Green grows the gravel pit

The hum of bees and rustle of poplar leaves in the wind provided accompaniment for the troupe of butterflies that performed all summer in the rehabilitated gravel pit on the east side of the University of Guelph campus. Bees and butterflies were quick to move into the area soon after planting was begun 18 months ago under the direction of Arboretum research co-ordinator Sarah Lowe.

The gravel pit area was recontoured with bulldozers and now provides a pleasant place to walk (it is part of the Arboretum's John McCrae Trail), although the rehabilitation was carried out mainly for demonstration and experimental purposes. The site provides a demonstration collection of plants suitable for poor soils and steep slopes, and as such fits into the Arboretum plan of providing collections of plants for various situations.

Ms. Lowe, who has degrees in botany and agriculture, is primarily interested in the physiology of plant growth. The first phase of her gravel pit plan has included shrubs on the slopes which will spread from layering, suckers or roots. In spite of dry weather and poor soil, the plants have had an 85 per cent survival rate. A mixture of native and exotic plants including locusts, sumacs, autumn olives, viburnums, willows and poplars is doing well on the steep slopes, as are the low creeping plants like grapes, Virginia creeper and the Asian hanging rose (Memorial rose) with its delicate white flowers and pleasant scent.

Visitors to the area can see what grows well in conditions of poor soil and bright sunlight and decide whether they want to grow trees, shrubs or creeping vines, exotics or natives on their own slopes.

The second phase of the gravel pit plan will involve planting of trees around the edge, followed by the last phase when species suited to wet areas will be planted at the lower levels.

Much of the gravel pit planting was done in a three inch layer of wood chips, used to conserve moisture, stop weed growth and prevent erosion until the shrubs are established. Ms. Lowe has calculated costs per hectare of various ground covers, and would not recommend use of wood chips on large sites because of high cost. However, agencies like Ontario Hydro and the Ministry of Transport and Communications produce their own chips which they use in plantings. In an area of the former pit, now designed to attract wildlife, some weeds have come through, adding a touch of color. Viper's Bugloss (blueweed) and thistles waved in summer breezes and provided nectar for hundreds of hovering bees. Butterflies, too, seemed to like the colorful weeds.

The gravel pit project aroused interest in the Mineral Resources Branch of the Ministry of Natural Resources and led to a ministry-financed survey of 100 Ontario gravel pits which Ms. Lowe supervised this summer. The Ministry grant is for a two-year study of the role of woody plants in gravel pit rehabilitation in southern Ontario. Two landscape architecture students, Brian Murrant and Jo-Anne Jewett, and landscape architecture graduate Mike Luco visited gravel pits from Windsor to Ottawa during the summer.

At each pit the summer employees took soil samples and an inventory of trees and shrubs used for rehabilitation and screening. Ms. Lowe is now preparing a report on the summer's work. Next summer she hopes to complete a series of recommendations on plantings for gravel pit rehabilitation. Many of the gravel pits visited were planted primarily with trees such as red and white pine, spruce and Carolina popular, all available from the Ministry of Natural Resources for one cent each. Most of the plantings were fairly young, as rehabilitation and screening programs were introduced after 1971 when the Pit and Quarry Control Act was passed. Screening of pits for aesthetic reasons is now common, and the success of various tree screens is also being evaluated. Screens also prevent the spread of dust and erosion of the area.

The survey should also result in a more relevant collection for the Arboretum gravel pit. "It will help us interpret our collection to the public," Ms. Lowe says. The Arboretum has begun to hold open days for visitors to a number of its collections. The first gravel pit open day was held in June, but visitors are welcome to visit the location at any time.

Maps of various collections are available from the Arboretum Centre. In addition to the gravel pit collection, the Arboretum has maps of the hedge and rose collections close to the Arboretum building and the Black Locust collection off Victoria Road.

These willows and poplar bushes were grown from unrooted cuttings placed in a trench on the slope of the former gravel pit close to Victoria Road in the spring of 1977. Arboretum research co-ordinator Sarah Lowe supervised planting of the demonstration and experimental plantings in the rehabilitated gravel pit. Three large bushes, from the left, are pussy willow, Carolina popular and peach-leaved willow.


