

NEWS BULLETIN

UNIVERSITY OF GUELPH

Vol. 19 No. 5

January 30, 1975

International week features films, talks, entertainment

International Education Week, February 17 to 22, will highlight a continuing effort to foster an appreciation for international affairs on campus and in the Guelph community. The six day program includes panel discussions, visiting lecturers from governments and other organizations, a series of films and International Students' Variety Night. Clubs, individuals and departments across the campus are involved in the planning and organization.

"We hope this week will begin a systematic program to strengthen our awareness and understanding of international issues," Professor J. C. Cairns, Director of the Center for International Programs said. "Very few, if any, of the major problems facing Canada today can be solved unilaterally. Increasingly, whether we like it or not, we must understand the international framework within which we live."

Don Amichand, International Student Advisor, hopes that this week will build up an awareness for the enormous problems facing the less fortunate countries. An important side effect will be to help Canadians to realize how fortunate they are. The University of Guelph currently has almost 700 foreign students, and many faculty who are active in international development programs. Such an environment is conducive to fostering deeper understanding of the developing countries.

International Week activities open on Monday, February 17, with United Churchman Dr. Bob McClure speaking at 8 p.m. in War Memorial Hall on Canada and the developing countries. Dr. McClure, United Church moderator in 1968 - 1969, spent nearly 40 years as a medical doctor in developing countries, including India, China and Borneo where he went after his retirement. He has a wide reputation as a dynamic and stimulating speaker.

Throughout the remainder of the week, each day's activities will focus on one region of the Third World. Films will be shown from 10 a.m. until 2 p.m., Tuesday to Friday, in University Centre 103. The 35 films have been obtained from foreign embassies, the Canadian International Development Agency, the Canadian Council for International Cooperation, the Development Education Centre and the United Nations. A number of the films will be controversial, provocative and a far cry from the standard travelogue.

Tuesday is Asia Day with a morning panel discussion on communication and international understanding arranged by the Department of Languages. Participants Professors Margret Andersen, K. E. Mose and A. D. Wilshere have all had personal experiences in foreign countries. The same afternoon, John Hadwen, one of the senior Canadian government experts on Asia, will speak on Canada's role in economic development in southern Asia. Formerly Canadian high commissioner to Pakistan, Mr. Hadwen is now based in the Department of External Affairs in Ottawa. A panel discussion on women in developing countries on Tuesday evening will have as guest Molly Chadsey of Toronto, a member of the World YWCA, who has travelled extensively and worked for non-governmental inter-

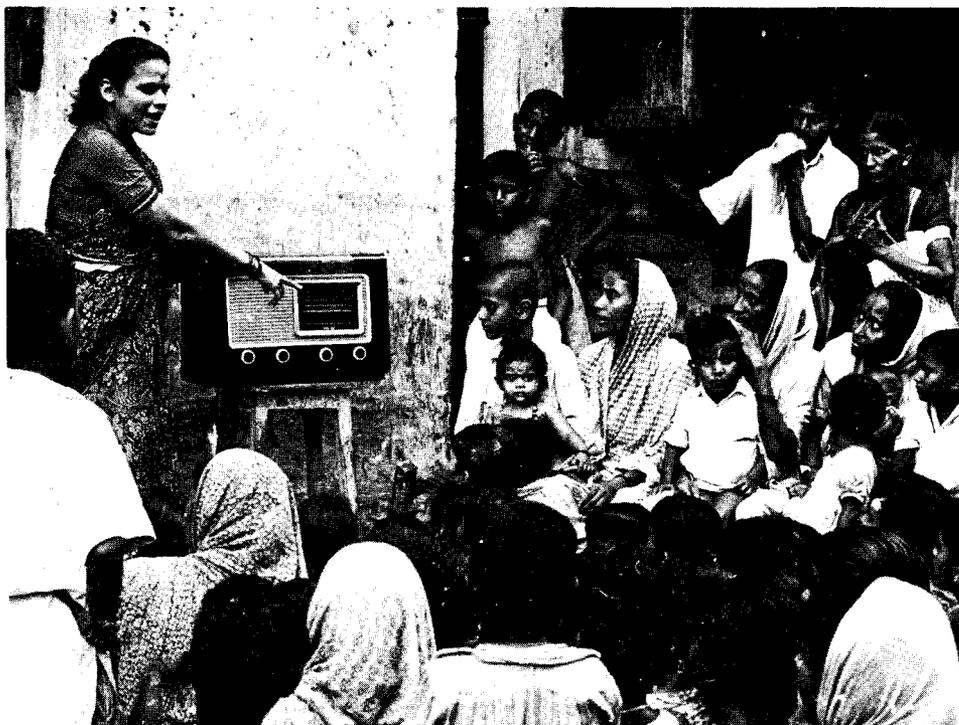
national organizations. Women from Paraguay, Ghana, Trinidad and Uganda, now living in Canada will relate their problems, frustrations and the struggles of women in their native countries. Diane Goodwille of Student Affairs will act as moderator.

Middle East day, Wednesday February 19, will provide films on the Arab States, Israel and Turkey. The guest lecturer will be Taha Omar from the Arab Information Centre in Ottawa, speaking in the afternoon on developmental priorities in the Arab states. In the evening, a lecture will take place in International House as part of the regular continuing education course, Canada and the Third World, with a \$2 fee for those not enrolled in the course.

Thursday, February 20 is Latin America Day with films on our "south of the border" neighbours, and a panel discussion at 7:30 p.m. on Latin America in the seventies - the search for new answers to old problems. Panelists are faculty from the Department of Sociology/Anthropology of the University of Guelph, the Department of Political Studies at York University, the Department of Geography at McMaster University, and the University of Toronto's Department of Hispanic Studies.

On Africa Day, Friday, February 21, an afternoon lecture will be given by His Excellency Frederick Rutakyamirwa, High Commissioner for Tanzania. His subject, socialism in Tanzania, will deal with the Tanzanian approach to development within the overall African context. The annual International Students' Variety Night promises a Friday evening full of international entertainment by singers, dancers and performers from many ethnic groups.

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UNESCO-aided program in India educates through radio programs followed by discussion.

REPORT FROM SENATE

January 21, 1975

Senate considered three major reports and approved the lists of graduands in one of its shortest meetings on record.

Professor Donald Barnum outlined the activities of the Center for Educational Disabilities under its new director, Dr. Griffith Morgan. Professor M.H.M. MacKinnon together with Professor John Cairns, new director of the Center for International Programs presented a review of the present activities and future plans of the center. Professor William Tossell surveyed the ongoing work of the Research Advisory Board and commented on some changes in financing. Lists of graduands presented by the boards of undergraduate studies, graduate studies and undergraduate diplomas for the winter convocation on February 7 were also approved.

