

TORONTO ENTOMOLOGISTS'
ASSOCIATION

Alan J. Hanks, Treasurer
34 Seaton Drive
Aurora, Ontario L4G2K1

1986/87

The first meeting of the 1986/87 season was held on Sept. 20th in the Planetarium Lecture Room starting at 1 p.m. In attendance were Alan Hanks, John Eberlie, Bill Edmonds, Bert Wigg, Quimby Hess, Jim Spottiswood, Barry Harrison, Hal Donly and new members Bev Lee and Kit James. Bev Lee kindly consented to take the minutes.

1. Minutes:

The minutes of the last meeting were reviewed and accepted and there was some discussion about the field trip and its success. Many thanks to Quimby for hosting it.

2. Business arising:

Quimby gave a run down on recent developments regarding the Karner Blue in the St. Williams and Pinery areas. More studies have been carried out this year and a program of lupine planting and canopy control has been instituted in selected areas.

3. Correspondence:

a) A letter of reply was received from the Ministry of Natural Resources regarding the spraying program for the Gypsy Moth. An assurance was included that areas involving the West Virginia White and the Karner Blue would be given special attention.

b) The usual christmas card package from the F.O.N.

4. Financial report:

Last season ended with \$581 in the account and with memberships received so far, there is currently \$843 on hand. Thirty members have paid their dues to date, leaving thirty-one unpaid. It was noted that several previous members have not paid dues for a couple of years. Some of them will be contacted further.

5. New business:

The problem of speakers for our meetings was discussed. John Eberlie stated that Dr. Vickery of the Lyman Entomological Museum has agreed to come to one of our meetings to talk on his specialty - grasshoppers.

Quimby will try to get Lawrence Packer, who has been doing research on the Karner Blue, to come and address a meeting. He has been working under contract for the World Wildlife Fund during the summer in the Pinery area.

The Lepidopterists Society meeting in Ottawa was discussed. Eight of our members were in attendance and it was noted that the slides during the sessions were very good, as well as the field trips.

Another member display meeting will be scheduled for next March.

A discussion was held regarding some differences in systematics in a new book by Scott on North American Butterflies. It was decided to stay with the current usage according to Miller & Brown, so that our summary need not change at present.

6. Publications & Book Reviews:

- a) 'Butterflies of North America' by James A. Scott (Stanford University Press) was reviewed by Quimby Hess. He noted a number of variations in systematics between this volume and the Miller & Brown listing.
- b) A recent copy of 'Seasons' from the F.O.N.
- c) Photographs from the Ottawa Lep. Soc. meeting.

7. Program:

John Eberlie showed slides he had taken during the summer season, including some very interesting life history material from his rearing experiments. Quimby Hess showed slides of various collecting areas of unusual interest and many specimens caught in the various areas. A lively discussion followed the showing of a very good selection of slides. John Eberlie also brought a healthy larval specimen of the Imperial moth

With regard to the 1986 Summary:

- a) The deadline for receipt of lepidopterists submissions is November 30th.
- b) Special notes on life histories, ranges and occurrences etc.. for Section 4 are welcomed.
- c) Colour or B & W photos (3 x 5) for possible inclusion are welcome (these will be returned in due course).
- d) A passport size photo of contributors for possible inclusion is welcome.
- e) Mail all contributions or material to:

Quimby F. Hess, 11 Esgore Drive, Toronto, Ont. M5M 3P9
(416) 482-1637

NEXT MEETING IS SCHEDULED FOR OCTOBER 18th. LET'S HAVE A GOOD TURNOUT.

DUES ARE NOW DUE !!



TORONTO ENTOMOLOGISTS' ASSOCIATION

The second meeting of the 1986/87 season was held on Oct. 18th in the Planetarium Lecture Room starting at 1 p.m. In attendance were John Eberlie, Bill Edmonds, Bert Wigg, Quimby Hess, Kit James and visitor Tom Mason.

1. Minutes:

The minutes of the last meeting were reviewed and one error was noted. The *Eacles imperialis* larva was brought by Hal Donly and not John Eberlie as reported.

2. Business arising:

(a) Summary submissions have been received so far from Irene Trigg, Bert Wigg, Rod Parrott, Quimby Hess, Ross Layberry, John Eberlie, Terry Crabe and Mary Gartshore. Please send your summary with a passport size photo (contributor) and any other photographs of specimens as soon as possible.

(b) Meeting speakers. Lawrence Packer is currently out of the Province. James Kamstra has agreed to talk at the November meeting about his collecting trip to B.C. with a possibility of some discussion about an ecological survey in Belize. John Eberlie noted that Dr. V.R. Vickery, Curator Emeritus of the Lyman Entomological Museum, is booked for the April meeting. For the January meeting, it was agreed that the program would be for members to talk about their favourite collecting/habitat areas - hopefully illustrated with slides. John Eberlie will contact Dr. Wiggins of the R.O.M. regarding space for our Members Display Meeting in March of 1987.

