

Queen's University Biological Station

Annual Report and Newsletter

1995



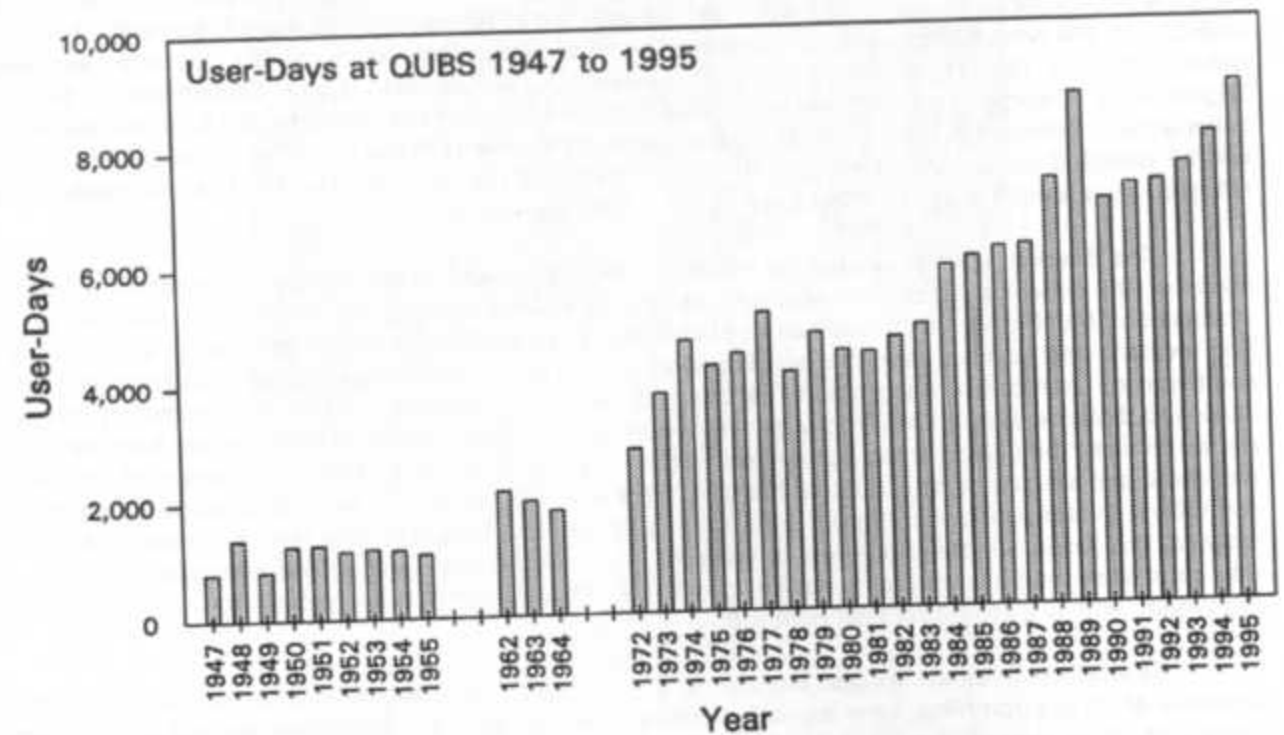
Director: Dr. Raleigh J. Robertson

Manager: Frank J.S. Phelan

Introduction

1995 marks the fiftieth anniversary of the founding of Queen's University Biological Station. The property on Queen's Point was purchased in 1945 from the Acton family. The prime mover behind the establishment of a field station was Principal Robert C. Wallace, aided by Dr. Rollo Earl (Chair, Department of Biology) and Dr. Wes Curran (Founding Director, QUBS). In 1995 we did not celebrate this event because attention is focussed on 1996 as the celebratory year of 50 years of operation as a field station. Several events are in the planning stages for 1996, aimed at QUBS alumni, neighbours and friends and current regulars. Plan to join in the celebration!

Nineteen ninety-five was the busiest year yet at Queen's University Biological Station. The year was highlighted by the dedication of the Bracken Tract, which was donated by George and Margaret Bracken. It was a productive year for both research and teaching, with a ten percent increase in user days from 1994 levels (User-day data are displayed in tabular form later in this report. On average, 36 researchers (professors, graduate students, honours students and assistants) were in residence throughout the summer. Abstracts of research projects and personnel involved are contained in the following pages.



