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Illustration by Ed Yabuki

**UBC Plans a Museum Where  
Your Feet Won't Get Sore  
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## **ENDOWMENT LANDS' FUTURE DEBATED**

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# MUSEUMS HIT BY WINDS OF CHANGE

By JIM BANHAM  
Editor, UBC Reports

The announcement by the federal government in July of this year of a \$2.5 million grant to construct a Museum of Man on the University of B.C. campus has come, it appears, at a particularly opportune moment.

The reason is that in a number of branches of anthropology the winds of change are blowing and the aim of the new museum will be to incorporate as many of these ideas as possible into the new structure.

## DISPLAY FUNCTION

Prof. Cyril Belshaw, head of the Department of Anthropology and Sociology sees the museum as "a living research and teaching organization to deal with important cultural and scientific issues that people are genuinely concerned with."

And that doesn't sound much like the majority of museums which the general public is used to — slightly musty places where a jumble of unrelated artifacts and curiosities are often haphazardly displayed.

All this doesn't mean that the proposed museum won't have a display function.

"Indeed," says Prof. Belshaw, "one of the main reasons that swayed the federal government in its decision to approve the grant was that the museum would finally make available to the public collections of artifacts and objects that have been largely inaccessible for more than 20 years."

Dr. Belshaw's reference is to UBC's permanent collections of artifacts, numbering about 20,000 items, in the basement of the Main Library and a storage shed at Totem Park on the west central edge of the campus.

If you mention anthropological collections at UBC everyone is likely to think you mean only the 10,000-item collection of Northwest Coast Indian art, considered to be one of the best in the world. The truth is that the Indian collection, which includes about 50 large totem pole sections, canoes and other items in the Totem Park shed and is valued at \$3.7 million, makes up one-half of UBC's holdings.

UBC's first major collection of artifacts was the 3,200-piece Burnett Collection of Oceanic materials, acquired in 1927. Since the Second World War the collections have been painstakingly accumulated by professor of anthropology Dr. Harry Hawthorn and his wife, Audrey, who serves as curator of the museum.

In addition to the Northwest Coast Indian materials and the Oceanic collection, the museum also boasts substantial collections of material from other cultures, including the Oriental (2,100 items), other American Indian and Eskimo (1,200 items), classical antiquity and Southeast Asia (900 items each) as well as lesser collections from India, South America and Indonesia.

Add to these more than 90,000 artifacts from the prehistoric period of B.C. Indian history, accumulated over a period of 25 years from sites excavated under the direction of professor of archaeology Dr. Charles Borden, and it's inevitable that a major function of the new museum will be that of displaying physical objects.

What will be different, says Prof. Belshaw, is the way in which this and other material will be displayed and made available to the public, students and scholars.

## EXAMINE ARCHIVES

Not only will displays of objects — implements, tools and artistic materials — reflect the systematic development of various cultures, but students and members of the public who are seriously interested will have access to work rooms of various kinds where they can handle, measure and study physical objects, look at photographs, listen to tape recordings, look at motion pictures and examine other archival material as well as attend lectures which will deal with culture in a systematic and comprehensive way.

To accomplish this, says Prof. Belshaw, the museum has to be a "flexible and adaptable one that includes a great many options for both present and future study."

He foresees that in the next five or six years the importance of physical collections concerned with B.C. ethnic cultures of a non-Indian nature will be extremely important.

Asked for an example, he cites folk dancing, folklore and folk music of non-Indian origin. "We're inclined to think there isn't much of this sort of thing in B.C.," he says, "but in fact there is a great deal, and the UBC museum will be interested in becoming a repository for such culture in the form of filmed, recorded and written records, including materials for sociological analysis as well as physical objects."

He also sees the museum's archives as being of interest to and serving to stimulate work in other UBC departments. He anticipates that Asian Studies, Music, Linguistics and Fine Arts will all have an interest in making use of the museum's collections and perhaps contributing to them.

Perhaps the most exciting aspect of the proposed museum will be its proposed national and international ties. Prof. Belshaw is unable to give many details at this point, but negotiations are currently underway to link the UBC museum with Canada's National Museum in Ottawa and to the museum network of France, where something of a museum revolution has been taking place in recent years.

## NATIONAL MUSEUM

Affiliation with Canada's National Museum would mean that some of the operating costs of the UBC museum would be borne by Ottawa and, in return, the National Museum would use the UBC building for displaying some of its collections and as a base for its activities in B.C., including excavation projects and extension work among the province's native Indians in co-operation with UBC personnel.

"Extension activities," Prof. Belshaw says, "already take the form of advising people on how to run a small museum of their own and training them to look after their own artifacts, or supplying skilled personnel to aid them in operating their archaeological digging program or to preserve their own oral literature."

As for the European connection, he said, "the French are currently developing new techniques of museum activity, including an approach for using them for sociological research." At the moment, he says, UBC is arranging a joint seminar program dealing with approaches to the treatment of mythology and computer techniques for handling myth analysis. The first of a series of joint seminars to discuss techniques will be held at UBC next summer.

In the long run, Prof. Belshaw and his colleagues see UBC becoming part of a world-wide network of institutions which produce linguistic materials according to agreed principles and exchange information and methods of analysis.

## ASIAN TIES

Prof. Belshaw also looks to increasing ties with Asia, largely as the result of the recent appointment to the UBC faculty of Canadian-born archaeologist Dr. Richard Pearson, who has worked extensively in and around Japan.

UBC's store of physical artifacts from this area is not likely to increase, says Prof. Belshaw, because Asian countries — like most European countries — now prohibit the export of materials found at excavated sites. This prohibition will probably result in a shift in emphasis from a strictly physical record to a more conventional type of record, on paper, by photograph and through the use of computer techniques.

What emerges from a conversation with Prof. Belshaw, then, is a concept of a new kind of museum, one that will expand the traditional function of public display, one that will utilize new ideas and techniques currently making themselves felt in the museum world, one with an extension function in B.C. and with national and international connections, one designed to serve the University community and general public to the greatest extent possible.

To learn more about the new ideas sweeping through the museum world and the plans of individuals who will be associated with the planned UBC building, *UBC Reports* interviewed members of the Department of Anthropology and Sociology. Excerpts from these tape-recorded conversations begin at right and continue on Pages Four and Five.



Illustration by Ed Yabuki



MRS. AUDREY HAWTHORN

## Doing Away With 'Museum Feet'

*Amassing UBC's outstanding collection of northwest coast Indian art has been a labor of love for more than 25 years for professor of anthropology Dr. Harry Hawthorn and his wife, Audrey, who is the curator of Museum of Anthropology in the basement of the Main Library. Mrs. Hawthorn describes how UBC's various anthropological collections will be displayed in the new museum.*

"I guess anyone who has visited an old-fashioned museum has experienced 'museum feet.' The expression is used to describe the fatigue that the visitor experiences when he's confronted with badly-displayed collections which require constant reading of labels to be intelligible.

"For some years we've been working on the creation of 'total environment' displays that involve tapes, slides, special lighting and movies to make them as meaningful as possible. In Montreal, for instance, where UBC's Indian collection was on display in the summers of 1969 and 1970, our designer, Rudy Kovack, created a display that involved a single label, one that introduced visitors to the exhibits in each building. The visitor who viewed the display also heard an audio tape that described the collection and the life and culture of the Indians who

created it and there was a slide show going on at the same time. The response to the display in Montreal was extraordinary. Many people said it was the most exciting thing of its kind they'd ever seen.

"That's the kind of display and involvement on the part of the public that we'll be aiming for in the new museum. And there's no reason why displays of other material in our possession can't be exhibited in the same way.

"The new museum will be more than a public display, however. We will also have an area of visible storage, where regional collections of artifacts will be visible in glass cases for use by scholars, students and members of the general public who have a genuine interest in studying these objects. The displays will be arranged in such a way that the visitor will be able to understand how the items are related to the total culture instead of appearing to be isolated curiosities.

"There will also be a third area of the building made up of student-faculty work laboratories for conservation and restoration of artifacts, where photographs and records are kept and a series of small offices where students and faculty members can work with cultural informants recording their stories and traditions.

"Taken as a whole, these three divisions will make for a museum that should be exceedingly meaningful. It will be a place for the public to come for interest and pleasure, where students will be closely related to the academic work in their departments and where our own museum training course will give the best preparation possible to students who go out to staff other buildings across Canada."