Dean MacKinnon stated that the international programs report was cause for some quiet pride for the whole university. Almost every department is involved and our activities which range from academic support to actual assistance have a community, national and international dimension. The report of present activities is drawn together in four sections — international academic programs; educational activities on campus and within the community; cooperative programs in research and graduate education and miscellaneous activities. Center director John Cairns emphasized the innovative ideas now being introduced.

The present international academic programs are: minor in international agriculture, study abroad in Spain, winter semester in London, Guelph-Ghana project, assistance to the University of Agriculture in Malaysia, and the agricultural engineering study mission to the Caribbean. The international activities within the community are: continuing

education courses (China series and Canada and the Third World), International House, film series and International Education Week. Co-operative programs in research are: Guelph-CIMMYT-Manitoba research on triticale, OVC collaborative research on animal trypanosomiasis, Guelph-CIAT cooperative program on cassava and Guelph-Kenya apiculture project.

Change in Canada Council regulations has meant extra work for the Research Board grants committee, Dean Tossell said, in response to questioning by Professor Murray. Queried about the board's "ethical standards committee", by Professor Brodie, Dean Tossell noted the greater difficulty of setting standards for experiments with humans relative to animal experimentation.

Professor D.A. Barnum, OVC, briefly commented on the report of the Center for Educational Disabilities as the new director was away at a conference. Workshops are being organized with the Boards of Education in Lincoln and Waterloo counties. The center is continuing to offer services to the community and schools and volunteer staff have organized professional development days and workshops in reading and mathematics. A 4-day residential course for teachers, co-ordinators of special education and psychologists is being organized for May. The contribution of the center is twofold 1) internally, to conduct research and development on topics relating to educational disability and 2) externally, to offer services to the community which will increase co-operation between the center and a range of educational and social agencies.

President W. C. Winegard and Professor Roy Anderson answered questions on the reports of the January and February meetings

of COU.

The recommendations of COU's special committee to assess universities' policies and plans drew some questions. The recommendations follow: a) as a first priority, provincial funds should be directed to cover inflationary costs for each university without reliance on growth; b) funds available after covering inflationary costs should be distributed in recognition of growth; c) the university should be free to charge fees without formula fees being changed; d) significance of fee income from foreign students should be assessed and if appropriate a different fee be recommended; e) appropriateness of the slip-year base should be re-examined.

In replying to a question by student senator Martin Sumner-Smith, President Winegard reiterated a university's right to change student fees without a penalty from the government. "We are either independent or we are not." He didn't think a higher student fee would curtail growth because fees are chargeable against the Ontario Student Assistance Program.

Senate received the reports of the Center for International Programs, the Center for Educational Disabilities and the Research Advisory Board for information.

MOTIONS

Board of undergraduate studies and board for undergraduate diplomas

Senate accepted the lists of graduands for the winter convocation, 1975, as presented and also authorized the executive committee to make changes.

Board of graduate studies

Senate approved the list of graduands for winter convocation, 1975, as presented.

REPORT FROM BOARD OF GOVERNORS

January 23, 1975

The board of governors received enrolment figures for the winter semester at its January 23 meeting. Enrolment of full-time students was reported as 8879 with part-time students numbering 598, for a total of 9477 undergraduates enrolled this semester.

Notice of motion has been received in the matter of Tim Hawkins et al vs The U. of G. for an order restraining the university from (i) collecting any monies from students for the University Centre between March 1969 and October 1974; (ii) collecting any monies for the University Centre building fund on or after January 1, 1975; and (iii) disbursing any monies collected on or after January 1, 1975. Written submissions by both parties will likely be presented to the courts within the next few weeks.

A resolution that the Food Industry Research Institute be discontinued was carried at the board meeting.

The board approved the construction of the extension to the OVC clinic at a total estimated cost of \$625,000 and the execution of a general contract with Cooper Construction for \$521,408. Also approved was the revised design of the OVC main building extension.

As far as other building on campus is concerned, the board received a report that the University Centre is largely complete aside from some work on the mechanical systems that should be finished by the end of February. The Biology building extension is also substantially complete. Both the Hotel and Food and Pathology/Veterinary Microbiology and Immunology buildings are closed in. However, Hotel and Food is expected to be completed by the end of February with completion date of Pathology/VMI estimated for July 1.

Three OAC appointments were approved. Lawrence Schaeffer was appointed assistant

professor in Animal and Poultry Science, Dwight Tomes assistant professor in Crop Science and Elmer Menzie, new director of the School of Agricultural Economics and Extension Education. Professor Menzie will take office on July 1 when the present director T. K. Warley completes his term of office.

Professor Peter Egelstaff gave a report on research in the Physics Department.

Quaker meeting

The Quakers will hold regular meetings on campus this semester, beginning today, January 30 at 7:30 p.m. in Arts 138. Meetings will be held every Thursday at the same location for the rest of the semester. Meeting for worship will be followed by a discussion period. Any one who is interested is invited to attend.

Controversial topics for biology hour

Back in the good old days biologists wore hip boots and peered into test tubes. Today's biologists tackle social, environmental, philosophical, medical and political problems as well as the traditional biological issues.

Biology Hour lectures for the winter semester span a spectrum of biological topics from drugs to doomsday. Now in its fourth semester the series features a lineup of excellent speakers.

Professor W. G. Barker, chairman of the Department of Botany and Genetics, has organized the series since its inception. So popular has it become, he says, that people actually request to speak, and return for second and third engagements. The speakers receive no fee for their lectures; in fact the Biology Hour has no budget.

One reason for the success of this lecture series is its wide appeal. Any given lecture will attract 250-350, representing students, faculty and administration from across the university, secretarial and technical staff and citizens from Guelph. Professor Barker estimates that about 20 per cent of the audience comes from off campus.

Starting out the winter 1975 lectures, two faculty members will debate the future of man and planet Earth. Professor K. Ronald, Dean of Biological Sciences, fears we're on a collision course with Doomsday — ours will be the last generation to enjoy earth. Professor T. W. Settle is more optimistic — concluding that because we're human, we will pull ourselves up by the bootstraps and prevent such a calamity.

"Is Acupuncture only good for porcupines?" asks Dr. L. E. Morris, chairman of the Department of Anaesthesiology of the Medical College of Ohio. As director of an acupuncture research laboratory, he brings to the subject not only thorough understanding of the body's central nervous system, but a wealth of research expertise.

Back by popular demand for his third appearance in the series, Dr. R. H. Gelb, a Guelph obstetrician and gynecologist, will discuss sterilization as a means of birth control.

Professor L. A. McDermott, Department of Microbiology, will address himself to the topic of biological warfare in what promises to be an informative, provocative and controversial session.

