# ANNUAL NEWSLETTER

Department of Entomology University of Illinois at Urbana-Champaign

# STAFF

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Shively, Louise N. - Res. Asst. Tegen, Penny M. - Res. Asst. Williams, John - Res. Assoc.

# Nonacademic

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Fisher, Mary E. - NSLA III
Fitzsimmons, James P. - Storekeeper II
Michael, Judy M. - Clerk-Steno III

Millholin, E. Ruth - Principal Lab Tech. Plymire, Ruth A. - Admin. Secretary Tegen, Alan R. - NSLA FI Wrisk, Lavella - Clerk-Steno III

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Redborg, Annemarie
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Walton, Barbara
Yang, Maggie

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McClure, Mark - USPH Trainee Pappas, Larry - USPH Trainee Redborg, Kurt - NDEA Fellow

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Thaddeus H. Parks (M.S. 1925)
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Herbert F. Schoof (Ph.D. 1940) 3 Pinewood Avenue, Parkersburg Savannah, GA 31406

Keith Solomon (M.S. 1972; Ph.D. 1973) N.C.R.L. P.O. Box 395 Pretoria Republic of South Africa

Kathryn M. Sommerman (M.S. 1941; Ph.D. 1945) 11 Laydon Avenue North Haven, CT 06473

Richard Sprenkel (Ph.D. 1973) Department of Entomology North Carolina State University Raleigh, NC 27607 Capt. Martin L. Taylor (M.S. 1964) Address Unknown

Victor T. Williams (M.S. 1962) Address Unknown

George R. Wilson (Ph.D. 1969) 513 W. Beardsley Champaign, IL 61820

Margaret Windsor (M.S. 1925) 220 Santa Rita Palo Alto, CA 94301

Ching-chieh Yu
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Department of Entomology
New York State Agricultural
Experiment Station
Geneva, NY 14456

# Added too late to alphabetize

Henry E. Ewing (M.S. 1908)
Deceased

Willis J. Nolan (M.S. 1917) Deceased

Calvin Soo Hoo (M.S. 1960; Ph.D. 1963) Deceased

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As always the editor would like to take this opportunity to thank the office staff whose time, patience and willingness continue to make it possible for the Newsletter to come to you, our alumni. We are also grateful to Alice Pricket who has so graciously designed our cover each year and has given us one more outstanding production for your book shelf. She has also been very helpful in taking pictures of the various groups within the department. We have added pictures as a new dimension to the Newsletter so that you might have a look at our faculty members and the current crop of students. We continue to be grateful to all our nonacademic people in the department who through their time and efforts unselfishly make it possible for this department to carry out meaningful programs. We would like to thank our graduate students, fellow colleagues and once again all of you alumni who share your activities and interests with us each year.

# MESSAGE FROM THE HEAD OF THE DEPARTMENT

# Joseph R. Larsen

With the advent of the early calendar at Illinois, we find that the end of the year has come more quickly than we anticipated. Normally the Newsletter is out prior to the end of the semester, but we will have to hide behind the excuse that semester end has come sooner than anticipated. It is with pleasure that I report to you, as our alumni, the activities within the department during the past year.

We are somewhat surprised by the number of applicants of very high quality that have come to the department during this past year. As a result of this activity, we find ourselves preparing to receive the largest entering class of graduate students for some time. We will have 16 in the fall class, all outstanding students whom we hope look forward to an exciting and intellectual experience in the department. While the job markets continue to be tight and students are not getting the exact positions they desire, we can say with a great deal of pride and satisfaction that almost 100% of those students in this department have been able to find positions upon the completion of their graduate training. We continue to be extremely proud of the students who complete their work at Illinois and then go out to make significant contributions at other academic institutions, industry and government services at the local, state and federal level.

While we were saddened by the loss of Dr. Clyde W. Kearns, who retired last year after a long dedicated service to this department, we are extremely pleased to announce that Dr. Hans Hummel, currently at the State University of New York, will be joining our staff in the fall semester of 1974. Dr. Hummel did his initial graduate training at the University of Marburg in West Germany. He then did postdoctoral work at the University of California at Riverside with Drs. H.H. Shorey and L.K. Gaston. He is currently working with Dr. R.M. Silverstein at the State University of New York. Dr. Hummel is an outstanding chemist and will bring to Illinois an expertise in the area of pheromones which at the present time have a significant impact on research in entomology. We feel that he will help us maintain the strong tradition that we have had in the area of toxicology at this university for many years. We are delighted to welcome Dr. Hummel to the department and look forward to his input in the teaching and research programs.

The new program in insect pest management has gotten off the ground, and we circulated to many of you a brochure outlining our intent and what we propose to carry out in this new area. We have already had considerable response and have two or three students working specifically in this program who will go out at the master's level in the rapidly expanding area of pest management and its related problems of environmental control.

The Department of Entomology has survived the reorganization of the departments within the School of Life Sciences and still continues to maintain its stature on the national scene as one of the most outstanding departments in the country. While some of our staff

members chose to affiliate with other departments, we still maintain a viable program in entomology and our graduate students continue to receive not only adequate course work but carry out research programs with an outstanding staff. We are pleased to continue to be a viable part of the university community.

As indicated in past Newsletters, we continue to be proud of our alumni, both those of long-standing antiquity and those who have just joined the alumni ranks. We enjoyed re-establishing the alumni breakfast at the annual meeting in Dallas, and it was a good experience to meet with you at breakfast and enjoy some fellowship. We look forward to your continued support as alumni of this department and university. We rely on you for feedback for placement of our graduate students and for sending to us bright young undergraduates who are seeking the Illinois tradition in entomology. We will look forward to being with you at the national meetings next year for the traditional Illinois Breakfast, to renew friendships once again.

## ACTIVITIES OF THE SCHOOL OF LIFE SCIENCES

The School of Life Sciences has continued during this past year under the direction of Joseph R. Larsen as Acting Director. This has been a rather arduous and time consuming year as both Director and Department Head. The wearing of two hats requires a great deal of time. I feel that the School has continued to move forward and carry out its mandates.

The reorganization of the School of Life Sciences has now been completed. The Department of Zoology no longer exists at the University of Illinois, and we have created two new departments - the Department of Genetics and Development with Professor Ed Brown as Provisional Head and a Department of Ecology, Ethology and Evolution with Dr. Ed Banks serving as Provisional Head. There is also currently in the formative stages a Department of Morphology to accommodate those people interested primarily in morphology and anatomy.

The School of Life Sciences continues to interact in a viable fashion with the School of Basic Medical Sciences at Urbana. Almost all of the people involved in preclinical instruction in SBMS have joint appointments within a department of the School of Life Sciences.

The School of Life Sciences continues to accept a tremendous number of students interested in medical, dental and health related careers. We are anticipating a record class in the fall of 1974 with large numbers of the entering freshmen being primarily interested in careers in the life sciences. However, in the face of overwhelming numbers, the various departments of the School continue to maintain quality education and devise methods to cope with the large numbers of students and develop teaching programs that are meaningful to undergraduates at this institution. The pressures of large student numbers continue to be even more of a problem when overlaid with diminishing financial support and the serious lack of space to carry out the programs in life sciences.

We are happy to note that the Search Committee has identified a candidate whom they have recommended to the Dean for the position of permanent Director of the School of Life Sciences.

The School continues to remain a viable administrative unit in bringing together the diverse interests of all the various departments and inter-disciplinary programs within its domain. As a department within the School, we in Entomology look forward to continued support.

#### BALDUF AWARD

The Balduf Award committee was pleased to receive a number of excellent entries this year, but judged none of such high quality as to be uniquely worthy of the prize. We sincerely hope that students shall not be discouraged from competition during the new year, and we look forward to reading and applauding the effort of our next winner.

## S. Friedman for the Committee

You may recall this award was set up in honor of Professor Balduf who for so many years had an impact on the graduate students of this department. I would just like to add a word of gratitude to those of you who have so graciously contributed to the Balduf Award. You should also know that we must reach a level of \$2,000 in order for the award to be self perpetuating on the interest generated through the Illinois Foundation. While many of you have generously contributed to the Balduf Award, we are still in need of raising some \$500. I would hope that each of you would share with us five or ten dollars so that the award might be on a perpetuating basis. Please send your contribution to the Illinois Foundation at the University of Illinois and indicate that it be earmarked specifically for the Balduf Award and it will be taken care of automatically.

Joseph R. Larsen

# VISITORS TO THE DEPARTMENT, 1973-74

Dr. Murray S. Blum Department of Entomology University of Georgia Athens, Georgia

Dr. Guy L. Bush Department of Zoology University of Texas Austin, Texas

Dr. David L. Denlinger
International Center for
Insect Physiology and Ecology
Nairobi, Kenya

Dr. Morton S. Fuchs
Department of Biology
University of Notre Dame
Notre Dame, Indiana

Dr. Lawrence I. Gilbert
Department of Biological Sciences
Northwestern University
Evanston, Illinois

Dr. Michael H. Hansell Department of Zoology University of Glasgow Glasgow, Scotland Dr. Hans Hummel
College of Environmental Sciences
and Forestry
State University of New York
Syracuse, New York

Dr. Koji Nakanishi Department of Chemistry Columbia University New York, New York

Dr. David M. Phillip
The Population Council
The Rockefeller University
New York, New York

Dr. Wendell L. Roelofs
Department of Entomology
Cornell University Agricultural
Experiment Station
Geneva, New York

Dr. Richard B. Root Department of Entomology Cornell University Ithaca, New York

# ENTOMOLOGY GRADUATE STUDENT ASSOCIATION

## Officers

With the onset of the fall semester the usual tranquility of Morrill Hall was abruptly broken by the campaign shouts of graduate student politicians vying for the cherished leadership positions of the EGSA. In keeping with true American tradition, when the mud had settled the most shady characters emerged victorious. This year's President is Mark McClure (who recently depleted the EGSA treasury on a vacation to Costa Rica); Vice President, Chris Maier (who spearheaded recent impeachment procedures for personal gain); Treasurer, Mike Toliver, 4th floor (24 hour protector of the empty piggy bank); Secretary, Bill Walker, 3rd floor (commonly seen streaking around the department with pen and pad in hand); Faculty Representative, Jerry Freier (usually seen with fishing rod in hand and one foot out the door); Dan Brown, 2nd floor (token candidate from the Polish Party); Mark Mayse, Harker Hall (ambassador to Dallas) and finally our Natural History Survey Representative, Ron Cherry (who?). The EGSA Constitution was extensively amended at the first all-member meeting to provide a more structured and functional student organization in the department.

## Programs

# 1. Seminar Series

This year the EGSA continued its weekly seminar series with great success. Under the direction of Bill Walker (fall semester) and Ralph Harbach (spring semester), the program included interesting presentations by departmental faculty and graduate students and by several guest speakers from other universities including Dr. Murray S. Blum, Dr. Morton S. Fuchs, Dr. Larry Gilbert, Dr. Hans E. Hummel, Dr. David Phillips and Dr. Richard B. Root. Through the special efforts of this year's committee a faculty-student coffee hour is being held prior to the Monday seminars and is becoming a popular weekly event.

