

# University News

Volume 1 Number 6

Dalhousie University

April 2, 1971

## Salaries among lowest

— Faculty brief

The faculty salary situation at Dalhousie has not improved, according to the Dalhousie Faculty Association, which says that average salaries of lecturers, assistant and associate professors are among the lowest in the Atlantic area.

The lag is about \$400 to \$600 behind that of their counterparts at Mount Allison, University of Prince Edward Island, St. Francis Xavier and University of New Brunswick, says the association.

In addition, although Dalhousie has more teaching staff at the doctorate level (56%), only 46% are at the professorial level. This, too, is not typical of other area universities, according to the association.

The Dalhousie association, in a brief to the President and the Board of Governors, views salary developments with concern and has asked the board to consider the matter.

Dr. Henry D. Hicks, the president, is sympathetic, and at a joint meeting of Senate Council and the executive committee of the board, accepted for consideration faculty submissions recommending a review of salary

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Dr. John F. Graham  
Chairman

## Two at Dal on commission

Two Dalhousie professors have been appointed to a Royal Commission.

Dr. John F. Graham, professor of economics at Dalhousie University will head the three-man Royal Commission on Education, Public Services and Provincial-Municipal Relations.

Other members are Professor Edwin C. Harris (Law) of Halifax and Charles E. Walters of Middle LaHave, Lunenburg County.

Education Minister Peter Nicholson, in making the announcement, said the commission would be asked to

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# LOW GRANT MAY BOOST FEES \$200

*Dalhousie University's tuition and residence fees may have to be increased by \$200 and \$100 respectively if, as expected, the university receives only a seven per cent increase in its operating grant from the Government of Nova Scotia.*

Dr. Henry D. Hicks, president of Dalhousie, issued the following statement earlier this week:

"As of press time, Dalhousie University has not been advised of the level of its grant support for 1971-72 from the Government of Nova Scotia.

"However, on the basis of the general information contained in the provincial budget which was brought down last week, it would appear that Dalhousie and the other universities in Nova Scotia are going to receive grants which we, at Dalhousie, regard as inadequate in the extreme.

"While I sympathize with the government over the financial problems it faces generally, it seems unrealistic that the universities should be subjected to such a small increase in operating grants for the coming year.

"The government is assuming that the universities of this province will continue to grow by about 10 percent per year,

in terms of enrolment, yet in Dalhousie's case it appears that it is giving a grant which is only about seven per cent higher than last year's.

"The Government and the University Grants Committee know that we are bringing into operation new plant, for which the government provided the major portion of capital assistance. But this new plant alone will increase fixed operating charges to such an extent that it will take up a substantial portion of the grant increase we expect to get.

"It must also be remembered that Dalhousie still bears the major burden of professional and graduate education in the province and is trying desperately to remain in the front rank of Canadian universities. This just cannot be done when the governments of other provinces support their universities so much more generously than does Nova Scotia's.

"It is also worth repeating, and emphasizing, that the amount of provincial government support to universities is misunderstood. Too many people in Nova Scotia have the erroneous idea that universities are an ever-increasing burden on the taxpayers of the province.

"The percentage of the

provincial budget granted to Nova Scotia's universities today is actually lower than it was six years ago.

"While it is true that universities in the province have in the last decade become increasingly dependent on government support to the extent that they look to governments for two-thirds of their revenues, it is important that Nova Scotians understand the true extent of their contributions and the payments the province receives from the federal government in support of higher education.

Prior to 1967-68 both the federal and provincial governments made some direct grants to universities.

"In 1967-68 a new arrangement was made between the government of Canada and the various provincial governments whereby the provincial governments undertook to make the only direct grants to universities.

"In return, they could reclaim from Ottawa each year sums of money equal to one half of the approved operating expenditures of the universities in the provinces. These 'approved expenditures' did not include interest payments, residence charges and some other types of necessary university ex-

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## No suppression of political beliefs at Dal—President

Dalhousie University has no policy that would suppress freedom of speech, no matter what a person's political beliefs may be.

But if actions resulting from any political beliefs interfered with or disrupted the normal operation of any part of the university, then the university has the right to take action.

The contract of a professor was not being renewed because of his non-compatibility with other faculty members.

Tuition fees may increase substantially next year, as may residence fees.

Additional student residence accommodation may soon be available.

These were the main points which emerged at the Dalhousie Student Council-sponsored University Forum held on Monday of this week in the Student Union Building.

The meeting was a consequence of a defeated motion which expressed concern over the nonrenewal of a professor's contract and the fining of a graduate student for disrupting meetings.

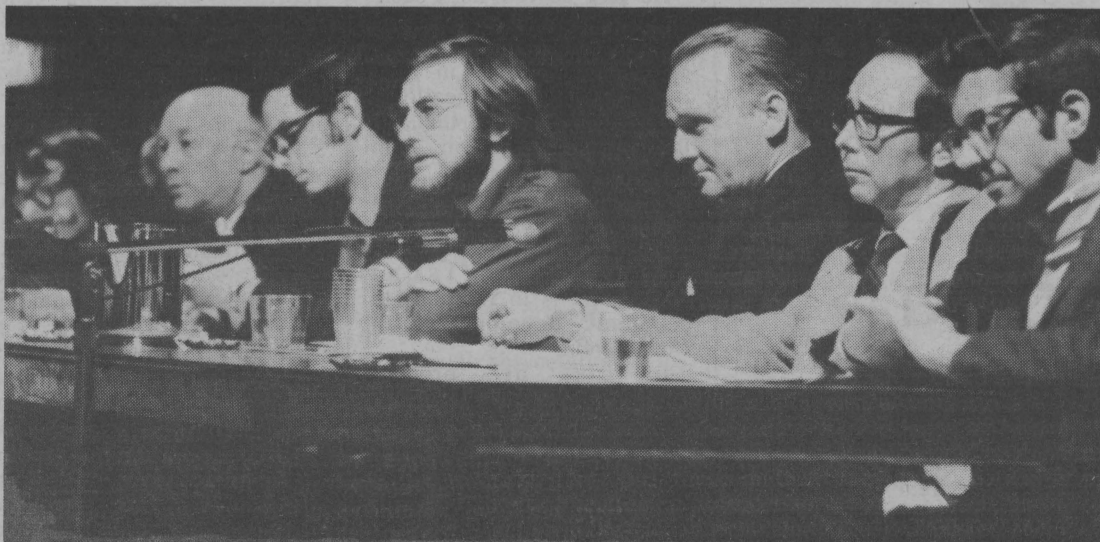
The motion asked that the

Student Council sponsor a panel discussion on discipline in the university, and the movers suggested the panel include the professor and the student involved, representatives of the Dalhousie

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### N.S. GOVERNMENT SUPPORT OF DALHOUSIE UNIVERSITY (Current Operating Expenses)

	N.S. Govt. Grant	Recoverable from Ottawa	Net Cost to N.S.	% of Provincial Budget
1965-66	\$ 1,753,100	—	\$ 1,753,100	1.16
1966-67	2,230,500	—	2,230,500	1.33
1967-68	6,259,000	\$ 4,890,000	1,369,000	0.62
1968-69	8,305,000	6,323,000	1,982,000	0.78
1969-70	10,490,000	8,317,000	2,173,000	0.69
1970-71 (est.)	14,485,000	10,362,000	4,123,000	0.95
1971-72 (est.)	15,500,000	11,700,000	3,800,000	0.81



FORUM panelists: Facing the audience in the McInnes Room of the Student Union Building on Monday were, left to right: Andrew Barker, Dr. Henry D. Hicks, Chris Smith, Roger Main, Prof. A. L. Foote, Prof. W.H. Charles and Prof. Keith Jobson. Not shown: Dr. G.R. MacLean, Jim Hearn. (Haggarty Photo)

## Dal closed next Friday

Classes will not be held and all business and administrative offices will be closed at Dalhousie on Good Friday, April 9.

**University News IS FREE**



## GENERAL NEWS

# Pre-school work must be carried through - Clark

(Following is the summary of a speech delivered at an Education '71 Colloquium last month by Dr. Barbara Clark, of the Department of Psychology at Dalhousie.)

The report was on research done for the past six years in the child study program of the Department of Psychology supported by grants from Dalhousie University, the Laidlaw Foundation and the Donner Canadian Foundation.)

It has long been observed that poor children do very badly in school and drop out early. A number of studies have revealed that these problems are due primarily to early life experiences that are incompatible with the demands of a primarily middle class oriented school system.

Added difficulties in learning are posed by the prevalence of infection, chronic illness and malnutrition in the poor. It has been thought that pre-school education and compensatory primary education are possible ways to improve the lot of poor children to enable them to "catch up" with their middle-class counterparts.

The research compared the readiness for school of middle class and disadvantaged children and assessed the language development of Negro children in isolated and integrated neighboring communities. Some appraisals of attitudes to minority groups were also done.

The major research evaluated existing pre-school programs for the disadvantaged and devised and tested specific remedial programs for pre-school and primary children. Children were followed through the second grade in school.