Tentatively scheduled for February 27 is the film "Limits to Growth" which grew out of the Club of Rome discussions and publication.

Sin, sex and plants, three seemingly unrelated subjects, will be woven together by Professor Barker in his presentation on plant based drugs. He will refer to a passage from Genesis which indicates awareness of narcotic plants "way back then."

Leaving Bible quotes to his colleague, Professor E. H. Anthony, Zoology, will refer to passages from Winnie the Pooh to advance his thesis that biologists traditionally shun mathematics. Drawing from his research with computers in biology, he will extoll the virtues of the algorithmic language APL and demonstrate how computers are essential in certain types of biological research. In "great agricultural experiments that bombed," Professor R. E. Subden will relate numerous amusing, but tragic, anecdotes of well-intentioned failures. No doubt most of the stories are better left untold, but then, that's what makes Biology Hour so interesting.

As an appropriate conclusion to the winter Biology Hour series, Professor R. Reader, Botany and Genetics, will help us anticipate and appreciate spring. "Has Spring Sprung?" will explain how plants respond to seasonal changes and how they know when to sprout leaves. He'll even stick his neck out and predict, on the basis of temperature data, just when trees will burst forth with their new foliage.

All nine Biology Hour presentations take place Thursdays at noon in Room 130 of the Botany/Genetics/Zoology building. Everyone is invited to come, listen and munch. Topics appear each week on the back page of the *News Bulletin*.

INTERNATIONAL WEEK — Cont. from p. 1

As an additional feature, O.V.C. and the Graduate Students' Association will sponsor a seminar during the week on International Veterinary Education and Research. Further details will be announced later.

An international program for children will take place Saturday morning at the Public Library. Elaine Dove, Center for International Programs, Pam Dalseg and Kathy Sutherland from International House, and Stephanie and Eva Cairns, plan a morning of stories, puppet shows, and music to inform and entertain children from four to ten years old.

In addition to the films, lectures and panel discussions already mentioned, several events will run throughout the Week. A WUSCraft sale of handicrafts from all over the world will take place Tuesday to Friday in University Centre 442. Organizers hope the sale will stimulate the community's interest in cultures and crafts of other nations, and raise funds for WUSC projects.

During the week, international students, returned CUSO volunteers and faculty members who have spent time overseas will visit schools and churches within the community to speak on international issues. They will talk not only of situations in other countries, but will outline practical projects that individuals and groups in Guelph can undertake in the developing regions.

"It does little good simply to talk or worry about world problems", explains Professor Cairns. "We need more information, more understanding, and a clear awareness both of the limits of our role and the practical things we can do."

A detailed schedule of events will appear in a later issue of the *News Bulletin*.



Professor Tom Funk of Agricultural Economics, centre, and Professor Paul MacPherson of Agricultural Economics gave a marketing management course for agri-business leaders earlier this month. Professor Funk looks at some of the material used in the four day course with Don Sifton, left, of CIBA-GEIGY, Toronto and John Ackermann of Midtown Equipment Distributors in Saskatoon. The course introduced the university's professional management program in agri-business to 24 businessmen from Ontario, Manitoba, Saskatchewan and Quebec.

FACULTY ACTIVITIES

C.Y. Cho, research assistant in the Department of Nutrition, attended the 28th annual meeting of the Canadian Conference on Freshwater Fisheries Research held in Vancouver and presented a paper on an automated fish respirometer for nutrition studies.

Professor D. H. Pletsch, Agricultural Economics and Extension Education, spoke at the annual dinner meeting of the Guelph chapter of the Canadian Bible Society on "the Bible international."

Professor W. M. Braithwaite, Agricultural Economics, and **Professor R. R. Forster**, Landscape Architecture, cooperated in the presentation of a seminar on urban open space planning at the fourth annual conference of the Ontario Recreation Society in Ottawa.

Professor John T. Powell, Human Kinetics, attended a 4-day Conference called by the Ministry of Community and Social Services for the purpose of deciding Curriculum content for Ontario's Community Colleges and Universities in the subject field of Recreation.

Professor Michael L. Matthews, Psychology, as a result of the fall competition of Canada Council, has been awarded a leave fellowship and research grant which will permit him to travel to England where he will spend his sabbatical leave at the universities of Oxford and Sussex. During his stay he will be a guest at the Road Research Laboratory where he hopes to study techniques and problems underlying driving behavior which will permit further development of a research program in this area on his return to Guelph.

Professors T.B. Daynard and O.E. Hatley, Crop Science, spoke at the recent Gray-Bruce Farmers Week.

Professor J.W. Boyle, History, attended the annual meeting of the American Historical Association held at Chicago where he chaired the joint session with the American Committee for Irish Studies devoted to Parnell: the man and the myth.

Professor Amreek Singh, Biomedical Sciences, presented a seminar entitled Etudes ultrastructurales sur les foies perfusés de souris: modification induites par la colchicine et la vincristine which was co-authored by Dr. Lelio Orci (Geneva University Medical School) at Hôpital Beaujon, Paris, France.

Professor Jack Pos, Engineering, presented a paper on manure handling and odour control at the Wellington Waterloo Swine Seminar in Waterloo recently. **Professor L. J. Martin**, Agricultural Economics, spoke at the same seminar on outlook for pork in 1975.

Professor Peter Chisholm, Engineering, took part in a panel discussion on wetland ecology at the Ontario Association of Landscape Architects' meeting at the School of Landscape Architecture.

Professor D. H. Bullock, Food Science, was guest speaker at the annual meeting of the Canadian Milk Powder Manufacturers' Association meeting in Ottawa. He spoke on the subject, grading — and industry's responsibility.

PUBLICATIONS

Twamley, B.E., 1974. Recurrent selection for seedling vigor in birdsfoot trefoil. *Crop Science* 14: 87-90. (Crop Science)

McKeown, B.A., T.M. John and J.C. George, 1974. Effect of prostaglandin E₁ on plasma growth hormone, free fatty acid and glucose levels in the pigeon. *Prostaglandins*, 8: 303 - 314. (Zoology)

Nasgaard, R., 1974. Simultaneous activity: the current work of Anthony Caro. *artsmagazine*, Vol. 49, No. 5, January, 1975. (Fine Art)

Presidente, P.J.A., B.M. McCraw and J.H. Lumsden, 1974. Pathologic features of experimentally induced *Fasciola hepatica* infection in white-tailed deer. *Wildl. Dis.* 63: 59 pp. (Pathology)

Moran, E.T., H.C. Carlson and J.R. Pettit, 1974. Vitamin E-selenium deficiency in the duck aggravated by the use of high-moisture corn and molding prior to preservation. *Avian Dis.* 18: 536-543, 1974. (Animal & Poultry Sc., Pathology and V.S.B., OMAF)

