THE AMERICAN MUSEUM OF NATURAL HISTORY

SEVENTY-FOURTH ANNUAL REPORT FOR THE YEAR 1942





BISON ON THE NORTH PLATTE RIVER IN SOUTH CENTRAL WYOMING DETAIL OF GROUP IN THE HALL OF NORTH AMERICAN MAMMALS

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THE CITY OF NEW YORK Issued May 1, 1943 "For the purpose of establishing and maintaining in said city [New York] a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction."

FROM THE ACT OF INCORPORATION, APRIL 6, 1869

SEVENTY-FOURTH ANNUAL REPORT OF THE PRESIDENT

To the Trustees of

The American Museum of Natural History and to the Municipal Authorities of the City of New York

> Education is the instruction of the intellect in the laws of nature, under which name I include not merely things and their forces, but men and their ways; and the fashioning of the affections and of the will into an earnest and loving desire to move in harmony with those laws.

Thomas Henry Huxley

The war has brought many changes to the Museum. As an instance, for the first time in the annual report, the Director is reporting for all Scientific Departments, and I hope our members and subscribers will find time to read this interesting narrative.

We are fast breaking away from old habits and thinking and the war will certainly force great changes in all political, economic, and social concepts. Some conceptions, such as American self-sufficiency, isolation, and economy of superabundance, appear to be on the way out. It is increasingly clear that all our notions will eventually go into the crucible of realism.

The Museum is particularly interested in educational problems and fervently hopes that American education will not escape this ordeal. Universal education and enlightenment in an atmosphere of free thinking and free expression is fundamental to the American ideal. Our

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great schools, colleges, research institutions, and museums bear witness to this. Annually, America spends more wealth per capita on education than any other nation in the world. What concerns the Museum is the rigidity, conservatism, and narrowness of a system which does not take in the Natural Sciences as an essential part. In New York, nature subjects as requirements appear only in the elementary curriculum. The three R's, supplemented by some teaching of history, economics, and technological sciences, may enable Man to earn a living. But it is certain that these subjects are not sufficient to enable Man to adjust himself fully to his environment and gain the utmost therefrom, to understand thoroughly his fellow man and learn to live in peace, or to become a world citizen and accept responsibility for world order.

We, at the Museum, through contacts with hundreds of thousands of visitors, have become concerned over the general ignorance and misinformation about Nature and Man and the kind of person Man is on scientific analysis. In this ignorance many misconceptions, which are among the fundamental causes of our present difficulties, take For example, Biologists and Anthropologists root. know that save for a comparatively few primitive tribes, races and the cultures they produce are not superior or inferior. They are different. The different attributes of peoples, their skills, ways of thinking, social customs, and adaptations, largely the result of environment, parental care, terrain, climate, and food, should be respected. It is even important for us to learn to like these differences. Furthermore, scientists believe that Man and his cultures develop best under conditions of comparative freedom of expression, thought, and action. Thus, in addition to refuting the idea of regimentation of society and cultures, the scientist explodes the Nazi idea of master race. This

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BIGHORN SHEEP ON MOUNT WILCOX, ALBERTA, CANADA GROUP IN THE HALL OF NORTH AMERICAN MAMMALS kind of false thinking has again and again brought war and misery to the world. Nor are we entirely free of it in this country, in the assertion of superiorities and inferiorities for which there is no scientific basis.

The Museum believes that the reconstruction of our educational system will be one of the great tasks for the new world and that the Natural Sciences must have a prominent, indeed a fundamental part. When Man learns his place in Nature and, in true humility, recognizes his own shortcomings, as well as potentialities, better days are at hand.

So, in the new world, Museums of Natural Science may well find their rightful place of leadership in the thinking of our people and in educational plans for their enlightenment. The basic aims and ends of these Museums should be to acquaint Man more fully with his environment and teach him more about himself.

Very fortunately, at this critical juncture, we have scientific leadership in the Museum of the very first order—alert, open-minded, intelligent, industrious, ready to do its part in reconstructing intellectual concepts. Certain first steps have been taken in creating a system of education within the Museum in relation to the public schools of New York, which will ultimately serve many hundreds of thousands of pupils annually. The Museum proposes fundamentally to change and greatly develop its entire exhibition program and bring the Natural Sciences to the attention of an ever-increasing public, by lectures, publications, broadcasts, and new exhibition techniques.

Our Museum in the past has received great backing in its work, in fact the support received in 1942 was almost the greatest in the history of the institution. The Trustees strongly approve the program now being developed. Let us all, Trustees, Officers, and Staff, make sure that the development of this program is worthy of the support we are receiving and as sound and beneficent to mankind as the immutable laws of Nature portrayed within the Museum walls.

