ANNUAL NEWSLETTER

Department of Entomology

University of Illinois
Urbana, Illinois

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TABLE OF CONTENTS

| | Page |
|--|------|
| MESSAGE FROM THE HEAD OF DEPARTMENT | - 1 |
| ACTIVITIES OF THE SCHOOL OF LIFE SCIENCES | - 2 |
| DEPARTMENTAL ROSTER 1966-1967 | . 3 |
| VISITORS TO THE DEPARTMENT | . 7 |
| SPORTS REVIEW | . 8 |
| SOCIAL ACTIVITIES | . 9 |
| RECENT GRADUATES | 11 |
| PRESENT ENTOMOLOGY GRADUATE STUDENTS | 18 |
| NEWS ABOUT THE STAFF MEMBERS | 25 |
| PUBLICATIONS FROM THE DEPARTMENT OF ENTOMOLOGY 1965-1966 | 39 |
| ALUMNI NEWS | 43 |
| ADDITIONS OR CORRECTIONS TO THE DIRECTORY | 54 |
| NEWSLETTER INFORMATION FORM | 55 |

The Newsletter comes to you a little late this year, due to a full schedule. We do delight in sharing with you in this Centennial Year of the great University of Illinois our best wishes and take this opportunity to let you know the activities of your entomology department.

The cover this year I think is most significant as we look back on a hundred years of progress at the University of Illinois. Harker Hall, the oldest building standing on the campus having housed the Department of Entomology for many years in tandum with Morrill Hall which now houses the Department. It gives us a look at the old, the present, and a glance into the future. We trust that we will be able to bring to fruition a Centennial Celebration of some sort commensurate with the activities and accomplishments of our many distinguished alumni.

Again, I would like to thank Ruth Plymire, our faithful secretary, without whose help this reincarnation of the Newsletter would be impossible. Also after much cajoling, pleading, begging and just plain threatening a word of thanks to all in the department who "willingly" shared with you their activities of the past year. With a resolve of "never again" the editor puts to bed the Newsletter for 1967. Until next year when trauma will be forgotten and hope will spring eternal. Best wishes.

MESSAGE FROM HEAD OF DEPARTMENT

The addition to Morrill Hall was completed during the summer of 1966 and Drs. Friedman, Selander and MacLeod quickly occupied the 4,000 square feet which were made available to us. After about seven months of use there have been no serious complaints and no requests for remodeling which is unique in comparison to our experience when we moved into the original building.

Dr. Ellis MacLeod joined our staff in September of 1966. He fills a position which had been vacant for several years. His primary teaching obligation will be our course in the division of general studies, and the instruction of graduate students interested in the cytological evidence of insect evolution.

We are still hoping to stage a commemorative program in connection with the completion of Morrill Hall. The building is occupied by four departments and from time to time they each express a desire to have a single occasion to serve this purpose. At this time we have not been able to agree on programs so we shall probably be contacting you with an invitation to join us in an independent departmental venture.

During the past year Dr. G.S. Fraenkel was notified his Career Award from the National Institutes of Health would be renewed for another five years. We are very happy to accept the benefits which we as a department receive from such an award, but we are most grateful to have a scientist of his stature in our department. The recognition is well deserved.

Again we invite you to pay us a visit and inspect our new facilities.

Sincerely,

Clyde W. Kearns

ACTIVITIES OF THE SCHOOL OF LIFE SCIENCES

After some minor delays the new addition to Morrill Hall has been completed and occupied. The month of September was filled with moving carts and jammed elevators as the accumulation of the century was moved into new quarters. It was a steady stream of traffic as people from Zoology, Botany and Entomology moved from Harker Hall and the Natural History Building into the new addition. Everyone seems to be well pleased with the new quarters. Now the entire complex of the School of Life Sciences is housed in Burrill and Morrill Halls connected by an administration bridge which houses the Director, Business Manager, and the Departmental Offices. The Natural History Building has been turned over almost entirely to Geology with some of the laboratories and classrooms maintained for the Botany, Zoology and Biology course work. Harker Hall is devoted now entirely to research and teaching laboratories for general biology, and entomology.

The School of Life Sciences becomes more and more involved with academics. The Honors Program continues to increase in size and the new basic course in biology has become a requirement for all preprofessional students in the Life Sciences. Also the doctoral program in cellular biology is increasing in number and stature.

As a member department in the School of Life Sciences we share with the entire University pride and admiration for the growth that has taken place particularly in this year 1967 as the University celebrates its Centennial Anniversary. We are both proud and grateful to be a member of such an excellent academic institution, which is continually striving for progress and development in graduate and undergraduate education.

The past year has been a fruitful one in the School of Life Sciences with new acquisitions in instrumentation, facilities, and expansion and growth in all departments. Our congratulations to Dr. Kallio for a successful year in the School of Life Sciences and for his skill and ability to diplomatically mold the activities of the various departments into a unified division of the University.

Departmental Roster 1966-1967 Faculty

Balduf, Walter V. - Professor of Entomology, Emeritus

Chadwick, Leigh E. - Professor of Entomology, Emeritus

Decker, George C. - Professor of Entomology, Emeritus

Fraenkel, Gottfried S. - Professor of Entomology

Friedman, Stanley - Associate Professor of Entomology

Ghent, Arthur W. - Associate Professor of Entomology

Hayes, William P. - Professor of Entomology, Emeritus

Horsfall, William R. - Professor of Entomology

* Jaycox, Elbert R. - Associate Professor of Apiculture

Kearns, Clyde W. - Professor of Entomology and Head of the Department

** Larsen, Joseph R. - Associate Professor of Entomology

Luckmann, William H. - Professor of Entomology and Head of Economic Entomology Section

MacLeod, Ellis G. - Assistant Professor of Entomology

Maddox, Joseph V. - Assistant Professor of Agricultural Entomology

Milum, Vern G. - Professor of Entomology, Emeritus

Ross, Herbert H. - Professor of Entomology and Head of Faunistic Survey

Selander, Richard B. - Professor of Entomology

Sternburg, James G. - Professor of Entomology

Waldbauer, Gilbert P. - Associate Professor of Entomology

White, Joan F. - USPH Post-doctoral Fellow

Willis, Judith H. - Assistant Professor of Entomology

^{* -} Joint Appointment with Horticulture

^{** -} Joint Appointment with Physiology and Biophysics

Research Associates

Hsiao, Ting-Huan

Unzicker, John D.

Research Assistants

Allen, Robert T.

Morden, Robert

Campbell, William R.

Nordin, Gerald

Eaton, John L.

Randall, Robert F.

Flattum, Roger F.

Ronquillo, Consolacion R.

Fogal, Willard

Seligman, Morris

Hsiao, Catherine T.

Wilson, George R.

Janicke, James F.

Yu, Ching-Chieh

Keyt, Keith

Teaching Assistants

Abou-aly, Aly A.

Reynolds, Judith L.

Bouseman, John K.

Sanburg, Larry L.

Eertmoed, Gary E.

Weddle, Richard C.

Killmer, Paul S.

Yang, Stella

Trainees and Fellows

Benson, Robert L. - NDEA Fellow Chang, Franklin - USPH Trainee

Ameel, John J. - NDEA Fellow

Clegern, Robert W. - USPH Trainee

Cupp, Edward W. - USPH Trainee

Dirks, Tobias F. - USPH Trainee

Fox, Philip M. - NDEA Fellow

Gemrich, Edwin G. - USPH Fellow

Peterson, Lance G. - USPH Trainee

Pinto, John D. - USPH Fellow

Sanburg, Larry L. - NDEA Fellow

Sastrodihardjo, S. - Fēllow

Scarbrough, Aubrey - NDEA Fellow

Sheldon, Joseph - NDEA IV Fellow

Students not on Staff

Fowler, H. Wade

Fraembs, Frank

Kuhlman, Donald E. (Instructor, Agricultural Entomology)

Mathieu, Jean M.

Newton, David

Parshall, Stephen J.

Patterson, William J.

Randell, Roscoe (Instructor with Entomology Extension)

Schmidt, Fred

Non-Academic

Adams, Paula

Duvall, Eloise

Etheridge, Jeanne

Plymire, Ruth

Ransom, Terry

Reeves, E. Jean

Student Employees

Carter, Kenneth

Creech, Cheryl

DeMoss, Susan

Fox, Stanley

Hanna, Jean

Kupelian, Lena

Marsh, RaVae

Meyer, John

Prickett, Alice

Rhoades, Bradley

Speier, Pat

VISITORS TO THE DEPARTMENT

Dr. Thomas J. Barr University of Kentucky

Dr. Fotis C. Kafatos Harvard University

Dr. Frank Kurczewski University of Kansas

Dr. Hamilton Laudani
U.S.D.A. Agricultural Research Service

Dr. A. R. Main
North Carolina State University

Dr. Thomas E. Moore
University of Michigan

Dr. J. W. S. Pringle Oxford University

Dr. Dan Shankland Purdue University

Dr. Edward H. Smith
North Carolina State College

Dr. Milan Trpis Slovak Academy of Sciences, Czechoslovakia

SPORTS REVIEW

As we sit down and look back over the activities of the past year, one might wonder when and how research and studies were included in the busy program. Last Spring the sport, of course, was softball where the Entomology Flycatchers posted a 6-2 record to capture second place in the faculty-staff league. Both losses were heart breakers making the entire season a very exciting one. When our present coach Lance Peterson completes his Ph.D. this spring, the baseball program will have to be overhauled. Lance has been an enthusiastic leader and his gung-ho sports enthusiasm will be missed by all. During the summer months, the sport was golf for those among us who could sneak off on a beautiful afternoon for 18 holes. With the coming on of winter, the action can be found on the handball courts where some of our students have become very good. A new addition for our physical fitness addicts is participation in noon-time programs of running, sponsored and directed by members of the physical education department faculty. of rugby participants from our department is down to one (Bob Benson) but the strength of the rugby club seems to be growing.