Graduate students help expand maize research

Three employees of the Crop Research Institute in Ghana, Ben Asafu-Agyei, Baffour Badu-Apraku and Stafford Twumasi-Afriyie, are doing graduate work in Crop Science under the direction of Professor Bruce Hunter. The aim of the CIDA-sponsored program is to expand the maize (corn) research and extension programs in Ghana. Dr. M.K. Akposoe, at present Ghana's only maize breeder, visited Guelph recently to familiarize himself with the thesis projects and programs of the three future maize scientists for Ghana following a visit to CIMMYT in Mexico. CIMMYT, the international organization participating in maize, wheat and triticale research, is also involved in the program.

Prof. Hunter and Dr. Akposoe worked together on preparation of the maize proposal during the two-year period that Prof. Hunter was in Ghana on the Ghana-Guelph Project. Prof. Hunter says that he will be released to able to play a role in the Ghana Maize Project. He feels it is one of the rewards of his two years in Ghana and is happy to have the opportunity to maintain his contacts with Ghana through this project.
Homecoming Weekend

Homecoming '78 Weekend celebrations begin Friday night, October 13, with an Oktoberfest Bio-Bash in the Gryphon Room sponsored by the College of Biological Science Alumni Association and features the three-piece band, "Brandy." Tickets at $1 are available at the door from 20:00. Other plans for Homecoming '78 include reunions for OVC '38 and OAC '68A, a field hockey match, homecoming football game, and the alumni dinner-dance on Saturday, October 14.

Saturday morning events begin with the alumni field hockey match in the hockey field, corner of South and East Ring Roads at 10:30. Hafa Alumni's annual brunch and general meeting is planned for 11:00 in MacDonald Stewart Hall. The Human Kinetics Alumni Association will meet at the same time in Room 103 of the University Centre. For those not lunching or brunching with Hafa or Human Kinetics, there is a buffet luncheon in the Whippletree at noon. Guelph Gryphons meet McMaster Marauders in Alumni Stadium at the homecoming football game at 14:00. Following the game the recently formed College of Social Science Alumni have their own warm-up planned, a wine and cheese party combined with the general meeting at 16:30 in Room 441 of the University Centre.

OVC '38 classmates gather on Friday for a party and Saturday for a dinner. OAC '68A class members meet Saturday night for a reception and dinner. All alumni are invited to attend the annual general meeting of the University of Guelph Alumni Association Saturday from 18:00 to 18:30 in Room 132 of the University Centre, followed by the reception, dinner-dance and Alumni Awards presentation, beginning at 18:30 in Peter Clark Hall of the University Centre. Anyone wishing to attend the dance only, should check on the state of ticket sales with Alumni Affairs on Friday. The band, "Tradition," will play for the dance at 21:30 in Peter Clark Hall.

Sigma Xi lecturer

Professor Simon Ostrach, of Case Western Reserve University Cleveland, will present a lecture entitled, "How to Solve Complex Problems Without Being Smart," Wednesday, October 18 at 16:00 in Room 103 of the University Centre.

Prof. Ostrach is the Wilbert J. Austin Distinguished Professor of Engineering at Case Western Reserve University, where he has served as a faculty member since 1960. He was educated at the University of Rhode Island and Brown University (Ph.D. 1950) and served for 10 years (1950-1960) as chief of fluid physics branch of NASA. His research in convective heat transfer has received widespread recognition.

DRAMA PRODUCTION

- The Department of Drama's first production of the fall semester will be "The Journey of the Fifth Horse," by Ronald Ribman (from a short story by Turgenev). It will be presented at 20:00, Monday through Friday, October 23 to October 27 at The Inner Stage, Room 101 of the Arts building. Tickets are on sale at the central box office, University Centre, for $2.