Studies of attitudes toward minority groups showed that both Negro and white children at the 4-year-old level show awareness of differences and regard white as the favorite color. Experience in an interracial pre-school program resulted in improved knowledge of differences and a greater Negro color preference on the part of both white and Negro children, thus a reversal of prejudiced attitudes.

Studies of children in grades

3, 5, 7 and 9 showed strong stereotype ideas about nationality and racial groups with the French seen as "different" or "no good", Negroes as "dirty, ugly and ignorant" and the word Jew evoking such words as "miser", "cheap," and "thief".

Results showed that the problems of the disadvantaged child, both Negro and white are very great, that a year before entering school most are retarded. Negro children in isolated communities suffer particularly.

However, the middle-class children tested were relatively homogeneous in their achievements while the financially disadvantaged showed a wide range of abilities. Pre-school programs produce early gains and the gains are greater if the programs include specific structured remedial help.

All the gains disappear in the early years in school. Intervention is an important factor for change only if it is continued. Although the disadvantaged are not a homogeneous uniformly retarded group they seem to become that way.

There is mounting evidence that this is due primarily to the single middle-class standard that operates in the schools which sees them as deviant and different, and expects very little from them. Pre-school programs then are insufficient without a continued massive intervention program.

Most teachers are not trained to deal with the kinds of problems posed by disadvantaged children even though persons in Nova Scotia that can be classified as disadvantaged (when controlled for the size of the family) represent 42.6% of the population.

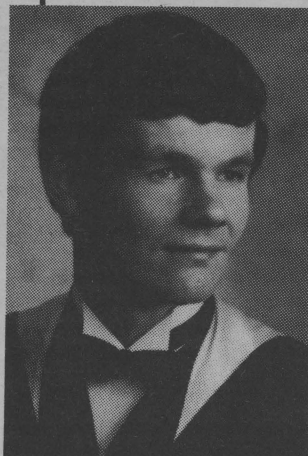
## Experimental classes: Act now plea

Any student or faculty member wishing to organize an experimental class for September, 1971 should contact Dr. Derek W. Lawrence, Romance Languages Department, chairman of the Curriculum Committee for the Faculty of Arts and Science, before April 30.

Although classes may be formed any time before the end of the second week of classes in the fall term, to run either the year or first half year, (see Arts and Science Calendar 1970-71, section 45.3) many problems will be eliminated if experimental classes can be set up before registration week.

## Psychology majors named

### Woodrow Wilson Fellows



Richard F. Davies



Catherine J. Smiley

Richard F. Davies and Catherine J. Smiley, two Dalhousie psychology majors, have been named Woodrow Wilson Fellows for 1971-72.

They are among 50 Canadian university seniors who received awards in the Woodrow Wilson Fellowship Foundation's 25th annual competition.

The purpose of the competition is to encourage outstanding students to consider careers of service primarily in college teaching. The grant for the Canadian fellowships is made possible by a special fund provided for this purpose by the Ford Foundation.

Mr. Davies, a native of Bridgetown, was awarded an entrance scholarship to Dalhousie in 1967. This year he holds a university scholarship valued at \$400 and will graduate with an honours BSc degree in psychology this spring.

Miss Smiley lives in Halifax. She received an entrance scholarship to Dalhousie in 1967. She has held university scholarships for the past two years and will also graduate with an honours BSc in psychology this spring.

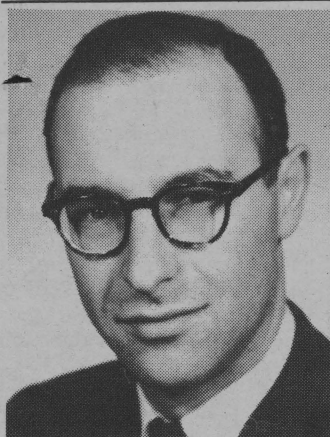
The fellows will be supported for one year of study at the university of their choice, either in Canada or the United States.

## DFA's annual dance April 14

A dance, late buffet with all the trimmings are part of the fare being offered to the entire university community by the Dalhousie Faculty Association at its annual spring dance on April 14, in the McInnes Room of the Student Union Building.

A spokesman for the arrangements committee ensures a pleasant evening for all at the modest price of five dollars a couple.

For further information call Professor A. Larson, mathematics department, at 3362, or faculty department secretaries.



Prof. E.C. Harris

## Commissions

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recommend to the government the means whereby these services may best be provided; whether or not the quality should be altered and if so, to what extent.

Prof. Graham has gained an international reputation from his books and articles on intergovernmental fiscal relations and economic development.

He has served as a consultant to the Royal Commission on Finance and Municipal Taxation in New Brunswick and on educational finance to the Newfoundland Royal Commission on Education and Youth.

Earlier he completed a study of local government and finance and provincial-municipal fiscal arrangements in relations to economic development in Nova Scotia.

He is at present collaborating with Mr. John Cameron, a second-year Dalhousie law student on a study entitled Financing Post-secondary Education. This study is being carried out for the provincial ministers of education.

Prof Harris, a professor of law, is also chairman of the Halifax Transit Commission.

## Salaries

—Continued from Page 1—

floors and increases in salaries.

The association calls for salary floors of 35 of the lowest-paid members of the Faculty of Arts and Science be raised by an average of less than \$300 a year and that effective July 1 of this year, the floor be increased with certain increments applied across-the-board. This increase represents about 7.5 per cent in average salaries and will serve to bring them nearly in line with those already prevailing at other universities.

The final recommendation calls for an additional across-the-board increase of an average of ten per cent on top of this making a 17.5 per cent aggregate increase.

Dr. Hicks agrees that faculty salaries should be better, but Government support was not as good as in other provinces, and for the coming year, to maintain even modest and inadequate salary scales and to keep the university operating at its present level, and without any growth or any new programs, Dalhousie would have to find about \$2,000,000 more than the grant it expected to receive from the government of Nova Scotia.

## Orthodontics course for dentists

Dr. R.D. Haryett of Edmonton, Alta., will be the clinician for a Continuing Education Course in Dentistry to be presented at Dalhousie April 15 and 16.

Dr. Haryett is a practising orthodontist as well as being Professor and Head of the Department of Orthodontics at the University of Alberta. The object of his course will be to make certain elements of the specialty field of orthodontics available to the general practitioner.

Some dentists in this area will recall his clinic on this subject presented at the 1970 national convention of the Canadian Dental Association. Dr. Haryett holds both Doctor of Dental Surgery and Master of Science in Dentistry degrees from the University of Toronto. He is a charter-fellow of the Royal College of Dentists of Canada and a member of both the Canadian and American Associations of Orthodontics.

Dr. Haryett's course will be entitled "Orthodontics for the General Practitioner". It will include illustrated lectures on normal development of the dentition as well as a consideration of anomalies of the developing dentition which create malocclusion. The following topics will be discussed in the context of the role of the dental practitioner in diagnosis and treatment: the clinical examination, anterior and posterior crossbites, problems of space loss in the dental arches, management of oral habits, orthodontic aids in general dentistry, and interception of malocclusion resulting from discrepancies in tooth size and jaw size.

Applications for the course should be made to the Faculty of Dentistry by April 12, 1971.

## Geologists to meet BBC TV crew

Dr. Michael J. Keen, chairman of geology, and Dr. F. Aumento, Senior Killam Fellow, in the department of geology, will meet representatives of the British Broadcasting Corporation when they visit Halifax on April 16.

The BBC is making a major two-hour television program on recent advances in geology and geophysics.



GENERAL NEWS

# VG's emergency department overworked

## Satellite centres suggested

\* The use of the Victoria General Hospital's emergency department has increased out of proportion with the population growth.

\* Two-thirds of the patients are men.

\* The VG emergency service is used most in July and August.

\* The vast majority of patients arrive without being referred by a doctor.

\* Monday is the busiest day of the week in the emergency department.

\* Only about 11 per cent of the patients arrive by ambulance.

\* Use of emergency services tends to decline with increasing distance. Rockingham is an exception to this pattern.

VG's emergency department

These were some of the findings of a recently-released study on the use of the VG's emergency department. Researchers were Miss Moira Stewart, research assistant; Dr. William B.C. Robertson, associate professor of preventive medicine at Dalhousie and director of public service hospitals with the Nova Scotia Hospital Insurance Commission; Mrs. Mary L. Chipman, lecturer in preventive medicine; and Dr. Peter C. Gordon, professor and head of the university's department of preventive medicine.

A federal government research grant assisted the study.

"The report is invaluable," says Dr. R.F. Scharf, director of the VG emergency department. "It shows what's happening in local medical care. Unless we can clearly see the trends, we can't make logical plans for change."

The relatively high usage of emergency services — a new pattern in North America and the United Kingdom — has probably developed as a result of breakdown in traditional relationships with the family doctor. Another cause may be the tendency for the family physician to refer patients to an emergency department so



Miss Moira Stewart, who was the primary author of the study of the Emergency Department of the Victoria General Hospital.

Miss Stewart is now in London, Ont., where she is doing graduate work in the Department of Community Medicine at the University of Western Ontario.

## By Fran Maclean

that he may use equipment not available (for economic reasons) in his own office.

"What has to come some day are regional health centres," explains Dr. Scharf. "Group practice makes it possible for larger numbers to see a doctor, in contrast to private practice."