PROF. CHARLES BORDEN

## B.C. May Hold Key to the Past

*Prof. Charles Borden recently retired from full-time teaching duties at UBC, but still busies himself daily in his archaeology laboratory in the basement of the Mathematics (formerly the old Arts) Building, piecing together the pre-historic period of B.C.'s history. For the past 25 years, Prof. Borden, supported only with grants he obtained from sources outside the University, has managed to accumulate some 90,000 artifacts from all parts of the province, but chiefly the lower Fraser Valley. He describes how his collection of materials would fit into the planned UBC museum.*

"Our display space here in the existing archaeology laboratory is extremely small and anyone viewing the visible artifacts wouldn't have the slightest idea how they were used or how they fitted into the socio-cultural context of the people who employed them. The new museum will offer opportunities for this kind of display and the prehistoric material will also be linked to more recent material to show the historic development of artifacts.

"The museum will also enable us to show how an archaeologist actually goes about digging up material. We should be able to show an actual excavation underway and, of course, the museum will serve to stimulate

further on-site excavation in various areas of the province.

"Why is it important to dig up the past? The present is rooted in the past and the future is rooted in the present. There is a continuum of human activity here that will enable the present to understand the past and the unique human achievement involved in adaptation to environment. In addition, British Columbia is coming to be recognized as an area where the key may be found to many of the problems which have baffled archaeologists in the past. B.C. was covered by successive ice sheets over many thousands of years, ice sheets that forced the earliest inhabitants to flee. When the ice retreated the province was repopulated from various directions and this resulted in a comingling of people of relatively advanced culture newly arrived from Asia with much earlier arrivals of more ancient cultural traditions who had lived in isolation from the Old World and the main stream of cultural development for many thousands of years.

"B.C. then appears to be unique in terms of cultural evolution and doesn't appear to fit any of the preconceived notions of cultural historians and theorists. A new museum at UBC could serve to stimulate the kind of archaeological activity which may solve the riddle of cultural development in this area of North America.

*Additional interviews with UBC faculty members on the planned museum appear on Pages Four and Five.*



MRS. GLORIA WEBSTER

## Active Extension Program Planned

*Mrs. Gloria Webster, an assistant curator in UBC's Museum of Anthropology and a part-time lecturer in the anthropology and sociology department, describes the extension activities which will be carried on in UBC's new museum.*

"Indian people generally know very little about museums. Those who do feel some resentment that they can only see the finest examples of our material culture. It is a reminder of how much we have lost. UBC has an outstanding collection of Northwest Coast materials and, hopefully, here we can change the image Indian people have of museums. First, by making it possible for carvers and artists to produce replicas of very old specimens that are too fragile to loan out and, secondly, by making such replicas available to Indians who wish to learn more of their own traditions.

"At the moment a small program of this sort is going

on at Vancouver's Centennial Museum. There is a group of 12 to 15 Indians who come to the museum, once a week to make costumes based on traditional ones in the museum's collection."

"We are going to be concerned about preserving and fostering the arts and crafts of other ethnic groups as well. There is an excellent Oriental collection in the present museum, which Japanese, Chinese and Korean people might be interested in using for research and study.

"The resurgence of interest by Indians in their culture is partly the result of the fact that much of it is in danger of disappearing and also because there is increasing interest and appreciation of Indian culture by white people. Indian artists are also aware that there is money to be made in carvings and handicrafts and this is important in the minds of people who have no other way of making a living.

"Another future area of extension activities centres around the desire of small communities throughout B.C. to develop their own small museums and displays. The new UBC museum could be helpful here by training people to run these regional museums, cataloguing their collections and even helping them to conduct archaeological digs in their own area."



DR. RICHARD PEARSON

## UBC Museum Will Relate to People

*Canadian-born Dr. Richard Pearson is an archaeologist in the Department of Anthropology and Sociology. He has worked extensively in Canada (eight years), Polynesia, the Ruykyu Islands south of Japan, including Okinawa, and in Taiwan, Korea and Japan proper. He talks about how new techniques coming to the fore in archaeology will be integrated into the proposed UBC museum.*

"The opportunity of integrating some of the new techniques and ideas about archaeology into the proposed museum at UBC offers some very exciting prospects. Perhaps I'd better begin by describing 'processual' archaeology, which is what the new archaeology is called.

"In the past there was a tendency for excavators to work a site over and select from the material excavated the most beautiful or most typical object. In recent years the emphasis has been to look at artifacts — the things excavated — as parts of whole systems of tools used by various parts of a community. Artifacts become important for their variation rather than as objects of beauty, which is perhaps the way an art historian would see them. This involves digging not just a single site but a whole range of sites to see how the artifacts they yield fit together in a systematic way. It's much the same sort of systematic approach currently being developed in biology.

"In terms of museum display this approach means that we would not simply display a case full of arrowheads with a label that says 'stone arrowheads.' They would be displayed and explained in such a way that the visitor or the student would be aware of the cultural context of the artifacts and what they were used for. The important thing is to make artifacts part of a living cultural system and to do this we have to develop ways of exhibiting materials. In some cases this may involve participation by the viewer, perhaps in ways that will allow him to actually use tools. Emphasis should also be placed on how humans related to their environment and how concepts of the environment changed over centuries. For instance, the island we now use as an airport may, in the distant past, have been a prime animal- and bird-hunting or fishing area. In other words, show how land-use concepts have altered.

"The museum could also be a place where the public could learn some of the scientific techniques of archaeology. It could also be a jumping-off place for the introduction of archaeological studies in high schools. I'm also eager to introduce the use of the computer into archaeological studies. I'm almost an illiterate as far as computer-based studies go, but there's no question that

they can be used to clarify the relationship within large quantities of information.

"I feel very strongly that archaeology has to be integrated with cultural anthropology and there are also some other possibilities for a closer alliance with the technical sciences, such as geology, botany, zoology and even mineralogy. I would hope that a carefully thought out organizational structure for the new museum would help to develop and strengthen these ties.

"What makes the prospect so exciting at UBC is the fact that we have the advantage of being able to avoid the mistakes which have been made in existing public and university museums. There are museums which exhibit objects as curiosities, museums which can be described as 'colonial' because the people of the culture come through as a bunch of stone-pounders or makers of bark cloth or fish hooks rather than as members of a living culture that made some unique human achievements.

"I think what we want is a people's museum, which is a term that might be misinterpreted today. We want a museum that the widest possible spectrum of people can identify with, not one where only professionals can study tremendous quantities of specimens or one that is strictly for the environmentalist, either. It has to be a museum to which the people whose heritage is represented there can relate directly."

## Museum Heads Getting Nervous

*Mrs. Marjorie Halpin, a curator in the Museum of Anthropology in the basement of the Main Library and special lecturer in the Department of Anthropology and Sociology, discusses the museology program offered by the department and the "museum revolution."*

"The so-called museum revolution is a reaction, to some extent, to what happened about a hundred years ago when great public museums were developed in London, Paris, New York, Washington and, to some extent, in Canada. They tended to reflect the viewpoints and classification systems of an elite group of curators. These museums were open to the public but they didn't speak to the public in ways that were relevant to their lives and experiences. In addition, many of them had an antiquarian approach that failed to relate exhibited objects to a system of cultural values.

"The revolution has manifested itself in some extreme forms. In France, for instance, where much of the discussion was initiated, it has resulted in such extreme statements as, 'There can be no democratization

Illustration by Ed Yabuki



of the arts until we burn the Louvre,' and a couple of years ago the American Museum Association meetings in New York were picketed by a group that demanded that museums become relevant to the issues of racism, sexualism and war. Museum curators are, as a result of all this, getting very nervous.

"So there is a reassessment going on — it's mostly talk at this point — about the democratization of museums. It centres around how museums can be scaled to human size in their architecture and how they can relate to the lives of the mass of the people. One of the concrete manifestations of the movement has been the establishment of neighborhood museums in the United States, museums that reflect the life of ethnic minorities, including museums on Indian reservations.

"Now it's clear that one of the stipulations under which UBC received a grant for its new museum was that it should be public. The question that we have to think about and explore is what, in the 1970s, does a public museum mean within the framework of a university, where one would expect the academic orientation to be paramount and where the training of students will have to continue.

"Certainly, the museology training program, which was formalized as an academic offering six years ago, will have to continue, since it is one of the backbones of the existing museum. Until two years ago it was the only training program in Canada and its graduates are now key figures in almost every museum in Canada. At the moment the entire training program operates in cramped facilities in the basement of the Main Library. Because of the technical skills demanded in the exhibiting of objects, the course demands apprenticeship training on a one-to-one basis with museum professionals. The emphasis in museology programs is the development of professional standards and instilling in students the idea of the importance of museology as a discipline."