Bartocci, Gianni, 1975. Our Image Is Different (On Italy and the Italians) in *Canadian Mosaico*, January 1975, Toronto, No. 1, 26-27. (Languages)

Panagioutou, Spiro, 1974. Relations and infinite regress in Plato, *Dialogue*, 13, 537-42. (Philosophy)

Crowley, T.A., 1974. Jean Delaborde, Jacques-Ange Lenormant de Mézy, Louis Levasseur, Jacques Rondeau, Antoine Sabatier. *Dictionary of Canadian Biography*, Vol. 3 University of Toronto Press. (History)

Chang, F.Y., G.R. Stevenson, G.W. Anderson, and J.D. Bandeen, 1974. Control of wild oats in oats with barban plus antidote. *Weed Science* 22: 546-549. (Environmental Biology and Crop Science)

Hutzinger, O., R.A. Heacock and S. Safe, 1974. Chlorobiphenylols, thin-layer chromatography and colour reactions of some hydroxylated chlorobiphenyls. *J. Chrom.* 97: 233-247. (Chemistry)

Panagioutou, Spiro, 1969. The Parmenides is the Philosopher: A Reply, *Classica et Mediaevalia*, 30, pp. 187-210. (Philosophy)

Panagioutou, Spiro, 1975. Plato's Euthyphro and the Attic code on homicide, *Hermes*, 102, pp. 419-437. (Philosophy)

Reinbergs, E., 1974. Elgin oats, *Can. J. Plant Sci.* 54: 827-828. (Crop Science)

Ho, K.M., and K. J. Kasha, 1974. Differential chromosome contraction at the pachytene stage of meiosis in alfalfa. *Chromosoma* 45: 163-172. (Crop Science)

Dube, P.A., K.R. Stevenson, and G.W. Thurtell, 1974. Comparison between two inbred corn lines for diffusive resistances, photosynthesis, and transpiration as a function of leaf water potential. *Can. J. Plant Sci.* 54: 765-770. (Crop Science and Land Resource Science)

New committee to advise on student financial aid

The Honorable James A.C. Auld, minister of colleges and universities, has announced the creation of a new committee to advise him on financial assistance for students.

The 10-member group, to be known as the Interim Committee on Financial Assistance for Students, will make recommendations on the nature of future student assistance programs, the best way of administering the programs, and the best way of providing independent advice to the minister about student assistance.

The committee will develop its recommendations in consultation with the Ontario Council of Regents and the Ontario Council

on University Affairs (OCUA), the bodies which advise the minister on matters affecting colleges of applied arts and technology and universities respectively.

Make-up of the new group is: the chairman and one member of the OCUA, appointed by the OCUA; the chairman and one member of the Ontario Council of Regents, appointed by the council; five members appointed by the minister of colleges and universities; and one member appointed by the minister of community and social services. Members of the committee are appointed for 18 months.

The chairmanship will alternate between the representatives of the OCUA and the Ontario Council of Regents.

Members of the committee are: Dr. Stefan Dupre, chairman, OCUA; Norman A. Sisco, chairman, Ontario Council of Regents; Paul Axelrod, graduate student at York University; Joyce Denyer, consultant, Women Associates Consulting Inc.; Timothy Doyle, president, Students' Council, University of Windsor; James Fisher, management consultant and member, OCUA; Frances Flanigan, welfare administrator, City of Cornwall; Joan C. Macdonald, executive director, College of Nurses and member, Ontario Council of Regents; Patrick Phillips, director of the Office of Student Awards, University of Toronto; David Ryan, student at Centennial College.

Odourless manure tank developed

Non-farm neighbours just don't seem to appreciate the smell that comes from intensive livestock operations near built-up areas and a University of Guelph engineer is out to try to solve part of the problem.

Professor Jack Pos of the School of Engineering has been active in waste management research for several years, and has received a \$15,000 grant for research into aerator systems for controlling the odour from stored liquid manure. The grant is part of a \$1 million a year Agriculture Canada farm mechanization research, development and evaluation program.

Intensive swine and poultry operations, which don't usually require the large acreages associated with other types of farming, are often located in the urban fringe, with non-farm neighbours located within easy sniffing distance. Liquid manure is usually stored in open holding tanks, resulting in some downwind unpleasantness, until the farmer requires the material as a fertilizer, said Professor Pos.

Aerators, however, can reduce or eliminate the odour from the tanks by dissolving oxygen into the liquid, he explained. The grant is for a one year period of evaluation and development of aerators. One commercial model and one designed by Professor Pos are being tested on two Guelph area swine farms. Professor J.B. Robinson, of the Department of Environmental Biology, is assisting in the evaluation of the aerators through biological analysis of the effluent.

In a non-aerated tank, anaerobic bacteria form and produce gases, including hydrogen sulphide which is the major source of the offensive "rotten eggs" odour, he explained.

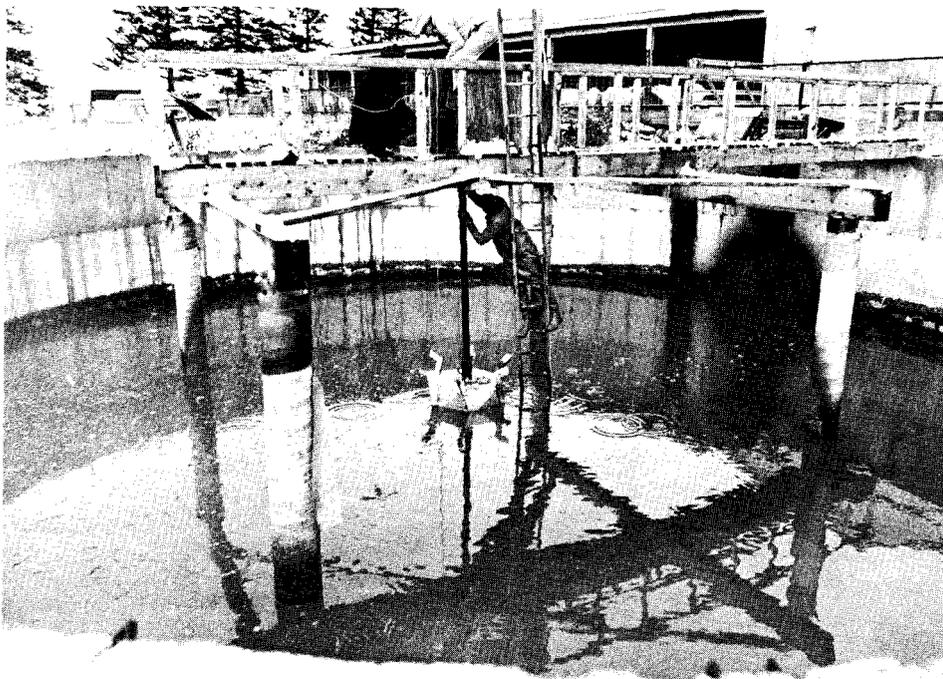
Aerators, by mixing air into the liquid, allow the growth of aerobic bacteria which do not give off offensive gases and inhibit the growth of anaerobic bacteria.

