-pollinating, but they need to have the pollen jarred off the anthers and deposited on the stigma. Humans can go through the greenhouses jerking the strings, but bumble bees produce better tomatoes. They grab on to the outside of the flower and hang underneath the opening among the petals. Then they vibrate their bodies ("buzz pollinate") until the pollen spills out of the flower onto their ventral surfaces. Obviously, the pollen gets shaken all over the place inside the flower. This treatment is a bit hard on the flower, which turns brown where the bumble bee grasped it. That color change is a good indicator of whether or not enough bees are visiting the flowers.

It is interesting to note that even in this bumble bee system honey bees can be very beneficial. Bumble bees start the season as a single mated female that has to find a hole, forage for nectar and pollen to form a large dough ball, then lay eggs on the ball. Larval bumble bees consume the dough ball and pupate. They emerge as small, worker bumble bees that begin nest building and foraging, leaving reproduction to the founder of the nest. In the warehouse, founder bumble bees are not always content to stay in their boxes and work with the honey bee-collected pollen that is provided for them. If a few freshly emerged honey bees hang around her, she is much more apt to go ahead and establish the nest. Older honey bees are not accepted in this manner and are quickly killed.

Bumble bee colony life expectancy in the greenhouse is longer than that of the same colony of bees outdoors. The colonies must be fed sugar syrup and they are changed every 2 months over the 9 month period of tomato growing. This type of pollination is expensive: \$670 (Canadian) / acre / month. Usually there are 2-3 colonies per acre. Experiments are presently underway with bumble bees on blueberries and cranberries at 2, 4, and 8 colonies per acre. Distance experiments are expected to show a foraging range of about 1/4 mile. Blueberries have about 3000 flowers per bush, while cranberries have about 200-300 uprights per square foot with 2 flowers per upright. I was surprised to hear that experiments are being conducted with bumble bees on strawberries in California. I have been trying for

years to get strawberry growers to rent honey bees, but I am always told that "Pickers won't work in fields where there are honey bees." Do they think that bumble bees are any less apt to inflict stings?

Dr. Keith Slessor talked to the group about the steps involved in collecting, isolating, identifying, and synthesizing queen mandibular pheromone (QMP). The reason that they don't call it "queen substance" is because there are other components in the total pheromone slurry called queen substance that they have not yet identified. The components from the tergal glands have been particularly elusive. Then the topic turned to how bees behave to QMP, in and around hives and when the pheromone is sprayed on blooming crop plants.

QMP is fairly similar to Nassenov pheromone (mostly citral and geraniol) when it comes to attracting disoriented bees in the field. That was demonstrated very clearly in our outdoor workshops. More intriguing were the effects that QMP produced in hived colonies: delayed swarming for a week or so, and in nucs: kept bees calmer, reduced drifting, and led to better queen mating success. The substance also tended to calm large groups of bulk bees so that they did not overheat or run about excitedly. Increased bloom visitation for a day followed applications to crops in bloom, but favorable yield differentials were noted only in cases where pollination was being suppressed under "normal" conditions (rainy weather, etc.).

I always learn something just a bit out of the ordinary when I listen to Dr. Eva Crane speak, and this meeting was no exception. Talking about beekeeping before movable frame hives, Eva related that chimpanzees use sticks to poke into honeycomb and lick off the honey. She said there also is a reference to similar human behavior in a passage in the Bible. Therefore, she concludes that prehistoric man probably ate honey in this manner also. That must be how they kept from getting sticky fingerprints all over the cave! (By the way, Eva sent me on a history quest for proof of honey bees in the western U.S. before the recorded imports around San Jose, California. I sure have talked to a lot of historians! None of them could cite proof that beeswax was available locally. Sorry, Eva.)

Sherry Jennings of the National Honey Board shared the results of some consumer surveys that were conducted in supermarkets and in focus groups. It turns out that consumers want "pure" or "natural" honey, and they want that word stated on the label. It did not matter where throughout the world the honey originated, as long as it was pure. Colorful labels were preferred to drab ones, but if you have a picture of a bee on the label, keep it cutesy. Believe it or not, realistic bee pictures caused many consumers to not be able to pick up the jar and touch the label. (And you wonder why they are worried about AHBs!) Apparently having "coffins" on the label (actually bee boxes) didn't go over very well, either. And having a picture of a fruit, such as an orange, on the label suggested that the honey would taste "fruity" and turned off the prospective customer.

