

PROVINCE OF BRITISH COLUMBIA
DEPARTMENT OF EDUCATION

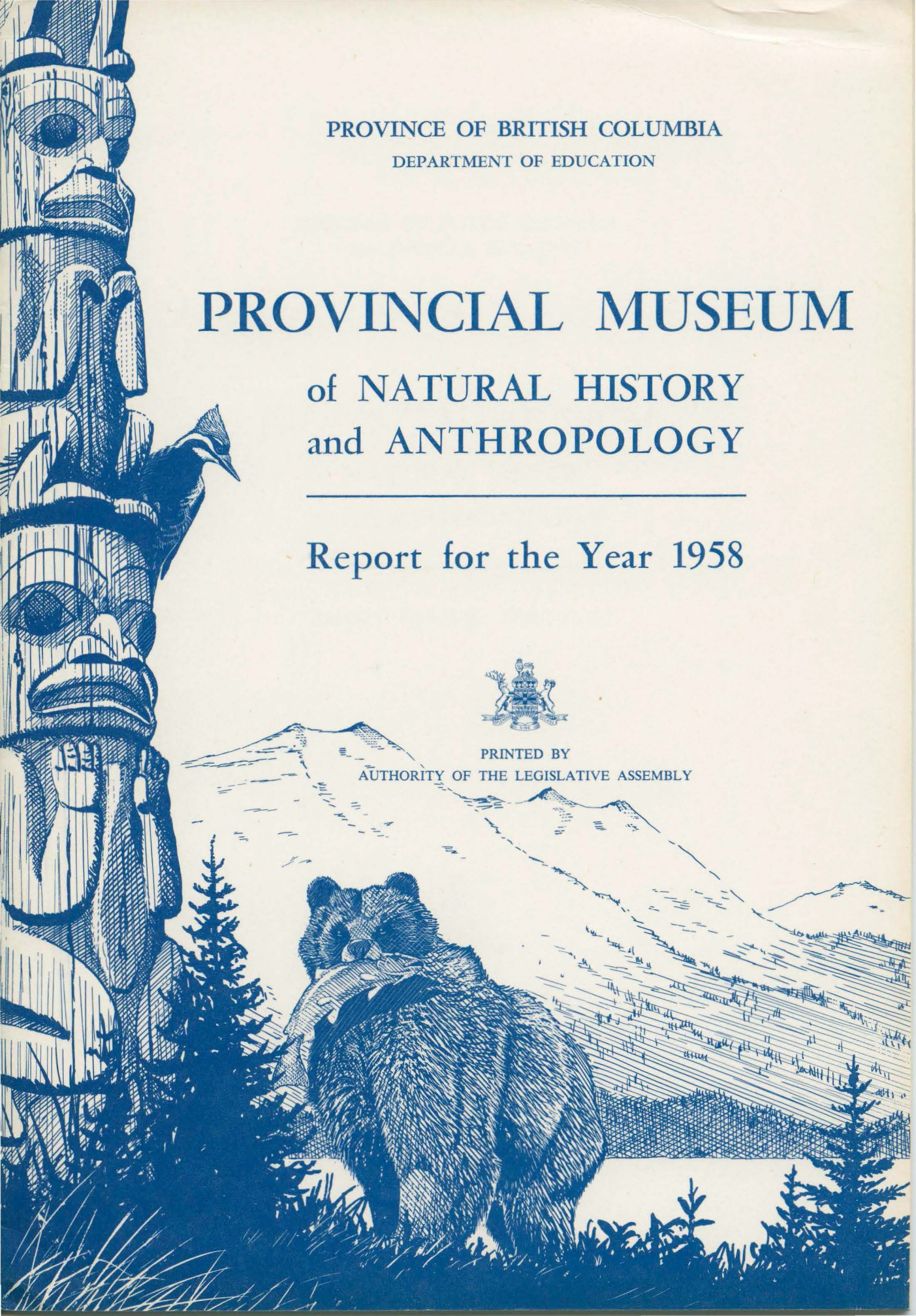
PROVINCIAL MUSEUM

of NATURAL HISTORY
and ANTHROPOLOGY

Report for the Year 1958



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PROVINCE OF BRITISH COLUMBIA
DEPARTMENT OF EDUCATION

PROVINCIAL MUSEUM
of NATURAL HISTORY
and ANTHROPOLOGY

REPORT FOR THE YEAR 1938



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*To His Honour FRANK MACKENZIE ROSS, C.M.G., M.C., LL.D.,
Lieutenant-Governor of the Province of British Columbia.*

MAY IT PLEASE YOUR HONOUR:

The undersigned respectfully submits herewith the Annual Report of the Provincial Museum of Natural History and Anthropology for the year 1958.

L. R. PETERSON,
Minister of Education.

*Office of the Minister of Education,
January, 1959.*

PROVINCIAL MUSEUM OF NATURAL HISTORY AND ANTHROPOLOGY,
VICTORIA, B.C., January 19th, 1959.

The Honourable L. R. Peterson,
Minister of Education, Victoria, B.C.

SIR,—The undersigned respectfully submits herewith a report covering the activities of the Provincial Museum of Natural History and Anthropology for the calendar year 1958.

I have the honour to be,

Sir,

Your obedient servant,

G. CLIFFORD CARL,
Director.

DEPARTMENT OF EDUCATION

The Honourable LESLIE RAYMOND PETERSON, LL.B., *Minister.*
J. F. K. ENGLISH, M.A., Ed.D., *Deputy Minister and Superintendent.*

PROVINCIAL MUSEUM OF NATURAL HISTORY AND ANTHROPOLOGY

Staff

G. CLIFFORD CARL, Ph.D., *Director.*

CHARLES J. GUILGUET, M.A., *Curator of Birds and Mammals.*

WILSON DUFF, M.A., *Curator of Anthropology.*

ADAM F. SZCZAWINSKI, Ph.D., *Curator of Botany.*

J. E. MICHAEL KEW, B.A., *Assistant in Anthropology.*

FRANK L. BEEBE, *Illustrator and Museum Technician.*

MARGARET CRUMMY, B.A., *Senior Stenographer.*

BETTY C. NEWTON, *Museum Technician.*

SHEILA Y. NEWNHAM, *Assistant in Museum Technique.*

ELEANORE MCGAVIN, *Clerk (to May 25th).*

GEORGE A. HARDY, *Curator of Entomology (part time).*

CLAUDE G. BRIGGS, *Attendant.*

Totem-pole Restoration Programme

MUNGO MARTIN, *Chief Carver.*

HENRY HUNT, *Assistant Carver.*

DEPARTMENT OF EDUCATION
The Honorable Earl B. Macdonald, Premier, I.L.B. Minister
J. E. B. Fraser, M.A., B.L.S., Deputy Premier and Secretary
PROVINCIAL MUSEUM OF NATURAL HISTORY
AND ANTHROPOLOGY

OBJECTS

- (a) To secure and preserve specimens illustrating the natural history of the Province.
- (b) To collect anthropological material relating to the aboriginal races of the Province.
- (c) To obtain information respecting the natural sciences, relating particularly to the natural history of the Province, and to increase and diffuse knowledge regarding the same.

(Section 4, "Provincial Museum Act," chapter 273, R.S.B.C. 1948.)

ADMISSION

The Provincial Museum is open to the public, free, on week-days, 9 a.m. to 5 p.m., and on Sunday afternoons, 1 p.m. to 5 p.m.

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(Photograph by Westview Studios Limited.)

School-children examining Centennial Caravan exhibits.



(Photograph by Westview Studios Limited.)

One of the two Centennial Caravans carrying Provincial Museum and Archives exhibits throughout the Province in 1958.

REPORT OF THE PROVINCIAL MUSEUM FOR THE YEAR 1958

REPORT OF THE DIRECTOR

NEW DISPLAYS AND SPECIAL EXHIBITS

Relatively few new displays were installed during the year 1958. These included a temporary exhibit of models of local wild flowers created by Mr. Beebe, models of the rare water ferns (*Azolla* and *Marsilea*), rearranged displays in the Indian rooms, and two new habitat groups of small mammals. Most notable among the new additions to the anthropological section are manikins for the display of costumes, the combined work of Miss Newton and Mr. Kew. Also new are background sketches by Miss Newton to demonstrate the use of tools and various other Indian activities. The two habitat groups consist of adults and young of field-mice (*Microtus*) and a hoary marmot in alpine setting. Taxidermy in the case of the mice is by C. J. Guiguet; backgrounds and accessories for both are by F. L. Beebe.

