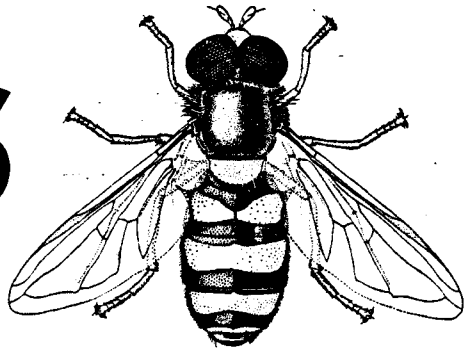
Syrphos



A Newsletter for Syrphidae (Diptera) workers,
compiled by F. Christian Thompson

Volume 2, number 1 - - SPRING 1980 (MAY)

SYRPHOS is a newsletter for and about syrphid workers. The purpose of SYRPHOS is to increase communication among people interested in syrphids and, thereby, to promote work on these flies. The newsletter includes information on workers, their collections, publications, and on-going research. Exchanges and address notices are also included. SYRPHOS is not a scientific publication and does not include formal nomenclatural actions.

The second issue of SYRPHOS continues the style and format of the first. Thanks are due to all who have responded with information. I apologize for not passing it on sooner. Remember information is the basis of a newsletter. For those who have written, please continue to do so, and for those who have not, please let me hear from you.

PROFILE

Under this heading, short sketches of syrphid workers are included. These sketches are prepared by the subject. All submitted sketches will be included as space permits.

Javier R. Butze

I was born in Mexico City on August 18, 1948 of German (Father) and Mexican (Mother) ancestry. I was interested in insects since I was a child. I studied biology at the Faculty of Sciences in the National Autonomous University of Mexico City (UNAM), receiving my B. S. degree in 1973 and M. S. in 1975. I began work as an assistant professor of entomology in 1971 and have been teaching field biology since 1974, both of these assignments being in the Faculty of Sciences (UNAM). Besides this I have worked as a research entomologist at the Institute of Biology (UNAM) since 1974. I became very interested in Diptera because I knew that nobody was working on Mexican flies. Hence, I had no advisor in Mexico to direct me on a study of any family of flies. I met Dr. M. Wood of Canada Agriculture, Biosystematic Research Institute, Ottawa, Ontario, who is advising me on the Tachinidae.

My interest on syrphid flies began before those on tachinid flies because of their coloration and behavior. In 1974, the Institute of Biology began a survey of the insect fauna of the state of Veracruz. I have collected in many places in Veracruz since then. My research interests on syrphid flies are several: 1) the knowledge of the Mexican syrphid fauna; 2) the species distribution in Mexico; 3) keys to Mexican species in Spanish; and 4) catalog to the Mexican Syrphidae.

COLLECTIONS

Under this heading, information about collections of interest to syrphid workers is included.

British Museum (Natural History)

The Syrphidae collection consists of a British collection and a General (World) collection. In the British collection which gets more handling, the types have been removed to separate locked cabinets but can be inspected on request. In the General collection the types are usually at the head of the series of each species, and the type species for each genus is put first in the drawer and the species are thereafter grouped zoogeographically. These two collection contain over 2,200 species and include 905 holotypes and lectotypes. The Old World fauna is better represented than the New. The collection is housed in 387 drawers and, including accessions totals some 58,000 specimens. A small collection of immature stages is kept in alcohol or on microscope slides. Material is loaned to experienced specialists on the completion and signing of an agreement form outlining the conditions of loan. Types are only loaned to specialist who have already borrowed and safely returned non-type material and only for periods of one to two months. The loan policy may be restricted in total or in part if local conditions or inadequate postal services endange the material. Inquiries should be addressed to Mr. B. H. Cogan, Head of the Diptera Section. (K. G. V. Smith)

We thank Ken for his modest write-up on the BM(NH) syrphid collections. What Ken doesn't say is why the BM(NH) is so rich in species and types (?the rich syrphid collection in the world?).