3. Correspondence:

a) A note was received from Gord Edmund noting that he will be away on a Sabbatical until the summer of 1987.

b) Quimby Hess advised on the last F.O.N. Directors meeting at Glendon College. It was mostly concerned with Club Insurance.

4. Financial report:

Finances currently stand at \$975.42 in the account, with an additional three members having paid their dues. This still leaves twenty-one members unpaid.

5. New business:

Tom Mason of the Metro Zoo wishes to become a T.E.A. member. He discussed their current plans to open an Invertebrate Zoo (including insects) within the next year. He would like to have T.E.A. members consider assisting in the project. It was decided to give members time to think this over, and further discussions will take place at future meetings. This proposed zoo could include both living and dead materials.

7. Program:

A slide show was given by Quimby Hess on butterfly habitats in the Hudson Bay Lowlands - particularly Onakawana and the Hudson and James Bay areas.

It is very disappointing that only five members and one visitor were present at this meeting. The executive realizes that a meeting without a speaker is somewhat less interesting than one with. However, obtaining speakers is very difficult, and most of the members are mainly interested in the collecting and preservation of the Lepidoptera. Why we cannot see more members at the meetings to take part in discussions on various topics touching on this subject is a mystery. It is extremely discouraging for the members who do come out to see such a lack of interest. Surely out of each month a member can spare the couple of hours on a Saturday afternoon to come out and support the Association. We do not even seem to have a Secretary at the present time, and Quimby Hess was kind enough to take the minutes of this meeting. If anyone has any comments on this, please contact any member of the executive. We would like to have your views on how to improve the Association and at least get some attendance at the meetings. PLEASE LET US KNOW!!!

NEXT MEETING IS SCHEDULED FOR NOVEMBER 22nd.
LET'S HAVE A GOOD TURNOUT.

* * * * *



TORONTO ENTOMOLOGISTS' ASSOCIATION

The third meeting of the 1986/87 season was held on Nov. 22nd in the Planetarium Lecture Room starting at 1 p.m. In attendance were John Eberlie, Bill Edmonds, Bert Wigg, Quimby Hess, Alan Hanks, Bev Lee, John Prideaux, James Kamstra, Jim Spottiswood, Barry Harrison, Tom Toyomi Ikeda, Tony Holmes, Ron Lyons, Irene Trigg, Kit James and visitors Tom Mason and Geoff Hirst.

1. Minutes:

The minutes of the last meeting were reviewed and accepted.

2. Business arising:

(a) Quimby noted that some members still have to send in their summary submissions and some photos are still to come. However, the summary preparation is progressing well and there is much interesting information.

(b) The January meeting will have some members talking about their favorite collecting spots, illustrated with slides. Lawrence Packer may also be present at the meeting. Rein Jaagumagi of the R.O.M. will conduct a 'tour' of the facilities of the Entomology Department during the course of the February meeting. He will come to the Planetarium Lecture Room at 2 p.m., which will give us time to conduct the normal business portion of the meeting. This should be very interesting and members are urged to come out and attend this meeting. The March meeting will be the members display meeting, probably to be held in the same room as last year. Dr. Vickery of the Lyman Entomological Museum will give a talk on grasshoppers at the April meeting.

3. Correspondence:

a) A communication was received from the National Library of Canada regarding the assigning of ISBN numbers to the TEA publications. Al Hanks has responded to this and will take care of the rest of the paper work.

b) A letter was received from the Credit Valley Conservation Authority requesting the assistance of the T.E.A. in identifying the insects of Environmentally Significant Areas in the Credit River Watershed. Al Hanks will call and set up an appointment to discuss this matter. Possibly some work may be carried out next summer, or we may be able to obtain some information from past summaries.

c) Brochures were received from Metascience Co. (suppliers of livestock) and the Entomological Clearing House in Wisconsin (suppliers of exotic insects).

d) Details from the Entomology Department of the R.O.M. regarding an insect cabinet that is for sale. Several members took copies of this.

4. Financial report:

Finances currently stand at \$1,098.98 in the account, with additional amounts due from recently paid members. Forty-one members have paid to date.

5. Publications:

Al Hanks brought a 'coffee table' book of insect paintings by Bernard Durin (Hudson Hills Press - New York) and a recent reprint of 'The Aurelian' by Moses Harris, in the Country Life series, printed in England. John Eberlie brought a copy of the A.E.S. magazine with an interesting article and some newspaper clippings concerning entomology. Quimby Hess brought some material from the F.O.N.

6. New Business:

Quimby Hess discussed some aspects of the F.O.N. and requested that someone volunteer to be the T.E.A. representative, a post he is currently filling on a temporary basis.

The Metro Toronto Zoo has become a 'member' of the T.E.A. and Tom Mason from their Invertebrate Department has permission to invite the Association to carry out a study of the insect species and their habitats found within the zoo property. This will be done next year, starting with the field trip in May. It will probably be necessary to do some work in June, July and August to get a good coverage of different species.