Other mechanical and chemical methods have been used to control odour, but they are either too costly or affect the quality of the manure as fertilizer. Properly used, aerators have only a slight effect on the quality of the fertilizer, he said. If the liquid was made as pure as it would be at a sewage treatment plant, there would be no smell, but the manure would have little use as fertilizer, because most of the nitrogen would be removed, added the engineer.

The commercial model floats in the tank and sprays liquid into the air, while the experimental model is mounted on an overhead framework and agitates the liquid; both systems result in air being trapped in the liquid and oxygen being absorbed, he explained. The aerators were first installed several months ago, but have been removed for modifications to improve their performance, Professor Pos said.

The aerator designed by the engineer was the result of some of the research work that he did during a sabbatical at Lincoln College in New Zealand last year. The aerator blades which agitate the liquid float up and down a vertical shaft as the tank level changes.

With increasing urban sprawl and concern for environmental quality, a simple, relatively cheap method of controlling the odour is necessary, he said. However, long association doesn't always result in immunity and more than one livestock farmer has installed an aerator system because "he just couldn't get used to the smell", commented Professor Pos.



An aerator designed by Professor Jack Pos, Engineering, is shown being installed in a liquid manure storage tank at a Guelph area farm. Professor Pos has received a grant from Agriculture Canada to carry out research into aerator systems for controlling odour from stored liquid manure. A commercially produced aerator is also being tested.

Key role for Richards in London conference

Professor N.R. Richards, former dean of OAC, will play a key role in the upcoming commonwealth conference on food production and rural development at Marlborough House, London, March 4-7. He has been invited by the Commonwealth Secretariat to act as a consultant to the secretariat office for the conference which will comprise the ministers of agriculture from commonwealth countries.

The meetings on food production and rural development are an outgrowth of the November Rome Food Conference, sponsored by FAO.

Professor Richards sees the discussions on food production and rural development as a forum "to discuss aspects in which commonwealth initiatives may help to meet needs and to exploit opportunities." The organizers hope to achieve this by bringing together different combinations of expertise to assess research and development requirements in relation to needs.

Professor Richards will assist Arnold Smith of the Commonwealth Secretariat and his staff in gathering the many background papers now being prepared for the conference, as well as assisting in the conduct of the conference. He will also help prepare the report of the conference to be presented to the meeting of the commonwealth countries in Jamaica in April.

Developmental biologist



Dr. Brian K. Hall, associate professor in the Department of Biology, Dalhousie University, is visiting professor in the Department of Biomedical Sciences at OVC from January to July this year. Dr. Hall will

spend some of his sabbatical year teaching biomedical histology, medical embryology and vertebrate morphogenesis in the winter semester. He will also share in the teaching of a graduate course in developmental biology. Dr. Hall is an experimental embryologist who is well known internationally for his work on the genesis of skeletal tissues in higher vertebrates, and for other contributions to developmental biology. He is writing a book on the developmental biology of the skeleton, and is looking forward to discussions with other scientists interested in connective tissues from basic biological, nutritional, pathological or clinical points of view. While he is on the campus he will also collaborate with Professor Margaret Hardy Fallding in applying techniques on *in ovo* grafting to the study of tissue interactions in normal and diseased skin.

CAMPUS BRIEFS

Art restoration

The chemistry of art restoration will be the subject of a public lecture, sponsored by the Chemical Institute of Canada (Wellington-Waterloo section) on February 6 at 8 p.m. in Animal/Poultry Science 141. Lecturer will be Professor J. Hanlon of the Fine Art Department at Queen's University.

Audio visual presents

Audio Visual Presents . . . to be held every Tuesday for the next 10 weeks will feature film, videotape and slide tape presentations in Arts 017 at 1:10 p.m. Sponsored jointly by Audio Visual Services and the Committee on Teaching and Learning, the series will feature current material prepared by, or in conjunction with AVS. A variety of subjects ranging from the life style of Newfoundlanders to muscle tissue under the electron microscope will be shown. The first presentation includes a 13 minute film prepared for the OAC centennial celebrations, a 10 minute film currently being used by the university on the high school circuit and a pair of eight minute slide/tape presentations on student and staff orientation. Showings will last about 40 minutes.

Convocation parking

Regular users of the Textiles parking lots (P. 23 and 24) should note that the lot will be reserved for convocation guests on Friday, February 7. Alternate parking is available near the Cutten Club or opposite the Athletics Centre. The pay-as-you-park lot behind War Memorial Hall is also reserved for convocation.

Reducing prison numbers

Canada has one of the highest incarceration rates in the western world. At a colloquium on Friday, January 31, psychology professor James White will speak on reducing the numbers in prison. He will discuss the alternatives available to break the prison-crime cycle, in light of recent innovations in the criminal justice systems of Holland and England. The colloquium, which is open to all, is in University Centre 103 at 12 noon.

Beryl Plumptre here

Beryl Plumptre will speak here on fairness in food pricing on Tuesday, February 18. The chairman of the Food Prices Review Board will discuss her idea of fairness — prices that give the producer, processor and retailer a fair return without ripping off the consumer. Entitled Towards Equity in Food Prices, the lecture will be given at 3:15 p.m. in Physical Science 105, sponsored by the Agricultural Economics Society. For further information contact Professor E.C. Gray, Ext. 2780.

John Dean to speak

John Dean, Watergate conspirator, will speak on campus February 12 at 8 p.m. in the University Centre. Further details will be available later.

Conversat

A few tickets are still available for Conversat on Saturday night, February 1. The theme of this year's formal dance is Camelot. Tickets are available at \$10 a couple from both the Central Box Office in the University Centre and from a booth set up in the University Centre courtyard. Tickets for the dinner at the Cutten Club before the dance are available from the courtyard booth.

Job interviews

Permanent employment interviews this week on level 3, University Centre are: Thursday, January 30: United Cooperatives of Ontario (7 p.m., briefing session for B.Sc. in Agriculture graduates), OMAF, Sperry New Holland; Friday, January 31: Pannell, Kerr, Forster and Company, United Cooperatives of Ontario (B.Sc. in Agriculture graduates); Monday, February 3: North American Life Insurance Company, Otto Pick Seeds; Tuesday, February 4: Dun & Bradstreet of Canada Limited; Wednesday, February 5: Robin Hood Multifoods, Excelsior Life Insurance, Cargill Grain & Seed; Thursday, February 6: Cargill Grain & Seed.