The Victoria General Hospital emergency service extends throughout the Halifax - Dartmouth metropolitan area and beyond. Located in the south end of Halifax, it tends to be used mainly by those living nearest to the hospital. The exception, Rockingham, with a fairly mobile population, has a high rate of use.

Dartmouth, like Rockingham, is relatively distant from the VG, and its boundaries and population are also expanding. Unlike Rockingham it does not, nor ever has used the VG emergency department much. The Dartmouth Emergency Hospital provides some medical service on a 24-hour basis, meeting a portion of that city's needs.

Introduction of Medical Services Insurance, during its first six months, did not appear to alter the general rate

of use. The exception is Halifax North, which had "an exceptionally large increase of utilization after the introduction of MSI. "The year-long study began six months before M.S.I.

The vast majority of patients entering the emergency department do not require hospital care, the study shows. Women require hospital care more than men, indicating that women who use these facilities tend to be sicker. On the other hand, only a third of the patients are female, but a greater proportion of them are more seriously ill than the men and had to be admitted for "in-patient care."

Dr. Scharf comments: "Women seem to have more endurance. They are also willing to make and wait for appointments with their physicians."

In view of the trend for the emergency department to be the major source of medical care for many patients, the researchers recommend two options to meet the increasing demands.

**Option A:** The provision of treatment facilities for ambulatory patients in the north-eastern section of the Halifax City peninsula and in the Rockingham area.

**Option B:** The provision of an emergency centre in the expanded facilities being considered in the area of Camp Hill Hospital, a few blocks north of the VG.

An increase of 5,015 patients in the VG emergency department was noted between 1968 and 1969, the report shows.

Both options would stem the increasing flow from the VG, with option A providing facilities in the area of greatest demand. The option B would provide a more comprehensive service through association with a general hospital, although its location is very little nearer the areas of high demand.

Stimulated by this report, the Izaak Walton Killam Hospital for Children is now giving serious consideration for a similar study of its emergency services, a hospital spokesman said. It provides all emergency service for children under 15 years.

# Noted geneticist, cancer researcher to lecture at Dal

Dr. Sol Spiegelman, chairman of the Department of Cancer Research at the College of Physicians and Surgeons, Columbia University, will visit Dalhousie from April 14 to 16, and will give a lecture in the Faculty of Medicine's Scientific Basis of Medicine series on Friday, April 16. The lecture, at 1 pm in lecture theatre "A" of the Sir Charles Tupper Medical Building, will be open to doctors, interns, professional people and the general public.

A distinguished basic scientist, Dr. Spiegelman graduated from the College of City of New York with a major in mathematics and physics and received his PhD from Washington University in St. Louis with a major in cellular physiology. He is now professor of human genetics and development at Columbia University.

Noted for his contributions to knowledge of growth in viruses, Dr. Spiegelman will discuss in his lecture the startlingly recently-established fact that some human leukaemia is of viral aetiology — viruses are related in some way to the development of, but not necessarily the cause of, leukaemia.

Dr. Spiegelman's findings are considered a major breakthrough which leads to the hope that cure of leukaemia may become a reality, and may have implications in other fields.

## Work-need interviews

### to April 16

The Dalhousie Awards Office will hold work need interviews for on-campus summer employment until April 16.

Students registered in an undergraduate program in Arts and Science, Health Professions, Law, Medicine or Dentistry and who will be enrolled at the undergraduate level next year are urged to arrange for an interview at the Awards Office.

Students will be required to demonstrate genuine need of financial assistance for the forthcoming year.

## Low grant

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penditures, but even so they enabled the provinces to claim a large proportion of university costs from the federal government.

"The table on Page 1 shows the total grants for operating purposes paid to Dalhousie from the government of Nova Scotia in the last two years before the new Fiscal Arrangements Act (1967) and for the five years (including estimates for the next year) under the present arrangement.

"It should be borne in mind that prior to 1967-68 Dalhousie also received direct grants from Ottawa, which ceased in that year, and the table shows quite clearly that in the first three years under the new arrangement, the government of Nova Scotia actually contributed less money from strictly provincial sources toward operating costs at Dalhousie than it had contributed in 1966-67.

"Another way to make this comparison would be to point out that the total budget of Nova Scotia in 1966-67 was approximately \$168,000,000, so that the payment to Dalhousie amounted to 1.3 per cent of that budget, whereas the budget of the province in the next year is estimated at \$472,200,000 and the operating grant to Dalhousie is .81 per cent. In the intervening years, of course, the percentage has been much lower.

"In fairness, it should be pointed out that the government of Nova Scotia also contributes towards capital costs in the university, and for the current year there has been set aside by the provincial government \$1,744,727 to pay estimated costs of interest and sinking funds on behalf of Dalhousie University.

"Similar comparisons could

undoubtedly be made in respect of the budgets of other Nova Scotia universities.

"Certainly we do not want to deprecate the importance of provincial government support without which the province's universities could not operate at all in the 1970s.

"But by restricting the grants to the universities by so much, the government is clearly not taking full advantage of the Fiscal Arrangements Act.

"What will Dalhousie do to meet the present unhappy situation?"

"Obviously, there are thoughtful people in Nova Scotia who expect us to carry on the work of our professional and graduate schools so that we can compete with the best universities in Canada, and at the same time, along with other universities in Nova Scotia, offer sound instruction at the undergraduate level.

"It is already too late this year to cut back any programs. Commitments had to be made to professors and students alike, and while we have not hired as many new faculty as we would have liked to do, we must undertake some pretty drastic paring of our budget.

"Dalhousie's salaries to faculty are already below those of other good universities in Canada and even, to some extent, lower than those in other universities in the Atlantic provinces.

"To maintain even modest and inadequate salary scales and to keep the university operating at its present level, and without growth in any new programs, we must find approximately \$2,100,000 more — and perhaps an even greater sum — than the grant we are

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# Teachers of English to meet at McGill

The Canadian Council of Teachers of English will hold its fourth annual conference at McGill University, Montreal from Aug. 18 to 21. The association extends an invitation to all staff of university English departments to take part in the four-day convention.

The conference theme is "English and its Cultural Contexts". The meeting will also feature a special student film festival based on award winning entries from Canadian students.

Planned sessions will touch on such themes as behavioural objectives in reading; literature as taught in French Canada; creative writing; can we evaluate it; McLuhan in the Ontario schools; increase the people — teacher ratio; English and establishment values; developmental

drama; the little magazine and the teaching of English; story telling; integrating the language arts.

The student film festival is part of the summer convention. Teachers are asked to encourage entrants to submit films on 8 mm, super 8 mm, 16 mm, 35 mm or without sound. Cash awards will be made on the basis of creative merit. Award winners along with a selection of other entries will be shown publicly at the meeting.

For conference information write to the C.C.T.E. Convention Committee, Arts Building, McGill University, Montreal, Quebec.

Deadline for film entries is July 15. For application forms write to: Eudice Garmaise, 375 Claremont Ave., Montreal 215, Quebec.



## GENERAL NEWS

## University News

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Inquiries and contributions should be addressed to: The Editor, University News, Information Office, Arts and Administration Building, Dalhousie University. Deadline for material is the Friday preceding publication.

University News staff: Acting Editor, Derek Mann; General News, Roselle Green, Doris Butters; Special features, Fran Maclean; Athletics, Doug Hargreaves.

## 7-man committee to run bookstore

Beginning in September, a seven-man committee will be responsible for the operation and management of the University Bookstore with John W. Graham, SUB manager as chairman.

The University Bookstore Committee is composed of two faculty members, Dr. D. H. Crook, assistant dean of graduate studies, and Dr. L. B. MacPherson, associate dean of medicine; G. R. George, business manager; David Honeywell, librarian, and two students appointed by the new student council, Ian Campbell, treasurer of the Student Union, and Michael Evans. The committee plans to meet shortly.

The present manager, George Clark, will continue day-to-day managing of the store, and will work closely

with committee chairman John Graham.

"The changeover has come about in an attempt to improve services and prices," says Mr. Graham who was given approval by the Student Union to preside over the University Bookstore Committee.

"Our policy is to operate on a 'break-even' basis. If we can make the operation more efficient, we might be able to cut prices. I can't foresee any massive reductions, though, within the framework we will be working.

"Services might be improved possibly by decentralizing sales for the busy period one month after registration," he says. "We will consider the feasibility of a temporary distribution of sales since the bookstore is so small."

## Grade XII exam readers wanted

The Atlantic Provinces Examining Board is engaged in the preparation of a list of prospective Readers, from which the reading group will be appointed.

In 1957 it was suggested by the Board that university professors should be asked to apply for reading positions if they were interested and that one professor for each reading group should be appointed. This plan worked well and the board is again circularizing the Maritime universities regarding the possibility of professors applying to read examination papers this year.

The reading of answer papers is to be done by the following eight groups:

**English:** Grade XII English; **History:** Grade XII History; **Modern Foreign Languages:** Grade XII French & German; **Mathematics:** Grade XII Algebra and Co-ordinate Geometry and Trig; **Social Studies:** Grade XII Modern World Problems; **Latin:** Grade XII Latin; **Natural Science:** (a) Grade XII Physics and Chemistry, (b) Biology, (c) Geology; **Home Economics:** Grade XII Home Economics.