# 2. Course Evaluations

The EGSA continued its program of course and instructor evaluations this past year. In an effort to promote increased student feedback concerning the departmental curriculum a committee has been established this year to improve the evaluation procedure. Committee members, Dan Brown, Nancy Edmunds, Jerry Freier, Bob Novak and a non-departmental member, Warren Post, are working especially hard toward this goal.

Mark McClure President EGSA

# Activities

## 1. Fall Picnic

Grand and glorious weather highlighted the first annual fall picnic held September 30th at Kickapoo State Park. The expected horde of entomology picnickers turned into only a meager few. However, this did not daunt the spirits of those in attendance. Activities for the day included a rousing football game between McClure's Locust Plague and Brown's Bad Beetles. The score was 15 to 14 at half time in favor of the B.B.B. But with a one-and-a-half hour pause for refreshment or rather 1 six pack apiece later, the teams again took the field with the Locust Plague devouring the Beetles in a fight to the finish and an impressive score of 36 to 14. Other activities included a contest among the wives to determine who was the best frisbee hurler; however, this contest was short lived when the men returned from the playing surface to demonstrate to the wives, in chauvinistic style, the proper execution of a frisbee throw. Some excitement was provided by our first annual watch hunt. Mark McClure unselfishly lost his watch so that the rest of us could stagger around and locate it. In fact this became so much fun that Chris Maier (who preferred not to burn his car this year) tossed out one of the lenses from his glasses and we eagerly searched for it. Also, Lloyd Davis entertained the troops with his menagerie of interesting live animals. live ones, who was that little blonde you were with Lloyd?

Everyone had a good time at the picnic this year and it was decided to make this a yearly event and hopefully more people will join in the fun.

# 2. Canoe Trip

The sun danced among the dazzling fall colors as a band of hardy entomologists broke the silence of the crisp morning air along Sugar Creek with the sound of pop-top cans and the echo of Ruth Millholin asking Phil Dickey to pass some more of that hot rum toddie. The trip began with a bus ride to the launching site. Entertainment along the way was provided by our driver, a la Sonny Bono, who got in his share of jokes. We were warned not to stop if we heard banjo music. He also gave us tips on treading water and an in-depth discussion of the natural fauna in the surrounding area. We were relieved to find out that snakes were no longer a problem since the 'gators moved into the area.

We launched our canoes at Shades State Park at a point in the stream that resembled a coral reef. After a few tortuous moments among the rocks we found smooth cruising. Once in the water we had a chance to really appreciate the autumn splendor with leaves of every hue nestled in amongst the cliffs and hillsides. An indigo sky speckled with only wisps of clouds was the backdrop to our adventurous mood. The water level of the stream was low, but we encountered difficulty in only a couple of places, one of which I am about to describe.

About 30 minutes into the trip a small but treacherous rapids, now known as Freier Falls, appeared on the horizon. It had the gusto of the lower Niagra and seemed to find the slightest ineptitude (of which there was plenty) in every canoeist. Well the rapids lucked (?) out and claimed two victims. An overturned canoe would have been no problem on a W.C.T.U. outing, but on this trip, our canoe went straight to the bottom due to the weight of beer cans (most of which were empty) in the cargo. Like all

good ships the canoe finally came to the surface after its heavy but valuable load was ripped away by the current. The Freier family had another revelation when they found that wet clothes dry very slowly in the cool autumn air. But we managed to muster enough clothing from our elated and chuckling comrades to ward off pneumonia.

On the last leg of our six hour journey, Chris Maier and John Ameel led the pack downstream since they had run out of beer and could be heard in the distance shouting "stroke-Coors-stroke-Coors, etc."

At the conclusion of the trip we all descended upon the Brown's Danville home for a wiener roast and an opportunity to reflect upon the day's activities and also to finish off any left-over six packs.

As the sun dipped into the distant corn we were one bunch of sore, yet happy adventurers.

The EGSA plans on making this canoe trip an annual event.

3. Christmas Party

This year's yuletide gathering was held December 17th at the home of Dr. and Mrs. Metcalf. Numerous bug-type revelers invaded the Metcalf home and established a focus near the bar. A holiday atmosphere was provided by decorations such as pine rope nestled across the fireplace which was also accented with red and gold tinsel garland. Mistletoe was hung in a prominent spot. Chris Maier spent most of the evening standing beneath this wonderful plant explaining to all passing ladies the tradition for which it is famous as well as the unique morphological features recently garnered from his plant taxonomy course. The most unusual decoration was a paper chain approximately 18 feet long, graciously donated by the Delcomyn's. This handmade chain was the product of Drs. Price and Sanborn. According to the tradition, as related by Mrs. Delcomyn, each link represents a can of beer. Must have been some evening putting that chain together.

A bountiful spread of palate-tingling treats in the form of hors d'oeuvres and munchies was provided by student and faculty spouses. Some of the most talked about foods were: the Brown's Russian cocktail snacks made with rabbit and pheasant; Bill Shepherd's pizza snacks; and Mrs. Lee's egg rolls. A special thanks goes to Mrs. Larsen, Linda Zaitlin, and Lynda Freier for helping organize the great goodies.

Entertainment this year came in many forms. The Metcalf's provided delightful music ranging from Montavani to stirring marches including the well received U of I fight song. The marches offered a perfect rhythm for the tequila-chugging contest. Nearly everyone who passed the door of the game room became engaged in table tennis competition. The big match-up of the evening was between Andy Chen and Mark Mayse for the Hank Kissinger trophy. Also, the merrymakers enjoyed watching Mike Toliver play ping pong while standing on one crutch. However, the long awaited portion of the evening was for the Orkin dealer to arrive from the North Pole with Santa's gift list for faculty and students. Although the little Orkin elf was unable to stay as he mumbled something about eating yellow snow, he did ask his Chambana assistants Dan "Rickles" Brown and Chris Maier, alias "the Roaster" to read the list. For those of you who missed them here is the unexpurgated list:

Dr. Metcalf: An uncensored tape of the limericks he recited at the going away party for Keith Solomon.

Mrs. Metcalf: One free visit from an interior decorator.

Dr. MacLeod: A copy of the book, Entomology, Love It or Leave It, and from the seminar class--directorship of a school for training attack dogs.

Dr. Selander: Also a copy of Entomology, Love It or Leave It and the Rap Brown Peace Prize.

Dr. Friedman: Head of the committee to study why there are so many committees and a book on The Dynamics of Public Speaking by R.M. Nixon.

Jerry Freier: An outrigger canoe and a weekend with Bubbles.

Mark McClure: A chastity belt--for himself.

Drs. Sternburg and Waldbauer: Joint membership to the Cecropia Society and to each a copy of the book, <u>I Can't Publish Without You</u>.

Dr. Stannard: A charge account at Nieman-Marcus.

Bill Walker: A new pair of tennis shoes.

Nono Liem: A brick shaped in the likeness of Vaishampayan.

Dr. Price: A position as a late night disc jockey in Tucson and a case of Montezuma's elixir.

Dr. Willis: A copy of Mein Kampf and several tape recordings of herself which were successfully used in North Korean prisoner of war camps.

Mike Toliver: A pair of roller skates and a pro contract to be the reserve quarterback for the New York Jets.

Dan Brown: A copy of The Bawdy and the Naughty and 50 cc of the new anti-procrastination drug.

Dr. Larsen: Chairmanship of the Department of Entomology and a speed tunnel from 320 to the third floor bridge.

Dr. Cole: A private key to the xerox room and a permanent job.

Bill Medler: Professorship at the Oral Roberts College.

John Marlin: A size 9 hat.

Dr. Horsfall: Some non-migratory graduate students and the latest works of Archie Bunker.

Dr. Delcomyn: One hundred cockroaches with injected dorsal blood vessels, all clearly marked "This Side Up."

Secretaries: A departmental Xerox machine complete with Rita to be placed in the vacant room next door.

Jim Fitzsimmons: An assistant to assist Mike.

Dr. Luckmann: One gallon of rotenone in order to catch more fish.

Dr. LaBerge: A complete collection of Charles Michener's reprints and a box of chocolate-covered bees.

Dr. Fraenkel: A chance to be a judge at the New York Erotic Film Festival.

Ruth Plymire: A bronzed copy of Mark McClure's thesis.

Ross Gundersen: A tape recording of "Oh, phooey; oh, phooey; oh, phooey."

Last year's physiology class: To each member a recording of Shaft's Concerto for a Violin in B, C, or D Major.

This year's party was certainly a great success due primarily to the Metcalf's gracious hospitality and to them we would like to express our sincere thanks.

Jerry Freier Society Page Reporter

#### RECENT GRADUATES

Chiou-nan Chen was born in Tainan, Taiwan, the Republic of China, on October 14, 1942. He received a B.S. degree in Agriculture from the Department of Plant Pathology and Entomology, College of Agriculture, National Taiwan University, Taipei, Taiwan, in 1965.

He was a graduate student and teaching assistant in entomology in the same department during 1966 to 1969 before he attended the University of Illinois in September 1969.

He received his Ph.D. degree in October 1973 and his thesis was entitled "Bionomics of the cypress twig gall midge, Taxodiomyia cupressiananassa (0.S.) (Diptera: Cecidomyiidae), in Central Illinois." His advisor was W.H. Luckmann. He is currently employed by the Plant Protection Center in Taiwan.

Joel Robert Coats was born on April 24, 1948, in Kenton, Ohio. He received a B.S. degree in Zoology (with honors) from Arizona State University, Tempe, in 1970 and an M.S. degree from the University of Illinois, Urbana-Champaign, in 1972.

Joel was a teaching assistant during the summer of 1973 for Insect Taxonomy. He has also been a research assistant for Dr. Metcalf since 1970. He belongs to the following scientific societies: Entomological Society of America, Beta Beta Beta Biology Honorary Society, American Association for the Advancement of Science, and American Birding Association. His publications include:

Coats, J.R., R.L. Metcalf, and I.P. Kapoor. In Press. Metabolism of the methoxychlor isostere, dianisylneopentane, in mouse, insects, and a model ecosystem. Pest. Biochem. Physiol.

Kapoor, I.P., R.L. Metcalf, A.S. Hirwe, J.R. Coats, and M.S. Khalsa. 1973. Structure-activity correlations of biodegradability of DDT analogs. J. Agr. Food Chem. 21, 310-315.

Kapoor, I.P., R.L. Metcalf, A.S. Hirwe, P. Lu, J.R. Coats, and R.F. Nystrom. 1972. Comparative metabolism of DDT, methylchlor, and ethoxychlor in mouse, insects, and in a model ecosystem. J. Agr. Food Chem. 20, 1-6. Nigg, H.N., I.P. Kapoor, R.L. Metcalf, and J.R. Coats. 1972. Microsomal

S-oxidation: a GLC assay. J. Agr. Food Chem. 20, 446-448.

