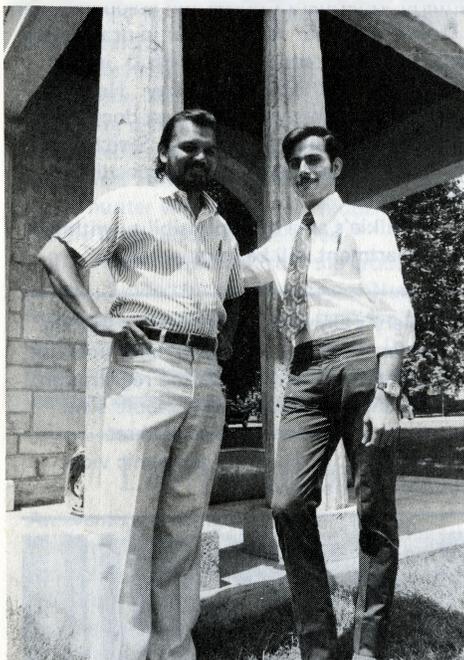


NEWS BULLETIN

UNIVERSITY OF GUELPH

Vol. 17 - No. 31

August 2, 1973



Clarence Amichand shows Nagender Swamy pillars from original Johnston Hall during the latter's visit on campus.

Crossroads program discussed at meeting

"It is easier to raise a flag than to raise a people," said Nagender Swamy, Assistant Director of the Village Reconstruction Organization in Andhra Pradesh, South India, when he visited the campus recently.

Mr. Swamy was invited by Canadian Crossroads International to participate in a cross-cultural interflow program. Many crossroaders from Guelph have worked on this project in India.

While on campus Mr. Swamy met with faculty and students from the School of Agricultural Economics and Extension Education including Professor Hugh Whitely, Professor J. C. Shute, Professor Louise Colley, and Professor Weldon Findlay. He also met with Ian White, Career Planning Officer; D. L. Waterston, Director of Information;

Plants react to noise - don't have favorite people

Do plants have emotions? Will they react to your loving words or harsh reproof? Are they sensitive to the sights and sounds of their environment?

An experiment presently being carried out by graduate student John Paroshy of the School of Engineering aims at coming to a better understanding of the sensitivity of plants, to find out how they react with certain environmental factors.

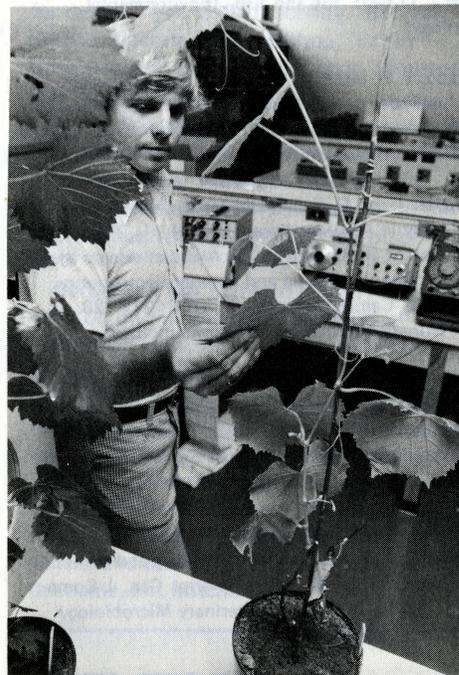
Up until now more questions than answers have arisen from the study. A capacitor attached to a leaf of a grape vine monitors the plant's capacitance and static electricity, which is measured on a chart recorder, an oscilloscope and on the needle dial of an impedance bridge. By touching any leaf on the plant sharp changes appear on the indicators. These, however, can be explained to a certain extent, since the capacitance and static electricity of the person touching it will be measured with the plant. Yet sometimes these will increase, and sometimes decrease for no apparent reason.