One could not close out the sports review without a word about that sweet, lovable (put yer money in the beaker Jack) office pool manager "Ma (Ruth Plymire) Barker." After three years of making my regular contributions to the odds-on-anything office pool your faithful and intrepid editor now knows, they're RIGGED!! After three consecutive years of coming up 0, yours truly finally won a departmental pool. Just as I was sitting at my desk to count the loot, who should appear on the threshold but "Ma." "Sorry about that Jack, but I got to have that money back. You see, you only had 12 in the 27th frame and it was tied up in the 3rd quarter, which makes you an automatic loser of the 1/2 time portion. Besides, you bought all your chances with 1927 quarters and Terry's mother has brown eyes, so the pool naturally goes to Roger." Oh well, maybe next year.

SOCIAL ACTIVITIES

Christmas Party

There is at least one time during the year when all entomologists seem to be able to get together for a joyous occasion. This is the Annual Christmas party. This year the festive activity was held on December 15, 1966. We again invaded the University Club at 1201 West Oregon Street, Urbana, where a delightful time was had by all. The holiday spirit was in full swing from 8-11 PM and a few hanger-ons till 12. Each year there seems to be new faces in attendance, approximately 80 people came. Again, thanks to Ruth, name tags were available so we could put names with faces. If, for no other reason, the Christmas party is excellent as it allows us to get together with entomologists from the Natural History Survey. If we all survive enough Christmas parties, sooner or later we are going to get to know each other. The usual array of goodies was available for all to enjoy -- punch, cookies, open-faced sandwiches, and something new this year a cheese dip.

There is something good about the Christmas season and a Christmas party when everyone can just sit down and enjoy each other's company without talking shop, and get to know each other's families and make new friends. We say on with the Christmas party -- bigger and better every year.

Spring Picnic

The Entomology Spring Picnic this year went past spring and moved into summer. The spring weather was so miserable in Champaign-Urbana this year that the picnic was not held until June 12, 1966. Hessel Park was the sight of the action. This seemed to be a good place for the picnic from last year's experience. The picnic lasted from 1-5. The day was delightful and we had a good crowd, but this year the entomologists seemed to come in bits and pieces and people drifted in anywhere from 1-5 PM. As a result we did not eat together as a group. The park was extremely crowded probably due to the lateness of the season and the bad spring everyone was out enjoying good weather. We needed a few more tables and this year the entomologists were too lazy to participate in sports. We did have some volleyball and softball, but spring fever seemed to grip the atmosphere and nobody seemed to have the energy to get up and play.

These kinds of activities are excellent because they allow us all to get together and give us the opportunity to meet each other's wives and children and get acquainted with the powers behind the throne. In a busy schedule of teaching and research these delightful moments of relaxation are few and far between, and should be continued for the enjoyment of all.

RECENT GRADUATES

John LeRoy Eaton - 1966

John was born September 21, 1939 in Macon County, Decatur. John is an Illinois boy - born, bred, raised and educated. John spent his younger years in Decatur, Illinois where he attended Stephen Decatur High School. After graduation, John entered Milliken University in September of 1958. He stayed at Milliken University for 2 years until June, 1960 where he majored in biology. After leaving Milliken, John entered the University of Illinois as an undergraduate where he majored in entomology. During his two years as an undergraduate at the University of Illinois, John served as an undergraduate laboratory assistant in the Department of Entomology. He received the B.S. degree in 1962 from the University of Illinois with a major in entomology and a minor in chemistry. At that time, he was accepted as a graduate student in the Department of Entomology where he pursued his graduate studies toward the Ph.D. from 1962 to 1966.

Prior to coming to Urbana to study at the University of Illinois, John worked with the City Health Department in Decatur for the summer of 1960 where he conducted mosquito population surveys trying his hand at applied entomology in the mosquito abatement system of this state. While John was a graduate student here at the University of Illinois, he held the position of research assistant in the laboratory of Drs. Kearns and Sternburg. He did his research under the direction of Dr. James Sternburg in the general area of toxicology and insecticides. The title of John's thesis is "Temperature and action of DDT on the cockroach nervous system." After completion of the thesis, in the fall of 1966, John accepted a position at Kalamazoo College in Kalamazoo, Michigan where he was awarded a Kettering Foundation Internship in teaching and research. A recent communication from John indicates that he has been invited by Kalamazoo College to stay on for another year and do teaching and research on the faculty and help them spend some \$40,000 just awarded for new facilities and equipment. John is married and they have two children.

John is a member of Phi Sigma and the Entomological Society of America.

Edwin Godfrey Gemrich II - 1966

Ed was born November 5, 1940 in Kalamazoo, Michigan. He grew up in Kalamazoo where he entered the University High School from which he graduated in 1958. At that time, he entered Michigan State University in East Lansing, Michigan as an honors student in sciences and art. While at Michigan State University, he majored in entomology and physical science. He received the B.S. degree in 1962. While a student at Michigan State University, Ed was honored by being nominated to Phi Eta Sigma. He was also in the Honors College and was on the Dean's list for 11 terms. He was also a member of the 4 Point Dinner for 4 terms. Ed was an outstanding student at Michigan State University and graduated with honors. In fact, Ed's ability as a student was recognized when he came to the University of Illinois in 1962 as a Ph.D. candidate in the Department of Entomology with a minor in biochemistry. At that time, he was awarded a Woodrow Wilson National Fellowship and also a University of Illinois Fellowship.

Prior to coming to the University of Illinois, Ed worked at Edgewood Orchards in the summer of 1959. In the summer of 1960 and the academic year of 1960-1961 Ed was an undergraduate researcher on a National Science Foundation Award. In the summer of 1961 and 1962 Ed worked for the Upjohn Company as a researcher on agricultural chemicals. His work at the Upjohn Company was with developmental research on carbamate insecticides. In the fall of 1963 Ed was a research assistant in toxicology here at the University of Illinois. In his terminal year at the University of Illinois Ed was honored by being awarded a USPHS Predoctoral Fellowship in Entomology.

While at the University of Illinois Ed worked under the direction of Dr. Clyde Kearns in the general area of insect toxicology. His Ph.D. thesis is "Metabolic enzymatic degradation of several aromatic carbamate insecticides." Ed's predoctoral USPHS Fellowship in entomology was terminated when Ed completed his thesis in August of 1966. At that time Ed felt the call of the north land and returned to his hometown of Kalamazoo, Michigan where he has accepted a position as Research Entomologist with the Upjohn Company.

Ed is married and they now have one child. Ed was a pleasant fellow and a bright student and we will not soon forget his participation in the departmental Christmas parties. One has not lived until he has heard Ed Gemrich sing "Silent Night" to a "rock-n-roll" beat.

Ting Huan Hsiao - 1966

Ting was born on February 6, 1939 in Hangchow, China. He attended primary and junior high schools in Canton, China. He went to Taiwan, Formosa in 1951 where he continued his education in the high school of Taiwan Teachers College, Taipei, Taiwan. After graduating from high school he entered Taiwan Provincial College of Agriculture, Taichung, Taiwan where he received the B.S. in Entomology and Plant Pathology in 1957. Ting came to the United States in 1958 where he entered graduate school of the University of Minnesota where he held a research assistantship under Professors H.G. Holdaway and H.C. Chiang. Ting received his Master's degree from the University of Minnesota in 1961 in Entomology. After graduating from the University of Minnesota in 1961 he was accepted in the Graduate School at the University of Illinois where he majored in entomology. While at the University of Illinois Ting held research assistantships under the direction of Dr. G.S. Fraenkel. Ting married Catherine Ling Tang in March of 1961; he met her while a graduate student at the University of Minnesota and they came together to the University of Illinois where Cathy has also earned her Master's degree under the direction of Dr. Fraenkel and has continued to work as a research assistant for Dr. Fraenkel.

Ting worked as a research assistant during the entire time he was at the University of Illinois under the direction of Dr. Fraenkel. He received his Ph.D. in August 1966. His research thesis was "Host plant specificity of the Colorado potato beetle, <u>Leptinotarsa</u> decemlineata (Say)."

Ting is a member of Sigma Xi, AAAS, AIBS, the Entomological Society of America, Phi Sigma and the Royal Entomological Society of London.

Upon completion of his Ph.D. degree in 1966 Ting accepted a position as research associate with Dr. Fraenkel to continue his work on plant specificity. Ting has just announced that he has accepted a position as insect physiologist at Utah State University at Logan, Utah. He and Cathy will be leaving in June to move to the Rocky Mountain country.

Joseph Bernard Maddox, Jr. - 1966

Joe was born in Montgomery, Alabama on April 14, 1938. He graduated from Sidney Lanier High School, Montgomery, Alabama in June 1955 and enrolled at Auburn University the following September. Joe received a B.S. degree in entomology in June 1959 and a M.S. in entomology in June 1961 from Auburn University.

