



Turning the sod: left to right, Mr. Malcolm, Mr. Johnson, Mr. Worton, Mr. Newman, Mr. Henderson and President Forster.

## Swine Centre sod turning

The sod turning ceremony for the new multi-million dollar Swine Research Centre at the Arkell Research Station had to be moved indoors last Thursday. Sod was taken from the building site and brought into the machinery shed for the occasion. Nevertheless, despite the dampness, a large number of officials and visiting dignitaries were on hand to mark the start of this research building.

The new facilities, being provided by the Ontario Ministry of Agriculture and Food and constructed through Government Services, will enable University staff to carry out research on swine production as well as in agricultural engineering on a year 'round basis. Completion of the centre is expected by April, 1981.

Dr. Clare Rennie, Assistant Deputy Minister, Education Research and Special Services Division for OMAF and former chairman of the University's Department of Animal and Poultry Science, was chairman of the proceedings. The two main speakers were the Honourable Lorne Henderson, Minister of Government Services and the Honourable William Newman from OMAF. Speeches were also given by University President D.F. Forster; J. Archie MacRobbie, Reeve of Puslinch and Samuel Bowman, Reeve of Pilkington who stood in for Laurence MacKenzie, Warden of Wellington County.

Present on the platform were Lawrence Argue, consulting engineer, whose firm was associate architect for the project; John Ball of Ball Brothers Ltd., Kitchener, the project's construction contractor; Jim Donaldson,

Ontario Swine Breeders Association; Howard Malcolm, chairman, Ontario Hog Producers Marketing Board; Robert M. Murray, vice-chairman, Agricultural Research Institute of Ontario; Harry Worton, MPP for Wellington South and Jack Johnson, MPP for Wellington/Dufferin/Peel.

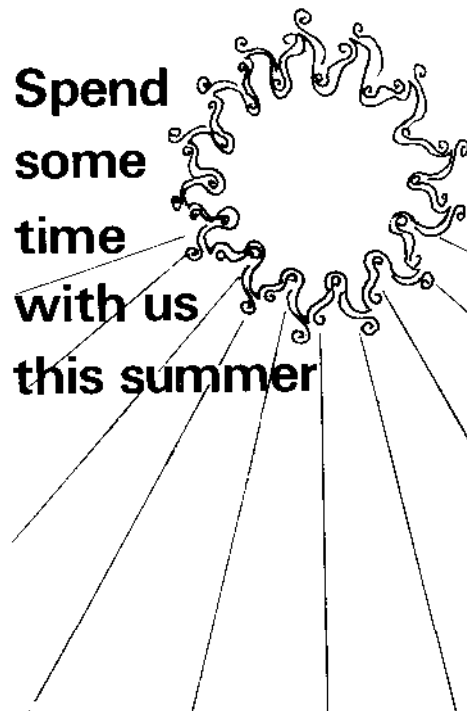
At the invitation of Mr. Henderson, all the speakers were involved with the turning of the sod. They and other platform guests and Professor C.M. Switzer, Dean of the OAC and long-time swine manager for the OAC, Jack Slinger, were presented with miniature gold spades as mementoes of the occasion.

The centre, as Mr. Henderson indicated in his speech, "will be the only Ontario government facility of its kind, and will provide excellent accommodation for University of Guelph staff whose studies ultimately benefit pork producers throughout the Province."

Mr. Newman said that agriculture must continue to make advances in research and technology to meet the challenges of the future. He pointed out that Ontario has the largest provincial agricultural research budget in Canada, totalling \$22.6 million.

Referring to proposals for research at Arkell on both solar energy and the generation of methane gas from livestock waste, Mr. Newman said, "I hope this goes a long way toward solving our energy problems in the future."

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This July, when some of the cows around Guelph seem star-struck and the chickens develop an unusually sedate or seductive gait, you will know that Summer Campus '79 is under way.

Murray Creed, producer of CBC TV's "Marketplace," has chosen a local farm as the shooting site for a course on television production which he is teaching at Summer Campus this year.

The Summer Campus program this year takes place July 9 to July 13 and July 16 to July 20. Now well-established, this unique vacation program for individuals and entire families provides an exciting and unusual combination of relaxation and learning.

### Distinguished Visitors

Harry Boyle, distinguished writer, broadcaster and former chairman of the Canadian Radio-Television and Telecommunications Commission (CRTC), is returning for a second year as writer-in-residence. His informal yet informative approach to teaching, which is characteristic of the summer vacation program, was well-received by members of last year's creative writing class. Many have continued to meet as a writing group throughout the past year and are returning to Guelph again.

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# Swine Centre will serve as model

*Continued from page 1.*

President Forster expressed the University's appreciation to the Ontario government for enabling the construction of the building in "these times of constraint." He spoke of the contract between the University and the Ministry of Agriculture and Food, which is "unique in Canada" and of the approximately \$13.4 million provided by OMAF last year for University research.

The University operates four agricultural research stations under the contract, and President Forster saw the new addition as extremely important because it will complete the series of new facilities required for animal research on the research stations.

He reminded his audience that the University has dairy cattle and beef cattle research stations at the Elora Research Station and

now, at Arkell, will have a swine centre in addition to the poultry research centre. In effect, he concluded, "the Ministry of Agriculture and Food facilities, along with the new OVC field station, mean that the University of Guelph has excellent facilities for research on the animal industry for Ontario."

The swine research centre, which will replace outdated and inadequate facilities, will consist of two buildings — one approximately 54,000 square feet, the other approximately 3,600 square feet in area — and a five-tank waste handling system. The larger building will have three wings: a breeding/gestation wing, farrowing and weaning wing and a growing and finishing wing. These will house approximately 1,500 pigs in a total of 24 rooms. The central core of the building will contain field laboratory and experimental procedure facilities,

feed and general storage rooms, loading dock, staff and meeting rooms.

The smaller building will house up to 300 pigs and provide facilities for the evaluation of waste handling systems. The tank system will provide for storage and treatment of manure in liquid form and will also be used for manure treatment research.

Many innovative labor-saving and energy-saving features will be incorporated into the centre's design. When ultimately completed the project will include an electronic pig feeding system, an air-to-air exchanger to reclaim ventilation heat losses, a full-scale methane generating unit using waste produced by the pigs and a solar heating system. Yorkshire and Landrace breeds will predominate at the facility, and plans are under way to have this centre serve as a model for the production of nutritious pork without the aid of drugs or antibiotics. □

Spend some time *Continued from page 1.*

Willson Woodside's course, "Issues Behind the Headlines," provides a chance to discuss such major current events as the Arab-Israeli conflict, SALT agreements and Sino-Soviet relations, with an eminent journalist and historian. A world-traveller and past political commentator for the CBC, Prof. Woodside stresses the importance of knowing the background behind such events.

