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# newsletter

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## society for invertebrate pathology

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Volume 17, Number 1  
February 1985

SOCIETY FOR INVERTEBRATE PATHOLOGY

XVIII ANNUAL MEETING

HOLIDAY INN, SAULT STE. MARIE, ONTARIO, CANADA

AUGUST 4-8, 1985

Sault Ste. Marie, Ontario  
CANADA P6A 5M7  
Phone (705) 949 9461

ALL PRICES QUOTED ARE IN CANADIAN DOLLARS. CURRENTLY \$1 U.S. IS WORTH \$1.32 CANADIAN, SO THE PRICES ARE NOT AS HIGH AS THEY MAY APPEAR!

### CALL FOR PAPERS, POSTERS AND ABSTRACTS

Papers for the Contributed Paper Sessions and Poster Session for the Sault Ste. Marie SIP Meeting are being solicited. Those who intend to present papers are urged to prepare their talks carefully and confine the length of their presentations so that they do not exceed 15 minutes including 3 minutes for discussion. Projection facilities for standard 2" x 2" (5.1 x 5.1 cm) slides will be available at the Contributed Paper Sessions. Overhead projectors for transparencies can also be provided. Those requiring overhead projectors should notify the Program Committee at the time abstracts are submitted.

For posters, boards will be approximately 4' x 4' (1.3 x 1.3 meters). Please plan to man your poster for at least one hour.

A blank guide for preparing abstracts is enclosed with this issue of the Newsletter. Instructions are printed on the reverse; please follow them carefully. The Abstracts will be prepared by direct reproduction of material submitted by each author. There will be no editing of the author's copy. Thus, every error which appears in the submitted abstract will also appear in the printed Abstracts. Poorly typed and improperly prepared abstracts, unsuitable for reproduction, will not be printed. Because of the various deadlines there will be no time for returning abstracts to authors for retyping.

Please send your abstract so as to reach the following address no later than April 15, 1985:

Dr. Sardar S. Sohi  
Program Committee, 1985 SIP Meeting  
Forest Pest Management Institute  
Canadian Forestry Service  
P.O. Box 490  
Sault Ste. Marie, Ontario  
Canada P6A 5M7  
Phone (705) 949 9461

### REGISTRATION

You are urged to register prior to July 1st and mail the enclosed form and your money order to:

Attn: Dr. J.C. Cunningham  
SIP Meeting  
Forest Pest Management Institute  
P.O. Box 490

Please pay in Canadian funds and not an equivalent amount in U.S. funds. The cheapest way for non-Canadians to pay is to send a postal money order; it costs less than a bank money order. Registration forms must be postmarked by July 1st otherwise a late registration fee will be charged. Make money orders payable to the Society for Invertebrate Pathology.

Registrations postmarked before July 1 are:  
Regular members \$50 Canadian  
Student members \$25 Canadian

Registrations postmarked after July 1 are:  
Regular members \$65 Canadian  
Student members \$35 Canadian

Please indicate on the registration form if you will attend the free mixer on Sun. Aug. 4th at 7 p.m., the banquet on Tues. Aug. 6th at \$20.00 Canadian per person and the barbecue on Wed. Aug. 7th at \$10.00 for adults and \$4.00 for children. Also indicate on this form if you wish a souvenir T-Shirt and give details of size on the 5 km race entry form. Please pre-pay for the banquet, barbecue and T-Shirts and add these costs to the registration fee. There is no registration fee for accompanying family members but they are required to purchase banquet and barbecue tickets if they wish to attend.

A registration desk will be set up in the Holiday Inn and will be open from 3:00 p.m. to 10:00 p.m. on Sun. Aug. 4th and from 8:00 a.m. to 5:00 p.m. on Mon. Aug. 5th.

### REFUND POLICY

The Society will refund advance registration fees (less a \$5.00 handling fee) for all cancellations received in writing or by telegram on or prior to Fri. July 26th, 1985.. NO REFUNDS WILL BE GRANTED AFTER THIS DATE. Refunds will be mailed from the Forest Pest Management Institute following the Annual Meeting.

### HOTEL RESERVATIONS

All meetings and social events will be held in the Holiday Inn and we urge you to stay in this hotel and to book early. We have a reservation for 15 rooms for Sat. Aug. 3rd, and for 90 rooms for Sun. Aug. 4th through to Thurs. Aug. 8th, but we shall not be able to hold these till the last minute as it is a busy time of the year. You should book prior to July 1st as we cannot guarantee you a room after that date. If you are doubtful about

attending please reserve a room and then cancel it if necessary.

We have negotiated a rate of \$55 Canadian per room per night plus 5% sales tax regardless of the number of occupants (within moderation of course). Each room has 2 double beds and some rooms have space for a rollaway. Families can work out their own arrangements. Unrelated delegates can opt for single, double or triple (with a rollaway) occupancy. We do not recommend triple occupancy, but it is available as an option.