While at Auburn Joe worked part time during the academic year and full time during the summer for the entomology department. His duties there involved assisting in a research project on the bionomics and control of economically important insects of corn, grain sorgum, peanuts, and long grasses. While a graduate student as a research assistant in entomology at Auburn Joe continued to work on the above mentioned projects and also assisted as a teaching assistant in the laboratories of general zoology and physiology. His master's thesis was a study on the European corn borer in Alabama concerned primarily with ecology and control of the European corn borer in that state.

In September, 1961 Joe entered the University of Illinois to pursue a Ph.D. in entomology. His studies were interrupted from October 1961 to September 1962 when his unit of the Alabama National Guard was called to active duty during the Berlin crisis. He returned to Urbana in September 1962 to resume his graduate studies at the University of Illinois. While a graduate student at the University here, he was employed as a technical assistant by the Illinois State Natural History Survey except for the period of September 1964 through June 1965 when he held a University Fellowship.

While working toward his Ph.D. degree in entomology his work was supervised by Dr. George Decker of this university, now retired. Joe's Ph.D. thesis was entitled "Studies on a microsporidiosis of the armyworm, Pseudaletia unipuncta (Haworth)." Upon completion of the Ph.D. requirements Joe accepted a full-time position as Assistant Professor of Agricultural Entomology at the Illinois State Natural History Survey where he is at the present time still working.

Dr. Maddox is a member of Gamma Sigma Delta, and Sigma Xi. Joe is still single and as the sage has said "a menace to society being over 21 and unmarried."

Soelaksono Sastrodihardjo - 1967

Sono was born in Poerwokerto, Java, January 3, 1938. He attended public schools in Jogjakarta, Semarang and Pati from 1942 to 1957. He entered FIPIA which then became Institut Teknologi Bandung (ITB) in August 1957. September 1958 he was awarded a scholarship from P.P.K. He served as a student assistant of comparative anatomy from 1958-1962. In July 1962 he received the degree comparable to a Bachelor's degree in biology. His major topics were physiology, parasitology and plant pharmacology. Also in July 1962 Sono was awarded a fellowship to study in the U.S.A. on the program of ITB-Kentucky Research Foundation at the University of Kentucky.

By September 1962 Sono realized that the training he desired was given at the University of Illinois and he applied here to enter this institution in September 1962. From 1962-1963 Sono worked under the direction of Dr. Chadwick and Dr. Downes on the larvae of Sarcophaga. In 1963 Sono began to work on insect tissue culture and did his thesis under the direction of Dr. J.R. Larsen. The title of his thesis is "The competence of the ovary of Hyalophora cecropia (Lepidoptera) in vitro, with special reference to the 'intermediate' cell." Sono has been actively engaged in insect tissue culture research and has been active in and a member of the American Society for Cell Biology and the Tissue Culture Association. He has already published part of his

work on myosis in pupal ovarian cells with Joan F. White.

Upon completion of his Ph.D. thesis Sono returned to his native land where he assumed the position of Professor of Biology at the Institut Teknologi Bandung (ITB). Having received a recent communication from Sono we know that he left with mixed feelings; having been here long enough to have made good friends and feel sad at leaving but delighted to be home with his friends and relatives and to assume his position as Professor at the Institut where he began his academic career. We trust that he will continue to have an active career in both teaching and research having an influence on future generations of scientists from Indonesia.

John Duane Unzicker - 1966

John was born in Harvey, Illinois in May 1938. Another product of Illinois John received his elementary education in Tinley Park, Illinois and his high school education at Harvey and Midlothian, Illinois. In September 1957 John entered Thornton Junior College in Harvey where he received a two-year diploma in January 1960. At that time John entered the University of Illinois where from February 1960 to January 1962 he continued his undergraduate studies with a major in entomology and received the B.S. degree from this institution. In February 1962 John entered the graduate school at the University of Illinois where he majored in the Department of Entomology. During this period of time he received a Master's degree in 1963. His master's degree was on evolution in the genus Hydropsyche which was carried out under the direction of Dr. Herbert Ross at the Illinois State Natural History Survey.

While pursuing the Ph.D. here at the University of Illinois John was employed as a research assistant at the State Natural History Survey and he did his thesis research under the direction of Dr. Herbert Ross of the State Natural History Survey. The title of his thesis is "Comparative morphology and evolution of the internal female reproductive system of Trichoptera (Insecta)."

John completed the requirements for his Ph.D. in 1966. While a student at the University of Illinois John acquired his wife Carol Ann, who is presently teaching at the University of Illinois High School. Upon completion of the degree requirements John accepted a position as research associate in the Faunistic Study Section under Dr. Ross with the Illinois State Natural History Survey.

PRESENT ENTOMOLOGY GRADUATE STUDENTS

Aly A. Abou-aly

Currently doing work on the bionomics of <u>Psorophora varipes</u>. He is also doing some teaching in the laboratory of Dr. Horsfall's classes. Advisor: Dr. W.R. Horsfall

Robert T. Allen

The systematics and evolution of the Carabidae (Coleoptera) especially the genus Loxandrus (Pterostichini).

In February he made a trip to the U.S. National Museum, Washington, D.C. to study the Thomas L. Casey types of Loxandrus and to collect winter stoneflies for Dr. H.H. Ross. The collections were made in West Virginia, Virginia, Maryland, and Pennsylvania. In May black light traps and pit fall traps were established in Brownfield Woods, northeast of Urbana, and Hart Memorial Woods, northeast of Mahomet. These traps have been in continuous use since May and are yielding interesting information on the insect fauna and its seasonal distribution in these two decidious forests. Advisor: Dr. H.H. Ross.

John J. Ameel

The past summer was spent on a mimicry problem with the syrphid, Eristalis tena. But most of the year has been spent on course work in ethology and physiology. Advisor: Dr. G.P. Waldbauer.

Robert L. Benson

The last year was a successful one for Bob as he completed some more of the required course work. His research on the biosynthesis of glucosamine in insects is still in the early stages, but the future looks promising. Bob acquired a wife (Lois) last summer, so he is attempting to make home cooking and the thin waistline mutually compatable. The photographic urge was satisfied by the spring flowers, the western scenery, fall color, and the recent freezing rain which knocked out the power lines. Advisor: Dr. S. Friedman.

John K. Bouseman

Systematic studies of the family Rhipiphoridae. During the summer of 1966, John worked with the Center for Zoonoses Research on a survey of ectoparasites of birds and mammals in the land between the Lakes Recreation Area in western Kentucky. In the area of "extra curricular activities" John and Barbara were blessed by the arrival of a son, Thomas Carl, on November 10, 1966. Advisor: Dr. R.B. Selander.

William R. Campbell

Taking courses and attempting to maintain research programs have been a constant struggle. Bill attended and presented a paper at the Portland meetings of the ESA in December. He also took a couple of trips, strictly for vacation; one was for canoeing in the Canadian wilds and the other was for basking in the warm Mexican sun. Advisor: Dr. C.W. Kearns.

Franklin Chang

Frank has been doing research in insect physiology. Frank was working on determination of sugar and sugar levels in honey bee hemolymph last year. This year Frank is involved in a study on lipid transport and glyceride synthesis in the fat body of the insects. Frank also attended the ESA meetings in Portland this year. Advisor: Dr. S. Friedman.

Eddie Wayne Cupp

Eddie spent the year 1966 concerning himself primarily with completion of course work. He and his wife did manage a week's vacation to Kentucky where they visited friends and relatives in various parts of the state. As of now his research interests have been confined to reviewing past work on thermal stress and anomalous development of mosquitoes. Advisor: Dr. W.R. Horsfall.

Tobias Dirks

Tobias is now in midst of his second year of course work. He is working on entomogenous fungi under Dr. D.P. Rogers to complete a botany minor requirement. Domestically he and Judy are rearing 3 children. Russell, the oldest, is in the first grade while Clarke and Lisa remain home. Advisor: Dr. J.G. Sternburg.

Gary E. Eertmoed

In 1966 Gary was busy taking courses, working on his thesis, and assisting in Entomology 302. During the summer he was Dr. Selander's assistant, and part of this time was spent studying the insects in the Davis Mountains near Fort Davis, Texas. Advisor: Dr. R.B. Selander.

Roger F. Flattum

Roger has been studying the effect of curare on the insect neuro-muscular junction and possible production of a "toxin" by nicotine. He has also been working on an extraction of a biologically active material on insect CNS and muscle from muscle. He attended the ESA meetings in Portland, Oregon. Roger has published his first paper on the effects of d-tubocurare chloride on nervous activity and muscular contraction in the house cricket. (Congrats!).

The Flattum's are also expecting in March. Rumor has it that at the moment of delivery Roger will flip and Jean will have to drive him to the hospital. Advisor: Drs. J.G. Sternburg and J.R. Larsen.

Willard Fogal

Willard's research is continuing on the morphogenesis of the adult fly cuticle and its control by bursicon. He attended the ESA meetings in Oregon and the Annual Regional Meeting of the Society of Endocrinologists in Wisconsin. He is looking forward to the possibility of a year of postdoctoral work with Professor T. Weis Fogh at Cambridge. Advisor: Dr. G.S. Fraenkel.

H. Wade Fowler, Jr.

Bionomics of medically important insects. A study was initiated in 1966 on the bionomics of <u>Aedes vexans</u>. Field collection trips to obtain specimens for laboratory colonies were made to Flin Flon, Manitoba and Wilson Dam, Alabama. Advisor: Dr. W.R. Horsfall.

Philip Mike Fox

Mike's major activity in the past year has been learning to use the electron microscope. During this period he has been working on a developmental study of the fine structure of the conglobate or prostatic gland of the American cockroach. In the present (spring) semester he is beginning some research concerned with the ultrastructure of synapses and myoneural junctions. Advisor: Dr. J.R. Larsen.