In order to qualify for appointment a Reader must be competent to act in one of these groups, that is, he must not elect to read a number of isolated subjects spread over different groups. On the application form the applicant is given an opportunity to choose two groups; but if he is appointed, he will read in one group only. Applicants for all groups must state the subjects in which they are best qualified to read.

Remuneration will be \$40.00

per day, plus board and travelling expenses. This is for a five-day week, Monday to Friday, 7 1/2 hours per day.

The readings will begin about June 29 and will continue for 12 to 14 reading days depending upon the number of papers in the particular group. Applications should not be made unless the applicant is prepared to remain for the full reading period of the group.

Professors who are interested can obtain application forms from the Information Office. They should be submitted to the secretary of the Atlantic Provinces Examining Board, P. O. Box 578, Halifax, by April 21, 1971.

## Summer credit courses

Vocational teachers in the Atlantic provinces will have an opportunity this summer to further their qualifications. A course on scientific and technical education, earning full university credits towards an eventual degree, is being offered for the first time by Dalhousie's Department of Summer School and Extension.

The program is a direct result of research into development of vocational education carried out by Professor Patrick Keane, when at Bath University, England. The course is mainly concerned with the development of scientific and technological education, particularly with such features as apprenticeship and the introduction of science and technology into the high school and college system.

Program director Keane, assistant professor of education at Dalhousie,

## Devaluation of the mark

EXAMS, as everyone knows, are hell. But are they also bad sense, even harmful? The argument was taken a stage further last week by Arnold Jennings, vice-chairman of the National Union of Teachers' Education Committee, who pleaded for a reform to the system: let kids have cribs, he said. Let them take dictionaries or set books into the exam room.

Mr. Jennings may be ahead of his time in England, but in parts of Georgia (Soviet not American) the last ten years have seen something of a revolution. In 172 classes throughout the republic not only exams but also the entire philosophy of marking has been abolished; some 4,200 children between the ages of seven and eleven have been entirely freed from ticks or crosses. The results, says Soviet Weekly, have been excellent. "We have found that children who no longer

have to worry about the marks they are going to get are far keener to learn."

To begin with only the children saw any virtue in the project: it met with total opposition from parents, who like little Ivan to keep up with Comrade Ivanov, and from teachers, who had to be retrained to assess children's progress without help of marks. By now, however, the majority of parents and teachers are said to be in favour of the scheme and the children are still overjoyed.

Not only overjoyed, but also allegedly cleverer. According to the Georgians "a special committee which descended unannounced on various experimental second and third forms" found them far more advanced than the average fourth forms.

Quite apart from being more relaxed and "devoid of nervousness and tension," the

"experimental" children were also more reliable. The visiting committee (where did it come from?) found that "experimental" seven year olds made half as many mistakes as "ordinary" eight year olds and were able to correct for themselves three times as many of such mistakes as they did make.

This all sounds fine. Indeed, perhaps a quick visit to Georgia would be just the thing to provide the reformers with all the evidence they need to prove that Dr. Arnold's days are well and truly gone, and that children need no longer be forced to swot for their parents' pride. But there is one slight snag. How were the abilities of the "experimental" children assessed and then compared with those of the "ordinary" pupils? Well, says Soviet Weekly, the visiting committee just "gave the children a snap exam." Of course.

## Exams worry you?—The counselling service can help

The race against time is on and as student contenders head into the last lap of the academic year, they may find they need a helping hand to see them across the exam finishing line.

Assistance by trained personnel using professional techniques is available from the Student Counselling Service, which offers among its various services two that are particularly useful just before exam time. These are the study skills program and the exam anxiety program.

The study skills program is comprised of six video-taped sessions, covering topics such as organizing study time, taking lecture notes, reading textbook material, writing essays and exams. The program emphasis is on establishing techniques which are effective for individual students.

A session on organization and scheduling aims at helping the student become organized and hence get full value out of his study time.

A film dealing with motivation covers various

psychological principles that are useful, in increasing the person's performance. These are described on the tape with relevant examples for study behaviour.

The concentration session is an audio-tape rather than a video version and consists of exercises designed to improve concentration both in reading and in listening.

The reading program is based on the "SQ3R" method of reading (survey-question-read-recite-review method). The objective here is to enhance comprehension and retention.

The main focus of the essay session is on how to outline thoughts for a term paper. It tells how best to organize the data to ensure an orderly flow of material and information from one stage to the next.

The exam-writing tape illustrates study methods for various exams, such as multiple-choice, open book or essay type.

The program also incorporates a series of exercises. These are part of the film presentation. A stu-

dent views a video portion of the tape, then performs an exercise related to the subject matter and then continues to see the remainder of the tape. Purpose of the exercise is to allow the student to practise and try out those principles and techniques suggested in the film documentation.

Each session takes about one hour. There is no charge and students can select those aspects of the skill program in which they are weak.

The counselling service offers another useful program for students at this time of year. This is the exam-anxiety program and is available to students who experience incapacitating tension and anxiety in writing tests and exams. By learning to relax, anxiety can be sensitized and, as a result, academic performance improved.

Both services are offered to students by staff of the Student Counselling Office. Call Mrs. Brenda Van Zoost for information on the study skills program and Mrs. Peggy Pittas for information on the exam anxiety sessions.

## Low grant

—Continued from Page 3—

getting for 1971-72.

"Our deans are now busy revising their budgets and within the next few days we ought to know where we stand, but I see no alternative to a substantial increase in student fees throughout the university.

"I have little hope that we can get by on an increase in student tuition fees of anything less than \$200, and our residence fees will also increase considerably (probably by \$100).

"This is unfortunate, coming at a time when the economy of this part of Canada is not as buoyant as we would like it to be, and our students will almost certainly face more serious difficulties obtaining summer earnings than in previous years.

"As for enrolment in 1971-72, we already have twice as many applicants for places over last year. It is regrettable, but the inevitable situation will be that those students who can af-

ford it will be in a better position to obtain university places Dalhousie next September; we will, however, make every effort to increase the bursary funds available to students."

## Science group to meet at Acadia

The Nova Scotian Institute of Science will hold its next meeting in conjunction with the Valley Chapter at 8 pm on Monday, April 5, in the lounge at Wheelock Hall, Acadia University.

Guest speakers will be Matthew W. Spence, department of paediatrics and biochemistry at Dalhousie, who will discuss "In-born metabolic errors of children in the Maritimes", and George Curry of the biology department at Acadia, whose topic will be "Light-growth reaction in plants".



## THE ENVIRONMENT

# Our lakes and rivers may be too well-fed

Eutrophic means "well fed"; oligotrophic means "underfed". These terms are commonly used to describe the condition of bodies of water; a eutrophic lake, for instance, is one that is enriched with nutrients with a resulting increase in the mass of living forms.

Four classes of bodies of water may be subject to eutrophication.

Streams and rivers may have a long life geologically if not altered by man. Each has characteristic rates of flow, width, depth, temperature and transport of materials (all generally increasing downstream).

Lakes, in contrast, have a restricted geological age. They proceed from oligotrophic to eutrophic, deep to shallow to bog to dry land. Hutchinson (in *eutrophication*) recommends that lakes, their drainage basins and the associated sediments be considered as a complete system. He also suggests that "eutrophic", when applied to the water systems, should mean *potential* high nutrient concentration; the partitioning of the total quantity of nutrients between the water, the living organisms, and the sediments will vary seasonally, and turnover time must also be considered.

Estuaries, broadly defined, are where streams and rivers meet the sea. They are frequently urban sites. The flow pattern is more complex than the unidirectional downward flow of a river. The salt water influx, and the mixing and dilution pattern of river and riverborne materials characterize individual estuaries. Ultimately estuaries flush, though there may be temporary upstream transport at certain phases of the tidal cycle.

The composition of the oceans on a world wide basis is relatively homogeneous. The chemical species are thought to be in steady state, but with man now such a force in altering the total environment, will the geochemistry of the oceans remain unchanged? The oceans are presently a major sink for land derived nutrients. Will the increased nutrients resulting from human activities sediment out, or will they result in the ultimate eutrophication of the world oceans? The volume of the oceans is such that the resolution of this problem still, I believe, lies in the geological, not the human, time scale.

## Women plan spring specials this month

"Looking Together For Spring Things" will be the theme of two April functions organized for members of the Women's Division of the Dalhousie Alumni Association.

A Dessert-Do, at Shirreff Hall, at 7:30 p.m. on April 5, will be devoted to assist out-of-town female students. This will also be the annual meeting and election of officers which will take place.

On April 24, members are asked to bring a guest to a Spring Special at the Student Union Building to help celebrate the 100th anniversary of the Alumni Association.

Other alumni activities for the next six weeks include a Swing into Spring Thing on April 16 for the Young Alumni and a reunion of the class of '61 during convocation week.

## \$500 offered in competition

The Claude Leigh Real Estate Award of \$500 is being offered this summer by the Real Estate Institute of Canada for the best article on any phase of Canadian real estate.