Joel received his Ph.D. degree in May 1974 and his thesis was entitled "Toxicity and metabolism of three methoxychlor analogues with altered aliphatic moieties and the development of some novel DDT analogues." His advisor was R.L. Metcalf. Joel is presently working as a research associate in Dr. Metcalf's labs here at Illinois.

Mohinder Singh Khalsa was born at Quetta (now W. Pakistan) on December 11, 1925. He received his primary and secondary education in the public schools of District Multan, graduating from Government High School, Khanewal in June 1940.

He continued his education at the S.N. College, Lahore, and received his B.Sc. in biological field from Punjab University, Lahore, in June 1944. After graduating from S.N. College, Lahore, he continued his education in

Punjab Agricultural College, Lyallpur, and received the degree of Bachelor of Science in Agriculture in June 1946.

Shortly after his second graduation he served as Plant Protection Assistant with the State Department of Agriculture in Punjab from August 1946 to June 1947.

After partition of the country he migrated to U.P. India and continued his education at the Government Agricultural College, Kanpur. He did research on the morphology of sugar cane leaf hopper under the guidance of Dr. U.S. Sharga and received the degree of Master of Science in Agricultural Zoology from Agra University in 1950. Shortly thereafter he served as a teaching assistant from 1950 to 1952 and as a Junior Lecturer in Entomology from 1952 to 1954 at the Government Agricultural College, Kanpur.

In November 1954 he was deputed as Senior Sugarcane Protection Inspector with the State Department of Sugarcane Development in U.P. India and served up to July 1963.

In August 1963 he was recalled back to the Government Agricultural College, Kanpur to serve as Assistant Professor of Entomology.

In March 1965 he was appointed as Extension Entomologist at the U.P. Agricultural University, Pant Nagar where he served up to August 1969.

In September 1969 he came to the United States and entered the Graduate College of the University of Illinois. From that time to the present he has been working with Dr. W.H. Luckmann, Professor and Head, Section of Economic Entomology, Illinois Natural History Survey, Urbana.

He was married to Surjit in December 1955. A daughter, Jyoti, was born on April 22, 1957, and a son, Harinder, was born on January 22, 1961.

He is a Fellow of the Entomological Society of India and a member of the Entomological Society of America.

During this graduate study program he also did a piece of research on the biodegradable analogues of DDT under the direction of Dr. R.L. Metcalf, Professor, Department of Entomology, University of Illinois.

Recent publication:

Kapoor, I.P., R.L. Metcalf, A.S. Hirwe, J.R. Coats, and M.S. Khalsa. 1973 Structure-activity correlations of biodegradability of DDT analogs. J. Agr. Food Chem. 21, 310-315.

Khalsa received his Ph.D. degree in October 1973 and his thesis title was "Host plant selection behavior of Autographa precationis (Guenée) (Lepidoptera: Noctuidae)." His advisor was W.H. Luckmann. He has returned to India to his position as Extension Entomologist at U.P. Agricultural University, Pant Nagar.

Adolfo Molina-Pardo was born on August 28, 1940, in Cali, Colombia, South America. He graduated from the Colegio Mayor de San Bartolomé, Bogotá, Colombia, in 1959. During the next five years he studied at the Universidad Nacional de Colombia at Palmira, Colombia, where he received the degree of Ingeniero Agronomo in 1964. Then, he became a faculty member of the Universidad de Nariño, Pasto, Colombia, where he taught entomology for two and one half years. In 1967 he was granted a scholarship from LASPAU in order to do graduate work in the Department of Entomology at the University of Illinois. He received the Master of Science degree from this University in 1969. Afterwards, he became a research assistant to Professor Wallace E. LaBerge, his academic advisor. He is a member of the Society of the Sigma Xi.

Adolfo received his Ph.D. degree in October 1973 and the title of his thesis was "A phenetic analysis of new world bees of five subgenera of the genus Andrena (Hymenoptera: Apoidea)." He accepted a position at the Universidad Nacional de Colombia in South America.

Donald Edward Nye was born on August 18, 1946, in the city of New Bedford, Massachusetts. He attended the public school system in Marion, Massachusetts, until the ninth grade at which time he enrolled in Tabor Academy for the completion of his high school education. He then entered Massachusetts State College (Bridgewater) in 1965 and obtained a B.A. degree in biology in the spring of 1969.

In June 1969 Don entered graduate school at the University of Illinois at Urbana-Champaign in the Department of Entomology and obtained his M.S. from that department in the fall of 1972. In June, 1973, he received the degree of Doctor of Philosophy from the Department of Entomology at the same institution. His thesis title was "The biological implications of the polychlorinated biphenyls in the housefly and model aquatic ecosystem." His advisor was R.L. Metcalf.

Carol Dianne (Hilfiker) Pappas was born in Redwood Falls, Minnesota, February 25, 1946. She attended public grammar school and high school in Atlanta, Georgia. In 1968, she earned a B.A. in anthropology from Florida State University. In 1970, she completed a M.S. in the teaching of biological sciences at the University of Illinois. While working on her Ph.D., she was a research assistant and teaching assistant in the Department of Entomology, University of Illinois.

Carol is a member of Sigma Xi, Phi Beta Kappa, Phi Kappa Phi, Delta Tau Kappa, and Alpha Lambda Delta. She was a Woodrow Wilson Fellow, 1968-1969, and a University of Illinois Fellow, 1968-1971.

She received her Ph.D. degree in May 1974 and the title of her thesis was "Fine structure of the dorsal and ventral eyes of <u>Dineutus assimilis</u> Kirby (Coleoptera, Gyrinidae)." Her advisor was J.R. Larsen. She currently is a research associate working for Dr. Fraenkel here at Illinois.

Douglas Keith Sell was born in Portsmouth, Virginia, on July 4, 1942. He graduated from Lincoln Southeast High School, Lincoln, Nebraska, in June 1960. The following September he enrolled at the University of Nebraska, Lincoln, in a pre-medical curriculum. In September, 1962, he was accepted as a student in the College of Dentistry, University of Nebraska, Lincoln, and completed three years of training toward the degree of Doctor of Dental Surgery. Following his departure from the College of Dentistry, he accepted the position of Agricultural Research Technician with the USDA's Metabolism and Radiation Research Laboratory, Fargo, North Dakota. While in Fargo, he completed his baccalaureate training and received the degree of Bachelor of Science in Zoology in May 1967. In June 1967, he accepted the position of Technical Assistant at the Illinois Natural History Survey and began graduate training in the Department of Entomology at the University of Illinois toward the Ph.D. degree.

Mr. Sell is presently an Assistant Entomologist with the Illinois Natural History Survey and an instructor in the College of Agriculture, University of Illinois. He serves as the representative of the Illinois Agricultural Experiment Station on the technical committees of two Regional Research Projects, NC-105 and S-59. He is a member of the Entomological Society of Canada and Gamma Sigma Delta and is the author or co-author of four scientific papers. He also contributed in the preparation of the Introductory Entomology Syllabus recently prepared by the Entomological Society of America.

Doug received his Ph.D. degree in January 1974 and his thesis was entitled "Esterase polymorphism in the corn earworm Heliothis zea (Boddie)." His advisor was Dr. Luckmann.

Keith Ross Solomon was born on December 11, 1944, in Cape Town, South Africa. He completed his high schooling at Grey College in Bloemfontein in 1961 and then registered as a student at Rhodes University in Grahamstown. In 1966 he graduated with a B.Sc. in Zoology and Chemistry and in 1967 received a B.Sc. (Hons) degree in Zoology. After working in the Tick Control Unit of the Onderstepoort Veterinary Research Institute for a year, he joined the staff of the Biochemistry Section of the National Chemical Research Laboratory where he studied the action of certain molluscicidal compounds in schistosomiasis vector snails. This work formed the basis for a Masters thesis entitled "The mode of action of the acyl-diethylamide molluscicides" which was submitted to Rhodes University. The Degree of Master of Science in Zoology was awarded in April 1971.

He registered at the University of Illinois in September 1970 where he worked under the direction of Dr. R.L. Metcalf in the Department of Entomology. He was awarded a Master of Science degree in October 1972. While at the University of Illinois he was University Fellow in Entomology, elected Chairman of the Entomology Graduate Student Association, served as Editor of the EGSA Newsletter and as Chairman of the EGSA Course Evaluation Committee. He is a member of the Entomological Society of America.

Publications:

With B.R. Allanson. The effects of exposure to low temperatures on the serum proteins of <u>Tilapia mossambica</u> Peters. Comparative Biochemistry and Physiology, <u>25:485-492</u> (1968).

With S.B. Bowlus, R.L. Metcalf and J.A. Katzenellenbogen. The effect of piperonyl butoxide and triorthocresyl phosphate on the activity of juvenile hormone mimics and their sulphur isosteres in Tenebrio molitor L. and Oncopeltus fasciatus (Dallas). Life Sciences, 13:733-742 (1973). Keith received his Ph.D. in October 1973 and the title of his thesis was "Structure, activity and metabolic relationships in juvenile hormone mimics." His advisor was Dr. Metcalf. He has returned to his position at the National Chemical Research Laboratory in Pretoria, Republic of South Africa.

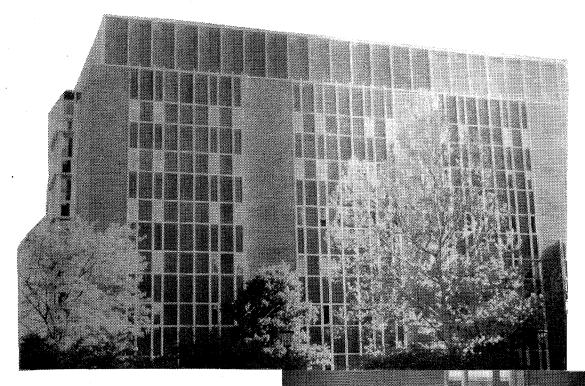
Richard Keiser Sprenkel was born July 10, 1943, in York, Pennsylvania. He attended public schools in York County, graduating from Dallastown Area High School, Dallastown, Pennsylvania, in June 1961. In September of the same year, he entered The Pennsylvania State University, University Park, Pennsylvania. He received the degree of Bachelor of Science in General Agriculture from Penn State in June 1965. He received the degree of Master of Science in Entomology from Penn State in December 1967.

In September 1967 he began graduate studies in the Department of Entomology at the University of Illinois. He held a graduate research assistantship at the Illinois State Natural History Survey throughout his studies at the University of Illinois.