Robert G. Holt

Bob comes to us from Utah State University and more recently from Dutch John, Utah where he was doing animal survey studies. His area of research is not yet decided. Advisor: Dr. E.R. Jaycox.

Catherine T. Hsiao

Cathy attended the ESA meetings in Portland, Oregon and presented a paper with Dr. Fraenkel on calcification, in the place of tanning, in the puparium of the face fly, <u>Musca autumnalis</u>. Her current research is on the fine structure of the neurosecretory system of the blowfly. Cathy and Ting are leaving in June for Logan, Utah where Ting has accepted a position at Utah State University.

James F. Janicke

Jim's area of research is not too clearly determined. He has accepted a position at the State Natural History Survey where he will be working on some aspect of economic entomology. Advisor: Dr. W.H. Luckmann.

Keith A. Keyt

Keith graduated in June, 1966 from Oregon State University receiving a B.S. in entomology. In late August he drove back here to attend classes and begin work on a M.S. He currently is a half-time assistant with the Natural History Survey. Advisor: Dr. H.H. Ross.

Paul S. Killmer

Paul finished some work on ultrastructure of the compound eye of blowfly Phormia regina and is presently working on the ultrastructure of the compound eye of the mosquito Aedes aegypti. He is also working on the ultrastructure, pathology, and development of the yellow fever and Venezuelan equine encephalitis viruses, in the mosquito Aedes aegypti. He travelled to Fort Dietrich, Frederick, Maryland in February 1966 to pick up infected mosquitoes. Paul also went to San Francisco for the Electron Microscope Society of America meetings to present a paper on the ultrastructure of the compound eye of the blowfly Phormia regina. He attended several meetings in Chicago for the Midwest Society of Electron Microscopy. He is also working parttime for Dr. A.M. Watrach in the School of Veterinary Medicine on dog wart viruses. The Killmer's are hoping for a family expansion in October. Advisor: Dr. J.R. Larsen.

Donald E. Kuhlman

Don worked as an extension entomologist for the College of Agriculture and the Illinois State Natural History Survey. He travelled throughout Illinois doing insect surveys. He is starting on thesis research with rootworms. He went to the North Central Regional Meetings on rootworms recently. Don is married and has two children. Advisor: Dr. W.H. Luckmann.

Marilyn Laverty

Marilyn arrived in February, 1967. She comes to us from Ghana where she was in the peace corps teaching biology. Her area of research is not yet determined. Advisor: Dr. G.P. Waldbauer.

Jean M. Mathieu

Jean this year is a graduate student in absentia. He is continuing to work on his thesis research in the biological studies of a group of closely related species of the genus Epicauta (Meloidae: Coleoptera). Hopefully he will be back this summer for his final examiantion. Advisor: Dr. R.B. Selander.

Robert D. Morden

Bob is a new student this year. His area of research is not yet determined. Advisor: Dr. J.G. Sternburg.

David C. Newton

The past summer was spent in the study of honey bee behavior. In September Dave began teaching biology at the Rantoul Township High School while writing his thesis. The whole family looks forward to getting some camping in this spring. Advisor: Dr. E.R. Jaycox.

Gerald I. Nordin

Gerald received his B.S. in Forest Production from the University of Illinois in June of 1966. After graduation he accepted a position as Research Assistant at the Illinois Natural History Survey with the economic entomology section. He is working with Dr. J.E. Appleby of the Survey staff on insect pests of trees, shrubs, and ornamental plants. Advisor: Dr. W.H. Luckmann.

William J. Patterson

Major Patterson of the U.S. Army, Medical Service Corps, has completed all didactic course work and the preliminary examination leading toward the Ph.D. degree. Two field trips were completed during the year for collection of subarctic aedine mosquitoes; one of the trips to the northern peninsula of Michigan, and the other to Flin Flon, Manitoba, Canada.

Research interests are progressing along nicely and concern histopathological effects of thermal stress in aedine mosquito larvae and pupae. Advisor: Dr. W.R. Horsfall.

Lance G. Peterson

Lance is a USPH trainee. He attended the ESA meetings in Portland where he presented a paper entitled "A study of the encapsulation reaction of the American cockroach to foreign tissue implantations." He has been continuing his thesis research on the insect immune response. Advisor: Dr. J.R. Larsen.

John D. Pinto

John has spent almost full time this past year on his Meloe research. He also went with Dr. Selander and Gary Eertmoed on a blister beetle collecting holiday in southwest Texas during the latter part of July. This past December he travelled to Oregon and California to attend the ESA meetings in Portland, examine type specimens of Meloe at the California Academy of Sciences in San Francisco, and get his California driver's license renewed (we're safe again). Advisor: Dr. R.B. Selander.

Robert F. Randall

During the past year Bob finished his course work and passed his preliminary examination. He is now starting research for his Ph.D. thesis. He attended the meetings of the ESA in Portland, Oregon and has recently been initiated into Phi Kappa Phi. Advisor: Dr. C.W. Kearns.

Roscoe Randell

Roscoe works full-time as an extension entomologist at the State Natural History Survey. He had a special project last summer evaluating gross damage caused by the corn leaf aphids. He travelled throughout Illinois working on this project. Advisor: Dr. W.H. Luckmann.

Judith L. Reynolds

During the past year Judy has been working on her Ph.D. thesis
"The assessment by progeny rearings of early changes occurring in populations
of the flour beetles <u>Tribolium confusum</u> Duval and <u>Tribolium castaneum</u>
Herbst. when reared under conditions of competitive interaction."
She expects to complete her work in June 1967. Advisor: Dr. A.W. Ghent.

Maria (Nen) Ronquillo

Nen's research is on the histopathology of thermal stress on subarctic aedine mosquitoes. She also finished her M.S. in Zoology under Dr. Ray L. Watterson. Advisor: Dr. W.R. Horsfall.

Larry L. Sanburg

Larry arrived in June 1966 from Humboldt State College in California and worked with Dr. Friedman on trehalose in Phormia. This work should be completed soon. Thesis work will begin in February and will deal with diapause in adult mosquitoes. He missed the ESA meetings this year but hopes to go next year. Advisor: Dr. J.R. Larsen.

Aubrey Scarbrough

Aubrey is in his second year of course work and has begun his research on the behavior of Hyalophora cecropia (Linn.) this fall. Advisor: Dr. G.P. Waldbauer.

I. Morris Seligman

Morris is one of Dr. Friedman's graduate students. Most of his time in Morrill Hall is spent worrying about the mode of action of the now well known hormone bursicon. Morris attended the regional meeting of the Endocrinology Society in Madison, Wisconsin. Advisor: Dr. S. Friedman.

Joseph Sheldon

In June 1966 Joe graduated from The College of Idaho. The summer was spent in his home town, St. Helens, Oregon, where he worked in a paper mill. The last part of August his wife Donna and he began the trip to Urbana where he is now beginning his graduate work. Advisor: Dr. E.G. MacLeod.

Richard C. Weddle

Nothing much has happened in the past year as far as extracurricular activities are concerned. Research has been going fairly well. At present Dick is working on the ontogeny and behavior of blister beetles in the genus Epicauta. Advisor: Dr. R.B. Selander.

George R. Wilson

George is continuing his studies on diapause in Cecropia and the hornworm pupae and the relationship of pupal brain to the control of wound metabolism and diapause. He is also hoping to continue work on ecdyson and its role in wound metabolism. He completed his morphological studies on the activity, relationship and structure of ecdyson. Advisor: Dr. J.R. Larsen.

Stella P. Yang

Area of research not yet determined. Advisor: Dr. J.G. Sternburg.

Ching Chieh Yu

Research interests not yet specified. Advisors: Drs. C.W. Kearns and J.G. Sternburg.

P.S.

Christina Ann Flattum, 7 lbs. 10 oz., born March 5, 1967.

Trevin Dean Pinto, 8 lbs. 8 oz., born March 9, 1967.

NEWS ABOUT THE STAFF MEMBERS

Dr. Walter V. Balduf

Dr. and Mrs. Balduf had a rather usual year, most of it spent at home in Urbana. Both state their health remains good, and they continue to engage in social and community affairs as before. Dr. Balduf states that his well-equipped space in Dr. Horsfall's laboratory, Room 415, Morrill Hall is a constant source of satisfaction, and he appreciates also, as ever, the extraordinary facilities of the campus libraries. Several research projects, more or less have matured and are in the "writing" phase, so there is never a dull moment.

June to September was spent at Eaglesnest Lakes, near Ely, Minnesota where they have gone since retirement in 1958. That area provides both the favorable climate and the entomological opportunities for research. Dr. Balduf returned there last June intending to carry on his work on the bionomics of the entomophagous parasites of two native caterpillars. A total of not less than 44 species had been secured, mostly reared.

However, the severe winter of 1965-66, plus many primary parasites had all but eliminated the hosts. As a consequence, he continued work on a project initiated in 1963 -- the insect fauna of the balsam fir, one of the dominant forest trees of that area. As usual, entomophagous parasites are well represented, including several species of the exciting Rhyssine group. This is the situation which they eagerly look forward to in mid-May, 1967.

Dr. Leigh E. Chadwick

Prior to his retirement in 1966, Dr. Chadwick had three of his students complete their Ph.D. work. Dick Storch finished in February, 1966, Rama Bharadwaj and Satish Chandran in June, 1966. Dr. Chadwick also published papers with Jim Krysan a student of previous years. Dr. Chadwick's grants, both NSF and NIH were either terminated or transferred to the supervision of Dr. Kearns. Chad sends us the following information concerning the activities of he and Maria.

