



Volume 30 Number 23 June 12, 1986

Inside:  
The University's  
Five-Year Plan,  
1986 - 1990.



## Vice-president, academic



Jack MacDonald becomes vice-president, academic, July 1 for a five-year term. Dean of the College of Physical Science, MacDonald is to succeed Dr. Howard Clark, who is leaving Guelph to become vice-chancellor and president of Dalhousie University.

MacDonald holds a B.A.Sc. in engineering physics and a PhD in physics from the University of British Columbia. In 1967, after two years as a postdoctoral fellow at the University of Oxford, he joined the research staff of Bell Laboratories. He joined Guelph in 1975 as professor and chairman of the Department of Physics. 0

*The Year 2000 is only 14 years away. The challenges and the changes leading to whatever our world will be by then — and beyond — belong to the university graduates of this decade. Convocation addresses last week to the graduating classes of 1986 by distinguished people who have made major contributions to the betterment of the world encouraged graduates to face and fulfil those challenges. (See stories inside.)*

## Parking rates going up

It's going to cost you more to park your car in the metered and attendant-controlled parking areas on campus.

Parking rates for the attendant-controlled parking lots will increase to \$1 for the first hour or part thereof, and 50 cents per hour (or part) for each hour thereafter to a maximum of \$5 daily beginning June 16.

Parking meters will also be converted, with rates increasing to 25 cents for each half hour. The conversion begins the last week of June and will be completed before the end of July.

Hours of operation for all cash lots, both metered and attendant-controlled, will be 8 a.m. to 5 p.m., Monday to Friday, excluding statutory holidays.

President Burt Matthews says the rate hike is necessary to offset escalating operational and maintenance costs.

In April, Matthews appointed an *ad hoc* committee on parking and traffic to look at ways to enhance Guelph's visitor parking and information system. The committee is to give its report to the president by Oct. 1. In the meantime, Matthews moved on some immediate improvements, including the establishment last week of attendant booths for visitor parking and information, and pay-as-you-park cash lots at the north and south ends of campus (lots P.44 and P.31).

New visitor parking and information directional signs will be erected at strategic locations on the main roadways leading to campus to direct visitors to the attendant information booths. 0

## Five-year plan ready for Senate

*The University's Five-Year Plan, 1986-1990*, the report of the Committee on University Planning from Vice-President, Academic, Howard Clark, goes to Senate for information and discussion June 17.

Senate will also be asked to approve procedures and guidelines for internal reviews of academic programs, and a proposal for the establishment of a soil and water conservation research centre.

Approval in principle will also be sought for a PhD program in the field of rural resource evaluation and environmental analysis. 0

## Tribute to teaching and service



Left to right: Phil Sweeny, Vice-President, Academic, Howard Clark; Joe Cunsolo; Ernie McFarland; and President Burt Matthews.

Outstanding teaching and service were recognized at the annual University of Guelph Faculty Association's 1986 professorial awards presentation.

Prof. Ernie McFarland, Physics, received the Special Merit Award for outstanding service to the University community. UGFA president Prof. Phil Sweeny, Microbiology, says McFarland was honored for his class efforts and off-campus activities, which include science writing and editing for radio, television and print media. McFarland, who is active in committee work, also finds time to judge science fairs and serve as a secondary school consultant in physics.

Recipient of the Distinguished University Professor Award and the College of Arts Award is Prof. Jakob Amstutz, Philosophy. He was unable to attend the presentation ceremony and will receive his award at a later date. Sweeny says the award is in recognition of Amstutz's contributions in his extensive graduate program, as well as in his undergraduate teaching.

Winners of college professorial awards are Joe Cunsolo, Mathematics and Statistics, and Wilf Rauser, Botany. They were honored for their strong commitment to the undergraduate program, says Sweeny. "They are friendly,

patient, fair teachers who have the ability to instill confidence in their students — teachers who are always available to discuss student problems."

The annual awards provide recognition for outstanding teaching performance by members of the various college faculties. Nominations are accepted from individual faculty members and students, as well as organizations, alumni and staff.

Recipients of the awards receive a commemorative plaque, and their names are added to the permanent plaques on display in the colleges. 0

## Food services offers bulk food deal

Members of the University community will have an opportunity to buy selected bulk foods at low prices this summer through a pilot project initiated by the Department of Food Services.

Jon Kerr, assistant project co-ordinator, says suppliers occasionally approach Food Services with special purchase offers at favorable prices but involving greater quantities than the department can use. "If we can distribute the excess quantity at something close to cost," says Kerr, "this would represent important savings for the department and help keep end prices down."

The plan calls for a monthly offering of three or more high-quality brand name bulk packs. This month, for example, the department will offer Schneiders frozen beef sirloin patties, F.G. Bradley bacon-wrapped filet mignon and Sunpac juices in assorted flavors. Information sheets with order forms will be distributed well in advance, and orders must be picked up between 3 and 6 p.m. at Maritime Cafeteria on the designated dates.

The main function of the June and July sales,

says Kerr, will be to find out how much interest there is on campus for the service, and whether it should be expanded. One possibility being considered is to make food products produced on campus available as well. 0

## Star-Kist report soon

Department of Food Science chairman Alex Morrison's report on standards and regulatory practices at the Star-Kist fish processing plant in St. Andrews, N.B., will be released "in the near future," Fisheries and Oceans Minister Tom Siddon said last week.

In Guelph to address the annual meeting of the Aquaculture Association of Canada, Siddon said he has not yet released the report because his ministry is consulting with Star-Kist on the report's findings.

Morrison was commissioned by the minister last January to head a committee to investigate the tuna processing plant's procedures and regulatory staff conduct. 0

## Scottish politician to teach

Scottish politics and culture will be the topics when William Wolfe, leader of the Scottish Nationalist Party from 1969 to 1979, offers a one-week course at Summer Campus '86.

Wolfe, who plans to entertain as well as instruct, will present a realistic view of Scotland's past and present. "I want people to gain true insights into modern nationalism," he says. He will address such key issues as why the Scottish identity survives and how it adapts to the changing world without any form of self-government.

Wolfe will conclude his overview of Scottish history with a presentation of the country's position in the nuclear age. Drawing on direct experience, he will discuss modern Scotland's politics, culture and sense of nationality.

"Scottish Politics and Culture" runs from July 7 to 11. For more information, contact Continuing Education, Ext. 3956. 0

## Appointments

Prof. Ted Swart, Computing Services, joins tenured faculty Aug. 1. He will have a joint appointment in the departments of Computing and Information Science, and Mathematics and Statistics. 0

# CHALLENGES AND CHANGES

Photos by Herb Rauscher, Illustration Services

## Subject to change without notice . . .

Canada-U.S. trade relations face an uncertain future, says the Ontario minister of agriculture and food, Jack Riddell.

In a convocation address to diploma graduates June 3, Riddell said Ontario food producers and processors must compete to sell their products in the global marketplace, and at home they face competition from across the world for the Ontario shopper's dollar. In this worldwide farmers' market, the food policies of governments have become a major source of tension between nations, he said.