A deposit payable to the Holiday Inn or a credit card number is required for a guaranteed reservation, without which the room will be held until 6 p.m. only. Please fill in the enclosed reservation form and mail it directly to the Holiday Inn at the following address:

Attn: Mr. Perry Miele  
Holiday Inn  
208 St. Mary's River Dr.  
Sault Ste. Marie  
Ontario, Canada  
P6A 5V4  
Phone (705) 949 0611

#### SOCIAL ACTIVITIES

An opening reception will be held in the Holiday Inn Ballroom from 7-9 p.m. on Sun. Aug. 4th. Finger foods, wine and beer will be served and there is no charge for registered delegates and their spouses.

On Tues. Aug. 6th, a Society Banquet is planned at the Holiday Inn. The menu will include soup or salad, roast prime rib of beef, dessert and wine. Dancing and/or entertainment will follow the banquet. The cost of this event is \$20.00 Canadian per person.

On Wed. Aug. 7th, the annual race and barbecue will be held at Hiawatha Lodge on the outskirts of Sault Ste. Marie. Hopefully, weather will be such that the barbecue can be held outside. On the menu are salad, hamburgers, hot dogs,

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#### SIP NEWSLETTER

The SIP Newsletter is produced four times a year by the Society for Invertebrate Pathology. Annual dues (U.S. funds) in the Society are: regular members, \$11.00; and students, \$4.00. Members receive the SIP Newsletter and a copy of the abstracts of all SIP Annual General meetings free, whether or not they attend. Application forms for membership in the Society may be obtained from the Treasurer, Dr. James R. Fuxa, Dept. of Entomology, Louisiana State University, Baton Rouge, Louisiana 70803-1710 U.S.A.

Council Officers of the Society are:

President	H. Denis Burges, England
Vice President	John C. Harshbarger, USA
Past President	Wayne M. Brooks, USA
Secretary	Elizabeth W. Davidson, USA
Treasurer	James R. Fuxa, USA
Trustees	John A. Couch, USA
	Brian A. Federici, USA
	John E. Henry, USA
	Hitoshi Watanabe, Japan

Send news items and other contributions to:

Gary G. Wilson, Editor  
SIP Newsletter  
Forest Pest Management Institute  
Canadian Forestry Service  
P.O. Box 490  
Sault Ste. Marie, Ontario, Canada P6A 5M7

beer and soft drinks. Cost of the adult barbecue is \$10.00 and for the children \$4.00.

#### 5 KM RACE

The 5 km race will be held at Hiawatha Park at 4:30 p.m. on Wed. Aug. 7th along a rough woodland trail used for cross-country skiing in the winter and cross-country running in the summer. Showers and saunas are available in Hiawatha Lodge for the runners, so they can freshen up prior to joining the rest of the delegates for the barbecue.

Special T-Shirts are being prepared. They will be printed SIP - 1985, Sault Ste. Marie, with an appropriate motif (not yet selected) in the centre. If non-runners would like a souvenir T-Shirt, they are welcome to order one and sign the appropriate spot on the race entry form.

If you wish to enter the race or if you would like a T-Shirt but do not feel like running, please include the race entry form with your registration form and add the price of the T-Shirt (\$8.00 Canadian) to the registration form.

#### LADIES PROGRAM AND TOURS

The ladies program and conference tour plans have not been finalized, but we are tentatively planning the Agawa Canyon train tour on Monday and a visit to Mackinac Island on Tuesday.

Prior to the race and barbecue on Wednesday afternoon there will be 3 to 4 hours of free time. This can be used to rest, shop, visit the Forest Pest Management Institute facility, visit the Sea Lamprey Control Centre or take the scenic boat tour through the Canadian and American locks (a must sometime during your stay here).

If there is any interest from delegates, we shall arrange a drive north along Lake Superior and possibly a hike on Friday, Aug. 9th. We can tailor the length of the trip to delegates requirements, but we expect it will take most of the day and those taking it should not plan departures on Friday afternoon flights.

Dr. Paul Fast has offered to guide a fishing expedition on Saturday, Aug. 10th and interested delegates should contact him soon by writing or phoning him at the Forest Pest Management Institute (705) 949 9461.

More details regarding these tours will be published in the next Newsletter.

#### MEALS

No meal plan is being offered. There is a small dining room in the Holiday Inn, but the hotel staff are advising us to arrange buffet breakfasts and lunches in the ballroom to avoid congestion and long delays. Delegates are free to choose whether they eat in the Holiday Inn or search out one of the many restaurants in Sault Ste. Marie.

#### WEATHER AND CLOTHING

Warm, sunny weather is hopefully anticipated in Sault Ste. Marie in early August. Temperatures in the mid-70° F range are expected. We cannot guarantee that it will not rain! Light, summer clothing is, therefore, the order of the day. The Holiday Inn and most public buildings and restaurants in town are fully air-conditioned.