Another distinguished visitor, children's writer Jean Little, is sharing her enthusiasm and knowledge about other authors with parents, teachers and interested adults. "First-rate children's literature," says the prize-winning author, "provides exciting reading which youngsters can return to and grow up with over the years and even adults will enjoy reading."

Solar energy specialist, Joe Umanetz, and Dr. Allen Bass of the McMaster Medical Centre are giving courses which were popular when offered through Continuing Education this winter. For people who want practical information and training to build a solar system, Mr. Umanetz's course is ideal. An expert on sports medicine, Dr. Bass discusses prevention and treatment of sports injuries.

Two courses in applied psychology are offered by Family Studies professor Sam Luker. In "Suddenly Single" and "Games People Play" the psychologist draws upon his extensive clinical experience and research. At a time when dollar-stretching is becoming a necessity, courses on family nutrition and personal finances should prove invaluable. French language lessons, winemaking, home landscaping, acting, farming, apiculture and calligraphy are also being offered in this year's vacation program.

## Youth Program

Innovative courses and a "hands-on" approach to learning characterize the Youth

Program at this year's Summer Campus. Having fun and gaining new skills are the main ingredients of a successful children's camp, says Paul Young, director of Youth Programs. If children can do both simultaneously they discover just how enjoyable an experience learning can be, and the impact of this realization lasts long after summer has ended.

Sports, games, arts and crafts and a daily swim are, as always, an integral part of all three youth programs. Specialists, such as Sean Pennylegion of the YM-YWCA Task Force on Children's Activities, co-ordinate the programs and, with University faculty and graduate students, lead the two-hour workshops each day.

At Scamper Camp for three to five year-olds, singing, clapping and the sounds of simple instruments will be resounding this year as the youngsters enjoy Orff music. This method for introducing young children to music, encourages their participation and builds up their sense of rhythm. Since these children are also being informally introduced to the French language, "Alouette" and other popular French songs will be included.

Some of the older children will have a hard time choosing from the five workshops offered for the six to 10 and 11 to 15 year-old age groups. For the six to 10 year-old who enjoys the outdoors and a chance to make kites, collages, puppets, the summer art activities workshop is ideal. The more musically inclined will appreciate a chance to learn about the history of instruments, experience workshops in choral and Orff music, and listen to guest musicians.

Painting and drawing excursions, under the direction of Charlotte Reinhold, owner of the Artery School of Arts and Crafts, are available for the oldest age group.

Journalism, mime and science workshops are offered for both groups of older children, with the level of challenge varying accordingly. In addition to encouraging children to write,

the journalism workshop provides an overview of the typesetting, sizing, layout and paste-up which are an integral part of the newspaper business. The silent art of mime will be enhanced by costumes and make-up, and give the children a chance to perform newly acquired skills.

Budding scientists in the younger age group will be able to explore the science laboratories in astronomy, biology, animal science, human kinetics and physics to gain a bird's eye view of research in the world of science. Older children will receive a more in-depth approach in two separate workshops on computer science and astronomy and in animal science.

Children and adults may attend Summer Campus for one week or two. For full information, contact the Office of Continuing Education, Johnston Hall, Ext. 3956. □

## University Canada

Five Canadian geographers will jointly receive a \$3.5 million program grant from the Humanities and Social Science Research Council of Canada. The largest ever made to academic geography in Canada, the grant will be used to produce an original historical atlas of the development of Canadian lands from prehistoric times to the 20th century. The task force of researchers includes professors R. Louis Gentilcore, McMaster, Cole Harris, University of British Columbia, Thomas McLlwraith, and William Dean, University of Toronto and John Warkentin, York University. The project will take six years, during which time three volumes will be researched, compiled, edited and published in two editions, one in English and one in French.



York's libraries are going micro. All the York Library acquisitions since 1974 will be listed on computer output microform (COM). The card catalogues will be closed to any additions or changes, although they will still be consulted by users seeking materials acquired before 1974. The new system is expected to be in full operation by September.

# Part-time enrolment increases

Guelph's spring semester has attracted a higher number of part-time students than projected, but not quite as many full-time students.

Figures released by the Office of the Registrar on Friday show that 982 undergraduates are studying full-time and 766 are studying on a part-time basis. In addition, some 620 graduate students are expected to be registered.

While there are 150 fewer full-time students than expected, part-time students number 66 above target. Full-time enrolment in two programs, the B.Sc.(Eng.), where 20 students registered, and the B.Sc.(H.K.) with 27 students, were up over targets of 12 and 22 respectively and above the 1978 figures of 15 and 22 respectively.

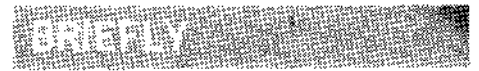
The drop in full-time enrolment was mainly accounted for by fewer in-course students than expected deciding to take courses this spring. This may have been due to a better summer job market than expected, says Assistant Vice-President, Academic, Professor Jim Stevens, and the fact that it is important for students to get as much employment experience and as many employment contacts as possible before graduation.

Part-time enrolment in the B.A. program, 373, and the enrolment of 272 students in programs other than B.A. and B.Sc. also exceeded targets of 345 and 215 respectively. Part-time enrolment in the B.A. and B.Sc. programs in 1978 was 346 and 139 respectively. Seventeen part-time students are enrolled in courses in Guelph's new general studies program.

Full-time semester 1 enrolment held nearly steady with 169 students, only 15 short of target. The first full-time general studies students were included in this semester's enrolment. They numbered 15.

First-year enrolment by degree programs is as follows: B.Sc.(Agr.), 21; B.Sc.(Eng.), 1; B.A. Sc., 12; B.A., 57; B.Sc., 41; B.Sc.(H.K.), 9; unclassified, 13, and general studies, 15.