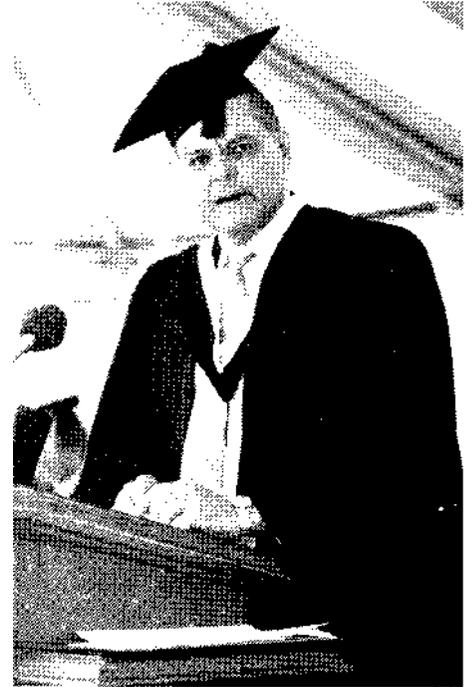
"You need look no further than the concern in this country over the enormous subsidies on agricultural exports by the European community or the import taxes the Americans placed on Canadian hogs last year," he said.

The American situation gives rise to a lot of questions, he said. "This is especially true when we are supposed to be entering an era of freer

trade relations with the U.S. — or at least, that's what they say in Washington and Ottawa. Our misgivings are not helped when the U.S. opens the much-discussed bilateral trade talks one day, and then slaps a hefty import tax on Canadian cedar products the next."

This all leads to a great deal of skepticism about the future, said Riddell. "Someone once said the times we are living in should be labelled 'subject to change without notice.' There will be uncertainty. There will be difficult times to come. There will be change."

Riddell was addressing the largest-ever graduation of diploma students. Some 195 diplomas — the Associate Diploma in Agriculture, the Ontario Diploma in Agriculture and the Ontario Diploma in Horticulture were presented. The Independent Study Division also graduated the largest class in its 26-year history — 52 students. 0



The Ontario minister of agriculture and food, Jack Riddell, OAC '52 and '57, addresses diploma graduates Tuesday afternoon.



Dr. Bernard Fonlon receives an honorary doctor of literature degree from Chancellor Bill Stewart as University secretary Barbara Abercrombie positions the hood.

## Thinkers, darers and doers

Guelph's part — and Canada's — in putting "spur, spring and direction" to Cameroon's big leap forward received the gratitude of Dr. Bernard Fonlon at Wednesday morning's convocation for graduates of the general bachelor of arts program.

Fonlon, emeritus professor of literature at the University of Yaounde, Cameroon, received an honorary doctor of literature degree. In his address to the graduating class, he urged "the

rising generations" — the academic and political authorities of "the coming Canada" — to continue the tradition of their elders to help humankind.

He said Guelph's motto, *Rerum cognoscere causal* (to ascertain the reasons of things), is applicable to all academies, institutions and organizations prepared to think, to dare and to do, in the lofty enterprise of the uplift, promotion, welfare and helping of humankind. 0

## MacKinnon's challenge

Guelph desperately needs a modern auditorium — perhaps called "Alumni Hall," said Dr. Murdo MacKinnon in his address to graduates of the honors bachelor of arts, bachelor of science in engineering, bachelor of landscape architecture and bachelor of science in human kinetics programs Wednesday afternoon.

MacKinnon was made an Honorary Fellow of the University of Guelph, and retired Languages and Literatures professor Rex Barrell was made a professor emeritus.

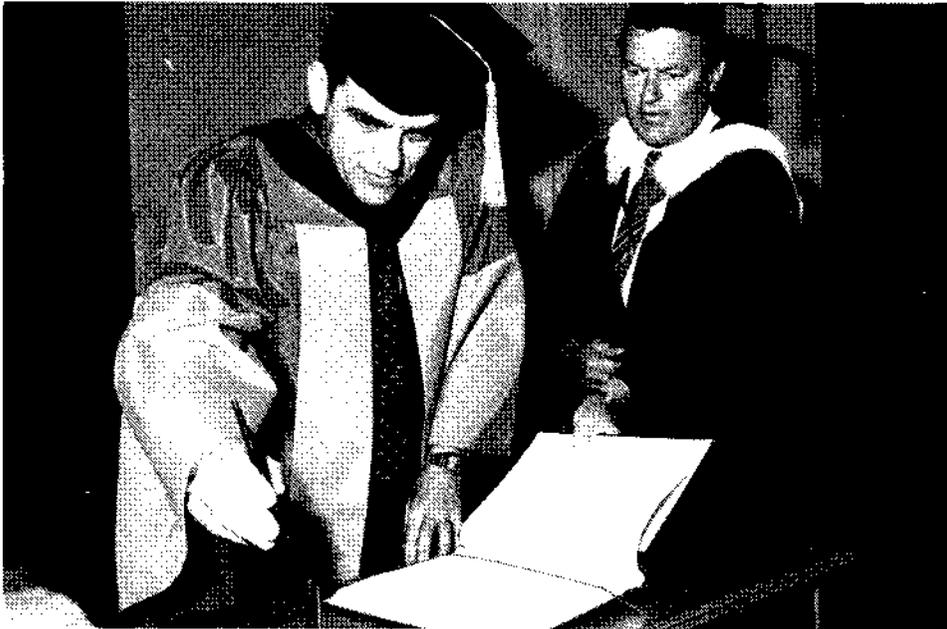
MacKinnon said the auditorium could be used for convocations, plenary sessions for international conferences and other important events, and have stage facilities for the performing arts.

"This is my dream for Guelph and perhaps you young graduates will make it your dream also," he said.

He urged all members of the University to continue Guelph's tradition of cultural leadership, which, he said, dates back to the founding colleges and their purchases of Canadian art. That leadership has continued to give Guelph its heritage buildings, a park-like campus, the Arboretum, the Guelph Spring Festival, the plays at the Inner Stage, the Macdonald Stewart Art Centre and the Donald F. Forster Sculpture Park, he said. 0

*At Guelph* regrets that black and white photos of Dr. Murdo MacKinnon and Prof. Rex Barrell were not available for publication. Color photos will be sent to them at a later date.

## Creating new knowledge



*Honora<sup>r</sup> doctor of science recipient Dr. Philip Leder, left, with Registrar Arnold Holmes.*

Graduates ready to accept the task of creating new knowledge will find a host of challenges, including famine, cancer, viral diseases and birth defects, awaiting them in the world today, honorary doctor of science recipient Dr. Philip Leder said in a convocation address Thursday morning.

The noted molecular biologist and geneticist told graduates of the doctor of philosophy, doctor of veterinary science, master of arts, master of science, master of landscape architecture, graduate diploma and doctor of veterinary medicine programs that he hopes this

generation of students will be able to meet those challenges and eradicate them from the list of world ills.

Leder said scientific advances will raise questions and concerns about what the effects of those advances will be, and he hoped that in trying to find answers, graduates would be "knowledgeably concerned, rather than simply concerned about knowledge."

During the ceremony, professor emeritus status was bestowed on retired OVC professors Cliff Barker, Frank Milne, James Archibald and Margaret Hardy Fallding. 0



## Grandfatherly advice



*Dr. Chris Bigland receives an honorary doctor of science degree.*

Forty-five years of post-university experience were condensed into seven points of advice to bachelor of science graduates Thursday afternoon. Dr. Chris Bigland, DVM '41, who received an honorary doctor of science degree, passed along some of what he has learned:

God --there is a supreme being or life force, he said. All his studies, experience and reading show a master force is impossible to deny.

Family — it's important to set aside time for spouse, children and family members, he said. No matter how much success someone has, it won't be more precious than the time spent with loved ones.