"After retiring in June, Maria and I decided to settle permanently in Maine, to which we were already committed for summers, and bought an all-year house in the town of Sargentville, just 6 miles from our summer cottage in North Brooklin. Our idea is to live in the summer place during the warmer months when this is possible and then move over to Sargentville for the rest of the year. The place there is generally in excellent shape, having been completely renovated by the former owner, and suits our needs just perfectly. Our somewhat large furniture has gone in as though it had always belonged there. We moved in in late September, when our things arrived from storage in Urbana. In Sargentville we have wonderful friendly neighbors -- quite a number of them -- whom we have already come to know and enjoy in a rather short time.

The first of December 1966, we went to Natick, Mass., where I had earlier made arrangements through Dr. Louis M. Roth to work temporarily at the U.S. Army Natick Laboratories, and expect to be here till about April 1st, then return to Sargentville. I am doing research on cockroach respiration primarily in relation to the ability of <u>Eublaberus posticus</u> (Erich.) to survive for upwards of a year without food other than water. Even among cockroaches, many of which can stand quite a lot of starving, Eublaberus is exceptional in this respect.

While here, we are sub-letting a furnished apartment just across the road from the post, so it takes less than 5 minutes to get from home to the laboratory. We are quite comfortably situated, and enjoy being in this area, although we do regret somewhat not having yet been able to spend our first full winter in Maine.

On several occasions, we have seen Dick Storch, and Kay and the baby. Dick has been doing very well at the University of Maine and seems well satisfied, at least for the present. We have also talked on the phone several times to his colleague and former U of I Entomology graduate, Ivan McDaniel, and have plans to get up to Orono to see them all.

This pretty well covers our news, except that we have been presented with our first great grandchild, a girl."

Dr. Gottfried S. Fraenkel

In his usual cryptic fashion Dr. Fraenkel supplied the editor of the Newsletter with a few terse statements, the framework which we can build an account of his activities during the past year.

Dr. Fraenkel spent last summer at the Marine Laboratories in France at the Villefranche and Banyuls where he continued to work on his research on the heat resistance of intertidal snails. Also while in Europe last summer, Dr. Fraenkel attended the International Symposium on insect hormones that was held at Brno, Czechoslovakia, and afterwards took a trip into the Carpathian Mountains. Dr. Fraenkel still continues to work on his new hormone, bursicon with two full-time graduate students, M. Seligman and W. Fogal. Also connected with this research and working under Dr. Fraenkel's guidance is Catherine Hsiao, full-time research assistant, who is also working on the calcification in puparium of the facefly and pupal diapause in Sarcophaga falculata.

Ting Hsiao completed his doctoral dissertation on nutrition and host plant selection of the Colorado potato beetle with Dr. Fraenkel.

Once again in the month of February Dr. Fraenkel has taken off for sunnier climes. This year he spent February at the marine laboratory at Bahia de Los Angeles, Baja California, 350 miles south of San Diego. Prior to his departure when accused of going to the sunnier climes because of the current ice storms, snow storms, and sub-zero weather in Champaign, he only smiled. Dr. Fraenkel also attended the Entomological Society of America Meetings in Portland this past November and also with some of his graduate students the regional meeting on endocrinology held this year at the University of Wisconsin.

Dr. Stanley Friedman

Stan with his hearty band of graduate students marched eastward down the hall in September and invaded the new building to establish permanent residency, taking with them everything but the paint on the walls. The move into the new laboratory was most advantageous for Stan.

His able band of foragers having maintained keys to all glassware sources in the old building fortified themselves in their new bastion and locked the doors.

Aside from a few trips to speaking engagements at Brandeis University and the Meetings of the Federated Societies of Experimental Biology in Atlantic City, Stan spent most of the year tidying his desk and engaging in polemic debate with the editor of the Newsletter. His vacation with the family was taken in the heat of the Illinois summer and consisted of a trip to Missouri where the fishing was awful but the swimming passable. During the year vol. 8 of Methods in Enzymology appeared containing a few short articles by the above named. University operations proceeded as usual in spite of his presence on some committees.

Dr. Friedman and his graduate students are still working on the effect of insect hormones on intermediary metabolism.

Dr. Arthur W. Ghent

During the past year, Dr. Ghent, who now holds a joint appointment in the Departments of Entomology and Zoology, has been devoting most of his free time from teaching to the preparation of manuscripts on a backlog of earlier studies. These have included a recent paper on a theory of crossing-over, Tribolium flour beetle behavior, analysis of contagion in spatial distribution and several more philosophical papers on experimental design in biology, and allied subjects. Recently prepared manuscripts in press or in review include an extension of corner-association analysis to the analysis of contagion simultaneously in three dimensions in which Mr. Paul Tenczar, a graduate student in Zoology at Illinois, will appear as co-author for his contribution of a Monte-Carlo computor study of the chi-square distribution resulting from this test; the first two of a series of articles on selected problems in biometry, including as Part 1 some applications of elementary set theory in biology, and as Part 2 an article on the structure of the binomial distribution. Presently in review is an article on graphic enumeration and computation procedures that make possible the economic extension of the Fisher exact test of 2 x 2 tables to 2×3 , 2×4 , 3×3 etc. tables.

Dr. Ghent's teaching duties include the Honors Biology undergraduate course in Population Biology (Biol. 351), and a (predominantly) graduate course in methods of probability and statistics, Quantitative Biology (Biol. 371). During the fall semesters of the past two years, Dr. Ghent has also taken the Honors Biology Seminar (Biol. 203). During this coming summer, Dr. Ghent will be visiting the Biology Station at St. Andrews, New Brunswick, Canada, where he will begin a re-examination of the statistics of the correlation between rainfall and the Atlantic salmon fishery, first published by A.G. Huntsman in the 1930's.

Dr. William P. Hayes

While Dr. Hayes has not been heard from directly at the time of the writing of the current Newsletter, we recall that he previewed his winter's activities by telling us that this winter would be spent taking a 77-day cruise in the South Pacific to New Zealand and return to Chile and the east coast of South America. We trust that Dr. Hayes is continuing the luxurious state of his retirement and will soon be back at home safe and sound in his bungalow. We wish him bon voyage in all of his diverse travels.

Dr. William R. Horsfall

Dr. Horsfall tells us that 1966 was a year of mixed activities so characteristic of the life of an academician. The teaching was particularly enjoyable this year thanks to enthusiastic groups of students. His research has progressed normally thanks to able assistants and a few breaks. Travel took Bill to the Canadian arctic and subarctic regions and to Europe.

Dr. Horsfall's group had with them for the whole year Dr. Milan Trpis from the Slovak Academy of Science. He carried out an investigation on conditioning and hatching eggs of Aedes sticticus, an important floodwater mosquito of his country. Dr. Trpis was here under the auspices of the World Health Organization as a Senior Research Fellow.

Summer travel included three trips for collecting live material for work during the winter. Trips were made to northern Michigan in June, to northern Manitoba in June and to Northwest Territories in July. The latter trip was made in a chartered plane in which two of us flew across the Canadian bush country and tundra to Baker Lake and return. In the fall a week was spent in Geneva working with a panel at WHO headquarters.

A citation was received from Societas Zoologica Botanic Fennica Vanamo, Helsinki, Finland for work done there in 1964 and election as Fellow of AAAS was received during the year.

Dr. Elbert R. Jaycox

Dr. Jaycox continued his work on honey bee behavior last year with the addition of a grant project to study the effects of queen substance on the industry of worker bees. A full-time research assistant, Mr. Ulf Soehngen, was hired to work on the project and a graduate assistant, Robert G. Holt, began work in 1967. In November, a new apiculture field laboratory and headquarters was completed on the Horticulture farm.

Major trips of the year included a collecting trip with Dr. W.E. LaBerge to Big Bend National Park in April and the entomology meeting in Portland in November. Family plans for a vacation were rudely cancelled when the mumps hit Susan, 16, a day before a trip to the Ozarks in Missouri.

Dr. Clyde W. Kearns

"As I look back upon the past year I find it difficult to recall any experience which would make interesting reading. Camille and I manage to visit our children in California and Wisconsin a few times each year, other than that we hardly get out of the city limits of Urbana. Although I threaten each year to revive my old hobby of trout

fishing in Wyoming. I usually find that I have used up my vacation time on the golf course before the month of August rolls around. It looks like this year will be a repetition of the past.

The fine cooperation of all the members of the department have made it possible for me to keep my hands in research. With a team of technicians and graduate students I have been able to take part in a laborious undertaking of separating and characterizing some insect cholinesterases. We hope to have the results of some of this work in print in the immediate future."

Dr. Joseph R. Larsen

In putting together the Newsletter for the third consecutive year I realize that this could become habit-forming, and it is a frightening thought. My activities the past year have been a continuation of work on insect sensory receptors, primary emphasis being on the ultrastructure of the various receptors.

The highlight of the year was a trip to San Francisco to attend the Electron Microscope Meetings, where Paul Killmer, a student, presented a paper on some work that we had been doing on the compound eye of the blowfly Phormia. Vacation was timed to visit various friends and relatives as we travelled across this great nation.

Teaching is still involved with insect physiology and a persistent interest in Biology 110-111. Also a new activity acquired during the past year is advisor to the teacher training people in the biological sciences. These are a stimulating group of young people who are vitally interested in teaching biology at the secondary school level. While this particular chore takes a great deal of time, it has been most rewarding to help these young people who have a desire to go out and teach biology.