DR. PIERRE MARANDA

## Native Indian Myths Recorded

*Dr. Pierre Maranda, associate professor of anthropology and sociology, is the director of a project which is analysing the myths, legends and oral traditions of the Indians in British Columbia. He describes the project and how it will fit into UBC's new museum.*

"We work jointly with B.C. Indians who tape record their own myths and folklore. The myths are then translated into English and put into machine-readable form for the computer. The computer analyses the myths and folklore in a number of ways. It produces a dictionary of all the words in the text and the number of times each word occurs, for instance. Further automatic analysis reveals that there are differences of world view between an Indian in the Okanagan area and one in the Thompson area, even though they belong to the same cultural area.

"The myth analysis is part of an international program. We are co-operating with a group of French anthropologists who are analysing French folklore. Our

common, long-range objective is to develop principles of analysis that can be applied to the myths and folk tales of people anywhere in the world. We exchange data with three institutions in Paris and compare the approaches and computer programs that each of us apply to the analysis of oral traditions.

"The object in analysing myths and folklore is to get at the underlying framework of human behavior, at a philosophy. This conditions the child to whom these stories are told, to form opinions and beliefs about life, technology and other aspects of the world.

"The analyses which we are in the process of accumulating will be held in the museum as a repository of B.C. Indian philosophy. But more important we would like to be able to turn over the tools we are developing to the Indians themselves so that they can not only record but also analyse their own cultural traditions. They need this for themselves, and other Canadians also need it, for the Indians have a contribution to make to Canadian cultural identity.

"When the museum is operating it should be possible to arrange for Indian artists-in-residence who would take part in myth-telling sessions for students, scholars and the public. Over thousands of years of life in this part of the world, the Indians have developed a very sophisticated philosophy which enables them to react with lucidity and respect to the beauty that surrounds us. We may, and the general public too, have something to learn from them."

## Teaching Will Be Improved

*Prof. Wilson Duff is a UBC graduate and member of the Department of Anthropology and Sociology who specializes in the study and analysis of the cultures of the Indian peoples of the northwestern coast of North America. He talks about the recent rebirth of the study of material culture based on museum collections.*

"For quite a long time anthropology moved away from museum-based studies and examined things that have no material counterpart, such as social organization and kinship. Recently there has been something of a renaissance in theoretical approaches to the study of material culture based on museum collections and there are a number of graduate students and two or three faculty members interested and involved in this area. The proposed museum will provide a home base for this kind of study.

"In the absence of a museum I have been teaching the ethnography and ethnology — the study and the analysis of culture — of the Indians of the Northwest Coast of North America through slides. I will continue to do that even after the museum is constructed because it gives students access to a wider range of materials. The present disadvantage for students is that slides give only a two-dimensional representation of physical things.

"Teaching has to be carried on in this way at UBC despite the fact that UBC possesses one of the outstanding collections of materials which relate to the Indians of the Northwest Coast. Because of a lack of teaching space and museum facilities students are unable to examine these materials and they haven't been exposed to good museum exhibits. More than 400 students are registered this year in the Indians of B.C. course, but it would be physically impossible for the existing museum in the basement of the Library to accommodate all these students if I wanted them to see specimens and we don't have any way of breaking them down into manageable groups. A better facility, with proper work rooms and display space will enable us to do this.

"The new museum will also bring under one roof a wide range of material which is not currently available to students. Dr. Charles Borden, who has just retired as professor of archaeology, has a large collection of prehistoric Indian materials in the basement of the Mathematics (formerly the Arts) Building which I would like my students to have access to and study. That simply isn't possible because the existing archaeology laboratory is, if anything, even more crowded than the present Museum of Anthropology.

"The new museum, in bringing all this material together for systematic exhibition in one place, will make it easier and more efficient for us to explore and develop ethnography and ethnology in terms of the rebirth of the museum-based studies which I mentioned earlier."

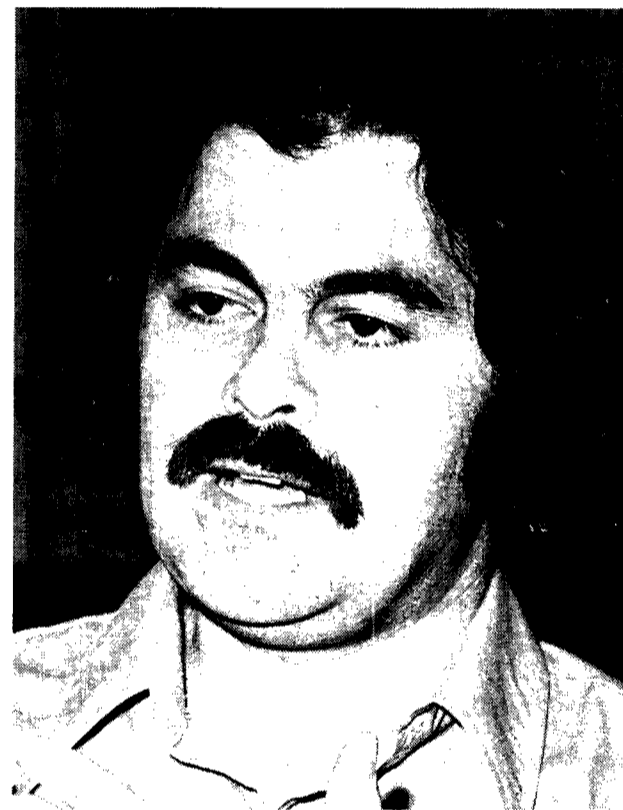
## Film Archive Seen in Museum

*Dr. Matthew Speier, assistant professor of anthropology and sociology, is convinced that audio visual techniques, particularly films, can be used for teaching and research. He describes how film and videotape could be employed in the planned UBC museum.*

"For some reason films have never been used as a powerful teaching and research medium. There is a reluctance to use them, possibly because of the expense and the special skills that are needed. When I speak of using films for research purposes, I have in mind how film might be used to study human group life. There are lots of films on human groups, but they haven't really been applied to situations of research and study.

"Using films for teaching has even larger implications for the University. In addition to supplying information, the film has to open up questions and issues about the people in the film and their lives. The big problem is to get students to see films as alternative sources of information that provide them with new ways of looking at familiar materials.

"The new museum could have an archive of films that would be used for both teaching and research. There are



DR. MATTHEW SPEIER

a great many films available for teaching purposes and I would hope the museum would use them in classroom situations and also for showings to interested members of the public.

"The ultimate goal I have in mind is to develop a film-making program in the museum, a program which would concentrate on recording various aspects of the life of B.C. Indians and other ethnic minorities. In the beginning they would not be long films and the subject might be as simple as blanket-making among the Indians or some other artistic activity. Properly made, a short film of this sort could be a powerful teaching and research device to supplement physical artifacts in the museum.

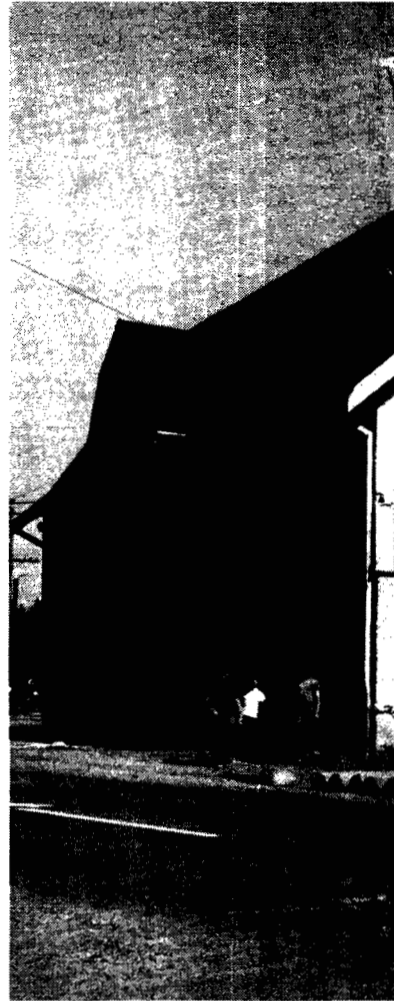
"I think, too, that a film or videotaping program of this sort would be doubly effective if we involved native Indians and other ethnic minorities in it. Armed with a movie camera or a portable videotape machine, Indians would be more likely to select for recording that which is significant in their culture than a white operator with preconceived notions about the lives of Indians.

"In this way I think Indians would make a significant contribution to the museum's archives and open up opportunities for a cultural exchange with non-Indians. I also see an archive of audio tapes in the museum for use by students, scholars and the public, tapes of folklore and other descriptions of cultural traditions.

"What has to be overcome, it seems to me, is the widespread feeling throughout the University that this sort of activity or archive is somehow unscholarly. The response of the University so far, it seems to me, has been entirely inadequate in adapting the audio-visual revolution to the teaching and research function. The use by the museum of these techniques may ultimately lead to the development of a model which would serve to show other departments how film and videotape could increase their teaching and research effectiveness."