> A. PERRY OSBORN Acting President



GRANT CARIBOU, SANDS LAKE, ALASKA PENINSULA DETAIL OF GROUP IN THE HALL OF NORTH AMERICAN MAMMAIS

THE YEAR'S WORK

By A. E. PARR, DIRECTOR

THE Museum has been no exception from other institutions in its experience of the difficulties and the challenge of our first year at war. The practical effects of the emergency have overshadowed all other causes of change in our organization and our activities, just as the question of our proper role in national life under the new circumstances has overshadowed all other considerations in our thoughts and our planning for the future.

On the score of the inroads made in staff and operating personnel, and of the difficulties which have been created thereby, the effects of the war are, of course, in one sense to be regarded as unfortunate. But the Museum can have no regrets for itself so long as it is still able and permitted to serve the needs of education and public morale in the ways in which we are convinced that we have an important contribution to make to our community and to its guests. It is therefore a happy task to report that the Museum was able to continue these services undiminished through 1942 in spite of the increasing difficulties. In fact we can claim considerable improvements in the quality and effectiveness of our services on several significant points.

By the opening of the new Hall of North American Mammals the Museum gave to the public a most timely opportunity to receive an inspiring impression not only of the animals of our land, but also of the rich and varied beauty of the country we must defend. The opening of the second series of habitat groups in the Whitney

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Memorial Hall of Pacific Birds also came at a propitious time with the pictures they give of the distant islands in which our forces are fighting the enemy.

Through the efforts of its own Department of Education the Museum greatly improved the coordination of its functions with the teaching activities of the public schools. The various types of material formerly sent to the classrooms as separate items were organized into subjects and combined into 30 portable school museums consisting of 480 separate cases. These are now in constant use in the city schools. By the further introduction of the Platoon Program within the Museum itself a single day's organized visit now achieves the results previously obtained only from a considerable number of separate trips. More than 350,000 young visitors of the Museum, the Planetarium, and the Bear Mountain Trails were served by the Department of Education during 1942, and motion pictures, lantern slides, and loan material circulated outside had a pupil attendance of over 13 million.

By use of the unique facilities at its disposal the Hayden Planetarium was able to respond immediately and most effectively to the new national need for early and rapid training in celestial navigation. Realizing the value of a special series of demonstrations on navigation, which in the course of the years up to 1942 had been attended by a total of 12,000 individuals, the Navy in July, 1942, entered into a contract with the Planetarium to arrange this demonstration for 10,000 students of the Midshipmen's School during one single year. About 2,500 had attended under this contract by the end of December, in addition to over 1,000 individuals who attended before the contract went into effect, as well as 800 students in Merchant Marine training and about 500 in other groups who received this instruction by similar arrangements. In still further contribution to the new demands the Planetarium in March, 1942, also introduced two new courses in navigation and star identification which had a combined attendance of over 1,700 students preparing themselves for national service. While these new duties were added, the regular performances of the Planetarium were continued without reduction, and a public attendance of over 240,000 was counted during the year.

In the course of the year the Museum, exclusive of the Planetarium, received nearly 1,400,000 individual visits in spite of public preoccupation with the unfamiliar problems of being at war. Such sustained interest argues well for the importance of the Museum to the members and guests of the community.

It is a singular pleasure to acknowledge the Museum's great debt of gratitude for the many gifts of funds, services, or material it has received from its growing circle of friends and supporters. One thousand individuals contributed to the welfare of the Museum by gifts to general purposes during 1942, and more than 420 donations were received for the support of special These concrete expressions of faith in the activities. character and purpose of our institution do not originate only within the metropolitan area, nor do they come to us only from the neighboring parts of the East-they reach us from the entire country, emphasizing the national character of our stature and our obligations. It would be impractical to make acknowledgment within these pages for the generosity of each individual friend to whom we are indebted, and any attempt to do so would be unwelcome to many. We can therefore only say that we deeply appreciate their friendship and their generosity,

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and that it will be our endeavor to be worthy of the support they have given us.

Mingled with our feeling of loss by their absence we also take great pride in the role played by 62 of the Museum's trustees and employees who now serve in the armed forces, and 11 others who have temporarily left the Museum to devote their entire time to the war effort in a civilian capacity. It is significant to note that 22 of those who are thus absent for national service have been called upon to apply special knowledge and skills which the Museum helped bring into existence.

Those who remain at the Museum have also been able to contribute to the war effort in various ways: by supplying technical information in response to innumerable inquiries, by organized participation in the education of the men in service apart from the training in navigation given at the Planetarium, and, at least in one instance, by the contractual undertaking of a special research project for a branch of our defense.

In the types of research normally pursued by the Museum in peace time the curtailments have unavoidably been very severe. Many members of the scientific staff left for the duration, some quite early in the year. Others found occupation for a considerable portion of their time in contributing specific information. Needed material or data from foreign sources became almost impossible to obtain, and the opportunities for expeditions for the Museum's own purposes were limited to the Western Hemisphere. Only four minor expeditions went out during 1942, each representing the effort of a single individual.