Any student in architecture, law, business, sociology, town planning, environment, or

engineering and urban studies, as related to real estate, is invited to enter the competition by submitting an article of approximately 6,000 words before July 1, 1971, to the Real Estate Institute of Canada, 99 Duncan Mill Road, Don Mills, Ont.

The Dalhousie Institute of Oceanography sponsored a series of pollution seminars in the latter half of the 1969-70 academic year in response to requests from graduate students for more information on environmental pollution, a topic of great scientific and public concern.

So much interest was shown in the series by groups and individuals outside the Institute and Dalhousie that the Institute decided to make a brief printed record of the seminars. The demand for the resulting booklet rose sharply after publication was announced.

Today, the sixth article in the series is published here.

Man's activities introduce excess nutrients to lakes, rivers, and estuaries, hence speeding up the process of eutrophication.

Sources of eutrophication agents are sewage, industrial wastes, farmland drainage (animal, plant, and inorganic fertilizers), urban run-off (fertilizer, soil, etc.), and ignition products of fossil fuels transported by rainwater. Potential eutrophication agents are the inorganic nutrients — phosphorus, nitrogen, iron, silica, and a wide variety of trace metals — and organic compounds such as vitamins, growth hormones, amino acids, and carbohydrates.

By  
SHIRLEY M.  
CONOVER

The total mass of nutrients is partitioned between living and non-living systems in elemental form or, more commonly, in a wide variety of chemical compounds. The nitrogen cycle was given as an example. The distribution of nitrogen in soil, air, water and aquatic sediments, and the complex activities of plants, animals, and bacteria in relation to nitrogen were considered. Eutrophication intensifies organic production, often without a compensating intensification of consumption, and with a lag in mineralization, at least on a short-term basis.

The increased nutrient concentration associated with eutrophication obviously changes the chemical composition of a given body of water; more subtly, shifts in the balance of the chemical system may also result. Changes in plant and animal life often result as well. Species diversity is frequently reduced. Plant communities change; for example, dominance may shift from a diatom-desmid complex to

bluegreen algae. The phenomena of "secondary pollution" has been recognized: nutrients put out by sewage treatment plants (or other fertilizing agents) stimulate algal growth, resulting in the production of far more organic material than was removed by the sewage plant during primary treatment. Drastic changes may also come about in animal communities, such as the extinction of sport and commercial fisheries, or an increase in undesirable insect species. Molds, fungus, and bacteria may also increase, causing disease and death in the plant and animal communities, and possibly producing unpleasant growths along shores and in shallow waters.

Biological changes associated with eutrophication directly or indirectly affect man. Abundant plant growth will sometimes choke out open water. Drinking water may develop an odour or taste. Massive algal blooms, especially of bluegreens, produce odours and shore and water refuse. The recreational potential of a given body of water for swimming, boating, or fishing may be ruined. The cost of sewage treatment may be increased. The chemical and biological demand for oxygen increases. Night time plant respiration can become a great oxygen drain, and may be deleterious to desirable fish species. Finally, eutrophication can insult human aesthetics.

Several methods of control of eutrophication exist. First, nutrient rich effluents can be diverted away from bodies of water which are potentially prone to undesirable eutrophication. Second, nutrients technology is not sufficiently advanced, but hopefully an efficient, effective, long-term tertiary treatment method will be developed. It must be remembered that individual bodies of water vary greatly in their capacity to safely handle nutrient enrichment (Skulberg, 1968). Third, agricultural practices need to be improved. Fertilization methods need to be developed which minimize nutrient runoff.

Re-cycling of waste materials with consequent reduction in demand for new additions to the total world stock of refined fertilizers would also seem to have much merit. Waste materials might also be used in controlled estuarine aquaculture. Fourth, there are several ways to control the availability of nutrients in water systems. Flocculants

can be added which will pick up nutrients as they settle out into the sediments. Overturn of the body of water can be prevented, or the volume of water participating in plant production can be otherwise limited.

The chemistry of the body of water can be deliberately altered in order to control plant growth, but this latter course seems especially liable to unpredictable side-effects resulting from incomplete human knowledge. Sixth, nutrients can be removed from water systems by flushing, by dredging the nutrient rich sediments (with a suction dredge), and by removing the large "catchable" organisms such as macrophytes and fish which may also have some economic value.

Finally, certain biological manipulations can be used as control measures. The food chain could be modified in order to increase the number of trouble levels or the quantity of consumers. Diseases and parasites of the offending plants could also be introduced, though this type of measure is also subject to unpredictable side effects.

A eutrophication problem in Lake Washington, Seattle, Washington, was solved by diverting the effluent from secondary sewage treatment plants, thus restoring a recreation facility of great value to the city (Edmondson in *Eutrophication*).

Development of commercial duck farming on Moriches Bay, Long Island, New York, altered the biology of a typical oyster producing salt pond; intense blooms of small flagellates dominate the areas now to the exclusion of many other forms of life (Ryther, 1954). Waldichuk (1969) made a study of a small river system emptying into the harbour of Victoria, B.C.; removal of all extra nutrient sources by diversion or by efficient tertiary treatment plus certain physical alterations to the water course were recommended as control measures.

One of the best studies undertaken to date in a marine environment is that of Rudd, et al., 1968, on the Bedford Basin; the Dartmouth Lakes are also potentially endangered by eutrophication problems.

Perhaps the ultimate objective in coping with eutrophication nutrients should be modelled from nature. Nutrients should be returned to the environment bound in some non-readily available state. The essential metabolic nutrient of "new" nutrient fertilizers which would undesirably increase the total world organic production.

## Advertising seminar next week

For the first time in the Atlantic region, a practical how-to-do-it approach to the management of advertising programs will be offered by Dalhousie University's Advanced Management Centre.

Seminar leader for the April 7 and 8 session will be R.H.R. Glube, associate professor in Dalhousie's Master of Business Administration program.

Mr. Glube has a sound knowledge of advertising theory and practical in-business experience. His teaching areas are in marketing and marketing policies.

Topic outline for the two-day seminar includes the objectives of advertising, the message and selection of themes, building the media selection strategy, the management, research and science of advertising.

## Meeting of DFA April 6

The next meeting of the Dalhousie Faculty association will be held on April 6, at 8:15 pm in the Faculty Lounge of the Arts and Administration Building. The agenda will be: 1, Minutes of the meeting of March 2, 1971; 2, Business arising from minutes (excl. committee reports); 3,

Committee reports; 4, Salary policy — discussion of proposals circulated; 5, Details of a proposed social event; 6, Election of new executive; 7, Other business.

Prof. K. T. Leffek, chairman of the nominating committee would appreciate suggestions as to a proposed slate of officers.



## THE ARTS

## IN BRIEF

## Art

**ARTS AND ADMINISTRATION BUILDING** — until April 25 — Andre Bieler Retrospective: 1920 to 1970 (Agnes Etherington Art Centre, Ont.)

**KILLAM LIBRARY SPECIAL COLLECTIONS AREA**—Opening April 15— The Photograph as Object (NGC).

**KILLAM LIBRARY** — in various places — Works of Art from the University's Permanent Collection, by major contemporary Canadian Artists.

**DISPLAY AREA in the STUDENT UNION BUILDING** — until April 8 — Dalhousie Student/Staff/Alumni Annual Exhibition — Photographs only.

April 12-19 — Photographs of World Wild Life, photographed by Prince Philip and donated to World Wild Life Fund.

## Art films

**CIVILISATION SERIES** — by Sir Kenneth Clarke —

Room 234, Arts and Administration Building — Tuesdays at 12:05 pm. Free.

April 6 — No. 12, "The Fallacies of Hope"

April 13 — No. 13, (final film of series) "Heroic Materialism."

## Music

**CONCERTS** in the Rebecca Cohn Auditorium, Arts Centre, Dalhousie.

Monday - April 5 - 8:30 pm — **SHEILA BRAND**, Soprano, B.A. Graduation Recital. Free.

Thursday - April 8 - 8:30 pm — **DAL PERCUSSION ENSEMBLE**. Free.

## Belgian books on display

A table display of 300 16th century Belgian books, mainly of art, will be on view today, tomorrow and Sunday in the special collections area of the Killam Memorial Library.

It is the first Maritime showing of the collection, sponsored by the Belgian Consul in Montreal, and following its cross-Canada tour, will be disbanded.



*The Fly's Eye, a prize-winning black and white shot in the Dalhousie staff, faculty and alumni photo exhibition, is viewed by the judge, Professor G. Karkutt, head of the media workshop division at the Nova Scotia College of Art and Design, and Elio Dolente and Barry DeVille, two of the prize winners in the competition.*

## Creative drama workshops for high school students planned

From September Dalhousie's Theatre Department intends to hold workshops on creative drama each Saturday in the theatre wing of the Arts Centre. The workshops will be directed mainly towards high school students, though occasionally throughout the year, sessions may be held for other age groups.

The program of workshops will be directed by David Farnsworth, faculty member of both the departments of Theatre and Education.