The biggest project under the heading of Special Exhibits was the organization of a display to be installed in each of two large trailers which were provided by the British Columbia Centennial Committee. They were designed as travelling exhibits to visit most of the Province during the Centennial Year. Exhibition material for both trailers was provided jointly by the Provincial Archives and the Provincial Museum. Our contribution consisted of choice examples of Indian arts and crafts representing various tribes, as well as an exhibit of sea-otter and beaver skins, showing their role in the history of the Province, and a replica of flowering dogwood, floral emblem for British Columbia. The material in each trailer was more or less identical.

The caravans were on the road from early May to early October, each on a different itinerary, so that between them they called at almost every town or settlement in the Province. Wherever possible, schools were visited in each community and at night films were shown. The numbers of persons viewing the combined exhibits and the movies were as follows: Adults, 77,356; students, 55,946; film show, 13,417; grand total, 156,719.

A demonstration hive of honeybees was again installed and maintained in the Museum by Mr. G. V. Wilkinson, of the Victoria Beekeepers Association. It continues to be our most memorable single exhibit.

FIELD WORK AND OUT-OF-PROVINCE TRAVEL

Three major biological field-trips were made in 1958. From June 25th to July 10th, Carl, Guiguet, and Szczawinski, of the Museum staff, together with Dr. William Newton and Dr. T. M. C. Taylor, of the Department of Botany and Biology, University of British Columbia, visited the Kyuquot area to collect plants and animals as part of our long-range Island survey programme. Transportation up the west coast of Vancouver Island from Victoria to Kyuquot was kindly provided by the Federal Fisheries Department on board the Fisheries patrol craft "Laurier," under command of Capt. A. D. N. Jamieson. We are grateful to Mr. A. J. Whitmore for this service and to Captain Jamieson and the ship's crew for many courtesies.

During most of the first week in September, Guiguet and Szczawinski worked in Garibaldi Park along with personnel of the Department of Recreation and Conservation on a short survey to determine park potentialities as a recreational area.

In mid-June, Beebe visited Langara Island (Queen Charlotte Islands) to survey falcon aeries in this area and to collect more data for a study of the peregrine falcons of British Columbia. While in the district, he also packed the R. M. Stewart collection of bird-skins and arranged for its shipment to Victoria.

In addition to the above, a number of shorter trips were made by various staff members to other areas, such as Miracle Beach Park (to make an inventory of plants and animals for the Department of Recreation and Conservation), Port Renfrew, Gulf Islands, Friday Harbor, and islands off Oak Bay.

In the anthropological field, Duff and Kew drove to the Upper Skeena River to arrange for the transport of certain totem-poles from some of the villages to Victoria for copying. Details of the trip are in a later section. In August, Kew and student assistant John Sendey exposed a profile of a midden at the Canal site on North Pender Island, the same site in which a test-pit was dug in 1957.

For three weeks in March, Carl made a lecture tour through a number of the northern States under the auspices of the National Audubon Society and the Audubon Society of Canada. En route, visits were made to the Joslyn Memorial Art Museum (Omaha, Nebr.), St. Joseph Museum (St. Joseph, Mo.), Missouri Resources Museum (Jefferson City, Mo.), and Minnesota Museum of Natural History (Minneapolis, Minn.).

In May, Carl attended the annual meetings of the Canadian Museums Association held in Windsor, Ont., and Detroit, Mich. Inspection visits were made to the Hiram Walker Historical Museum (Windsor), Detroit Historical Museum, Detroit Museum of Art, Cranbrook Institute of Science, and General Motors Research Center (Detroit).

MUSEUM FILM PROGRAMMES

For the sixteenth consecutive year a series of Saturday morning programmes was given for school-children of the Greater Victoria area, as follows:—

Date	Topic	Attendance
March 1st	" Backyard Exploration "	427
March 8th	" The Marine World "	504
March 15th	" Wildfowl and Penguins "	489
March 22nd	" Land Mammals "	389
March 29th	" Native Peoples "	399

As in past years, we are indebted to the Audio-Visual Education Branch of the Greater Victoria School Board for distributing the free tickets to the various schools and to the British Columbia Electric Company for granting special travel privileges to school-children attending the lectures.

A similar series of films was presented to the general public on Sunday afternoons during the same period. The attendance was 698 persons. We are again indebted to the Public Information Department of the British Columbia Electric Company for loan of certain films used on these programmes.

OTHER LECTURES AND DEMONSTRATIONS

During the year the Director gave lectures and film shows to forty organizations, not including eighteen made on the tour through the States. Several short instructional courses to Cubs and Girl Guides were also given, as well as four field-trips for children's playground groups.

Many other lectures and class demonstrations were given by other staff members, as noted in other sections of this Report.

SEMINAR FOR MUSEUM PERSONS

A three-day seminar for museum people was held in Victoria from September 11th to 13th, 1958, sponsored by the Provincial Archives and Provincial Museum and aided by a grant from the Leon and Thea Koerner Foundation.

Previous to the meeting date, all persons known to be connected with or interested in museums throughout the Province were sent a preliminary announcement followed by a programme and registration form. In response, twenty-six persons representing twenty-four institutions or organizations registered.

The programme consisted largely of discussions and demonstrations along practical lines, scheduled as follows:—

Thursday, September 11th: Registration; Problems of the Small Museum; Problems in Display; Complimentary Dinner; Lecture by Dr. Douglas Leechman.

Friday, September 12th: Problems with Archival Materials; Visits to Local Museums; Restoration of Historic Sites.

Saturday, September 13th: Museum Round-up; Business Session.

The visits to local museums included five institutions, each of a different type. Special speakers were Mr. Raymond O. Harrison (Vancouver, B.C.), Mr. Cliff Routledge (T. Eaton Co. of Canada, Victoria), Dr. Douglas Leechman (Fort Langley restoration project), and Mr. C. P. Lyons (B.C. Parks Service, Victoria). Mr. Willard Ireland and Dr. Clifford Carl acted as co-chairmen.

MODELS AND ILLUSTRATIONS

During the spring season Mr. Beebe modelled a number of local wild flowers, using latex, feather-shafts, various plastics, and other materials. The results are extremely life-like.

Enlarged models of the water ferns *Azolla* and *Marsilea* were constructed by Miss Anne Hassen, student assistant, and some of the enlarged models of insects made several years ago were repaired by Miss Betty Newton.

In the field of illustrations for publications, Mr. Beebe turned out several black-and-white drawings of fresh-water fishes, a series of univalve molluscs, and a number of birds. In addition, he created and installed accessories and painted the background in two small-mammal display-cases now set up on the main floor.

RADIO AND TELEVISION

Except for a few occasions, the Director has appeared with Inspector George Stevenson, formerly of the old British Columbia Game Commission, in a weekly radio programme "Outdoors with the Experts," sponsored by the Victoria station CJVI. The programme has continued to receive enthusiastic response, judging by fan mail and personal comments.

Staff members have also made short appearances on television programmes from time to time. Most noteworthy was Dr. Szczawinski's contribution to a CBUT programme on mushrooms and other fungi in the fall season.

PUBLICATIONS

Publishing material on natural history and anthropology of the Province is still one of the important activities of the Museum, and considerable time is spent in this field. In addition to the Annual Report, two numbers in the Handbook series and one in the Occasional Paper series were published in 1958—namely, "Alien Animals in British Columbia," "The Birds of British Columbia: (6) Waterfowl," and "The European

Starling in British Columbia"—and several manuscripts were prepared for future use. Among these was "The Orchids of British Columbia," a revision of "The Fresh-water Fishes of British Columbia," and "The Peregrine Falcon in British Columbia." Manuscripts on a number of other topics are in various stages of preparation.

The following publications have been produced during the year:—

By G. Clifford Carl—

"Why Not a Marine Tank?" Vancouver Aquarist, January, 1958, pp. 3-4.

"Salamander Sallies." Victoria Naturalist, Vol. 15, No. 3, pp. 30-32.

"How's Your Nature Study?" The B.C. Teacher, Vol. 38, Nos. 1, 2, and 3.

By G. Clifford Carl and C. J. Guiguet—

"Alien Animals in British Columbia." Provincial Museum Handbook No. 14, pp. 1-94.