Bev Lee has made a request for any spare insect specimens which members may have for use in the classroom. She would like to get a good cross-section of the different insect families if possible.

7. Program:

A talk and slide show was given by James Kamstra in two parts. The first concerned some work he carried out as a Park Naturalist in British Columbia and the second his work at the site of a proposed National Park in Belize, Central America. His account of both areas was extremely interesting, and was illustrated with some excellent slides. The slides covered both flora and fauna, as well as some insects.

- - - - -

It was very encouraging to see so many members out at this meeting, seventeen in all. The executive hopes that this trend will continue in the new year and would like to wish all those members who do not get to the meetings a Merry Christmas.

* * * * *

NEXT MEETING IS SCHEDULED FOR JANUARY 24th.
LET'S HAVE A GOOD TURNOUT.

* * * * *



TORONTO ENTOMOLOGISTS' ASSOCIATION

Meeting # 4
86/87 Season

The fourth meeting of the 1986/87 season was held on Jan. 24th in the Planetarium Lecture Room starting at 1 p.m. In attendance were John Eberlie, Bert Wigg, Quimby Hess, Alan Hanks, Bev Lee, James Kamstra, Jim Spottiswood, Tom Toyomi Ikeda, Tony Holmes, Ron Tasker, Bud Ridley, Hal Donly and visitors Michele Williamson, Tony Steddy, Chris Rickard and David Pagnello.

1. Minutes:

The minutes of the last meeting were reviewed and accepted.

2. Business arising:

a) Quimby reported that he had just completed the draft of the 1986 Seasonal Summary, having received a 'last-minute' submission by Dr. Nick Escott of Thunder Bay only a few days previously. He also said that the compilation of the Summary had become increasingly hard as more reports come in each year. The latest Summary has taken approximately four months to complete. He suggested that in future years it should be made easier for the editor by only reporting new information. Members already have previous summaries, which include information to date!

b) Ron Tasker suggested that since the Bird Breeding Atlas for Ontario was now completed, the experience acquired by the compilers of the atlas could perhaps be made use of by our Association to compile a similar atlas for the distribution of Ontario lepidoptera. Tony Holmes then reported that his work on the "Distribution of Ontario Butterflies" which was completed some years ago, was 'on hold' as he had been unable to find a publisher. It was agreed that the Association would like to see it published, but Tony stated it would first have to be brought up to date.

It was therefore agreed that a committee composed of Quimby Hess, Ron Tasker and Tony Holmes would get together with objectives as follows:

1. Up-dating the "Distribution of Ontario Butterflies".
2. Finding a way to publish the book.
3. Looking into the possibility of commencing an atlas of the distribution of Ontario Lepidoptera along the lines of the Bird Breeding Atlas.

c) Metro Zoo. Tom Mason has requested details of probable numbers of T.E.A. members who could take part in a survey of insects at the Zoo property and also possible dates for such surveys. It was suggested that an average of six members at each outing was about as many as could be expected and the suggested dates were:

June 6, July 11 and August 22.

3. Correspondence:

a) A letter from the M.N.R. requesting applications for positions of Junior and Senior Park Naturalists in Algonquin Park.

b) Correspondence from the F.O.N. re liability insurance for naturalists' clubs.

c) A letter from the F.O.N. trip organizers requesting some assistance with a proposed butterfly watching trip to Pelee Island including the new Stone Alvar Nature Reserve. For this trip, they need a leader who knows something about the Pelee Island lepidoptera. It was thought that Alan Wormington or Jack Pilkington might be interested and should be contacted.

Jim Kamstra said that he would be a willing candidate if a date in early September would be suitable. He knows the area and said that several interesting butterflies such as *P. cresphontes* and the *Asterocampas* would likely be in flight at that time.

d) A letter from an organization called 'Public Focus' regarding a "Children's Environmental Conference" in 1987. Details are attached.

e) A letter from the Nature Conservancy of Canada requesting donations. It was agreed that the T.E.A. would donate \$75.00 to this worthy cause.

4. Financial report:

Finances currently stand at \$1,202.55 in the account, with additional amounts due from recently paid members. Forty-nine members have paid to date.

5. Publications:

Quimby Hess brought the Nov/Dec. issue of the 'Equinox' magazine, which contains a brief article on the Karner Blue in Ontario.

6. New Business:

Owing to the fact that one or two members said that March 21st would be an inconvenient date for them to attend the proposed 'Display Meeting', it was agreed to try and hold it on March 28th instead.

Bert Wigg and others suggested trying to rent a room in a hotel, school or public library etc.. so that we could invite the public to a display meeting and take the opportunity of offering for sale spare specimens and so on. A proportion of the profit from such sales would be retained by the T.E.A. to offset expenses.

Chris Rickard introduced himself and noted his collecting interests and Tony Steddy told the meeting that he is a landscape architect. He has an idea for creating butterfly-watching displays at garden centres, somewhat along the lines of some of the establishments found in Great Britain. This is a very interesting concept, which should create more interest in insects.