The full effect of these curtailments was of course not evident in the output of scientific publications by members and associates of the staff during 1942 since the [Page Eight] publishing activities of any one year chiefly express the results of work done in previous years. Over 250 titles are contained in the complete bibliography appended to this report. Of these 159 represent new contributions to scientific knowledge or philosophy, 74 articles and books were addressed to the general public, and half a dozen works were added to the literature of formal instruction from elementary levels to advanced graduate studies. It is unavoidable that 1943 must show a reduction in this fine record of published contributions to general knowledge due to curtailment of staff and opportunities during 1942.

To make a contemporaneous evaluation of such an output is very difficult, but it is only fair to say that the Departments of Mammalogy, Amphibians and Reptiles, Insects and Spiders, and Animal Behavior had particularly large shares, by numbers, in the production of the purely scientific additions to existing knowledge. The major publication in this category was the second volume of Osborn's monographic treatise on the Proboscidea, which completes a monumental contribution from The completion of the Bashford Dean our Museum. Memorial Volume represents another important milestone in scientific publication passed during 1942. The Department of Animal Behavior is particularly to be commended for having doubled its previous maximum output in spite of greatly reduced circumstances. Margaret Mead, Associate Curator in the Department of Anthropology, in collaboration with Gregory Bateson, made public a photographic analysis of "Balinese Character," in a bold and successful departure from traditional forms of presentation of anthropological data. By her book "And Keep Your Powder Dry" Dr. Mead also created a wide public interest in the possibilities of

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applying anthropological methods of analysis to the study of our own national character and its potentialities in the face of emergency. The Department of Birds added new distinction to its record with the appearance of Ernst Mayr's "Systematics and the Origin of Species," a very important and timely contribution to zoological theory and practice. Bird lovers of the region served by the Museum also welcomed the addition to their literature of "Birds Around New York City" by A. D. Cruickshank, as J. T. Nichols' "Representative North American Fresh-Water Fishes" was welcomed by Wal-The Departments of Invertebrates and of tonians. Mineralogy took an especially active part in the popular presentation of scientific information in the pages of "Natural History" Magazine, a series of articles by Pough on strategic minerals being particularly worthy of note.

The Museum may also take pride in whatever share it may have had in making possible the creation of several works by its associates. "Comparative Vertebrate Anatomy" by Libbie H. Hyman, an invaluable, up-to-date texbook for students of this subject, might be specially mentioned.

We are similarly proud of nine different courses contributed by Museum staff members to the curricula of other educational institutions, of 88 single lectures delivered elsewhere, apart from regular Museum extension work, of nearly 60 offices held by our staff in other learned institutions and organizations, and of many individual honors received. Outstanding in this long list of honors and offices are the following: President of the American Ethnological Society, Dr. Shapiro (Chairman of Anthropology, American Museum); President of the Society for American Archaeology, Mr. Nelson

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(Curator in the Department of Anthropology, American Museum): Director of the American Society of Mammalogists, Dr. Hill (Assistant Curator in the Department of Mammals, American Museum); President of the Long Island Biological Association, Dr. Murphy (Chairman, Department of Birds, American Museum); Editor of the AUK, Mr. Zimmer (Curator, Department of Birds, American Museum); President of the American Ornithologists' Union, Dr. Chapin (Associate Curator in the Department of Birds, American Museum); President of the American Association of Physical Anthropologists, Dr. Gregory (Chairman of Comparative Anatomy, American Museum); Chairman of the Museums Council of New York City, Mr. Faunce (Vice-Director, American Museum). The A. Cressy Morrison Prize, awarded by the New York Academy of Sciences, for 1941 (announced in 1942) was received by Dr. Haas (Research Associate, Department of Invertebrates, American Museum), and the same Prize for 1942 was given to Dr. Michener (Assistant Curator, Department of Insects and Spiders, American Museum). Dr. Murphy (Chairman of the Department of Birds) and Dr. Colbert (Chairman of the Department of Amphibians and Reptiles) were elected to receive the Elliot Medals of the National Academy of Sciences for 1936 and 1935, to be awarded in April, 1943.

What has already been said about the delayed effects of war upon research and publication is also true of its effects upon exhibition. In 1942 the Museum was able to gather a rich harvest from earlier efforts but was at the same time forced to reduce its expectations for the immediate future by severe curtailment of current work in preparation of new exhibits. The opening of the new Hall of North American Mammals and of four additional

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habitats in the Whitney Hall of Pacific Birds has already been mentioned. An important milestone in the Museum's history was also passed with the completion of the two last exhibits in the gallery of the Akeley African Hall. The Hall of the Biology of Birds made an auspicious start in life with the opening of its first two alcoves. Other departments also made various improvements in the display of their subjects and added many new items, notably in the anthropological exhibits and in the Hall of Fishes. A new exhibit in the Forestry Hall, using the fade-in method for demonstrating the disastrous effects of forest fire, deserves special mention, both for its perfection of technique and for the lesson it teaches. The Department of Preparation gave a great deal of attention to the development of simpler and more economical methods of presentation, capable of being applied to the improvement of our essential educational functions also under war-time restrictions. Much has already been learned from these studies and several experimental exhibits, such as the dioramas on the theme of "Animals in War," were placed before the public with satisfactory response, offering promise of further development.