Money — those trained in the sciences are so dedicated they are often careless about money, he said. He advised graduates to learn about finances to understand "the other world."

Bigland also directed them to contribute to their professional associations and to uphold the integrity of their professions. And he told them to continue to learn, to be innovative and flexible, and to prepare a life plan. 0

*Left to right: professor emeriti Frank Milne, Jim Archibald, Margaret Hardy Fallding and Cliff Barker*

## Stability and change



Left to right: Chancellor Bill Stewart, Vice-President, Academic, Howard Clark and President Burt Matthews.

Universities need to demonstrate flexibility and a willingness to experiment and adapt if they are to provide the leadership society deserves and expects, Dr. Howard Clark said Friday morning in his last convocation address as Guelph's vice-president, academic. He becomes vice-chancellor and president of Dalhousie University Sept. 1. But the preservation and understanding of traditions and values is also an essential university activity, he said.

The tension between tradition and stability on the one hand, and flexibility and change on the other, is healthy for a university, said Clark, but there must be an appropriate balance between the two. There must be a similar balance in Guelph's students, he told graduates of the bachelor of applied science and bachelor

of commerce programs.

The difficulty of the task being asked of universities cannot be overestimated, Clark said. "We ... are asked by the public to educate for a future we cannot describe, to provide skills for occupations and professions that do not now exist, to convey to students a sense of today's cultures from a society that is fragmented and fractious, to conduct research especially in those fields which will be relevant to tomorrow's society — which none of us can describe — and to do all of this with resources that are ... seriously constrained and inadequate.

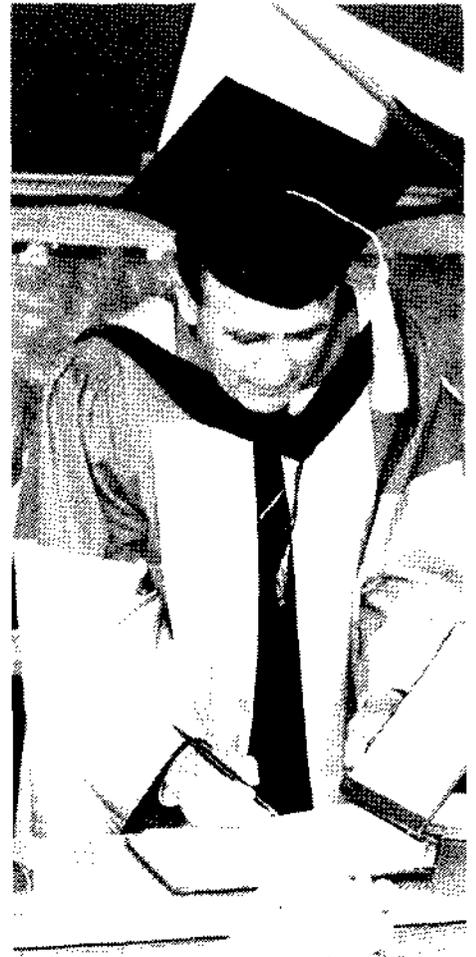
"Given the importance of the task, surely we can reasonably expect from you, the public, strong support and concern — stronger than we have had in the past." 0



At left, professor emeritus Ernie Reinbergs with Dr. Howard Clark. At right, professor emeritus Reg Shuel with Chancellor Bill Stewart.



## Milk for all it's worth



Honorary doctor of laws recipient Ernest Mann.

New career opportunities in the dairy industry await graduates, said honorary doctor of laws recipient Ernest Mann in his address to bachelor of science in agriculture and bachelor of science (earth and food science) graduates Friday afternoon.

Mann said a worldwide revolution in the dairy industry is changing the traditional image of milk and dairy products. Modern scientific research and technology has unlocked the treasure chest of milk, he said, making way for possible use of dairy ingredients in the non-food sector — the textile, chemical, pharmaceutical and cosmetics industries.

There has also been an explosion in scientific literature, Mann said, and today's scientists have direct electronic access to facts published in thousands of journals. He said the new information storage medium has much potential, particularly for disseminating information in developing countries where telephone services are often inadequate.

"These developments offer graduates new careers and an opportunity for success," he said.

During the ceremony, retired professors Ernie Reinbergs, Crop Science, and Reg Shuel, Environmental Biology, were each made a professor emeritus. 0

# THE UNIVERSITY'S FIVE-YEAR PLAN 1986-1990

Following the acceptance by Senate and Board of Governors of the mission statement **Toward 2000: Challenges and Responses**, each college, University school and academic service unit was asked in the fall of 1985 to formulate a strategic plan for the next five-years. Certain parameters were stated within which such planning should be undertaken, and each plan was to address at least the following points:

1. What specific steps towards excellence will the college (University school or other unit) undertake over the next five years in teaching, research and service?
2. What faculty and staff retirements and replacements are to occur over the next five years, and how will the available positions and resources be allocated within the college?
3. What new programs (graduate or undergraduate) are planned for each college, and how would they be mounted with few, if any, additional resources? What old programs will be phased out?
4. What new disciplinary areas in each college, usually within existing departments, must we support and probably expand over the next five years?
5. Within the parameters outlined above, what space and capital needs will each college have, and how will these needs be met?
6. What specific steps will each college take to ensure that its undergraduate programs and teaching are consistent with the University's aims and objectives?
7. Should additional funds become available for faculty renewal as recommended by the Bovey Commission, in what areas would they best be used in each college?
8. In what areas should each college be planning future developments in collaboration with other colleges? What steps are being taken to develop such collaboration?
9. How will you evaluate annually the progress of your College in implementing the college plan?

Nevertheless, within these constraints, the format and content of each plan has been left very much to the discretion of each unit, thus recognizing the different challenges and opportunities that may confront individual parts of the University over the next decade.

To gain a full understanding of the present thinking of each unit, it is essential to read each detailed submission. Each college plan is based on individual plans from each department; indeed, in any university, much of the planning and subsequent implementation must occur at the departmental level with common, major themes and issues being drawn together to form the college and the University's plans. There follows the summaries of all the individual colleges and academic service unit plans.

In considering them, a statement of what strategic planning means will be helpful. The following quotation is drawn from George

Keller's book "Academic Strategy" (p.75).

"To have a strategy is to put your own intelligence, foresight and will in charge instead of outside forces and disordered concerns. The priorities are always there. The question is who selects them. When the pressures are in charge, the present gets the attention not the future; fighting brush fires and improvisation takes precedence, not planning; defence is the game, not offence; and political and psychological infighting rules, not meeting the outside needs, threats and opportunities. Strategy means agreeing on some aims and having a plan to defeat one's enemies - or to arrive at a destination - through the effective use of resources."

It is clear, even from a relatively cursory examination, that many of the plans from the various units, as they now exist, cannot be regarded as strategic plans. Although they give some indication of new ventures that each unit wishes to undertake, many do not raise the question of where the resources are coming from to mount these new ventures, and few address the thorny issue of priority-setting. Without these, the present documents give only a glimpse of the future but do not chart the appropriate route for its attainment.

They can, therefore, in general only be regarded as the first step towards planning the future of the University. Subsequent planning cycles will be needed to refine these plans, especially to address the priority question and to specify the reallocations of resources that will be needed to achieve a significant number of hoped-for goals. On the other hand, planning cycles must not occur with so great a frequency that planning becomes an obsession and an occupation in itself.

