EXTRA

NEWSLETTER
MICHIGAN ENTOMOLOGICAL SOCIETY

Volume 3, Number 1 March 1959

A

MICHIGAN STATE LIST

OF INSECTS

IN PREPARATION

(page 3)

Fifth Annual Meeting

MICHIGAN ENTOMOLOGICAL SOCIETY

The fifth annual meeting of the Michigan Entomological Society will convene in East Lansing on March 28, 1959, at 1:00 PM in room 401 of the Natural Science Building on the Michigan State University campus.

Arrangements have been made for a luncheon together at 11:45 in the Union cafeteria. Those desiring to attend the luncheon should assemble in front of the Natural Science building at 11:30.

PROGRAM

Sibling Species in the Bird-Locusts of the Schistocerca alutacea complex.
Theodore H. Hubbell
Ann Arbor

Illustrating Entomological Papers.
George Steyskal
Grosse Ile

An Improved statistical Technique for Establishing Oviposition Preference of Rhyacionia buoliana (Schiff.)
Dean L. Haynes
East Lansing

Distributional History of Some Flightless, Polymorphic Grasshoppers.
Irving J. Cantrall
Ann Arbor

Michigan Nectar Flows.
E. C. Martin
East Lansing

Yucca Moths (Tegeticula & Prodoxus) in Michigan
Edward G. Voss
Ann Arbor

A New Plastic Mount for Demonstration and Exhibit of Lepidoptera.
R. A. Scheibner
East Lansing

Entomologist Eaters of Mexico
Theodore J. Kohn
Ann Arbor

Business Meeting of the Society

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MEMBERSHIP DUES

Membership dues are now payable. Membership in the society is $2.00 for Active members, $ 6or Student members, and $25.00 or more for Sustaining members. Checks may be made out to the MICHIGAN ENTOMOLOGICAL SOCIETY.

A MICHIGAN STATE LIST IN PREPARATION

Work has begun on a list of the insects, arachnids, and other land arthropods of Michigan. Preliminary records of about 17,000 species and about 85,000 individual county occurences are on hand. These will be supplemented from all reasonably available sources, typed, and revised by specialists before final typing and publication. Assistance from interested persons is requested. Definite locality records with authentic determinations, determiners for material on hand that is still un-named, specialists to advise on taxonomic arrangements and nomenclature, and in some areas workers to take the entire responsibility for the manuscript on taxonomic groups in their specialties, all are needed.

It is planned to have a typed copy of available records in the hands of specialists by January, 1960, and a manuscript for final typing ready by January, 1962.

Specialists so far agreeing to take sections of the manuscript are as follows: Frank Ammerman, Rhynchophora; T. H. Hubbell and Irving Cantrall, Orthoptera; J. H. Newman, Macrolepidoptera except butterflies; M. C. Nielson, butterflies; David Shappirio, Mutillidae; George Steyskal and Curtis

Sabrosky, Diptera; Henry Townes, Evaniidae, Ichneumonidae, Stephanidae, Gasteruptiidae, Trigonalidae, and Roproniidae; R. L. Fischer, Apoidea.

R. R. Dreisbach is general editor of the list and responsible for all groups not assigned to others. Address all general communications to Mr. Dreisbach, 301 Helen Street, Midland, Michigan; communications concerning special groups to responsible specialists. ---- R. R. Dreisbach, R. L. Fischer, J. H. Newman, George Steyskal, and Henry Townes
(Steering Committee)

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SOME OF MY IMPRESSIONS OF EUROPE

William E. Miller

I was in Europe from November 1956 till July 1957. I spent 7 months at Göttingen University in Germany as a West German Government Fellow, and I traveled two months in Finland, Sweden, Norway, Denmark, Austria, and Italy on a U.S. Forest Service grant. My main concern was field observations on the European pine shoot moth, Rhyacionia buoliana (Schiff.), but I saw a lot of other things and have plenty of impressions.

In forest entomology, the European approach differs from ours. Most of their forest entomology is built on a biocoenotic framework--what we call the community approach in ecology. In dealing with our forest insect problems, we seem to follow the population approach. The encouragement of shrubs, flowers, certain birds and ants, is advocated for keeping European forests safer from pest attack. Economic conditions in Europe help to make such measures practical.