#### FLIGHT INFORMATION

Sault Ste. Marie, Ontario is served by two airlines, Air Canada (AC) and Nordair (ND) and Sault Ste. Marie, Michigan by one, Simmons (MQ). We recommend that people try to con-

nect through Toronto rather than Detroit. Simmons lands at Kincheloe about 20 miles from Sault Ste. Marie, Michigan. Delegates arriving at this destination should ensure they contact the local organisers and their flight will be met; ground transportation from Kincheloe to Sault Ste. Marie, Ontario is rather complicated.

There is ground transportation from the Sault Ste. Marie, Ontario airport to the Holiday Inn at a cost of \$7.00. Local arrangements committee members will attempt to meet most Canadian flights arriving on Aug. 3rd and Aug. 4th.

Below are listed the arrival schedules from Toronto, Winnipeg and Detroit on Sat. Aug. 3rd and Sun. Aug. 4th. Being a weekend the number of flights is limited. For departures the flights from Mondays to Fridays are the same on each day. Those staying later should consult their travel agents about weekend departures. These schedules were compiled on Jan. 2nd and changes may occur prior to August!

Flights arriving in Sault Ste. Marie

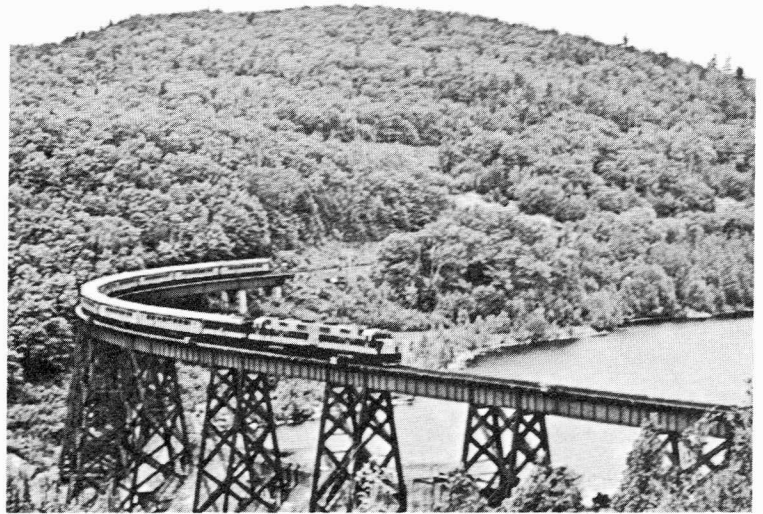
Date	From	Flight no.	Dep.	Arr.
Aug 3	Toronto	ND853	8:40 am	9:45 am
	"	AC347	2:15 pm	3:18 pm
	"	ND833	7:40 pm	8:45 pm
	Winnipeg	ND846	7:30 am	11:20 am
	"	ND840	1:25 pm	4:40 pm
	Detroit	MQ31	10:10 am	12:15 pm
Aug 4	Toronto	ND853	8:40 am	9:45 am
	"	AC347	2:15 pm	3:18 pm
	"	ND837	8:20 pm	9:25 pm
	Winnipeg	ND846	7:30 am	11:20 am
	"	ND842	1:00 pm	4:50 pm
	Detroit	MQ455	1:30 pm	3:10 pm
	"	MQ36	7:55 pm	9:50 pm

Flights departing Sault Ste. Marie

Date	To	Flight no.	Dep.	Arr.
Aug 5	Toronto	ND828	8:04 am	8:59 pm
	"	AC340	10:30 am	11:30 am
Aug 9	"	ND846	11:35 am	12:35 pm
	"	AC348	4:05 pm	5:05 pm
	"	ND844	8:30 pm	9:30 pm
	Winnipeg	ND843	10:05 am	12:00 pm
	Detroit	MQ30	6:20 am	8:15 am
	"	MQ32	12:35 pm	2:35 pm
	"	MQ456	3:30 pm	5:10 pm

SAULT STE. MARIE AND AREA TOURIST ATTRACTIONS

In Mayor Don MacGregor's letter of welcome to SIP members, he mentions the Agawa Canyon train tour and we feel it is most desirable that visitors to Sault Ste. Marie try to go on it. It is a one-day trip leaving at 8 a.m. and returning to Sault Ste. Marie at 5 p.m., with a 2-hour stop at Agawa Canyon Park. The price is \$27 (Canadian) for adults, \$13.50 for children and is free for children under 5.



Agawa Canyon tour train crossing a trestle over the Montreal River at Mile 92, north of Sault Ste. Marie. The trestle is 130 feet high and 1,550 ft. long.

North of Sault Ste. Marie stretches a vast expanse of forest and mountains interlaced with countless clear lakes and raging rivers. The magnificent wilderness scenery along the Algoma Central Railway is considered some of the finest in Canada. The trip terminates 114 miles north in Agawa Canyon where a two-hour stop provides opportunities to photograph the waterfalls and rugged scenery, climb to a viewpoint, picnic or just relax.