Cutting a leaf off the plant with metal snips causes marked changes on the recorders. This does not necessarily indicate that the plant is suffering pain, but occurs because the snips are an excellent conductor. When the blades penetrate to the sap of the plant the static electricity of the person holding them flows freely into the plant and is measured on the dials. Watering the plant also causes changes, which may be measurements of certain properties of the water itself.

The least explicable behaviour pattern of the plant is its reaction to sounds. Definite changes occur in a plant exposed to sounds, and these cannot be explained by transference of capacitance and static electricity through contact. The sharpest increases occur with very high frequencies, which seem to "upset" the plant to the extent that the needle soars beyond the dial. After being submitted to such sounds the plant will often refuse to react for a period of time, and in some cases the plant will wither and die. Certain frequencies may be favourable to the growth of a plant, but this could be determined only by long exposure to various frequency levels and

and Don Amichand, International Student Advisor. Mr. Swamy also had an opportunity to meet with members of the Indian Students Association and members of the International Students Association.

During his two month stay in Canada, Mr. Swamy will visit Nova Scotia to work on a Frontier College construction project and to visit the Coady Institute at Antigonish. He will also meet with organizations and agencies in Ottawa to talk about possible help for his



Graduate student John Paroshy is shown touching a leaf of a grape vine. In the background are the instruments used to measure the ensuing changes in capacitance and static electricity of the plant. A wire attached to a lower leaf of the plant carries information back to the monitors.

an observance of how well the plant is thriving.

The plants used in the experiment have not been observed to follow any constant reaction pattern. They do not seem to show preference for any one person, nor do they always react the same way to the same person's touch. It does maintain one pattern, however, with which many of us may share. In the morning it doesn't want to do anything and around 5:00 p.m. it performs at its best.

Despite the unknown factors it would seem that the plant does possess a high degree of sensitivity to its surroundings. Maybe it cannot comprehend the attitude of the gardener towards it, but I'm sure a few kind words of affection towards your philadendron wouldn't do any harm.

project through personnel, manpower and other resources.

"We hope that Mr. Swamy will gain maximum benefit from his Canadian experience, and experience which would benefit his people tremendously on his return to India," says Clarence Amichand who had the pleasure of conducting Mr. Swamy around campus.

PUBLICATIONS

Townsend, G. F. and Eva Crane, 1973. History of apiculture. In History of Entomology, published by Annual Reviewers Incorporated, p. 387-405. (Environmental Biology)

Szabo, T. I., 1973. Comparison of the behavioral response of queenless caged workers and nuclei of *Apis mellifera* L. towards introduced queens. Am. Bee J. 113(4): 136 and 138. (Environmental Biology)

Szabo, T. I., 1973. Relationship between weight of honeybee queens (*Apis mellifera* L.) at emergence and at the cessation of egg laying. Am. Bee J. 113(7): 250-251. (Environmental Biology)

Cho, H. J. and D. G. Ingram, 1973. Antigen and antibody in Aleutian disease in mink. II. The reaction of antibody with the Aleutian disease agent using immunodiffusion and immunoelectroosmophoresis. Can. J. Comp. Med., 37(3): 217-223. (Veterinary Microbiology and Immunology)

Carlson, H. C., J. R. Pettit, R. V. Hemsley and W. R. Mitchell, 1973. Marble spleen disease of pheasants in Ontario. Can. J. Comp. Med., 37(3): 281-286. (Pathology, Veterinary Services Branch, K-Vet Ltd. and Veterinary Microbiology and Immunology)

Long, J. R., 1973. Necrotic enteritis in broiler chickens. I. A review of the literature and the prevalence of the disease in Ontario. Can. J. Comp. Med., 37(3): 302-308. (Veterinary Microbiology and Immunology)

Yarmey, A.D., 1973. I recognize your face but I can't remember your name: further evidence on the tip-of-the-tongue phenomenon. Memory and Cognition, 1, 287-290. (Psychology)

Lange, Gordon L., Harold M. Campbell, and Eli Neidert, 1973. Preparation of substituted spiro[4.5]decan-7-ones. An approach to the synthesis of the acorenones. J. Org. Chem., 38: 2117. (Chemistry)