The source of the greatness of the BM(NH) is the British People. They formed a Worldwide Empire early, and, as they spread throughout this empire, they sent almost everything back to the British Museum. But this is only part of the reason for the richness of the BM(NH) collections. The Museum supported a policy of describing the material it received. Hence, Francis Walker, one of the greatest describers of insects. While Walker wasn't the best scientist, someone had to described the tremendous diversity that flowed into the BM(NH) and that Walker did. Unfortunately, the adminstrators didn't realize in what fashion he did it. Following Walker there was interlude of little or no work Diptera, but since the turn of the Century, there has been a series of distinguished dipterists working on the BM(NH) collections. Major E. E. Austen, Miss Daphne Aubertin, Dr. F. W. Edwards, R. L. Coe all worked on the BM(NH) staff and developed its syrphid collection. Mario Bezzi and Enrico Brunetti also made significant contributions to the development of the syrphid collections.

RESEARCH

Progress on major projects of interest to syrphid workers is reported under this heading. Since the last newsletter little significant progress has been made. The status of the Canada Agriculture North American Diptera Manual and my Catalog and Manual to the Palaearctic Syrphidae is the same as previously reported. The Catalogue of the Diptera of the Afrotropical Region is published, but I have not seen it. Does anyone know about the Palaearctic Diptera Catalog being developed by the Hungarian dipterists?

EDITORIAL

Points of views of interest to syrphid workers are present under this heading.

Where are We?

By my most recent count there are some 5,326 known species of Syrphidae. The figures for the various faunal regions are: Palaearctic (1,530), Nearctic (857), Neotropic (1,605), Afrotropic (526), Oriental (716), and Australian (366). These are the figures given in the recent regional Diptera catalogs with some modifications. The total probably represents less than a third of the extant species. More than 250 new species are waiting to be described in the USNM collections alone. Almost every new collection received from the tropics and south temperate region contains new species. Even a few new species are being continuely described from the north temperate region (Holarctic), but new synonymy out weights them.

So there are more than 5,000 known species and possibly more than 10,000 unknown ones. While we have catalogs (or will have in the very near future) which list the names of the valid species, do we know them? I doubt it. Only in the British Isles and the European part of the USSR can one identify Syrphidae easily and with confidence. In all other areas, no adequate revisions or keys are available. So as we enter a new decade, let us try to develop more revisions, keys and, especially, regional monographs.

EXCHANGES

Worldwide: U. S. National Museum is willing to exchange syrphids will all. The Museum would like to build the best syrphid collection in the World. Hence, all exchanges inquiries are welcome. List of species available for exchange and desired in return, is available on inquiry. Write F. Christian Thompson, Dept. of Entomology, Smithsonian Inst., NHB-168, Washington, D. C. 20560 USA.

Literature: Becker 1894 (Revision der Gattung Chilosia Meigen), Unbound. Available for best offer, minimum acceptable bid is $35 US dollars or equivalent value in syrphid flies. Other syrphid literature available for purchase or exchange for syrphid flies. Write F. Christian Thompson, Dept. of Entomology, Smithsonian Inst., NHB-168, Washington, D. C. 20560 USA

CORRESPONDENCE

Under this heading, reports or excerpts of letters from correspondents are included. All submitted material is included with the minimal amount of editing. English is preferred, but most other languages are accepted. Many of the responses in this issue are taken from the questionnaire sent out with the first issue.

Hugo Andresson: Interests--Taxonomy & Biogeography of European region. Current projects--Scandinavian Melanostoma taxonomy, for which I plan to use isoenzyme electrophoresis.

Marcos Baez: Interests--Taxonomy & Biogeography of Palaearctic and Neotropic regions. Current projects--Syrphidae of Venezuela. Other comments--"About information on my work on Syrphidae you know the two papers that I have published on this subject (on the Canary Island fauna, listed in last SYRPHOS). The main problem in these islands is that our fauna is poor and each family has only a few species and when you have revised a family from the taxonomic point of view, you can pass to the study of another if you want to go on with Diptera. ... Last April I was in Venezuela and I spent one month in the savanna. I caught only a few syrphids there. But I was two days in tropical forest and I caught some more syrphids. ... My future goal is to return to Venezuela in the summer of 1980 and collect more syrphid and ... to revise the syrphid fauna of Venezuela."