Tour train stopped in Agawa Canyon Park, 114 miles north of Sault Ste. Marie in the heart of scenic Algoma.

We shall be offering this trip on the ladies' programme, but if delegates as well as their spouses want to go on this tour we suggest that you come a day early or stay an extra day.

Other attractions mentioned by our mayor include boat tours of the locks and a bus tour of the city. These only take two hours each and can be fitted into afternoon or evening outings.

Another possibility, which is also a one-day trip, is a visit to Mackinac Island in Michigan, USA. This island is the home of the famous Grand Hotel. No motor vehicles are allowed on the island, there is a reconstructed fort and numerous quaint souvenir and gift shops. Mackinac Island can be reached by boats sailing from Mackinac City at the south end of the Mackinac Bridge or from St. Ignace at the north end of the bridge. St. Ignace is about 60 miles from Sault Ste. Marie.

Those interested in tourist activities in and around Sault Ste. Marie at the time of the meeting should write to:

Dr. John C. Cunningham  
Forest Pest Management Institute  
P.O. Box 490, Sault Ste. Marie  
Ontario, Canada P6A 5M7

He will send the appropriate brochures and tourist literature.

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#### MEMBERSHIP DRIVE

The Society's Membership Committee is commencing another drive for new members. Your help is paramount. If you have non-member colleagues or students working in any aspect of invertebrate pathology, please encourage them to join the Society. Pamphlets and membership forms are available from Dr. Jim Fuxa, Treasurer, Department of Entomology, Louisiana State University, Baton Rouge, LA 70803, USA, or myself, Dr. Lawrence A. Lacey, Chairman, Membership, Insects Affecting Man and Animals Research Laboratory, USDA, ARS, P.O. Box 14565, Gainesville, Florida 32604, USA. Your assistance will be greatly appreciated.

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#### RESEARCH ALLIANCE COMMITTEE FINAL RECOMMENDATIONS

The Steering Committee of the Ad Hoc Committee on Research Alliances recommends for SIP's consideration:

1. That SIP establish a standing committee charged with bringing international government attention to the problem in order to generate government-level microbial control agent policies to stimulate research, development, production, and use of microbial control agents.
2. That SIP help serve as a catalyst for obtaining a more liberal attitude from industry at least to the extent of provision of "service", and that SIP help develop mechanisms to provide proprietary safeguards or other reassurances in exchange.
3. That SIP develop an educational effort to build support for the future role we all envision for microbial control agents. The targets of the effort would be the general public as well as executive level members of governments and industry.

The Steering Committee thanks the Society for the opportunity to have served in this capacity.

C.M. Ignoffo  
M.H. Rogoff  
N. Goodman, Chairman

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For its size and population New Zealand is well represented in insect pathology. There are two main centres of activity, one at Auckland at the northern tip of the North Island where the Department of Scientific and Industrial Research maintains an unit of Insect Pathology as a part of the Entomology Division. Further south at the opposite end of the South Island another active group operates from the Department of Microbiology, University of Otago at Dunedin. In this instalment the activity of the latter group will be briefly reviewed.

The research programme in Dunedin is geared towards insects of medical importance and agricultural pests. It includes both basic and applied research. The following pathogens are being investigated, Bacillus thuringiensis var israelensis, Coelomomyces opifexi, Tolypocladium cylindrosporium.

Main topics are the endogenase proteases of BtI and other varieties of Bt, ecological studies on environmental factors which influence the infection process of Coelomomyces opifexi of Aedes australis larvae, the mosquito control potential of the New Zealand strain of Tolypocladium cylindrosporium and is currently being field tested against Aedes polynesiensis larvae breeding in crab-holes in Fiji. T. cylindrosporium was found here in 1969, and like the California strain of fungus shows a good tolerance to salinity (>100% sea water) and temperature (35°C). Aedes polynesiensis is the main vector of subperiodic filariasis throughout Polynesia and the crab-hole presents a very difficult control problem.

Earlier this year, Brian S. Batson from the University College of Wales, has joined the group as the 6th James Cook Fellow of the Royal Society of New Zealand, for a period of 2 to 3 years. Brian's main interest is in Protozoan infections in mosquitoes and blackflies, and is currently engaged in field exploration for bio-control agents in South and South West Pacific. There has been a sustained interest in the ecology of a NPV of Wiseana spp. major pasture pests in New Zealand. Plans are now well advanced for an investigation of the endemic milky disease of our grass grub, Costelytra zealandica which is another important pasture pest here.

North American colleagues travelling to and from Australia, might consider a side visit to Dunedin. Close by, we have the scenic Queenstown area, good for skiing in Winter and boating on the lake during Summer.

J.S. Pillai  
New Zealand Correspondent  
Department of Microbiology  
University of Otago, Dunedin  
New Zealand

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ZOOLOGICAL SOCIETY OF LONDON SYMPOSIUM  
November 14th and 15th, 1985, at the Zoological Society  
Regent's Park, London NW1

"IMMUNE MECHANISMS IN INVERTEBRATE VECTORS"  
Organised for the Zoological Society by Dr. A.M. Lackie

#### List of Speakers

Prof. Roy Anderson (Imperial College, London)	Genetic variability in invasion. Population implications.
Dr. D. Bishop (NERC Institute of Virology, Oxford)	Mosquito anti-viral mechanisms.