He is a member of the Morrill Chapter of Alpha Zeta, the Penn State Chapter of Gamma Sigma Delta, the Beta Alpha Chapter of the Phi Sigma Society and the Illinois Chapter of Sigma Xi. He is also an active member of the Entomological Society of America, the Society of Invertebrate Pathology and the Entomological Society of Canada.

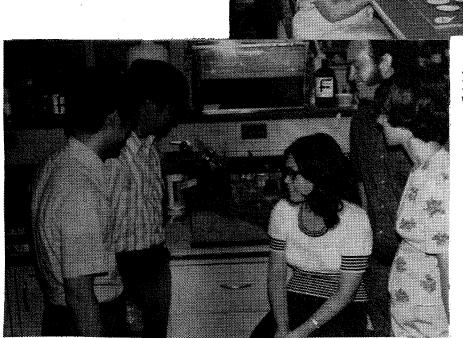
Richard received his Ph.D. degree in June 1973 and his thesis was entitled "Studies on Nosema plodiae (Sporozoa, Microsporida) and Mattesia dispora (Sporozoa, Gregarina) pathogens of the Indian meal moth, Plodia interpunctella (Lepidoptera, Pyralidae) in Illinois." His advisor was Dr. Luckmann. He accepted a position at North Carolina State University in Raleigh in the Department of Entomology.

PICTURE SECTION



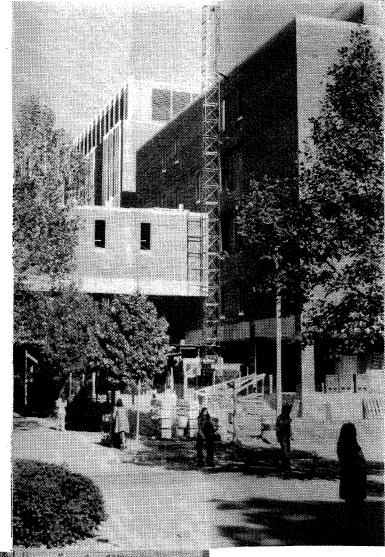
North side of Morrill Hall.

Seated: Ruth Millholin. Back row: Caroline Chang, Jim Lu, Maggie Yang, Lavella Wrisk, Joel Coats and Robert Metcalf.



An-horng Lee, Err-lieh Hsu, Li-chun (Li) Chio, John Williams, Barbara Walton.

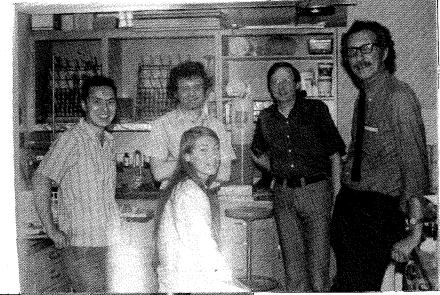
New Medical Sciences Building west of Morrill Hall.



Office Staff: Judy Michael, Ruth Plymire, Jim Fitzsimmons and Eloise Duvall.



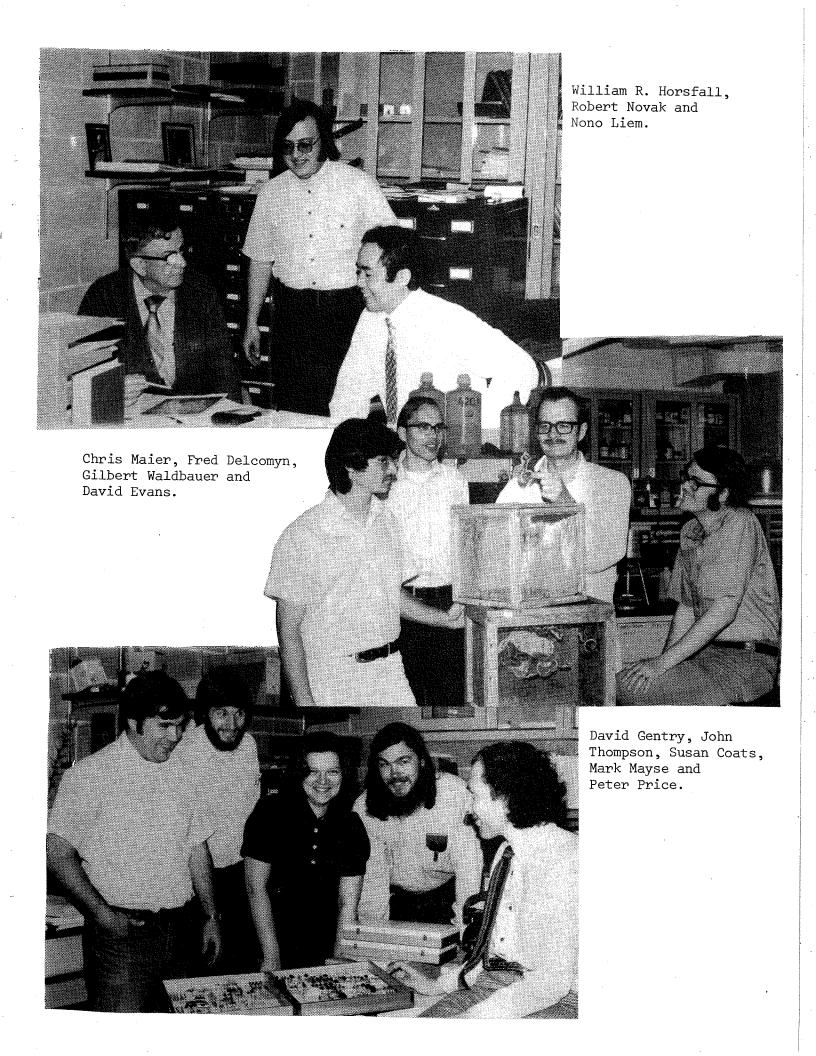
Seated: Louise Shively. Back row: Andy Chen, Morris Seligman, Jerry Freier and Stanley Friedman.

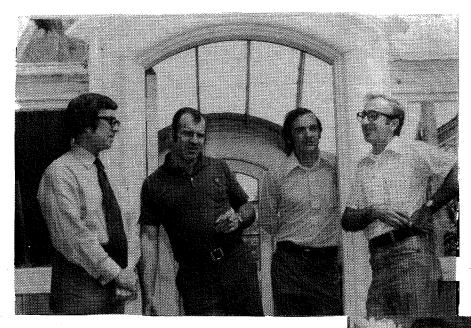




Seated: Joseph Larsen.
Back row: Carol Pappas,
Mary Fisher, Larry
Pappas, Linda Zaitlin
and Ralph Harbach.

Angel Berrios-Ortiz, Cheryl Adams and Nancy Edmunds.





Lewis Stannard, Don Webb, George Godfrey and Wallace LaBerge.

Marcos Kogan, Wayne Howe and John Bouseman.



Seated: James Sternburg.
Back row: Mike Toliver, Mike Jeffords,
Dan Brown and Willard Woodward.

# STUDENTS AND STAFF

ALI, Syed. I am a transfer student from West Virginia University, Morgantown. I received my M.Sc. degree in Agricultural Entomology from the A.P. Agricultural University at Hyderabad, India. At present I am busy completing my course requirements. My research work will be in toxicology.

Advisor: R.L. Metcalf

CHANG, Chang-shyan Caroline. Home is always the warmest place to live. This winter vacation I went back home to Taiwan to see my parent. It has been two years since I left there. Everything seems changed a little bit except the love from my family. I stayed there for one month. Most of the time I stayed at home to try to be a good daughter of my parent. I also met some of my schoolmates. Some of them have married and have their own children. Some of them changed their field to some other subject. Some of them plan to go here to further their study. We had so many things to talk about. I really enjoyed every day which I spent at home. I hope that I have another chance to go back there very soon.

Advisor: R.L. Metcalf

CHEN, Andrew C. The most exciting thing that occurred in th past year was an addition to the family. On January 22, 1974 (Chinese New Year's Eve!) we got a baby boy. We named him Li-shing Lyndon Chen. He weighed 6 lbs. and 7 oz. and was 19 1/2 inches long at birth. Although he was a bit small, he is growing fast.

There was little progress in research since the flies die when you want them to survive and live when you want them to die. Nevertheless, we are getting some interesting (not necessarily happy) results.

Advisor: S. Friedman

CHERRY, Ronald H.

Home: South Bend, Indiana

Age: 27

Profession: Insect Entomologist

Last Book Read: Future Shock

Tennis, Bird Watching, Jogging, Drinking, Late Night Prowling,

Avoiding Hassles

Latest Accomplishments: Obtained M.S. in small mammal energetics, spring '73, U of I; spent summer in Barrow, Alaska, with IBP Tundra Biome Project. Started in Entomology Department, fall '73. Interested in field population biology of hymenopteran parasite of alfalfa weevil.

Quote: True humor begins when one ceases to take oneself seriously.

Profile: Intelligent, humorous, in love with life.

Scotch: Dewar's White Label.

Advisor: W.H. Luckmann

CHIO, Eddie H. and Li-chun. Li-chun and I are graduate students in the department. We got married last June. Since I started my graduate work here last summer, we only got a day off before returning to school. We called that day our Honey-Day.

I am working under Dr. James Sanborn at the Natural History Survey. I am working on herbicides to find out what their fates are in soil fauna. Li-chun works under Dr. Metcalf. She is interested in the metabolism of insecticides in different insects.

Last semester break, we went home for about a month vacation. We took some beautiful pictures in L.A., Hawaii, Hong Kong, Macao, Taiwan and Japan. If you want to go to the above places, we would be happy to give you some information.

Finally, something I want to point out here is my wife's favorite activity - cooking. She has a lot of Chinese recipes. Mine is playing ping-pong. If you are interested in cooking and ping-pong, just feel free to call us.

Advisor: W.H. Luckmann (Eddie) Advisor: R.L. Metcalf (Li-chun)

COATS, Joel: I am in my fourth year as a research assistant studying the selective toxicity and biodegradability of DDT-type insecticides under Dr. R.L. Metcalf. This January I presented much of my thesis research at the Rockefeller meetings held at the University of California at Riverside. Soon I will be assuming a post-doctorate position here to pursue further research under Dr. Metcalf.

Advisor: R.L. Metcalf

COATS, Susan. The past year has kept me actively employed fulfilling the coursework and research requirements for a Masters Degree in Entomology. My research entails a study of the biology and the construction of a life table for a Hymenopteran that is parasitic on the house fly. I hope to finish my thesis by the end of this summer semester.

Advisor: P.W. Price

EVANS, David. This year has been fairly eventful for me. My wife (Betty) and I returned from teaching high school in Sierra Leone (West Africa). During our three years there we had survived one coup d'etat attempt, two cholera epidemics, an election in which most of the opposition members vanished, and many students. On the way home (Yuma, Arizona) this summer, we travelled through Spain and Portugal. Presently, I am working with Dr. Waldbauer on a mimicry project.