Total enrolment by program is as follows: (target figures are in brackets): B.Sc.(Agr.) 67 (90); B.Sc.(Eng.), 20 (12); B.L.A. 2; B.A. Sc., 85 (95); B.Comm., 19 (11); B.A., 524 (640); B.Sc. 210 (235); B.Sc.(H.K.), 27 (22); unclassified, 13 (27) and general studies, 15. □



**THE DIRECTOR** — of Animal Health at the Metropolitan Zoo, Toronto, Dr. William Rapley, will be the guest speaker at the last meeting for this season of the Guelph Field Naturalists. Dr. Rapley, who is an OVC graduate will speak on "Behind the Scenes at the Metro Zoo." The meeting will be held at the Arboretum Centre, Thursday, May 10 at 7:45 p.m. Shuttle service will be available from the bus stop in front of the University Centre.

**ENTRY FORMS** — for the Faculty Club's annual golf tournament Thursday, June 21 at Victoria Park Golf Club, east course, have been circulated to members. Tee-off times, commencing at 1 p.m., and four-somes will be organized by the golf committee unless otherwise notified. The cost is \$18.50 per person and includes cocktails at 6 p.m. followed by a roast beef dinner. Entry forms should reach the club manager before Friday, June 15. The tournament is limited to 60 people.

**THE 11TH ANNUAL** — Eastern Canada Pesticide workshop will be hosted by the Provincial Pesticide Residue Testing Laboratory, Ontario Ministry of Agriculture and Food, on campus, Tuesday, May 15 to Thursday, May 17. For more information contact Brian Ripley at Ext. 2449.

**SUMMER TOURING** — with the University Centre shuttle service includes five trips to Exhibition Stadium, Toronto, to see the Toronto Blue Jays, three to Stratford for the Shakespearean Festival plays and one to Hamilton Place for a performance by Liberace. All tickets may be reserved at the central box office in the courtyard of the University Centre, Ext. 3940. The price of the ticket includes transportation, and the bus leaves at the front door of the University Centre. Watch the "Next Week at Guelph" column in the *News Bulletin* for each event.

**QUEBEC VIEWERS** — will have an opportunity to hear about winemaking from Professor Cyriel Duit-schaever, Food Science, on Sunday, May 20. He will be a guest on the program, "Semaine Verte," broadcast at 12 noon over the CBC French-language network from Montreal.

**THE FACULTY** — of the School of Human Biology was pleased to hear that Dr. Erling Asmussen received the 1979 Honor Award from the American College of Sports Medicine for his work in applied physiology. Dr. Asmussen spent part of the winter semester, 1978, as a visiting professor in the School of Human Biology.

**WOMEN IN CRISIS** — is currently holding training sessions for anyone interested in doing volunteer work with the organization. Classes are held one evening per week from 7 to 10 p.m. For more information telephone 836-1110 and leave your name and number.

**NOMINATIONS FOR** — the annual Guelph Arts Council Heritage Awards must be received by Tuesday, May 15. The Council honors those who have made outstanding contributions to the preservation, restoration or development of heritage properties, or who have put new life into older buildings in the City of Guelph. For further information contact Virginia Gray, Office of Continuing Education, Ext. 3958.

## Veterinarians return from St. Vincent

Veterinarians from the OVC have returned from the volcanic-stricken island of St. Vincent. (See story in the *News Bulletin* of May 3.)

The Guelph team flew to Barbados by commercial air carrier and then chartered a Trilander aircraft from Aero Services to fly them and 46 boxes of drugs to St. Vincent. They landed 12 miles from the volcano and were met by Dr. Brock Clelland, a Canadian veterinarian serving with CUSO, and representatives of the local department of agriculture.

Members were then divided into teams, and one group took a route up the leeward

coast past the police checkpoint, which was close to the still active volcano.

Animals grazing along the roadside seemed to be in a reasonable state of health, says Dr. Tom DeGeer. The veterinarians saw cattle grazing on the ash-infested grass, but they noted that it seemed to be passing through them without impacting in the intestines. Some chickens had been killed, presumably by dogs for food, and cattle and donkeys, which had not been released from their tethers when the inhabitants left in haste, had fallen victim to water deprivation.

The OVC team took antibiotics, wound spray, dressing and worming medicine with them. The latter was a fortunate addition, for the veterinarians spent most of their time worming animals. "It seems that the native people attribute every animal's ailment to worms," he explained.

Dr. DeGeer says that the animals on the island will probably have to be slaughtered to feed the 16,000 to 18,000 refugees. Groups of natives had begun to round up the stray animals on the northern end of the island while the Guelph team was there. □



Claude Bissell, distinguished Canadian scholar and former president of the University of Toronto from 1958 to 1971 has joined the Department of English Language and Literature as a short-term visiting professor. (See story in the April 12 issue of the *News Bulletin*.)

During his stay, Prof. Bissell will give two public lectures under the general heading, "The Young Vincent Massey, 1887-1926", in addition to visiting classes and talking to students and colleagues.

The date of Prof. Bissell's first lecture, "The Man of Letters and Patron of the Arts," previously scheduled for Friday, May 11, has been changed to Tuesday, May 15. The date of his second lecture, "The Shaping of Public Careers," remains the same, Thursday, May 17. Both lectures will take place at 12:10 p.m. in Room 107 of the Arts building. □

Dr. John Woods, dean of the faculty of humanities at the University of Calgary, becomes president of the University of Lethbridge July 1. Current president, Dr. Bill Beckel, is to become president of Carleton University.

A former Lethbridge school teacher is the University of Lethbridge's fourth chancellor. Islay Arnold took office in March and will be installed during May convocation ceremonies.

# Conference on use of animals

Guelph will host a conference, "Ethical Issues Concerning the Use of Animals in Agriculture and Scientific Research," at the Arboretum Centre, June 12 to June 13. Professors Hugh Lehman, Philosophy, Frank Hurnik, Animal and Poultry Science, and J.D. Schroder, Pathology, are joint co-ordinators of the conference, and the co-operation of the three Colleges is a significant factor, say the organizers.

Professor Peter Singer of Australia, author of the book, *Animal Liberation*, will be one of the speakers. He suggests that experiments should not be carried out on animals that we would not do on humans. Professor Jan Narveson of the University of Waterloo, will be on hand to retort Prof. Singer's argument as will Professor Michael Fox of Queen's University.

Cruel treatment of animals in intensive farming is the concern of another speaker, Mrs. Ruth Harrison, author of *Animal Machines*. These are but four of the 10 major speakers.

The conference will be divided into four sections, with two to three papers presented at each. A one-hour presentation will be followed by questions from the floor.