Prof. Hans Boman  
(University of Stockholm)  
Dr. Bruce Christensen  
(University of Wisconsin)  
Prof. Peter Gotz  
(University of West Berlin)  
Dr. Wil van der Knapp  
(Free University Amsterdam)

Antibacterial proteins in insects  
Resistance to filarial nematodes in mosquitoes  
Melanin and encapsulation

Dr. Ann Lackie  
(University of Glasgow)

Immunity to larvae of Trichobilharzia in the snail Lymnaea stagnalis  
Evasion of immunity by helminth larvae in insects

Dr. Sam Loker

Immunity to trematode larvae in the snail Biomphalaria  
Insect immunity to trypanosomatids

Prof. David Molyneux  
(University of Salford)  
Prof. Norman Ratcliffe  
(University of Swansea)  
Dr. P. Ready  
(Imperial College, London)

Insect cellular immunity and phenoloxidase system  
The effect of vector resistance on the transmission of leishmaniasis  
Cellular immunity in crustacea

Dr. Valerie Smith  
(University Marine Station, Isle of Cumbrae)  
Dr. Timothy Yoshino  
(University of Oklahoma)

Antigen sharing between trematode larvae and their snail hosts: How significant a mechanism in immune evasion?

For further information, please write to Miss U. McDonnell, Administrative Assistant, The Zoological Society, Regent's Park, London NW1 4RY, England, U.K. Registration forms and final programmes will be available in September: registration fee will be £ 12 for 2 days or £ 7 for one day, student rate £ 7 for 2 days, £ 5 for 1 day.

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NOTICE OF MEETING - 1985 PAAS

The IV Triennial meeting of the Pan American Acridological Society will be held in Canada on the campus of the University of Saskatchewan at Saskatoon. The meetings are scheduled for Tuesday, July 30 to Thursday, August 1, 1985, inclusive.

Accommodation (incl. maid service) and meals will be available on the campus at an approximate cost of \$43.50 Canadian funds per person per day for a single room and three meals. Double (sharing) accommodation will cost approximately \$38.25 per person per day. All meeting sessions will be held on campus. Extensions of residence at the University can be arranged for those who desire it.

Collecting trips will be organized during the conference (one afternoon) and following the conference (two days) if enough delegates express interest.

There will be three general symposia (organizing chairman in parentheses), tentatively arranged as follows:

- 1) Endocrinology of reproduction in Acrididae (Dr. C. Gillott)
- 2) Stability and diversity of grasshopper species in grassland communities (Dr. M.K. Mukerji)
- 3) Current topics in acridid systematics (Dr. V.R. Vickery)

Also, if there is enough interest, a round table discussion on acridid rearing methods and techniques will be scheduled.

Deadline for submitted papers has been set for June 1, 1985.

Please address all correspondence to:

Dr. Al B. Ewen  
Local Chairman, PAAS  
Research Station, Agriculture Canada  
107 Science Crescent  
SASKATOON, Sask. S7N 0X2  
Canada

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POSITION ANNOUNCEMENT  
MARINE INVERTEBRATE IN VITRO SYSTEMS

A post-doctoral position (one year with possible renewal for additional year) is available at the Center for Marine Disease Control, Marine Research Laboratory, Battelle Northwest, Sequim, Washington. The successful candidate will be expected to conduct research programs to develop methods to initiate and characterize cell, tissue and organ cultures (primary and potentially continuous cultures) from selected marine invertebrate species. Applicants should possess demonstrated technical background and research aptitude in biochemistry, invertebrate physiology, and experience in cell and/or tissue culture. Applicants must possess U.S. citizenship.

Applicants should forward resume, technical reprints and statement of pertinent experience and objectives to: Dr. Ralph Elston, Center for Marine Disease Control, Battelle Marine Research Laboratory, 439 W. Sequim Bay Road, Sequim, WA 98382. The position is expected to be filled prior to July 1, 1985.