Sabry, J. H. and E. A. Gullett, 1973. Food in a changing society. Agrologist 2(3): 23. (Family Studies and Consumer Studies)

Nirmalan, G. P. and G. A. Robinson, 1973. The survival time of erythrocytes (DF³²P Label) in the Japanese Quail. Poultry Science 52(1): 355-359. (Biomedical Sciences)

Ramprasad, F., S. Corey and K. Ronald, 1973. The harp seal, *Pagophilus groenlandicus* (Erleben 1777). XIV The gross and microscopic structure of the middle ear. Can. J. Zool. 51: 589-600.

RESEARCH GRANT CALL

(For further information see Department Chairman)

1. The deadline for nominations for the E.W.R. Steacie Memorial Fellowship is September 1.
2. Canada Department of National Health & Welfare — Family Planning Division. Closing date for applications for research grants is April 15.

FACULTY ACTIVITIES

Professor B. L. Raktoe, Mathematics and Statistics, has been granted leave without salary to work for the United Nations at the Asian Statistical Institute in Tokyo, Japan. At the request of the U.N. he will spend the period August 1, 1973, to July 31, 1974, as an agricultural statistician with the following duties: to carry out professional training in statistics of senior professional statisticians for government service in statistical methodology and operation and in applied statistical research in various fields in Asia and the Far East. The Asian Statistical Institute is operated by the Economic Commission for Asia and the Far East. This is the second assignment Professor Raktoe has fulfilled for the U.N. Earlier he served from 1965 to 1967 as an agricultural statistician in Uruguay, South America.

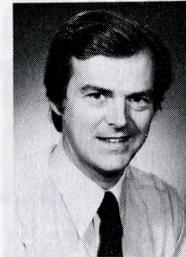
Professor K. Myers and Professor F. Gilbert, Zoology, attended the 37th Federal-Provincial Wildlife Conference in Ottawa.

Professor H. Tiessen, Horticultural Science, presented a paper on Canadian asparagus production and the need for new cultivars at the 4th meeting on asparagus breeding sponsored by Eucarpia in Versailles, France. While in Europe he also visited research stations in England, France and Germany.

Professor Frank Theakston, Engineering, recently returned from a 14 day tour of agricultural engineering establishments in Finland, Sweden, Norway, Denmark and Scotland. During the first week of his visit to Finland he attended the International Congress of Agricultural Engineers held at Helsinki where he presented a paper on snow control for agricultural structures. Professor Theakston also attended the national meeting of the American Society of Agricultural Engineers held at Lexington, Kentucky. Professor Theakston completed a term of office as director of the A.S.A.E.

Joins OVC faculty

Dr. Bruce N. Wilkie, a native of Scotland who emigrated to British Columbia with his family in his youth, has joined the faculty of the Department of Veterinary Microbiology and Immunology as an assistant professor.



Bruce Wilkie

Dr. Wilkie, after preliminary training at the University of British Columbia, came to Ontario Veterinary College and graduated with a D.V.M. in 1965. After a year in practice, he went to Cornell and secured a Ph.D. in the area of reproductive immunology. He has spent the past two years as a post-doctoral fellow at the University of Bern, Switzerland, where his research was on hypersensitivity pneumonitis.

Dr. Wilkie's area of responsibility within the Department will be immunology.

Saint Mary's University in Halifax is seeking an assistant registrar to develop and supervise the operation of a computerized registration system. Interested applicants should send a curriculum vitae and names of three referees to Dr. D. H. Gillis, academic vice-president of the university.



Cheques in the amount of \$1,000 were presented to two students winning the OAC Alumni Degree Entrance Scholarships recently. The scholarships are awarded to students obtaining high honor standing in the subjects required for admission to a degree program at OAC. Genevieve Chornenki is registered in horticultural science and Bonnie Harley in environmental biology. Shown from left: John Eccles, vice-president of the OAC Alumni Association, Miss Chornenki, Miss Harley, and OAC Dean C. M. Switzer.