APPOINTMENTS

Tammy Mung-chun Bray joined the Department of Nutrition as assistant professor September 1. Professor Bray obtained her B.S. degree from Fu-Jen University, Taipei, Taiwan in 1967, her M.S. and Ph.D. degrees in nutrition from Washington State University, Pullman, in 1970 and 1974, respectively. Before coming to Guelph she acted as a research assistant at Washington State University, in the department of food and nutrition from 1967 to 1968, in the department of animal sciences from 1967 to 1968, and as research associate in that department from 1975 to 1978. She also received the award of merit for the best paper presented at the 16th annual meeting of the Society for Experimental Biology and Medicine in 1972. Prof. Bray's primary interest lies in nutritional biochemistry with special emphasis on nutritionally related diseases. Her research is directed towards the application of biochemical knowledge and methods to important biological problems of humans and animals in relation to nutritional status.

Fred van de Voort has joined the Department of Food Science, effective August 1, as assistant professor. Professor van de Voort received his B.Sc. degree in 1972, his M.Sc. in 1974 and his Ph.D. degree in 1977, all from the University of British Columbia and all in food science. His Ph.D. thesis concerned "Study of Protein-Protein Interaction in Food Systems Using the Analytical Ultracentrifuge." Before coming to Guelph he was assistant professor, from 1977 to 1978, in the department of dairy and food science at the University of Saskatchewan.

Prof. van de Voort's teaching responsibilities will include undergraduate courses in food chemistry.

AUTUMN AT THE ARBORETUM

The Canadian baroque ensemble, "Tafelmusik," will be giving a musical autumn concert on Sunday, October 15, at 14:00 in the Arboretum Centre. The trio, comprised of Kenneth Solway, baroque oboe and recorder; Susan Graves, baroque bassoon and the CBC Talent Festival winner, Valerie Weakes, harpsichord, have recently returned from professional studies in baroque performance in the Netherlands. A unique feature of this concert will be a fall color slide presentation set to the music of Antonio Vivaldi.

A guided tour of one of the scenic Arboretum trails will be offered following the concert. Coffee will also be served to those wishing to meet the artists and enjoy an autumn view of the countryside from the Arboretum Centre.

Admission is free and everyone is invited to attend.

THURSDAY NOON HOUR CONCERT

Two remarkable young pianists, Canadian Ralph Markham and American Kenneth Broadway will perform Thursday, October 12, at 12:45 and 13:45 in Music Room 107 of the Arts building. Markham and Broadway reside in Munich, and Guelph is privileged to bring this piano duo on their first North American tour.

Program I will feature Schubert's "Duos in A Minor, D 947 ("Lebenssturme")" and "Jeux d' Enfants, Op. 22" by Georges Bizet. Program II will include "Variations in D Major" by Chopin, Stravinsky's "Five Easy Pieces" and "Four Fantasies" from "Souvenir de la Russie" by Brahms.

Admission is free and everyone is welcome to attend.

CUSO INFORMATION

- There will be an opportunity to meet Betty Plewes, CUSO development education officer at 12:00, Wednesday, October 18 in Room 441, University Centre. If you would like information but cannot attend, contact Sue Pearen, Counselling and Student Resource Centre, level 3, University Centre, Ext. 2213.

Come on, Guelph!

Guelph has joined 18 universities from across Canada in responding to Carleton University's challenge to participate in the first national university fitness challenge.

Carleton issued the challenge in early September and the nine-week event continues to Sunday, December 9. Faculty, students and staff at all Canadian universities are eligible to participate and Guelph is calling for all joggers, walkers and runners to record their efforts on charts posted in the locker rooms in the Athletics Centre. Points will be awarded for participation and mileage, and Carleton is to administer the tabulation for all participating universities.

Contact Ann Stahlin, Ext. 2215, for additional information, or see the fitness bulletin board in the Athletics Centre.
Faculty Activities

Professor P.B. Little, Pathology, was invited to present a neuropathology short course at Purdue University, Indiana.

Professors J.H. Lumsdon and V.E. Valli, Pathology, gave a joint seminar presentation on “Blood Smear Interpretation” at the Ontario Veterinary Association meeting held at the Skyline Hotel, Toronto. Professor D.H. Read presented a paper on “Facial Eczema,” and Professor I.K. Barker was chairman of the research regulatory diagnostic teaching program. Contributions from the Pathology Department to the poster session were made by Professors J.R. Geraci, D.H. Read, R.B. Miller and O. Stroome and B.D. Hicks. Prof. Lumsdon also attended a course on Radioimmunoassay held at the University of Toronto.