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MOLECULAR BIOLOGIST

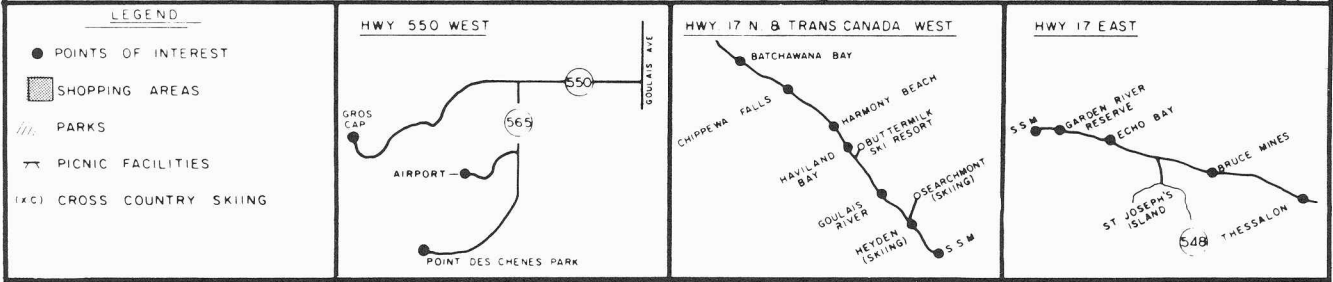
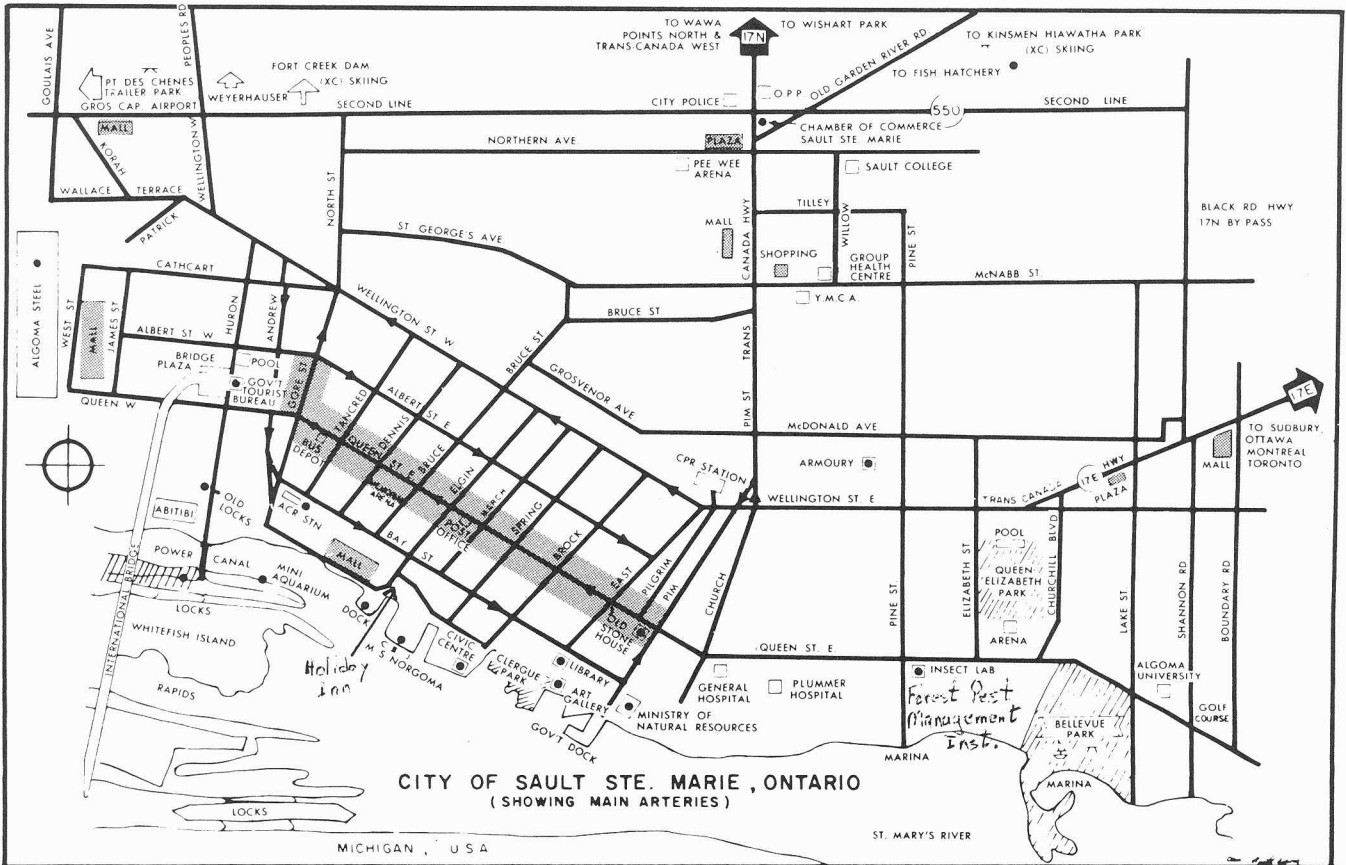
The Riverside campus of the University of California is currently forming a Multidisciplinary Group in molecular biology. The unit will involve components of several departments including Plant Pathology, Biochemistry, Botany and Plant Sciences, Biology, Nematology, as well as the Division of Biological Control within the Department of Entomology.