In regard to personnel, the departure of staff members in response to the demands of the national emergency was compounded by an unusually heavy schedule of retirements among the most distinguished scientists of the Museum group and of a key man in the management of Museum affairs. The following curators were retired because of the age limitation during 1942, and were voted emeritus status by the Board of Trustees in recognition of their outstanding achievements: Dr. Frank M. Chapman, Curator Emeritus of Birds; Dr. Barnum Brown, Curator Emeritus of Fossil Reptiles; Dr. Willard

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VIEW FADES INTO THE ONE ON THE FACING FAGE BY THE USE OF A TRANSPARENT MIRROR.



THE SAME LANDSCAPE IMMEDIATELY AFTER A FOREST FIRE

G. Van Name, Associate Curator Emeritus of Invertebrates; and Dr. Clark Wissler, Curator Emeritus of Anthropology. It is impossible to express within the limited scope of an administrative annual report, what the intellectual creativeness of these men, through their years of service, has meant to science, to society, and to the Museum which has had the honor of sponsoring their work. We can only express our gratitude for what we owe them and our hope that relief from administrative burdens may prove a blessing in disguise allowing greater freedom of application to the scientific studies they all continue to pursue. After 51 years of loyal and valuable service to the Museum, Frederick H. Smyth retired from the position of Bursar.

In connection with the preparation of a physical and intellectual program for the future of the Museum the question of the departmental organization of its subjects of research and education also came up for review. It was decided to discontinue the artificial segregation between the palaeontological departments, dealing with the life of the past, and those concerned with the living forms of today, and to combine them into larger departmental units defined only by the natural relationships of the organisms. The new title of "chairman" was introduced to designate the administrative head of each independent unit. A list of the reorganized departments and their chairmen follows:

Anthropology: H. L. Shapiro, chairman. Mammals: Harold E. Anthony, chairman. Birds: Robert Cushman Murphy, chairman. Amphibians and Reptiles: Edwin H. Colbert, chairman. Fishes: William K. Gregory, chairman. Insects and Spiders: Frank E. Lutz, chairman. Invertebrates: Roy Waldo Miner,* chairman. Com-

^{*}Retired in March, 1943, and succeeded by H. E. Vokes as Acting Chairman.

parative Anatomy: William K. Gregory, chairman. Animal Behavior: Frank A. Beach, chairman. Geology and Mineralogy: Frederick H. Pough, chairman. Astronomy and the Hayden Planetarium: William H. Barton, Jr., chairman. Education: Charles Russell, chairman.

The Departments of Forestry and Conservation, Micropalaeontology, and of Central Asiatic Research occupy special positions and were not involved in the changes.

The present director assumed his duties on June 1, 1942.

FUTURE PLANS

Most notable among the activities of the Museum during 1942 was the work done by, or under the sponsorship of, the Committee on Plan and Scope which was charged with the preparation of a program for the future development of plant and activities. The basis for these efforts lay in the realization that natural history museums in general, and our own institution in particular, have reached a critical stage in the development of their functions and their services to society.

The public museums of natural history had their birth in the period of the great explorations and the most vigorous expansion of white man's domain. The theory of evolution gave further impetus to their growth. Responding to the demand for information on subjects in which the public felt a real and vital concern the museums focused their eyes on the great distances of time and space. They attempted to show their visitors what they might find when they ventured beyond the horizon on the trail of the explorers. They tried to dig out of the earth the records of the early ancestry of life which had existed before the memory of man began. The contemporary

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nature of home territory seemed relatively commonplace and uninteresting, as bread on the menu, because it seemed abundant, self-renewing, and ever present. As the full round of the earth became better known and exploited, and the theory of evolution settled into its proper place in public thought, the museums lost their most vital contacts with the real concerns of man. They had won a victory at the loss of a cause, and became reduced to functioning mainly as sources of sound and polite intellectual entertainment. While the era of abundance and rising standards of living still continued, fascinating material for mental occupation was probably all the museums could give to society, because it was all that society would take, and the museums acquitted themselves extremely well of their limited task.

But mankind has finally been rudely awakened from the dream of a perpetually increasing abundance for all flowing from the richness beyond the horizons, and public attention has been forcefully directed back to the problems, the possibilities, and the limitations of nature at home.