Janny M. van Brink: Interests--Cytogenetics and Cytotaxonomy. Other comments--"With the late Dr. J. W. Boyes I have just finished the second part of our monograph (Boyes, Van Brink, Boyes & Vockeroth) on the chromosomes of Eristalinae and Microdontinae, that will appear in the series Misc. Publs of the Genetics Society of Canada. This monograph contains measurements of chromosomes of over 350 species, presented in Tables and as idiograms. This large amount of numerical data needs to be further analyzed. Also it would be interesting to study selected cases with the aid of chromosome banding techniques, in order to verify some hypotheses on karyotype evolution that we formulated in the course of our studies. I would be glad if anybody interested in this type of research would contact me.

J. W. Boyes & B. C. Boyes: Interests--Chromosomes of Brachycera nad Cyclorrahpa of the World, Cyctotaxonomy, Cytology. Wally and his co-workers have recently finished the major part of their syrphid work as noted above. Unfortunately, Wally passed away in January, so we will probably not see any new works on Syrphidae. However, Wally left a large number of manuscripts on other flies, which his wife, Bea, and Janny van Brink will probably see to publication.

Vladimir Brădescu: Interests--Taxomony of Palaearctic region. Current projects--Monograph of Syrphidae of Romania; descripitons of new species of Cheilosia and Merodon; and descriptions of morphological abnormalities of various syrphids. Other comments--"Une collection de taille moyenne, mais

assez intéressante, c'est la collection des elaborée par moi; elle se trouve à présent au Musee de Delta du Danube à Tulcea - province Dobrudja. Le matérial de cette collection reflète la position du notre pays situé au carrefour des influences du ancie climat périglaciaire et des irradiations méditerranéenne actuelles. Espèces particulièrement intéressantes: Parasyrphus monticola (Becker), Melanostoma incompletum Becker, Chrysotoxum caucasicum Sack, Chrysotoxum lessonae Giglo-Tos, Cheilosia fulvipes (Zetterstedt), Cheilosia grisella Becker, Cheilosia naso Becker, Ferdinandea aurea (Rondani), Brachyopa plena Collin, Sphegina platychira Szilady, Eumerus uncipes Rondani, Criorhina pachymera Egger, Xylotomima pannoica Oldenberg, etc.

Javier R. Butze: Interests--Taxomony, Biogeography & Ecology of Neotropic region. Current projects--"I am working on the syrphid fauna from Veracruz, which includes Neotropic and Nearctic elements. Syrphid flies from Morelos and the high mountains surrounding Mexico City are also being studied.

Pieter H. Van Doesburg, Jr.: Interests--Taxomony, Biogeography & Morphology of Syritta of the World.

Willem N. Ellis: "I am honorary librarian of the Dutch Entomological Society... Our library - which really is a very big one in its field - has the double function of catering to both our roughly 600 members (including a promising segment of juniors and students, where syrphids have an appeal that is equalled by dragonflies only) and university and other research institutes. Many of our users, interested in Syrphidae though they may be, cannot be labelled specialists in the group, partly since they are too young, largely since their scope of work by necessity in wider than just one family or order. For those people it is very advantagous to have one run not only of "official" journals, but also of newsletters."

Ma. Angeles Marcos Garcia: Interests--Ecology, Morphology, Taxomony & Biogeography of Palaearctic region. Current projects--Faunistic and Biology study of the Syrphidae of different Spanish regions.

Kumar D. Ghorpade: Interests: Taxonomy, Ecology, Biogeograph, Morphology, Faunistics, broad Natural History, Immatures, Genetics (Karyotypes), Economic (as predators/pests), Phylogeny, Classification of higher taxa, etc. (In fact, all aspects of Syrphidae interest me). Taxa of special interest - subfamily Syrphinae. Geographic areas - My interest is world-wide, but am currently interested in the ORIENTAL species. Current projects--1) A taxonomic revision of the Syrphini from the Indian subregion (incl. Burma); 2) xxxxxx, a new genus of Syrphini from the Malay Peninsula; 3) Syrphidae from Ceylon: results of the Lund University Expedition; 4) Syrphidae from Karnataka, India; 5) Insect prey of Syrphidae from India and neighbouring countries: A review and bibliography; 6) On a collection of Syrphinae from southern China; 7) Immature stages of Indian Syrphidae (a series of papers); 8) A list of the natural enemies of Indian Syrphidae; 9) A new catalogue of Oriental Syrphidae; 10) Separate papers on the tribes Paragini, Bacchini, Melanostomini and Chrysotoxini from the Indian subregion; 11) Syrphidae of Kashmir, India; 12) some new Eristalinae from India; 13) The genus Asarkina in the Oriental region; and 14) Advances in our knowledge of Oriental Syrphidae (to be read in

the Workshop on "Advance in Insect Taxonomy in India and the Orient" at Manali, Oct 8-13, 1979, organized by V. K. Gupta). Other Interests: I am generally interested in the systematics and natural history of all Oriental Diptera. I have a personal collection of 25,000+ Diptera of which over 7,000 are Syrphidae. Am interested in exchange & Diptera literature.