7. Program:

Quimby Hess discussed some of his favourite collecting areas demonstrated by slides. The areas included Lake Huron localities near Grand Bend such as the Pinery; some northern Ontario localities and the Muskoka District.

Ron Tasker described favourite habitats on Manitoulin Island and the significant butterflies occurring in them. Slides and maps of the Island clearly illustrated his descriptions.

John Eberlie described his favourite areas, mostly in Northumberland County, again accompanied by slides.

- - - - -

The next meeting will be held on February 21st and will include a brief discussion of the survey last year on the Lupines at St. Williams and the associated Karner Blue and Frosted Elfin butterflies. This will be followed by a tour of the R.O.M. Department of Entomology conducted by Rein Jaagumagi

* * * * *



TORONTO ENTOMOLOGISTS' ASSOCIATION

Meeting # 5
86/87 Season

The fifth meeting of the 1986/87 season was held on Feb. 21st in the Planetarium Lecture Room starting at 1 p.m. In attendance were John Eberlie, Alan Hanks, Bev Lee, Gord Townsend, Alan Wormington, Tom Toyomi Ikeda, Tom Mason, Bud Ridley, Bill Edmonds, David Pagnello and Chris Rickard.

1. Minutes:

The minutes of the last meeting were reviewed and accepted.

2. Business arising:

a) The summary is currently being typed into the computer after the final draft was received from Quimby Hess. Some discussion arose regarding the photographs. The last summary photographs were not too successful, a result of trying to Xerox the colour prints. An attempt will be made to get the original negatives or to try and copy the photos in black and white so that they reproduce better. This may delay the publication of the summary a little.

b) Alan Wormington gave some information on the proposed F.O.N. 'Entomology' trip in the Pelee area. He has agreed to lead the trip, but it has been changed from Pelee Island (as proposed originally) to the mainland. Probably centering around Point Pelee National Park and Oxley Swamp, with other possible locations included to encompass as many species as possible. The dates have been set as July 25 - 26 and a notice will appear in 'Seasons'.

c) There was a problem with the location of the March 'Members Meeting' as the room which was to have been used in the Palaeontology Dept. at the R.O.M. is no longer available. As of now, the meeting will be held in another room in the Planetarium which is located just past the Lecture Room. It is a little small, but we should be able to use the corridor outside as well.

3. Correspondence:

a) A letter from the F.O.N. requesting a nomination for someone to represent the T.E.A. at their meetings. Quimby is unable to do this any more. We really need a volunteer to take this on. It is a bit ridiculous being a member of the F.O.N. if we cannot have some representation at the meetings. If anyone is interested in doing this, and there is very little attached to it other than attending an occasional meeting, please let any member of the executive know.

4. Financial report:

A \$75 donation has been sent to the Nature Conservancy of Canada. Balance is at \$1177.12, with fifty-one members paid to date.

6. New Business:

Tom Mason reported that the plan for the insect survey of the Metro Toronto Zoo is underway and just has to be passed by the board. Construction has also begun on the new invertebrate section at the Zoo.

Some discussion took place regarding speakers for our meetings next season. Some suggestions were for professors from U of T, York University or Erindale College. Two possibilities are Dr. Glen Morris, whose field is Katydid and Robert Longair, whose interest is in earwigs. Other possibilities will be examined.

7. Program:

Dr. Chris Darling gave a resume of the work carried out last season on the Karner Blue by Laurence Packer. This was most interesting and Dr. Darling also showed a number of slides of various braconid wasps which are his interest.

After this, the whole assembly moved into the Entomology Department of the ROM, and Rein Jaagumagi led a tour and discussion of various things currently going on in the Department. He showed us the pinning boxes which the Dept. are currently using, and which fit in the Cornell drawers. These boxes are available from Hanlie Carton & Printing in Guelph. If anyone is interested in these, please let Al Hanks know, and he will make up a list for a possible order. A summary of sizes etc.. is attached.

Remember the next meeting will be on March 28th, still in the Planetarium, but in a different room in the basement. Bring your slides, books, specimens etc.. for sale or trade or showing. Let's have a good turnout!!! See you there!!!

Cornell University System

<u>CODE</u>	<u>DESCRIPTION</u>	<u>SIZE</u>	<u>PRICE EACH</u>	
			<u>1-500</u>	<u>501-100</u>
HCU - 4D22	4 Trays/Drawer	218 x 188 x 50	1.50	1.30
HCU - 4D22L	Lid	222 x 190 x 35	<u>.30</u>	<u>.20</u>
	Tray c/w optional lid		<u>1.80</u>	<u>1.50</u>

			<u>PRICE EACH</u>	
			<u>1-3000</u>	
HCU - 8D42	8 Trays/Drawer	109 x 188 x 41	.65	
HCU - 16D44	16 Trays/Drawer	109 x 94 x 41	.50	
HCU - 32D48	32 Trays/Drawer	109 x 47 x 41	.40	
HCU - 52D413	52 Trays/Drawer	109 x 29 x 41	.38	
HCU - 64D88	64 Trays/Drawer	55 x 47 x 41	.37	

Large quantity, reduced prices available on request.