The pipe-smoking dean of UBC's Faculty of Agricultural Sciences, Dr. Michael Shaw pictured at right, describes the changes that have been made in his Faculty recently to up-date the curriculum and explains why a campaign was launched recently to raise \$500,000 to improve the Faculty's ancillary facilities.

# AGGIES LOOK TO THE FUTURE



**UBC REPORTS:** Dean Shaw, Dr. Patrick McTaggart Cowan, who is now executive director of the Science Council of Canada, in addressing a group of government scientists recently, characterized university faculties of agriculture in Canada as being, for the most part, second rate. He tempered this with the statement that within Canadian schools of agriculture there are some scientists who have done some outstanding work. But the burden of his speech was that there is not a first-class faculty of agriculture at any university in Canada. Can you comment on this and, if you agree with that statement, is there some historic reason for this situation in Canada?

## DROP IN BUCKET

**DEAN MICHAEL SHAW:** Well, I think that Dr. McTaggart Cowan's remarks have to be looked at in context. First of all, he was addressing a group of federal government scientists and was making the point that federal support for research in the faculties of agriculture in Canada has been at a rather low level. The Canadian Agricultural Services Co-ordinating Committee makes available something like \$800,000 a year for research in all the seven faculties of agriculture in Canada, which is about one-third of the total funds made available for agricultural research by the National Research Council of Canada.

And that's a drop in the bucket when one considers that the internal operations of the research branch of the Canada Department of Agriculture cost between \$30 and \$35 million a year. So the point that Dr. McTaggart Cowan was really making was how much better the faculties of agriculture could be if they didn't have to struggle quite so hard to obtain adequate research funds.

**UBCR:** Is there a reason for the government funding its own agriculture services in preference to the university faculties of agriculture? What accounts for this?

**DEAN SHAW:** Well, my own view is that this is an accident of history which probably arose because, when the federal Department of Agriculture and related departments were originally set up, Canadian universities were simply not in a position to undertake much research.

It's not so many years ago, you know, that McGill and Toronto had the only two graduate schools of any significance in Canada. So while the faculties of agriculture have grown and have increased their capabilities enormously in the last 20 years, the old pattern of the government tending to do everything in its own laboratories has remained.

**UBCR:** A substantial percentage of the gross national product in Canada must be a result of activity in the agricultural field.

**DEAN SHAW:** I can't give you a percentage, but I can give you some figures for British Columbia. The cash value of farm receipts in British Columbia is slightly in excess of \$200 million a year. But if you calculate the impact value of agriculture in terms of jobs that it generates in various sectors of agriculture, food

processing, to name a single example, you have to multiply that figure roughly by five.

Dr. George Winter, head of our agricultural economics department, recently presented a very interesting paper on this subject, and while he had to make certain assumptions in his calculations there is no question that the impact value in terms of dollars is very much larger than the actual cash value of farm receipts. Even in British Columbia, where agriculture is relatively small compared to resource industries such as forestry or mining, there is no question that agriculture is very much interwoven with the whole economy.

**UBCR:** How do you account for the fact that student enrolment at UBC in agricultural sciences, and I would assume in schools of agricultural sciences across Canada, remains relatively low?

**DEAN SHAW:** I don't think that it's true to say that enrolments have remained relatively low across Canada. I think that at the University of Guelph, in Ontario, where they've got the largest university agricultural faculty, they have something of the order of 900 undergraduates. Of course, in Ontario there is a very large agricultural industry and in Manitoba, Saskatchewan and Alberta they have always had considerably larger enrolments than we have here in B.C. I think that there are several factors that operate in B.C. to keep enrolments relatively low.

Before I go into them, let me say that at the present time our undergraduate enrolment is about 225 students and that represents a 6 per cent increase over the last academic year. The factors that contribute to smaller enrolments are that production agriculture in B.C. is a relatively small industry, it's very much diversified, the University is located in an urban environment and perhaps the University's own view of the importance of a first-class Faculty of Agricultural Sciences has not always been what it should have been in the past. I feel that in recent years there has been a considerable change in this attitude and that our value is now recognized as far as the University is concerned.

I think that another factor is that the people who are responsible for advising high school students throughout the province tend to think of agriculture in terms of what it was 30 years ago and don't fully realize the extent to which our programs are based on science and the application of science to agriculture. Nor do they fully realize the diversity of the programs that we now offer and the opportunities that these provide for students.

**UBCR:** Do you think there are students within the University, perhaps in other faculties, who would be well advised to investigate the kind of work you are doing in agricultural sciences with a view to switching?

**DEAN SHAW:** Yes, I do. I am quite sure — and this, of course, is a personal view — that there is a substantial number of students who are now taking general degrees in science without any particular objective who would find, if they looked into it, that they could obtain a very satisfactory university education through a degree in agricultural sciences and that it would lead them to a very rewarding career after they graduated.

**UBCR:** What about job opportunities? Do you feel they are perhaps better with an agricultural degree than with a general science degree?

**DEAN SHAW:** Well, at this moment in time, job opportunities for university graduates are not as good as they were a few years ago when every graduate had a choice of where he would work and what he would do. A graduate in agricultural sciences has as good or perhaps a better, opportunity than many other kinds of graduates to obtain rewarding employment. Of course, this doesn't mean that the University or the Faculty of Agricultural Sciences guarantees every graduate a job. That's not what the University's for.

**UBCR:** You mentioned earlier that one of the factors that may have contributed to lower enrolments is that UBC is in an urban setting. Do you think that it might have been advantageous to have tried to decentralize some agricultural training in other parts of the province?

**DEAN SHAW:** Not at all. The main problem involved in taking a faculty of agriculture out of a university and moving it into some rural setting is that all the advantages of contact and co-operation with other faculties, such as science, applied science and so on, are lost. And in order to have a first class Faculty of Agricultural Sciences one has to have a faculty located in a large university where there is a great deal of diversity and where there are strong basic sciences. I could cite instance after instance where the work of our staff benefits enormously from work in other faculties and departments, particularly the Faculty of Science. And I'm sure that there are many people in the Faculty of Science who benefit from our faculty being on the campus. So I regard the possibility of decentralization as being quite out of the question because I think you create quite a different kind of institution. If we were to decentralize, the province would simply end up with a vocational institution. By that I mean an institution which is training people primarily to go back to production work on farms.

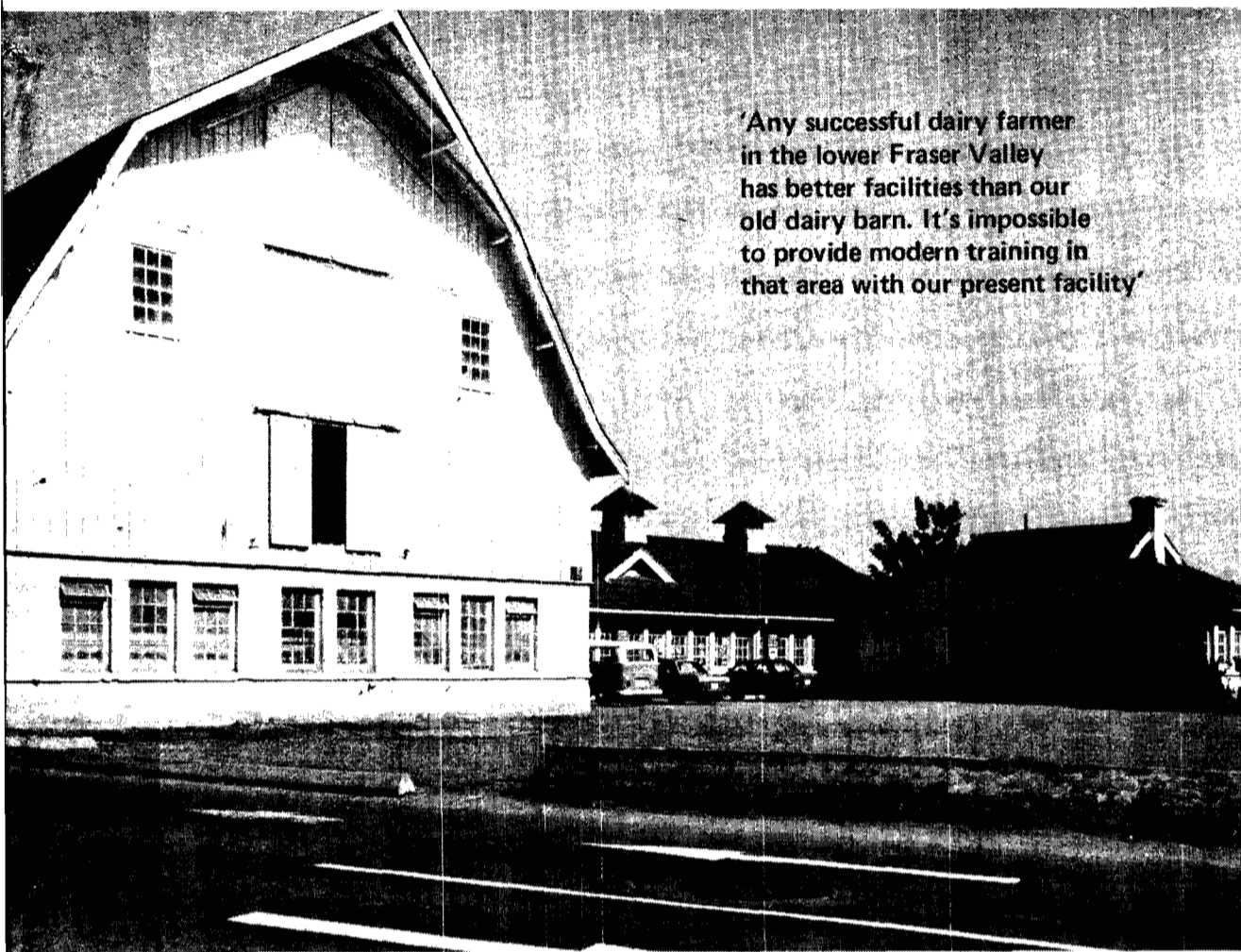
**UBCR:** But isn't that what faculties of agriculture have traditionally existed for?