University zoologists collect grouse eggs

Not putting all their eggs in one basket, a group of zoologists made 18 trips to collect grouse eggs from a 120 mile radius of Guelph.

They made the trips in response to telephone calls from people who had read about the University's grouse project in the weekly newspapers of southern Ontario.

Graduate student Alan Garbutt arranged the collection, by notifying the weeklies and offering to pay \$1 for each egg (an average size nest has 12 eggs). People who found nests called him collect from locations as far away as Wiarton and Bracebridge and as close as Freulton and Galt. One farmer refused payment for eggs . . . he said his ties with OAC were too strong for him to accept any money for anything that would benefit the University.

Grouse nests are extremely difficult to find, and no one, Mr. Garbutt said, found a nest simply by setting out to look for one. Most of the people who called were hunting morels; a few were fishermen. One nest found by a morel hunter was completely hidden, surrounded by brush under a fallen tree.

The results obtained from the grouse project, funded by the Ministry of Natural Resources, should ultimately help the Ministry in its grouse management program. In his M.Sc. study, now almost completed, Mr. Garbutt investigated the effects of daylight



Alan Garbutt, graduate student in Zoology, discusses grouse chick with Professor A.L.A. Middleton.

and cold on the birds' ovulation. At present limited experimental data are available to complement field studies of the elusive grouse.

Close to 100 chicks are now being raised in the Zoology Department's aviary. They will be used in experiments in nutrition being carried out by graduate student Don Price. He will study the effect of diets of different nutritional quality on egg production. Both students are working under the supervision of zoology professor A.L.A. Middleton.

Lamb producers meet on campus

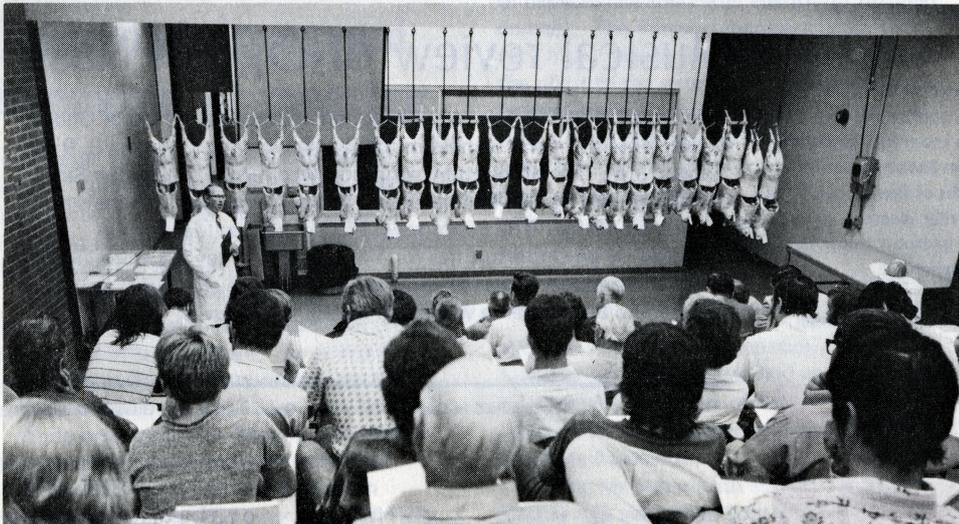
An evening meeting of members of the Western Ontario Lamb Producers Association was held on campus to study grading, carcass valuation, and types to be produced to meet today's consumer needs.

Professor W. R. Osborne, Animal and Poultry Science, conducted the session which was also attended by two representatives each from J. M. Schneider Ltd., and Dominion Stores Ltd. Government was represented by

R. P. Miller from the Livestock Division of CDA.

Several segments of the lamb industry participated in the discussions to upgrade knowledge of current trends in lamb production.

Planning for the meeting evolved from talks between Professor Osborne and members of the Association when the need for such a meeting was stressed.