In this newborn concern with the natural history of the country from which our nation derives its existence the museums should find a new, vital contact with their public, and a new cause to fight for. It is towards the task of helping our nation to build its own future from its own nature that we must direct the Museum's plans for tomorrow.

In the plans proposed during 1942 we are appoaching our new goal from two separate directions: through improvement and completion of our intellectual program in exhibition and research within present limitations of space, and through the development of an architectural plan for the improvement of the space itself after the war has been won.

After having surveyed the allocations of space within the existing buildings the Committee on Plan and Scope could recommend several changes intended to achieve a more logical arrangement of the established subjects, better library facilities, and an opportunity to introduce into the program several aspects of natural history and anthropology, which have previously been left out but are now sorely needed for the fulfilment of our duties as an educational institution.

As a first step towards future unification of our exhibits of birds it was decided to abandon the systematic exhibits on the second floor of the old building and to install in their place an abbreviated and modernized display in part of the Hall of the Biology of Birds in the Whitney Wing. A reorganization of these exhibits has been long overdue, and this has also been true of the exhibits in general geology and fossil invertebrates now on the fourth floor of the North Wing. As a further advance it was therefore also recommended to install an entirely new Hall of Geology and Fossil Invertebrates on the second floor, in the space to be vacated by the old systematic exhibits of birds. A greatly improved plan for a new hall in the two geological subjects, using modern methods of display and modern architectural forms for their arrangement, is now being developed by the departments concerned, in cooperation with the Museum's staff architect.

When the new plan for Geology and Fossil Invertebrates is put into effect, the fourth floor hall, now occupied by the exhibits of these departments, may be used to fill an extremely urgent need for greater and better library facilities, and this, in turn, will increase the

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ARCHITECT'S DRAWING OF THE SEVENTY SEVENTH STREEF FACADE FOR THE POSTWAR RECONSTRUCTION OF THE AMERICAN MUSEUM
space available for offices and laboratories on the fifth floor.

An improved treatment of our exhibits in forestry had already long been contemplated. With the opening of the new Hall of North American Mammals the old hall dedicated to the same subject had served its purpose. A new display of forestry and general botany is therefore to be installed in the old Hall of North American Mammals unless post-war building should make a still more advantageous arrangement possible.

The traditional method of displaying museum objects according to their academic classification rather than their dynamic relations in nature tends to produce in the minds of the visitors a feeling of remoteness between museum interests and the contemporary problems of mankind. To alleviate this feeling it is not alone sufficient to arrange temporary, topical exhibits here and there among the others. The attempt to bridge the gap between everyday experience and the more advanced or specialized museum subjects must be given a fuller expression in permanent features of the exhibition program. To supply this want the Committee on Plan and Scope recommended the installation of two introductory halls, on each side of the 77th Street lobby, one surveying briefly the structure, contents, and active forces of a typical landscape from the natural environment of our own community, the other giving a brief review of the elements and foundations of human culture and the dynamics of the civilization to which we belong.

In the first of these two halls one might start with a pictorial review of the natural surroundings of New York City, from which a typical landscape would be selected for study. This would then be shown by eyelevel views of its appearance through the four seasons,

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and by bird's eye view of its topography on a scale Having established the object of study one model. would proceed to a demonstration of its history, its contents, and the relations between the objects and forces, living or dead, which interact with each other in the daily existence of the landscape. The geological structure and the history of how the valley and the hills were molded into their present shape by the geological forces of the past would be shown by models and One would study the origins, variations, dioramas. biological productivity, and economic importance of the different soils found in the landscape, and the problems created by man's disturbance of the natural conditions he found when he came. From the soil one would turn to the native and cultivated vegetation, its changes through the seasons, its development and growth from seed to new fruit, the reasons for its variations from one locality to another, the animal friends and enemies associated with the plants above ground and with their roots in the soil. The elementary biological principles of agricultural practice would be outlined, as would also the succession of native woods through the postglacial period. The series would end with a review of the main types of animal and plant communities found in the landscape, presented in habitat form but with the emphasis upon the totality of organism and not upon the single species.

An introductory hall of this type would serve several different purposes simultaneously. In the act of creating a new understanding of everyday experiences and of at least the elementary principles of our national problems in relation to the nature of the land, these exhibits would also give a demonstration of how all the apparently remote and abstruse subjects pursued by any institution for the study of natural history actually have a very

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direct and important bearing upon our most vital concerns. In addition, the attention given to the familiar will serve to extend the visitor's enjoyment of what he sees and learns beyond his visit within our own walls to a degree that can never be achieved by the study of distant things he will never have opportunity to observe in life. His pleasure will be reborn on every picnic in the countryside during which he will learn the satisfaction of understanding what he sees. The same reasoning also applies to our appreciation of the brilliant plan for an introductory hall to the anthropological subjects submitted by Dr. Shapiro and recommended by the Committee on Plan and Scope.