Dr. Jeff Pettis put an awful lot of work into determining what tracheal mites do inside the bees and beehives. Among other things, he found that tracheal mites transfer between host bees six times more often at night than during the day. Apparently, the mites are more apt to accomplish their goal of transferring to

young bees when most of the bee population is just standing around, not moving. Actually, the mites don't run right down to the thoracic spiracles as soon as they get on the new host. They tend to hang around the wing bases for a while, before entering the trachea.

There were other speakers, very nice exhibits in the display room by beekeeping supply dealers, book vendors, high-tech pest control companies, and an interesting silent auction. The Awards Banquet was held in a Vancouver Chinese restaurant. We were treated to a multi-course, highly varied, Chinese Banquet. Many of the dishes were not your "standard fare," but I noticed that very little food was returned to the kitchen until near the end of the meal. The food was so plentiful that we just couldn't eat any more.

Dr. Mark Winston bestowed Certificates of Appreciation on a couple persons who really helped make the Conference a success. Rozanne Phelps from Layton, Utah, made and donated a beautiful patchwork quilt as a raffle item. Steve Mitchell was honored for organizing all the logistics involved with getting bees and equipment on and off the field for the workshops and all those other "little things" that must be done right to make a good conference a great conference. The winners of the competitive exhibits received their ribbons at the banquet. And Denis McKenna was awarded the Outstanding Service to Beekeeping Award. Denis had a very nice write up in the "bee journals" months ago.

Reading about these conferences is nowhere near as much fun or as informative as attending and getting a copy of the proceedings, that covers all the lectures. Please try to attend the Washington meeting so that you don't miss out on all the good things a W.A.S. conference has to offer.

The Present and Future

Our 1994 WAS President, James C. Bach, submitted the following President's Message. "First, I would like to express my pleasure with the high quality WAS conference put together by past president Mark Winston, vice president Doug McCutcheon and all the volunteers in British Columbia. Thanks very much for a job well done! I heard many comments extolling the conference content and quality. This certainly indicates that everyone received what they expected in terms of information, communication, relaxation, and pleasure.

The next WAS conference will be held the week of August 1-5, 1994, in Pullman, Washington. Washington State University is home of the Cougars and Cougar Gold (the campus cheese). We had to move the conference to the early part of the month because, after the 15th, extensive construction starts on remodeling various buildings on campus including the conference hall.

The reason we selected Pullman is to encourage our members in Idaho, Montana, Alberta, Oregon and eastern Washington to attend our next conference. We have had past conferences up and down the I-5 corridor and I thought it was about time to move the venue farther east to broaden participation.

Several persons gave me some ideas to consider for the next conference, while we were in Burnaby. They are excellent ideas. I would like to extend an invitation to all of you to send me your ideas for agenda items, as well as other activities you may wish to see us provide. Also consider the current beekeeping issues which are important to you and tell me how we can address them at the conference. Since we are an apolitical group, we will not take any positions or generate any resolutions on these issues, but we can certainly provide a forum for discussion for our mutual benefit. We can exchange ideas, information, the latest research and personal experience to help us look at the issues. Our knowledge will then equal the sum of all our ideas and information.

Dr. Dan Mayer and I express our hope that many of you will set aside the first week in August, 1994, to join your beekeeping colleagues in Pullman to enjoy the Palouse region as well as the hospitality of WSU. [Ed. note - Palouse sounded like a horse to me, but it is the name of a town on the Idaho border through which flows the Palouse River from it's origin in the St. Joe National Forest in Idaho, over Palouse Falls, and into the Snake River.]

I am pleased that you have selected me to serve as your President, and I look forward to working with Dan Mayer and you in formulating a rewarding conference in 1994."

1993 Minutes

Delegates and Directors Meeting, August 16, 1993.