The fauna of Europe is of course impoverished when compared to the fauna of America. With fewer species to contend with, the European naturalist knows more about his fauna than the American naturalist knows about his. Even school children and non-entomological adults know the common European insects and where they are found. In insect systematics, however, the approach is still mainly the 19th century -- at least in the microlepidoptera [my specialty]. The new systematics seems to slow in taking hold. But nearly every large city in Europe has a natural history museum comparable to our National Museum or American Museum. Europeans have an appreciation for museums that Americans somehow don't have. There are also many time more amateur entomologists in Europe than here.

Entomologically and otherwise, an academic year in Europe is a fine finishing touch to a formal education. I recommend it to anybody.

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THE WALTER C. STINSON COLLECTION OF LEPIDOPTERA DONATED TO MICHIGAN STATE UNIVERSITY

One of the largest existing private collections of Michigan moths and butterflies has been donated to the Entomology Museum at Michigan State University.

The collection contains some 5,700 specimens from Michigan and 500 exotic butterflies. The collection is roughly 50% complete for the known moths and butterflies of the state. A total of nearly 1100 species, representing 75% of the known butterflies, 60% of the macrolepidoptera, and and estimated 40% of the microlepidoptera are in the collection.

Mr. Stinson, who died in May 1958, was secretary of the State Bridge Commission and was manager of the International Blue Water Bridge at Port Huron, a position he had held since the bridge opened in 1938.

ANN ARBOR BRANCH NEWS

The first meeting of the 1957-1958 year was held Friday, November 8, in the museums building. Thirty-eight persons were present Chairman Warren H. Wagner opened the meeting by calling on Theodore H. Cohn to give a brief outline of the ideas of the program committee for future meetings. In addition to the usaual talks and demonstrations, tentative plans call for a winter and spring field trip, a dinner for the local group at which entomological items will be served, and the serving of simple refreshments at evening meetings.

Kirk leighton told of finding a female Mantis religiosa, the European praying mantis, near Port Huron this summer. This is the first Michigan record, and indicates that the species is spreading westward from New York state where it was first reported established in the 1890's. He kept his mantis alive, and in the fall presented it to the Museum of Zoology where it lived for many weeks on a diet of grasshoppers.

Dr, Wagner reported on the results of a trip to Manistique in the northern Peninsula, made by T. H. Hubbell and himself, in June in search of additional specimens of the butterfly, Boloria frigga, of which a single male was found by Stephen Hubbell in 1956. They

were unsuccessful in their search for frigga, but found seven specimens of Oeneis jutta in the same bog where the other species had been taken the previous year. Only two specimens of jutta had previously been known from Michigan; they were taken in Dickinson County in 1909 by W. W. Newcomb and H. Burrington Baker. Since no others had been found in nearly fifty years, in spite of special search on various occasions, Klots listed the species from Michigan with a query in his popular butterfly guide.

The main feature of the evening program was an interesting talk by Dr. Frederick E. Smith of the Department of Zoology of the University on polarized light and its relation to the behavior of honeybees, and the results of experiments designed to discover whether bees could perceive the plane of polarization of light as has been assumed in much recent work. He showed that not only is there no mechanism for their doing so, but that also their behavior can be explained without this assumption, because of their response to intensity of illumination and the way in which polarized light from the sky affects illumination.

The meeting concluded with an informal discussion and the serving of cider and doughnuts.

The second meeting of the year was held on Thursday, December 5, with thirty-five persons in attendance. There being no business, the first report was given by Theodore J. Cohn and Irving J. Cantrall. Called "Entomological Detectives at Work", it related the difficulties encountered in trying to locate a locality given in the literature as "Venvideo" in Mexico, fhom which many species of Orthoptera have been described, and the clues which they followed to ultimate success. Trips were made by Cantrall and later by Cohn to the place, which is Venadillo, near Mazatlan in Sinaloa. Cohn found many rare species of grasshoppers in the arid coastal regions on account of the unusual amount of rain that fell there this fall.

T. H. Hubbell stated that the new revised list of Michigan butterflies was nearing completion, and asked that anyone who has specimens that may be new county or date records bring them in for checking in order to make the list as complete as possible. Certain doubtful specimens have been sent to Dr. A. B. Klots for verification. It is planned to include a few illustrations of species or forms not or seldom figured, and a simple key for the identification of the Michigan butterflies.