While the Canadian Council on Animal Care recently issued new guidelines placing certain ethical restrictions on the use of animals, Prof. Lehman points out that it is still a troublesome issue, and organizers expect that the conference will be monitored closely by scientists and humanitarians across the country.

Anyone seeking further information should call Prof. Lehman at Ext. 3221 or Ext. 3885.[]



**Foreman/Forelady**, Housekeeping. (2 positions). Salary Grade 008. Salary range \$221.96 — \$294.09.  
Custodian 1, Housekeeping. Job rate \$4.87. Probation rate \$.20 per hour lower than job rate.  
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Stenographer, Nutrition. Salary range \$141.84 — \$209.38.  
**Assistant Manager**, Employment and Training Services. Salary commensurate with qualifications and experience.  
Co-ordinator, Training and Development. Salary commensurate with qualifications and experience. Contractually limited appointment of one year.  
Technician, Grant Position, Botany and Genetics. MTS IV. Salary range \$221.96 — \$319.62.

For further information please see bulletin boards or call Ext. 3058 or 3059.

## Farm animal welfare reflects interest of society, producers

Does a laying hen suffer unnecessary stress because it spends its entire life in a cage? Is it cruelty to lock a pregnant sow in a crate too small for her even to turn around? What about the welfare of cattle confined in a pen with little opportunity for exercise?

Questions like these echo the concern that many people have for the welfare of farm animals in today's intensive livestock production systems. They represent legitimate concerns, says animal scientist J.F. Hurnik, which are no less important to the farmer than they are to the various animal welfare groups in our society.

Prof. Hurnik notes that it is sometimes easier to emphasize only the negative aspects of intensive livestock production. A fair discussion of animal welfare, however, must respect the vital interests of both society and the producers. It must also mention the ways in which confinement housing improves the well-being of farm animals.

Prof. Hurnik made these remarks at a recent conference on "Livestock-Intensive Methods of Production" which was sponsored by the Animal Welfare Foundation of Canada. In his presentation, the professor pointed out that confinement housing is just one managerial change initiated in response to society's rising demand for food. Those who advocate complete vegetarianism or the elimination of animal agriculture perhaps do not realize how dependent they are on animal products. New potential risks could be involved in their substitution, says the University of Guelph scientist. The whole range of domesticated animals has been developed through selective breeding under the direct control of humans. Abolition of these human controls would unavoidably lead to rapid reduction and probably extinction of many bloodlines in animals and poultry.

If an animal is fully adapted to a confined system, notes Prof. Hurnik, the amount of suffering due to physical restriction is reduced.

We think the crated sow is under stress because we would be unhappy in a similar situation. "While there are many similarities in human and animal responses," says Prof. Hurnik, "we cannot strictly apply our judgements as human beings."

Confinement housing is deliberately restrictive for both economic and health reasons. The sow might indeed prefer a larger pen, but use of a farrowing crate prevents her from lying on and crushing her newborn piglets. It is a value decision whether the resulting reduction in piglet mortality justifies the mother's confinement.

The animals on Grandfather's farm may have had unlimited freedom of movement, but theirs was far from an existence free of suffering. Laying hens kept in cages have constant access to a balanced diet and good water. They are free from the stress of fighting or competing for food. Diseases which ran rampant in the barnyard are virtually non-existent in the confined systems of today. Intensified animal production necessitates more emphasis on sanitation and disease prevention because of the greater economic loss associated with health problems.

Prof. Hurnik adds that some critics of contemporary livestock farming emphasize exclusively the economic concern of producers. It is true that the changes in technology they initiate are an attempt to increase production and reduce costs. In a society based on supply and demand, says Prof. Hurnik, that strategy cannot help but benefit consumers as well in the form of lower food prices. "Any suggestion that feed costs are the largest item and lessening the intensity of production would not affect food prices is a mistake," he says. "We should realize that the reason why feed is now the major production cost is because confinement rearing and mechanization have largely reduced other cost components."

Economic performance goes hand in hand with good production performance, which Prof. Hurnik cites as a good indicator of gen-

eral animal health and well-being. An animal that is suffering either physically or mentally will seldom perform well. It is certainly to the producer's benefit to avoid any unnecessary stress, and such is the case in most farming operations. As a general rule, notes Prof. Hurnik, good livestock producers do not need regulation.

Animal welfare standards are necessary only for those few producers who have a limited knowledge of animal behavior or low concern for animal well-being. Canada relies on the Animal Cruelty Act to provide this regulation, while several other countries have gone much further to initiate legislated codes or recommendations for the welfare of animals. In Europe there is particularly strong pressure to create a set of common regulations which would be imposed internationally on all countries exporting animal products.

Should Canada get involved in the future elaboration of such international standards, suggests Prof. Hurnik, it is essential that they be based on a maximum of scientific evidence and a minimum of subjective bias. "The moral principle of agricultural practice relies on a higher priority for human welfare as compared to animal welfare. Under these conditions, the search for technology which will minimize discomfort and potential stress and, at the same time, maximize production is perhaps the only realistic way to express concern for the welfare of farm animals." □

**THE INTERNATIONAL** — Development Research Centre is sponsoring a symposium for Canadian scientists at the Ontario Science Centre May 10 to May 13. Among those attending will be Professor John Cairns, Director, Centre for International Programs.

**AWARENESS WEEK** — for the Big Sisters Association of Guelph is on now, until Saturday, May 12. Anyone interested in becoming a Big Sister or wishing further information, contact Lin Coburn, Ext. 3632.

Media Day Visitors: left to right, Prof. Wall, Prof. Brooke, Ros Guggi, Kitchener-Waterloo Record and Richard Longley, associate producer of the CBC-TV program, "Science Magazine."



## School of Human Biology Media Day

The School of Human Biology opened its doors to members of the media April 26, providing newspaper, magazine, radio and television personnel with a first-hand overview of the work in the School.

Director John Brooke welcomed the visitors, including many on-campus people, to the School's first-ever Media Day. In his introduction, Prof. Brooke explained that the School works to reveal the biological bases which describe and account for human behavior. The goal is to understand the behavior and optimize the well-being of humans through knowledge gained by a study of both evaluatory and functional biology.

Visits included a tour of Professor Jack Charteris's hominid functional anatomy laboratory. Prof. Charteris is in South Africa this month, but Prof. Brooke and research associate Nancy Ditchfield explained how research is focussing on understanding the series of engineering modifications to man's shape necessary for him to achieve an erect bipedal posture.