In reviewing the plans of the individual colleges and units, as they were originally submitted, it was also clear that in many cases, even when the introduction of a new program was being suggested, no anticipated date for its implementation was included. This necessitated some further correspondence with college deans and others, and based on those replies, it is possible to develop the following scenario for major program developments over the next five years. This scenario in no sense defines new program development; it is tentative and the dates are flexible. It does, however, give an overall sense of future developments.

## ONTARIO AGRICULTURAL COLLEGE

1. Introduction of the M.Ag. program in September 1986, with graduate enrolment in this program reaching 60 by 1990.
2. Graduate program in park administration - proposal to the Board of Graduate Studies and Senate in spring 1986 and to the Ontario Council of Graduate Studies for appraisal in fall 1986.
3. Review of undergraduate and diploma programs to be complete by December 1987 - no

new undergraduate programs proposed and no existing majors will be discontinued.

4. Guelph turf research unit - proposal to Research Board in May 1986, with unit operational in September 1986.
5. OAC's total enrolment not likely to exceed 1,000 in B.Sc.(Agr.) on an annual basis, but graduate enrolment may grow to 500 by 1990.
6. Centre for Soil and Water Conservation. Proposal to Research Board in May 1986 with unit operational by January 1987.

## COLLEGE OF FAMILY AND CONSUMER STUDIES

1. Although no new undergraduate programs are envisaged, significant changes within existing programs will include:

- development of the <sup>3</sup>erontology emphasis into a major.
- introduction of a youth services emphasis into the child studies major.
- review of the role and place of the textile option and the housing emphasis.
- review the assignment of titles for the consumer studies major and its emphases.
- review of the Institutional Food Service Major in the B.Comm. program.

Proposals for these changes will be developed for consideration of the Board of Undergraduate Studies in 1987/88, except for the institutional food service major proposal, which will be developed by 1988/89.

2. A review of academic advising will be conducted leading to revised procedures or programs in place by fall 1987.
3. A proposal for a PhD program in family studies, jointly with colleagues from the Department of Psychology, will be prepared by March 1987.
4. A proposal for a master's program, by course work, will be developed by the Department of Consumer Studies by fall 1986.
5. New support/experimental facilities for research will be developed and operational as follows:
  - metabolic unit for applied human nutrition by fall 1986.
  - consumer research unit by summer 1987.
  - product testing and development unit by 1987/88.
6. There will, in each of the academic units, continue to be a significant commitment to continuing education offerings, and especially to those professional and industry groups that relate to the strategic interests of the college.

## COLLEGE OF ARTS

1. Major review of the core, structure and management of the BA program to be undertaken jointly with the College of Social Science and to be completed by June 1987.
2. A study of the feasibility of an interdisciplinary film studies minor will be completed by June 1987.
3. External funding for a chair of Scottish

studies may be raised by 1988, with the appointment to the chair effective in 1989.

4. A study of the feasibility of an interdisciplinary MA program in drama will be completed by late 1987.

5. The fine and performing arts department will bring forward a preliminary report by spring 1987 on the co-ordination of cultural activities and on suggested new ventures.

6. The colleges of Arts and Social Science will co-operate on a study of counselling services within the BA program and will bring forward proposals for new approaches by early 1987.

7. A student exchange program with the University of Aberdeen and an interuniversity third-year abroad program for students of French at the University of Nice will be introduced by September 1987.

#### COLLEGE OF BIOLOGICAL SCIENCE

1. A major review of undergraduate programs in the college, particularly an examination of core courses, will be undertaken and will be completed by December 1986.

2. A CBS research advisory committee will, by Dec. 1, 1986, identify research strengths in the college and propose strategies for their further development.

3. The incorporation of information technology into courses and programs will be a matter of priority.

4. High-school liaison and graduate recruitment will be strengthened.

5. A staffing plan for faculty renewal and recruitment is under discussion.

6. Greater emphasis on graduate training, especially at the PhD level.

7. Exploitation of areas of research strength that overlap between CBS and other colleges (e.g. biotechnology, human nutrition, aquaculture, plant sciences).

#### COLLEGE OF PHYSICAL SCIENCE

1. A new interdisciplinary undergraduate program for students specializing in physical sciences is being considered by the college. Six first-year courses will be developed and offered experimentally in fall 1987. If successful, the program will be expanded.

2. Undergraduate enrolment in the college programs to remain relatively stable with some increase in the specialized physical science honors and majors program. The desired level of graduate enrolment is at least 180.

3. A modest start has been made on a research initiative, based on expertise in the college and emphasizing NMR applications to the biological sciences, perhaps leading to a major research commitment. Since this plan was written, the University has encouraged this project and funding is being arranged.

4. A Guelph-Waterloo audio-visual microwave link will be funded by external sources and established by 1988.

5. Master's program in CIS to be introduced in fall 1986.

6. A proposal for a PhD program in mathematics and statistics will be developed by 1988.

#### COLLEGE OF SOCIAL SCIENCE

1. Major review of core, structure and management of the BA program to be undertaken jointly with the College of Arts and to be

completed by June 1987.

2. Proposal to establish a School for Integrated Studies (Akademia).

3. Introduction of PhD in resource economics in collaboration with the Department of Agricultural Economics and Business, to be operational in fall 1987.

4. Proposal for a PhD program in rural resource evaluation and environmental analysis to be considered by the Board of Graduate Studies and Senate in 1986/87.

5. Proposal for a PhD program in industrial-organizational psychology jointly with the University of Waterloo or a collaborative PhD program with the Department of Family Studies, to be developed in 1986/87.

6. The development of a proposal for an MA program in international development to be undertaken in 1986/87.

#### ONTARIO VETERINARY COLLEGE

1. The creation of a Department of Population Medicine, drawing on personnel in the departments of Clinical Studies and Veterinary Microbiology and Immunology, will be carried out by spring 1987 or earlier, if approved by the OVC faculty this June.

2. The college plans to attain a faculty-student ratio that is the average of the colleges of veterinary medicine in Canada and the United States by 1991.

3. The college has established a "College Forum" comprising all faculty and selected representatives of other OVC constituents to take responsibility for the college's aims and objectives and to comment regularly on academic and other affairs of the college (May 1986).

4. The college is making a major commitment to providing continuing professional education for veterinarians in Ontario in co-operation with the Ontario Ministry of Agriculture and Food and the Society of Ontario Veterinarians.

5. Specific new and expanded areas for emphasis in medical research or clinical practice have been identified. Examples are animal biotechnology, oncology, health management, medical imaging, laboratory animal, wildlife, fish, poultry, medical informatics, and food hygiene.

6. OVC wishes to co-operate with the College of Biological Science and other colleges in developing a baccalaureate program in biomedical science if this serves the interests of the University.

#### CENTRE FOR INTERNATIONAL PROGRAMS

1. Mobilize international program committees in all colleges.

2. Collaborate in enhancement of "global perspective" in all teaching programs.

3. Delineate, encourage and assist international development research areas with initial priority placed on food aid policy research.

4. Expand international co-operation activities to increasingly involve students.

5. Establish position of associate of the Centre for International Programs.

#### LIBRARY

1. Attempt to meet need for 35-per-cent increase in space for storage, staff, service and

study use.

2. Completion of the integrated on-line catalogue.

3. Modification of orientation programs including the possibility of a credit course in information access and research methods.