The speaker of the evening was Dr. Marston Bates of the Department of Zoology. He gave a most interesting talk on his work on mosquitoes and yellow fever in the tropical rain

forest of Colombia and the manner in which they determined that jungle yellow fever was carried by monkeys and transmitted by tree-top inhabiting mosquitoes. His account was as much devoted to the ecology of the rain forest as to the mosquitoes and yellow fever, and was most enjoyable and informative.

At the end of the meeting while engaged in informal discussion and the consumption of more cider and doughnuts, Chairman Wagner passed around paper and pencils and requested members to note down their activities of the past summer and what they were engaged in at the moment. Some of the interesting notes are as follows:

David Eades was in the Far East. He soent some time in Japan under the Council of Student Travel, and then attended a work camp in Hong Kong under the sponsorship of the world Council of Churches. He collected Orthoptera whenever possible, and addend many gnera and species to his collection.

Dr. Kirby Hays is now on the staff of the Alabama Polytechnic Institute at Auburn, Alabama, soing some teaching, but largely assigned to research on insects afflicting man and animals. He has been given responsibility for setting up an entomological museum for the Department of Entomology. Through an arrangement between Auburn and Michigan, he was able to spend more than a

month in Ann Arbor this fall, arranging the determined Diptera collcetion of the Museum of Zoology--about 30,000 specimens. In return, he took back to Auburn more than 6,000 identified insects (Diptera, Coleoptera, Orthoptera, etc.) as a nucleus for the collection at that institution.

J. H. Newman is currently working on some 600 specimens of phalaenid moths from Isle Royale, which were collected for Michigan State University during a two month stay on the island by Ron Hodges. This material has produced eight new state records to date.

Tim Newcomb is back from a year spent in California, where he collected butterflies chiefly near San Jose, but with trips to the Majaave Desert and the Sierra Nevada Mountains.

Stephen Hubbell spent the summer in northern Newfoundland and Labrador, where he did general collecting of insects for the Museum of Zoology and captured many interesting butterflies for his own collection.

Dr. Henry Townes was busy most of the summer and fall working on the classification of North American ichneumon flies. He completed and sent to press one large manuscript on the subfamily Metopiinae.

Dr. David Shappiro, a former student at Michigan, who went off to Harvard to get his degree in insect physiology and came back as a member of the staff of the Department of Zoology, spent two years studying in Europe. Although his first loves are now the enzymes and hormones, he hopes to find some time to work on the Mutillidae (velvet ants). Some years ago he worked the museum collection into shape but it needs considerable work at the present time.

Dr. Marston Bates has returned from a year spent in Puerto Rico, wher he helped the University of Puerto Rico organize a gaduate and research program. He says that he did not have time for insect collecting. We hope that he will resume his arranging of the exotic butterfly collection of the Museum with the assistance of his understudies, Hubbell, Newcomb, and Pliske.

Mark Lowry attended the University of Michigan Biological Station at Douglas Lake and while taking the entomology course became interested in Hemiptera and Coleoptera and collected in both groups.

Ed Voss traveled over 10,000 miles in Michigan this past season on his project of writing a flora for the state. He collected plants in 51 counties, but got few butterflies in spite of always carrying a net. The Michigan Flora project is moving along

well, and the resultant distribution maps of Michigan plants would be of interest to entomologists as well as botanists.

Ted Kohn spent the summer at a marine biological station in California taking courses, but found time to do some very productive Orthoptera collecting at intervals, and after the close of the session went with E. R. Tinkham down the west coast of Mexico to Mazatlan on a special Orthoptera collecting trip.

Virenda Gupta, a graduate student in the Department of Zoology, is here from India to work on the Ichneumonidae with Dr. Townes. He brought a considerable collection of Indian ichneumonids with him for study, and expects to prepare a bibliography on the Asiatic Ichneumonidae while here.

Dr. Richard Alexander and Dr. Thomas Moore, both curators in the Insect Division of the Museum, are engaged in joint and individual projects involving the study of insect sounds. They have received University grants for the purchase of recording and analyzing equipment needed for such studies, and are obtaining results with crickets, katydids, and cicadas that will prove amazing to oldsters working in these groups.

At the last meeting of the year, the following officers were elected for the coming year for the local branch.: Chairman, David G. Shappirio; Vice-Chairman, Henry K. Townes; and Secretary, Thomas E. Pliske.