In this second introductory hall, presenting the Epic of Mankind as a counterpart of the Hall of the Landscape in which man lives, the anthropological exhibits would be designed to create an understanding of the foundations and dynamics of civilization and of the cultural relations of the people of the earth, rather than merely to entertain our visitors with the picturesque objects of native crafts. The evolution of man would be briefly touched upon, but the main emphasis would be given to the growth of man's culture and to the many factors which caused each particular culture to take its own particular form. The fundamental factors of social organization would be explained and the importance exercised by differences in age and sex, by the family unit, and by the various types of organization through contract of association would be analyzed.

Attention would be given to the very important subject of the variations in the basis of personal prestige in different civilizations; the prestige of the warrior in warlike nations; the prestige of wisdom and age in other

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nations; the prestige of material possessions or of family, and so on.

The dynamics of cultural adaptation to the environment would be given extensive treatment to create an understanding of why entirely different methods of mechanical procedure or social organization may be required to achieve the same result under different conditions of environment and natural history. The extremely interesting mechanisms of cultural exchange and the conditions under which such a change may prove fertile or sterile will be illustrated by various examples.

Having demonstrated all these underlying principles, the last portion of the hall would be devoted to the history of our own American civilization from the Indian economy which obtained before the white man's arrival, through the social and economic organization and the technical methods developed by the settlers, through their modifications in the subsequent era of the pioneer fringe, and on to the final development of our modern industrial civilization of today.

It scarcely seems open to question that such a hall would have a very important message to bring to the youth of our community at this particular time, and the Museum hopes to be able to make some progress even now in the direction indicated by this plan.

While it is hoped and expected that the various new plans already recommended, and others now in preparation, will greatly increase the value of the cultural services our Museum can give to its public, it is also realized that even the best plans for the utilization of buildings designed for the needs of other days will not allow us to achieve full effectiveness in our work towards new educational goals. We must also hope for an opportunity to apply modern knowledge and experience to

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WAPITI IN THE TRAPPERS LAKE BASIN OF NORTHERN COLORADO GROUP IN THE HALL OF NORTH AMERICAN MAMMALS the over-all plan of presentation, and to the creation of efficient conditions for our research activities as well. The authorities of the Museum were therefore very glad to accept an invitation from the Commissioner of Parks to cooperate in the preparation of plans for reconstruction to be included in the Post-war Building Program of New York City. The development of these plans, with Aymar Embury, II, as architect in charge, thus became the second major task for the Committee on Plan and Scope during 1942. In this effort the Museum also received the advice of Eliel Saarinen of the Cranbrook Institute of Science as architectural consultant.

Internally the post-war plans provide for the abolition of all inefficient attic spaces and similar areas which are unsatisfactory in use and costly to maintain. In replacement they create an adequate and efficient housing of all the Museum's invaluable collections, some of which are actually at the present time boarded up outdoors. They further provide excellent facilities for the research which is the only reason for possessing such collections. And, most important of all, the plans will bring all the public exhibits together on only two large, lower floors where a far better integration of their message to the visitors can be achieved and where, in the experience of large modern museums, the public is most willing to give its attention to the exhibits. These lower floors will be entirely without windows to secure perfect control of illumination for best display effects. Greater economy in operation is also brought about by this feature.

Externally the architect has achieved a simple and dignified treatment giving interest to all facades and a harmonious background for the New York State Theodore Roosevelt Memorial which forms the central part of the unaltered east facade.

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[Page Forty-two]

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THE AMERICAN MUSEL

BALAN

December

ENDOWMENT AND OTHER NO ENDOWMENT FUNDS:	N-EXPENDA	BLE FUNDS	*	
Cash		\$302,254.43		
Securities:				
Bonds		\$6,941,178. 46		
Preferred stocks		1,940,131.14		
Common stocks		3,369,387.18		
Real estate mortgages, etc.		1,142,270.32		
Note receivable		30,253.16		
		\$13,423,220.26		
Real estate		\$223,586.20	\$13,949,060.89	
TRUST FUNDS:				
Cash	•	\$13,121.38		
Securities:				
Bonds		\$544,982.38		
Real estate mortgages		247,673.03		
		\$792,655.41		
Derlaster		*F0 F00 00	950 056 50	
Keal estate		\$52,500.00	858,2/0.79	
TEMPORARY INVESTMENT FUNDS:				
Cash		\$1,190.58		
Securities:				
Bonds		\$ 57,857.85		
Common stocks		15,000.00		
		\$72,857.85	74,048.43	\$14,881,386.11
CURRENT FUNDS				
General Funds:				
Cash:				
In bank	\$30,874.87			
On hand	2,605.00	\$33,479.87		
Accounts receivable		136,010.81		
Due from other funds		5,083.03	AD 47 110 22	
Loans receivable		72,343.02	\$247,119.55	
RESTRICTED FUNDS:				
Cash in bank		\$156,393.67		
Accounts receivable		7,766.17	164,159.84	
AUXILIARY ACTIVITIES:				
Cash:				
In bank	\$30,400.38	**** 00**00		
On hand	025.00	437,083.38		
Accounts receivable		4,422.90		
Inventories Deferred charges		5 003 22		
Furniture & fixtures		4.072.70	87.864.28	\$499,143.45
A CENICY ELINIDS				
PENELON FUNDS				
Cash in bank			\$41,498.33	
Accounts receivable			6,870.62	
Securities:				
Bonds		\$1,417,385.39		
Preferred stocks		295,703.75	1 720 526 14	
Keal estate mortgages, etc.		40,447.00	1,/39,330.14	1 000 554 /5
Keal estate			14,049.58	1,802,334.07
				\$17,183,084.23