By Wilson Duff and Michael Kew—

"Anthony Island, a Home of the Haidas." Report of the Provincial Museum for 1957, pp. 37-64.

By C. J. Guiguet—

"The Mink." Victoria Naturalist, Vol. 14, No. 7, p. 81.

"The Birds of British Columbia: (6) Waterfowl." Provincial Museum Handbook No. 15, pp. 1-84.

By G. A. Hardy—

"Wings and No-wings." Victoria Naturalist, Vol. 14, No. 7, pp. 81-85.

"Bunchberry or Dwarf Cornel." Victoria Naturalist, Vol. 14, No. 9, p. 105.

"Bird Notes from Saanich." Victoria Naturalist, Vol. 15, No. 2, p. 21; No. 3, pp. 33-34.

"Notes on the Life-histories of Five Species of Lepidoptera Occurring on Vancouver Island." Report of the Provincial Museum for 1957, pp. 30-36.

By J. E. Michael Kew—

"The First Horses in British Columbia." Victoria Naturalist, Vol. 14, No. 9, p. 114.

"The Problem of Indian Tobacco in British Columbia." Victoria Naturalist, Vol. 14, No. 10, pp. 118-119.

By J. A. Munro—

"The Birds and Mammals of the Creston Region, British Columbia: A Supplement." Report of the Provincial Museum for 1957, pp. 65-82.

By M. T. Myres—

"The European Starling in British Columbia." Occasional Papers of the Provincial Museum, No. 11, March, pp. 1-60.

By A. F. Szczawinski—

"Survey of Airborne Pollen and Fungus Spores of Victoria, British Columbia." American Academy of Allergy, Report for 1958.

"Dogwoods." The Canadian Primula and Alpine Society, Nos. 9 and 10, 1958.

"Madrona." The Canadian Primula and Alpine Society, No. 11, 1958.

"Common Reed (*Phragmites communis* Trin)." Victoria Naturalist, Vol. 14, No. 8, p. 93.

ATTENDANCE

The number of visitors to the Museum in 1958 is summarized as follows:—

January	810	August	16,507
February	1,233	September	4,784
March	1,323	October	1,659
April	2,315	November	927
May	2,101	December	811
June	3,692		
July	9,176	Total	45,338

The total registered attendance figure is about 1,800 less than in 1957, a reduction of almost 4 per cent, probably as a result of the transportation strike in early summer. That the strike was the cause is borne out by the fact that in August, after normal ship service was resumed, the attendance climbed to an all-time high of 16,507 registrations.

These figures are derived from counts of signatures in the visitors' register and are therefore not a true measure of attendance since all persons do not register. From previous experience we know that the proportion of people who register varies with the number of persons who happen to be in the entrance hall. When few are present, all are likely to sign; when the place is crowded, many pass up the register. No actual counts of visitors were made this year to determine the ratio of signers to non-signers, but, based on counts in previous years, we estimate the 1958 attendance to be about 65,000 persons.

To this estimated total there should be added 2,906 persons attending the spring film programmes and 1,458 persons attending as school classes or organized groups, making a grand estimated total of 69,364.

As an interesting record for purposes of comparison, the attendance for the month of July has been analysed each year for a number of years. Accordingly, the attendance record for July, 1958, has been broken down by Mr. Briggs as follows:—

Residence	Registration	Residence	Registration
British Columbia	2,662	Washington	1,149
Alberta	309	Oregon	714
Saskatchewan	229	California	2,024
Manitoba	103	Other States	1,338
Ontario	331	Alaska	3
Quebec	77	Great Britain	121
New Brunswick	21	Other countries	61
Nova Scotia	28		
Prince Edward Island	2	Total	5,410
Newfoundland	3	Grand total	9,176
Yukon Territory	1		
Total	3,766		

Compared with figures for July, 1957, the total attendance is down, apparently for the reason mentioned before, but the attendance from out-of-Province points, particularly the United States, is a bit higher in proportion. This small increase may be credited to the Centennial attractions of the year.

A notable visitor in 1958 was Princess Margaret, who made an unscheduled tour of the main floor of the Museum on July 14th during her visit to the Legislative Buildings.

The sum of \$465.33 collected by the Solarium donation-box during the year was turned over to the Queen Alexandra Fund for Crippled Children.

STAFF CHANGES

Mrs. E. McGavin, a member of our staff for some years, was transferred to another branch on May 26th as part of a Government economy measure introduced in 1958.

Mr. Wilson Duff, Curator of Anthropology, obtained leave of absence for one year commencing July 1st, 1958, in order to conduct a study of Tsimshian ethnology in collaboration with Dr. Marius Barbeau at the National Museum, Ottawa. The research is partly financed by a grant from the Canada Council.

As student assistants during the summer months we were pleased to have the help of Anne Hassen in the botanical office and John Sendey in anthropology. In addition, Mr. John Nutt has been employed on a part-time basis to care for the living plant exhibit and to do certain typing.

LIBRARY REORGANIZATION

Over the years the Museum reference library has grown considerably; it includes standard reference books, periodicals, and numerous separates, mainly in the fields of natural history, anthropology, and museum technique. During the early phase of its history, publications were filed under the Dewey decimal system, but since about 1937 a simple numerical system was followed which proved fairly satisfactory for a time. However, it lately became obvious that the current system could not continue to be serviceable indefinitely, and, moreover, since space was severely limited, it would be necessary to discard publications which were of little or no use.

Early in 1958 we accepted the offer of Mr. Willard Ireland, Provincial Librarian, to have members of his staff recatalogue our library. This would not only bring it into line with the modern system, but would also permit a duplicate set of reference cards to be prepared for the main library file. In addition, considerable shelving space would be gained by elimination of little-used books. By the end of the year, fair progress had been made through the combined efforts of Miss K. Clark, Chief Cataloguer, Mrs. Alice Mooney, and Miss Margaret Hastings, and later by Miss Hastings. We are grateful for this help.

OBITUARIES

We regretfully record here the passing of two eminent ornithologists—Mr. R. M. Stewart on May 3rd and Mr. J. A. Munro on September 29th.

Mr. Ron Stewart was an ardent bird student and collector. During his long career in the service of the British Columbia Police he resided in several parts of the Province, finally at Masset in the Queen Charlotte Islands, where he retired and lived until his death. His bird collection, now housed in this Museum, contains many valuable specimens, particularly adding to our knowledge of birds of the Queen Charlotte Islands and of the Atlin district in the northern section of the Province.

For many years Mr. Jim Munro was in the Federal Wildlife Service as migratory bird officer, first for the western Provinces and then in British Columbia alone. Being an active fieldman, he spent the summers observing and collecting birds and mammals in various sections of the Province, particularly in the Central Interior. The data he gathered appeared later in publications, which form a most impressive list and contain many contributions of great value. A few of his publications have been put out by the Provincial Museum. His "Review of the Bird Fauna of British Columbia," written in collaboration with I. McTaggart Cowan, is still the bird student's guide for this Province and will continue to be so for many years to come. The J. A. Munro bird collection is now in the Royal Ontario Museum at Toronto.

REPORT OF THE CURATOR OF BOTANY

HERBARIUM

The principal effort of the botanical section is the maintenance of its growing herbarium despite the time-consuming nature of the duties in connection with it.

Recorded accessions for the year 1958 amounted to 2,505 sheets of phanerogams, bringing the total to 32,914 phanerogams. The accession of cryptogams amounted to 920, consisting mainly of material collected on Vancouver Island and in Northern British Columbia.

A great deal of time was spent in mounting, labelling, and identifying material collected in previous years. This was considered a job of primary importance as the material consisted of the collections of our earliest botanists, hitherto uncatalogued and therefore not available for others to study. This work, started in 1956 and carried on throughout 1958, incorporated the remaining extensive collection of J. R. Anderson, W. B. Anderson, J. Fletcher, C. F. Newcombe, C. Tice, J. W. Eastham, G. A. Hardy, and many others.