Dr. Robert Decareau, a senior food technologist and researcher with the Food Service Equipment Division of the US Army Natick Laboratories in Natick, Massachusetts, spoke to hotel and food students recently. He is shown here making a point on current research in the use of microwaves in quantity food production.

Job opportunities

New Listing as at January 25.

Library Assistant, Coding, The Library. Salary grade 2, salary range \$85 - \$124.

Technician, Animal and Poultry Science. Salary grade 4, salary range \$114 - \$151.

Special Events building co-ordinator (2 Positions), University Centre. Salary grade 6, salary range \$137 - \$181.

Technician, Animal and Poultry Science. Salary grade 8, salary range \$162 - \$215.

Pantry Person, Faculty Club. To take charge of lunch operation at the University of Guelph Faculty Club under the direction of club steward. Hours 9 a.m. 4 p.m., at \$4 an hour.

Porter, University Centre (2 Positions). Starting rate \$3.27, six month job rate \$3.62.

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

PERSONALS

FOR SALE — B&W TV, cabinet model, good condition, 822-3926; Skis, dynamic F-34, 205 cm., ladies' ski boots, 7N and boys', 6N, 822-4886; Women's skates, size 7, 821-2678; 5 Goodyear polyglass belted tires size G78-15, low mileage, reasonable, 824-9126; Zenith portable B&W TV, Smith-Corona electric typewriter, Kodak XL-55 movie camera, 824-1684; Fischer C4 competition skis, new Nevada bindings 195 cm, Fender Rhodes electric piano, Fender super amp, Shure microphone, 824-1669; Sansui receiver, headphones, dual Q turntable, Poodle pup, apricot, unregistered, 821-8558; B&W portable, 19" TV, excellent condition, 821-3085; 30" electric stove, coffee table, electric fry pan, telephone table, 824-8236; Framus folk guitar, Levin classical guitar, dearmand acoustic pick-up, 824-6577; Pair men's ski boots, size 12, like new, 824-1395; F78-14 winter tires with rims, 4,000 miles, 3505; 1973 Austin Mini, 27,000 miles, excellent condition, 658-5257; Double bed frame and headboard with matching dresser and mirror, 821-8707; 1971 Ford Pinto, certified, 822-0007 or Judy, 8753; Truck cab, insulated, 821-0331; '47 Plymouth, 824-6995; Registered Appalosa mare, Wendy, 2522; Ducks, geese, oven-ready, also feathers, E. Pearson, 578-7747; Stereo, turntable with cartridge and Shure pick-up arm, 824-4437; 200 cm. Kniessal Red Star skis, Nevada Look competition bindings and ski poles, like new, 821-8654; Seabreeze record player, B&W 26" TV, men's figure skates, size 10, girl's winter dresses & coat, size 6, steam mist curlers, 824-8620; Few tickets for Marcel Marceau at Hamilton Place, Wed. evening, Feb. 5. \$6.00 for ticket and return bus, 3254; 23" B&W TV, 821-1494; Riding boots, size 12, 821-1736 or 3369; TV component set, kitchen table, 3/4 bed frame, girls' bedroom drapes, bedspread & pillow sham in green, blue velvet living room drapes, 8731; White portable sewing machine, 821-5665.

HOUSING — For rent — large furnished 4 bedroom house, separate dining room, den, close to Exhibition Park, all schools, Sept/75 — Aug/76, Ext. 2721 or 822-3832; To rent — 3 bedroom bungalow in University Village, for 1 year from mid August 1975, G.R. Chapman, 3038; Wanted — unfurnished house in quiet area, by May 1, A.M. Ross, 3881; Wanted — unfurnished apartment for couple, close to campus, preferably, 2501; To Rent — Shared country home with garden for mature female, end of March for summer only, 2577; 3 bedroom townhouse on Scottsdale to sublet, Ann Ext. 8731, lease expires Oct. 1.

MISCELLANEOUS — Wanted to buy — Child's car seat, GM or Ford, for child 20 - 40 lbs., 836-2113; Chests of drawers, wardrobe closet, study desks, 824-7091; Flute lessons by Margaret Andersen, professional musician, 821-1633; Part siamese black cat, free to good home, 823-5367; Typing — essays, reports, theses, Wendy, 3041; Will baby sit in my home, 824-1514; Wanted to buy — used banjo, any shape, 822-4462; Used wooden table with 2 - 4 chairs wanted, 822-2856; Nancy Drew and Bobbsey Twins books, wanted 2588 or 822-6135; Piano tuning and regulation, reasonable rates, 821-5172; Wanted — Commuter to share ride/drive from Guelph to Hamilton, 3254.

OVC probe

The Guelph chapter of CVSA will present its annual Probe on Saturday, February 8 from 9 a.m. to 12 noon in the Arboretum. The topic this year is the role of specialization in veterinary medicine. Guest speakers will be Dr. F.J. Mustard, Dean of Medicine, McMaster Medical Centre; Dr. J.C. O'Dea, equine practitioner from Aeneseo, New York; Dr. J.M. Walker, small animal practitioner from Ottawa and Dr. P.A. Doig, large animal practitioner from Aylmer. All are cordially invited to attend.

Faculty concert series

The Hamilton Philharmonic Institute will give its second concert in the University Faculty Series on Sunday, February 2 at 4 p.m. in Arts 107. The Hamilton Philharmonic Institute, which is associated with the Hamilton Philharmonic Orchestra, consists of eleven extremely talented professional musicians under 25 years of age who have been chosen from all over North America. There are three violins, a viola, two cellos, a double bass, two flutes and two percussion. Admission is free and everyone is invited.

Campus child care

Initial approval to fund renovations and equipment for the proposed University of Guelph Day Care Centre has been received from the Ministry of Community and Social Services. Once building plans, costs, etc., are approved, work will begin on the former Grad House at 346 Gordon Street. The centre will be run by the Campus Child Care Cooperative of Guelph, Inc. and will provide daily care for 35 children, aged three months to five years. Parents will share responsibilities with paid staff to program and maintain the centre. For further information contact Pam Archibald at 824-8135.

Cholesterol test

Professor John T. Powell reports that 296 Guelph men had their cholesterol tested at the YMCA as part of an international study on effect of cholesterol in the years between 35 and 59. He reports that any adverse results will be sent to the individual's physician within the next two weeks.

African safari

Norm Lightfoot who has led previous East African safaris for the Federation of Ontario Naturalists, is again leading a group to that part of the world. Norm is a cinematographer with Audio Visual Services. His latest film, *Turtles of Ontario*, is scheduled to be shown on Wildlife Cinema on April 6. Anyone interested in joining the East African trip this summer should contact Mr. Lightfoot at Ext. 3106 between 12:30 and 1 p.m.