In teaching activities, QUBS hosted ten modules in the Ontario Universities Program in Field Biology. Seven of these were presented by Queen's faculty, three by faculty from other institutions. Titles and enrolments for modules held at QUBS and for the OUPFB program in general are found in Tables 1 through 3. In addition to the modules mentioned above, Dr. Ed Kott (Wilfrid Laurier University) brought his field course for senior undergraduates to QUBS for two weeks in late summer. In spring and fall, Steve Thompson (Sir Sandford Fleming) brought his Terrain and Water Resources Field Course to QUBS. The seventeenth edition of the Naturalists' Workshop, described in more detail later in this report, was held in three sessions, one mid-May, and two in July.

The demand for small conferences, meetings and workshops continues to grow. However, QUBS is able to host these events only when not in conflict with teaching and research uses. This year, given the high levels of use, only a few of these events were hosted in 1995. QUBS continues to be an important destination for a variety of field trips, especially those associated with fall and winter term courses. In many cases, this exposure to field work is cited as a key element in stimulating interest in field biology. A tabular summary of conference, meeting and field trip use of QUBS in 1995 appears later in this report.

Donation of Bracken Tract

This 500 acre tract was donated to Queen's University by George and Margaret Bracken in 1994. George is a surveyor from Smith's Falls and an alumnus of Queen's. The property was donated in memory of his parents, George N. Bracken and Lena B. Bracken (nee Pierce). On March 31, 1995, a ceremony recognizing the donation took place at the University Club. All five of George and Margaret's children were able to attend, no mean feat since that encompassed Vancouver, British Columbia to Bristol, England.

Appreciation for the gift was expressed on behalf of Queen's by Dr. David Turpin (Vice-Principal (Academic)), Dr. Gerry Morris (Chair, Department of Biology), Dr. Raleigh Robertson (Director, QUBS), Dr. Herwart Helmstaedt (Chair, Department of Geological Sciences), Dr. Victoria Remenda (Asst. Professor, Department of Geological Sciences), Dr. Will Bawden (Chair, Department of Mining Engineering). George Bracken then spoke, outlining the history of the property and how the donation came about. Principal William Leggett then assisted the Brackens in the unveiling of the plaque which will be installed on a rock monument at the entrance of the Bracken Tract. The ceremony was followed by a luncheon in the West Lake Room of the University Club.

The Bracken tract is located on Newboro Lake, just west of the village of Newboro. ~~At two~~ thirds of the Bracken Tract (northern and eastern portions) is open old field in various stages of succession. Much of the field area has not been regularly hayed but provides grazing for a few cattle. The western and southern portions are occupied by forest of varying age, density and quality. The south-central portion of the property is covered by moderately old forest, dominated by maple, ironwood, basswood and ash. In places, the forest cover is thick, with old trees, some massive. On the south side, the upland areas slowly descend toward Newboro Lake. There is a variety of rich, wet woodland and swampy area bordering the lake. This area includes dry woodland, lakeside forest, alder and willow thickets in low-lying pockets and fringing wet shrublands replete with a diversity of ferns, mosses, and forbs. At the lake edge, a ribbon of cattail marsh and expanses of emergent plants give way to shallow embayments of waterlily, pondweed and submergent aquatic plants. The foreshore lies wholly within a Provincial Fish Sanctuary.

Several small islands are also included in the property. Of geological and historic interest is the presence of an old iron mine, now partially flooded. The remains of a drill house are still visible, with many drill cores scattered around it. Considerable interest has been expressed in the property by hydrogeologists and geologists at Queen's. This generous gift by the Brackens should foster greater interaction between the Departments of Biology and Geological Sciences at Queen's.

In summer, a large granitic rock found on the property was moved, with the help of Maurice Hutchings and his son, and positioned to serve as a base for the plaque commemorating the Bracken Tract. This brass plaque was mounted on the monument rock, facing the eastern gate entrance (off the Mon O'Kel Road) to the property.