In 1956 the herbarium started to operate a supervising-collecting scheme, offering volunteers detailed instructions and material needed for field work. As a result of this scheme, a few extensive and valuable collections and several smaller ones were received. Two of them deserve special mention. *Flora of Dawson Creek* area, collected by a group of local naturalists from Dawson Creek headed by Mrs. Dortha H. Calverley, is a most valuable addition to our herbarium as it covers a not previously explored area. It is our pleasure and duty to acknowledge this collection, giving credit not only to Mrs. Calverley, but also to Howard C. Calverley, Roderick K. Calverley, Mr. James Bullen, Mr. Lee Andrews, and Mr. and Mrs. J. A. Paul. *Flora of Manning Park*, collected by Mr. J. E. Underhill, added to the herbarium several new records from that area, and is a valuable addition. Space does not permit us to list all the other collectors and localities, but we wish to acknowledge their work with thanks.

A start was made in organizing a new division in our herbarium of British Columbia cryptogams. We were encouraged by the Smithsonian Institution, the University of Washington, and the Michigan State University as the above institutions urgently require British Columbia collections for studies. The Smithsonian Institution offered to identify all our collections and to exchange with us British Columbia material in their possession. There is, therefore, an urgent need to build up the herbarium and to collect our cryptogams in future, but unfortunately this requires additional space, and for the time being the material has to be kept in storage.

In 1958, 255 lichens and mosses were exchanged and distributed among herbaria in the United States.

Plants collected by the University of British Columbia survey party, headed by Mr. M. Bell and Mr. J. Davidson, were incorporated into the herbarium, and a complete list of 1,075 specimens was prepared by Dr. T. M. C. Taylor (phanerogams) and Dr. A. F. Szczawinski (lichens). Most of the phanerogams were identified by Mr. J. W. Eastham, and some of the lichens were identified and checked by Dr. Mason E. Hale (Smithsonian Institution). We acknowledge their help with thanks.

PLANT EXCHANGE

Exchange of duplicates was carried out and increased considerably. Two thousand nine hundred and seventy-five British Columbia plants were exchanged with various universities and government botanical institutions. Most of the material was exchanged with Science Service, Ottawa (1,300); University of British Columbia (1,100); National Museum, Ottawa (375); and University of Washington (200).

HERBARIUM HELP

The herbarium was able to obtain the help of one student assistant, Miss Ann Hassen, during the summer. She was a great help in the herbarium and also in preparing models. Technical and artistic supervision of models was efficiently carried out by Miss B. Newton. Supervision of technical and routine work in the herbarium was carefully carried out by Mrs. S. Newnham.

EXTENSION WORK

A series of lectures (forty-two) was given to popularize a botanical knowledge of our Province. The lecture topics were "West Coast of Vancouver Island," "Garibaldi Park," "Thetis Park Nature Sanctuary," "Flora of Northern British Columbia," "Along Alaska Highway," "5,000 Miles in British Columbia with a Camera," and "British Columbia Natural Rock Garden." All the above were illustrated by a series of coloured slides. This service was at the disposal of agricultural and horticultural associations, garden clubs, Parent-Teacher Associations, church groups, and other professional and social clubs.

A lecture and laboratory demonstration on morphology, taxonomy, and ecology of lichens was given to botany students at Victoria College.

Other extension work of the botanical section is covered in the Director's report.

OTHER ACTIVITIES

The exhibit of native plants was maintained all year round very successfully by Mr. John Nutt. As usual, this exhibit was both educational and popular with tourists.

Other curatorial duties were the identification of plant collections, providing service for the general public and also for various government departments, mainly Forest Pathology Laboratory and Experimental Station at Saanichton for the Federal Government, and Agriculture, Horticulture, Forestry, and Recreation and Conservation Departments for the Provincial Government.

SPECIAL EXHIBITS

The work on new modelling technique was started by Mr. F. L. Beebe, who successfully reproduced an exhibit of spring flora of Vancouver Island. Water ferns were modelled by Miss Ann Hassen under the efficient supervision of Miss B. Newton.

FIELD WORK

Field work in 1958 included botanical survey and collecting parties as follows:—

Botanical survey of Miracle Beach Park (April 22nd and 23rd) jointly with Dr. G. C. Carl and Mr. J. E. Underhill. The above survey was requested by the Department of Recreation and Conservation, Parks Branch.

Biological survey of the Kyuquot Sound area and offshore islands (June 25th to July 11th) jointly with Drs. G. C. Carl, T. M. C. Taylor, W. Newton, and Charles Guiguet. (See Director's report.)

East Coast of Vancouver Island (July 28th to 31st) with Dr. T. M. C. Taylor to survey route of field-trip on Vancouver Island to be attended by the members of the International Botanical Congress in 1959.

Biological reconnaissance of Garibaldi Park in co-operation with the Department of Recreation and Conservation in connection with the proposed development and management of the park with a view to preserving its natural biological resources. This survey party was made up of Lloyd Brooks and York Edwards from the Parks Branch and Charles Guiguet and Curator of Botany from the Museum.

SPECIAL RESEARCH

A survey of air-borne pollen and fungus spores of Victoria, British Columbia, was carried out in co-operation with Dr. S. S. Avren in 1958. The Durham sampler, a device approved by the Pollen Survey Committee of the Research Council of the American Academy of Allergy, was operated at St. Joseph's Hospital to determine the abundance of various microscopic organic particles in the air. The sampler was in operation from January 1st to November 15th, 1958. The particles that were caught, identified, and recorded were mainly pollen grains and fungus spores, and a report was submitted to the Research Council of the American Academy of Allergy (Council on Aeroallergens Pollen and Moulds Sub-committee) for publication.

The primary purpose of this survey is to furnish information of value in studies on pollinosis (hay fever). Although it is designed for use by patients and physicians who need to know what, where, and when organic particles are in the air in sufficient quantities to cause medical concern, the presentation and discussion is from a botanical standpoint only.

ACKNOWLEDGMENTS

We wish to acknowledge the voluntary co-operation and help of those who contribute to botanical collections and knowledge. Space does not permit us to list everyone who helped, as we have done in previous years, but we intend to include all of them in a grateful vote of thanks.

The botanical section continues its cordial relationship with the Department of Biology and Botany at the University of British Columbia; Science Service, Department of Agriculture, Ottawa; National Museum of Canada, Ottawa; University of Washington, Seattle; Smithsonian Institution, Washington, D.C.; and is indebted to them for their interest and help in the field of botanical research.

REPORT OF THE CURATOR OF BIRDS AND MAMMALS

Field work in 1958 was confined largely to short explorations on Vancouver Island. West coast insular work was continued in the Kyuquot Sound area, where additional islands were surveyed biologically. On this expedition, Drs. T. M. C. Taylor, A. F. Szczawinski, and William Newton carried out the botanical work. Dr. G. C. Carl worked marine invertebrates, fish, insects, and photography, and the Curator worked birds and mammals. Much information and many specimens were gathered in the period June 25th to July 11th. Areas worked included Walters Island, Grassy Island, Hohoae Island, Mocketas Island, the Markale Peninsula, and other adjacent points on Vancouver Island. In late September the Curator joined a National Museum field expedition on the east coast of Vancouver Island. Dr. Austin Cameron, leader of the expedition, was collecting data on mammals and mammal habitats for the proposed publication "Mammals of Canada." The Provincial Museum was happy to lend assistance and the benefit of local experience to this endeavour.

In an advisory capacity on birds and mammals, the Curator participated in two short expeditions to Miracle Beach and Garibaldi Provincial Parks for the Department of Recreation and Conservation. Three short sorties, totalling seven days, were made to Miracle Beach in the latter part of August, and four days were spent working in the Black Tusk and Diamond Head areas at Garibaldi during early September. In November two short familiarization sorties were made to mountains north of the Nanaimo Lakes, with a view to collecting mammals in this zoologically unexplored area. Much of this high country is accessible through logging-roads.

Research in speciation of the white-footed mouse introduced to islands in the Oak Bay area was continued. Series of scientific study skins were taken from Discovery, North Trial, and the two Chatham Islands in December of last year. The accidental introduction of Norway rats (source unknown) to the Discovery Island group two or three years ago is expected to have a decimating effect upon the introduced mouse populations. Investigations carried out this fall indicate that so far appreciable numbers of mice are still present on all four islands. Additional series of mice will be collected at four-year intervals.

Routine curatorial activities dealing with nearly 17,000 scientific study skins of birds and mammals, specimen preparation and identification, preparation and rearrangement of exhibits, publications (*see* Director's report), and the host of minor activities associated with museum work completely utilized the Curator's time during the Centennial Year.