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DETROIT BRANCH NEWS

Dr. Frederick Turner, of the Biology Department of Wayne State University, writes that towards the middle of April, 1957, Mabel and I drove to Louisiana--stopping frequently along the way to enjoy hitherto unvisited areas. At Fort Ancient, in southern Ohio, while Mabel inspected this old Indian stronghold, I rooted about under fallen oak branches and found a number of the large beetle, Passalus cornutus (Shelford calls these Betsy beetles) and two blister beetles (Meloë). We toured a part of Mammoth cave and were amazed by the spider-like cave crickets scurrying about on the walls and ceiling. Mabel found a luna moth one morning in Covington, Louisiana, probably recuperating from a night of fluttering around the light. On the way home from Louisiana in late April we saw black swallowtails and the beautiful goatweed emperor (Aenae) flying in Mississippi.

In early June I collected several kinds of scarabs and lucanids (Phyllophaga, Pseudolucanus?) east of Madison, Wisconsin. On June 18 we were almost overwhelmed by Papilio zelicaon, P. erymedon, P. rutulus, mourning cloaks, checkers, et al in a canyon near Logan, Utah, A few days later we collected P. eurymedon again along with the striking and wary California Sister, Heterochroa californiaca, on the west slope of the Sierra Nevada. In Berekely, California, we frequently saw buckeyes, painted ladies, and anise swallowtails, P. indra. On another occasion in late July my brother-in-law and I ran ourselves ragged chasing these handsome swallow tails in the Feather River Canyon. In early September, again in northern Utah, Mabel discovered a bevy of mourning cloaks, apparently just emerged, feeding on the dap from an aspen.

During the fall, in Detroit, I turned (perhaps faute de mieux) to orthopterans. Mabel, unable to stir up admiration for crickets and the like, indulged her preoccupation with Colias and Vanessa. Dr. Stanly Gangwere was particulary helpful in identifying the orthopterans (gathered on short trips to Mt. Clemens, Pt. Pelee, and the George Reserve during late September and early October.

Stan Gangwere has given two half-hour programs over the University television station. They were entitled: "What grasshoppers eat" and "Animal Grooming." In addition, Stan has kept himself busy with field work on the feeding relations of the Orthoptera and the writing of papers on these relationships.

Alfred Beeton has accepted a new position with the U.S. Fish and Wildlife Service in Ann Arbor as a biolimnologist for the Great Lakes Fisheries Investigations. He has completed his doctorate writing on "The vertical migration of Mysis relicta in Lakes Huron and Michigan."

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EAST LANSING BRANCH NEWS

The most successful meeting of the season was held in February with thirty-five in attendance. Julian Donahue, an M.S.U. freshman, spoke on butterfly collecting in India. Mr. Donahue had spent a year in India with his parents and had considerable leisure time to chase butterflies and as a consequence gathered in over 500 specimens of the group. Upon returning to the states he donated the entire collection to Michigan State Univ-

ersity. He spoke on some of his adventures while collecting, the life of the people he met, and the economic conditions of India.

Richard Fox has completed work on the biology of the European Elm bark beetle and has accepted a position in forest entomology at Clemson. Dick has very generously made arrangements with Clemson for the return of light trap material to Michigan State University--needless to say, this material has materially added to the museum material from that area.

R. L. Fischer, R. Scheibner, J. Eichmeier, and J. G. Brady went on a collecting trip into Arkansas and Texas in the spring. Some 25,000 specimens were added to the museum as a result of this trip.

Rudy Scheibner has begun taxonomic work on the Rhynchophora.

Jack Eichmeier has completed his work on the effect of the giberellins on the reproductive rate of Tetranychus tularius. He is now teaching biology in the Saginaw public schools.

Bill Drew has completed his work on a generic study of the anthomyiid flies of North America and has accepted a position with Oklahoma State University at Stillwater. Bill is teaching the taxonomic courses, aquatic entomology, and ecology. He is also the curator of the collection, and as a result considerable exchange of material has been made between Oklahoma State University and Michigan State University.

The department of entomology hasbeen very fortunate this winter in having Dr. William R. Thompson as Visiting Distinguished Professor. Dr. Thompson taught a course on insect ecology.

With the completion of channel 10 the department again finds itself on television. Present plans call for a continued series of programs during 1959 on the first and third Thursday of each month from 12:15 to 12:30. A few of the forthcoming programs are as follows:

Insects-Good, bad and indifferent
The 4-H entomology project
Embedding insects in plastic
How to make an insect collection
Controlling fruit insect pests
Butterflies and moths

Dr. Herman King has recently been appointed as Assistant Dean to the Dean of the College of Science and Arts.