The inscription reads:

Queen's University pays tribute to
George W. Bracken (BSc '56, PEng, O.L.S.)

and Margaret A. Bracken

for their generous gift of property known as the Bracken Tract

given in memory of

the late George N. Bracken

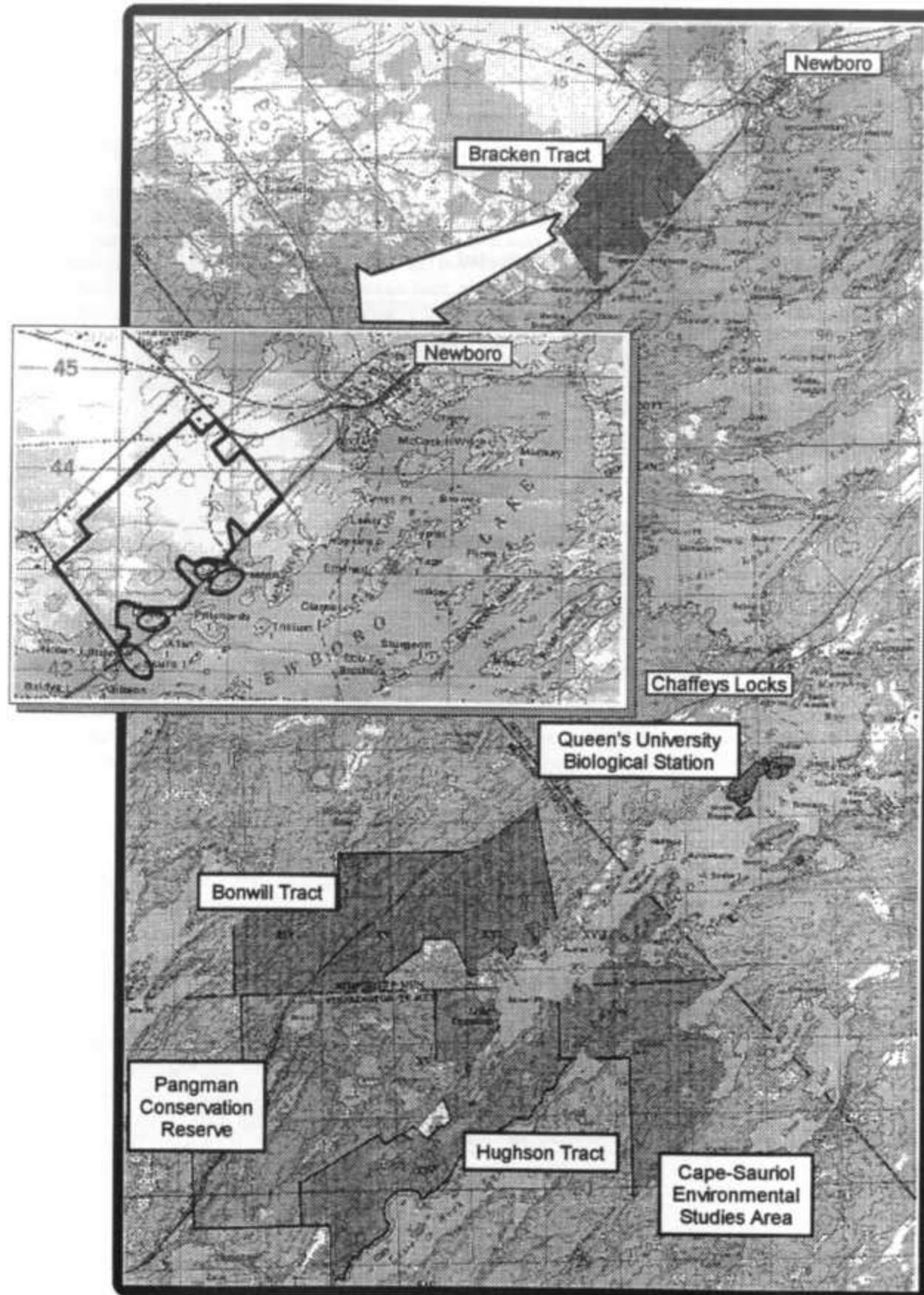
and Lena B. (Pierce) Bracken

dedicated 31 March 1995



George Bracken at monument, summer 1995

Map of Queen's University Biological Station Showing Location of the Bracken Tract



A Farewell Tribute to Charles Sauriol - by Raleigh J. Robertson

With the death of Charles Sauriol on December 16, 1995, we at QUBS have lost a dedicated and energetic friend. Mr. Sauriol died suddenly, while at work on still another project, at the age of 91. Charles was, above all, a committed conservationist, with a passion for raising funds to preserve natural habitats for conservation, to ensure that essential elements of our nature heritage are saved for future generations.