4. Augmentation of existing on-line data base search services, including the provision of locally created data bases.

5. Review of University archives policies, and the development of "archives and special collections."

#### UNIVERSITY SCHOOL OF RURAL PLANNING AND DEVELOPMENT

1. Conduct a comprehensive review of its course programs in 1986 and 1990.

2. Introduce a new program in international rural development in fall 1986.

3. Appoint a co-ordinator of Rural Domestic Outreach in 1986.

4. Institute an interdisciplinary PhD program by 1989.

5. Improvement will be made to the merit appraisal system to make it into a more effective performance appraisal/development process to be initiated in 1986.

#### UNIVERSITY SCHOOL OF PART-TIME STUDIES AND CONTINUING EDUCATION

1. Change from a University school to Faculty of Continuous Learning (1986).

2. Assist in the foundation of a Third Age University (1988).

3. Establish an International Training Secretariat (to 1990).

4. Develop new certificate programs and enlarge the offering of distance education courses (to 1990).

5. Establish an Adult Education Resource Centre.

6. Organize teleconferencing/tutor service for independent learners (1987).

#### INFORMATION TECHNOLOGY

1. Define an educational network that will provide access for all students to a variety of generic services, programs and information resources as part of their educational experience. Phased implementation beginning in fall semester 1986.

2. Ensure that all students have a course-related requirement for network use, by fall semester 1987.

3. Develop an integrated orientation program for all network information or service providers, using new technologies as appropriate. Fall semester 1986.

4. Provide computing and communications support services in new ways: information technology co-ordinators in the colleges; scheduled professional support desk; more emphasis on orientation, information modules and brochures, less on course instruction. Phased implementation beginning in fall semester 1986.

5. Develop a funding algorithm, including incidental fees, for the educational network; implementation, fall 1987.

6. Establish policy guidelines for assessing proposed new programs or services and assigning resources.

7. Develop and expand network protocols,

standards, interconnections (internal and external).

8. Expand support for research in information technology.

9. Develop plans by June 1987 for central computing environment after June 1988.

## UNIVERSITY-WIDE ISSUES

The plans of the various colleges and units were, of course, prepared in relative isolation. Not surprisingly, there are several areas of overlap, as well as other issues that affect the University as a whole, but which no single college has addressed. Thus, the plan of the College of Social Science raises a number of proposals concerning student counselling and retention rates. These issues, which have recently also been under discussion in the College of Physical Science, should most appropriately be addressed at the University level, although individual college initiatives, especially in the area of counselling, are to be encouraged.

Again, the plans raise many questions about the availability and allocation of space, which can only be addressed by the University. On the other hand, none of the plans deals adequately with the need for appropriate mechanisms that will orient and update faculty, students and staff to the applications of new technology to education and research, nor for the need of the University to consider carefully its future direction in the areas of business- and management-related programs. Other issues can also be identified. The following section contains a discussion of some major University-wide issues that must be addressed over the next five-year period.

### 1. Enrolment

Three major issues are apparent. First, the number of students likely to enter Guelph's programs over the next few years needs to be carefully examined, taking into account a number of factors. The size of the age group from which direct high school entrance to university has traditionally come has already started to drop and will drop by some 20 per cent by the mid-1990s before it starts to increase again.

So far, the reduction in the age group size has not been reflected in university enrolment because of a marked increase in participation rates since the late 1970s. However, if the current participation rates remain constant, full-time undergraduate enrolment is predicted to drop steadily to 80 per cent of its present level by 1998/99, after which it will start to grow again. This, of course, does not take into account any "double-cohort" effect, which may cause a perturbation in the 1988-to-1992 period, although its size cannot be estimated with any accuracy.

Although everything possible must be done to promote Guelph programs effectively and the University's projections of its likely enrolment must also take into account reasonably the above trends. Again, in the last two years there have been major declines in enrolment in agriculture and there are no signs that this trend has yet bottomed out, or indeed that it will be reversed within the next five to 10 years. This again emphasizes the need for the University to have, as the basis of its future planning, realistic enrolment projections, especially in

terms of first-year intake.

Secondly, as the school-age population declines, it becomes even more important that the University pay increasing attention to the retention of students in its programs. This is highly desirable in itself as an academic goal, but is equally important in terms of the efficient use of resources.

For example, is it likely that under our present regulations based on a trimester system, a student who adjusts slowly to the university environment and performs poorly in his/her first semester is penalized relative to a similar student in a university operating on eight-month courses? Can more be done through counselling to reduce our present attrition rates? In what specific ways can the learning environment of our students be improved, so that retention can be enhanced?

Thirdly, the further development of the University's liaison and public relations programs must be a matter of high priority. This must be apparent not only in the allocation of resources for liaison purposes, but also in the recognition given at the departmental level to those faculty who actively engage in our various liaison activities.

It must be recognized by all promotion and tenure committees that student counselling, and liaison activities such as visiting high schools and even telephoning of applicants, are the responsibilities of all and are as important as teaching and scholarship. Putting it bluntly, the students must be at Guelph, before we can teach them!

## RECOMMENDATIONS:

I. That the Forecast Enrolment Procedures Group, annually each fall, present a report to the Committee on University Planning, giving details of graduate and undergraduate enrolment projections for the following five-year period, and of the rationale for these projections.

Comment: At present, the Forecast Enrolment Procedures Group develops enrolment projections that form the basis on which the following year's budget is cast. Although there is some dialogue between FEPPG and admission committees relating to intake numbers and admission standards, CUP, which will subsequently be reporting to Senate on the annual budget, has no opportunity for discussion of enrolment issues. Whether or not the planning committee will wish to report annually to Senate on these enrolment projections, separately or as part of the budget report, is a matter that CUP should decide.

II. That the Board of Undergraduate Studies, as a matter of priority, establish a subcommittee to:

- (a) develop a measure, based on existing student data, of attrition at Guelph in the various undergraduate degree programs, over the period 1980 to 1986, and
- (b) report and recommend on those factors that can maximize retention, within the limits of available resources.

Comment: Documents are already available, as a result of work done through the Provost's Office, summarizing experiences elsewhere in improving retention rates. But existing data

bases may not easily provide an acceptable measure of attrition at Guelph, nor is it clear what remedial steps might most appropriately be taken here.

No specific recommendation is submitted here concerning liaison and public relations, because detailed proposals are being developed by Associate Vice-President, Academic, Janet Wardlaw with the liaison committee and the director of Public Relations and Information.

## 2. Organization and Structure

Arising from Senate's approval of **Toward 2000: Challenges and Responses**, a review is now under way, directed by the associate vice-president, academic and the provost, of the various counselling and advising services provided to students. BUGS has made considerable progress in the definition of learning objectives that might apply to all undergraduate programs, and this discussion will be continued at the program committee level in fall 1986.

Responsibility for the quality of the learning environment for students has been assigned to the provost and the vice-president, academic, and the advisory committee on liberal education is engaged in a useful debate on the semester system and its impact on teaching and learning. Yet no single body has an overarching responsibility for all of these matters that govern not only the nature but also the quality and impact of the undergraduate education offered across the University.

Moreover, there is a lack of understanding and co-ordination among the advising and support programs by the teaching departments, and the counselling and educational support programs offered by Student Services and other non-academic units on campus.

Given the discussions associated with **Toward 2000**, and the University's commitment to a greater emphasis on independent student learning and personal development of students, it is timely to consider a major reorganization that will promote an integrated responsibility for student learning and the learning environment of students, and will ensure closer co-ordination of all those involved in supporting student learning.