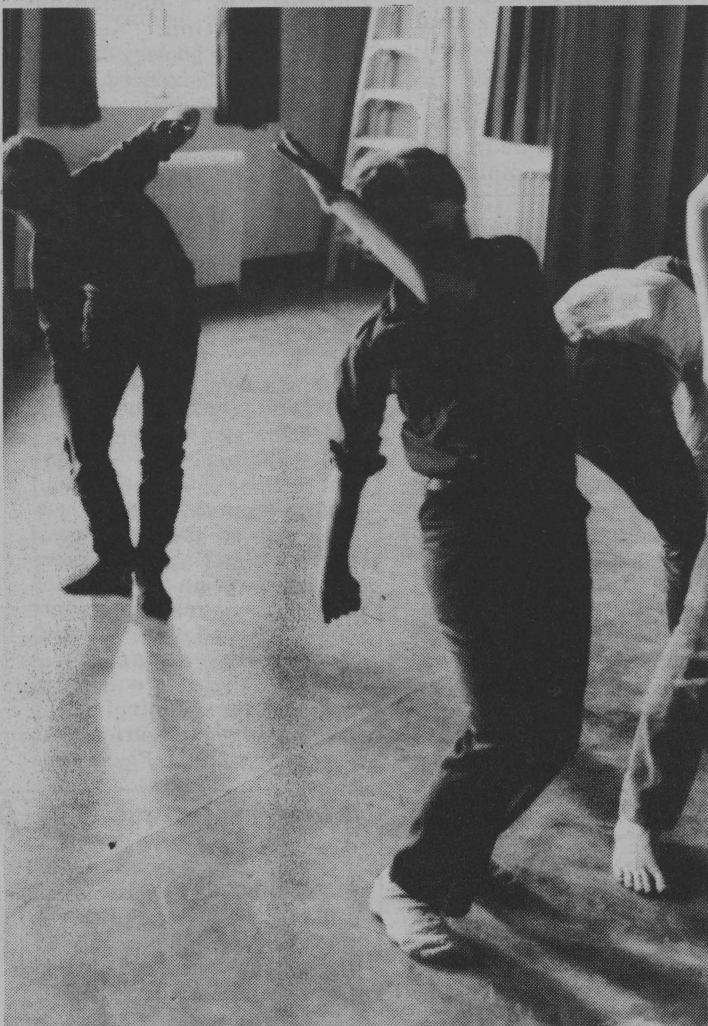
Planned to serve two needs—that of students in schools who wish to pursue drama, and that of B.Ed. students who wish to explore the potential of creative drama in a way that is not possible in the present school curriculum — the workshops will cover all dramatic areas of self-expression, and will gradually incorporate these attitudes into play-making.

The idea for regular workshops came to Prof. Farnsworth as a result of the excessive demands for occasional help from local schools. In the past few months he has found that evening sessions in schools have sometimes reached the proportion of a hundred students at one time.

At present the main outlet for their interest is the school play, but while there is clearly a place for this, he sees an even greater need for the students to work from their own scenarios and build their own plays, so as to allow expression of their own feelings in contemporary terms.

This is a pattern on which he has worked before, in other

places, and he sees no reason why it should not succeed in Halifax, especially on the basis of his recent experience in some local schools where, he says, "the students were as involved in the need and process of self-expression and communication as any student anywhere."



*Creative drama work with junior high school students in Halifax.*

## The Photograph as Object next Killam exhibition

"The Photograph as Object" is the next exhibition to be held in the Special Collections Display Area in the Killam Memorial Library at Dalhousie. The exhibition, which opens on April 15 and runs until May 14, is sponsored by Dalhousie's Art Gallery and was organized for the Art Gallery of Ontario by the National Gallery of Canada.

Representative work of many well-known photographers is featured, Thomas Barrow, Jerry Uelsmann, Alice Wells, Roger Merten, John Max, Nina Raginsky, Aaron Siskind, and examples of mid-19th century

photography by pioneers such as Hill and Adamson, Charles Negre, Le Mehedin, Gustave Le Gray, Louis Robert, Nadar, Julia Cameron and Frederick Evans are included.

The exhibition explores the potential of photography as expression rather than as description. In the 1850s photography was considered an art form and the new medium made use of the rules of a ready-made tradition, but by the end of the century reaction set in against regarding the photographs as painting.

Led by Frederick H. Evans in England, and Alfred Stieglitz in America, a new generation of photographers appeared, intent upon using the medium in its pure form; men such as Paul Strand, Charles Sheeler and Edward Weston who exploited the ability of the camera to see "more than the eye sees, exaggerating details, recording surfaces, textures that the human hand could not render with the most skill and labor..."

However, it was not until

### Music students to perform at Bridgewater

Madrigals, folk songs and a concert version of Gilbert and Sullivan's "Trial by Jury" will be featured in a benefit concert given by students of the Dalhousie Music Department, at Bridgewater on April 17, in aid of the Bridgewater Hospital.

Taking part will be the Chamber Singers under the direction of Professor A.G. Scott Savage, members of the Dalhousie Brass Ensemble and Professor David Farnsworth of the Theatre Department.

The concert is being organized in conjunction with the Bridgewater Hospital Ladies Auxiliary.

Aaron Siskind's work of the late forties that the break was complete and a new photographic space was created, with a new set of relationships that are very much part of the picture plane — a visual symbol of the photographer's experiences, evoking deep response in the viewer. As Siskind has stated, "the emphasis... has shifted from what the world looks like to what we feel about the world, and what we want the world to mean."

### Royal photos

A display of photographs of birds and animals taken by Prince Philip during his travels around the world will open at the Dalhousie Student Union Building on April 12.

The exhibition has been arranged by the Halifax Wildlife Association and is on loan from the World Wildlife Fund, which has its North American headquarters in Washington, and to which Prince Philip donated the photographs.

The exhibition follows closely on National Wildlife Week, which will begin on April 5.

### Waterloo pair don't want tenure

Two University of Waterloo professors have asked that they be "excluded from tenure". Professors Donald J. Clough and Kenneth D. Mackenzie told the board that the principle of academic freedom is secure enough in the traditions of Canadian universities that it no longer requires the protection of tenure. They also think that tenure as a 'job security' provision tends to have adverse effects on motivation in some cases and that it "amounts to a one-sided lifetime contract."



## GENERAL NEWS AND ATHLETICS

## PEOPLE and PLACES

John W. Graham, general manager, of the Student Union, served as a panelist at the 1971 conference of the Association of College Unions-International (ACU-I), held at The Greenbrier, White Sulphur Springs, West Virginia, March 21-24.

"Revenue Producing Areas: New Insights Into Old Problems," the session in which Mr. Graham participated dealt primarily with new developments and a review of traditional services in revenue producing areas.

The ACU-I, an organization, founded in 1914, with a current membership of almost 900 colleges and universities, is one of the oldest associations in higher education and the only major educational organization committed to a student-staff partnership through student participation internationally, regionally, and on individual campuses. Its purpose is to provide an opportunity for college unions to join in studying and improving their services and program of activities, and to assist in the development of new college unions.

The Killam Memorial Library wishes to extend its Telex service to a wider public, and the main information desk will now accept written requests for use.

Messages must be accompanied by the name, address and telephone number of the sender, together with a signed charge card.

Incoming messages will be relayed to the addresses by phone; the typed original will follow by mail.

A word of caution! Not every organization has Telex. Be sure that your destination does. It saves frustration.

A Day in Family Practice for general practitioners, arranged by the Division of Continuing Medical Education of the Faculty of Medicine at Dalhousie, was held last week.

Three sessions were held: "Problems in Office Otolaryngology" by Dr. K.E. Walling; "Problems in Office Ophthalmology" by Dr. E.V. Rafuse, and "Headache" by Dr. T.J. Murray.

Two business meetings were also held. The semi-annual meeting of the Nova Scotia Chapter of the College of Family Physicians, under the chairmanship of Dr. C.H. Reardon, and a meeting of the section of General Practice, Medical Society of Nova Scotia, with Dr. G.C. Jollymore in the chair.

Recent sessions in the Community Hospital Program, sponsored by the Division of Continuing Medical Education, Faculty of Medicine of Dalhousie, covered three areas in the province.

On March 15, Dr. T.R. Martin, assistant professor of obstetrics and gynaecology, spoke on "High Risk Obstetrics" at the Dawson Memorial Hospital, Bridgewater.

Dr. R.L. Ozere, associate professor of paediatrics presented a talk on "Use and Abuse: Antibiotics" on March 16 at Western Kings Memorial Hospital, Berwick and Dr. R.H. Charman, associate professor of surgery gave sessions on "Acute Pancreatitis" at Blanchard Fraser Memorial Hospital in Kentville on March 17, and at

Digby General and Soldiers' Memorial Hospital, Middleton, on the 18th.

The latest issue of the University Computer Centre Newsletter contains information regarding operation changes, IntroDal, Key punches, MCEXAM Changes, Machine utilization, Scheduling Statistics, Systems Notices, Current IBM Manuals, Canada Council Grants and NRC Operating Grants and Computing Costs.

A copy is available for perusal in the Information Office, Arts and Administration Building, or in the University Computer Centre, in the Killam Memorial Library.

The Impact of Computers in Education will be the theme of a one-week non-credit computer program offered during May or June (depending on requests) York University's Centre for Continuing Education.