Mr. Sauriol first became involved with projects at Queen's when, on December 31, 1984 I wrote to him to request his help in raising funds to acquire the Bonwill Tract. Charles, who at the time was Special Advisor to the Nature Conservancy of Canada, responded to my letter with enthusiasm. He knew of the Bonwill property through earlier discussions about the Skycroft land which involved the Bonwills, The Nature Conservancy and the Cataraqui Region Conservation Authority. Convinced by the merits of Queen's owning the land for a combination of educational and research purposes, Charles was instrumental in persuading the Authority to support the acquisition of the land by Queen's. Furthermore, Charles committed the Nature Conservancy to providing \$12,500, one-fourth of the cost of the purchase. He developed a "brief", in his typical fashion, and set about matching this project with donors whose objectives could be achieved by making a contribution. Through his office in the Nature Conservancy, Charles obtained donations from Mr. and Mrs. Pangman, and from Suncor, to assist with this important acquisition.

Charles became even more extensively involved in raising funds for acquisition of "The Wright Property." At the occasion of the dedication of the Bonwill Tract, in 1986, Charles and I had the good fortune to meet Henry Wright, who had already approached Queen's about the possibility of transferring some 1000 acres of the old Wright homestead to the Station. Charles knew Henry from an earlier project at Glen Major. Charles was quick to recognize the value of the Wright property, both for the Station and for conservation. He took an immediate interest in this project and expressed a willingness to help. Once agreement had been reached with the vendors on a purchase price of \$300,000, Charles committed to raising one-third of this amount. By this time Charles was no longer working with the Nature Conservancy, but rather was working on his own, to raise funds for conservation projects that he believed in. Ultimately, Charles received donations of \$50,000 from Mrs. John B. Pangman, \$12,500 each from Mrs. Dorothy Bullen and Mrs. Betty Burton, and \$25,000 from the McLean Foundation. He was also instrumental in ensuring that requests made directly by me to the Canadian National Sportsmens Shows, and to the Ontario Heritage Foundation were successful in obtaining awards of \$50,000 each. These funds, coupled with a generous donation of \$100,000 to Queen's, from Mr. John M. Cape, to help Queen's "do something for the environment", enabled the University to purchase this magnificent land with its extensive shoreline on Opinicon and Hart Lakes. This tract, which was named the "John M. Cape - Charles Sauriol Environmental Studies Area", was dedicated at a ceremony at QUBS on June 25, 1990.

Working together with Charles on these two projects, which proved to be so successful, was a very satisfying and inspiring experience. So, it was with great anticipation that we set out, beginning in August 1993, to obtain funding for "The Back Lakes - A Conservation Reserve for Warblers and Wetlands, Science and Education." I had initially felt the scope of this project, namely \$540,000, was out-of-reach. However, the youthful persuasiveness and enthusiasm about the need to acquire this land by Queen's student Paul Martin, and the similar level of enthusiasm and optimism from someone 70 years his senior, Charles Sauriol, convinced me that at least we had to try. Once again, Charles enthusiastically endorsed our proposal, and helped develop a "brief" which very effectively conveyed the value and importance of this tract of 1500 acres of forest and wetland. Charles further assisted by suggesting people whom he knew, through his many years of working with them on various land-acquisition projects, would be interested in helping. One of these people was Mrs. Hilda Pangman who, along with her husband John, had contributed to many projects in which Charles had been involved. Fortunately for us all, Mrs. Pangman donated the entire amount needed

Charles Sauriol C.M.

to acquire the Back Lakes tract as a memorial to her husband who, like herself, had a strong appreciation of nature. The "Hilda and John B. Pangman Conservation Reserve" was dedicated at QUBS on July 15, 1994. At the dedication, Charles Sauriol, now in his 91st year, took great pride in addressing the group, expressing his gratitude to Mrs. Pangman, and championing the cause of conservation for the benefit of future generations.