Professor W. R. Osborne, Animal and Poultry Science, discusses row of lamb carcasses with members of Western Ontario Lamb Producers Association during evening clinic.

Bill Van Norman

Campus barber for 40 years

Barber Bill, a well known campus personality for over 40 years, died recently. Bill Van Norman operated a barbershop, first in Creelman Hall from 1920, then in Johnston Hall when it was completed.

It was the social centre of the campus, the only place you could go for a snack or tobacco between classes. Athletics Director Bill Mitchell, who arrived on the campus in the mid-thirties, remembers it as "the place to go."

Barber Bill was involved in everything that went on on this campus," Mr. Mitchell said. "Although he wasn't a sportsman himself, he had pictures of all the campus teams on the walls of his shop, and donated a trophy for volleyball, but his real interest, of course, was people," Mr. Mitchell told the Bulletin.

Anyone who returned to campus dropped into the barbershop where Bill would have a welcome greeting. He always remembered names, and usually an anecdote to go with the name, Mr. Mitchell said.

New grants aid research with industry

A group of University physicists has received a grant of \$34,215 from the National Research Council of Canada under their new program, Project Research Application in Industry (PRAI). The objective of this program is to provide support for university research which may make significant contributions to developments in Canadian industry.

Members of the research group are Professors J. R. Stevens (project director), F. R. Hallett, J. L. Hunt, R. W. Ollerhead, G. H. Renninger, A. L. Gray and A. Rae, all of the Department of Physics.

The aim of the research by the seven University of Guelph physicists is to demonstrate the commercial feasibility of using photon correlation spectroscopy to determine latex or rubber particle sizes and size distribution in an emulsion during polymerization. This research will be carried out in cooperation with two Canadian industries, Polysar Ltd. and Electronic Associates of Canada Ltd.

Successful completion of this two year project will enable the particle sizes and size distribution to be measured earlier in the polymerization process. This early monitoring will determine the optimum times for adding a catalyst and chemical reagents to the polymerizing mixture. This will ultimately improve quality control and increase productivity.

NEXT WEEK AT GUELPH

THURSDAY, AUGUST 2

Exhibit — NORMAN C. WALLACE COLLECTION OF HORSE BRASSES, Arts building showcase until end of August.

Radio — HEIDELBERG HI-LITES, University of Guelph news program, CJOY 1460, 6:20 p.m. Monday — Friday.

T.V. — SPOTLIGHT ON UNIVERSITY OF GUELPH, Cable 8 at 6:15 p.m.

FRIDAY, AUGUST 3

Worship — MUSLIM JUMA PRAYER, 1 p.m. Arts 315.

T.V. — SPOTLIGHT ON UNIVERSITY OF GUELPH, Cable 8 at 5 p.m.

SATURDAY, AUGUST 4

Examinations — CONCLUDE

SUNDAY, AUGUST 5

Worship — MUSLIM ZUHR PRAYER, 1 p.m. 9th floor lounge, Arts.

MONDAY, AUGUST 6

Holiday — CIVIC HOLIDAY

Job Opportunities

New Listing as of July 27, 1973

Assistant Receptionist (Part Time), Medical Services. Salary commensurate with qualifications and experience.

Technician, Animal & Poultry Science. S.G.6. Salary range: \$116 — \$154.

Technician, Environmental Biology. S.G. 5 or 6. Salary range: \$106 — \$154.

Clerk Typist, Mathematics & Statistics. S.G. 2. Salary range: \$80 — \$106.

Junior Graphic Designer (Temporary), Audio Visual Services. Salary commensurate with qualifications and experience.

For further information see Bulletin Boards or call Extension 3058 or 3059.