Other comments--"Firstly, SYRPHOS will have to be issued every month, instead of every three (?) months if it is to increase its effectiveness. Secondly, I suggest it include informal articles from syrphid workers on their collecting trips, etc. to make it more interesting and lively. Thirdly, several other sections will have to be started e. g. short notes, lists of syrphid workers with addresses, Book reviews, extracts, techniques, faunistic lists of syrphids from various regions, etc. ... I would like SYRPHOS to cater to the natural history of Syrphidae and include popular articles and short notes on various aspects of biology of these flies as observed in nature and also travelogues, accounts of collecting expeditions or trips to interesting areas all round the world, with vivid descriptions of the vegetation, logistics, a sort of a tour diary along with list of species collected, etc. This will, I am sure, be very popular and thus attract more and more contributions. Just making the SYRPHOS a dull and drab "information newsletter" would not give it the personal touch that would make it something to wait for and read from page to page. SYRPHOS must provide adequate reading matter, especially that which will interest field workers, not just museum taxonomists. ... You must also see that its distribution covers all syrphid enthusiasts and would suggest your have "representatives" in each country to function as an effective "agent" for SYRPHOS. He/she will have to see that every syrphid worker in his/her country knows of and receives SYRPHOS and also gather material to feed you as the compiler. But please try and make SYRPHOS a monthly--three months and only 4 issues a year will not be adequate!"

> Ghorpade is quoted in full as I feel that SYRPHOS is an open forum, all comments, criticisms, etc., should be included. While I agree with most of what Ghorpade suggests, I think one point may have been misconstruted. SYRPHOS is not a scientific publication. Anything of importance and permanent value should be published in a regular scientific journal. What Ghorpade means by "short notes, ...book reviews, ...techniques, faunistic list..." I don't exactly know, but I suspect many of these items should be published elsewhere. Beyond that I am willing to include all suitable material submitted and try to send out SYRPHOS as frequently as possible. SYRPHOS will be sent to any active worker, that is, anyone willing to contribute to it.

Francis Gilbert: Interests--Ecology, Physiology, Economic (pest control) & Biogeography of European region. Current projects--Foraging behaviour of some common hoverflies, phenology, and competition. Detailed foraging behaviour in relation to rewards available. Other comments--"I have completed most of the analysis of my first year's work, and I think the data show some very interesting patterns. Some species take pollen exclusively, others only nectar, and some take both nectar and pollen in varying proportions. Their

diet is correlated with the morphology of their mouthparts, and I am presently gathering together some measurements to write a paper with these results.

"I have also found very striking behavioural changes with temperature and humidity, with marked differences in timing and actual behaviour between the species involved, and these support and extend (I hope!) the work of Chris Maier."

Heikki Hippa: Interests--All aspects of Syrphidae from everywhere. Current projects--Subfamily classification and origin of Syrphidae; Revision and classification of the Milesia group of genera; Revision of the Indo-Australian Xylotini; and smaller works on diverse groups of Milesiinae.

Yoshihiro Ikezaki: Interests--Taxomony & Ecology of Palaearctic Syrphinae and Eristalinae. Current projects--Life history of Eristalinae and Lampetinae. Other comments--"I was born in Feb 2, 1939. There are four in my family: a son and daugther beside my wife and myself."

Jim Jobe: Interests--Taxomony & Biogeography of New Guinea Syrphidae. Current projects--Study of a small collection of syrphids from Papua New Guinea. Other comments--"The fauna of Papua New Guinea appears to be very impoverished compared to that of Europe."