The meeting was called to order at 4:04 pm by President Mark Winston. Officers, Delegates, Directors and members attending were: Mark Winston, President; Ron Neese, Treasurer; Nancy Stewart, Secretary; Burt Spangler, Auditor and Delegate; Ed Hanson, Director Alberta Canada; Ron Parsons, Delegate; Olive Jones, Nominations; Bill Jones, Utah; George Steffensen, Director Oregon; Joe Erickson, Director Colorado; Charles Duncan, Resolutions Chair and Delegate; Eric Mussen, Journal Editor; Doug McCutcheon, Vice President and Director, Victoria BC; James Bach, Second Vice President; Wilburn Phelps, Director Utah; Mike Burgett, Past President and Sites Chairman.

The President's report included conference general information and the fact that Dr. Eva Crane is in attendance as a speaker.

Charles Duncan moved that the minutes from the Delegates and Directors meeting of August 10, 1992, be approved as printed in the Journal. G. Steffensen seconded. Motion carried.

Ron Neese gave the Treasurer's Report. Membership has grown slightly and more associations are members this year. The accounts from last year's conference are yet to be settled, completely. The report was filed.

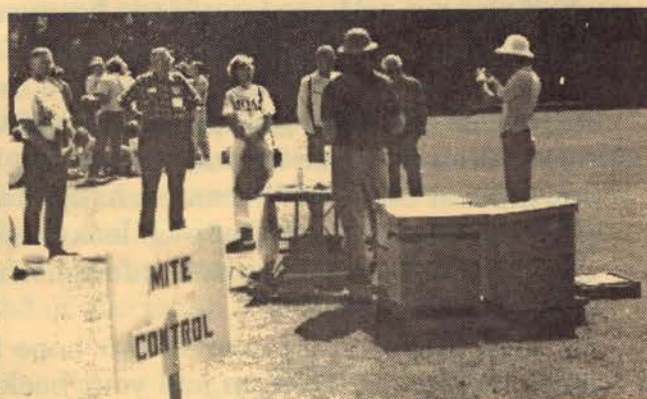
Burt Spangler presented the Auditor's Report and placed it on file.

Eric Mussen said that increased cost of printing the Journal is attributable to the cost of reproducing pictures.

James Bach suggested that next year's conference be held at Washington State in Pullman, WA. C. Duncan moved that we approve this site for 1994. G. Steffensen seconded. Motion carried.



Conference staff "enjoying" a meeting event with Mark



Dr. Kerry Clark discusses mite control experiments



Tanya Pankiw attracts a crowd at queen rearing demonstration



Dr. Keith Slessor demonstrates Queen Mandibular Pheromone



Alex, thankfully, relinquishes his beard



Alex finishes second to Ian "Banana Man" Farber



Pat and Alex play with borrowed camcorder

Burt Spangler asked that the organization consider making the necessary changes to allow W.A.S. to be able to include venues other than universities for consideration in future planning of conferences. This will be brought up at the General Meeting.

Mike Burgett suggested the following sites for conferences: 1994 (already decided) Washington; 1995 California (Eric Mussen tentative beginning organizer); 1996 Hawaii.

Olive Jones asked the following groups to caucus to nominate a Director: California, Oregon, Alaska, Idaho, and Washington.

Charles Duncan reported no resolutions.

The meeting was adjourned by the President at 4:56 pm.

General Business Meeting, August 18, 1993.

The meeting was called to order at 4:35 pm by President, Mark Winston. B. Spangler moved the minutes of last year's meeting be approved as published in the Journal. J. Bach seconded. Motion carried.

Secretary, Nancy Stewart, reported that over twelve items of correspondence from all over the world were received and acted upon in the last year. Information on a Costa Rica tour was read and Mark Winston volunteered to have a report from Mali translated.

The financial report was given by Treasurer, Ron Neese, and placed on file. Membership trends include a growth after a two-year down trend; senior category is the fastest growing, Association memberships are up from two to six, and there are no commercial memberships.

The Auditor, Burt Spangler, presented his report and placed it on file. He was thanked by the group for his continuing and helpful work. J. Bach moved the treasurer's report and auditor's reports be approved. G. Steffensen seconded. Motion carried.

The President reported conference attendance up a bit this year, to approximately 140-150. He thanked the B.C. Honey Producers Association and Ernie Fuhr, a local beekeeper, whose special contributions to W.A.S. enabled us to bring Dr. Eva Crane to the conference as a speaker. We had no tour on the program this year, partly due to the rising costs of the conference. The President recognized Doug McCutcheon and Paul van Westendorp as co-organizers of the conference.