Eight specialists have been invited to participate in the program which will cover such topics as: introduction to computers and programming, the computer as a research tool, administrative uses of computers in education, computer studies, the computer used as a means in the instructional process and simulation as educational planning tool.

For full information write to The Centre for Continuing Education, York University, 4700 Keele Street, Downsview, Ont.

Two members of the Faculty of Medicine visited hospitals in New Brunswick last month to conduct meetings in the Community Hospital Program series organized by the division of continuing medical education.

Dr. D. M. Nicholson, spoke on "Surgery", at Charlotte County Hospital, St. Stephen, Saint John General, Victoria Public Hospital at Fredericton, and Carleton Memorial Hospital, Woodstock, and Dr. O. H. Millard dealt with the topic of "Urology" at Hotel Dieu, Chatham, Chaleur General, Bathurst, and Kings County Memorial Hospital, Sussex.

Dr. D. E. Morris, department of surgery, visited Western Hospital, Alberton, P.E.I., in March, to speak on "Differential Diagnosis of Jaundice" at a Community Hospital Program meeting organized by the division of continuing medical education.

Dr. R. C. Dickson, head of the department of medicine, and Dr. N. A. Kerenyi, associate professor of pathology, conducted a Clinical Pathological Conference at Aberdeen Hospital, New Glasgow. It was the final meeting in the current series of Community Hospital Programs organized by Dalhousie's division of continuing medical education.

Dr. R. A. Langille, Faculty of Medicine, spoke on "Neurosurgery" at Halifax Civic Hospital in a lecture that was one in the series organized for physicians in the area by Dalhousie's division of continuing medical education.

Professor Osvald Knop, of the Chemistry Department, and now on sabbatical leave in Switzerland, has been invited by the Hungarian Chemical Society to present a lecture in

Budapest in April, about his studies on the structure of sulfated minerals and analogue crystals.

Several members of the Department of Physics attended the Congress on the Antiferromagnetism of Chromium, held on March 26 and 27 at the University of Toronto. Those attending were Professors M. Coulthard, A. M. Simpson, D. J. W. Geldart, M. H. Jericho, and graduate students C. H. Chiu, and N. H. Sze.

The Faculty of Dentistry was well represented at the annual meeting of the International Association for Dental Research held last week in Chicago. Papers were presented by:

Dr. A. P. Angelopoulos (Head of the Division of Oral Pathology), "Effect of Diphenylhydantoin on Gingival Mast Cells of the Rat."

Dr. E. Angelopoulos (Department of Biology), "Ultrastructure of the Oral Protozoan Trichomonas Tenax" (a study done in collaboration with Dr. A. P. Angelopoulos of the Dental Faculty).

Dr. J. M. Gourley (Division of Operative Dentistry), "Surface Finishing of Composite Resin Restorations."

Dr. P. M. Pronych (Division of Pedodontics), "A Scanning Electron Microscopic Study of Normal and Developmental Hypomineralized Enamel Surface."

Dr. G. L. Terriss (Division of Pedodontics) "The Pattern of Mineralization in Developing Human Deciduous Teeth."

Miss Brenda Walker, 4th year dental student, was awarded a student grant from the International Association for Dental Research to attend the meeting.

Effective immediately the telephone number for Communications Services is 424-3628.

The following people may be reached at this number: Louis Vagianos; Finn Damtoft; John H. Oxley; Derek Sarty; Janet Lutz.

## Athletics: A good season

Bridesmaid?  
Not if you're  
realistic

The Spring of 1971 has been a banner season for Dalhousie athletes. At the CIAU (Women's) volleyball championship held in Calgary, the Dal Tigerettes represented the AWIAAA after capturing the Atlantic crown in straight games, including decisive victories over defending champions UNB. Although the fourth place finish was disappointing for the girls, the experience

Laurentian University, but were unable to contain the explosive Blues from the University of Toronto in the CIAU championship game.

The men's Nova Scotia Open Volleyball title was won by Dalhousie after elimination by UNB in the AIAA championship. Dal skiers dominated both the Alpine and Nordic ski events to capture the Atlantic Intercollegiate crown.

## By DOUG HARGREAVES

and hospitality provided by the national competition was ample return for the effort expended during the season.

Dalhousie was represented at the CIAU national level in wrestling and swimming as well. Larry Burke and Mark Wannamaker placed third in their respective weight divisions at the championships held in Queen's University, while Wolf Nowak ran up against stiffer opposition to finish fourth in his category.

In swimming, Jim March picked up two bronze medals in the 110 and 220 yard backstroke events at the CIAU meet in the University of Waterloo's pool. Anne Gass, a second year nursing student, was chosen to represent the Atlantic Conference in the CIAU's (Women) first national swimming championship also held at Waterloo.

Dalhousie hockey Tigers were eliminated by St. Mary's Huskies in the final game of the AIHL playoffs after staging an incredible comeback victory against St. Francis Xavier in the semi-finals. St. Mary's went on to

Picked to finish at the bottom of the heap, the men's basketball team displayed a stubborn defence and disciplined offence to emerge in second place in the AIAA to Acadia, subsequent 1971 CIAU champions.

Led by high-scoring Beth Johnston who finished second in the points race, the Tigerettes completed an outstanding year in basketball. Unable to dethrone UNB, the Dal squad, nevertheless, displayed signs of championship potential for next season.

Before you criticize these results, take time to realistically appraise your individual philosophy of participation in intercollegiate athletics. To the achievement-oriented segment, Dal's accomplishments are relegated to the status of bridesmaid; the cynic dismisses the season as "a character-building" year; but the educator recognizes significant advances in the problem of providing for the total education of the individual... maximum opportunity... period.

Management series begins  
on CBC TV April 12

A Leader and a Laggard, an expose of some of the commonly-held beliefs about industrial growth and management in the Atlantic provinces, will lead off a series of five televised programs designed for industry in the region beginning April 12.

Arranged by Dalhousie University's Advanced Management Centre in association with the Canadian Broadcasting Corporation, the in-company educational series, will focus attention on the critical relationship which exists between management and change in the Atlantic provinces.

Among the subjects highlighted in the televised programs will be a discussion of some of the misconceptions about industrial growth in the area, a case study in management, the use of

computers in small business, an illustration of the implications of technological change, and finally, the change and the behavioural sciences.

These topics have been selected to help Atlantic management analyse, understand and perhaps harness the opportunities of economic, behavioural and technological changes occurring today in the region.

The programs will be viewed each morning from 10:30 to 11:00 a.m., April 12 to 16 on CBC television stations throughout the region. CBC production is by John McKay.

Guest for the first program will be Roy George, Dalhousie professor and author of the book entitled A Leader and a Laggard.

On April 13, an on-the-site filming at Atlantic Bridge Co., Lunenburg, will take a look at

management and growth within the company, how it was developed and the reasons for it. Discussion will be led by vice-president, Andrew Eisenhauer.

The following day another on-the-site sequence will demonstrate how Ideal Aluminum, a small Halifax company is using a computer terminal on the premises to provide accounting sales and inventory data.

The fourth film, The Concept of Technological Revolution will tell the story of the change on the Halifax waterfront and examine its implications for management and society.

The final session in the series will be theory. Professor Robin Stuart-Kotze, of Acadia University's School of Business will focus attention on the resistance to change and motivation.



# the bulletin board

## Monday, April 5

**IMMUNOLOGY CLUB** meeting — arr. by Pathology Dept., Dal. — 2 pm — Pathology Library, Tupper.

**SEMINAR** — Pathology — Dr. K. Hameed, "Ovarian Cancer" — Rm. 204 — Old Path. Bldg — 4 pm.

**SEMINAR** — Oceanography — Robert C. Cooke, "Solubility Anomalies of Carbonate Species in Sea Water" — 4:30 pm — Rm. 302: Dunn.

**N.S. INSTITUTE OF SCIENCE** — meeting in conjunction with Valley Chapter, Matthew Spence, "In-born Metabolic Errors of Children in the Maritimes" and George Curry, "Light-Growth Reactions in Plants" — Wheelock Hall, Acadia Un., Wolfville — Buffet at 7 pm.

**MEETING** — Women's Div. Dal. Alumni Association — "Dessert-Do" — 7:30 pm Shirreff Hall.

**COLLOQUIUM '71** — Education Meeting — Dr. Veri Short — "The Spectrum of Early Childhood Education" — 7:30 pm — 115: Weldon Bldg.

## Tuesday, April 6

**DALHOUSIE FACULTY ASSOCIATION** meeting — Faculty Lounge — A. & A. Building — 8:15 pm.

## Thursday, April 8

**LECTURE** — Chemistry — Dr. I.J. Solomon, Illinois Inst. of Technology, "Evidence for the Existence of NF 5" — 11:30 am — Rm. 215: Chem. Bldg.

## Monday, April 12

**IMMUNOLOGY CLUB** meeting — arr. by Pathology Dept., in Tupper — Halifax Infirmary, 4C Clinical Rm — 1 pm.

**COLLOQUIUM** — Mathematics — Dr. Michael Richter, Federal Republic of Germany and University of Texas at Austin) "Compactifications, Completions and Non-Standard Models" — Rm. 113,

Weldon, 3:30 pm.