Trays and lid are made from heavy (20-24 caliper), white - coated (80 BC), die - cut, carrier board; all assembled, and complete with 8 - 10 mm cross-grain, closed - cell, white, polyethylene foam pinning bottoms.

Foam pinning bottoms and unassembled trays may be purchased for convenience of storage, at reduced prices.



TORONTO ENTOMOLOGISTS' ASSOCIATION

Meeting # 6
86/87 Season

The sixth meeting of the 1986/87 season was held on Mar. 28th in the Planetarium Basement Room starting at 1 p.m. In attendance were John Eberlie, Alan Hanks, Bev Lee, Bert Wigg, Tony Holmes, Tom Toyomi Ikeda, Tom Mason, Quimby Hess, Hal Donly, David Pagnello, Jim Spottiswood, Kit James, Eric Bryant, Phil and Pat Schappert.

1. Minutes:

The minutes of the last meeting were reviewed and accepted.

2. Business arising:

a) The summary is now in the stage of being finally checked and assembled along with the photographs, maps etc.. It should not be too long before it can go to the printer. Hopefully it will be available before the end of the season!!

b) Notice has appeared in the F.O.N. magazine about the 'Entomology' trip in the Pelee area. This will be led by Alan Wormington and the changes outlined in the last newsletter have been put in place. The dates have been set as July 25 - 26 and anyone wishing to book should contact the F.O.N.

c) The Metro Zoo 'project' is in place and the dates for visits are June 13th, July 11th and August 22nd. Please call Tom Mason at 839-6764 (home) or 392-5972 (work) if you wish to join in. This will give the numbers for each visit.

d) Kit James has agreed to act as the F.O.N. representative for the T.E.A. and his name will be forwarded. Many thanks to Kit from the Executive!

4. Financial report:

Balance is at \$1197.76, with fifty-three members paid to date.

6. New Business:

Additional discussion took place regarding speakers for our meetings next season. John Eberlie has produced a list of local people gathered from the Lep. Soc. membership list, and some of these will be contacted. Remember that Dr. Vickery of the Lyman Entomological Museum in Quebec will be our speaker for the April meeting. Make sure you all come out to support this event. The talk is entitled "A conglomeration of Insects", and should be really interesting.

7. Program:

This meeting was the 'Member's Display Meeting' & this constituted the program. A number of the members had brought specimens for display, books for sale and various other things. John Eberlie had some live larvae, as rearing is one of his main interests.

Remember the next meeting will be on April 25th, and the guest speaker will be Dr. Vickery of the Lyman Entomological Museum. Please make an effort to get out and attend this meeting, as we want to show Dr. Vickery that the T.E.A. has a number of active members that are interested in attending the meetings.

Paul Syme of Sault Ste. Marie has sent in some plans for Schmitt boxes and these are attached to these minutes. Many thanks, Paul.

* * * * *

INSTRUCTIONS FOR CONSTRUCTING
SCHMITT BOXES WITH SIMPLE POWER TOOLS

(For People who are reasonably handy
but not highly experienced cabinet makers!)

Introduction: When I was at University and needed some Schmitt boxes but didn't have the cash to purchase these pricey items, a friend and I planned and built our own, using a bench saw. They were built for a pittance, in contrast with the commercial cost, and looked quite presentable when done. You don't have to be a skilled carpenter, just have an ability to work with wood and use some basic power tools.

The boxes were standard schmitt box size, but by doubling the height of the box, we found that we could get twice the pinning bottom area by utilizing the top and bottom, with virtually no increase in the effort and a savings in the material of two single boxes with the equivalent pinning capacity.

Construction: The sides were made from nominally 1/2 inch (3/8 " actual) [1 cm] thick basswood. (Clear pine or other similarly easily workable wood would do.) Two styles were built: 1) For the standard box, 2 3/4 inch (7 cm) wide stock was used. 2) The double box required 4 1/2 inch (11.2 cm) wide stock.

Both boxes are standard Schmitt box size, 9 x 13 inches, therefore 44 inches (4 feet) of stock are required per box. For the tops and bottoms, we used 1/4 inch, good one side (G1S) birch plywood cut into approximately 8 1/2 x 12 5/8 inch pieces (matching pieces must be exactly the same). The side stock was rabbeted along both edges 1/4" (5mm) deep (i.e., half of the thickness of the stock) and as wide as the plywood was thick (nominally, a 1/4 x 1/4" rabbet). The actual width should be just a shade wider than the thickness of the plywood, about 1/16 or 1mm, or less. (Fig. 1)

Using the dimensions of the plywood tops and bottoms, measure along the inner rabbeted edge to determine the lengths of the sides and ends of the box. Using a power saw, mitre the corners of the side pieces. (See Fig. 2)

Now, using a good quality carpenter's glue, glue the 4 sides together, with the top and bottom plywood pieces, to make a solid box with no opening. Use finishing nails in the plywood top and bottom to hold the pieces together and countersink them with a nail set. Do not use nails in the corners of the side stock. The squared corners of the plywood pieces will ensure that your box is reasonably square when assembled, with no forms needed. However, build the box on a flat, plane surface.