**DEAN SHAW:** At one time perhaps, but those days are long gone. In fact, of all the UBC graduates in agriculture since the faculty first opened its doors, only about 6 per cent have actually gone back to farming in B.C. We've had something of the order of 1,800 or 1,850 graduates and only 6 per cent of those have gone back to farming in B.C.

## MANY OCCUPATIONS

**UBCR:** What occupations do the other 94 per cent go into?

**DEAN SHAW:** Something like 16 per cent are teaching in B.C. or other parts of Canada, 22 per cent are in business and industry, and that includes all kinds of businesses from banks to the forest industry; 32 per cent are with government agencies, either in administrative positions or as research officers of one kind or another; 17 per cent are research scientists primarily in government institutions, but some in private industry, and others are at universities. The other 7 per



**'Any successful dairy farmer in the lower Fraser Valley has better facilities than our old dairy barn. It's impossible to provide modern training in that area with our present facility'**

cent are in a wide variety of other occupations.

**UBCR: In allied fields?**

**DEAN SHAW:** Not necessarily. I met one dentist who feels that the best thing that ever happened to him was to take an undergraduate degree in agriculture because it gave him a very wide inter-disciplinary introduction to science.

**UBCR: You said earlier that the best place for a school of agriculture is as part of an integrated scientific establishment at a university. Has the Faculty of Agricultural Sciences at UBC altered its curriculum in recent years to provide for greater integration?**

**DEAN SHAW:** We have had a considerable change in our undergraduate program. The individual courses within the curriculum have also been altered considerably. This has been the result of new points of view, of bringing new staff onto the faculty. The faculty has increased in size in the last four years from 27 to 45.

**UBCR: Have you introduced any new areas of study in recent years?**

**DEAN SHAW:** Yes, we have. We now have a fully-accredited Department of Food Science with a program that did not exist a few years ago. We've added two entomologists to the staff of the plant science department because we couldn't properly deal with the problems of plant protection without having entomologists on the staff. In soil science we have widened the scope of the department considerably. We have, for example, an environmental physicist on the staff of soil science now.

And in this connection I should point out that we are building bridges into other disciplines. Our soil science department is really serving both agriculture and forestry. We have one man in the department who is supported by the Faculty of Forestry and another man who is jointly supported by this Faculty and by the Faculty of Forestry. We have also made a great effort to form links with the Institute of Animal Resource Ecology under Dr. Crawford Holling and one of the entomologists in plant science is a joint appointment between the Institute and the Faculty. In these and other ways I feel that we've made a considerable degree of progress in linking up with the programs of other departments.

**UBCR: You've recently launched a campaign to raise half a million dollars. The University is also committing funds for a total of approximately one million dollars. Can you explain exactly what this money is to be used for and what it will do to improve agricultural sciences at UBC?**

**DEAN SHAW:** The first priority is to improve ancillary facilities on the campus. We badly need to update the greenhouses for plant science and provide new facilities for animal and poultry science. We also need a modern dairy unit.

It's almost embarrassing to bring members of the agricultural community to the campus because any successful dairy farmer in the lower Fraser Valley probably has better facilities than our old dairy barn. It's quite impossible for us to provide modern training in that particular area with the facility that we now have.

**UBCR: Will the improvements you are planning go far toward creating a first-class school of agriculture here?**

**DEAN SHAW:** They will very much update our ancillary facilities, but after that we still have other needs. But it didn't seem wise to try to accomplish everything all at once.

## FUTURE NEEDS

**UBCR: What do you see as the greatest future needs in agricultural sciences? Where do you see the Faculty going over the next 25 years, say?**

**DEAN SHAW:** That is a hard question to answer. I know one university president — not our own — who says that five years is an infinity of time. In the last four years we have concentrated on building minimum essential strength in each of the departments in the Faculty. I think that in the future we need much more development in the area of agricultural economics, which is still our smallest department. Many of the problems facing Canadian agriculture are essentially economic ones, problems concerned with marketing, distribution and trade.

Our Department of Agricultural Economics is in a particularly favorable position in comparison to similar departments in other faculties of agriculture because we're located in Vancouver where grain and other agricultural produce is shipped to China, Japan and elsewhere.

**UBCR: Do you think the possibility of increased trade with China will effect development along those lines?**

**DEAN SHAW:** I think that any developments in relation to trade between Canada and the Orient are bound to have a good effect.

**UBCR: Are there other areas within the faculty that you see as being promising in terms of future development?**

**DEAN SHAW:** The traditional areas, the soil, animal and plant sciences, all offer exciting possibilities for future development in relation to increased efficiency of land use and animal and plant production as well as conservation of the environment.

Two areas that I think we have neglected in Canada in the past are food science and agricultural engineering, particularly food engineering. I think that these areas will become increasingly important in the future because, whether we like the idea or not, I believe we shall see an increased use of processed foods or food supplements. So we have made a great effort to get the two departments — Food Science and Agricultural Engineering — established on a sound basis and to integrate their work as much as possible. Incidentally, the agricultural engineering program gives the Faculty a strong link with the Faculty of Applied Science.

**UBCR: In recent years one of the questions that new members of your faculty have thrown at them bears on the question of the world food shortage. Faculties of agricultural sciences are often seen as a powerhouse of ideas for solving food shortage problems. Is this an**

**unfair burden to put on them?**

**DEAN SHAW:** No I don't think it is. A number of faculty members have gone to less-well-developed parts of the world, Ghana, South America, India and the West Indies, for example, on agricultural missions. The problem is that the Faculty hasn't been big enough in the past to be able to afford to have people away for long periods. Some even question the idea that we should have people away on overseas agricultural missions. I think that we would be doing our students a disservice if some of our staff did not occasionally undertake these missions, because they bring back a perspective on world agricultural problems that is extremely useful to our students.

I feel that more of our young people who go into agriculture should consider the possibility of taking a post overseas in connection with agricultural development. There is no question about the need and the work that has to be done when one considers the world food problem.

## NEW BUILDING

**UBCR: Do you feel that in the future the University is going to have to provide Agricultural Sciences with a larger building?**

**DEAN SHAW:** The short answer to that is yes. If the province really wants a first-class Faculty of Agricultural Sciences to do the job that should be done in British Columbia and Canada, we certainly need a larger building and more teaching staff.

When I first came here I said I thought a staff of 60 was a minimum requirement for the Faculty and I still believe that to be true.

**UBCR: Can you briefly describe what you see as the functions of the Faculty?**

**DEAN SHAW:** There are three functions, teaching, research and extension or continuing education. And that's in order of priority.

In connection with teaching, our responsibility is to give undergraduates the most up-to-date training possible in the agricultural sciences and that means the program has to be very solidly based in science. The program must not only make students aware of the application of science to agriculture but also aware of the relationship of agriculture to the environment. In the past, faculties of agriculture concentrated on graduating students who knew all about the production side of agriculture. Today we have to graduate students who know about the production side and are also aware of the problems of pollution and damage to the environment. The big problem is to achieve maximum production with minimum damage to the environment.