We wish to acknowledge the co-operation of the many citizens of this Province who contribute annually to our biological collections and knowledge, especially members of the Canada Department of Fisheries—Mr. A. J. Whitmore, Mr. H. E. Palmer, and Inspector J. Embelton; Mr. Frank R. Butler, Director of the British Columbia Fish and Game Branch, and his staff of biologists, inspectors, and game wardens throughout the Province; Mr. R. H. Mackay, of the Canada Wildlife Service; the Royal Canadian Navy; and the many private citizens too numerous to list here.

REPORT OF THE CURATOR OF ENTOMOLOGY

The usual routine of caring for the collections has been maintained; the acquisition of two large storage cases has now made it possible to place all the important material contained in storage boxes into quarters safer from pest hazards than when the boxes were on open shelves.

The assembly of classified series of the lepidoptera is making progress in spite of delays caused by lack of cabinet space.

Requests for information on common insects of home and garden have been received as frequently as in past years. These chiefly concern economic kinds, such as carpet-beetles, fleas, spiders, grubs, and such like—all unwelcome intruders in our way of life.

The carpet-beetle has cropped up rather more than usual this season. To enable a ready identification, a small exhibit showing the beetle, together with illustrations of the larva, was set up in one of the table cases on the second floor.

Miss B. C. Newton has continued to make colour illustrations from time to time of the caterpillar of some of our more interesting butterflies and moths.

Several papers on the life-history of certain butterflies and moths have been prepared for future publication. The task of gathering material for a handbook on the butterflies of British Columbia is well under way.

The following moths are listed here as of interest either as recent records of uncommon species or as range extensions within the Province, particularly with reference to Vancouver Island.

As these are my personal records, no claim is made as to their being the only recent ones. Jones's list (1951) has been my chief reference.

I would greatly appreciate hearing from students of the group who may have had recent experience with any of the moths listed here.

I am indebted to Professor G. J. Spencer, Entomologist at the University of British Columbia, for checking the collection of that institution in regard to the following species, and also to Mr. R. Guppy, of Wellington, B.C., for information regarding them in his experience. Where applicable, reference is made under the species.

SOMBRE DART. *Euxoa perfusca* Grt.

Saanich, Vancouver Island, August 28th, 1954, and July 31st, 1957. Jones records it from Stuart Lake, Creston, and Shuswap Lake.

COCKLE'S DART. *Euxoa perfusca cocklei* Sm.

Forbidden Plateau, Vancouver Island, August 3rd, 1957. Also from Kootenay, Salmon Arm, and Lillooet according to Jones.

OREGON DART. *Euxoa colata* Grt.

Forbidden Plateau, Vancouver Island, 2,100 feet. Also from Mount McLean and Sandon (Jones).

SORDID DART. *Chlorizagrotis thanatologia* Dyar.

Saanich, Vancouver Island, August 21st, 1949. Jones records various Mainland localities under its several forms.

BROWN-WINGED POLIA. *Polia segregata negussa* Sm.

Royal Oak, Saanich, Vancouver Island, April 19th and 30th, 1956. This form of *segregata* lacks the black markings. It was first recorded from British Columbia by Danby at Rossland in 1898. Jones lists other British Columbia localities as Southern Interior and Brilliant, but none from Vancouver Island. R. Guppy has taken it at Wellington, Vancouver Island. For an illustration see Blackmore (1919), Plate I.

ROSY PENMAN. *Sideridis rosea* Harv.

Royal Oak, Saanich, Vancouver Island, one specimen, May 30th, 1957. Another specimen in the Museum collection comes from Maple Bay, Vancouver Island, May 15th 1933, collected by J. J. Taylor. Other British Columbia localities are listed as the Kootenays, Vernon, and Shuswap Lake, but Vancouver Island has not been previously mentioned anywhere to my knowledge. An illustration is in Blackmore (1918), Plate I.

SCARCE PENMAN. *Orthosia mys* Dyar.

Royal Oak, Saanich, Vancouver Island. Eight specimens—one very dark, four pale, and three grading toward the dark form. October, 1956, 1957, and 1958.

O. mys is described by Dyar (List of North American Lepidoptera, 1902, p. 168) as a dark purple-brown. The form *caloramica* B. & McD., according to Blackmore (Report of the Provincial Museum for 1924, p. 20), was described from an Arizona specimen, also as a dark form.

A pale specimen from Royal Oak is referred to *mys* by authorities at Ottawa. I have not seen a reference to the pale form.

In a Check List of the Lepidoptera of Canada and the United States of America, 1938, McDunnough lists the species as:—

myas Dyar

a *caloramica* B. & McD.

agravens B. & McD. (as a synonym of *caloramica*).

On the face of available literature it would seem that *mys* and *caloramica* are one and the same thing, with the pale form not designated.

Jones records *mys* from Saanichton, Shawnigan District, and Wellington, both pale and dark forms.

There are three of the pale forms in the Hanham collection from Duncan.

SPECKLED GRAY. *Mniotype ducta* Grt.

Forbidden Plateau, Vancouver Island, August 2nd, 1957. I can find no other reference to this species as occurring in British Columbia.

FIELD MIDGET. *Annaphila arvalis* Hy. Edw.

Saanich, Vancouver Island, March 10th, 1958. This has already been reported by Hardy (1958). It appears to be the first record for British Columbia since 1903. Formerly listed as *Brephos fletcheri* Sm.

SCROLL PUG. *Euphithecia multiscripta* Hlst.

Saanich, Vancouver Island, June 24th, 1955; May 29th, 1956; May 14th, 1957. So far listed only from Brilliant, according to records available to me.

SETON GRANITE. *Semiothisa setonana* McD.

Saanich, Vancouver Island, May 31st, 1956. Jones lists it from Seton Lake, from which locality it was collected and described by J. McDunnough. (See Canadian Entomologist, 1927, p. 245.)

PACIFIC UNDERWING. *Catocala nevadensis* Bent.

Forbidden Plateau, July 12th, 1957. So far as I am aware, not hitherto recorded from Vancouver Island. On the Mainland it is recorded from Lillooet, Soda Creek, Robson, and Southern Interior in general.

I am greatly indebted to the officials at the Science Service, Department of Agriculture, Ottawa, for identifications. In particular, I would like to mention Dr. T. N. Freeman, Dr. D. F. Hardwick, and Dr. E. G. Munroe for their kindness in this respect.

REFERENCES

- BLACKMORE, E. H. 1918. Rept. B.C. Prov. Museum for 1917.
 ——— 1919. Rept. B.C. Prov. Museum for 1918.
 HARDY, G. A. 1958. A New Record of *Annaphila arvalis* Hy. Edw. in British Columbia. Proc. Ent. Soc. B.C., Vol. 55, p. 35.
 JONES, J. R. J. LLEWELLYN. 1951. An Annotated Check List of the Macrolepidoptera of British Columbia. Ent. Soc. B.C., Occ. Paper I.
 MCDUNNOUGH, J. 1927. The Lepidoptera of the Seton Lake Region, British Columbia. Can. Ent., Vol. 59, p. 245.

FIELD WORK AND TRAVEL

The major field project, as in past years, was connected with the archaeological excavations at the site of the Indian village of Kitwanoon. In April, Mr. Duff and Mr. Kew travelled in the motor-truck to Kitwanoon, where a week was spent completing arrangements, removing the town-poles, and gathering local ethnographic data. A grant from an anonymous private source enabled us to arrange for the recording of certain legends and historical data pertinent to the town-poles removed. For this project the services of Mr. Cox, White River, B.C., were secured. Mr. Cox is a fluent speaker of the Ojibwa language and, in October, spent two weeks at the village translating and recording the legends supplied by the chiefs of the Wolf and Frog clans. Further ethnographic data were obtained in a following section of the report.

In early May, Mr. Duff and Mr. Kew attended the Northwest Anthropological Congress at the State College of Washington. Discussion was held in regard to the present and future development of research in the fields of archaeology and ethnology.

During the latter half of August, Mr. Kew and Mr. Duff conducted an archaeological excavation on Fraser Island. The site chosen was a continuation of the excavations begun in 1957. A 15-foot section of the midden was exposed, some very important artifacts were recovered, and drawings of the stratigraphy of the site were obtained. We now have sufficient information to plan a wide extensive excavation of the site. The evidence gives strong indications that the site contains an early historic site, as discovered by Dr. C. F. Gordon of the University of British Columbia at L'Anse-au-Loup in Vancouver. This consisted of an early maritime culture existing some 2,500 years before the present.