I.S.A. Film series

The International Students' Association is continuing to present Tuesday noon hour films this semester but the location has been changed to the Alumni Conference Hall in the University Centre. In addition, the same film is now being repeated on Tuesday evenings at 7:30 p.m. in the International Students' lounge, UC level 5. This week's film is entitled *India, the Bewildered Giant*. Following the evening film there will be a panel discussion with students and faculty participating, followed by coffee.

Woman's hour

The Woman's Hour resumes its regular meetings this week. The meetings are held every Monday at 12 noon in a new location, Room 103 of the University Centre. This Monday, February 3, Professor Evelyn Bird will speak on women, health and sports.

Career talk

Students interested in a career in business will be interested in a talk arranged for February 4 by Career Planning and Placement. R. Sturgess of the Faculty of Administrative Services at York University will speak on career aspects of business administration as well as admission requirements for graduate study in business. York gives a Master of Business Administration degree. The talk is arranged for 4 p.m. in Arts 116, one of a continuing series of career talks for students soon to graduate.

OFY Advisor

The Opportunities for Youth project officer for Wellington County, David Monoogian, will be on campus February 4 to answer questions about any OFY projects being considered by anyone on campus. Application forms are available for projects from Career Planning and Placement on level 3 of the University Centre. Mr. Monoogian will be in UC 442 at 1 p.m. Another Opportunities for Youth information meeting will be held in the Public Library on February 5 at 8 p.m. For further information on this meeting call Moe Brubacher at 821-0571 or Pat Smith at 824-5150.

New York Times

Anyone interested in receiving the Sunday New York Times should contact the Political Studies Department. The Times is available in Guelph before noon every Sunday. For further information call Ext. 2183.

Purcell consort

The Purcell Consort of Voices, a British group of six singers and conductor will give the Thursday noon hour concerts on February 6 at 12:10 and 1:10 p.m. in Music Room 107 Arts. The group performs mainly Renaissance music for which it has become known in Britain, on European concert tours and records. A workshop will be held, also in the music room, from 3 - 4:30 p.m., for music students and anyone else interested. The group is being brought to the university through the British Council.

Herbicides in Vietnam

A seminar on the effects of herbicides in Vietnam will be given by the Departments of Crop Science, Horticultural Science and Environmental Biology on February 10 in University Centre 103 at 2:45 p.m. J. D. Fryer, director of the Weed Research Organization at Begbroke Hill, Oxford, England, was a member of the committee established by the US National Academy of Sciences to survey the effects of herbicides in Vietnam. He will speak from his observations.

Liberal Association

Any student interested in forming a University of Guelph Liberal Association should contact Dave Steckley at 821-0302 or Box 1829 Johnston Hall. Plans for the semester include guest speakers, rap sessions, etc. depending on how much student support the group receives.

Chinese art

Artist Andrew Chang will talk about various aspects of Chinese art, emphasizing the portrayal of Chinese culture through its art in an illustrated public lecture on Tuesday, February 11 at 7 p.m. in Physical Science 113. A graduate of Taiwan University, he has studied at the École des Beaux-Arts in Paris, and exhibited in Paris and Toronto. A selection of his paintings will be on display in the red lounge of the Arts building February 10 - 12 and in the Arts show cases from January 27 - February 14.

International dinner

The university's international students are planning a dinner for President W. C. Winegard who completes his term of office at the end of June. The dinner, open to anyone on campus, will be prepared by international students themselves, and served in the Macdonald Hall cafeteria. Tickets at \$3 each are available from Central Box Office in the University Centre until Thursday, February 6. The dinner will be held from 5:30 - 8 p.m. on February 21.

NEXT WEEK AT GUELPH

THURSDAY, JANUARY 30

Biology Hour — DOOMSDAY! HELL? Prof. K. Ronald, Dean, Biological Science and Prof. T. W. Settle, Philosophy, 12 noon, Botany/Genetics/Zoology 130.

Thursday Noon Concert — ANTONIN KUBALEK, piano, 12:10 and 1:10 p.m., Arts 107.

Afro-Caribbean Week — THE AFRICAN DIASPORA & THE PAN AFRICAN IDEA, lecture by Prof. G. Uzoigwe, U. of Michigan, 8 p.m., Physical Science 113.

Art Exhibition — UNIVERSITY OF GUELPH FINE ART FACULTY, 9 a.m. - 10 p.m. (Mon. - Sat.), 1 - 10 p.m. (Sun.), McLaughlin Library, to Feb. 5.

Meeting — DUPLICATE BRIDGE CLUB, 7:30 p.m., card games room, level 3, U.C.

Lecture — THE MORAL POINT OF VIEW, Olaf Tollefsen, 8 p.m., Arts 304, sponsored by Philosophy Dept.

Meeting — ORGANIZATION MEETING FOR JEWISH SOCIETY, 8 p.m., Lambton Hall music room.

Employment search program — THE RESUMÉ, 12 noon, Physical Science 121.

Career seminar — SOCIAL WORK, 4 p.m., Arts 117.

Meeting — LESBIAN DROP-IN, coffee and conversation, 8 p.m., U.C. 221.

Worship — R.C. MASS, 12 noon, U.C. Chapel, level 5.

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

FRIDAY, JANUARY 31

Free Film — THE FIGHTING O'FLYNN, Douglas Fairbanks, Jr., 8 p.m., Physical Science 105.

Colloquium — REDUCING THE NUMBERS IN PRISON, Prof. James White, Psychology, 12 noon, U.C. 103. All welcome.

Special lecture — INTEGRATION OF MEASURES WITH APPLICATIONS TO PROBABILITY, Prof. Laurent Schwartz, École Polytechnique, Paris, 3:30 p.m., Physical Science 201. Contact Mathematics Dept.

Worship — JUMA PRAYERS, 12:30 p.m., Arts 233.

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

SATURDAY, FEBRUARY 1

OMM Meeting — P-SUMMING MAPS AND THE GEOMETRY OF BANACH SPACES, Prof. Laurent Schwartz, École Polytechnique, Paris, 2:15 p.m., Physical Science 105, at the 34th Ontario Mathematics Meeting, 10 a.m., - 3:30 p.m., Physical Science main floor.

SUNDAY, FEBRUARY 2

Cine-Series — THE APPRENTICESHIP OF DUDDY KRAVITZ, Richard Dreyfuss, 7:30 p.m., War Memorial Hall. Admission: \$1.25.

Concert — HAMILTON PHILHARMONIC ASSOCIATES, 4 p.m., Arts 107.