Professor B.M. McCraw, Pathology, chaired a session at a meeting of the Canadian Society of Zoologists held in London, Ontario.

Professor Elmer L. Menzie, Director of the School of Agricultural Economics and Extension Education, presented a paper “Basic Considerations in Developing an Effective Marketing System,” at a conference of the Ontario Grain and Feed Dealers’ Association in Chatham.

Professor R.B. Miller, Pathology, was a delegate at the Animal Pathology Conference held at the Animal Diseases Research Institute, Ottawa. Professor R.G. Thomson, Pathology, presented a paper on “Pneumonia in Feedlot Cattle” at that meeting, and Professor E.H. Lee, Pathology, presented a paper at the adjourned Poultry Disease Conference, on “Coccidiosis and Drug-resistant Strains of Coccidia in Poultry in Ontario.”

Professors J.R. Ogilvie, J. Poss and P.S. Chisholm, School of Engineering, attended the first Canadian Conference on Engineering Education. Concordia University hosted the Conference in Montreal. Their presentations made before the Agricultural Engineering Discipline Session of the conference were “What Can Be Done to Encourage More Canadians to Pursue M.Sc. and Ph.D. Studies in Agricultural Engineering?” by Prof. Ogilvie, “Some Specific Needs for New Textbooks and Teaching Aid Materials for Agricultural Engineering Curricula” by Prof. Pos and “Incorporating Design Work into Agricultural Engineering Curricula” by Prof. Chisholm.

Professors Ogilvie, J.C. Jofriet and Chisholm also attended a one-day planning session at McMaster University for next year’s Committee of Ontario Deans of Engineering Workshop of Design Education. Professors Ogilvie and Chisholm are member and chairman respectively of the organizing committee for next year’s workshop.

Prof. Ogilvie also visited Wad Medani, in the Republic of Sudan during May, as part of a Canadian International Development Agency feasibility team, to evaluate a proposal for the establishment of a University farm (2,000 acres) at the New University of Gezira. He also visited Silsoe, England to discuss the sugar cane project in Jamaica with Dr. D.S. Boyce, of the National Institute of Agricultural Engineering, also a visitor at Silsoe.

Prof. Ogilvie travelled to Logan, Utah to chair the session at the Association of Schools of Agricultural Engineering meeting on animal waste management and presented a paper on “Simulation of Sugar Cane Harvesting.” He also attended the Canadian Schools of Agricultural Engineering meeting in Regina, Saskatchewan and represented CSAE as a member of the National Council of Agricultural Institute of Canada.

John Paroschy, a graduate student in the School of Engineering, gave a seminar on “Engineering Aspects of Viticulture,” and Professor Kent Percival, School of Engineering, gave a seminar on “Remote Sensing for Control of Agricultural Machines using a CCD Image Array,” at the University.

Professor Truman P. Phillips, School of Agricultural Economics and Extension Education, presented two invited papers, “The Implications of Cassava Processing and Marketing for Other Tropical Root Crops,” and “Cassava: Production to Utilization as an Animal Feed,” at a workshop on small-scale processing and storage of tropical root crops, Honolulu, Hawaii.

Professor John T. Powell, Human Kinetics, spoke on “Opinions of Some Philosophers and Poets Concerning Ancient Greek Athletic Festivals” and acted as group leader at the meeting of the National Olympic Academy at Illinois State University, Normal-Bloomington. He also taught each of the six-day National Track and Field Coaches Course attended by 80 coaches held at York University.

Papers presented by faculty of the Department of Pathology at the 30th Canadian Veterinary Medical Association Annual Convention held in Regina, included Professor P.B. Little’s “Identity of Fluorescein in Poliomyelophalamealacia” and Professor O. Stroome’s “Heartworm in Canada in 1977.” Professor M.G. Maxie ran a panel presentation on “Canadian Veterinarians and International Development.” Professors I.K. Barker and R.G. Thomson also attended. The 5th Annual General Meeting of the Canadian Association of Veterinary Pathologists held in Regina was attended by Pathology faculty members, Professors Barker, T.J. Hulland, Little, Thomson and Maxie who presented two papers on “Hypothalmic Infarction in a Cat” and “Distemper Encephalitis in a Dog.” Following the meetings Prof. Little visited the Calgary Veterinary Services Branch Laboratory to investigate diseases in cow-calf beef cattle.