In September, Mr. Kew accompanied Dr. C. F. Gordon on a field trip and excavation of several sites on the southern part of Vancouver Island. These included the new site near Courtenay, which was being excavated by Miss Kathleen Egan of the National Museum, Ottawa.

In addition to the numerous short trips required for routine Museum business, the staff attended several Indian social dances and Blackfoot Church meetings on Southern Vancouver Island.

EDUCATION

Numerous classes of school children visited the Museum and were given demonstrations of guided tours of the anthropological section. The Director's report contains further information on visits to school groups. A series of lectures on the Indians of British Columbia was given at Victoria College to a class of anthropology students.

REPORT OF THE CURATOR OF ANTHROPOLOGY

A major event in the course of the year was a research programme which the Curator, Mr. Duff, has been enabled to undertake at the National Museum, Ottawa. It is felt that his work there will be of great importance to the advancement of studies on the Tsimshian Indians, one of British Columbia's important Coast tribes. Mr. Duff obtained leave of absence from his position in the Museum for one year commencing July 1st. A progress report is included in a following section.

We were fortunate in obtaining the services of a student assistant, John Sendey, during the months of July and August. He assisted in the routine duties of the Museum and was a valuable participant in a brief archaeological field-trip.

FIELD WORK AND TRAVEL

The major field project, as in past years, was concerned with totem-pole salvage. Negotiations were begun last year with the Indians of Kitwancool village for permission to remove some of their poles. In April, Mr. Duff and Mr. Kew travelled in the Museum truck to Kitwancool, where a week was spent completing arrangements, removing three totem-poles, and gathering incidental ethnographic data. A grant from an anonymous private source enabled us to arrange for the recording of certain legends and historical data pertinent to the three poles removed. For this project the services of Mrs. Constance Cox, White Rock, B.C., were secured. Mrs. Cox is a fluent speaker of the Gitksan language and, in October, spent two weeks at the village translating and recording information supplied by the chiefs of the Wolf and Frog clans. Further details regarding these totem-poles are given in a following section of this report.

In early May, Mr. Duff and Mr. Kew attended the Northwest Anthropological Conference at the State College of Washington. Delegates took part in presenting scientific papers and in discussing recent developments in research in the fields of anthropology and archaeology.

During the latter half of August, Mr. Kew and Mr. Sendey conducted an archaeological excavation on Pender Island. This was planned as a continuation of the investigation begun in 1957. A 15-foot section of the midden was exposed, some very important artifacts were recovered, and drawings of the stratigraphy of the site were obtained. We now have sufficient information to plan a more extensive excavation of this site. The evidence gives strong indications that the site contains an early horizon similar to that discovered by Dr. C. E. Borden, of the University of British Columbia, at Locarno Beach in Vancouver. This consisted of an early maritime culture existing some 2,400 years before the present.

In September, Mr. Kew accompanied Dr. C. E. Borden on a brief tour and examination of several sites on the southern part of Vancouver Island. These included a mound site near Courtenay, which was being excavated by Miss Kathleen Capes, of the National Museum, Ottawa.

In addition to the numerous short trips required for routine Museum business, the staff attended several Indian spirit dances and Shaker Church meetings on Southern Vancouver Island.

EDUCATION

Numerous classes of school-children visited the Museum and were given demonstrations or guided tours of the anthropological section. The Director's report contains further information on visits of school groups. A series of lectures on the Indians of British Columbia was given at Victoria College to a class of anthropology students.

Lectures or film showings were given to the following groups: British Columbia Indian Arts and Welfare Society (two), Margaret Jenkins P.-T.A., View Royal High School P.-T.A., St. Andrew's Presbyterian Church Young Peoples Group, Women's Canadian Club, and Victoria Y.M.C.A. Men's Club.

EXHIBITS

The major portion of the anthropological display rooms has now been reorganized. Exhibition space is inadequate for complete coverage of all phases of life of British Columbia's many Indian groups, and facilities and space are inadequate for the realization of the full value of the material in the Museum's collection. However, we have attempted to arrange the new exhibits in a way which is both pleasing and instructive. This necessitated decreasing the amount of material on display. In consequence, our storage rooms are severely overcrowded, and this problem will become more acute each year since our collection is continuing to grow.

LOANS

The Museum has continued to lend, on a temporary basis, selected material to other institutions for exhibition and scientific study. This year eight such loans were made. The Vancouver Art Gallery displayed some of our finest examples of Northwest Coast Indian art in its exhibition "One Hundred Years of B.C. Art." Staff members selected and planned two duplicate exhibits which were installed in the mobile Centennial Caravans sponsored by the British Columbia Centennial Committee. This was one of the few opportunities our institution has had to extend the range of its visual contact, with the people of the Province, beyond the large urban areas of Victoria and Vancouver.

A set of educational exhibits was prepared and loaned to the Victoria School Board for use in elementary schools of this district. Two other museums also borrowed material to augment their own collections for special displays—the Anthropological Museum, University of British Columbia, and the Hudson's Bay Company Historical Museum in Winnipeg.

Other loans were made to the Photographic Branch, Department of Recreation and Conservation; the Parks Division, Department of Recreation and Conservation; and Dr. C. E. Borden, Archæologist, University of British Columbia.

MISCELLANEOUS

Much of our time continues to be devoted to routine office work, such as answering inquiries, handling correspondence, accessioning and caring for the anthropological collection, maintaining photographic and archæological site-survey files.

In the previous year, colour moving pictures were made of the Gitksan village of Kitwancool, with special attention given to the remarkable display of totem-poles. Additional footage was obtained during our stay at the village in April of this year, and a half-hour silent movie was compiled. This has been used in educational lectures and has received favourable comment. Colour photographs were taken during the archæological excavation on Pender Island, and a series of slides illustrating the methods of modern archæology has been prepared.

INTERIM REPORT ON OTTAWA RESEARCH PROGRAMME

On July 1st the Curator started on a year's leave of absence to undertake a special project at the National Museum of Canada. This was made possible by the grant of a Canada Council Senior Fellowship. The trip to Ottawa was made by car, and a large number of museums, both in Canada and the United States, were visited. In Ottawa, facilities have been generously provided by the National Museum, and work on the project has been carried on as planned.

The project is a study of the social organization and traditional history of the Tsimshian Indians of the Skeena and Nass Rivers. It is based on voluminous materials on file, assembled over many years by Dr. Marius Barbeau. These include original field-notes made by Dr. Barbeau during several seasons of work with the Tsimshian between 1915 and 1939, and also a large volume of information and traditional narratives collected by Dr. Barbeau's Tsimshian assistant, William Beynon, between 1915 and his death in 1957. Because of Dr. Barbeau's advanced age, it was important that another scholar should become familiar with these data and help prepare them for publication.

The immediate objective of producing a definitive report on Tsimshian social organization involves two steps. First, the information must be extracted from the original handwritten field-notes (which are partly in Dr. Barbeau's unique shorthand) and compiled in an orderly system. Second, it must be analysed and rewritten for publication. By the end of the year the first step had been completed, and a start made on the second, for fifteen of the twenty-six tribes of the Tsimshian nation. These are the ten Lower Skeena tribes of "Tsimshian proper," the Kitkatla, Kitkahta, and Kitisoo of the sea-coast, and the Kitselas and Kitsumkalum of the Skeena Canyon. The material on the Upper Skeena (Gitksan) tribes and the Nass River tribes has not yet been studied.

The information has been arranged in a number of categories, which include:—

- (1) *Tribal Structure*.—The basic kinship units are the "houses" (lineages), and each tribe consists of from twelve to forty-five houses arranged in order of rank. The houses fall into four phratries and two marked social classes.
- (2) *Names*.—Each house owns hereditary personal names, more than 2,500 of which have been translated and analysed. Abstracts have been made of the traditional origins of many names, and progress has been made on the analysis of the complex naming system.
- (3) *Crests*.—Each house also owns a number of crests which it displays on totem-poles and in a great variety of other forms. These have been listed and described, and the crest system has been analysed for the information it yields on the historical relationships among the houses.
- (4) *Territories*.—The hunting territories and village sites of the tribes and houses have been listed and mapped.
- (5) *Traditions*.—The traditions owned by each house explain its history, the origin of its names and crests, and its rights to territories. They also reveal most clearly the structure and growth of the tribes. Most of these historical narratives will be published in separate works under preparation by Dr. Barbeau, but abstracts have been made of a large number which bear directly on social organization, for use in the present study.