Advisor: G.P. Waldbauer

FAROOQUI, Mohammed Y.H. I received my M.Sc. degree in Agriculture with major field of study in Entomology in April 1971. Then I worked as a Research Assistant in Entomology for about a year and half and as Instructor in Entomology for a few months at the Andhra Pradesh Agricultural University, Hyderabad, India. I joined this University in the fall of 1973. My research interests are in the field of insect ecology and insect control. I am currently completing my course work as a first-year graduate student. My research problem has not yet been selected.

Advisor: W.H. Luckmann

FREIER, Jerry. In the year since the last newsletter, I have continued to investigate some of the factors involved with the relationship between Aedes aegypti and Plasmodium gallinaceum. My main concentration during the past twelve months has been on the sporozoite stage with hopes of being able to isolate sufficient quantities of the parasite so as to obtain some information regarding the sporozoite's enzymatic activities. Currently, I am in the process of writing my thesis, preparing articles for publication, and seeking employment.

Travel this year has been restricted to a summer vacation trip to Aspen, Colorado, with my wife, Lynda, for two weeks of backpacking and trout fishing. Also, I attended the annual meeting of the Entomological Society of America held last November in Dallas, Texas.

Advisor: S. Friedman

HARBACH, Ralph E. My activities during the past year have been focused on course work, teaching and research. Course requirements and teaching have taken up most of my time. However, my course work is nearing completion and I am grateful that I have had the opportunity to prepare lectures and teach Zoology 104. Teaching has been a rewarding experience, but I am anxious to begin on a University Research Assistantship this summer. I will then be able to spend more time on research.

Dr. Larsen has been guiding my study on insect hygroreceptors. During the unusually long semester break this year, I was able to prepare milkweed bug antennae for the transmission and scanning electronmicroscopes. This began an investigation of antennal sensillae which may be hygroreceptive.

Advisor: J.R. Larsen

HSU, Err-lieh. This is my second year here. My current research is the study of the fate and interaction of pesticides and herbicides in the rice-paddy ecosystem. I hope to get some results before the summer is gone.

I am planning to leave here for my country (Republic of China) after this summer. I am going to continue the rice-paddy ecosystem study for my Ph.D. thesis at National Taiwan University. I hope this work will have some practical application in Taiwan.

My address after this summer will be Department of Entomology, National Taiwan University, Taipei, Taiwan, Republic of China. I will be glad to guide your tour in Taiwan, if any one of you should visit this land in the future.

Advisor: R.L. Metcalf

LEE, An-horng (Research Associate). This past year was a very enjoyable one. In February, I went home to visit my parents and re-visited Tokyo. In May, Lu-ping and I got married in Champaign. Late in the summer, we had several week-end camping trips to southern Illinois.

Research Activity: Studying carbamate insecticides selectivity; two papers concerning this subject were published in Pestic. Biochem. Physiol. with Drs. Sanborn and Metcalf.

LIEM, Khian K. (Nono). Another exciting year has gone by and I am looking forward to finishing my thesis.

Advisor: W.R. Horsfall

- LU, Po-yung (Research Associate). I am newly appointed as a research associate in the department under Dr. Metcalf, working on a National Science Foundation supported project in the RANN Program, "Evaluation of a Laboratory Microsome for Study of Toxic Substances in the Environment". I enjoyed my student life; I also enjoy very much my present work.
- MAIER, Chris. Last year I travelled to Costa Rica (as a participant in OTS),
  Arizona, northern Michigan and Dallas, Texas (ESA meeting). All the excursions were very enjoyable and contributed significantly to my knowledge of the entomo-fauna and the flora. Naturally, the Costa Rican adventure had to be the highlight of the year as the OTS course was undoubtedly the finest I've ever taken.

My research is slowly beginning to accelerate beyond a snail's pace because of the completion of course work. (Guess what exercise will soon slow it down again!) I spent the summer gathering data on syrphid-flower phenological relationships which sets the stage for determining whether syrphid flies simply exploit flowers or give them something in return (pollination). In my spare time, I am completing the rearing of five species of mimetic syrphids - three hitherto unknown and all five not reared through an entire generation. Hopefully, the upcoming year will see a couple of publications.

Advisor: G.P. Waldbauer

MATHEW, Malethu T. I joined the Entomology Department in August 1973. I am interested in insect physiology. I received my Masters from Roosevelt University, Chicago.

Advisor: S. Friedman

MAYSE, Mark A. I received my B.S. at U of I last summer in biology education after student teaching the entire spring semester in the northwest suburbs of Chicago. While finishing up as an undergraduate here I also worked for the Salvation Army in a summer recreation program with folks ranging in age from 3-18.

This fall I started my graduate work in insect ecology with Dr. Price in addition to the department's core courses and teaching as an assistant 1/2 time. Certainly I didn't have to worry about spare time on my hands, but I was able to attend the Dallas meeting of the Entomological Society of America. While at the meeting I made the acquaintance of Dwight M. DeLong of Ohio State who gave me much encouragement as I was beginning research on leafhoppers.

This summer I will be expanding my entomological research experience by working with Dr. Waldbauer and Dr. Kogan on the bean leaf beetle-soybean project.

Advisor: P.W. Price

McCLURE, Mark. For the past year I have been busy completing necessary coursework and continuing my research on the ecology of leafhoppers on sycamore trees. I spent much of last summer sampling leafhoppers in southern Illinois and am currently enjoying the tedious task of sorting the thousands of specimens which I collected. This summer's plans include a continuation of this work with particular emphasis on establishing a successful rearing operation here in east-central Illinois. My advisor, Dr. Peter Price, has been most helpful in supervising this research.

The past year has also been a busy one for me in terms of travel. Last April I spent an exciting two weeks in the Southwest with the field ecology course from this University. The trip provided an excellent opportunity to study the ecology of several areas including the Chiricohua Mountains and the Sonoran Desert of Arizona.

In November I attended the Entomological Society of America's annual meetings held this year in Dallas, Texas, and found them very worthwhile. My conversations with several entomologists also working with leafhoppers provided me with some welcome new approaches to my research.

In January I left a snowy Champaign, Illinois, to participate in a two-month tropical biology course offered by the Organization for Tropical Studies (OTS) in Costa Rica, Central America. The course involved a rather intensive ecological study of several major habitat types of Costa Rica, including wet lowland rainforests, dry lowland deciduous forests, high and mid-elevational cloud forests and Atlantic and Pacific coastal areas. OTS operates and maintains field stations at most of these areas to encourage tropical research.

We visited several large coffee fincas throughout Costa Rica and toured the large banana operations of the Standard Fruit Company at Rio Frio. We also examined the current status of the colossal beef industry in Guanacaste province.

With its incredible diversity of fauna and flora, Costa Rica is truly a tropical paradise for any biologist. I found the tropical adventure to be an extremely worthwhile and intellectually rewarding experience.

Advisor: P.W. Price

MEDLER, W.K. My second and final year has been rewarding as far as developing new perspectives and determining a few of the next goals. Fulfillment of some objectives and most expectations have been achieved, at least obliquely. I would like to extend my thanks to all the faculty who have demonstrated kindness and concern in their attempts to guide me through the awkward moments. My thoughts go out especially to my fellow comrades who have shared their experiences with me and, in turn, have allowed me to go my own way. The warm friendships that I have been privileged to nurture will be maintained for the years to come I hope. My permanent address is 508 SE 2nd St., Fairfield, IL 62837, and through this I can always be indirectly contacted. In a last will and testimony, I, the aforementioned party at hand, being judged barely sound of body and mind, hereby decree that my Divine Doctrine and inherently feeble principles be conveyed with all pomp and ceremony to those members who have been deemed qualified (i.e., characterless) to hold such a stupendously insignificant position. Formal inductions at a so designated bastion of moral decay (a local pub will suffice). To one and all, the best of all, and all of the best is wished for you and yours.

Advisor: S. Friedman

MILLHOLIN, Ruth (Principal Lab Tech). It has been a very productive year as far as our own Toxicology Group is concerned. They are cranking out new compounds as fast or faster than we can get them tested. The research that Caroline Chang is doing with the hut testing also shows some interesting results. We will all miss Dr. Asha Hirwe as she has gone to a new job at Hercules on the East Coast. We are all glad to have Mrs. Lavella Wrisk as Dr. Metcalf's right arm - for a while we were afraid nothing could get tested as it keeps us hopping merely answering his myriad phone calls and bringing up his mail. We all enjoyed attending the lovely weddings of Jim Lu to Shen, An-horng Lee to Lu-ping Kan and Li-chun Li to Eddie Chio.

For myself I am delighted to have my son, Les, accepted as a fall freshman in Electrical Engineering here at Illinois, to have had a fantastic trip to Haiti, Colombia, Panama Canal and Yucatan, and just wish the flu bugs would leave me alone so I can get on with the business of screening compounds. I thoroughly enjoyed all of the department seminars I've been able to attend this year.

MONKMAN, Marie. The high point of the year for Marie Monkman was getting out of debt, for the first time in 15 years, at the end of December (due to \$5000 profit on the sale of family property) and buying a new VW (back into debt again!). No more calls or letters from creditors, no more missed classes, or taxicabs! (These aspects of financial relief, and the ability to eat a little better, may not be interesting to our more affluent friends, or those who have not been paying the poverty tax for a very long time, but take my word for it, they are basic). Daughters Ruth, 19, and Amy, 17, respectively a sophomore and freshman at the U of I, are holding their own in contrasting ways: Ruth as a pre-med with a heavy load of science courses and Amy investigating a wide range of humanistically-oriented studies.

Advisor: P.W. Price

NOVAK, Bob. Last summer my wife, Loraine, and I moved from Los Angeles to Champaign-Urbana. I am looking forward to working at the Macon County Mosquito Abatement District this summer.

Advisor: W.R. Horsfall

SIDDIQI, Mohammed-A.Q. I received my M.Sc. (Agri) Degree in Agricultural.

Entomology in 1971 from the Andhra Pradesh Agricultural University, Hyderabad, India. I worked as a Research Assistant in Entomology for the same university for two years before coming over to the United States. I joined this university in the fall of 1973. At present, I am completing my course work as a first year graduate student. My field of interest is economic entomology.

Advisor: W.H. Luckmann

SIRISINGH, Sathorn. I am taking two courses this semester which is enough to keep me very busy and also keep me from research work. I hope to work on my research with more concentration during this summer.

Advisor: W.H. Luckmann

TOLIVER, Mike. This is my first year at the University of Illinois, and I still find it difficult to get up in the morning and not see a mountain in my backyard. However, since my arrival from New Mexico, I have found that there are places in Illinois where the flora consists of plants besides corn. Deciduous forests are very different from the conifers I am used to, and I can't wait for summer to come so I can play in the woods.