A paper entitled “The Potato Industry in North America” by Professor R.G. Rowberry, Horticulture, and A.J.D. Howells, Potato Marketing Board, London, England was read by the latter at the 7th Triennial Conference of the European Association for Potato Research in Warsaw, Poland.

Professor S. Safe and colleagues A. Crawford and C. Wyndham, Chemistry, recently gave two papers at the annual meeting of the Canadian Federation of Biological Societies, entitled “The Metabolism of Substituted Biphenyls and the Utility of 4-Chlorobiphenyl in Assessing Microsomal Enzyme Inducers.” Prof. Safe also gave an invited lecture at an International Conference in Halifax, Nova Scotia on Reye’s Syndrome entitled “Environmental Chemicals: Reye’s Syndrome.”

Professor Robert Simmons, Political Studies, presented an invited paper on Soviet, Chinese and North Korean relations during the Korean Civil War period at a conference on security arrangements in East Asia at Harvard University. Prof. Simmons’ use of the term “civil” in earlier writing had attracted criticisms. The Harvard University conference readily accepted Simmons’ categorization into the causes of the war, offering additional insights into the causes of the war, and the relationships between the communist side during the conflict, that led to the “Sino-Soviet split.”

When the Information Service, Alberta Department of Agriculture was on campus to make a movie “Snow and Wind Studies in the Research and Development Laboratory,” Professor Frank Theakston, School of Engineering, demonstrated the technique by showing many models of farms with remedial solutions. The production was filmed by personnel from the Ontario Ministry of Agriculture and Food.

Prof. Theakston has recently returned from a tour of the Far East which included Guam, Philippines, Thailand, Singapore, Hong Kong, Taiwan, Japan and Hawaii.

Professor Dave Stanley, Food Science, attended the annual meeting of the Canadian Institute of Food Science and Technology in Edmonton where he presented a research paper, co-authored by graduate student Brian Murray, entitled “A Response Surface Study of Co-extracted Proteins” and an invited review paper “Structural and Mechanical Properties of Textured Plant Proteins.”

Barbara McSherry, past president of the College Women’s Club, has an eye on the camera as she welcomes Mrs. Hugh Branson, far left, to the Club’s membership tea on September 19 at the Arboretum. Others in the group are, left, Andrea Maddon, honorary president, Lauren Davis, president, and Leni George, vice-president.
Significant advances have been made in recent years in the scientific production and handling of deciduous tree fruits in North America. This third edition brings together in up-to-date usable textbook form the essence of pertinent research and practical experience on the subject. Although the principles involved in the different operations of orchard management, such as pruning, soil management, fruit thinning, and harvesting remain constant, practices and techniques have been undergoing considerable change. Economic and social changes have been brought to bear in altering the approach to such aspects of pomology as tree size, plant density, mechanical harvesting, pest control and irrigation.

The large reference list has been updated where necessary and enriched where possible in order to provide even greater substance and scope to principles and practices presented in the text. Many changes have been made to the nearly 100 photographs and drawings with which the text is illustrated so that the illustrations truly reflect the timely character of the treatise.

A Medley of Statistical Techniques for Researchers, Gordon C. Ashton and Ian McMillan, Campus Co-op, 1978, 62 pp. $3.10

Appropriate application of statistical techniques to collected research data is as music to the ears of these authors. To help researchers who feel some bewilderment in the area of experimental design and statistical analysis, retired Mathematics and Statistics professor, Gordon Ashton and Animal and Poultry Science professor, Ian McMillan, have produced a dissertation on problems frequently encountered in their role as consultants. They emphasize the importance of pre-experiment planning and the essentiality of plotting the results. Extensive use is made of graphs to point out the biases that may arise in the interpretations when inappropriate methods of analysis are applied to the data.

The areas covered in the dissertation include: the design of experiments, the hypothesis, multiple versus alternate comparisons of means in factorial experiments, comparison-wise versus experiment-wise error rates, correlation, the techniques of simple ratios and of covariance and the presentation of results.