Some time has been spent collaborating with Dr. Barbeau in the preparation of these related publications.

Quite apart from the Tsimshian study, the Curator has been privileged to participate in staff discussions on all phases of museum policy and in the planning of new exhibit halls. The result has been an improved knowledge and appreciation of general museum problems.

TOTEM-POLE RESTORATION PROGRAMME

As in past years, considerable time has been devoted to the task of salvaging totem-poles and directing the carving programme at Thunderbird Park. From January to mid-July the carvers, Mr. Mungo Martin and Mr. Henry Hunt, were engaged in completing the two Centennial totem-poles. These were described in the Annual Report of 1957. The Royal totem-pole, produced jointly by this department and the British Columbia Centennial Committee, was completed first and shipped from Victoria early in May after a dedication ceremony before the main entrance to the Parliament Buildings.

The pole arrived safely in England, was erected in Great Windsor Park and accepted by Her Majesty the Queen Mother on behalf of Queen Elizabeth II. The pole has been acclaimed a magnificent gift and an appropriate commemoration of British Columbia's first centenary.

Mr. Martin and his granddaughter Mrs. Henry Hunt travelled to London to be present at the ceremony and were well received during their week-long stay. The expenses of their journey were provided partly by the Centennial Committee and by a donation from Mr. and Mrs. J. G. Nordal, of Victoria.

The carving of the Vancouver Centennial pole, sponsored jointly by the Vancouver Centennial Committee and the British Columbia Centennial Committee, had progressed simultaneously with that of the Royal pole, and on July 10th the completed pole was transported to Vancouver. It was officially erected at the site of the Centennial Maritime Museum in Haddon Park on October 15th. The ceremony was attended by Mr. and Mrs. Mungo Martin and Mr. and Mrs. Henry Hunt.

Following the completion of the Centennial poles, the Museum was able to resume its programme of restoring old totem-poles. In the past this has involved buying and removing decaying originals from Indian villages and making new copies to be erected in outdoor locations. The originals are being held in storage until such time as facilities are provided for indoor exhibition. A representative sample of Haida and Kwakiutl poles has been compiled in recent years, but, because of a reluctance on the part of the Tsimshian Indians to sell their poles, the collection was conspicuously short of this style of pole, which is most distinctive and of high artistic merit.

In April the staff was pleased to complete an arrangement with the people of Kitwancool village whereby three of their poles were obtained for permanent preservation. Still unwilling to relinquish outright the ownership of their poles, which are important symbols of family rank and the right to the use of traditional land areas, the people of the village acceded to the following proposal offered by the Museum. The Museum would remove three of the totem-poles to Victoria, where new copies of them would be carved. The new copies would be returned to Kitwancool and re-erected on their original locations, and the originals would be retained by the Museum.

The poles obtained are of outstanding quality and have been judged among the finest ever produced by the Tsimshian Indians. The tallest pole is known as "Split Person" and consists of the following figures, from the bottom up: A human figure; two human females side by side, each holding a child; a large human figure surmounted by two small human figures. This pole is the hereditary property of Chief Wiha, the leading chief of the Wolf clan of Kitwancool. According to Marius Barbeau, this is one of the oldest Kitwancool poles, having been erected *circa* 1870. (Barbeau, Totem Poles of the Gitksan, National Museum, 1929, p. 120.)

The second pole is also the traditional property of Chief Wiha. It is the most elaborate of the three, consisting of two large eagle figures, each surmounted by a band of small delicately carved human figures.

The third pole is owned by Chief Guno, the head of the Frog clan. It has three frog figures topped by a human figure, and is the smallest of the three.

These poles were lowered and crated, then trucked to Prince Rupert, where they were loaded on H.M.C.S. "Sussexvale" and brought to Victoria.

Mr. Martin and Mr. Hunt began the task of copying these poles in July; by the end of the year, Chief Guno's pole had been copied and more than half the work on the tallest of Chief Wiha's pole had been done. When the three copies will have been completed in the spring of 1959, they will be returned to Kitwancool and re-erected.

The costs of labour, equipment, and materials involved in the removal of these poles and the costs of the return and re-erection are being generously borne by a private source wishing to remain anonymous.

In August an 8-foot totem-pole was carved by Mr. Martin and Mr. Hunt. It was an original design by Mr. Martin in the Kwakiutl style and featured two figures—the thunderbird and the sea-otter. Prepared as a gift from the Province of British Columbia to the Canadian Tourist Association, the carving was financed by the Department of Recreation and Conservation. The pole was shipped to Quebec City for the Canadian Tourist Association convention in the latter part of September. Mr. Martin, accompanied by his great-granddaughter, Miss Shirley Hunt, attended the convention. Mr. Martin demonstrated his carving techniques and Miss Hunt served as his interpreter.

Other incidental carving accomplished during the year includes three copies of old fragile Kwakiutl masks in the Museum collection. The new copies are intended for use in demonstration and for loan to other institutions.

ACKNOWLEDGMENTS

The encouragement and co-operation offered by various individuals and groups throughout the Province have been most gratifying. We wish particularly to express our indebtedness to the following: Mrs. Constance Cox, White Rock, for recording ethnographic data on the Kitwancool totem-poles; Mr. and Mrs. B. W. McKilvington, Kitwancool, for the hospitality of their home and services in recording ethnographic data; the chiefs and band councillors of Kitwancool for their generous help and co-operation; the officers and men of H.M.C.S. "Sussexvale," and all other Navy personnel who helped in transporting the Kitwancool totem-poles to Victoria; Lady R. Lake and Mrs. Constance Kelly for their generous permission to camp and excavate on their Pender Island property; British Columbia Forest Products Limited and MacMillan & Bloedel Limited for the donation of cedar logs used in the totem-pole carving programme.

DONATIONS AND ACCESSIONS

ZOOLOGICAL

MAMMALS

By gift—

- British Columbia Game Office, Victoria, two mink, two elk skulls.
 Michael Easton and Jean Masters, Victoria, one skull of dog.
 David Hancock, Victoria, one fur-seal.
 Reuben Randell, Saanich, one black rat.
 George Ruck, Victoria, one whale embryo.
 Lorne Woodley, Victoria, one big-eared bat.

By the staff, sixty-three.

BIRDS

By gift—

- Mrs. Grace Bell, Victoria, one towhee.
 Chris Burton and Danny Curtis, Victoria, one murre.
 George H. Dawson, Saanich, one barn-owl.
 Miss Norah DeLisle, Cadboro Bay, one rail.
 Mrs. A. Fontaine, Victoria, one varied thrush.
 S. Gibson, Saanich, one goshawk.
 A. O. Hayes, Victoria, one Swainson thrush.
 Miss Hilda Hinder, Victoria, one hermit thrush.
 Canon M. W. Holdom, Crescent Beach, one golden-crowned sparrow.
 J. A. Ingram, Victoria, one sharp-shinned hawk.
 J. Lenfesty, Victoria, one screech-owl.
 Mrs. E. McGavin, Victoria, one quail chick, one rufous hummingbird, one pine siskin.
 H. McKeever, Victoria, one yellow warbler.
 J. McLaren, Victoria, one yellow warbler.
 Mrs. M. I. Newton, Victoria, one Oregon junco, one Steller jay.
 K. Richmond, Victoria, one nest of bush-tit.
 J. B. Short, Victoria, one Seattle wren's nest with three eggs, one California quail.
 Mrs. E. Sylvester, Victoria, one cedar waxwing, one red-breasted sapsucker.
 Mrs. W. L. Taylor, Saanich, one cowbird, one cedar waxwing.
 R. H. Turley, Saanichton, eighty-seven goldfinches, twelve purple finches, three robins, one pipit, one Audubon warbler.
 Mrs. W. G. Ziller, Cordova Bay, one sharp-shinned hawk.
 Crew of weather ship "Stonetown," Victoria, one wandering tattler.

By the staff, six.

AMPHIBIANS AND REPTILES

By gift—

- G. C. Bugg, Victoria, one horned toad.
 David Evans, Victoria, salamander eggs.
 Mrs. E. Stephen Price, Victoria, one box-turtle.
 G. Stace Smith, Creston, one skink.