Charles Sauriol had a remarkable life. He was passionate in his efforts to secure natural areas for conservation purposes. He was truly an inspiring person. It is somehow difficult to grasp the fact that he had a full and successful career as an advertising executive, through the age of 50, and that his career as a conservationist was not launched until he was well into his 50's. I did not meet Charles until he was nearly 80 years old, and all that he accomplished for Queen's and conservation in the Lake Opinicon area was done since that time!

Charles had grown up in Toronto, and his experiences as a Boy Scout, camping along the Don River, made a deep impression on him. He loved the out-of-doors, and through his career had been concerned with preserving the Don Valley. However, much of his effort had been to no avail until the devastating floods of Hurricane Hazel, in 1954, made it obvious that the flood plains of the Don were inappropriate for development. Beginning in 1957, at the age of 53, Charles was appointed to the board of the Metro Toronto Region Conservation Authority. From 1966 through 1987 he worked with the Nature Conservancy of Canada. And, from 1987 until the day he died, he worked independently, as his chartreuse stationery boldly stated - "Charles Sauriol, Conservationist" - with energy, dedication and effectiveness to raise funds to preserve natural area land. It is sad to lose such a cherished friend, to know there will be no more cups of coffee and planning sessions, no more optimistic chats on the phone. Yet, at the same time, realizing that it was such a privilege and a source of inspiration to work with Charles, and knowing that what he helped accomplish for Queen's and for conservation will last for generations to come, should be a source of great motivation for us all.

Pangman Commemorative Plaque

Only a few meters inside the gate, along the Lindsay Lake Road, a monument rock was brought in and erected to serve as a base for a brass plaque marking the Pangman Conservation Reserve. A mock-up of the plaque had been unveiled by Mrs. Hilda Pangman at the dedication of the Reserve, last year. The inscription reads:

Hilda and John B. Pangman Conservation Reserve
This conservation area is given to Queen's University for ecological studies,
and the teaching of young Canadians
the care and love of our nature heritage

dedicated 15th of July 1994.

This monument will stand as a recognition of the generous gift from Mrs. Pangman

Moore's Donation

As 1995 wound down, Ian Fraser (Director, Office of Advancement at Queen's) was contacted by Frank and Beth Moores about a potential donation of land to the Biological Station. Frank was, at one time, Premier of Newfoundland. Currently, the Moores have a home on Indian Lake, close to the field station. The Moores had, for some time, contemplated donating some 200 acres of property to the university. This property has waterfront on Benson Lake and road frontage on the Indian Lake Road. Time was of the essence, requiring fast action to anchor the donation in 1995.

Right: Charles with John Heney (Queen's Director of Development), and Peter and Ann Pangman at the dedication of the Pangman Reserve - 1994



Above: Raleigh Robertson thanks Charles for his assistance at the dedication of the Bonwill Tract - 1986



Right: Charles Sauriol at the dedication of the Cape-Sauriol Environmental Studies Area - 1990

Frank and Kelvin Conrad (Interim Assistant Manager) took a firsthand look at the property via snowshoe just before Christmas. They prepared a preliminary evaluation of the property. Several features make the property desirable as an addition to QUBS landholding: 1) proximity to main QUBS complex - easy access by foot or by bicycle, 2) the waterfrontage enables access to another water body (Benson Lake), 3) there are well-developed pine stands along the waterfront/inlet section, 4) a large, mature marsh in the embayment off Benson Lake, and 5) the expanse of maturing old-field habitat would be a unique addition to QUBS.

Armed with this preliminary evaluation, and acting swiftly, Ian Fraser took care of the initial procedural matters toward transfer of ownership. As of this writing, the process is incomplete, but the necessary steps required to tie the potential donation to 1995 have been taken.

Thank you to the Moores for their generous gift to Queen's and QUBS.