NEW LINKS WITH BUSINESS COMMUNITY

The Ontario Confederation of University Faculty Associations (OCUFA) and the Ontario Chamber of Commerce, representing Ontario's professors and business communities, respectively, have agreed to take several joint initiatives designed to establish more productive relations between universities and private enterprise.

The two groups will create a joint steering committee to identify and develop opportunities for future business-university activities and form a broader-based task force to work on improving the interface of high schools, community colleges, universities, the private sector and government. A work group will also be appointed to explore the feasibility of establishing a flexible research resource centre that would enable the private sector to optimize the talents and research capabilities of the university system.

BRIEFLY

A RED CROSS BLOOD DONOR CLINIC will be held Tuesday, October 31, in Peter Clark Hall of the University Centre from 10:00 to 12:15 and 14:00 to 16:15.

Prof. Teskey autographs his recent book for Vice-President, Academic, Professor Howard Clark.
Energy conservation benefits Guelph

The University of Guelph spent just over $400,000 on energy conservation projects from 1972 to May, 1978, and the estimated cost avoidance resulting from these expenditures is $1,770,000, according to W.A. Brown, Director of Physical Resources. As most energy conservation projects require a one-time expenditure and the savings go on indefinitely, increasing as utility rates escalate, Guelph should continue to benefit greatly from these expenditures, he says.

In the current budget year, almost $200,000 will be spent to produce future energy savings. The most sophisticated projects are in Animal Science and Physical Sciences buildings where extensive changes to the building’s air conditioning systems should provide substantial future operating benefits. Other small projects range from water-saving shower heads installed throughout campus, heat recovery systems on exhaust air at the swimming pool and the Animal Science building, miscellaneous insulation throughout the campus to a water-recirculating system in the seal area in Zoology.

Energy Conservation Contest

The University’s energy conservation committee has announced its second contest to promote ideas to conserve energy on campus.

Nora Valcourt, a College of Biological Science student, won the first contest last April for her suggestion to install individual light switches in carrels in the basement and second floor of McLaughlin Library. Physical Resources implemented the plan over the summer.

The best contest idea that can be implemented by the University will be acknowledged with a certificate and dinner for two at the Whippletree Restaurant.

Each suggestion will be judged on its cost to implement, annual saving, originality, practicality, savings in labor, improved quality of service, and ecological merit.

Mail your ideas to John Flowderw, head of the Engineering Department, Trent building, and include your name and address so you can be contacted. The judging committee, consisting of R.D. Davis, chairman of the energy conservation committee, Mr. Flowderw, a representative from the School of Engineering, and a student representative, will evaluate all ideas submitted by November 1. The winner will be announced November 16 in the News Bulletin.
Breast feeding has interested nutritionists and psychologists as a research topic for years. Doris Bramble, a Canadian Commonwealth Scholar from the West Indies, has completed pioneering research in this area by applying social science research methods to this nutrition-al problem.

When Doris received her Ph.D. degree last week, she achieved another first — the first West Indian-born breast feeding mothers, and West Indian-born bottle feeding mothers, and West Indian-born bottle feeding mothers. Doris found unexpected differences and similarities among the four groups.

Through interviews and a written personality test, Doris gathered data about the decision to breast feed or bottle feed before the baby's birth, attitudes toward breast feeding, duration of breast feeding, factors influencing the timing of weaning and the attendant introduction of solid foods, and personality characteristics of the mother.

Through statistical analysis she was able to divide the mothers into two distinct groups in three different ways with three different combinations of variables. One set of variables separated Canadian mothers from West Indian mothers. The Canadians, as a group, had a higher level of nutritional knowledge, were more naive and submissive and endorsed more traditionally "feminine" values. The West Indian-born women were shrewder and more aware.

The mothers could also be separated into breast feeders and bottle feeders on the basis of another combination of variables. Not surprisingly, the breast feeding group showed a stronger belief in breast feeding, but they also were less sociable, less anxious, and more serious. This observation is not inconsistent with the popular conception that often women approach breast feeding in a serious, sometimes dedicated way. On the other hand, the decision to bottle feed may involve non-nutritional considerations such as the opportunity to maintain minimal interruption of their present lives.