Worship — PUJA, sponsored by the Hindu Cultural Society, 11 a.m., 8th floor lounge, Arts; R.C. MASS, 11 a.m., War Memorial lounge; ANGLICAN & UNITED EUCHARIST, 11 a.m., U.C. Chapel, level 5; ZOHR PRAYERS AND QURANIC DISCUSSION, (open to all), 1 p.m., 9th floor lounge, Arts.

MONDAY, FEBRUARY 3

Courses — PRINCIPLES AND PRACTICES OF CROP MANAGEMENT and HORTICULTURAL SCIENCE, 10 sessions each. Fee: \$45 (individual), \$65 (couple), \$75 (family). Contact Prof. G. Hutchison, Ext. 3401 to register.

***Course** — INFLATION AND THE CURRENT DILEMMA, Prof. D. Auld, Economics, coordinator, 8 sessions at 8 p.m. Fee: \$25.

***Course** — HORSEMANSHIP I, Prof. Rhis Owen, Clinical Studies, 10 sessions at 8 p.m. Fee: \$25.

***Course** — TURF MANAGERS' COURSE, Prof. J. Eggens, Horticultural Science, Feb. 3 - 28. Fee: \$200.

Woman's Hour — WOMEN, HEALTH AND SPORTS, Prof. E. Bird, 12 noon, U.C. 103.

Employment search program — INTRODUCTION and THE SELF ASSESSMENT, 4 p.m., Physical Science 121.

Course — APL FOR UNDERGRADUATES, W. Marshall, continues Feb. 10 & 17 from 6:30 - 9:30 p.m. Physical Science 113.

Seminar — THE TEACHING OF CONCEPTS WITH THE HELP OF A PROGRAMMING LANGUAGE, Dr. Peter Braun, 2 - 3 p.m., I.C.Sc. 312.

TUESDAY, FEBRUARY 4

Hockey — McMASTER at GUELPH, 8 p.m., Memorial Gardens.

ISA Film Series — INDIA — THE BEWILDERED GIANT, sponsored by the International Students' Association, 12 noon, Alumni Conference Hall, U.C., and 7:30 p.m., International Students' Lounge, U.C., level 5.

Lecture & Slide Presentation — CHINA TODAY, 8 p.m., Landscape Arch 204.

Meeting — OFY INFORMATION, U.C. 442, 1 p.m.

***Course** — SCENIC TOWNS AND TOWNSHIPS — A TOURING GUIDE, Prof. G.

Couling, 8 p.m., Phys. Sc. 105. Fee: \$20, or \$2.50 pay-as-you-go.

***Course** — THEATRE GOERS: STRATFORD AND SHAW, Prof. L. Marshall, coordinator, 8 p.m., Arts 317. Fee: \$5, or \$1 per lecture.

Audio Visual Presents — OAC 100 and LIAISON III (films) and STUDENT ORIENTATION and STAFF ORIENTATION (slide/tape presentations), 1:10 - 1:50 p.m., Arts 017.

Employment search program — THE RESUMÉ, 4 p.m., Physical Science 121.

Career seminar — BUSINESS ADMINISTRATION, 4 p.m., Arts 116.

Worship — NOON HOUR DEVOTIONAL, Chaplain Remkes Kooistra, 12 noon - 12:20 p.m., U.C. Chapel, level 5.

Meeting — DISCUSSION-FELLOWSHIP GROUP, sponsored by Chaplain Remkes Kooistra, 8 p.m., 9th floor lounge, Arts. All are welcome.

WEDNESDAY, FEBRUARY 5

Film — Disabled People: "LOVE CARRIES NO DOUBT", "IF YOU'RE NOT THERE . . . YOU'RE MISSED", Jean Vanier, 8 p.m., Arts 115. Admission: 50¢.

***Course** — LIVESTOCK FEEDS AND FEEDING, Practical feeding of beef cattle, Fee: \$10.

***Course** — CANADA AND THE THIRD WORLD, Prof. A. Hoffman, Political Studies, coordinator, 8 sessions at 8 p.m. Fee: \$15.

***Course** — HORSEMANSHIP II, Prof. Rhis Owen, 10 sessions at 8 p.m. Fee: \$25.

China Week — LION DANCE & FIRECRACKERS, 12 noon, front of U.C.;

CHINESE CULINARY DEMONSTRATION, 2:30 p.m., Mac. Inst. 122;

ACUPUNCTURE, LECTURE, DEMONSTRATION, 7 p.m., Phys. Sc. 105.

Employment search program — JOB LOCATIONS/STRATEGIES; THE LETTER OF APPLICATION, 1 p.m., Physical Science 121.

Meeting — OFY INFORMATION, how to apply, needs of Guelph community etc., 8 p.m., Guelph Public Library.

Meeting — UNIVERSITY OF GUELPH HOMOPHILE ASSOCIATION, 8 p.m., 9th floor lounge, Arts.

Worship — ANGLICAN & UNITED EUCHARIST, 12 noon, U.C. Chapel, level 5; R.C. MASS, 5 p.m., U.C. Chapel, level 5.

THURSDAY, FEBRUARY 6

Thursday Noon Concert — PURCELL CONSORT OF VOICES, Renaissance music, 12:10 and 1:10 p.m.; Workshop, 3 - 4:30 p.m., Arts 107.

Meeting — UNIVERSITY CENTRE BOARD, 8 p.m., U.C. 334. Open to the public.

Biology Hour — IS ACUPUNCTURE ONLY GOOD FOR PORCUPINES? L. E. Morris, chairman, Dept. of Anaesthesiology, Medical College of Ohio, 12 noon, Botany/Genetics/Zoology 130.

Courses — INTRODUCTORY AGRICULTURE, 10 sessions. Fee: \$45 (individual), \$65 (couple), \$75 (family) and PRACTICAL FEEDING OF DAIRY CATTLE. Fee: \$10. Contact Prof. G. Hutchison, Ext. 3401 for more information.

***Course** — NATIVE PEOPLE OF CANADA, Prof. G. E. Mortimore, Sociology and Anthropology, 10 sessions at 8 p.m. Fee: \$25.

China Week — MOVIE NIGHT: Brilliant Spectacle, China's table tennis team visits Canada, 7 p.m., Phys. Sc. 105.

Employment search program — THE INTERVIEW, 12 noon, Physical Science 121.

Lecture — CHEMISTRY OF ART RESTORATION, Prof. J. Hanlon, Fine Art, Queen's University, Animal Science 141.

Worship — R.C. MASS, 12 noon, U.C. Chapel, level 5.

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

***Contact Continuing Education, Johnston Hall, Ext. 3956, to register.**

KEEP THESE DATES

February 7 — CONVOCATION

February 8 — OVC PROBE '75

February 12 - 15 — WINTER CARNIVAL

February 28 - March 9 — COLLEGE ROYAL

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**NEWS
BULLETIN**
UNIVERSITY OF GUELPH