Proposed reorganization: It is suggested that the following committees and boards be abolished: Board of Undergraduate Studies; Board of Studies for Associate Diploma Program; Liberal Education Advisory Committee; Senate Committee for Educational Development; and Committee of Academic Counsellors.

There should then be established a Board for Educational Policy, to be appointed by Senate, and composed of: the vice-president, academic; associate vice-president, academic; provost; director of the Counselling and Student Resource Centre; director of the Associate Diploma Program; director of the Office for Education Practice; co-ordinator for Instructional Development; and 12 members of Senate — including two chairmen of program committees, two deans, two undergraduate students, and one student in the Associate Diploma Program.

The Board for Educational Policy shall establish the following standing committees:

- (a) Committee on Programs and Regulations. This committee will conduct the routine business, now undertaken by BUGS, to review and recommend approval of program and course

changes and of academic regulations.

(b) Committee for the Associate Diploma in Agriculture.

(c) Committee for Advising and Counselling. This committee will recommend policy concerning counselling and student support services, and will oversee their co-ordination. Its precise mandate and composition should probably not be defined until the review of counselling and advising services mentioned earlier has been completed.

(d) Committee for Extracurricular Learning. This committee will be concerned with the overall learning environment beyond the classroom and with the promotion of student involvement in that environment. This might include a concern for general-interest lecture series, programs in residence, orientation, cultural and social activities, instructional programs in athletics, and leadership development.

(e) Committee on Educational Research. This committee will undertake, or sponsor through a University unit such as OEP, or Institutional Planning, or a department, or even with an individual faculty member, research on educational issues, as requested by the Board for Educational Policy. For example, the study of retention and attrition, mentioned above in Recommendation II, would in future appropriately be undertaken by this committee. Numerous other issues warrant careful and detailed study, i.e., how successful has OTEA been in improving English competence, how effective is CAI/CAL in terms of student learning, relative to traditional teaching, and so on.

The Board for Educational Policy will oversee the work of all committees, will be the body that reports to Senate, and will itself be responsible for overall educational policy. It should, for example, review the impact and future of the semester system, using research studies generated through its committee on educational research; it should be concerned with the integration of information technology into the learning environment; and it should be concerned with university admission requirements as OAC's come into effect, and with the extent of French language instruction, as typical examples.

This proposal has many implications and requires extensive discussion and consultation, as well as refinement and amplification of terms of reference, and of appropriate compositions. Accordingly, it is recommended:

III. That this proposal be referred to CUP for detailed study with a report to be submitted to Senate by December 1986.

### 3. Resources and the Budget

The impact of continuing budget reductions on the quality of our programs, and the serious difficulties in balancing the 1986/87 budget even with addition of the University Excellence Fund, are obvious problems to all. There is little evidence that over the next five years this financial situation will improve.

Moreover, over the years, these budgetary pressures have been accommodated by reductions in equipment and operating supplies budgets, with salary costs taking an ever-increasing part of the total budget. For the University to seriously move towards excellence in teaching and research, substantial invest-

ments must be made to replace obsolete equipment, to restore the purchasing power of operating supplies budgets, and to greatly increase the Library acquisitions budget.

In addition, major new research initiatives need to be developed and supported financially. Although these may be achieved in part if the excellence fund is continued, this cannot be guaranteed, and in any event the University should be making these reallocations with whatever resources are available. Moreover, given the age distribution of faculty and, to some extent, staff, and the relatively low turnover, the average age of employees is likely to continue to increase over the next five years with a similar continuing increase in the percentage of the budget required to cover salaries.

By 1991, it is also likely that, unless there is an increase in the participation rate, enrolment declines will be substantial in the Ontario university system as a whole and probably also at Guelph.

These factors combine to make a compelling argument for even more careful budget planning over the next five years. In accordance with the present budgetary procedures of the University, CUP is referring these matters to the president for consideration in preparation of the 1987/88 budget and the budgets of succeeding years.

One aspect, which can and should be addressed immediately, is not a budgetary issue itself but is concerned with the more efficient use and planning for faculty resources. It is essential that wherever possible the broadest possible view be taken of each faculty member's role within the total University, and that duplication of interests and responsibilities be minimized.

When faculty positions are being filled, it is therefore important that University-wide perspectives be applied, rather than the often narrower interests of a particular department. The most appropriate means of achieving this are not easily apparent and hence it is recommended:

IV. That CUP examine mechanisms to ensure that the interests of the University at large are taken into consideration when faculty appointments are made.

### 4. Information Technology and the New Information Age.

The five-year plan for information technology describes plans to develop over the five-year period a new information and computing environment on campus. This will change profoundly the teaching and learning environment for students and the way in which the information needs of scholarly work and research are met. It will influence many aspects of campus life for faculty, staff and students.

Experience elsewhere has shown that as this new information environment is implemented, the need for a rethinking of some organizational structures within the University becomes apparent. The relationships among the Library, Computing Services and Communications Services here at Guelph will become increasingly tighter, since all are in the business of providing and accessing information. The question of the relationship of CAI/CAL, now a responsibility of OEP, to such information units will need to be addressed, as will the matter of the most appropriate administrative and reporting relationships. It is recommended:

V. That CUP establish a task force to review experiences at other institutions in Canada and elsewhere in information technology, to consider the future roles of the Library and other related units, and to recommend on the most appropriate structure and organization that the University should adopt to maintain a leadership role in the use and application of information technology.

Comment: The review of the task force should be forward-looking and should address questions such as: which unit(s) at Guelph have the responsibility and expertise to provide instruction at any level to students in the accessing and manipulation of information, whether it be in printed or electronic form?

### 5. Involvement of the University of Guelph in Business and Management Programs.

In recent years, some discussion has taken place concerning the need for new programs that have a business- or management-related core. The M.Ag. program in agribusiness is the first such step, and others that have been mentioned or are under discussion include programs in park administration, and the possibility of a graduate level program in the School of Hotel and Food Administration.

Other programs under discussion might well include courses in these areas, including the programs in rural planning and development, and public administration. Indeed, there is a continuing heavy demand for courses in business and management that cannot fully be met at present. There is also the possibility of developing a number of inter-related master's-level programs in what might be termed "applied management" fields, all built around a common core of business/management courses.

At present, the University's faculty expertise in these areas is limited and dispersed among several academic units, and there exists no adequate forum for interaction, or for the consideration of any need to develop long-term, more integrated plans. It seems timely to consider the University's potential and future role in these fields, in an orderly and thoughtful way. It is recommended:

VI. That CUP undertake a study of the University's future role in business administration and management, that opportunities be provided for interested parties or individuals to contribute to the study, and that CUP report to Senate by June 1987 on the results of the study.

Comment: The scope of the study should be wide and should range from the possibility of maintaining the status quo to that of developing a Faculty or School of Business and Management.

### 6. Future of Agriculture and Agricultural Education and Research.

The present state of agriculture in Canada and North America is generally well-known. There is some agreement that agriculture is in a major transition and that it will emerge within an unspecified number of years with enhanced productivity but far fewer persons actively involved in it. The perceived loss of the traditional family farm and the perceived conversion

*Continued on page 10.*

# Going home

## *PhD graduate equipped to help his country*



*Prof. Pieter Groenevelt celebrates with the El-Asswad family at convocation last week*

*(Photo by Herb Rauscher, Illustration Services)*

Four years after arriving at Guelph to earn a PhD in soil science, Rajab El-Asswad of Libya is heading back home with his research findings to help improve the agricultural industry in his country.