F NATURAL HISTORY

CURRENT FUNDS

HEET

42

•

ENDOWMENT AND OTHER NON-EXPENDABL	LE FUNDS	
Principal of funds with income designated for—		
Unrestricted purposes	\$2,643,181.93	
Restricted purposes	6,504,234.59	
	\$9,147,416.52	
Principal of funds functioning as endowment designated for—		
Unrestricted purposes	\$3,634,717.77	
Partially restricted purposes	1,118,073.47	
Restricted purposes	48,853.13	
	\$4,801,644.37	\$13,949,060.89
TRUST FUNDS:		
Principal of funds with income designated for-		
Unrestricted purposes	\$792.022.88	
Restricted purposes	66,253.91	858,276.79
TEMPORARY INVESTMENT FUNDS:		
Principal of funds designated for restricted purpo	8C8	74,048.43

\$14,881,386.11

General Funds:			
Deferred income	\$6,685.64		
Notes payable	225,000.00		
	231,685.64		
Contributed capital	15,000.00		
Surplus	433.69	\$247,119.33	
RESTRICTED FUNDS:			
Balance of funds:			
Special funds	\$150,590.71		
Other funds	13,569.13	164,159.84	
Auxiliary Activities			
Accounts payable	\$15,599.09		
Due to other funds	5,083.03		
Deferred income	47,918.43		
	68,600,55	•	
Surplus	19,263.73	87,864.28	\$499,143.45
AGENCY FUNDS			-
PENSION FUND			
Principal of fund		\$1 801 545 43	
Welfare fund		1.009.24	

<u>1,802,554.67</u> \$17,183,084.23

THE AMERICAN MUSEUM OF NATURAL HISTORY

Statement of Income and Expenses, and Surplus for the year ended December 31, 1942

GENERAL FUNDS

Income:		
Appropriation from the City of New York	\$511,738.24	
Income from capital funds	589,587.24	
Income from trust funds and foundations	31,678.72	
Membership fees	41,295.00	
Sales, services, interest on loans, etc.	16,553.60	
Contributions of trustees, members, foundations and others	116,972.84	\$1,307,825.64
Expenses:		
Executive and financial administration	\$196,662.78	
Scientific, educational and exhibition program	419,963.51	
Building maintenance and operation	576,545.23	
Miscellaneous supplies and expenses	131,372.43	1,324,543.95
Excess of expenses over income		16,718.31
Deficit at January 1, 1942		88,930.90
		\$105,649.21
Add:		
Transfers from capital funds	\$111,041.24	
Transfers from auxiliary activities	2,113.02	113,154.26
		7,505.05
Deduct:		
Transfers to auxiliary activities		7,071.36
Surplus at December 31, 1942		\$433.69
RESTRICTED FUNDS		
Income:		
Income from capital funds	\$31,455.48	
Sales, subscriptions, rentals, etc.	26,200.52	
Contributions of trustees, members, foundations and others	142,964.35	\$200,620.35
Expenses :		
Executive and financial administration	\$23,851.67	
Scientific, educational and exhibition program	178,993.85	202,845.52
Excess of expenses over income		2,225.17
Balance of funds at January 1, 1942		173,267.68
		171,042.51
Add:		
Transfers from capital funds		13,226.25
		184,268.76
Deduct:		
Transfers to capital funds		33,678.05
Balance of funds at December 31, 1942		\$150,590.71

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Endowment N	lembers	8	

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General attendance	1,075,135
Lectures, meetings, special exhibits, concerts, etc	313,426
Total	1,388,561

HAYDEN PLANETARIUM

Paid admissions	223,748
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Total	241,979

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Reached by staff by direct contact	356,133
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[Page	Forty-nine}

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THE AMERICAN MUSEUM OF NATURAL HISTORY

INCORPORATED BY THE

LEGISLATURE OF THE STATE OF NEW YORK IN 1869

The Corporation consists of a self-perpetuating Board of thirty-five Trustees, elected for terms of five years. Also, *ex-officio*, the Mayor, the Comptroller, the Commissioner of Parks of the City of New York, and a representative of the Board of Education of the City of New York.