Professor Jim Wall's walkway in the biomechanics unit received considerable interest. The walkway measures the time and position of contact of the feet during walking. The technique is used to assess disability in a number of pathologies, including hemiplegia and osteo-arthritis of the hip.

Some visitors enjoyed the opportunity to "listen" to themselves as Professor Evelyn Bird taped them to a biofeedback machine in the psychokinetics unit. Research supporting the development of programs for the elimination of psychosomatic illness and the attainment of high-level performance through psychological self-control techniques is being undertaken in this laboratory.

Professor Len Cooper's research is in exploring movement therapy as an alternative to medication in controlling child hyperactivity. He showed a videotape of the progress made by hyperactive pre-schoolers in a program, conducted at the School, where structured play and operant behavior modification teach children to pause and think.

Professor Terry Graham explained preliminary research indicating that moderate levels of alcohol coupled with mild cold stress impair body temperature regulation, the ability to accurately perceive the true stress of the environment and, hence, cold survival.

Professor John Powell, screened parts of the recently-completed film on the successful management of physical activity during middle age. Members of Guelph's Cardio-Vascular Club were featured in the film, which is expected to be available for on-campus viewing next month.

Prof. Brooke and laboratory co-ordinator Brian R. Goslin explained some of Professor Bob Webb's work in the ergonomics unit. Prof. Webb, who was lecturing in the Maritimes at the time, is conducting research in a comparatively new area of interest in North America, the science of man at work. Visiting journalists were particularly interested in hearing how the School's information program assures that research findings reach and benefit people in the work place. □

Hunt, J.L. and J.D. Poll, 1979. "Infrared Spectra of Liquid and Solid DT and T<sub>2</sub>" *Chem. Phys.* 70(04): 1581-1584 (Physics).

Krishnan, T., W.C. Duer, S. Goldman and J-L. Fortier, 1979. "On the Use of Dilution Calorimetry in the Study of Hydrogen-bonding Self-association Reactions: Benzoic Acid in Benzene," *Can. J. Chem.* 57(5): 530-537 (Chemistry).

Marshall, L.E., 1979. "The 'Shape All Light' in Shelley's *The Triumph of Life*," *English Studies in Canada* 5: 49-55 (English Language and Literature).

Tomes, D.T., 1979. "A Tissue Culture Procedure for Propagation and Maintenance of *Lotus corniculatus* Genotypes," *Can. J. Bot.* 57: 137-140 (Crop Science).

Waterston, Elizabeth, 1979. "Crawford, Tennyson, and the Domestic Idyll," and "Crawford's Achievement," in Frank Tierney, ed., *The Crawford Symposium*, Ottawa, University of Ottawa Press, pp. 61-78, pp. 137-138 (English Language and Literature).

## Grouse eggs needed

University zoologists are again this year requesting the help of the public in collecting grouse eggs for their research program. Because of the great difficulty in locating the eggs of the Ruffed Grouse, researchers have for several years relied on the help of farmers, fishermen and naturalists to report nests.

Anyone who locates a nest of Ruffed Grouse eggs within a 125-mile radius of Guelph is asked to leave the site undisturbed and report the finding to one of the following numbers: during office hours, Mrs. Betty Campbell, Zoology, Ext. 2703; out-of-office hours, Professor A.L.A. Middleton, 836-3033 or Patrick Beckerton, 824-9848.

The eggs will be picked up and brought for hatching to the aviary at the University where they will receive the best possible care. Birds raised from eggs collected as a result of this annual public appeal have allowed researchers to make a number of significant findings relating to the reproductive biology and nutrition of grouse.

The number of eggs collected in an area is not sufficient to harm the local grouse population. In an average spring, about 125 eggs are collected from southwestern Ontario. Because nests are difficult to find and identify, it is rare to have more than one nest reported in any one area.

The efforts of those who locate nests will be rewarded with one dollar for each egg. □

Two philosophy professors are authors of books in the New American Philosophical Quarterly Library series. Professor John Leslie has written the 223-page *Value and Existence* and Professor Hugh Lehman is author of the 177-page *Introduction to the Philosophy of Mathematics*. Both volumes were published by Basil Blackwell, Oxford, England.

*Sociobiology: Sense or Nonsense*, a 400-page volume by philosophy professor Michael Ruse has been published by D. Reidel Publishing Company, Dordrecht.



The manager of the Faculty Club for the past two and one half years, Bob Desautels, left, introduces the new manager, Bill O'Brien at a recent farewell party for Mr. Desautels.

## Languages students receive grants

The Department of Languages encourages its students to spend some time studying abroad or in Quebec in order to become more familiar with the language or languages of their choice. This is carried out with the help of grants offered by the various governments and their cultural institutions.

This year, the Department has received grants for a number of students enrolled in courses offered in the French and German Sections. Peter Leslie, majoring in French, has been awarded a "Bourse d'Etudes Universitaire" by the French government. This bourse will enable him to pursue his M.A. studies in Strasbourg, France, for the year 1979-1980 and, if he wishes, for 1980-1981. Sandra Elliott and Susan Sick, who are majoring in German, received grants from the German Academic Exchange Service (DAAD) to study at the University of Freiburg, West Germany this summer, and Richard Straub, another German major, received one of the few Goethe House stipends to study in Luneburg, West Germany, for eight weeks.

Three more students were selected to participate in the 1979 Student Work-Summer Program (WSP) in Germany. Four more students from the German Section have been accepted at the University of Kassel which is twinned with Concordia University and offers programs geared to Canadian students; one of them will continue studying for a semester at the University of Mannheim. □

## Adolescent sexuality conference

Family Studies professor Ed. Herold contends that we need to be more aware of changes in teenage sexuality that have occurred in recent years. For instance, adolescents are engaging in premarital intercourse and are doing so at younger ages, and there is a notable increase in unwanted pregnancies among adolescents in Canada.

These factors precipitated the upcoming conference, "Adolescent Sexuality — A Need for Education and Understanding." The two and a half day conference is designed to bring together professionals involved in sex education and family planning programs, explains Prof. Herold. By dealing with practical concerns, the conference will assist educators, health professionals and social workers in improving programs that are presently being offered to adolescents.

Although sex education has been taught in schools for some years now, many teachers still lack the confidence to do a good job, says Prof. Herold. Several organizations, such as the Ontario Federation of Women Teachers, have recommended that teachers should be offered courses in sex education. The importance of providing such education cannot be overlooked, stresses Prof. Herold, who says this conference, by providing further insights into the teaching of sex education, should enable teachers to deal with this subject more effectively.