The Larsen clan is about ready to be split asunder. Pam having reached the age of collegeability has made application and been accepted to Brigham Young University for the coming year. We have

during the past year acquired a pure white German shepherd. While hardly a replacement for Pam it does tend to give us something to think about, namely the stability of our minds in having been conned into such an acquisition by our children, who couldn't live without a dog so that the parents could take care of it.

Dr. William H. Luckmann

Dr. Luckmann having completed his first year as Head of the Section of Economic Entomology at the State Natural History Survey approaches Newsletter time with the following:

"I see it is Newsletter time, and I do not have a lot of news for the year 1966.

"Perhaps my greatest achievement was in obtaining joint appointments for all members of the Section of Economic Entomology in the College of Agriculture, University of Illinois effective September 1, 1966.

"Also during 1966 I received a formal invitation from the Indian government to serve as a research advisor for four months at J. Nehru Agricultural University, Jabalpur, M.P. India. I will leave for India in May, 1967.

"My family still remains at six -- five children and one wife, and all are in excellent health and spirits."

Dr. Ellis G. MacLeod

Since the writing of the last Newsletter there has been a new appointment to the staff of the Entomology Department. Dr. Ellis G. MacLeod joined us in September, 1966. Dr. MacLeod was born in Washington, D.C. in 1928. He brings with him to the city of Champaign-Urbana a wife and three children, having come to us from the Biological Laboratories at Harvard University where he was doing post-doctoral work with Dr. Carpenter.

Dr. MacLeod did his undergraduate work at the University of Maryland at College Park, Maryland with time out for a stint in the U.S. Air Force. Upon return from the Air Force Ellis completed his undergraduate work at Maryland and continued there in the department of zoology obtaining a M.S. While at the University of Maryland he served as an instructor in charge of laboratories in a large course in introductory zoology. In 1961-1966 Dr. MacLeod was at Harvard. First as a graduate student where he received his Ph.D. in 1964 and then stayed on as a postdoctoral fellow. His Ph.D. thesis was a comparative study of the functional morphology of the head and cervix of the larvae of Neuroptera. His work on the postdoctoral fellowship involved a study of the ecology and taxonomy of the Chrysopidae. In the first of these areas work was begun on the mating behavior of the adults, defensive mechanisms and particularly the environmental control of diapause in all of the environmental stages. His taxonomic work was oriented around a reinvestigation of the relationships of the different groups using the chromosome cytology of a large sample species as an important guide. Work in all of these areas will continue here at the University of Illinois in his current research programs. Dr. MacLeod is also interested in insect behavior and insect paleontology.

Dr. MacLeod's major teaching assignment in the department is Entomology 103, the undergraduate course for general entomology. He has done a great deal of overhauling and bringing up to date of this course and is doing an enthusiastic job of bringing entomology to the undergraduates at the University of Illinois.

We are delighted to have Ellis' enthusiastic and diverse interests join us here in the Entomology Department. We are also delighted to have his wife and three children. The editor shares with Dr. MacLeod various PTA meetings at Jefferson Junior High School where we are both attempting to shepherd our children through the arduous rigors of modern education.

Dr. Vern G. Milum

Dr. Milum tells us that having retired in 1962 he is now coming to the completion of the first 5-year plan or span. He points out that his contemplated ambition on retirement was to play golf everyday, as soon as he was released from his academic pursuits. He says, however, far from it -- 9 holes once or twice a week is all that he can take.

On retirement Dr. Milum inherited two colonies of bees, but like Topsy the number is now 5. He is still actively interested in his research program of observing the bee dances. He claims to have many theories. However he states that they remain just that -- theories. He also claims that lack of heated glass enclosures prevent winter observations of the bee colonies. He hastens to add, however, that this lack of equipment and the inability to observe the bees in the winter time have necessitated prolonged winter vacations in warmer climes, such as Florida, Spain, Italy and Portugal. We agree with Dr. Milum. These are excellent substitutes for the lack of opportunity to observe and gain research data during the winter months. Every entomologist should have such an excuse. Dr. Milum sends his kindest regards to all.

Dr. Herbert H. Ross

Dr. Ross tells us that except for the end of the year, 1966 was pretty much a stay-at-home year for the Rosses. The 8:00-5:00 period was spent chiefly on caddisflies and ants, the ant part representing the completion of earlier keys for the common ants of Illinois, plus considerable expansion with the help of George Rotramel. The caddisfly work included considerable biogeographic analysis that pointed to extremely interesting thoughts concerning trans-Antarctic dispersals of these insects. The 5:00-8:00 watch was spent chiefly on the final editing of the Spectrum paperback <u>Understanding Evolution</u> and working on a presidential address for the Society for the Study of Evolution.

The year was highlighted by visits of two fellow taxonomists from England, Dr. Henry Stroyan of the Virus Laboratory at Harpenden and a keen student of aphids; and Dr. W.J. Knight of the British Museum who has cooperated with us on several intercontinental projects involving leafhoppers. Dr. Ross also had a fine midge duo studying the Survey collections, Dr. John Martin of Australia and Dr. J.L. Sublette of New Mexico.

In November the Rosses combined business with pleasure on the West Coast, including a tour of the Oregon coast, the Portland meetings, and a trip to Bellingham, Washington, and Vancouver, B.C., to see son, daughter-in-law, and parents. The end of December saw the pilgrimage to the Evolution Society and AAAS meetings at Washington, D.C., followed by a jolly taxonomic New Year's eve. (After the 5th round everyone was describing new species.)

Dr. Richard B. Selander

The major research activities of Dr. Selander continue to be taxonomic and behavioral analyses of the meloid and the meloidae. Dr. Selander's field work this past year was confined to a couple of weeks in the Davis Mountains of western Texas, where studies of sexual behavior in several species of blister beetles were made. The field party included, in addition to Dr. Selander, John Pinto, Gary Eertmoed, and Jean Mathieu.

During this past year Dr. Selander had some visitors to his laboratory included among them were T.E. Moore, University of Michigan, R.D. Alexander, University of Michigan and E.L. Mockford, Illinois State University.

In September Dr. Selander attended the AIBS meetings in College Park, Maryland, and also spent a day at the U.S. National Museum in Washington, D.C.

The Selander's have completed their new home in Champaign and are now permanently settled at their new address 1714 Georgetown Drive.

Lorraine continues to be active in her academic pursuits in the psychology department, and will receive the B.S. degree in June. Dick is girding up his loins for another session at the annual junior high school science fair with his oldest son Mike.

Dr. James G. Sternburg

Dr. Sternburg's research during the past year has been a continuation of previous work. Studies on the effects of insecticides and biologically active substances have progressed further, particularly with DDT in reference to its negative temperature coefficient of toxicity.

In addition to his toxicological research, Jim has become involved with Dr. Waldbauer in certain phases of the biology of cecropia. This work began last winter, and will probably require a number of years for completion.

The Sternburg's (all five of them) have done relatively little travelling this past year. They did go to northern Wisconsin near St. Croix for several weeks last August. During their vacation at St. Croix they saw the sun on only five days, a great disappointment after looking forward to much swimming, fishing, and collecting. Jim will just have to take the clan south next year if he wants to find sunshine.

In addition to his research and directing graduate students, Jim is extremely involved as Executive Secretary of the department. With the process of admitting new students and taking care of a great deal of the administrative load in the department he is very busy. We are grateful to Jim for his continued, diligent efforts.

Dr. Gilbert P. Waldbauer

Gil tells us that his contribution this year will be a short paragraph since he was very busy preparing a review article on the consumption and utilization of food by insects for the 1967 volume of Advances in Insect Physiology.

Dr. Fraenkel and Gil teamed up to obtain a U.S.D.A. Grant which will support work on the consumption and utilization of food by stored products insects. This work is not off the ground yet since the equipment hasn't arrived. Gil tells us it will be a relief to work with an insect that doesn't eat great quantities of fresh plant material. He can now buy his insect diets in the grocery store.

Gil is involved in a study of the biology and behavior of cecropia with Dr. Sternburg. This work gets more and more interesting. Gil and Jim are collecting cocoons again this winter and look forward to finally collecting the data from controlled matings they made last summer. They claim they won't know what's what until the adults emerge this spring. Gil and Jim have both acquired the title of "cecropia snatchers" driving around Champaign-Urbana stealing cecropia cocoons from the front and back yards of every innocent law-abiding citizen in town.

Dr. Joan F. White

Dr. White having brought to completion much of her research here at the University of Illinois made arrangements to spend the coming year in Canberra, Australia. Joan is currently in Dr. Grace's laboratory, C.S.I.R.O., Canberra where she will spend the next year working on insect tissue culture in mosquito tissues and also on Dr. Grace's Lepidoptera.

Joan has her two boys with her and her husband intends to join her in the summer. In the fall of 1967 they will all go to England where her husband will take a sabbatical to study English literature. We hope to see Joan back around the department in two year's time. We wish her a most pleasant stay down under.

Dr. Judith H. Willis

Dr. Willis is still involved in her studies on cuticular proteins and mode of action of the principle hormones on metamorphosis. She is also getting involved in studies on aging with Dr. Friedman and some others in molecular biology! Judy is still very much concerned with undergraduate Honor's Biology Program. This last year she has completely re-written and put out in book form the laboratory manual for the Cell Course, in addition to her teaching The Organism.