Applications are invited for a tenure-track, assistant professor position in molecular biology/insect pathology in the Division of Biological Control. The appointee will be expected to develop a vigorous research program directed toward an increased understanding of the molecular biology of insect pathogens. More specifically, he/she will be expected to assess the potential for applying current methodologies of molecular biology to the area of insect pathology aimed at improving the efficacy of insect pathogens for biological control. The position will also involve teaching responsibilities and graduate student supervision. A Ph.D. degree in cell biology/biochemistry is required, with training in molecular genetics and recombinant DNA technology. Postdoctoral experience is highly desirable.

Applicants should send a curriculum vitae, list of publications, a statement of interests, and a list of five references to: Dr. B. A. Federici, Division of Biological Control, University of California, Riverside, CA 92521. The appointment will be effective July 1, 1985, although the position will remain open until a suitable candidate is selected.

The University of California, Riverside, is an equal opportunity/affirmative action employer. Minority and women candidates are urged to apply.

# SAULT STE. MARIE, ONTARIO, CANADA



## TRAVEL INFORMATION

### Seat Belts

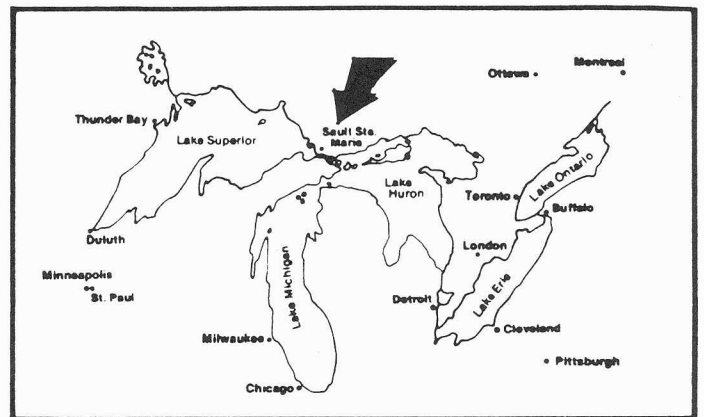
The Highway Traffic Act of Ontario, requires that every driver and passenger wear seat belt assemblies provided in the motor vehicle while driving in Ontario.

### Mileage Table

From Sault Ste. Marie, Ontario, Canada

East to:		North to:			
mi.	km	mi.	km		
St. Joseph Island	27	43	Wawa	140	225
Manitoulin Island	145	242			
Sudbury	185	308			
Ottawa	477	795			
Montreal	591	985			
Toronto	409	676			
Niagara Falls	483	805			

West to:		To other U.S. points:			
mi.	km	mi.	km		
Thunder Bay	429	715	Buffalo, N.Y. (via Canada)	525	840
Winnipeg (via Canada)	870	1423	(via U.S.)	722	1155
(via U.S.)	860	1384	Duluth, Minn. (via Canada)	631	1010
			(via U.S.)	463	741



Km/h	30	50	80	90	100
mph	20	30	50	55	60

Note: Canada now uses the Metric System  
 1 Kilometre = 0.621 mi. (5/8 mi)  
 1 Litre + 1.056 qts 10 Litres = 2.64 gals.

REGISTRATION  
SOCIETY FOR INVERTEBRATE PATHOLOGY  
XVIII ANNUAL MEETING  
HOLIDAY INN, SAULT STE. MARIE, CANADA  
Aug. 4-8, 1985

Please complete this form (print or type) and send it directly to  
Attn: Dr. J.C. Cunningham, SIP Meeting, Forest Pest Management  
Institute, P.O. Box 490, Sault Ste. Marie, Ontario, Canada P6A 5M7.

Registration forms must be postmarked July 1st latest or the late  
registration fee will be added.

ALL PRICES ARE IN CANADIAN FUNDS.

Please make your money order payable in Canadian funds to Society  
for Invertebrate Pathology. For further information and details of  
the refund policy, see Newsletter.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone number (including area code) \_\_\_\_\_

Exact wording you wish on your name tag \_\_\_\_\_

Name of accompanying family members:

Spouse \_\_\_\_\_

Children \_\_\_\_\_ Age \_\_\_\_\_

\_\_\_\_\_ Age \_\_\_\_\_

Arrival date: \_\_\_\_\_ Time: \_\_\_\_\_ Mode: \_\_\_\_\_

Flight number if known: \_\_\_\_\_

I shall attend the free mixer on Sun. 4th at 7 p.m. Yes \_\_\_ No \_\_\_

Regular member registration fee before July 1 - \$50 \$ \_\_\_\_\_

Regular member registration fee after July 1 - \$65 \$ \_\_\_\_\_

Student member registration fee before July 1 - \$25 \$ \_\_\_\_\_

Student member registration fee after July 1 - \$35 \$ \_\_\_\_\_

Banquet (Tues. Aug. 6) \$20/person x \_\_\_\_\_ persons \$ \_\_\_\_\_

Adult BBQ (Wed. Aug. 7) \$10/person x \_\_\_\_\_ persons \$ \_\_\_\_\_

Child BBQ (under 12) \$4/person x \_\_\_\_\_ persons \$ \_\_\_\_\_

Race entry including T-Shirt \$8/shirt x \_\_\_\_\_ persons \$ \_\_\_\_\_

TOTAL AMOUNT ENCLOSED \$ \_\_\_\_\_

THIRD ANNUAL SIP 5 KM RACE

Wed. Aug. 7th, 4:30 pm, Hiawatha Lodge, Sault Ste. Marie, Canada

\$8 entry fee includes the price of a souvenir T-shirt.  
Please enter this fee in the appropriate space on the  
registration form.