M. Kaplan: Interests--Taxomony & Biogeography of Palaearctic and Afrotropic regions. Current projects--Descriptions of some new Syrphidae from Israel (with F. C. Thompson) and preparing a volume on the Syrphidae of Israel in the "Fauna Palaestina" series (with Prof. J. Kugler).

B. Kiauta: Interests--Cyctotaxonomy, Phylogeny, Taxomony & Biogeography of Oriental Syrphidae. Also Fauna of southeastern Asia.

Kurt Korman: Interests--Taxomony & Biogeography of European Syrphidae. Other comments--"My collection is not large and I possess only European species. It contains about 300 species. ... On the other hand I have many colour-slides of Syrphidae. All my photo are taken in nature and show the flies as they are on flowers or leaves. So my chief interest is to find out the hosts of certain flowers. I think there is still much to do and I shall continue also my research on the distribution of syrphids in southeast-Germany. I have now worked on syrphids for about 8 years. Before this, I was interested in Odonata and I have a worldwide collection of 800 species of dragonflies. ... My age is now 54 and I hope that I shall still some years for my work with syrphids."

Pavel Láska: Interests--Morphology (Larval), Ecology, Taxomony & Biogeography of Palaearctic and partially Nearctic regions. Taxa of special interest are Metasyrphus, Scaeva, Platycheirus and other Syrphinae. Current projects--Prey records of aphidophagous Syrphid-flies from Czechoslovakia (Diptera, Syrphidae) (with P. Stary) (in press, Acta Entomol. Bohemoslov.); European species of Platycheirus manicatus group; Revision of species of Scaeva (Palaearctic, eventually the world)(with J. Dušek); Revision of Nearctic Metasyrphus (with J. Dušek & F. C. Thompson); Supplemental studies on European

Metasyrphus and syrphid larvae. Other comments--"Since I am working in Vegetable Institute, my main work is the study of biology and control of vegetable pests, e.g. Brevicoryne brassicae, Trialeurodes vaporariorulm, Trioza apicalis."

Leif Lyneborg: Interests--Taxomony & Biogeography of Diptera of the World, especially Therevidae. Chief editor for Scandinavian Scientific Press, the publishers of ENTOMONOGRAPHS and FAUNA ENTOMOLOGICA SCANDINAVICA.

Louis Marnef: Interests--Taxomony of Neotropic, Afrotropic and European regions. Other comments--"I was born in Hoboken, on 22nd December 1904. I have no academic degree. I have a diploma of works-chemist of the Municipal Industry School. I have always been interested in insects, but started collecting and studying Diptera since 1949 when I became a member of the Société Royale Belge d'entomologie of which I am still member. I can no longer think of collecting or exchanging because I have retired since 1970 (after 50 years of work) and my health no longer allows me to leave my home and it hurts me to make the costs of exchanging. The only merit I have as a "prof." is that I worked 4 years for the Universidad de Chile at Valparaiso."

Stephen R. Miles: Interests--Ecology, Taxomony & Biogeography of Palaearctic Syrphidae. Current projects--Production of faunal lists mainly from woodland sites in southern England. Also interested in Conopidae, Sciomyzidae, Brachycerous Diptera, Aculeata Hymenoptera. I am studying the breeding behaviour of Volucella inflata (Fabricius) and other species not associated with Hymenoptera. Appreciate hearing about other species of Volucellinae whose larvae are commensals with Hymenoptera.

Tore R. Nielsen: Interests--Ecology, Morphology, Taxomony & Biogeography of Nearctic, Palaearctic, and specially European regions. Current projects--Survey of Norwegian syrphid fauna.

Jennifer Owen: Interests--Ecology of European Syrphidae. Current projects--"I have been collecting syrphids using a Malaise trap from a suburban garden since 1972. I am interested in the ecological role of syrphids in the garden community and consequently in their phenology and diversity. As a group they are well-represented in gardens and demonstrate the significance of gardens as refuges for wild life as the urban sprawl encroaches on the countryside. The major project at the moment is to analyze the mass of data from the Malaise trap captures thus far."

Eric G. Philp: Interests--Taxomony & Ecology of European syrphids. Current projects--"I am particularly interested in the distribution of insects within the county of Kent, England and in this sort of work it is essential to keep up-to-date so that all insects can be identified correctly. Although I am employed as Keeper of Natural History at Maidstone Museum, I like to think of myself as an Amateur Dipterist as most of my collecting and study is done in my spare time."