After graduating from the University of New Mexico in May 1973, I worked for the U.S. Forest Service trying to discover what sorts of insects the Eastern Fence Lizard eats in Arizona, and whether it is a significant predator of the Southwestern Pine-tip Moth. I found that lizards are much more beautiful in the forest than they are in the lab. Our results may eventually be published in the Southwestern Naturalist if the manuscript ever gets through all the government red tape.

Since arriving here, I've been involved with fulfilling course requirements and settling in. I also managed to offer my leg as a sacrifice in a touch (?) football game. This summer I will begin work on diapause termination in the Zebra Swallowtail.

Advisor: J.G. Sternburg

TURNER, Lee Anne. I did my undergraduate work at Grinnell College in Grinnell, Iowa, where I majored in biology. I spent the first semester of my senior year and the previous summer in Costa Rica on an Associated Colleges of the Midwest program doing field research in entomology. I took my first formal entomology course second semester of my senior year, and decided to apply to the graduate school in this field.

This is my second year here at the U of I. I hope to receive my M.S. in entomology next fall and continue my graduate work. My special area of interest is pest management. Last summer I worked at the Natural History Survey with the corn team on corn rootworms. I found this to be a rewarding and educational and practical experience. I expect to learn a lot more working out there again this summer on soybean insects.

Advisor: W.H. Luckmann

WALKER, Bill. During the past year, I began a research project under Dr. J.H.
Willis on the factors regulating reproductive development and rate in
Oncopeltus. I am particularly interested in the role of hormones in the
effects of mating and diet on reproduction. Preliminary results look interesting and I will probably continue this project as my doctoral thesis.
I enjoy the mixture of research, teaching, seminars and an occasional
course.

Advisor: J.H. Willis

ZAITLIN, Linda M. (formerly Haase). This year I've begun studies on my research animal, Mydas clavatus. I hope to make a very thorough study this summer and next fall.

I was married last August to a graduate student in Physics, Mark P. Zaitlin. I don't understand his work and he doesn't understand mine, but we get along, just the same.

Advisor: J.R. Larsen

## NEWS ABOUT THE FACULTY

# Leigh E. Chadwick (Emeritus)

Actually there is nothing of publishable interest to report. We lead a fully occupied but placid existence and think often of all of you. Since my last brief communication for the Newsletter, which seems to have been sent just a few days ago, nothing noteworthy has happened to us or our family. We are still enjoying our retirement in moderately good health, and are happy whenever we hear from any of our friends in Illinois. Dick Storch visits us from Orono, Maine, from time to time, and as he himself has no doubt told you, he and his wife Kay and their two children (now getting quite big) are all doing fine. Both he and she are teaching on the university faculty.

# Fred Delcomyn

The past year has been an extremely interesting one for me. Teaching a course in the area of my primary interest, the physiology of insect behavior, has proved a very stimulating experience. Not only do the students seem to be enjoying the course, but I myself have gained a new appreciation for certain unifying themes in the field while selecting material for discussion and preparing lectures.

Research work initiated during the tenure of a Summer Faculty Fellowship has also turned up some exciting possibilities. The development of a system for supporting a cockroach so that it can "walk" on a small, lightweight styrofoam ball while still allowing access to the central nervous system for electrical recording of neural activity has opened up many avenues of research. The role of various nerve fibers during walking is the primary problem under investigation.

On the home front, Nancy and I feel that we can now live anywhere, after surviving a central Illinois summer without an air conditioner. (Judy Willis is taking bets on how long it will be before we buy one!) Temporary relief was gained from a brief visit to the beautiful Driftless area of southern Wisconsin.

## G.S. Fraenkel (Emeritus)

A trip to Israel, planned for October/November 1973 (to work on the effect of various drugs and venoms on fly pupariation) had to be cancelled when the war broke out.

Stanley Friedman and I are working on a joint program on the function of carnitine, with the cooperation of Morris Seligman.

I enjoy the very able assistance of two undergraduate students, Paul Herman, who works on the effect of cAMP on pupariation in flies, and Susan Kraft, who works on the starvation-maintenance metabolism of young fly larvae.

P. Sivasubramanian ("Siva") finished his Ph.D. thesis on proteinaceous hormonal factors which play a role in puparium formation, and on the effect of X-rays on the same process. He is now, since September 1973, on a "post-doctoral" with Carroll M. Williams at Harvard University.

Vol. VII, 1972, of the Israel Journal of Entomology was dedicated to me in honor, belatedly, of my 70th birthday. It contains 18 contributions by former students (Jack McFarlane, Jay Nayar, Calvin SooHoo, Bob Yamamoto, Willard Fogal, Victor Brookes, Rachel Galun, Herb Lipke, Morris Seligman, and other friends and colleagues). Also a "Tribute" originally written by Stanley Friedman for the 1972 Newsletter, a delightfully written piece by M.R. (Miriam Rothschild, Oxford, not Morris Rockstein as one reviewer had surmised) entitled "Green Fingers, an appreciation of G.S.F.'s bibliography," and a fairly complete list of my publications.

A comprehensive book, <u>Insect and Mite Nutrition</u> (North Holland Publishing Company, Amsterdam-London, 702 pp., 1972), representing the proceedings of an International Conference, held April 25-28 at the University of Kentucky, was dedicated to me, also.

# Stanley Friedman

The year has been a very profitable one in many ways. With Jerry Freier I have been learning a great deal about host parasite relationships using the mosquito side of the bird malaria cycle as a model system, and Andrew Chen and I have been making inroads into the role of the corpus cardiacum in the control of trehalose metabolism. The little time I have to myself has been spent detailing the enzymes involved in the synthesis and degradation of trehalose. I have also had the pleasure of once again working with Morris Seligman, who is now here as a colleague and is doing a very interesting study on the metabolism of pyruvate by fly sarcosomes and the part played by carnitine (Dr. Fraenkel's Vitamin  $\mathbb{B}_T$ ) in its oxidation. This past summer my family and I went camping and collecting through the southwest, and I look forward this year to spending a sabbatical term in the Department of Protozoology at the Hebrew University in Jerusalem.

# William R. Horsfall

This was the year of "the book" as far as I was concerned. With Wade Fowler's collaboration I was able to get to book form work on bionomics of Aedes vexans in this laboratory for some 25 years. Actually the book was in two parts. Col. Fowler and I contributed the section on bionomics, and Drs. Moretti and Larsen contributed the section on embryology. I made a few trips here and there, and I was unable to take a major one because of faint heart brought on by the national scare about petroleum.

# Wallace E. LaBerge

The past year has been spent continuing studies on the systematics of bees. Part VI of the revision of North American Andrena was published in December and Part VII is being prepared for press. Also being written is a revision of North American bees of the genus Anthidium which will be coauthored with Elbert Jaycox. Adolfo Molina-Pardo finished his dissertation on the phenetic and cladistic relationships of over 100 species of Andrena belonging in subgenera previously studied. Adolfo and LaBerge are rewriting sections of this dissertation for publication.

Last summer the family enjoyed a month of camping, fishing, and collecting bees in North Dakota, the Black Hills and the Rockies of Colorado. The international meeting of systematics in Boulder were attended in transit.

# Joseph R. Larsen

This has been a demanding, but fruitful, year for the Larsen family. My time has been fully consumed by continuing to serve as Acting Director of the School of Life Sciences and maintain my responsibilities as the Head of Entomology. Hopefully the new director for the School will arrive soon, and I can divorce myself from double duty. In spite of the heavy administrative load this has been a productive year researchwise. been successful in getting some additional work done on sensory physiology primarily of the mosquito mouth parts plus the book with Drs. Horsfall, Fowler and Moretti. Travel this year was limited to a trip to Virginia to see our daughter and son-in-law as he completed his training in the Marine Corps and to the Entomological Society meetings in Dallas, Texas, where I was able to give a paper on some of the recent work. The family continues to roll forward with ever-increasing numbers and enthusiasm. We are now the proud grandparents of three lovely granddaughters. Our #2 daughter, Debbie, is completing her junior year at Brigham Young University in Drama and Speech and it hardly seems possible that another one will soon be out of college. Jennifer continues to maintain humility in her parents with the teen-age antics of a 14-year old. We look forward to a good year in the department and hopefully additional research activity.

## William H. Luckmann

Administrative duties take most of my time, but administration is very rewarding. I take great pride in the fact that through team effort of the staff several projects on insect-pest management have developed to the testing stage for field trial during the cropping season, 1974. We have been very fortunate in receiving strong support for these activities from NSF, USEPA, and USDA.

The science and practice of Economic Entomology becomes more challenging and sophisticated each year. Through joint appointment and funding with other colleges and departments, we have added an Electrical Engineer and an Agricultural Economist to our staff. These are exciting times in Entomology.

# Robert L. Metcalf

The past year has continued to be both exciting and frenetic. A new joint appointment in the Institute for Environmental Studies has led to the development of a program relating to Toxic Substances in the Environment. Interest in the development of the laboratory model ecosystem as an early warning system for environmental pollutants has grown enormously and we now have cooperative evaluation projects with WHO, EPA, and FDA. The development of the principles of biodegradability has led to the issuance of U.S. patent 3,787,505 "Insecticidal Biodegradable Analogues of DDT," assigned to the University of Illinois Foundation. Three other patent applications in this area are applied for. As a result of these activities, our laboratory has been inundated with visitors and the requests for speaking engagements have taken me to symposiums in Helsinki, Seattle, Philadelphia, Kansas City, Boston, Athens, Georgia, Riverside, California, Princeton, New Jersey and Columbia, Missouri. These activities together with 10 pre-doctoral and 5 post-doctoral students and teaching Entomology 420, Insect Control, and Entomology 319, Chemistry and Toxicology of Insects, have kept us busy.

A most exciting project has been a happy collaboration with Prof. William Luckmann and other members of the Department and the Natural History Survey in producing a new book "Introduction to Insect Pest Management." This book will become the text for Entomology 319 but also has aroused considerable nation-wide interest as a new and hopefully improved approach to insect control.

# Peter W. Price

With my time divided between teaching, research, editing and travelling, 1973 was gone too quickly. I saw much more of North America than ever before: Maine for the Northeastern Forest Insect work Conference at which I gave a paper and organized a workshop on parasitoids; Texas and Arizona on a very educational and enjoyable field ecology trip with botanists and zoologists of many interests; Wyoming on a vacation with Maureen and English friends to remind ourselves of how mountains feed the soul; Mexico with my brother from England to look for milkweeds, ants and acacias, and archeological sites. An expected baby prevented Maureen from getting to Mexico with us, which prepared us, probably inadequately, for major adjustments in life-style ahead.

Horizons also broadened in professional activities by acceptance of editing responsibilities for the Ecological Society of America. First as associate editor and then as a member of the Board of Editors, and by receiving joint appointments with the Illinois Natural History Survey and the Illinois Agricultural Experiment Station. My research interests also broadened to studies on the reproductive strategies of milkweeds as influenced by herbivores and pollinators, and the biology of Enicospilus americanus, an ichneumonid parasitoid of Cecropia, which will be valuable in studies on parasitoid energetics. (At the time of going to press I can report the arrival of Gavin Price, with baby and mother progressing well.)