Travels this past year for Judy and her husband John were to the AIBS Meetings in Maryland and they also attended the AAAS Meetings in Washington in December. Both trips were followed by visits with friends in several nearby universities in both these areas. Judy and her husband, Dr. John Willis are looking around the world for possible spots for sabbatical leave which is coming up for both of them in the very near future. The question is to go north and freeze or go south and stay warm. John who studies hibernation prefers the north; Judy who gets cold easily prefers the south.

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ALUMNI NEWS

We were again gratified by the response of the alumni in sharing their activities, publications, and point of interest which have concerned them during this past year. Many of the alumni had considerable news to pass on to you. We heard from many whom we did not hear from last year, and we would be delighted to hear from all of you so that your colleagues, past, present and future might have an opportunity to keep track of your recent activities.

Many of the alumni have written in expressing appreciation for the Newsletter and a marked interest in its continuation. We are grateful for these words of encouragement and will continue to put out the Newsletter on an annual basis, so that we all might maintain contact with each other. At the end of the newsletter as in previous issues we are including a perforated information sheet which we would like you to remove, fill out and return to us. We hope before too many years go by this will become a yearly ritual with all of you.

In the last Newsletter we suggested the possibility of a reunion of all of the graduates of the Entomology Department to coincide with the dedication of the new building which also coincides with the Centennial celebration of the University of Illinois. There was considerable affirmative response from those who indicated an interest to participate in such an event. The Centennial year of the University runs from February , 1967 through February , 1968. An exact time for the dedication of the new building has not yet been set, but it is hoped that sometime during this period we might have such a gathering of former students in this department with a worthwhile symposium and social gathering where we might all get together and renew old acquaintances. We will keep you posted so you can make plans to attend such an event.

Lusettie Blevins ('25)

Lusettie tells us under current research and recent publications that it was too dry this past summer to even get much garden planted, let alone research. She also points out that we have given her credit for having a doctor's degree but states "Better correct that -- I have a master's, not a doctor's. Don't want to sail under false colors." I guess we are just

too eager to give away degrees. Please excuse the slip.

Lusettie had a very wonderful tour of Europe and the Holy Lands in October. This was her first visit to the Holy Land and she states she would like to see more of these ancient countries.

She is delighted with the Newsletter and always happy to hear from former classmates and friends from the University.

B. D. Burks ('37)

My current research and recent publications include the usual round of papers on the classification of chalcid-flies (of no interest to anyone outside the field). However, in January 1966 I became Investigations Leader for Hymenoptera on the Agriculture staff here at the U.S. National Museum which means slightly more paper work. I did not get around to letting you know that I was a visiting lecturer at U.C., Berkeley, last summer, so that is past history that may as well be forgotten. My real accomplishment while in California was the scaling of three mountains, one above 14,000, my highest so far (this was White Mountain Peak, 14,246). No, we did not go up by jeep nor helicopter, but zu fuss.

George B. Craig Jr. ('56)

George is now Professor of Biology and Director of the World Health Organization International Reference Centre for Aedes. His current research continues to be involved in the genetics of Aedes, particularly A. aegypti.

George has a most prodigious research program going. He sends us a list of current projects in mosquito genetics and a list of publications encompassing four pages. He is really pushing back the frontiers in the genetics of mosquitoes.

He tells us he is going to Senegal this summer for field study of speciation in A. aegypti. He has made yearly trips to Geneva, Switzerland for about five years on business for W.H.O.

P. A. Dahm ('47)

Paul Dahm returned the Newsletter Information Sheet for 1966-67. At least he gave us his current home and business address. While we didn't hear of Paul's recent activities or travels we do know that he is still in the land of the living and were delighted to hear from him.

Philip Garman ('16)

I have not tried to publish anything lately. I make many business calls around Connecticut as consultant for a group that call themselves "The Laurel State Fruit Growers." It requires information on several phases of fruit growing besides insect control.

This year it will be 50 years since my graduation from Illinois. I would certainly like to see the new quarters and will make it to a reunion if my physical strength holds out and my pocket book warrants.

Robert D. Glasgow ('13)

Since the publication of the last Newsletter we were very sorry to hear from Mrs. Josephine B. Glasgow informing us that her husgand Dr. Robert D. Glasgow passed away on July 15, 1964. This information was not available to us at the time of Dr. Glasgow's passing. Because of this and because many of you who might have known him were not aware of his passing we are including an orbituary which appeared in the New York Times, July 16, 1964, and extending to Mrs. Glasgow our belated sympathy.

ALBANY, July 15 (AP) -- Dr. Robert Douglass Glasgow of Albany, state entomologist from 1928 until his retirement in 1949 died today at Albany Medical Center Hospital. He was 85 years old.

During his years as the state's expert on insects Dr. Glasgow led many campaigns against flies, ticks, moths, mosquitoes and a variety of other pests.

Dr. Glasgow developed many methods of applying insecticides, and was a pioneer in the use of helicopters to spread DDT fogs.

He also published a number of papers on the physiology and ecology of insects.

Dr. Glasgow was born in Tennessee, Illinois and received his bachelor's and doctorate degrees from the University of Illinois. He taught at the University before taking up the state post here.

Al G. Grosche ('25)

This year we heard from Al Grosche who is now residing in Waukegan, Illinois and is in that blissful state of life for which we are all striving -- retirement. Al tells us that he is spending most of his time these days working with "little league" groups in baseball and :

basketball. That sounds like enough to keep a retired man young.

In his euphoric state he has been able to spend two months in central Europe, three weeks in Southwestern United States and tells us that his next travelling plans are a trip to Washington and Oregon. Al tells us that he would also be delighted to attend a Centennial Dedicatory Symposium, which we hope we can bring to fruition.

Robert F. Harwood ('54)

Bob is currently working on daily and seasonal rhythms, especially with mosquitoes and the codling moth. He is particularly studying the effect of "skeletal" photoperiods on codling moth development. He is also involved with attempted mass rearing of the European pine shoot moth.

His recent travels have been mostly trips to participate in meetings such as National ESA meeting in New Orleans, and Pacific Branch meeting in Monterey, California. He will be on sabbatical at Princeton University during the 1966-1967 academic year.

In the recent additions to the family department he lists just one dog and two parakeets, names and dates unimportant.

Thank you for your kind comments, Bob. I have indeed been persuaded one more year, though the efficiency is questionable. Bob tells us that he would be delighted to attend a Symposium in conjunction with a reunion if he can get himself away from his research problems.

Bob also appends a P.S. to his Newsletter Information and tells us that they are enjoying having Calvin Soo Hoo with them in the Department at Pullman, Washington.

J. David Hoffman ('60)

My recent research is on some preliminary studies on mass rearing of the tobacco hornworm and attraction of male tobacco hornworm moths to blacklight traps baited with live virgin female moths. Also I am doing a some mass rearing of the tobacco hornworm.

I recently spent two months on the island of St. Croix (U.S. Virgin Island) to study the possibility of conducting insect population control experiments on that island.

I was married September 9, 1960 to Mary Bishop whose home is in South Wales, U.K. We now have two children: Trudi Leigh and Jan Margaret Hoffman, 5 and 3 respectively.

In September of 1966 I took a position at the Biological Control of Insects Laboratory at Columbia, Missouri (P.O. Box 329).

George Earl Huff ('50)

We heard from George Huff this year who tells us that while he has no current publications he has been doing some research as to the certain treatment of bee equipment for the control of American foulbrood using ethylene oxide.

George gives us no information in the recent travels department so we guess that he is staying in Indiana keeping the home fires burning.

No new additions to the family. George tells us that he would like to attend a symposium and thinks it would be a good idea if it will bring us together for a much needed reunion. And to quote George "We ought to do this more often as the old song goes."

Donald Ross Johnson ('40)

Don is now at the Malaria Eradication Branch, Communicable Disease Center, U.S. Public Health Service, Atlanta, Georgia and tells us under current research "No research! This is an international operational program jointly carried on by World Health Organization, UNICEF (United Nations Children's Fund) and USPHS (representing U.S. governemnt). U.S. Assistance is currently being given to 15 countries, CDC is doing some research for program, but the malaria eradication branch at the moment is only indirectly involved in this research. The eradication program is the largest organized health effort ever undertaken by man. Over one billion people are exposed to malaria."

My publications are World Role in Mosquito Control and Status of Malaria Eradication in India, 1965. My recent travels for business or pleasure took me on an official business trip to India, Jordan, Syria and Geneva, Switzerland in January and February 1966, to observe, appraise and discuss malaria eradication program problems and progress.

Our current roster reads thus:

Son, Gary R. 1/31/49
Daughter, Lynn K. 7/1/50
Son, Lee R. 10/21/54
Daughter, Laura K. 11/2/62

Don suggests more alumni news in the Newsletter. I agree with Don -it's up to you. Don would also enjoy attending a symposium. We will send
notices and programs as early as feasible.

Robert E. Lewis ('59)

From the Land of Lebanon my current research is still involved in a study of the fleas of the Middle East, Southwest Asia and North Africa, as well as their hosts.

Bob has four or five new articles on distribution and collection of fleas from mammals and birds in Saudi Arabia. His recent travels read: "Last summer while I was on a five-month collecting trip to Afghanistan, Mike visited India, Nepal, Thailand, Hong Kong, Japan and the U.S.A.

On the possible reunion or symposium Bob said it would not be possible for them to attend but think it's a good idea!

Jai K. Nayar ('62)

We heard from Jai Nayar again. Delighted to hear from those who are now in the Newsletter Information habit.