**SEMINAR** — Pathology — Dr. M. MacAulay, "Pituitary Control Functions — 4 pm — 204: Old Path. Building.

## Tuesday, April 13

**COLLOQUIUM** — Mathematics — F.W. Wilson Jr., University of Colorado and University of Maryland, "An Intuitive Account of the Geometry of Flows on Manifolds" — 3:30 pm — 113: Weldon.

## Wednesday, April 14

**BUFFET DINNER AND DANCE** — Dalhousie Faculty Association — McInnes Room. For further information call Professor A. Larson, Mathematics Department — 3362.

## Friday, April 16

**OBSTETRICS AND GYNAECOLOGY** — Short Course for Physicians — sponsored by Dal's Faculty of Medicine, Division of Continuing Medical Education. All today and continuing through April 17.

**SEMINAR** — Analytical Section: Chemistry — analytical chemistry of pesticides and other organic pollutants — (please confirm with Dr. Frei, 424-3334) — 11:30 am — 327: Chem. Bldg.

**LECTURE** — Scientific Basic of Medicine series — Dr. Sol Spiegelman, Columbia Un., on the biochemistry of tumour viruses — 1 pm — lecture Rm. "A": Tupper Med. Bldg. (open to professional medical people and interested members of the public)

**SEMINAR** — Psychiatry — Dr. Bajramovic — "Review of some recent papers on Schizophrenia in the Russian literature" — 11th Fl. Sem. Rm: VGH — 4 pm.

**YOUNG ALUMNI ASSOCIATION** — "Swing into Spring Thing" — Pancakes and Maple Syrup cabaret style — McInnes: SUB — 9 pm.

## No suppression

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Gazette, and senior administrative officers of the university.

After a long discussion, the council approved an amended motion submitted by Student Union President Brian Smith that the agenda for such a meeting not be restricted to discipline and that Dr. Hicks and others from "the relevant departments" accompany him.

About 400, mostly students, attended the forum, in the McInnes Room.

Members of the panel included: Dr. Henry D. Hicks, president of Dalhousie; Mr. James Hearn, vice-president of the Student Union; Dr. Guy R. MacLean, Dean of Arts and Sciences; Professor W. H. Charles, chairman of the Senate Disciplinary Committee; Professor Arthur L. Foote, of the Faculty of Law; Professor Keith Jobson, of the Faculty of Law; Mr. Andrew Barker, representing the Graduate Students' Association; and Mr. Roger Main, a student representative on the Senate Disciplinary Committee. Chairman was Mr. Chris Smith, chairman of the student council.

The following report is not intended as a verbatim transcript of the two-hour forum; rather it is a condensation of notes taken by members of the staff of University News.

After the chairman, Mr. Smith, explained the

procedures for the conduct of the forum, Prof. Charles outlined the present system of discipline in the university and described the background history of the Senate Disciplinary Committee.

He mentioned a number of disciplinary matters, including petty theft and damage; only one was of an academic nature — the submission of a false transcript.

In answer to a question from the floor, he said that some cases were handled within the university to protect students from getting a criminal record.

The Senate's was the only disciplinary committee in existence, although it was an interim one. A new code was needed, said Prof. Charles, and was now under discussion and should be ready by the end of the summer. It would be more precise in defining "unbecoming behaviour" than the present rather loosely defined terms.

From the floor, a student asked for university-wide discussion before any new code was adopted, and another student suggested three disciplinary committees — a residence committee, a student committee with jurisdiction over student behaviour, and a Senate committee with jurisdiction over academic matters and to act as an appeal board for matters brought before the two other committees.

Another student said the

case of the student who was fined \$250 for disrupting classes should have been heard by a student-only body and should now be reassessed.

Mr. Barker said the Graduate Students' Association had in the last few days recommended that 1, the university should have no disciplinary power in civil actions; 2, there should be an appeal board for action in academic cases; and 3, discipline should only reprimand, suspend or expel (and not fine) students.

Mr. Greg Neumann, the student who was fined (and told the forum he did not intend to pay it) asked for reasons for anti-student, anti-scientific attitudes toward departments in the university, and reasons for his fining and for what he described as the use of other means of political suppression.

Prof. Charles pointed out that the Senate committee did not go out looking for erring faculty or students. Complaints were submitted to the committee.

Another student asked if students could complain about the unbecoming behaviour of a professor, and Prof. Foote said that the office of an ombudsman (approved in principle last year, although no appointment has been made yet) would be the logical avenue for such complaints; such an office would direct the complainant to the proper source of assistance.

Prof. Foote added that the new code of conduct would apply to the university as a

whole.

Another student, from the floor, said that rules affecting students should be made by the student body and not be a "bureaucratic elite."

When the question of the professor whose contract is not being renewed was raised, Dr. Hicks said that the university had no policy to restrict a person expounding or holding any political beliefs.

Dr. MacLean then explained that, as a result of a recommendation from the Department of Mathematics, he felt he could not recommend that the professor in question (F.H. Lawvere) be rehired.

At one meeting with the professor (described by the professor as an interrogation), Dr. MacLean said he had, jokingly, asked which meeting the professor would disrupt next. "Look at the Dalhousie Newsletter (which, when it existed, listed university meetings and activities)", he said.

Dr. MacLean said he asked Professor Lawvere: "You mean any meeting?" and had been told "Yes".

Dr. Hicks said that if a professor estranged himself from his colleagues and disrupted meetings in the name of his political views, then the university had the right to take into consideration those views.

When Professor Lawvere called Dr. Hicks a Fascist, the president replied: "When you were a very small boy, I was fighting Fascists."

At one point, Dr. MacLean said he had read Prof. Lawvere's side of the story in the student newspaper, the Dalhousie Gazette (March 26 issue) and it reminded him of the story of the steer: "A point here and a point there, with a lot of bull in between."

When Dr. Hicks explained, with Prof. Lawvere's permission, that Prof. Lawvere visited him only last week to discuss his non-renewal of contract (consideration of which began at the departmental level last October), Prof. Lawvere said that in the course of their conversation, the President had advocated civil war in the province of Quebec — an uprising against the working classes.

Dr. Hicks said he never said any such thing; their meeting had been informal and conversation had never touched on the Quebec situation.

Explaining the rationale for imposing a fine on the graduate student, Prof. Charles said that the committee found that Neumann had made one successful attempt at preventing a professor from holding a class, and that he delayed another class for ten minutes.

The penalty imposed was a fine of \$250 for the two offenses. The decision was made, said Prof. Charles, after consideration had been given to the effect of the decision on the whole university.

Answering queries about the handling of the Lawvere matter, Dr. MacLean said that he wondered why, from the beginning, that the Faculty Association had not been involved when there had been expression of dissatisfaction.

A professor in the audience said that the mathematics department voted "to take no action in the case of Professor Lawvere."

Dr. Hicks asked for clarification.

The professor replied that the mathematics department

voted by secret ballot to recommend that Professor Lawvere should not be re-appointed.

Answering student's question as to why the disciplinary committee recommended that Prof. Lawvere's contract not be renewed, Dr. MacLean replied that it was because of "non-compatibility with other faculty members."

Are student fees going up? "We haven't yet been told what we will be given by the government, and the answer is dependent upon that," answered Dr. Hicks.

Speculating, Dr. Hicks said that the answer would be "yes" if the rumour of the financial grant turned out to be true.

"A substantial raise," he said.

Why would tuition go up next year?

To keep the university operative, to improve professors' salaries, which are lower than those in other parts of Canada, including some Maritime universities; to covers costs involved in new university buildings coming into operation; fuel oil cost was up 80% at the university; increased maintenance of the plant, and increased enrolment would not carry these extra costs, said Dr. Hicks.

But he promised that whatever increase in fees was necessary would be carefully estimated, "since this is a terrible time to increase them." He also said that the university would try to add to the student bursaries.

Would the Transition Year Program continue next year? It was undecided, said Dr. Hicks. The decision would be based largely on financial grounds.

Asked for his personal opinion of TYP, Dr. Hicks said that he did not have enough experience with the program to have an opinion, although he considered that "the idea is an excellent one."

Panelist Jim Hearn asked Dr. Hicks whether there was any news on the housing situation.

"I have no comment here, except to say that there is more than one iron in the fire," he replied. "One solution, to be confirmed within the next two weeks, could give us a giant step ahead."

Would residence fees go up? Yes, replied Dr. Hicks.

How much? This is still unknown.

The forum broke up quietly.

## George, Waite on list of best-sellers

Leading the list of the 10 best-selling non-fiction books in the Halifax area are recent works by two Dalhousie professors.

"A Leader and a Laggard: Manufacturing Industry in Nova Scotia, Quebec and Ontario" by economist Roy E. George, chairman of the Department of Commerce and director of the School of Business Administration, remains high on the best seller list since its publication in December.

Also attracting many readers is "Arduous Destiny" by Peter B. Waite, professor of history, published this year.

Dalhousie sociologist Dr. Jean Elliott's "Minority Canadians" (Vols. 1 and 2) was published last week. Copies are not yet available locally in bookstores.