Another set of variables identified the West Indian bottle feeders with the Canadian breast feeders as a distinct group. The women in this group had stronger beliefs about breast feeding, were more independent in their judgments, more unconventional and tense. Doris feels that this interesting pattern reflects the fact that the Canadian breast feeders and the West Indian bottle feeders were going against the norm for their groups with respect to infant feeding practices. While bottle feeding has become the standard practice in contemporary Canadian society, breast feeding is almost expected in West Indian society. A Canadian woman who decides to breast feed thus appears to share some characteristics with a West Indian woman who bottle feeds. This was not an expected result and helps to underscore the complex interplay of factors in this decision.

"Nutritionists are becoming more aware of the role of psychology in their profession", explains Professor G.E. Miles, Family Studies, and Doris' research advisor. "Doris' research carried this awareness one step farther by actually applying sophisticated behavioral science research techniques to a nutritional problem."

Professor G.F. Kawash, a psychologist in Family Studies and a member of Doris' committee, notes that this study is unique from a psychologist's viewpoint as well. A psychologist, he explains, would be more likely to limit the study to personality and other behavioral factors and overlook or underestimate such factors as duration of and beliefs in breast feeding.

Returning to the West Indies in August, Doris became a community nutrition officer for the government of Montserrat. Her Ph.D. research has inspired many ideas for nutrition education programs from pre-school through high school and into the community. Knowledge is a positive factor in a woman's decision to breast feed, but Doris' research shows clearly that attitudes are also a determining factor and she feels that the same is likely true for other health regimens as well. She hopes to develop nutrition programs for West Indian families that will incorporate some of her findings concerning the complexities involved in decisions on infant feeding practices.

Dr. Nikolai N. Pleshanov, left, agricultural counsellor of the Embassy of the USSR, Ottawa, examines the operation of the soil testing laboratory, Department of Land Resource Science, with Earl Gagnon during a recent visit to the campus. During his tour, Dr. Pleshanov, who is a veterinarian by profession, also spent a day with Dr. Jim Henry of the OMAF Veterinary Services Branch.
**Next Week at Guelph**

**THURSDAY, 78 10 12**

Art Exhibit — WORKS BY PHOENIX ARTISTS CO-OPERATIVE, 10:00 to 19:00, Faculty Club lge., level 5, UC, until 78 11 04.

Luncheon Special — CHAMPIONSHIP BOXING #1 and #2, films, 11:30 to 18:00, PCH, UC.

Worship — CATHOLIC MASS, 12:00, Chapel, level 5, UC.


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

Career Information Session — TEACHING, Mr. H. Oikle, Queen's University, 13:00, UC 442.

Ski Club Meeting — SKI INFORMATION PUB and movie, MOLSONS G.M.

HOTDOGGING, slides of Smuggler's Notch, 17:00 to 21:00, UC 103.

TV — SPOTLIGHT ON UNIVERSITY OF GUELPH, D.L. Waterston, Director, 18:00, Physics 113.

Course — CONTOURS OF CHRISTIAN PHILOSOPHY, Rev. Dr. Rem Kooistra, 19:30, UC 441.

Employment Search Program — THE INTERVIEW, 19:30, UC 333.

Luncheon Special — CHAMPIONSHIP BOXING #1 and #2, films, 11:30 to 13:00, UC 333.

Department of Information, interviews Prof. Terry Graham, Human Kinetics, 13:00 to 15:00, Phys. Sc. 103.


Meeting — EAST GERMANY, Amnesty International, 19:30, Guelph Public Library.

Course — OFFICE PROCEDURES PROGRAM, P.A. Corcoran, instructor, eight-week course for all employees, 19:00 to 21:30, UC 441. Phone Ext. 3068 or 3059, to register.

**FRIDAY, 78 10 13**

Homecoming '78 (See detailed agenda, page 3.)

Sale — PLANT SALE, sponsored by Landscape Architecture, 08:00 to 19:00, UC courtyard.

Video Tape — MEAT LOAF AND JOURNEY and MOTHER'S LITTLE NET-GOER, 13:00, University of Waterloo, Room B1-295.