The Journal report was made by the President. There were two editions this year and are streamlining the process in the future.

Sites Committee Report: J. Bach said the 1994 conference will be held the first week in August in Pullman, WA, at Washington State University. Send him any ideas for program content. Mark Winston passed along Mike Burgett's report from the Directors and Delegates meeting that 1995 will be in California (perhaps UCD) and 1996 looking to Hawaii. Mark asked for an indication of who would go to Hawaii and there was lots of interest!

Resolutions Chairman was not present.

Olive Jones, Nominations Chair, introduced the present Directors, B. Cosgrove, CA; G. Steffensen, OR; F. Miller, AK; J. Worley, WA; B. Smith, ID; L. Joy, NV; D. McCutcheon, BC; J. Erickson, CO. The committee submitted the following slate of nominees: President - James C. Bach; Vice President - Dan Mayer; Second Vice President - Eric Mussen; Treasurer - Ron Neese; Secretary - Nancy Stewart; Directors - California: Stan Umlauf; Washington: Miriam Bishop; Oregon: Michael Burgett; Idaho: Bob Marion; Colorado: Joe Erickson.

There was no old business. New business: Burt Spangler suggested we change the constitution so

the conference committee can consider sites other than universities, because they are no longer assuredly less expensive than other sites. If the Directors OK this change it would be guided through channels and could be approved at the General Meeting in 1995.

B. Spangler moved we approve the WA site for 1994. G. Steffensen seconded. Motion carried.

R. Neese moved that the slate of nominations be accepted. T. Muncey seconded. Carried. Nominations were opened to the floor. B. Spangler moved nominations be closed. G. Kern seconded. The slate presented by the committee were declared elected.

Communications and bills were commented on by R. Neese. He and others will be working to resolve the bill from 1992 conference and will report on it later. Ron also responded to inquires about specific budget items.

S. Umlauf submitted a resolution to ask the Directors to recommend the establishment of a Lifetime membership for clubs. This was discussed and approved.

R. Neese moved we adjourn at 5:20 pm. T. Muncey seconded. Motion carried.

Delegates and Directors Meeting, August 20, 1993.

The meeting was called to order by President J. Bach at 9:00 am. Those attending were: F. Stewart, B. Spangler, E. Hansen, R. Neese, V. Neese, N. Stewart, R. Parsons, J. Erickson, B. Marion, O. Jones, B. Jones, L. Joy, S. Umlauf, M. Bishop, E. Mussen, C. Duncan, M. Winston, and A. King.

Discussion topics: Does this organization have any political role? A third issue of the Journal.

The President appointed the following: Nominations Committee - Olive Jones; Sites - Mike Burgett; Parliamentarian - Ron Neese; Resolutions - Charles Duncan; Journal Editor - Eric Mussen; Auditor - Burt Spangler. Ron Neese will work toward resolution of the 1992 conference bill from Oregon.

In the Interest of changing the Articles of Incorporation so the conference committee may consider venues other than universities, C. Duncan moved the word "primarily" be inserted in the Articles at the appropriate place to allow that flexibility. M. Bishop seconded the motion. Motion carried.

C. Duncan moved the following: "Be it resolved that we provide permanent membership for beekeeper associations for a one time charge of \$100.00. All other conditions of membership shall apply." B. Spangler seconded. Motion Carried. This will be published and voted upon at the Directors meeting next year and will become effective if approved.

The Auditor recommended that the society change from its bank to a credit union to avoid service charges.

S. Umlauf suggested there be a conference committee for developing honey competitions at future conferences.

The auction raised \$847.00. The silent auction and quilt raffle brought in over \$1,000.00.

C. Duncan moved we adjourn at 10:19 am. S. Umlauf seconded. Motion carried.

Respectfully submitted,
Nancy Stewart, Secretary

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ADVERTISING RATES: ¼ page

One year \$ 50 Single copy \$ 25

Payments in foreign currency should be adjusted to reflect current rate of exchange (U.S.).

Copy deadline is the 10th of the month. Send all copy to the Editor. Information must reach the Editor at least one month in advance of the copy deadline.



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