Determine where the opening between the eventual top and bottom of the box will be. For single, standard boxes, the bottom should be about 1 7/8 inches high. For the double boxes, the top

should be equal to the bottom, so the line between should be at 1/2 the width of the side.

Mark this position on one corner. At about 1/4 to 1/2 inch from this line, on both sides of it, make another mark. Repeat these latter 2 marks at the same distances, on each corner

For the next step, I used a hacksaw and some basket wood from a berry basket. The point here is, that the wood you use should fit snugly into the saw cut. Experiment on scrap wood with various hacksaw blades or woods until you get the right combination. Now, at each corner, cut two slots with the hacksaw at each of the 2 marks, at 45° to the side and not quite through the stock. (Figs. 3 & 4). Coat each piece of berry wood, or whatever wood is going into the slots, with glue, both sides, and force snugly into the slots. Set aside for the glue to set.

When ready, cut off the excess berry wood with a sharp chisel, working back from the corners so as not to split the wood out at the edge. Take care not to mark the surface of the side. Trim or sand down these carefully. Now you have a box you cannot get into! Before going any further, hand sand, with a sanding block and appropriate grits of garnet or aluminum oxide paper, the soft wood of the sides until they are smooth to your satisfaction. (Here is the advantage of using soft wood such as basswood or pine.) Be careful not to round the corners or edges. Placing the box on its bottom, carefully sand the protruding edge sticking up above the birch top, without sanding the top itself. Be especially careful on the ends, as a stroke across the grain of the plywood will scratch it and show up under any staining or finishing you might do later. Sand the edge down flush to the plywood and repeat for the bottom. Fill in any cracks between the top or bottom and the sides, with a wood filler (plastic wood) and sand smooth, or wait until the final finish is dry and fill in the cracks, if any, with an appropriately coloured putty stick, available at builders' supply houses.

After sanding the box smooth, and using a bench saw, cut the box on 4 sides at the mid-point as previously marked (although this mark will be sanded off now), or at the top - bottom line for single boxes. This will give you a top and a bottom portion. Number these as you make them in an inconspicuous place and so that corners will match exactly as they were before the cut. Although the boxes were reasonably square before the cut, they will not be perfectly square. But as long as they are re-fitted as they were built, they will match perfectly. The berry box splines will prevent the now unsupported edges from separating. If properly made, these joints (splines) are very strong and will hold together an otherwise mediocre mitre joint!

Using whatever is available, cut strips of material (thin wood, plastic, etc.) and insert inside the bottom as a collar,

sticking up about 1/2 inch above the edge. Tack it in place with short finishing nails and this acts as a form to hold the lid when it is on. If there is no warping, the lid will fit snugly with no need for fasteners. Just don't try to carry it by the lid!

We used plexiglass inserts for most of our boxes, because of availability at the time, but most plastics are marred by contact with paradichloro-benzene if you use it to deter pests. So, if you use plastic, put it in contact with the chemical you use for pest control for a week or so to see if there is a reaction. If so, you'll have to use some kind of container fastened in the corner of the box (I use cardboard pill boxes with holes punched in the lids, but these are hard to find today). This will keep the crystals out of contact with the plastic. Wood, of course won't react.

Before placing the collars in, install your pinning bottoms. We used 1/4 inch thick balsa wood, but got it wholesale in 4 x 6" x 4 feet lengths and cut it into 1/4 inch slabs with a power saw. This prodeced nice pinning bottoms at a fraction of the cost of 1/4 inch balsa in the hobby shop. Any pinning material of your choice would be suitable, but set it in securely (top and bottom for the double boxes) before installing the collar.

A point to remember when cutting the tops and bottoms from a 4 x 4 foot sheet of plywood: Keep the grain running lengthwise, but you'll have to use some with the grain running across, unless you waste a lot of wood. Use these up on the bottoms and save the lengthwise grain for the tops, picking the nicest looking pieces for the tops. Finish the exterior with a suitable finish, but don't put a varnish - type of finish on the edges between the top and bottom, or else they may stick shut. If you stain the boxes first, you can stain these edges to eliminate the contrast at the crack, but don't varnish the edge.

I stand my boxes up on end like books on a shelf. That way they are instantly available without stacking and look nice on the wall stained walnut to suit the decor of the room.

Good luck in your building!