Jai is still at Vero Beach, Florida at the Entomological Research Center. He is currently working on growth and development of mosquitoes and on biological clocks in mosquitoes and also continuing work on the nutrition of mosquito larvae. He tells us he has been enjoying Florida weather. After the Chicago snowstorm of 1967 and the fantastic ice storm in Champaign-Urhana which kept us all out of power and destroyed half the trees in town, we, too, would enjoy a little Florida weather along with Jai. There is a recent addition to the Nayar family. Veena Renate Nayar, a daughter, born December 11, 1965. Congratulations! Jai also expresses interest in attending a possible reunion symposium at the dedication of the new building.

Angel Berrios-Ortiz ('61)

Angel who is with the Biology Department, College of A ricultural and Mechanical Arts in Mayaguez, Puerto Rico says "T think it is wonderful to be able to read and to keep track of all people that shared the same experience of being at least for a very short time in contact with the Entomology Department at the University of Illinois. I would probably be able to attend a reunion or symposium if it could be held during a weekend."

Faustino Q. Otanes ('22)

From Faustino who completed his graduate training from the University of Illinois in 1922, a varitable encyclopedia of information which we are delighted to share with the rest of the alums.

This year Faustino has not travelled abroad, but within the country to attend agricultural conferences, scientific meetings, etc.

Faustino was formerly Senior Entomologist; Chief, Plant Pest and Disease Control Division; and later Assistant Director for Research, Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Also, he served as Officer-in-Charge of the Bureau at various times.

He retired several years ago, after more than forty years of service in the Philippine Government, devoted chiefly to entomological and plant pest and disease control activities.

He taught at the College of Agriculture, University of the Philippines, and also at the Araneta Institute of Agriculture (now Araneta University), as professor of Entomology and acting head of Department.

Now as a member of the National Research Council of the Philippines, he is still keeping up his interest in certain entomological activities, especially on the biology and ecology of the Oriental Migratory Locust (Locusta migratoria manilensis Mayen) and insects of coconuts in relation to a serious trouble that has already killed over eight million trees.

The family includes three girls and four boys, all grown up and all professionals. Only one boy is married so far and has two children, a girl (four years) and a boy (two years). Can only speculate as to how many more grandchildren there will be. Hope there will be an entomologist or a biologist among them!

Faustino thanks us very much for the 1965 and 1966 Newsletters. "It is most gratifying to know that the Department of Entomology, for one, has been getting, and continues to get, what it needs to be able to have and maintain high standards of instruction and research.

"I have read and reread with pleasure and interest what the Newsletters say about the research activities of graduate students, alumni and faculty members.

"That comparatively little research along fundamental lines is being done here is due chiefly to the lack of men and women with broad biological training and with adequate experience in research along such lines.....

"What you stated in the 1965 Newsletter about available traineeships, fellowships and assistantships under the Department of Entomology, some of which are open to foreign graduate students, will accordingly be kept in mind.

"I am happy to know from the Alumni Directory that those who did graduate work with me and with whom I had frequent association and whose friendship I enjoyed are still alive. I greet them all. I greet all fellow alumni, the members of the faculty and friends, and as we say here in the Philippines, "MABUHAY"! (meaning "May you live long"! Pronounced "Ma-boo-high"). The same is wished for the Newsletter."

T. H. Parks ('25)

Thaddeus is still consultant in pest control for two large fruit farms in central Ohio.

He adds that the Newsletter serves as a "letter from home" for recent alumni and a measurement of growth for the older alumni. He also suggests that the reunion - symposium should feature the importance of entomology in the advancement of world economy in agriculture, public health and biological science education.

Alvah Peterson ('16)

Dr. Peterson's current research is on the identification of eggs of insects, especially those of moths from various places in the U.S. Some ten papers have been published since 1960, most of which have been printed in the Florida Entomologist.

Several weeks to months have been spent in the following states collecting and photographing eggs of insects namely, at Gainesville and Homestead, Florida; Lake Itasia, Minnesota; Gull Lake, Michigan; Raleigh, North Carolina; Corvallis, Oregon; Postal Arizona and elsewhere.

Dr. Peterson tells that when he was at Urbana, entomology was taught in the old Natural History Building, 1912-1916.

Paul W. Riegert ('54)

I am currently engaged in attempting to resolve the inter-related effects of photoperiod and temperature on the induction and termination of diapause in certain species of grasshoppers; also, determining the genetic relationships and inheritance of diapause. Recent publications include the effects of grouping, pairing and mating on the bionomics of grasshoppers; the effects of the fungus Entomophthora grylli on populations of grasshoppers; the suitability of native grasslands as habitats for certain species of grasshoppers.

My recent travels included a summer trip through the Canadian Rockies and later a trip to attend the ESA meetings at New Orleans. On the latter tour, Betty and I travelled by car through 21 states for a distance of nearly 9,000 miles. We visited more than a dozen research establishments and universities, visited with a host of new and old friends, acridologists and chemists, including a great number of old Illini. We are sorry that we had to miss the old University of Illinois, for we had intended to drop in, even if just to say hello. We did, however, manage to get out to the Bahamas for a bit of fun in the sun before returning to the cold winter of Saskatchewan.

Regarding additions to the family "As I said after prelims: Gott seidank, wir sind am Ende!"

I certainly enjoy every minute I spend in reading the Newsletter. I used it as a guide to plan my tour through the U.S.A. last December.

A reunion is a memorable occasion, one which always will be remembered. Do have one if it is at all possible. As for me, I live too far away to make definite commitments to attend.

Robert Snetsinger ('60)

We received a communique from Robert this year. He tells us that he is still working on rat control and tick distribution and also on pymotid mites. He just received a three-year ARS grant to work on the host resistance to spider mites. The communiques may be short, but we do enjoy hearing from all of you.

George J. Spencer ('24)

"Many thanks for the Entomology Newsletter 1966 which was read and enjoyed.

"I date back to 1923-24, to the time of Professors C. L. Metcalf, Alex MacGillivray, Victor Shelford, W. V. Balduf, the Great van Cleave Dr. Shumway, Theodor Frison; fellow students were G. E. King, DeCoursey, Alvin Cahn, Curtis Benton, Paul Knight, Morris Steggarda. Margaret Windsor was an undergraduate. Since then I have encountered Kathryn Sommerman by correspondence.

"After a serious operation, Clotho, Takesis and Atropos are hovering round my bed so please strike my name off your mailing list."

We were delighted to hear from Dr. Spencer. We're sorry to hear of his serious operation and are grateful for the grand old men of entomology and refuse to take his name off the mailing list as he asks until he has made that final crossing of the River Styx.

Donald M. Tuttle ('52)

Don tells us that this year his current research and publications efforts still concern the plant mites, especially the Tetranychoidea. He has just published with E. W. Baker a treatise on the spider mites of Arizona and notes on the systematics and represents a 3-year effort. Congratulations on this accomplishment, Don.

Don's recent travels have taken him to the Rocky Mountain states for more plant mite materials. Also, he attended the regional meeting in Logan, Utah on Alfalfa Seed Production, and again attended the Institute of Acarology at Ohio State University. He says "Again in 1965, for the 6th time at the Institute." He claims to be a perennial attender and will be there again in 1966.

He tells us that the family situation is the same as in 1965. No new additions. Don also passes on the information that it would be very possible that he would be able to attend a reunion-symposium in connection with the dedication of the new building and the University Centennial.

Since the publication of the departmental Newsletter last year, it has come to our attention that the following entomology alumni have passed away:

Robert D. Glasgow
James Lowell Hypes

ADDITIONS OR CORRECTIONS

TO THE DIRECTORY

John L. Eaton
Department of Biology
Kalamazoo College
Kalamazoo, Michigan 49001

Paul W. Riegert Canada Agricultural Research Station University Sub P.O. Saskatoon, Saskatchewan, Canada

Edwin G. Gemrich The Upjohn Company 301 Henrietta Street Kalamazoo, Michigan 49001

Soelaksono Sastrodihardjo Dept. Kimia-Biologi Institut Teknologi Bandung Ganeca 10 Bandung, Java, Indonesia

J. David Hoffman
Biological Control of
Insects Lab
P.O. Box 329
Columbia, Missouri 65202

Robert H. Schiffman 28203 Ella Road Palos Verdes Peninsula, California 90274

Mr. and Mrs. Ting H. Hsiao Department of Zoology Utah State University Logan, Utah 84321 (effective 9/1/67) If you know of the whereabouts of any of the following people, please let us know.

Sol Kramer College of Medicine University of Florida Gainesville, Florida 32601 Harry E. Anderson
David M. Brunfiel
Peh-I Chang
John E. Fraley
Gladys Hoke
Abdul H. Junaid
George Edward King
Ronald B. Madge
Richard O. Malcomson
Jean Paul Picard
A. Mohan Rao
Albert Salako
Edgar Henry Smith
Elmer D. Sweeney
Perry Homer Welley

Ronald Meyer Rural Route #1 Sidney, Illinois 61877

Guy J. Noerdinger 660 Tyrello Avenue Apt. 40 Mountain View, California 94040



NEWSLETTER INFORMATION FOR 1966-1967

| Name: |
|--|
| Home Address: |
| Business Address: |
| Current Research and Recent Publications: |
| |
| |
| Recent Travels for Business or Pleasure: |
| • |
| Additions to the family (names, dates): |
| Suggestions or comments concerning the "Newsletter": |

Return to: Newsletter Committee
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