Wind erosion and evaporation are serious problems in arid and semi-arid regions with sandy soil. El-Asswad's research has concentrated on treating the soil surface and experimented with different materials that might aid in water retention and provide soil stability. He collected soil in Libya and received permission from Agriculture Canada to bring about 100 kilograms to Guelph for laboratory experiments. For his field trials, he used the loamy sand at the Cambridge Research Station.

In his work on wind erosion, El-Asswad received assistance from Prof. Bill Nickling, Geography, who has done research in this area and whose wind tunnel was used for experiments. Prof. Pieter Groenevelt, Land Resource Science, El-Asswad's adviser, says the equation El-Asswad devised to measure the threshold shear velocity is now being used as a criterion for wind erosion.

For the wind experiments, samples of both the Libyan and Canadian soils were sprayed with solutions of polyvinyl alcohol (PVA). El-Asswad found that even at the lowest concentration of .25 per cent PVA, significant resistance to wind erosion occurred. He used three surface treatments to investigate evaporation — liquid manure, PVA and polyvinyl acetate; he also used a control test plot with nothing added. Both the manure and polyvinyl acetate increased the structural stability of the soil and slowed evaporation.

El-Asswad, with Groenevelt and Nickling, has published the results of this research in *Transactions of the American Society of Agricultural Engineers* and in *Soil Science*. The work was funded by the Natural Sciences and Engineering Research Council of Canada and the Ontario Ministry of Agriculture and Food.

El-Asswad returns to Libya this month to a faculty position at Alfateh University in Tripoli, which provided a scholarship for his graduate work here. His teaching responsibilities will be in soil and water conservation and soil physics. Because of graduate work done prior to coming to Guelph, El-Asswad says he is aware of the excellence of the doctoral program in soil science offered here and considers himself fortunate to have been involved in it.

El-Asswad and his wife have been away from Libya for seven years, and he says they are looking forward to introducing their five daughters, aged two to nine, to the country.



*Kevin Cockell of Nepean receives the Walter N. Vaughan Medal from Mrs. Nancy Vaughan. The award, presented June 4, is given annually to a student who makes outstanding contributions as a member of Senate while maintaining a high academic record.*

*(Photo by Herb Rauscher, Illustration Services)*

**Plan** *Continued from page 9.*

of agriculture to large-scale industry, together with the low profitability of agriculture, seem to be at the heart of this transition.

The University states that it has a special responsibility in agriculture not only to Ontario, but to Canada and internationally, and therefore it must be involved in this transition. Moreover, enrolments in agriculture at the undergraduate and graduate levels are so essential to Guelph's financial base that substantial declines would have great impact on all parts of the University. The future of agriculture and agricultural education is therefore a matter of concern for the entire University and not just OAC.

Is it the University's task to teach agriculture as a technical discipline only? What emphasis should be placed on management skills? To what extent, if any, should our research in agriculture be concerned with small-scale viable agricultural systems or with long-term socio-economic perspectives? What is Guelph's role in, and emphasis on, rural sociology and indeed in rural outreach?

In terms of just self-interest, what will be the impact of the transition in agriculture on Guelph? Should enrolment in the B.Sc.(Agr.) program be set at a much lower level, recognizing that opportunities and demand will diminish substantially? How should the curriculum be reorganized? What will the overall impact of these changes possibly be on OAC?

Given Guelph's special characteristics and responsibilities, it is hard to avoid the conclusion that there is need for University-level discussion of these and related issues. It is recommended:

VII. That CUP establish a committee, drawing heavily on expertise in OAC, OVC and USRP&D and on outside experts, to consider the present state of agriculture and agricultural education and research and their long-term future, and make appropriate recommendations by April 1987, especially with regard to enrolments over the 1986 to 1990 period.

7. Rural Resource Development.

Perusal of the college and University school plans, as well as those of some departments, reveals that there is widespread interest in a number of areas that might usefully be collected under the title of rural resource development. Whether or not this is the correct term is unimportant, but there are certainly common themes associated with areas such as soil and water conservation, land use and land-use planning, land evaluation, rural planning, environmental management, resource economics, resource management, and of course such themes can be applied not only to the Canadian, but also to the international context.

Of all Canadian universities, Guelph is unquestionably best placed to emerge as an international leader in educational programs and research in these fields. The opportunity is considerable, but it requires that thought be given as to how the University's strengths and expertise in these fields should best be organized and administered. It is recommended:

VIII. That CUP consider, in consultation with the Board of Graduate Studies and the Research Board, and recommend to Senate by September 1987, an appropriate organizational structure for optimal development of Guelph's strengths in areas of rural resource development. 0

## Mixed farming key to efficient operation

by Pamela Healey

Next time you bite into a spear of asparagus or crunch on a cucumber, consider that these vegetables are real luxuries. "Asparagus, maybe," you say, "but Ontario field cucumbers — these are a luxury?"

According to Engineering professor Peter Southwell, they are. And he should know. He recently completed a three-year contract with Agriculture Canada to develop energy output/ input ratios for all Ontario farm products, to determine which are most energy efficient.

Using the unit kilocalories, Southwell measured all off-farm energy costs, from petroleum fuels and fertilizer to the manufacture of steel and farm machinery, as well as electricity, pesticides and animal feed production. He also added in the on-farm energy costs of crop and animal production, including such items as tillage and harvesting, livestock housing, feed preparation and manure handling. Finally, he compared total energy input to the energy output or nutritional value of the farm products for human consumption.

### Energy producers

Southwell found that field crops are all energy producers, mainly because they capture sunlight. Soybeans, for example, produce more than five times the energy put into growing them and carrots produce almost four times the energy. Sweet corn, yellow beans, cucumbers and asparagus, however, have ratios of less than one, and are all grown for reasons other than their energy efficiency. In terms of nutrition, the consumer gets only seven per cent of the energy put into producing the asparagus on the plate.

Southwell says small fruits also have low energy output/input ratios, with grapes, cherries, strawberries and raspberries all well below one. Apples, however, produce twice the energy needed to grow them.

Animal products, especially poultry, are all much less energy efficient than field

crops, says Southwell. "The worst is fried chicken — you are getting only about 10 per cent of the energy you put into the crop, plus you are using additional energy for the oil and frying."

By conserving and using the nitrogen content of animal manures, however, the ratio can be raised to higher than one. Southwell says beef producers were glad to hear that their product, formerly condemned as inefficient, can have a balanced ratio if the manure is managed properly. "Before very long, with the increasing price of fuels, we may be keeping beef cattle primarily as a source of manure and secondarily as a source of food."

### Closed-loop system

Southwell is active in developing self-sufficient, synergistic, or what he calls "closed-loop" farm systems. Agriculture is unique in its ability to produce its own on-farm energy requirements, he says, and this ability should be matched to the crops produced. As costs of energy rise, farmers must get away from always striving for maximum yield and profit, and use the criteria from output/input ratios instead, he says.

Farming has been moving towards even greater specialization, but the only way closed-loop systems will work is with mixed farming, says Southwell. For example, if farmers use oilseed or ethanol crops as a source of animal food and fuel, and also nitrogen and methane from the manure as fertilizer and fuel, they can close the nutrient and energy loops within their farm operation.

Closed-loop farm systems require capital to initiate, he says, but some farmers are getting close to becoming involved in this type of operation. He is confident that this is the farming of the future and that someday, with the help of computers to simplify management, farmers can be energy efficient and prosperous while remaining responsive to changing markets. 0

## Norden teacher award to Hunter



Dr. Bruce Hunter, Department of Clinical Studies, has been named this year's winner of the Norden Distinguished Teacher Award at OVC.