Harry D. Pratt: Interests--Ecology, Taxomony & Biogeography of Nearctic region, especially Eastern North America. Current projects--"I am compiling two state list of Syrphidae: The first dealing with Georgia will include my own collection records and many of those from the University of Georgia at Athens with specimens collected by H. O. Lund, P. W. Fattig, H. R. Dodge, W. Atyeo, C. Smith, and W. B. Sikora. There is a wide variety of species--from Canadian life zone species in the high mountains in the north, to Floridian species in the south. The second list will deal with Vermont where I have a summer home. Most of the species are typical of the Canadian life zone, and will included a number of relatively rare species originally described by Williston from the White Mountains of New Hampshire, by C. W. Johnson from many parts of New England, and R. C. Shannon. I'm leaning now toward paper like the Syrphidae of District of Columbia (USA) put out years ago by Banks, Shannon, et al. with some biological data rather than just simple lists as in Brimley's North Carolina list or Leonard's list of Syrphidae in the New York check list."

Charles L. Remington: Interests--Ecology, Mimicry, Myrmecophily & Biogeography (especially insular) of Nearctic, Neotropic, Afrotropic, Australian regions. Current projects--"Not intensive at present, except faunal sampling of Californian offshore islands, Galapagos, Atlantic coastal islands. Mimetic biology of Hymenoptera mimics; morph ratios in different areas of polymorphic species; ecogeographic color trends; larval taxonomy." Other comments--(Charles is the Curator of Terrestrial Arthropods at the Peabody Museum, Yale University and write of this collection)--"We do have a fair syrphid representation. Our taxonomic collections in Entomology have long been built selectively by group, the emphasis being on relevance to theoretical fields such as mimicry, polymorphism, hybridization, insular evolution, gynandry, myrmecophily, limnology, entomogeography, and so on. Syrphids are outstandingly important in mimicry studies, which we have emphasized for 25 years, so we watch syrphids during general world collecting and in other specimen acquisition. We have largest representation from New England, Colorado, and Montana, and many island groups such as the Southern California Islands, Galapagos, tropical Pacific groups, and even the New England/New York/Virginia islands. Some years ago Dr. Vockeroth determined most of our specimens, but for the accumulation since then, sadly, many of our syrphids are not even generically sorted yet (Chris Maier promises to help here)."

Graham E. Rotheray: Current projects--"I have been looking at the predatory behaviour of syrphid larvae. Chandler's (1968) division of aphidophagous syrphids into aphidozetic and phytozetic species was based on whether aphids or plants were the most important stimuli eliciting oviposition. I have compared aphid capture rates, handling times, searching behaviour and behaviour consequent to encountering aphid prey of larvae from both Chandler's groups. The results suggest aphidozetic species have a greater requirement for aphids and are more specialized aphid predators than phytozetic species. These results shall be considered in greater detail in forthcoming publications."

Clark N. Shiffer: Interests--Ecology, Taxomony & Biogeography of Nearctic, Neotropic and Palaearctic regions. Current projects--"Collection and observation of Syrphidae, particularly in Pennsylvania, with a view toward adding to knowledge of distribution and habits. Hope to publish on collection and observations in collaboration with Frank Fee."

Kenneth G. V. Smith: Interests--Ecology, especially life histories of larvae. Current projects--"General work on larvae of Diptera especially those involved in Myiasis and other medical and forensic aspects."

Alan E. Stubbs: "I am currently preparing an identification book on British hoverflies. Publication is to be through AIDGAP, a Field Studies Council promotion for the production of simplified keys to difficult groups of plants and animals. Stephen Falk is preparing 12 colour plates, these covering over 160 species for large format page size. He will also be providing supplementary line drawings and other people may be helping as well. A test version of the keys should be available before next field season. Final publication incorporating plates and species notes is likely to be in 1981 or 1982.

"In the course of the above project, it has been necessary to investigate some taxonomic problems. I am working with Martin Speight on a revision of British Pipiza. Cheilosia has particularly taken my interest and I forsee continuing my work on this genus well beyond the production of the book.