FOUNDERS AND INCORPORATORS OF 1869

John David Wolfe	Benjamin B. Sherman	Morris K. Jesup
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Јозерн Н. Сноате		HENRY PARISH

HISTORY

Presidency of John David Wolfe, 1869-1872.

- 1869 Museum incorporated. Constitution adopted as drafted by Joseph H. Choate.
- 1870 First home secured, the Arsenal, Central Park.
- 1871 The City of New York appropriated \$700,000 for building. (Section I.)

PRESIDENCY OF ROBERT L. STUART, 1872-1881.

- 1874 Cornerstone of first section of building laid by President Ulysses S. Grant.
- 1878 Contract adopted between Trustees and Department of Parks, as drawn up by Andrew H. Green and Joseph H. Choate.
- 1880 Educational work with the schools inaugurated by Professor Albert S. Bickmore.

PRESIDENCY OF MORRIS K. JESUP, 1881-1908.

- 1892 Museum opened to the public on Sundays.
- 1887—1905 The City of New York appropriated \$4,218,820.94 for eight new building sections, II-VIII, and XV.
- 1907 Museum opened free to the public every day in the year.
- 1908-1917 Mr. and Mrs. Jesup bequeathed \$6,000,000 to the Museum.

PRESIDENCY OF HENRY FAIRFIELD OSBORN, 1908-1933.

- 1908 Constitution amended making the Mayor, the Comptroller and the President of the Department of Parks, *ex-officio* members of the Board of Trustees.
- 1921 Greater New York Charter amended, placing the Museum on the same basis as Public Schools with respect to Corporate Stock Appropriations, by Chapter 618 of the Laws of 1921, State of New York.

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HISTORY-(continued)

- 1921—1925 The City of New York appropriated \$2,233,800 for new sections, IX-XI, and equipment and alterations of old sections.
- 1924 The State of New York provided for the Theodore Roosevelt Memorial (Educational). Cost \$3,500,000. (Original Chapter 615 Laws of 1924.) (Building Section XII.)
- 1929 Appropriation of \$3,550,000 by the City of New York for construction of African Wing, Power Plant and Service Building, and Whitney Wing. (Sections XIII, XVII, and XIX.)
 - Contribution of \$750,000 by Harry Payne Whitney for one-half cost of Whitney Wing. (Section XIX.)
- 1932 Completion of the African Wing. (Section XIII.)
- 1933 Completion of the Whitney Wing. (Section XIX.)

PRESIDENCY OF F. TRUBEE DAVISON, 1933-

- 1934 Contribution of \$150,000 by Charles Hayden for purchase of Zeiss Projection Planetarium and Copernican Planetarium.
 - The American Museum of Natural History Planetarium Authority erecting Planetarium Building with funds (\$650,000) secured through loan from the Reconstruction Finance Corporation. (Section XVIII.)
- 1935 Opening of the Hayden Planetarium. (Section XVIII.)
- 1936 Dedication of the Theodore Roosevelt Memorial. (Section XII).
- 1942 Constitution amended making a representative of the Board of Education of the City of New York an *ex-officio* member of the Board of Trustees.

CAPITAL FUNDS

The Capital Funds were established in 1884. They now amount to \$14,881,386.11 (book value). The Trustees especially desire to insure the permanent growth and welfare of the Museum through an increase of the General Endowment Fund. The additional sum of \$10,000,000 is needed at present.

FORM OF BEQUEST

I do hereby give and bequeath to "THE AMERICAN MUSEUM OF NATURAL HISTORY" of the City of New York

GIFTS AND BEQUESTS EXEMPT FROM TAXATION

Gifts to the American Museum of Natural History are exempt from Federal Income Tax, subject only to the general limitation that the total deduction for charitable gifts in any year may not exceed fifteen per cent of the donor's net income.*

Gifts and bequests in any amount to the American Museum of Natural History are exempt from Federal Gift and Estate Taxes.**

MEMBERSHIP, CONTRIBUTORY AND HONORARY

Associate Members	(annually) \$4	LIFE MEMBERS	\$1,000
ANNUAL MEMBERS	(annually) 10	Patrons	5,000
Sustaining Members	(annually) 25	Associate Benefactors	10,000
CONTRIBUTING MEMBERS	(annually) 50	Associate Founders	25,000
SUPPORTING MEMBERS	(annually)100	Benefactors	50,000
Fellows		ENDOWMENT MEMBERS	100,000
HONORARY LIFE	Members	HONORARY FELLOWS	-

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^{*}The same deduction is allowed for New York State Income Tax.

^{**}A similar exemption is granted from New York State Estate Tax.