Name \_\_\_\_\_

Address \_\_\_\_\_

Age group    under 35 \_\_\_\_\_                      Sex M \_\_\_\_\_  
                  over 35 \_\_\_\_\_    F \_\_\_\_\_

T-Shirt size (men's) size    S \_\_\_\_\_ M \_\_\_\_\_ L \_\_\_\_\_ XL \_\_\_\_\_

I intend to participate in the race. I affirm that I  
am in proper physical condition to participate in this race  
and in consideration of the acceptance of this entry hereby  
release sponsor officials and organisers of this race and  
the owners and operators of Hiawatha Lodge Two, Sault Ste.  
Marie from all claims of injury or damage to person or  
property, including death resulting from my running in this  
event.

\_\_\_\_\_  
Signature

I would like a souvenir T-Shirt but I do not wish to enter  
the race.

\_\_\_\_\_  
Signature

Return this form along with the registration form to:

Attn: Dr. J.C. Cunningham  
SIP Meeting  
Forest Pest Management Institute  
P.O. Box 490  
Sault Ste. Marie, Ontario  
CANADA P6A 5M7



HOTEL RESERVATIONS  
SOCIETY FOR INVERTEBRATE PATHOLOGY  
XVIII ANNUAL MEETING  
SAULT STE. MARIE, CANADA  
Aug. 4-8, 1985

Name: \_\_\_\_\_

Mailing address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Arrival date: \_\_\_\_\_ Time: \_\_\_\_\_

Departure date: \_\_\_\_\_

If family group, number in party \_\_\_\_\_

No. of rooms required \_\_\_\_\_

I wish a single room \_\_\_\_\_

I wish to share a room (double) \_\_\_\_\_

I wish to share a room (triple) \_\_\_\_\_

I want the local committee to select a room-mate \_\_\_\_\_

I want the following colleague as a room-mate:

Name: \_\_\_\_\_

Affiliation: \_\_\_\_\_

I wish to make a guaranteed reservation as I shall probably  
arrive after 6 p.m. Yes \_\_\_\_\_ No \_\_\_\_\_

To make such a reservation either: (A) Enclose a money order  
for \$55 Canadian payable to Holiday Inn or, B) Give particulars  
of a major credit card (Visa, Master Card, American Express)

Name of card: \_\_\_\_\_ Card number: \_\_\_\_\_

Expiry date: \_\_\_\_\_

For further details, see the Newsletter.

Please return the completed form directly to the Holiday Inn

Attn: Mr. Perry Miele

Holiday Inn

208 St. Mary's River Dr.

Sault Ste. Marie, Ontario

CANADA P6A 5V4

## PREPARATION OF ABSTRACTS

The Abstracts of the Annual Meeting of the Society for Invertebrate Pathology will be prepared by direct reproduction of the abstract submitted by each author. There will be no editing of the author's copy. Thus, every error which appears in the submitted abstract will also appear in the printed Abstracts. Please use the following procedure for the preparation of the abstract. If intended as a Poster presentation, please type "POSTER SESSION" at the bottom middle of the Abstract. Also, for a Poster presentation, please bring 50 copies of your Abstract for distribution at the session.

1. Use a typewriter, preferably electric, with a carbon ribbon. If such a typewriter is unavailable, use a typewriter with a fairly new black ribbon.
2. Place the enclosed sample abstract form under a blank typing sheet and insert in the typewriter. The dark lines will show through the usual grades of typing paper.
3. Single space all typing. The title, authorship, and text must be within the boxes as outlined on the enclosed sample form. Leave no top or left margin within the boxes. Type only within the space outlined on the sample form.
4. The Style Manual for Biological Journals, published by the American Institute of Biological Sciences, should be used as a guide to abbreviations and symbols. Proprietary and trade names must be accompanied, at first mention, by the established or generic names. When using abbreviations for compounds, the name must be spelled in full at the first mention.
5. REMEMBER! Your abstract will be printed exactly as submitted. Any smudges, errors, and misspellings on your copy will be evident also in the printed Abstracts!
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7. Send your abstract so as to reach the following address no later than April 15, 1985:

Dr. Sardar S. Sohi  
Program Committee, 1985 SIP Meeting  
Forest Pest Management Institute  
Canadian Forestry Service  
P.O. Box 490  
Sault Ste. Marie, Ontario  
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8. Enclose a self-addressed envelope with your abstract if you wish acknowledgment of the receipt of the abstract.