"My main concern, however, is ecology and distribution. John Ismay has undertaken the role of organizer of the Hoverfly Recording Scheme (covering the British Isles) since I was already organizer of the Cranefly Recording Scheme (Tipulidae, etc) and I act as co-ordinator of the seven separate Diptera recording schemes in Britain. May I take the opportunity to extending an invitation to dipterist's visiting Britain to join our field meetings (a weekend to a week in length) and our Diptera Recording Schemes annual meeting in London which is normally held on the second Saturday in November each year (with a Dipterists Dinner the same evening).

"I am a member of the committee which is drawing up a Red Data Book for British Insects. Some rare and endangered hoverflies are being given as examples to illustrate the importance of safeguarding dead wood and wetland habitats which are under particular threat. I have long had a strong concern with the conservation of dead wood faunas.

"During the last few years I have stepped up my collecting of hoverflies on holidays to Europe and hope to extend my knowledge of the European fauna. I am trying to build up the European material in the British Museum collection which is currently inadequate for serious study. Collections have also been made in several tropical countries."

Brian Roy Stuckenberg: Interests--Ecology, Morphology, Taxomony & Biogeography of Afrotropic Diptera, especially Syrphidae. Current projects--"Am continuously adding to the Natal Mulseum's substantial syrphid collection, adding material obtained during field trips in various parts of South Africa and neighbouring territories. Some remarkable new species have been found in recent years, particularly flower-dwelling eristalines that mimic the honey-bee extremely well. A special search was made in January this year at the type-locality of Pelloloma on the anniversity of the original capture, but without results. Preliminary sorting and examination of hypopygia reveal new species of Paragus in some numbers. The new Afrotropical Catalogue is being awaited so that I can overhaul the names in the collection here and plan a revisional series of papers on the South African syrphids."

J. Oliver Watts: Interests--Ecology of Palaearctic and European syrphids. Current projects--"I am just starting my PhD research on woodland syrphid ecology. Malaise traps are being used to collect samples from different habitats within a single large forest ecosystem in Buckinghamshire and between-site diversity will be compared: Concepts of ecological diversity will be explored. It is hoped to be able to use Syrphidae as indicators of woodland quality."

RECENT LITERATURE

Under this heading, all publications on syrphids or of interest to syrphid workers are listed. Workers are requested to send reprints of their papers to the compiler for inclusion. TWO copies, if available, would be appreciated: One copy will be deposited in the combined reprint library of the U. S. Department of Agriculture (Systematic Entomology Laboratory) and Smithsonian Institution (Entomology Department); and the other in that of the compiler.

On a limited basis, we will supply xerox copies of rare and out of print papers on Syrphidae. "Limited" means that we will be glad to supply a few pages to those who can not obtain them from any other sources, but we don't intend to supply copies of just anything to everyone.

Not many reprints have been received since the last SYRPHOS. Only by sending your reprints promptly can this literature section be useful to others. If you don't get reprints of your paper, please send the title and reference.

✓ Barlow, C. A. 1979. Energy utilization by larvae of a flower fly Syrphus corollae (Diptera: Syrphidae). Canad. Entomol. 111: 897-904.

✓ Batra, S. W. T. 1979. Insects associated with weeds of the Northeastern United States: Quickweeds, Galinsoga ciliata and G. parviflora (Compositae). Environ. Entomol. 8: 1078-1082. (6 syrphids listed, p. 1079).

✓ --------. 1979. Insects associated with weeds of the Northeastern United States: II. Cinquefoils, Potentilla norvegica and P. recta (Rosaceae). J. New York Entomol. Soc. 87: 216-222. (4 syrphids listed, pp. 218-219).

Batra, S. W. T. 1979. Insects associated with weeds of the Northeastern United States: III. Chickweed, Stellaria media, and Stitchwort, S. graminea (Caryophyllaceae). J. New York Entomol. Soc. 87: 223-235. (19 syrphids listed, pp. 227).

Beaver, R. A. 1979. Biological studies on the fauna of pitcher plants (Nepenthes) in West Malaysia. Annls Soc. Entomol. France (n.s.) 15: 3-17 (syrphids, p. 12).

Carter, H. H. 1978. A list of the Diptera of the Reading Area. Reading Naturalist, Suppl. 30, 70 pp.

---------. 1979. Diptera of the Reading Area. (18 pp.) xerox supplement to Carter 1978.

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