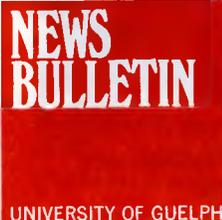
PERSONALS

FOR SALE — '70 Datsun station wagon, Bradford stereo set, 2 pairs cross country skis & poles, 1500 watt step up transformer, 1 set of mist electric hair curlers; Ext. 2603 or 2631, or 824-1571; '68 AMX V-8 automatic, 843,3588; full set of drums, 823-2779; Queen size mattress, 821-2133; car top carrier for large model, Ext. 2569 or 822-9994; Peugeot 204, 822-4359; Man's Italian 10 speed bike, 22" frame, Ext. 3625 or 821-0423; 4 new C78-15 Goodyear polyglas tires for Volvo, 856-9630; 2 burner plug-in stove plus oven, 822-2964.

HOUSING — For rent, 2 rooms with shared bathroom and kitchen, 821-8412; for rent, large town house, with 2 bedrooms, 2 bathrooms, all appliances, Ext. 3621 or 821-7593 after 5:30 p.m., ask for Anna; for rent one room in 3 bedroom apt., 78 Cedar St., Ext. 3728 or 821-4174; Wanted, 2 bedroom accommodation, furnished, for visiting professor and family required for months of September and October, 1973, contact Dr. Garibaldi, Ext. 3445; Tent trailer, sleeps 4, 822-2964; 2 bedroom apt. to share, 821-4043; unfurnished 3 bedroom house by faculty member for 1-year, Tom, Ext. 2250 or 578-0783, (Kitchener).

MISCELLANEOUS — Babysitter required in University area, starting September, 11:30 — 5:00 weekdays, 821-8774.

The News Bulletin is published every Thursday by the University of Guelph's Department of Information. News items must reach the Information Office, Room 361, McLaughlin Library (Ext. 3863) by noon Friday. Articles and news items may be quoted or reproduced in full.



Library hours

McLAUGHLIN LIBRARY

Monday — Friday 8:00 a.m. — 9:00 p.m.
Saturday (except Aug. 4 when hours are 9:00 a.m. — 9:00 p.m.) 1:00 p.m. — 9:00 p.m.
Sunday 1:00 p.m. — 9:00 p.m.
Full Reference Service, Monday — Friday only, 8:30 a.m. — 5:00 p.m.

Holiday Hours

Civic Holiday, Monday, August 6 1:00 p.m. — 9:00 p.m.
Labour Day, Monday September 3 1:00 p.m. — 9:00 p.m.
Regular hours resume on Monday, September 10.

O.V.C. BRANCH LIBRARY

Monday — Friday 9:00 a.m. — 5:00 p.m.
Saturday 1:00 p.m. — 5:00 p.m.
Sunday 1:00 p.m. — 5:00 p.m.

Holiday Hours

Civic Holiday, Monday, August 6 Closed
Labour Day, Monday, September 3 Closed
Regular hours resume on Monday, September 10.

August pool hours

The Athletic Centre will be open from 8 a.m. until 9 p.m. weekdays until September 2, except for Fridays, when it closes at 6 p.m. Saturdays and Sundays the hours are 2 — 4 p.m. Pool hours follow:

August 2 — 3, early bird dip 7:30 — 8:30 a.m.; noon swim 12 — 1; afternoon dip 5 — 6.

August 4 — 6, recreational swim 2 — 4; family swim 3 — 4.

August 7 — September 3, Monday to Friday, early bird dip 7:30 — 8:30; noon swim 12 — 1; afternoon dip 5 — 6; Monday to Thursday only, family swim 7:30 — 8:30; Saturday and Sunday, recreational swim 2 — 4; family swim 3 — 4. Children must be accompanied in the pool by an adult.

The pool will not be open Saturday, August 11.

Musical review of Ogden Nash

The Poppytown Player's last production is a musical review of Ogden Nash's poems. It will be held in the drama workshop, August 8, 9 and 10 at 8 p.m. The production, scripted and directed by Gordon Sim features music by Sue McSherry and Bruce Westheuser. There is no admission charge. The Poppytown Players are a student group financed by an Opportunities for Youth grant. They have produced plays and puppet shows for children and adults in the parks, at the library and at the drama workshop during the summer.

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