Prof. Herold points out that sexuality entails more than sex and birth control, so in addition to dealing with such issues as birth control and pregnancy, workshops are also scheduled to deal with communication with

teens, sexuality and the mentally handicapped, self-esteem, personal values and adolescent sexuality and the family. There will also be a workshop on male involvement with contraception.

The conference, sponsored by the Department of Family Studies, has been planned by a diverse group of professionals, and it is expected that the participants will come from many fields. Invitations have been sent to school boards, family planning clinics, social service agencies and physicians. The importance of the conference is indicated by the granting of 12 hours of study credits by the Ontario Medical Association to those physicians who attend.

The government's role in family planning and sex education will be presented in the keynote address, June 11, by Ontario's Minister of Health, Dennis Timbrell.

Registration begins June 11 at 7 p.m. in the foyer of the Physical Science building, outside Room 105. The conference continues to June 13.

Prof. Herold and his colleagues feel it is important to provide information on research in adolescent sexuality to educators, but it is equally important not to neglect the educational needs of parents who may want help in discussing these issues with their children.

More information may be obtained from the Office of Continuing Education, Johnston Hall, Ext. 3958. □



Paul Boutet, second from right, was the first recipient of the Consul General of Belgium Prize, awarded to the resident of la Maison Française who has made the most worthwhile contribution to student life during the preceding academic year. Attending the presentation are, left to right, Charles Goubau, program director, Maison Française, R.P. Gilmor, Provost, L. Adams, co-ordinator for French Studies, Professor H. Clark, Vice-President, Academic, M. F. V. De Wilde, Consul General of Belgium and Marie Goubau, program director, Maison Française.



Greenwood, B. and R.G.D. Davidson-Arnott, 1979. "Sedimentation and Equilibrium in Wave Formed Bars: A Review and Case Study," *Canadian Journal of Earth Sciences* 16: 312-332 (Greenwood: University of Toronto; Davidson-Arnott: Geography).

Makinde, A.A. and B.N. Wilkie, 1979. "Humoral and Cell-mediated Immune Response to Crude Antigens of *Dermatophilus congolensis* during Experimental Infection of Rabbits," *Can. Journ. of Comp. Med.* 43 (1) January: 68-77 (Veterinary Microbiology and Immunology).

Murtar, A.J. and S.J. Slinger, 1979. "A Study of the Chemical Binding of Allyl Isothiocyanate with Thyroxine and of the Effect of Allyl Isothiocyanate on Lipid Metabolism in the Rat," *Can. J. Physiol. Pharm.* 57:141. 385 (Nutrition).

Tarzi, J.G. and R. Protz, 1979. "Increased Selectivity of Naturally Weathered Biotites for Potassium," *Soil Sci. Soc. of Amer. J.* 43(1): 188-191 (Land Resource Science).

Wilkie, B.N., F. Caoli and R. Jacobs, 1979. "Bovine Lymphocytes: Erythrocyte Rosettes in Normal, Lymphomatous and Corticosteroid-treated Cattle," *Can. Journ. of Comp. Med.* 43(1) January: 22-28 (Wilkie and Caoli: Veterinary Microbiology and Immunology; Jacobs: Pathology).



Ron Elmslie has assumed the duties of the development supervisor at the Institute of Computer Science.

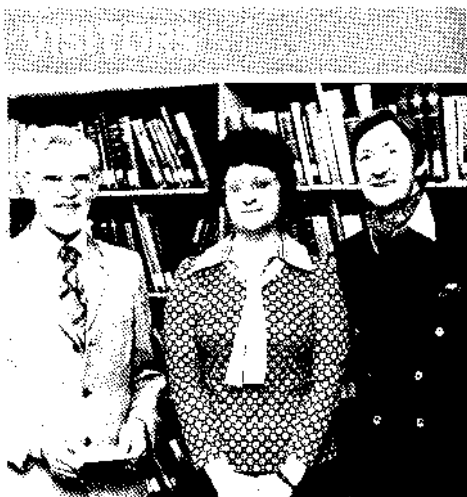
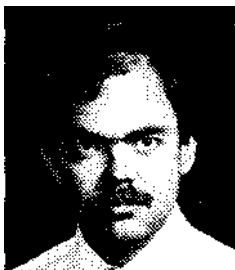
Mr. Elmslie, who was supervisor of the database group within administrative systems, has a strong technical background and he has been involved in the selection and testing of the facilities required to support on-line services. Among his other assignments, Mr. Elmslie is involved in the early stages of the student information system.



Joachim Barth has been appointed manager of food and beverage operations within the University Centre. Mr. Barth's duties will include supervision of the University Centre's commercially licenced facilities, including the Brass Taps and Peter Clark Hall.

Mr. Barth will be assisted in his duties by William Davidson, assistant manager, bar operations and John Liddle, assistant manager, food and inventory. Diane Smiley will become supervisor of bar operations.

Mr. Barth received his B.Sc. in 1973 from the University of Guelph and prior to his appointment as Brass Taps manager, he was employed by Howard Johnson's.



Professor A. Zitnak, Horticultural Science, left, and graduate student Mary Ann Filadelfi with visiting speaker Allen Paterson, curator of Chelsea Physic Garden, London. The Chelsea Physic Garden is the second oldest botanical garden in the United Kingdom. During a recent visit to the University, Dr. Paterson shared a wealth of expertise on plant collections and the philosophy of a plant hunter.

#### Guelph Liaison

Speaker's Day at GCVI, Guelph, recently had an unusual cast and an unusual topic — "Am I My Brother's Keeper?". Participants in the day's program from the University of Guelph were Professor Jack Madden, Economics and Professor Keith Ronald, Dean of the College of Biological Science.

Prof. Madden talked about the part man plays in looking after man as his brother, and Prof. Ronald talked about whether man can ignore animals as part of the world's environment, and whether such ignorance indicates man does not really care for himself.

Also speaking were Stephen Lewis, former leader of the Ontario NDP party and Dr. Jack Vallentyne, senior scientist for Canadian Centre for Inland Waters.

#### Returns from New Zealand

Professor J.E. Tong, Psychology, has returned from a visit to New Zealand at the invitation of that country's Director General of Health. The purpose of the visit was to initiate a research project concerned with the physiological assessment of psychiatric patients detained in top security conditions. Whilst in New Zealand Prof. Tong also gave lectures and conducted post graduate seminars at the Massey University and the University of Auckland.