# J.G. Sternburg

I have continued to teach insect morphology with a graduate level class in the fall, and part of an undergraduate course for biology majors in the spring. In fact, next fall will be the 20th year of teaching! Last spring and again this year, with Peter Price and Gil Waldbauer, I am participating in a new course for non-biology students (150 of them) called "Insects, Man and the Environment." It has been an interesting challenge and a very rewarding experience.

As in past years, my duties included processing applications for admission to our graduate program, a job becoming more and more time consuming. The number of applicants seems to increase each year.

My research interests continue with the action of DDT-type compounds on nervous systems of insects. One student, Mr. Willard Woodward, is now completing his study of the effects of insecticides on sensory receptors of susceptible and resistant house flies. A completely different research interest concerns various aspects of cecropia biology, and with Gil Waldbauer I am working on diapause termination among other projects. This work also includes other saturniid moths. One of the new students in the department, Michael Toliver, plans to work with promethea and the zebra swallowtail with us. Another student also new this year, Michael Jeffords, will study the role of promethea as a mimic of the troidine swallowtail philenor. I am also studying various aspects of mimicry among neotropical Lepidoptera.

Because of the early start for the academic year last August, the Sternburgs were unable to go on the usual vacation north. I taught an entomology course last summer, and there wasn't enough time between the end of the summer session and the beginning of the fall session. But I did manage to get to northern Michigan for a few days collecting, and did a lot locally for teaching material. Our family discovered some interesting and very beautiful small lakes in nearby State Parks, and did some canoeing and fishing. We hope to do more this summer. I also imagine that what with teaching a summer course again and riding herd on several thousand hungry (very hungry!) cecropia larvae for use as pupae during the winter, and helping with the rearing of promethea, that I will be very busy.

Some of my old friends may be interested to know that we have one daughter through high school, our niece graduates this June and has been admitted to the University of Illinois this fall. Our son Tom will be a high school senior next year and the youngest, Janet, will be in 9th grade. Time flies!

#### G.P. Waldbauer

During the past year research activity went on at full pace. Jim Sternburg and I made and are still making good progress with our study of the polymorphic termination of diapause by cecropia. With Survey entomologist, Marcos Kogan, I am still in the midst of a wide-ranging study of the bionomics of the bean leaf beetle. Last summer we put to the test our modification of Dr. Horsfall's Illinois Eggs Separator in a study of

the seasonal distribution of bean leaf beetle eggs in soybean fields; our accuracy return is still 93%+. Other studies, especially those on mimicry move ahead rather slowly. Fortunately, I have a graduate student who is interested in that sort of thing so that I manage to keep my hand in. He has, among other accomplishments, managed to rear from egg to egg in the laboratory several previously unreared syrphids--some of which are still not known in nature.

As for travel this year: Stephie and I went to Haiti for a couple of weeks and found it very poor, and, on the whole, depressing. In summer Susie and I camped in the Black Hills, Yellowstone and the Tetons and loved every moment of it.

## 1973 PUBLICATIONS OF THE DEPARTMENT

DELCOMYN, FRED, Assistant Professor

## Articles

Motor activity during walking in the cockroach Periplaneta americana. II. Tethered walking. Journal of Experimental Biology 59, 3: 643-654.

With P.N.R. Usherwood

Motor activity during walking in the cockroach Periplaneta americana. I. Free walking. Ibid., 629-642.

FRAENKEL, GOTTFRIED S., Professor, Emeritus

## Articles

With G. Bhaskaran

Pupariation and pupation in cyclorrhaphous flies (Diptera). Terminology and interpretation. Annals of the Entomological Society of America, 66:418-422.

With D.M. DeGuire

The meconium of Aedes aegypti (Diptera: Culicidae). Ibid., 475-476. With N.P. Ratnasiri

Inhibition of pupariation in Sarcophaga bullata. Nature, 243:91-93.

GHENT, ARTHUR W., Professor

#### Articles

Gravity and the distribution of leaf shape in the trees of Sassa-

fras albidum. The New Phytologist, 72, 5:1141-1158.
Selected problems in biometry. Pt.8: Some applications of contingency tables in research. Bios 44, 2:63-85.

Theory and application of some nonparametric statistics. Pt.I. Exact solutions (extended by number triangles) to the Wilcoxon two-sample and paired-sample tests. The Biologist, 55, 4:149-177.

HORSFALL, WILLIAM R., Professor

## Books

With H.W. Fowler, Jr., J.R. Larsen and L.J. Moretti Bionomics and embryology of the inland floodwater mosquito Aedes vexans. University of Illinois Press, Urbana, IL 211 pp.

## Articles

With L.T. Nielsen

The occurrence of Aedes barri Rueger in Alaska with notes on its distribution. Mosquito News, 33:243.

JAYCOX, ELBERT R., Professor

#### Articles

With G.J. Guynn

Observations on sunflower pollination in Illinois. American Bee Journal, 113, 5:168-169.

Bulletins and Technical Reports

Making and using an observation beehive. University of Illinois Department of Horticulture H-678, 4 pp.

Making and using a pollen trap. University of Illinois Department of Horticulture H-679. 4 pp.

Making and using a solar wax melter. University of Illinois Department of Horticulture H-680, 2 pp.

#### Review

Insect pollination of crops by John B. Free. Animal Behavior, 20, 3:619.

LABERGE, WALLACE E., Professor

#### Articles

The bee genus <u>Proteriades</u> in South Dakota (Hymenoptera: Megachilidae). Entomological News, 84:160.

A revision of the bees of the genus Andrena of the Western Hemisphere.

Part VI. Subgenus Trachandrena. Trans. American Ent. Soc., 99:
235-371.

LARSEN, JOSEPH R., Professor and Head of Department

#### Books

With W.R. Horsfall, H.W. Fowler, Jr. and L.J. Moretti Bionomics and embryology of the inland floodwater mosquito <u>Aedes</u> vexans. University of Illinois Press, Urbana, IL 211 pp.

#### Articles

Reaction of land isopods to light and humidity. In <u>Introductory</u>
<u>Entomology</u>, ed. by V.J. Tipton. Brigham Young University Press,
<u>Provo</u>, UT 409-410.

Chemoreception in adult houseflies. Ibid., 411-413.

With G.M. Booth, J. Connor, R.A. Metcalf

A comparative study of the effects of selective inhibitors on esterase isozymes from the mosquito Anopheles punctipennis. Comparative Biochemistry and Physiology, 44B:1185-1195.

With L.L. Sanburg

Effect of photoperiod and temperature on ovarian development in Culex pipiens pipiens. Journal of Insect Physiology, 19:1173-1190.

With J.F. White

Morphological and physiological studies of the silkmoth ovary. Journal of Morphology, 141, 1:99-132.

LUCKMANN, WILLIAM H., Professor

## Articles

With Z. Singh and C.E. White

Notes on Amyotea malabarica, a predator of Nezara viridula in India. Journal of Economic Entomology, 66, 2:551-552.

METCALF, ROBERT L., Professor

# Articles

Pest and pollution: the challenge of modern insect control. In Wednesday Night at the Lab: Antibiotics, Bioengineering, Contraceptives, Drugs, and Ethics, ed. by K.L. Rinehart, Jr., W.O. McLure and T.L. Brown. Harper and Row, New York, 93-110.

A century of DDT. <u>Journal of Agriculture and Food Chemistry</u>, 21: 511-519.

With G.M. Booth

The histochemical fate of paraoxon in the cockroach and honey bee. Israel Journal of Entomology, 7:143-56.

With G.M. Booth, C.K. Schuth, D.J. Hansen, P-Y Lu

Uptake and fate of di-2-ethylhexyl phthalate in aquatic organisms and a model ecosystem. Environmental Health Perspectives, 4:27-34.

With L.B. Brattsen

Synergism of carbaryl toxicity in natural insect populations. <u>Journal of Economic Entomology</u>, 66:1347-1348.

With M.A.H. Fahmy, T.R. Fukuto, R.L. Holmstead

Structure-activity correlations in DDT analogs. <u>Journal of Agriculture</u> and Food Chemistry, 21:585-591.

With I.P. Kapoor, A.S. Hirwe, J.R. Coats, M.S. Khalsa

Structure-activity correlations of biodegradability of DDT analogs. Ibid., 310-315.

With I.P. Kapoor, P-Y Lu, C.K. Schuth, P. Sherman

Model ecosystem studies of the environmental fate of six organochlorine pesticides. Environmental Health Perspectives, 4:35-44.

With A-H Lee

In vitro inhibition of acetyl cholinesterase by 0,0-dimethyl S-aryl phosphorothiates. Pesticide Biochemistry and Physiology, 2:408-417.

With A-H Lee, G.M. Booth

House cricket acetylcholinesterase: histochemical localization and in situ inhibition by 0,0-dimethyl S-aryl phosphorodithioates. Annals of the Entomological Society of America, 66:333-343.

With R.A. Metcalf

Selective toxicity of analogs of methyl parathion. Pesticide Biochemistry and Physiology, 3:149-159.

With K.R. Solomon, S.B. Bowlus, J.A. Katzenellenbogen

The effect of piperonyl butoxide and triorthocresyl phosphate on the activity of juvenile hormone mimics and their sulfur isosteres in Tenebrio molitor and Oncopeltus fasciatus. Life Sciences, 13: 733-742.

## Book Reviews

Naturally occurring insecticides by Martin Jacobsen and D.G. Crosby. Pesticide Biochemistry and Physiology, 3:108-109.

PRICE, PETER W., Assistant Professor

#### Articles

Reproductive strategies of parasitoid wasps. American Naturalist, 107:684-693.

Parasitoid strategies and community organization. Environmental Entomology, 2:623-626.

The development of parasitoid communities. Proceedings of the Northeastern Forest Insect Work Conference, 5:29-41.

## Book Reviews

Ecology: the experimental analysis of distribution and abundance, by C.J. Krebs. Bioscience, 23:264.

STANNARD, LEWIS J., Professor

Article

Two new species of Chilothrips (Thysanoptera:Thripidae). <u>Journal</u> of the Kansas Entomological Society 46, 1:107-115.

STERNBURG, JAMES G., Professor

Article

With G.P. Waldbauer

Polymorphic termination of diapause by cecropia: genetic and geographical aspects. Biological Bulletin, 145:627-641.

WALDBAUER, GILBERT P., Professor

Articles

Food utilization (introduction). In <u>Insect and Mite Nutrition</u>, ed. by J.G. Rodriguez. North-Holland Publishing Co., Amsterdam, 53-55.

With A.K. Bhattacharya

Self-selection of an optimum diet from a mixture of wheat fractions by the larvae of <u>Tribolium confusum</u>. <u>Journal of Insect Physiology</u>, 19:407-418.