Paul D. Syme

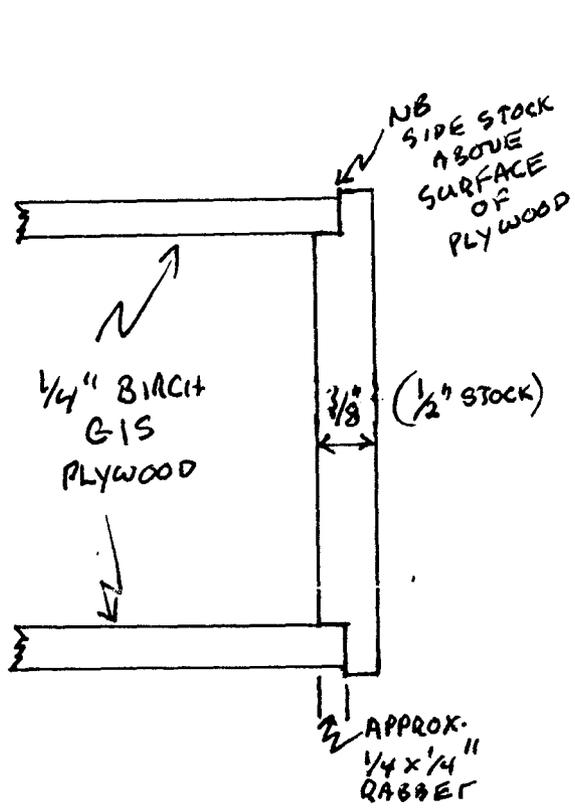


FIG 1

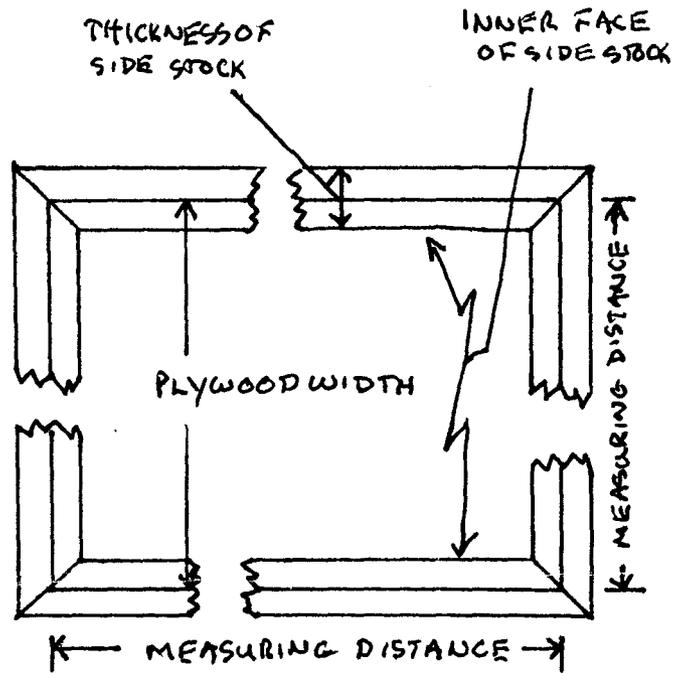


FIG 2

NOT TO SCALE

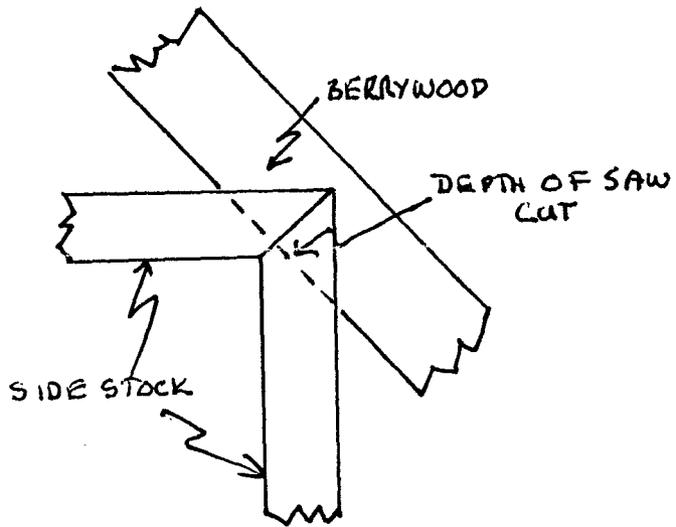


FIG 3

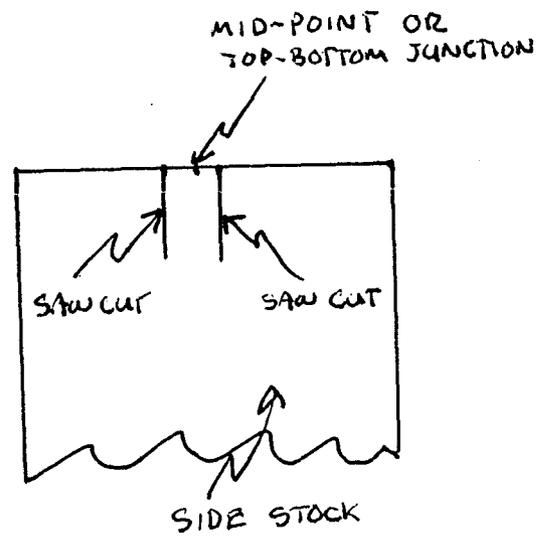


FIG 4



TORONTO ENTOMOLOGISTS' ASSOCIATION

Meeting # 7
86/87 Season

The seventh meeting of the 1986/87 season was held on April 25th in the Planetarium Lecture Room starting at 1 p.m. In attendance were John Eberlie, Alan Hanks, Bev Lee, Bert Wigg, Tony Holmes, Tom Toyomi Ikeda, Gord Edmund, Quimby Hess, Ron Lyons, Bud Ridley and Bill Edmonds.