#### Travels and Seminars

Professor John D. Ambrose, Arboretum, presented a paper before The Linnean Society of London entitled, "A Re-evaluation of the Melanthioideae (Liliaceae) Using Numerical Analyses," as part of a symposium on research into Monocotyledons of Horticultural Importance sponsored jointly with the Royal Horticultural Society. While in London, he conferred with Dr. D.F. Cutler of the Jodrell Laboratory concerning the preparation of the volume *Anatomy of the Monocotyledons: Liliales*.

**For Sale** — Westinghouse 5-cycle dishwasher, good condition, 821-3903; set of 20 Lady Schick mist curlers, Vicki Peter, 3327 or 3329; Boston rocker, pine and hardwoods, 824-6259; 1972 Ford Custom, 1970 Chevrolet Impala, 836-0605; two 175R13 tires on rims, one 165R13 tire, 822-9092; 1972 Volkswagon beetle, 61,000 miles, well maintained mechanically, but no longer beautiful, 2422 or 821-6285 after 6 p.m.; electric stove with 30" oven in excellent condition, 3887 or 836-8775; bed chesterfield, 821-5067 or 3942.

**Wanted to Buy** — Good quality, used, electric guitar, preferably American or top quality Japanese make, Jeff Graham, 824-8298.

#### Accommodation

**For Rent** — 3-bedroom house, large rec room with bar, close to schools and campus, express bus route, available July 1, 822-2677; small 3-bedroom house, minutes to campus, available June 1, 836-4046 after 5 p.m. or 3137; 2-bedroom apartment, all facilities, indoor swimming pool, sauna, 3509, 836-3168 after 6 p.m. weekdays.

**For Sale** — 3-bedroom, immaculate bungalow, spacious custom kitchen, hardwood floors, finished rec room, corner of Mountford and Hadati, M. or S. Sheppard, 3594 or 824-7304; 4-bedroom bungalow on well-treed lot near University, 824-3993.

Professor J.C. Cairns, Centre for International Programs, was guest speaker at the recent Founder's Day banquet of Beta Sigma Phi in Guelph. The banquet was attended by 150 members of Guelph chapters. Under the theme, "Seek New Horizons," Prof. Cairns discussed the efforts under way to build a more rational world order.

Peggy Patterson and Cathy Baird from the Counselling and Student Resource Centre recently attended a meeting of the Learning and Study Skills Association (LASSA) at York University, Toronto. Peggy Patterson was also appointed to the steering committee of LASSA which represents the university and community college study skills programs Canada-wide.

Professor John T. Powell, School of Human Biology, attended the annual general meeting and committee meetings of the Canadian Olympic Committee in Olympic House, Montreal.

As a member of the selection committee for Canadian representation at the International Olympic Academy in Greece, Prof. Powell reports that, for the first time, the Canadian delegation will number five. Two women and three men were selected from 125 applicants representing all 10 provinces and have been awarded \$1,000 scholarships to enable them to attend the 19th session of the 10A in Ancient Olympia, July 6 to July 19. Henceforth an annual competition will be held for such scholarships from the COC.

Professor S. Safe, Chemistry, recently participated as a facilitator at a hazard assessment workshop in Ann Arbor, Michigan, sponsored by the International Joint Commission. Scientists, primarily from government and industry, presented papers outlining their approaches in assessing the impact of chemicals on biological systems.

Prof. Safe also recently presented a seminar entitled, "PCB's — Metabolism and Enzyme Induction Studies," at the National Centre for Toxicological Research in Jefferson, Arkansas.

Professor R. S. Singh, Mathematics and Statistics, attended the joint statistical meetings of the Institute of Mathematical Statistics, the Biometric Society and the American Statistical Association held recently in New Orleans. Prof. Singh presented a paper entitled, "Speed of Convergence in Nonparametric Estimation of a Multivariate Density and Its Mixed Partial Derivatives."

**Next Week at Guelph** *Continued from page 8.*

#### THURSDAY, 79 05 17

Lecture Series — THE YOUNG VINCENT MASSEY 1887 to 1926: SHAPING OF PUBLIC CAREERS, Prof. Claude Bissell, former president of the University of Toronto and Winegard visiting professor, 12:10, Arts 107. Everyone welcome.

Employment Search Program — THE INTERVIEW, 13:00, UC 301.

TV — SPOTLIGHT ON UNIVERSITY OF GUELPH, Prof. Stanley Saunders, Director of Music, on "Music at Guelph," 19:00, Cable 8.

Guelph Spring Festival — TORONTO SYMPHONY ORCHESTRA with MAUREEN FORRESTER, contralto, Andrew Davis, conductor, 20:30, Athletics Centre. Tickets at \$10, \$7 and \$5 from the central or Festival box offices.

# Next Week at Guelph

## THURSDAY, 79 05 10

Exhibits — THE WORK OF FIVE YEARS, by Charles Rolston, Faculty Club Ige., level 5, UC; YOUTH ART, by Wellington County Students, main fl., Arts, until 79 05 23; GRAFICAS: CONTEMPORARY LATIN AMERICAN PRINTMAKERS, McLaughlin Library until 79 05 27.

Physics Lecture Series — FLUCTUATION PHENOMENA: EXPANSION OF THE MASTER EQUATION, Prof. N.G. Van Kampen, Winegard Visiting Professor from the University of Utrecht, the Netherlands, 10:30, Phys. Sc. 318.

Guelph Spring Festival **Workshop** — VOCAL WORKSHOP, "To Be an Artist," with Jon Vickers, 11:00 to 13:00, Arts 107. The cost of auditing this workshop is \$4. Contact Festival box office, 821-7570.

Employment Search Program — THE INTERVIEW, 13:00, UC 301.

TV — SPOTLIGHT ON UNIVERSITY OF GUELPH, Sixth Annual Waterloo-Wellington Science and Engineering Fair, 19:00, Cable 8.

Guelph Spring Festival — Engelbert Humperdinck's HANSEL AND GRETEL, with MAUREEN FORRESTER, contralto, 19:30, Ross Hall, John F. Ross CVI. Tickets at \$8 and \$6 from the central or Festival box offices.

Meeting — AMNESTY INTERNATIONAL, two newly released Latvian prisoners will speak on human rights in Latvia, 19:30, Arts 237. Contact John Prescott, Ext. 2586 for further information.