FISH

By gift—

- Captain Barnes, Brentwood, one sailor-fish.
 Danny Normandeau, Victoria, one bracketed blenny.
 Harry Watkins, Victoria, two unidentified fish.

INVERTEBRATES

By gift—

- R. G. Alcock, Canoe Cove, collection of West Indian shells.
 R. Buckell, Salmon Arm, collection of land snails.
 I. E. Cornwall, Victoria, one California mussel.
 A. D. Crease, Victoria, one wasp's nest.
 Gary Elliott, Victoria, one wolf-spider, one black widow spider.
 Brian Inglis, Victoria, goose-barnacles.
 D. A. Lamont, Victoria, chrysalis of butterfly.
 Miss E. Lemon, Victoria, one jumping spider.
 D. C. McDevitt, Whaletown, specimens of nudibranch and egg-mass of a mollusc.
 Robert Mathews, Victoria, one starfish.
 Ricky Matthews, Victoria, one banded borer.
 Mrs. G. E. Mortimore, Langford, one leech.
 A. W. Patenaude, Victoria, one black widow spider.
 E. Rahn, Victoria, one giant chiton.
 Mrs. Buchanan Simpson, Lake Cowichan, large collection of shells.
 Joseph Siscoe, Victoria, one hair-worm.
 Robert Stewart, Victoria, one Polyphemus moth.
 Daryl Wakelyn, Victoria, caterpillar of tiger-moth.
 Frank White, Victoria, one turtle-crab.

MISCELLANEOUS

By gift—

- William A. Cooil, Ladysmith, two walking-sticks made from whalebone.
 Stephen Jones, Victoria, July, 1958, copy of "Du" magazine.
 George Ruck, Victoria, three publications—"The Sei Whale," "The California Gray Whale," "Notes on External and Internal Anatomy of *Balaena glacialis*"—and samples of tanned shark-skin.
 Mrs. Buchanan Simpson, Lake Cowichan, nineteen volumes of Bent's "Life Histories of Birds" and other books.
 Mrs. G. M. Stewart, West Vancouver, three water-colours of fungi by Henry A. C. Jackson.

ANTHROPOLOGICAL

The Robert H. Nichols Collection.—(Purchase.) An extensive collection of Coast Salish implements and ceremonial paraphernalia, purchased from R. H. Nichols, Victoria.

TSIMSHIAN

Bone soul-catcher. Mr. Schroeder, Kitwanga.

KWAKIUTL

Human skulls, five, Royal Canadian Mounted Police.
 Human skeleton with fragments of cedar-bark matting. Royal Canadian Mounted Police.

NOOTKA

Button blankets, two. Nichols collection.
 Objects of grass basketry, four. H. Brown, Victoria.
 Human skulls, ten. George Kinney, Victoria.

COAST SALISH

- Human skull. John Sendey and Richard Cox, Victoria.
 Stone fish-hook. Mrs. M. G. Sember, Victoria.
 Antler object. Mrs. M. G. Sember, Victoria.
 Stone atlatl weight. Mrs. M. G. Sember, Victoria.
 Stone hammers, two. R. A. Willing, Victoria.
 Ground stone blade. Robert Coates, Gibsons Landing.
 Stone sinker. E. Watson, Victoria.
 Chipped stone object. R. Dunn, Victoria.
 Human skull. Alan Jones, Victoria.
 Human skull. Alan Orr-Ewing, Victoria.
 Human skeleton. J. Kemp, Victoria.
 Cedar-bark towel. Nichols collection.
 Cedar-bark head-dress. Nichols collection.
 Fur head-piece. Nichols collection.
 Novice dancers' costumes, four. Nichols collection.
 Novice dancers' staffs, six. Nichols collection.
 Beaded vest. Nichols collection.
 Beaded dance shirt. Nichols collection.
 Wool sashes, two. Nichols collection.
 Goat-wool blanket. Nichols collection.
 Carved cane. Nichols collection.
 Reed mats, two. Nichols collection.
 Cradle spring-poles, two. Nichols collection.
 Spinning-machine. Nichols collection.
 Wool-winding reel. Nichols collection.
 Canoe paddles, three. Nichols collection.
 Blanket looms, two. Nichols collection.
 Uprights for blanket looms, one pair. Nichols collection.
 Clam-drying sticks. Nichols collection.
 Fish-roasting sticks. Nichols collection.
 Herring-drying sticks. Nichols collection.
 Chipped stone points, nine. Staff.
 Chipped stone objects, twelve. Staff.
 Ground slate objects, sixteen. Staff.
 Bone objects, twenty-four. Staff.
 Antler objects, nine. Staff.
 Abrasive stones, twelve. Staff.
 Shell rattle fragments, two. Staff.
 Soapstone objects, seven. Staff.
 Human skeletons, two. Staff.

INTERIOR SALISH

- Chipped stone objects, four. Nelson Museum, via Peter Eastham, Mines Branch.
 Chipped stone points, three. Nelson Museum, via Peter Eastham, Mines Branch.
 Stone pipe. E. J. Klohn, Vancouver.
 Coiled basket. Mrs. E. Cridge, Victoria.
 Coiled baskets, three. William Downes, Victoria.
 Coiled basket. Mrs. E. Tait, Maple Bay.
 Coiled basketry tray. H. Brown, Victoria.
 Coiled baskets, two. H. Brown, Victoria.

ATHAPASKAN

- Loon-skin bag. Miss E. Melville, Victoria.
 Obsidian scraper. Niels Knudsen, Victoria.
 Birch-bark basket. Morley Shier, North Burnaby.
 Beaded moccasin tongue. T. W. S. Parsons, Victoria.
 Beaded skin gloves, three pairs. T. W. S. Parsons, Victoria.
 Shaman's drum and drumstick. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Shaman's rattle. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Shaman's paint-bag. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Shaman's head-dress. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Shaman's feather dusters. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Shaman's amulet. Mrs. Donald Gray, Hagwilgate. (Purchase.)
 Woven tump-line. Mrs. Donald Gray, Hagwilgate. (Purchase.)

MISCELLANEOUS

- Skin purses, four, Eskimo. Mrs. J. M. Henderson, Victoria.
 Ivory model of kayak, Eskimo. Major D. L. McKeand, Victoria.
 Ivory model of steamship, Eskimo. Major D. L. McKeand, Victoria.
 Human skulls, two, Blackfoot. George Kinney, Victoria.
 Small twined basketry bag, unknown origin. Parks Branch, Department of Recreation and Conservation.

A NEW DISTRIBUTIONAL RECORD FOR OCEANIC CRABS

BY JOSEPHINE F. L. HART, VOLUNTEER ASSISTANT,
PROVINCIAL MUSEUM, VICTORIA, B.C.

A collection of small crabs found clinging to the netting and barnacles of a large Japanese glass float are a rarely taken species of oceanic crab, *Pachygrapsus marinus* (Rathbun). These were obtained March 28th, 1958, by the "Pacific Queen" from latitude 48° N., longitude 126° W., which is some 60 miles south-west of Vancouver Island, and given to the author through the kindness of Mr. Paul Parizeau, of Victoria, and Dr. Gordon Bell, of the Biological Station, Nanaimo.

This crab is closely allied to the so-called Columbus's crab (*Planes minutus* (Linnaeus)), found on sargassum weed and believed to be the species that gave Columbus faith that they were near land. Actually these crabs are ocean dwellers, living on floating objects, such as logs, seaweeds, and even sea-turtles, and are only found near land when carried there by wind or tide.

Pachygrapsus marinus (Rathbun) was first described in 1914 from specimens taken west of Baja California (latitude 23° 49' N., longitude 127° 50' W.), and not seen again until 1947, when four were found clinging to a Japanese mine which drifted onto Lincoln Beach, Oregon. They have also been found in the vicinity of the Hawaiian Islands (Chace, Fenner A., Jr., 1951: The oceanic crabs of the Genus *Planes* and *Pachygrapsus*, Proc. U.S. Nat. Mus., Vol. 101, pp. 65-103). Thus the locality off Vancouver Island constitutes a considerable extension of range.

These crabs are superficially like the yellow shore-crab (*Hemigrapsus oregonensis* (Dana)) but differ in having striations on the carapace, more swollen leg joints, and a dense growth of hair and spines on the ends of the walking-legs. They are predominately brown in colour, ranging from light, to reddish, to a rich chocolate, with mottlings of white or grey, and some pink on the tubercles of the carpus of the cheliped.

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