Pub — CBS ALUMNI ASSOCIATION, 18:00, Lennox/Addington Cafeteria.

Career Session — LAW, OSGOODE HALL, Mr. Ranachan, York University, 13:00, UC 442.

Public Service Commission — GENERAL EXAMINATION: ADMINISTRATIVE LAW, 13:00, UC 301.

Women's Hour — MARRIAGE AND A CAREER: IS IT POSSIBLE?, 12:10 to 13:10, UC 441.

Career Session — LAW, OSGOODE HALL, Mr. Ranachan, York University, 13:30, UC 442.

Monday Night Football — CHICAGO “BEARS” vs. DENVER “BRONCOS,” 19:30 to 23:30, UC 103.

**SATURDAY, 78 10 14**

Homecoming '78

Public Service Commission — FOREIGN SERVICE EXAMINATION, 09:00, Hotel and Food Administration 101, 301 and 311.

Men's Soccer — GUELPH vs. TORONTO, 12:00, Guelph stadium.

Women's Ice Hockey — ALUMNI GAME, 13:00, Guelph rink.

Conference — LEISURE: ASSET OR LIABILITY?, sponsored by the Guelph Recreation and Parks Department and the Ministry of Culture and Recreation, 09:00 to 16:00, Centennial CVI.

Guelph Stamp Club Exhibition — ANNUAL STAMP EXHIBITION, 10:00 to 18:00, John F. Ross CVI, continues 78 10 15 from 12:00 to 17:00.

**SUNDAY, 78 10 15**

Worship — CATHOLIC MASS, 10:00, PCH; ANGLICAN EUCHARIST, 12:00, Chapel, level 5, UC.

Concert/Tour — AUTUMN DAY AT THE ARBORETUM, tours, concert and fall color slide presentation, 10:00 to 16:00, Arboretum Centre; concert at 14:00, sponsored jointly by Concert Management, Division of Music and the Arboretum.

Cine-Series — SEMI-TOUGH, 19:00 and 21:30, WHM.

**MONDAY, 78 10 16**

Royal Bank of Canada — APPLICATION DEADLINE FOR SCREENING.

Course — WORD PROCESSING COURSE (COURSE 1), L. Dennis, 09:00 to 12:00, ICS, continues 78 10 17 to 78 10 20.

Video Tape — DOONESBURY SPECIAL and MAN: THE INCREDIBLE MACHINE, 11:00 to 15:00, UC 103, continues 78 10 18 and 78 10 20.

Women's Hour — MARRIAGE AND A CAREER: IS IT POSSIBLE?, 12:10 to 13:10, UC 441.

Career Session — LAW, OSGOODE HALL, Mr. Ranachan, York University, 13:30, UC 442.

Public Service Commission — GENERAL EXAMINATION: ADMINISTRATIVE LAW, 19:00, Centennial CVI.

Monday Night Football — CHICAGO “BEARS” vs. DENVER “BRONCOS,” 19:30 to 23:30, UC 103.

**TUESDAY, 78 10 17**

Luncheon — CANSAVE FALL LUNCHEON, 11:30 to 13:30, Guelph Armouries. Tickets, $3, available at the door.

Our World Series — THE PEOPLE'S FOOD COMMISSION, 12:00 to 13:00, UC 442.

Course — INTRODUCTION TO SHARP APL (COURSE 3), Barry Stahiman, 13:00 to 16:00, ICS, continues 78 10 19, 78 10 24, 78 10 26 and 78 11 02. To register call Ext. 3046.


Career Session — TEACHING, UNIVERSITY OF TORONTO, Mr. G. Whyte, 13:30, UC 442.

Physics Colloquium — DIFFUSION AND DEFECTS IN bcc METALS, Dr. John Mundy, Materials Science Division, Argonne National Laboratory, 16:00, Phys. Sc. 113.

Seminar — THE MAINTENANCE OF DIFFERENTIATED FUNCTION IN CULTURED CARDIAC CELLS, Dr. Fred Kasten, Louisiana Dental School, New Orleans, 16:00, OVC, Biomedical Sciences 309.

Baha’i Campus Club — BAH’I FIRESIDE INFORMAL DISCUSSION, 17:00, UC 431.

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