Plans for 50th Anniversary Celebration in 1996

In recognition of QUBS' 50 years as a field station, a number of events are being planned for 1996 to mark the golden anniversary. To publicize the celebrations, Frank wrote an article on the history of the station for the Alumni Review. Judging by the feedback from this article which appeared in the January-February issue, there is a lot of interest in events planned for the anniversary celebration. Presently, three events are being planned. The first is a symposium dealing with the impact of research at QUBS on current biological themes. This event is aimed at current and recent past users of the field station. The second event is a special Open House for the benefit of our neighbours and friends. The third event is a reunion of sorts, hoping to attract past users of QUBS back for some outings, slide shows, seminars and reacquaintance. Details are still sketchy, but keep in touch with QUBS personnel as planning continues.

Major Facilities Access Grant

The Infrastructure program of NSERC has been discontinued. This program has, to present, been a major source of funding for QUBS, providing salary monies for assistants and for utilities etc. NSERC has replaced the Infrastructure program with a Major Facilities Access Grant program. To qualify, a facility has to be significant (provincially, nationally or internationally) and must be accessible to users from a variety of institutions. QUBS meets these requirements so Frank and Raleigh prepared an MFA submission in fall. Notification of awards should be forthcoming in March.

Global Positioning Equipment

QUBS was successful in its application for an NSERC equipment grant in 1995. The application included a complete Global Positioning System (GPS): top-of-the-line GPS unit, software and computer. Although the award was insufficient to obtain the complete system, with a combination of funding from NSERC (\$15K), QUBS Trust Fund (\$2.5K) and the Naturalist Workshop Fund (\$2K), the GPS unit was purchased.

This unit is a Trimble Excel GPS receiver with real-time correction via radio beacon which is part of the backpack unit. This receiver enables high accuracy and comes with basic mapping software (Pathfinder). The unit was received in summer and has been used in several studies requiring spatial information. This GPS unit is the vital first step in the development of a Geographic Information System (GIS) for QUBS. A well-developed GIS system will provide a database of QUBS landholding and environs for a multitude of teaching, research, conservation and management uses.

Application for computer equipment to complete the system has recently been made to the Principal's Development Fund.

Interim Director

During QUBS Director Raleigh Robertson's sabbatical in Australia, September through December of 1995, Dr. Chris Eckert assumed the post of Interim Director of QUBS. With the complexity of QUBS operation and affairs, it is important to have a designated member of faculty at the helm at all times.

Interim Assistant Manager

Dr. Kelvin Conrad assumed the role of Assistant Manager of QUBS during Floyd Connor's leave of absence from November 1995 through March 1996. Kelvin's skills (especially computing) were of great assistance in maintaining and improving the facilities.

Dr. Gordon Bennett

Dr. Gordon Bennett (Memorial University) passed away on December 24, 1995. Gordon and his wife, Lillian had spent some time at QUBS while Gordon collaborated with Dr. Pat Weatherhead (Carleton) and Dr. Bob Montgomerie (Queen's) on parasites of a range of bird species. His friends at QUBS send condolences to Lillian and the Bennett family.

Pearl E. Williams and Llewellyn Hillis Fund

This fund has been established through the generosity of Llewellyn Hillis in memory of her parents. It is dedicated to increasing linkages between the field station, the arts and women.

In 1995, with funding from the Pearl E. Williams and Llewellyn Hillis Fund, Turid Forsyth, a local artist and photographer, offered a workshop titled "Drawing from Nature: A sketch to a finished artwork". The 13 registrants were introduced to techniques of sketching and watercolours, with emphasis on interpreting nature through art. In conjunction with this workshop, Turid offered a seminar titled "Drawing from nature: the artist's portfolio", available to all QUBS users and the Friends of Opinicon.

Friends of Opinicon

Activities of the Friends continued in 1995, with several after-dinner nature walks and a few weekend activities. The summer was quite hot, so there wasn't much enthusiasm for lengthy outings. A highlight of the summer was Dr. James Fullard's reprise of his legendary bat lecture and flight demonstration on August 17. A large number of regulars, neighbours and friends turned out, making this a most enjoyable and successful evening. Many thanks to the Friends for organizing this event. At summer's end, Naz MacDonald again hosted the Friends' potluck supper on Hughson's Island. Many of the Friends turned out for an evening of food and conversation.

Seminars

Raleigh and Frank organized the seminar program for 1995. This series of seminars is often a highlight of summers at QUBS. A full list of speakers and topics appears later in this report.