Agricultural research in a university serves two purposes. It serves as a vehicle, first, for advanced training of graduate students. It also serves the province and the country because the results of that research are applicable to agricultural problems. I should add that it will not pay to be too short-sighted about the kind of research that is done in agriculture faculties. If all the research effort is devoted to short-term problems we won't be provided with the core of well-trained people needed to deal with future problems. What I am saying is that a fair amount of our research needs to be of a basic, long-term nature, devoted to producing people who can deal with agricultural problems 20 years from now.

## EXTENSION WORK

On the extension side, we are working closely with the appropriate people in the provincial Department of Agriculture and the University's Center for Continuing Education. This is a facet of faculty activity which is often forgotten, but it is a very important facet and it is an area where I feel we need to do much more.

**UBCR: Do you see the results of research in the laboratory being funnelled out through the extension services?**

**DEAN SHAW:** That's possible with certain kinds of research. When it comes to fundamental, long-term research it's not always possible.

**UBCR: Agriculture students have always been noted for their high morale. Can you tell us something about faculty-student relations and the faculty itself?**

**DEAN SHAW:** I think that students and faculty associated with agriculture are pretty highly motivated and have a very strong sense of providing service to others. The teaching staff certainly enjoys excellent relationships with its students and they are a very fine group of young people. As for the staff, I think you would have to look a long way to find a group of people who work harder and are more dedicated. And, of course, a number of our researchers have achieved international distinction in their particular fields.

# DEBATE CONTINUES OVER LANDS

Few pieces of real estate in the Greater Vancouver area have been the subject of more debate in recent years than the undeveloped portion — some 1,700 acres — of the University Endowment Lands, the forested green belt that separates the University of B.C. from the City of Vancouver.

## PROVIDE REVENUE

The Lands, which total just over 2,500 acres, were set aside by the provincial government in 1923 with the intention that they should be developed in some manner to provide revenue for the University. In the 48 years since they were created, UBC has not realized a penny from its birthright.

Recent controversy concerning the Lands has largely centred on the possibility that the 700-odd acres of developed land will be amalgamated with the City of Vancouver. Endowment Lands schools have already been incorporated into the Vancouver school system and tax assessments on existing homes and businesses in the area have been increased to make them more comparable to assessments in Vancouver.

Very little is known about the negotiations, which began in February of this year, between

the provincial government, which controls and administers the Lands through the Department of Lands and Forests, and the City of Vancouver. The City, it appears, wants control of the entire UEL, not just the developed area, and the UEL Ratepayers Association is resisting the amalgamation proposal, fearful that standards of service in the area may drop and real estate operators may move in to exploit the forested areas in undesirable ways.

The Hon. Ray Williston, provincial Minister of Lands and Forests, insists there will be no giveaways. Nothing the provincial government has said in recent years seems to indicate that it has abandoned the principle that development of the remaining 1,700 acres should provide income for the University.

## PROPOSALS MADE

Since the end of the Second World War there have been several proposals for developing the Lands. In 1963, Webb and Knapp (Canada) Ltd., a company which subsequently went bankrupt, unveiled a \$3 million development scheme. The company estimated that UBC would get an income of \$3 million a year after 15 years if all the developed land was held on a lease-hold



Forested University Endowment Lands separate UBC on tip of Point Grey from City of Vancouver

# PARK PROPOSAL ENDORSED

*Mr. Adrian Belshaw's five-page brief on the University Endowment Lands first discusses the 1955 and 1963 proposals for the development of the Lands. He says there are compelling reasons for the outright rejection of both plans, largely because the endowment concept has not been carried out and probably won't be revived. "Financial considerations," he says, "should no longer be considered crucial in the development of the endowment; the immediate needs of the university and the community it serves should take priority." His brief continues:*

So we have a problem; we must decide what to do with almost 1,800 acres of beautiful forest. The first thing we should note in this context is that since the student population of UBC has probably peaked there will be no need for major spatial expansion. . . . The new Sedgewick library has set a valuable precedent in showing that expansion can take place underground; the greater expense is easily justified by the preservation of the view and feeling of space which could so easily be destroyed by the ubiquitous high-rise. The institution of rational public transit . . . or the construction of underground parking lots would free vast waste areas for new buildings. There is clearly no excuse for the spread of the academic parts of campus.

The triangle of land presently occupied by B.C. Research, TRIUMF, and other research facilities provides generous scope for future expansion. There is a current view that 100 acres on the eastern side of Wesbrook Crescent and south on Sixteenth Ave. should be set aside for an "industrial park" where private companies could set up research facilities. That such a development would provide good revenue is irrelevant. Physical proximity of research facilities is not a prime factor in the communication of important scientific results, and the advantages of such an arrangement may well be offset by the corporate presence working to the detriment of "pure" research. There is a better use of the land, as will be shown later.

One thing that is important to any university is the creation of a community spirit, something that is sadly lacking at UBC. There are many good entertainment facilities at the university, but they are under-used, and there are too few restaurants, cafes and pubs for a distinctive centre of student and faculty activity to grow. If more students were to live in the UEL in some kind of "student ghetto," then half the problem would be solved. The construction of new housing would preferably

*Please turn to Page Ten  
See BRIEF*



basis. The scheme was politely, but non-committally, received by the government.

Earlier, in 1955, the provincial government commissioned a study of the Lands. This report proposed comprehensive development of the Lands, but no action was ever taken on it.

UBC has not yet publicly stated an official position on the Lands, but a report prepared by a presidential advisory committee early this year has been forwarded to the government for study. The only preference expressed by UBC, some years ago, was for the development of a private-sector research park adjacent to the new South Campus research area being developed by UBC.

In recent months another pressure group has entered the controversy over the Lands. The Point Grey Chapter of the Scientific Pollution and Environmental Control Society (SPEC) has presented a petition signed by 5,400 people to the provincial government asking that the undeveloped portion of the lands be set aside for park use. The SPEC plan calls for creation of a 1,675-acre regional park that would include camping facilities for city children and a network of nature trails and cycling paths.

## BRIEF APPROVED

The UBC Students' Council has already approved a proposal on the future of the Endowment Lands, written over the past summer by Mr. Adrian Belshaw, one of four student representatives of the Faculty of Science on the Council. At its Oct. 20 meeting council established a committee to draw up more detailed recommendations based on the brief. Excerpts from Mr. Belshaw's brief are reprinted below.

Mr. Donald J. Norris, who recently received his master of forestry degree from UBC, has found that a large number of UBC faculty members and students use the Endowment Lands for teaching and research and that the area has at least three unique sites which are being encroached on or are in danger of destruction.

An article based on Mr. Norris's report, written by UBC assistant information officer Peter Thompson, begins at right.



Picture by UBC Photo Department

UBC Forestry graduate Donald Norris has his hands full of moss that grows in the Camosun peat bog, a unique area in the University Endowment Lands. Mr. Norris found that the

Lands are used extensively by UBC professors and students for field trips and research. Details in story below. Picture by UBC Photo Department.

# Widespread Use of Lands Found in Survey

By PETER THOMPSON

Assistant Information Officer, UBC

Every weekday some 25,000 people travel through the 1,700-acre green belt that separates the University of B.C. from the City of Vancouver.

Most of us zip through the strip of wilderness, enjoying the mile or two of unbroken travel as a relief from Vancouver traffic congestion.

That's about as much as the University Endowment Lands mean to many of us. Few of us have seen any more of this forest area — what's left of the 2,500-odd acres set aside for the University by the provincial government almost half a century ago and from which UBC has yet to receive a dime — than what we glimpse along the traffic corridors through it.

Yet some parts of the Endowment Lands, like a no-man's-land belonging to neither UBC nor the City of Vancouver, may be in danger of destruction.

That, at least, is the outlook implied in a study of the Endowment Lands by UBC graduate Donald J. Norris, who received his master of forestry degree this year.

His report shows that a surprisingly large number of UBC faculty and students use the Endowment Lands for teaching and research, that their number is increasing quickly, and that the area has at least three unique sites virtually unknown to anyone outside of a handful of UBC experts.

Mr. Norris tracked down 40 professors who

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See REPORT*



Picture by UBC Photo Department

MR. ADRIAN BELSHAW

## REPORT *Continued from Page Nine*

use the Endowment Lands. Here are some results of his report:

The Endowment Lands are used by students and staff in the Faculties of Forestry, Education and Agricultural Sciences and the Departments of Anthropology and Sociology, Geography, Geology, Botany and Zoology for staff research, graduate student research, collecting laboratory materials or for undergraduate projects.