Hunter, who has a DVM and M.Sc. from the University of Saskatchewan, specializes in diseases of free-living avian species and fur-bearing animals. He has taught at Guelph since 1981. Prior to that, he was a veterinary pathologist and acting head of Avian Pathology with the Ontario Ministry of Agriculture and Food in Guelph.

Hunter is director of OVC's Wild Bird Clinic, which rehabilitates wild birds injured accidentally or wounded by hunters. The clinic, the only one of its kind in Canada and one of only four in North America, is staffed by 120 Guelph student volunteers.

The Norden award was established in the United States in 1963 by Norden Laboratories, Inc., Nebraska, in recognition of the far-reaching influence veterinary professors have on their students. Each class in OVC submits a nomination for the award to the dean, and the winner is selected in consultation with the three previous winners of the award. 0

## Our people

The Department of Athletics is hosting a wine and cheese reception June 19 for **Londo Iacovelli**, wrestling coach and co-ordinator of men's intercollegiate athletics, who is leaving the University after 21 years to pursue business interests. The reception is at 4:30 p.m. at the Faculty Club, Level 5, University Centre. RSVP to Janis Macpherson, Ext. 6133

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Computing Services is holding a party June 26 for Prof. **Ted Swart**, who is leaving the department to take up a teaching position with Computing and Information Science and the Department of Mathematics and Statistics Aug. 1. The party is from 7:30 to 10 p.m. in the Faculty Club. RSVP to Sandy McIntyre or Elaine Schonewille, Room 215, ICS, by June 20.

## Briefly

**THE SURPLUS SALES** Department, Blackwood Hall, has the following items available for sale on a closed-bid basis: one 1978 Dodge truck, Model D314, cab and livestock body, 360 V/8, s/n 031 BF8J508554, box size: 7'6" x 12' x 60", complete with 12" pitch roof and tarp. Reserved bid of \$2,000. Bids close June 18 at noon. For more information, contact Dave Scott at Ext. 8139.

**COMPUTING SERVICES** has available Base SAS and SAS/STAT for use on an IBM PC. In addition to most non-system dependent features, this new PC version also includes the display manager for full-screen editing and multi-windowing, file conversion support for DBASE II, DBASE III and LOTUS 1-2-3, and many other frequently used data management tools. Copies of the software may be obtained from

user support services, Room 203, ICS building, Ext. 3046. For a demonstration of the software, or information about hardware requirements, licensing or pricing structure, contact Tony Mackay at Ext. 2485.

**THE UNIVERSITY'S** annual Community Barbecue is July 10. Mark the date on your calendar and watch for the program of events.

**A GINGERBREAD HOUSE**, a new play for adults written by Janice Wiseman, runs June 13 to 15 at 8 p.m. at the Inner Stage. Directed by Rex Buckle and starring Gill Lloyd Jones, Andy Houston and Gerry Butts, the play is set in 1941 in the small pulp and paper town of La Tuque, Quebec. Tickets are \$5 and are available at the Bookshelf Cafe, at the door or by telephoning 836-3280.



Chancellor Bill Stewart admires the 1986 Winegard Medal just presented to Cheryl Greenlees of Caledonia. The medal is given annually to Guelph's most outstanding student. Greenlees graduated with distinction last week with an honors B.A.Sc from the College of Family and Consumer Studies.

(Photo by Herb Roust-her, Illustration Services)

## Next week at Guelph

### FRIDAY, June 13, 1986

**The Club's Summer Film Series - THE SEDUCTION OF MIMI**, 7:30 p.m., PS 113, members \$2, non-members \$3.

**Drama - A GINGERBREAD HOUSE**, directed by Rex Buckle, 8 p.m., Inner Stage, continues to June 15, \$5.

### SUNDAY, June 15, 1986

**Worship - CATHOLIC MASS**, 10:10 a.m., Alumni Lounge; **ECUMENICAL CAMPUS MINISTRY**, Sunday services are available at St. Matthias (Anglican), Kortright and Edin, Kortright Presbyterian, Scottsdale, and Harcourt United Church, 87 Dean Ave.

**Cycling Club - DIAGNOSTIC CLINIC**, 9:45 a.m.; **BELWOOD**, 50 miles, 10 a.m., UC south doors, \$2 entrance fee.

**Sunday Afternoon Walk - THE COLORS OF JUNE**, 2 p.m., Nature Centre.

### TUESDAY, June 17, 1986

**Arboretum - EDIBLE WILD PLANTS**, 7 p.m., registration required, Ext. 3932.

**Senate - MEETING**, 8 p.m., PS 113.

### WEDNESDAY, June 18, 1986

**Cycling Club - PUSLINCH LAKE**, 25 miles, novice ride, 5:30 p.m., UC south doors.

**Wednesday Evening Excursions - LIFE IN A POND**, 7 p.m., J.C. Taylor Nature Centre, cancelled if raining at 5 p.m.

## Job opportunities

As of *at Guelph* deadline June 6, the following opportunities were available:

**Secretary** (CIDA grant), Development Education Program. Salary range: \$270.64 to \$291.88 per week.

**Benefits Administrator**, Personnel Department. Salary range: \$23,501 minimum; \$29,376 mid-point; \$35,251 maximum. Normal hiring range: \$23,501 to \$27,613 (1986/87 rates).

**Assistant to the Director**, Gerontology Research Centre; grant position until April 30, 1989. Salary commensurate with qualifications and experience.

**Technician**, Department of Crop Science; temporary full time from Aug. 8 to June 30, 1987. Hiring range: \$368.51 to \$400.02.

*The following positions were available to on-campus employees only:*

**Library Assistant 1**, Track 2, Library Circulation/Reserve. Salary range: \$236.66 minimum; \$274.53 job rate (level 5); \$401.34 maximum.  
**Custodian 2**, Housekeeping Department; three positions: Position number 081 — original vacancy, night shift, Area 2; Position number 226, original vacancy, night shift, Area 1; Position number 072, consequential vacancy, night shift, Area 2. Job rate: \$9.27 per hour; probation rate \$ .20 per hour lower than job rate.

**Project Assistant**, Student Environment Study Group, Office of the Provost. Salary range: \$333.73 minimum; \$384.57 job rate (level 5); \$475.87 maximum.

**Laboratory Technician**, Department of Pathology. Salary range: \$312.58 minimum; \$361.4 job rate (level 5); \$448.43 maximum.

It is the University's policy to give prior consideration to on-campus applicants. To determine the availability of University employment opportunities, contact employment services and training, Level 5, University Centre, or telephone 836-4900.

## Personals

**For Sale:** 1984 Dodge Caravan, 822-8204. Small rabbit cage, Ext. 2456, afternoons. 1975 Camaro, Sherri, Ext. 2503. James Bay parka, 837-0296. Complete household contents, moving sale, 763-0280. Sides of beef, no artificial growth hormones, 1-855-6320. Burgundy camel-back couch, Gabrielle, Ext. 6031. Men's three-speed bicycle, Ext. 3993 or 822-4968. 1976 Volvo, Ext. 4961, or 763-0666.

**For Rent:** Three-bedroom house, until Sept. 1 only, Ext. 3445 or 822-1248. Rooms, available early July, Keith, 824-9804. Townhouse to share with two females, 824-5994.

University of  
**Guelph**



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