With M. Kogan

Sampling for bean leaf beetle eggs: extraction from the soil and location in relation to soybean plants. Environmental Entomology, 2:441-446.

With J.G. Sternburg

Polymorphic termination of diapause by cecropia: genetic and geographical aspects. Biological Bulletin, 145:627-641.

WALKER, WILLIAM F., Graduate Teaching Assistant

Articles

Mexican bean beetle: compounds with juvenile hormone activity (juvegens) as potential control agents. Journal of Economic Entomology, 66:30-34.

With A.L. Boswell, F.F. Smith

Resistance of spider mites to acaricides: comparison of slide dip and leaf dip methods. Ibid., 549-550.

With W.S. Bowers

Comparative juvenile hormone activity of some terpenoid ethers and esters on selected coleoptera. Journal of Agriculture and Food Chemistry, 21:145-148.

With J.A. Svoboda

Suppression of Mexican bean beetle development by foliar applications of azasteroids and reversal by cholesterol. Entomologia Experimentalis et Applicata, 16:422-427.

With M.J. Thompson

22,25-bisdeoxyecdysone: pathological effects on the Mexican bean beetle and synergism with juvenile hormone compounds. <u>Journal of Economic Entomology</u>, 66:64-67.

WILLIS, JUDITH H., Associate Professor

Articles

With S.O. Anderson, A.M. Chase

The amino-acid composition of cuticles from Tenebrio molitor with special reference to the action of juvenile hormone. Insect Biochemistry, 3:171-180.

#### ALUMNI NEWS

Again we share with you the responses received from faithful alumni who take the time to tear out the last sheet of the Newsletter and return it to us so that we might pass on the activities and accomplishments of each of you during the past year. We do appreciate our former alumni and I hope you have a sense of belonging and continued attachment to the Department. We continue to encourage you to share your activities so that we might circulate them to your former colleagues and fellow students. We are justifiably proud of all of our alumni and mindful of their accomplishments in the scientific world. We also share with you the accomplishments of our graduate students, those completing their work and looking for positions and hope that you will take the opportunity to be mindful of their talents and share with us positions that might be available. As in years past we have included the information sheet at the end of the Newsletter and appreciate your taking the time to fill it out and return it to the department.

#### ROY BARKER

Home Address: 3231 E. Lester Street

Tucson, AZ 85716

Business Address: 2000 E. Allen Road

Tucson, AZ 85719

Current Research and Recent Publications: Physiology and toxicology of honeybees.

Recent Travels for Business or Pleasure: Chiapas and Tabasco, Mexico River Trip. Backpacking in Arizona, Pinacates and Tarahumara country of Mexico, and Escalante country of Utah.

Family News: Oldest son killed in traffic accident.

Suggestions or comments concerning the "Newsletter": Like the photographs; why is Dr. Horsfall poking his finger in the coffee?

#### MURRAY S. BLUM

Home Address: 425 Ponderosa Drive

Athens, GA 30601

Business Address: Department of Entomology

University of Georgia Athens, GA 30602

Current Research and Recent Publications: Still dabbling with pheromones and defensive products. Just for fun we are plunging off into neurophysiology and behavior. We still have chemosystematic illusions, but it appears that the insects have different rules for their biosynthetic ball game.

Recent Travels for Business or Pleasure: Bolivia, Canada, Sweden, Belgium and England. I have never tried to separate business and pleasure since they are mostly synonymous.

Additions to the Family: Delete permanently.

Suggestions or comments concerning the "Newsletter": Spot on.

## B.D. BURKS (Ph.D. 1937).

As you probably want to keep track of what is happening to the Alumni from Urbana, I think I should tell you that I am going to retire the last day of this June, after 25 years of work in the Museum. I have handled the Chalcidoidea for all that time, and also have been head of the Hymenoptera Unit for about a third of that time. I have selected the man on our staff who will succeed me as Research Leader for Hymenoptera, and scouting is being done for a man to take on the work in Chalcidoidea. So I have burned my bridges, and have to retire whether I want to or not. Actually, I am quite a few years short of the obligatory retirement age, but I am ready to let someone else

take over. There has been a continuous succession of workers in the Chalcidoidea here during this century -- C.V. Riley, L.O. Howard, W.H. Ashmead, J.C. Crawford, A.A. Girault, A.B. Gahan, and then myself. Who is to continue, I do not yet know, although there is right now a very promising crop of new graduate students who are working on the taxonomy of the Chalicoidea.

CAPT. ROBERT (BERT) W. CLEGERN

Home Address: 5519 Aspen Valley

San Antonio, TX 78242

Business Address: Chief, Entomology Branch

Epidemiology Division

USAFSAM

Brooks AFB, TX 78235

Current Research and Recent Publications: Environmental Survey of the Phoenix Islands, Central Pacific; Biological Stream Survey, Chanute AFB, IL; Invertebrate Survey, Eglin AFB, FL; Marine Survey, Johnston Island, Central Pacific.

USAF Technical Report, "Wastewater Survey, Vandenberg AFB, CA, Nov. 72" Williams, C.R. and R.W. Clegern. 1973. USAF Envir. Health Lab. Kelly AFB.

USAF Technical Report, "Ecological Studies, TAC-52A, Eglin AFB Florida" 1973. Young, A., Editor, Chapter on "Insect density and diversity studies" -- R.W. Clegern.

Recent Travels for Business or Pleasure: Business: Cincinnati, OH; Dayton, OH (3X); Chanute AFB, IL; Eglin AFB, FL; Hill AFB, UT: Dugway Proving Grounds, UT; Sacramento, CA; Honolulu, HI; Canton, Hull and Enderbury Islands of the Phoenix Group, Central Pacific; Johnston Atoll, Central Pacific; ESA Meetings in Dallas, TX. Pleasure: Fort Walton Beach, FL and over central Texas.

Additions to the Family: One cat, named "Kitty."

Suggestions or comments concerning the "Newsletter": I like it!

DONALD R. JOHNSON (B.S. 1943)

Home Address: 1362 N. Decatur Road, N.E.

Atlanta, GA 30306

Business Address: None (retired as of July 1, 1973)

Current Research and Recent Publications: Research: None. Publication: Johnson, Donald R. 1973. "Recent Developments in Mosquito-Borne Diseases: MALARIA." Mosquito News 33(3):341-347.

Recent Travels for Business or Pleasure: July-Aug. 1972 - Worked in Haiti studying Anopheles albimanus ovaries for age determination, prior to aerial ULV malathion application.

Additions to the Family: None.

Suggestions or comments concerning the "Newsletter":

- 1) Please add my name to the "Newsletter Mailing List." It was omitted in the 1973 listing. [This has been done on the master list. Ed.]
- 2) Also, Dr. Richard W. Fay is now deceased. Dr. H.F. Schoof of Savannah has details.
- 3) Please carry more information re activities of alumni.
- 4) I retired from U.S. Public Health Service effective July 1, 1973, and am a consultant to the U.S. Agency for International Development, World Health Organization, and anyone else needing services of vector-borne disease control specialist.

FRANKLIN C. NELSON

Home Address: 2601 N.E. 14th Street, Apt. 127

Pompano Beach, FL 33062

Business Address: Retired since 1958 from Standard Oil (NJ)

Recent Travels for Business or Pleasure: We came up to New Jersey from Florida on May 15. I developed what was called cheumatoid arthritis by 4 hospitals in Boston and Florida. My Florida doctor found a staph infection and cleared it with antibiotics. In April '73 I went to Taipei, Taiwan, to Dr. Wu Wie Ping for 26 acupunctur treatments with very good results. Too bad we cannot have it done in the U.S.A. Surely this is better than 16 aspirin a day, which is all I got as treatment in the U.S.A.

Suggestions or Comments concerning the "Newsletter": I was glad to see the mailing list. Please change mine to Florida, as we plan to spend most of our time there. I hope Dr. Kearns enjoys his retirement as much as I have. Sorry to hear that Dr. Milum passed away.

JOHN E. PORTER

Home Address: 7521 S.W. 53rd Avenue

Miami, FL 33143

Business Address: First Presbyterian Church

609 Brickell Avenue Miami, FL 33131

Current Research and Recent Publications: None. (Retired from Public Health Service March 1, 1973, and am enjoying very much my time now -- working harder than for many years as per the attached news clipping.

"After 28 years of looking at God through a microscope, Dr. John E. Porter has become the first commissioned lay preacher in the 77-year history of the First Presbyterian Church, 609 Brickell Ave. . . . His new duties include preaching and teaching in the local program of the church and pastoral visitation of hospitals and homes." Miami Herald, Saturday, June 16, 1973.

Recent Travels for Pleasure: In August, 1973, we spent a week in Manassas, VA, visiting our oldest daughters, Sue and Nancy, their husbands and their six children. Then rested one week in Guatemala.

Suggestions or comments concerning the "Newsletter": Enjoy the reports of what's going on at the U of I, but would like to hear more too of what's going on in the lives of the alumni.

BILL and JANET RAPP

Home Address: 430 Ivy Avenue

Crete, NB 68333

Business Address: Janet - Feeding Service Corporation

Berks Siding Crete, NB 68333

Bill - Nebraska State Health Department 1103 "O" Street

Lincoln, NB 68508

Current Research and Recent Publications: Janet - Still doing research on ruminant nutrition. Bill - Still medical entomologist working on mosquitoes, ticks, etc.

Recent Travels for Business or Pleasure: Spent three weeks in England during the summer of 1973.

Ed. note: According to clipping received, Dr. Janet Rapp was cited for community service by being selected Crete Sertoma Club's Service to Mankind award winner. She has been an active Girl Scout Leader for nearly 20 years in Crete.

## KATHRYN M. SOMMERMAN

Home Address: 11 Laydon Avenue

North Haven, CT 06473

Business Address: Retired from Arctic Health Research Center in June 1973. Current Research and Recent Publications: There is still some arbovirus research to prepare for publication. I hope to continue work on some of the biting flies, and start again on psocids, so things are looking up.

Recent Travels for Business or Pleasure: I expect to leave here in late September and drive back to Connecticut then return with a trailer next summer and continue snipe fly studies in alpine areas; then collect psocids on the return trip to Connecticut in 1974.

Suggestions or Comments concerning the "Newsletter": Always glad to get it, and especially this time, with the address list.

# DONALD M. TUTTLE (Ph.D. 1952)

Home Address: 308-22nd Avenue

Yuma, AZ 85364

Business Address: Rt. 1 - Box 587

Yuma Experiment Station

Yuma, AZ 85364

Current Research and Recent Publications: Citrus pests; agricultural pests of S.W. United Stated (general; systematics of Tetranychoidea mites).

Recent Travels for Business or Pleasure: Last summer in N.W. Brazil at University of Fortaleza under AID Program.

Suggestions or comments concerning the "Newsletter": I enjoyed the news and information contained in your recent Newsletter issue.