Guelph Field Naturalists Meeting — BEHIND THE SCENES AT THE METRO ZOO, Dr. William Rapley, graduate of OVC and director of animal health at the Metropolitan Zoo, Toronto, 19:45, Arboretum. Shuttle service available from the University Centre bus stop.

## FRIDAY, 79 05 11

Worship — FACULTY-GRADUATE STUDENT CHRISTIAN FELLOWSHIP, 12:00 to 13:00, UC 333; MUSLIM JUMA PRAYERS, 12:30, Chapel, level 5, UC.

Guelph Spring Festival — ONTARIO YOUTH CHOIR, 12:15, Chalmers United Church, Quebec Street. Tickets at \$3 available at the central or Festival box offices. HOMEMADE SOUP AND HOMEMADE BREAD available for \$1.50 at the church following the concert.

Student Discussion Sessions — INTER-FACE for foreign and Canadian students, 16:00, main Ige., Macdonald Hall. For further information contact Anne Ruhl, Ext. 3609 or Don Amichand, Ext. 3244.

Bible Study — GUELPH CHINESE CHRISTIAN FELLOWSHIP, 19:00 to 20:30, 8th fl. Ige., Arts.

Free Film — BOUND FOR GLORY starring David Carradine, Best Cinematography Winner in 1975, 19:00, Phys. Sc. 113.

Guelph Spring Festival — THE SWINGLE SINGERS, 20:30, WMH. Tickets, at \$8 and \$6, obtainable from the central or Festival box offices.

## SATURDAY, 79 05 12

Arboretum Nature Series — SPRING WARBLERS, an early morning walk to observe the spring migration of warblers; discussions, slides and tapes of their songs will follow, Alan Watson, naturalist, 08:00 to 11:00, meeting at the J.C. Taylor Nature Centre.

Guelph Spring Festival Workshop — FROM FIRST READING TO FIRST NIGHT, Malcolm Black, director of this season's *Hansel and Gretel*, 11:00 to 13:00, Arts 107. The cost of auditing this workshop is \$4. Contact the Festival box office, 821-7570.

Guelph Spring Festival — HANSEL AND GRETEL, with MAUREEN FORRESTER, contralto, 14:30, Ross Hall. Tickets at \$6 and \$4 obtainable at the Festival and

central box offices; THE JOY OF MOZART, Orford String Quartet, 20:30, WMH. Tickets at \$8 and \$6 obtainable from the Festival and central box offices.

## SUNDAY, 79 05 13

Worship — CATHOLIC MASS, 10:00, UC 441.

TV — SPOTLIGHT ON UNIVERSITY OF GUELPH, Prof. Stanley Saunders, Director of Music, on "Music at Guelph," 11:00, Cable 8.

Guelph Spring Festival — BRAHMS REQUIEM, Ontario Choral Federation, 15:00, Wilfrid Laurier University Athletics Complex, Waterloo. Tickets at \$5 obtainable from the central or Festival box offices.

## MONDAY, 79 05 14

Last day for clearance to graduate for Spring Convocation

ICS Course — INTRODUCTION TO CMS, Nory Ison, 13:00 to 16:00, ICS; continues 79 05 16 and 79 05 18. To register, contact Ext. 3046.

Guelph Spring Festival — HANSEL AND GRETEL, 20:30, Ross Hall. Tickets at \$8 and \$6 obtainable from the Festival and the central box offices.

## TUESDAY, 79 05 15

Workshop — STUDY SKILLS WORKSHOP. To register contact P. Patterson, Counselling and Student Resource Centre, level 3, UC, Ext. 3244.

11th Annual Eastern Canada Pesticide Workshop — ANALYSIS OF PESTICIDES AND POLLUTANTS, hosted by the Provincial Pesticide Residue Testing Laboratory, Ontario Ministry of Agriculture and Food; continues to 79 05 17. For more information telephone Brian Ripley, Ext. 2449.

Lecture Series — THE YOUNG VINCENT MASSEY 1887 to 1926: MAN OF LETTERS AND PATRON OF THE ARTS, Prof. Claude Bissell, former president of the University of Toronto and Winegard visiting professor, 12:10, Arts 107. Everyone welcome.

ICS Courses — INTRODUCTION TO SCRIPT, Alison Lauder, 13:00 to 16:00, ICS; continues 79 05 17, 79 05 22 and 79 05 24. INTRODUCTION TO SHARP APL, Les Dunn, 18:30 to 21:30, ICS; continues 79 05 22, 79 06 05, 79 06 12, 79 06 19 and 79 06 26. To register, telephone Ext. 3046.

Employment Search Program — THE SELF-ASSESSMENT, 13:00, UC 301.

Engineering Seminar — RETARDING BASIN DESIGN, Prof. Eric M. Laursen, Monash University, Australia, 15:30, Engineering 112A (Thornbrough bldg.).

Meeting — SENATE, 17:00, Phys. Sc. 113.

Informal Discussion — BAHA'I CAMPUS CLUB, 17:00, UC 334.

University of Guelph Faculty Association — COUNCIL MEETING, 19:30, Faculty Club Ige., level 5, UC.

Meeting — ASIAN CANADIAN WOMEN'S ASSOCIATION, 19:30, 8th fl. Ige., Arts. Guelph Spring Festival — ANNUAL SCHOLARSHIP COMPETITION, 19:30, Arts 107. Admission free.

Dance Club — INTERNATIONAL DANCE CLUB, folk and social dance, instruction and requests, 21:00, Gryphon Room (upstairs at the Stadium).

## WEDNESDAY, 79 05 16

Guelph Spring Festival — RECITAL WITH ELIZABETH NEUFELD, soprano and DANIEL LICHTI, baritone, both from the Division of Music, 12:15, Chalmers United Church, Quebec Street. Tickets at \$3 from the central or Festival box offices. HOMEMADE SOUP AND HOMEMADE BREAD, following the concert, \$1.50. ANNUAL SCHOLARSHIP COMPETITION, 19:30, Arts 107. Admission free.

Employment Search Program — THE RESUME, JOB LOCATION STRATEGIES, THE LETTER OF APPLICATION, 13:00, UC 301.

TV — SPOTLIGHT ON UNIVERSITY OF GUELPH, Prof. Stanley Saunders, Director of Music, on "Music at Guelph," 16:30, Cable 8.

*Continued on page 7.*



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