Greatest use made of the area, in terms of the number of people involved, is organized field trips. Last year the Endowment Lands received nearly 140 field trips and more than 8,300 student-visits, increases of more than 23 per cent and 6 per cent respectively over the 1969-70 session.

Twenty-eight of the 40 professors use the Endowment Lands as a source of laboratory materials.

Twenty-five said they conduct undergraduate student projects there, projects that aren't extensions of laboratory assignments.

Nineteen research projects are being carried out on the Endowment Lands by faculty members. More than 16 graduate students also use the area for research.

Mr. Norris's report, prepared as part of the requirements for a graduate course in Forestry given by Prof. D.S. Lacate, also points out that:

About half of the great blue heron population of the Lower Mainland and Fraser Valley nest in a certain area of the Endowment Lands. In the spring of last year

125 nesting pairs produced 179 young.

One of the very few aspen groves occurring in the coastal Douglas fir zone is in the Endowment Lands, as well as a peat bog, a survivor of the ice ages, which contains the pollen and so the history of plants that have existed in the Vancouver area since glaciation.

The bog also contains at least one rare plant and two shrubs that are uncommon in this area and an unnamed and undescribed moss.

Four professors said they don't use the Endowment Lands for research because "practical experiences has shown that at any time any project can be disrupted, without warning, by construction equipment, spraying programs or, in exposed areas, by vandals," says Mr. Norris.

"One researcher set up an experiment in an area promised to him only to have a bulldozer clear the area."

If the Endowment Lands are ruined, laboratory materials would have to be collected elsewhere, staff members said, and about 83 per cent of the undergraduate student projects would have to be cancelled or studied from text books. Five of the 19 research projects being conducted by UBC staff couldn't be done anywhere else.



Picture by UBC Photo Department

Mr. Donald Norris found a unique aspen grove in UBC Endowment Lands

## BRIEF

*Continued from Page Eight*

be under student control, in order to give architecture and engineering students and faculty a chance to experiment. The encouragement of private dining and entertainment enterprises to take part in the development, along with the lifting of the provincial government's ban on liquor licenses on Crown land, would help in the creation of a vibrant and flourishing community.

It is to be hoped that most such development could take place on areas already occupied by campus, such as Fort Camp. Should new areas be necessary, then the area between Acadia Road and the golf course, or the area earmarked for the industrial park, could be developed.

What of the rest of the land? Here, we fully support the proposals contained in the SPEC 10/UBC Reports/Oct. 27, 1971

report of this year. We maintain that, in an era where cities are wantonly gobbling land, it is vital to preserve wilderness areas close to them so that city dwellers do not forget what wild country looks like. Many youth groups already use the Endowment Lands for camping, and the Vancouver School Board has indicated an interest in holding wilderness classrooms. Such activities are obviously desirable, particularly for the poor sections of the community who might otherwise never have the opportunity to enjoy the outdoors. The improvement of the current network of trails could provide jobs for students and better access to a remarkable piece of forest for all citizens seeking quiet relaxation . . . .

Recreational and conservational considerations dictate, therefore, that the UEL be made a city or provincial park. Establishment of campsites, trails, and picnic

## COMMON FEELING

"If there was one feeling common to most of the respondents," Mr. Norris says, "it was that the Endowment Lands should be minimally developed, especially the foreshore and the area south and east of Imperial Drive."

He claims the unique Camosun peat bog is presently being filled in with soil from construction operations, drained, and sprayed to control mosquitoes.

He also suggested that the great blue heron nesting site be given the status of a preserve. Its location is known only to a few people in the Department of Zoology, who fear the birds may be destroyed by vandals or development.

"If these birds are driven off they would perish, since other nesting sites and food sources in the surrounding area could not stand the increased load," he says.

He says a more comprehensive report should be done. He is convinced other UBC professors and students unknown to him use the Endowment Lands. A campus-wide survey could find them.

A study should also be done of the area's use by the B.C. Institute of Technology and public schools as well as by hikers, riders, joggers and Scout organizations for recreation, he said.

areas should be carried out so as to minimize disruption of the natural flora and fauna. The Camosun peat bog and the heronry . . . should be fenced off, with access limited to scientific researchers. The former area is so valuable for its unique plant community, and the latter for its handsome birds which are highly sensitive to human interference, that it would be hard to justify continued open access.

The developed portions of the UEL should remain under the administration of the Ministry of Lands and Forests. However, it is essential, if the spirit if not the letter of the original endowment is to be maintained, that the ministry should become more responsive to the needs of the university. Indeed, all plans for development of the UEL should have as their only consideration the needs of the university; if UBC doesn't need the land, then let the forest stand.

# UBC NEWS IN BRIEF

A COLUMN FOR UBC GRADUATES ROUNDING UP THE TOP NEWS ITEMS OF RECENT WEEKS. THE MATERIAL BELOW APPEARED IN MORE EXTENDED FORM IN CAMPUS EDITIONS OF 'UBC REPORTS.' READERS WHO WISH COPIES OF CAMPUS EDITIONS CAN OBTAIN THEM BY WRITING TO THE INFORMATION OFFICE, UBC, VANCOUVER 8, B.C.

Site preparation for the University of B.C.'s new 350-bed teaching, research and service hospital will begin this fall.

The \$58.5-million hospital will be integrated with the existing 60-bed psychiatric unit on campus for a total of 410 beds.

Provincial Health Minister Ralph Loffmark announced government approval of funding for the hospital in September.

Victoria has committed itself to \$28 million and the federal government will contribute \$25 million. Construction will take about five years.

Though the hospital's bed capacity is small, the hospital will be used to diagnose and treat patients living in motel-like buildings close to it. This will avoid providing expensive acute-care beds in the hospital for patients who don't require them.

The five-storey hospital will be the heart of the Health Sciences Centre complex of buildings taking shape on campus. The Centre embodies the idea of the health team pioneered by Dr. John F. McCreary of the Faculty of Medicine.

The Centre will train health students together, so they will be able to function as a team when they graduate. Aim of the health team is to shift some medical tasks now done by doctors onto the shoulders of other less-expensive health professionals.

Between 2,500 and 3,000 health students will be trained at the Centre when it is completed. Involved in the Centre are the Faculties of Medicine, Dentistry and Pharmaceutical Sciences and the Schools of Nursing and Rehabilitation Medicine.

UBC's Board of Governors has appointed Dean McCreary as co-ordinator of the Health Sciences and Mr. J.E. Breeze as project manager of the hospital. Mr. Breeze, of B.C. Research, led a cost analysis team which examined proposed designs for the hospital for more than one year.

## UBC ENROLMENT

UBC's 1971-72 enrolment stood at 19,894 students on Oct. 1, more than 1,000 students or almost 5 per cent below last year's final enrolment figure of 20,940.

Since Sept. 10, the last day of UBC's formal registration period, enrolment has continued to inch upwards despite the usual number of withdrawals, according to an official in the Registrar's Office.

An additional 211 students registered between Sept. 10 and Oct. 1, mostly in the Faculty of Graduate Studies.

The faculties showing the sharpest decline in enrolment are Arts, down 537 students from last year's registration, and Graduate Studies, which is 335 students below the final 1970-71 figure.

More than half the enrolment decline in the Faculty of Arts is concentrated at the second-year level. Second-year registration is down nearly 400 students from last year's total of 1,639 students. First-year Arts enrolment is also down by more than 160 students.

The Registrar's Office said it has no reliable data to show which of the two major Arts divisions — the humanities and the social sciences — had suffered the greatest drop in enrolment.

The Registrar's Office is currently processing more than 5,000 course changes and it will be some weeks before departmental enrolments are available.

Following are enrolment figures to last Friday in various UBC degree programs (figures in brackets indicate increase or decreases from last year's final enrolment figures):

Agricultural Sciences, 225 (+15); Applied Science, 1,032 (-112); Architecture, 153 (+14); Nursing, 226 (+22); Arts, 4,816 (-537); Home Economics, 280



DR. HAROLD COPP, centre, head of UBC's Department of Physiology, was in Paris recently for the premiere showing of a 30-minute film on Calcitonin, the bone hormone which Dr. Copp discovered in 1961. The film was made by Mr. Michel Meignant, right. At left is Mr. Roger Alain, Air

Canada manager for France and western Europe. Before going to Paris Dr. Copp gave the prestigious Jacobaeus Lecture in Gothenburg, Sweden, at the invitation of the Nordisk Insulin Foundation. He is only the second Canadian invited to give the lecture.