1. Minutes:

The minutes of the last meeting were reviewed and accepted.

2. Business arising:

a) The summary is now completed and copies will be mailed out shortly.

b) Speakers for upcoming meetings (87/88 season) were discussed again and John Eberlie has been successful in finding one speaker. This is Lester Kohalmi, who will address the October meeting on 'Speciation and Reproductive Isolation of the North American Genus Hyalophora'. This topic should generate some interest among those of our members who collect and study the Saturniidae!

c) Do not forget to call Tom Mason if you intend to be at the Zoo on June 13th, July 11th and August 22nd. Please call him at 839-6764 (home) or 392-5972 (work) if you wish to join in. This will give the numbers for each visit.

4. Financial report:

Balance is at \$1200 +, with fifty-three members paid to date.

6. New Business:

a) A report on the 'Butterfly Atlas' notes that the committee is currently updating information on the locations of various species.

b) Ross Layberry of Ottawa is looking for information on butterfly species found in Algonquin Park in order to update the current list. If you have any collection or observation data from the past few years, please contact Ross.

7. Program:

Dr. Vickery of the Lyman Entomological Museum was our speaker for this meeting and he kept us entertained with 'A Conglomeration of Insects'. His slide presentation gave some history of the museum and information on the Orthoptera, which he has studied for many years. He also spoke on some work carried out on the *Catocala* species in Quebec with respect to seasonal appearance, foodplants etc... He spoke of his bee-keeping experiences over many years, touching on some historical perspectives and the physiology and behaviour of bees. Also mentioned was the history of 'Killer Bees' and their advancing distribution since 1956. A copy of 'The Grasshoppers, Crickets & Related Insects of Canada & Adjacent Regions' was shown and he related the difficulties of publication. The book is Part 14 of 'The Insects & Arachnids of Canada' and Dr. Vickery mentioned that it is better to publish many small books or papers rather than one large one!

All-in-all a most interesting and informative presentation, which was followed by numerous questions and the thanks of those present.

NOTE THERE WILL BE NO MEETING IN MAY, DUE TO THE PROXIMITY OF THE JUNE VISIT TO THE TORONTO ZOO. Have a good summer, see you at the Zoo or next season!



TORONTO
ENTOMOLOGISTS'
ASSOCIATION

34 Seaton Drive,
Aurora, Ontario,
L4G 2K1.

June 1st, 1987.

Dear TEA Member:

In the event that you were planning to visit the Metro Zoo for the field trip on June 13th, please note the following:

Tom Mason will be away until Friday June 12th, so you will not be able to contact him to let him know you will be coming out. Instead, please call John Eberlie at 372-8673 (Cobourg) and let him know. He will advise where to meet and the time.

Also enclosed is a letter from Lansdale, PA member David Wright. It is self-explanatory, so if you have any information, please let David know.

Hope you are all having a productive season so far!!

Yours sincerely,

Alan J. Hanks.

124 heartwood Drive
Lansdale, PA 19446

April 22, 1987

Alan J. Hanks
34 Seaton Drive
Aurora, Ontario L4G 2K1

Dear Alan:

I'm hoping this reaches you before April 25th, so that you may share this letter with the TEA membership.

Harry Pavulaan and I have studied the Celastrina sibling complex here in eastern United States for several years. After extensive field work and rearing experiments, we're about to publish some of our findings. We firmly believe that North American ladon is distinct from Palearctic argiolus. Furthermore, our research indicates that there are at least three (perhaps four) sibling species that are included under the name ladon.

We've combed through the collections of most of the major museums in the United States gathering Celastrina data. While there is considerable Canadian material in each museum, there is little useful information in the form of continuous observation/collection at one site throughout the year. This kind of information is much more valuable in reconstructing the presence and changes in the Celastrina phenotypes during the season. We would like to extend an open invitation to the TEA membership to join our task force here in the states. The task force consists of interested individuals who are willing to give special attention to Celastrina in their local area from April-October for the upcoming year. We are particularly interested in flight dates, phenotypes, habitat, and oviposition data from certain sites throughout the flight season. Special attention should be given to any form that appears shortly after the spring forms, but before the summer broods. We are not seeking extended efforts on the part of any individuals, but we hope that some of you may take note of Celastrina if it should cross your path during your fieldwork.

Harry and I are willing to share in the information collected by the task force. It should be an interesting year. Also we are willing to identify any difficult specimens or foodplants, plus trade stock with interested individuals.

With regards,



David M. Wright