(+22); Librarianship, 65 (+23); Music, 292 (+32); Social Work, 140 (+14); Commerce, 1,007 (-24); Dentistry, 140 (+14); Dental Hygiene, 40 (+5); Education, elementary, 1,703 (-203), secondary, 1,329 (-60); Physical Education, BPE degree, 419 (-19), recreation, 133 (-15); Forestry, 214 (-9); Law, 593 (-21); Medicine, 252 (-0); Rehabilitation Medicine, 179 (+55); Pharmaceutical Sciences, 274 (+48); Science, 3,561 (+1); Unclassified, 161; Qualifying, 113; Graduate Studies, 2,475 (-335).

## NEW GEOLOGY HEAD

A distinguished Canadian geologist from Queen's University has been named to head UBC's Department of Geology.

Prof. Hugh Robert Wynne-Edwards, 37, who is currently head of the Department of Geological Sciences at Queen's, has been appointed by the UBC Board of Governors to succeed Prof. William Mathews, who resigned as head of the UBC department June 30. Acting head until Prof. Wynne-Edwards can take up his post July 1, 1972, will continue to be Dr. James W. Murray.

Born in Montreal, Prof. Wynne-Edwards took a B.Sc. degree with first-class honors from the University of Aberdeen in 1955. He took an M.A. degree and Ph.D. degree from Queen's in 1957 and 1959 respectively.

He joined the staff of Queen's geological sciences department the year he took his doctorate and became head in 1968.

He was visiting professor to the University of Aberdeen from 1965 to 1966; advisor to the State Directorate of Mining and Geology at Uttar Pradesh, India, in 1964; has spent ten summer sessions with the Geological Survey of Canada; and has been advisor to the "Grenville Project" of the Quebec Department of Natural Resources since 1968.

He has published more than 40 scientific articles, many of them on the Grenville geological province of the Canadian Shield — an area about 250 miles wide north of the St. Lawrence River in the Province of Quebec.

He has designed a system for collecting geological information in the field in a form that can be fed directly into a computer, specializes in the study of metamorphic rocks as well as "regional tectonics" — the relationship to each other of large-scale structures in the earth's crust.

## TELESCOPE ARRIVES

Canada has entered one of the most fascinating realms of astronomy with the arrival of a 15-foot, millimeter-wave radio telescope at the University of B.C.'s south campus.

The \$65,000 telescope will be used to study atoms and molecules in the space between the stars in our galaxy. Astronomers have made startling discoveries in interstellar space recently.

The project is under the direction of Dr. W.H. Shuter, associate professor in UBC's Department of Physics, and is being financed through a \$538,600 National Research Council negotiated development grant.

The grant, to be spent over three years, was awarded last year for three separate research projects in astronomy and astrophysics at UBC, including Dr. Shuter's.

This kind of NRC grant is to stimulate rapid development of research in subject areas where the University already has competence, especially if the subject area doesn't fall within the domain of one department but is shared by a number of disciplines.

## Letters to the Editor

Dear Sir:

Please let me draw attention to an error in the September 29 issue of *UBC Reports*. On page 5 this assertion is made: "A glottal stop is almost a non-sound made in the back of the throat and is non-existent in European languages." The glottal stop occurs in more than one European language: for instance, in German, and even more noticeably in Danish. It can be found in English, as when we say, "I said an ice box, not a nice box." It can be heard in a widespread, but deplorable, Canadian pronunciation of the word "Latin."

Very truly yours,  
Geoffrey B. Riddehough  
Emeritus Professor  
of Classics

Dear Sir:

I have before me your issue of 29 Sept. 1971.

I congratulate as well as thank you. It is readable, interesting and informative.

Yours truly,  
Earl W. Van Blaricom

**UBC**  
REPORTS

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# UBC ALUMNI Contact



UBC ANTHROPOLOGY professor Dr. Harry Hawthorn (left) and anthropology museum curator Mrs. Audrey Hawthorn (centre) read the inscriptions on their honorary life memberships in the Alumni Association following presentation at the Oct. 18

board of management meeting. Association president Mr. Frank Walden (right) presented the awards in recognition of the Hawthorns' contribution to Northwest Coast Indian studies at UBC. Picture by UBC Photo Department.



MR. ERIC KIERANS

## Eric Kierans Speaks Nov. 10

Mr. Eric Kierans, the fiery critic of the federal government's economic policy, will be the featured speaker at a dinner to be held on Wednesday, Nov. 10, at the UBC Faculty Club.

Mr. Kierans, the former federal minister of communications, will speak on "Canadian Economic Policy: An Assessment."

Special invitations have been extended to UBC Commerce alumni, the business community, Commerce faculty members and students. The dinner meeting is being presented under the auspices of the UBC Commerce Alumni Division, the Faculty of Commerce and Business Administration, the Commerce Undergraduate Society and the Master of Business Administration Association.

The function has been planned as a means of increasing contact between Commerce alumni, faculty and students.

Mr. Kierans resigned from the federal cabinet on April 29, 1971, after seriously disagreeing with the government's employment and economic policies. In essence, Mr. Kierans argued that present government policy tends to foster the export of raw materials at the expense of creating job-intensive secondary industry. He maintained that all economic policies should instead dovetail to work toward expanding employment. Mr. Kierans is expected to have more to say on this topic on Nov. 10.

The function will begin at 6 p.m. with a reception, followed by dinner at 7 p.m. and the address by Mr. Kierans at 8:30 p.m.

### Tickets, Please

Please send me ..... tickets at \$6.50 single to the Eric Kierans dinner.

Enclosed is a cheque for \$ .....

Name .....

Address .....

Phone number .....

Mail to: UBC Alumni Association, 6251 N.W. Marine Drive, Vancouver 8, B.C.

## Alumni Awards Help 188

This year 188 students are studying at UBC with the help of scholarships and bursaries provided by donations to the UBC Alumni Fund.

A total of almost \$44,000 in awards have been granted to students from all over B.C. under the UBC Alumni Association's academic awards program.

"The need for financial assistance to students is increasing, particularly in this difficult economic period, and we're glad to be able to help out," Mr. Kenneth Brawner, Alumni Fund '71 chairman, said in

announcing the award winners. "The number of 1971 awards is the most extensive in the history of our program. We hope our alumni and other friends of the University will continue their generosity so that we can help even more students in coming years."

The scholarships and bursaries granted to 188 students were made possible through donations to the Fund may by alumni and other friends of the University in 1970. Sixty-four students entering UBC from high school were awarded N.A.M. MacKenzie Scholarships of \$350 each. Sixteen qualified and needy students were granted John B. Macdonald Bursaries of \$350 each. A further 108 students received Alumni Bursaries varying from \$100 to \$300 each.

## Phonathon Seeks Fund Donations

The telephone lines in the UBC General Services Administration Building will be buzzing away on overtime on two evenings in November.

That's because a group of UBC Alumni Fund volunteers will be using the phones in a two-evening telephone canvass of UBC graduates who have not yet given to the fund this year. About 100 volunteers — alumni, alumni wives and students — are expected to man the phones from 7 to 9 p.m. on Tuesday, Nov. 9, and Monday, Nov. 15, in the annual phonathon.

The phonathon is confined to the Greater Vancouver area. Last year the two-evening canvass resulted in about \$12,000 in donations to the Alumni Fund; it is hoped a similar amount can be raised this year.

The procedure is for the phonathon volunteers to first outline to the graduates how the Alumni Fund money is used, make a note of any comments they wish to make and record their pledges. Donations to the Alumni Fund are mainly used each year to support scholarships, bursaries, the Library, the President's Fund and various student, cultural and intellectual activities.

Phonathon chairman Mike Rohan urges alumni to pitch in and help the campaign. "We have the facilities, we have the prospects — all we need is you, your experience in alumni affairs and your enthusiasm," he said.

Alumni who would like to volunteer for the phonathon are invited to call the Alumni Association at 228-3313 and pick an evening on which to participate.

## Reunion Set For California Grads

While Canada-based alumni will be celebrating Reunion Days '71 at UBC on Oct. 29 and 30, southern California alumni will be having a celebration of their own in Los Angeles.

Graduates living in southern California will stage a Homecoming steak and champagne barbecue at the home of Dr. and Mrs. Jack Lintott in Los Angeles on Saturday, Oct. 30.

The special guest at the event will be UBC's registrar, Mr. Jack Parnall.

All proceeds from the barbecue, which costs \$4 per person, will go to the Southern California UBC Alumni Scholarship Fund.

## Student Tutorial Service Opens

The UBC Alumni Association and the Alma Mater Society are jointly sponsoring a tutorial scheme to help interested students improve their academic standing.

Students who wish to receive tutorials — or who wish to serve as tutors — are urged to go to Room 228 of the Student Union Building from 12:30 to 2:30 p.m. any weekday and make the necessary arrangements with co-ordinator Sue Westren. There is a \$1 registration charge.