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Botany Hall 29

VICTORIA REGIA, LARGEST OF WATER LILIES, SHOWN IN NEW HABITAT GROUP

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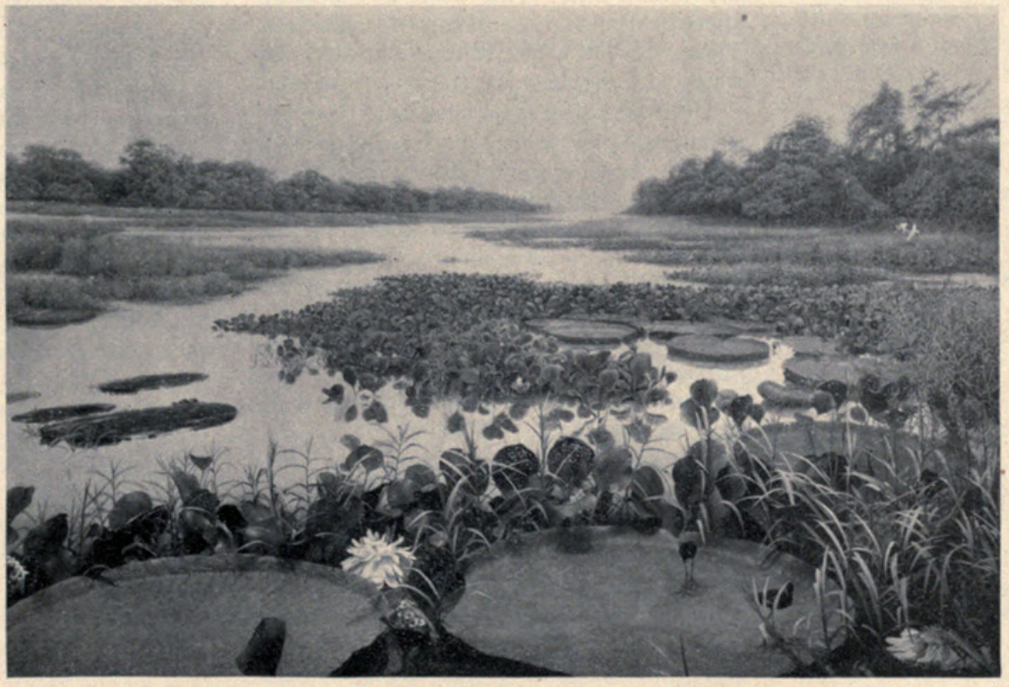
A new plant habitat group has recently been added to the botanical exhibits. It represents an association of aquatic plants in their natural environment, and is the fourth of the small series of habitat groups in Martin A. and Carrie Ryerson Hall (Hall 29). These are designed to provide for that hall, devoted to Plant Life, a few outstanding examples of plant formations representing widely different environments.

The scene reproduced in the new exhibit is from the junction of the Tapajós River with the Amazon. At this point silt from the two great rivers has produced a long spit of mud separating the waters of the two streams for a considerable distance. This alluvial land is cut into islands by transverse channels and covered in its more substantial portions by a dense growth of recent tropical vegetation including, especially, spiny leguminous shrubs and trees, and weed-like Cecropias, topped by some slender Assai palms, all of them evidently survivors of many inundations. The shallow channels, as well as the many backwaters enclosed by the ragged margins of the land, afford protection for a large variety of aquatic plants, some floating, others anchored in the mud, growing there from seed or seedlings either brought down river by the current or produced on the spot. That those not securely anchored are soon carried away, is suggested by the masses of floating plants moving down stream at all times, alone or in company with trees or whole floating islands of vegetation undermined by the current and recently torn from the river banks, or old accumulations released from their moorings by sudden high water in one or another of the numerous tributaries of the great river.

In some of the more sheltered shallower channels, colonies of water lilies, Victoria regia, the largest of all freshwater aquatics, appear to be well established. Though subject, like everything on the river, to the vicissitudes of floods, and not present in the great numbers reported from certain other localities, they are known to have existed there for a long time. They were observed in the same place almost a hundred years ago by the well-known English botanist Spruce who sent specimens of them to Europe. Their large prickly seedpods mature under water and, though not actually buried in the soil, stick firmly in the mud of the bottom and will no doubt insure reseeding even if the parent plants should be carried off by floods.

The huge water-lily is indigenous in much of the territory covered by the larger rivers of eastern South America, from La Plata to the Guianas. It was first discovered on one of the Amazon tributaries in 1807 by the Bohemian botanist Haenke who was sent by the Spanish government to investigate the vegetable products of Peru. Shortly afterwards the plant was found in the La Plata river system by Bonpland and soon afterwards by D'Orbigny. It was found again on the Amazon by the botanist Poeppig who descended the river from Peru, and finally in 1837 in the Guianas by Robert Schomburgk during his Venezuelan boundary explorations on behalf of the British government. Schomburgk proposed naming the plant in honor of Queen Victoria.



GIANT SOUTH AMERICAN AQUATICS

Plant life of Brazilian streams, as reproduced in habitat group representing junction of the Tapajos and Amazon Rivers. This exhibit was recently added to Martin A. and Carrie Ryerson Hall (Hall 29).

On the Amazon the popular name of the plant is "forno de jaçaná" (the jaçana's oven, or frying pan), the jaçaná being a long-legged plover-like bird frequenting the huge skillet-shaped leaves in its search for food. In the Paraná region the pods are said to be gathered by the Indians, and the seeds, according to Bonpland, "maiz del agua" (water maize), are ground for flour.

Introduced into cultivation in tropical gardens and in the temperate zone in places where young plants may be grown in greenhouses and kept alive for outdoor display in summer, the largest of all water-lilies never ceases to be an object of interest and admiration. The large white flowers are short-lived. They open in the evening, closing, at least partly, in the morning, to open again at dusk. After the second night they begin to decline, lose their brilliance, turn pinkish, wilt and soon disappear from sight. The leaves, on the other hand, last a long time. They make their appearance at the surface of the water as tightly rolled spiny buds which gradually unfold and enlarge in widening circles to form flat shallow pans four to five feet or more in diameter, smooth on the upper surface, but reinforced on the lower surface by a radiating network of stout ribs, channeled for buoyancy by large air spaces and spiny like the stout leaf and

flower stalks. The plant is a perennial with a well developed rootstalk. The flowers are apparently insect pollinated. They are visited, as soon as they open, by a black beetle as large as a coffee bean.

The other conspicuous flowering plant of the habitat group is a water-hyacinth resembling in all essential respects the blue-flowered South American water-hyacinth which, as an escape from cultivation in the southern states, has become a pest and hindrance to navigation in some of the rivers of Florida and the Gulf states. The species growing with the Victoria regia forms well rooted plants which have long submerged stems and lack the swollen leafstalks which serve its more common and familiar relative as floats.

An aquatic grass, with stout, almost woody root stalks, lines all the margins of the channel and invades the shallow water where it competes with the water-hyacinth for space. A small floating water fern completes the special plant association over which the Victoria regia presides.

The reproductions of the plant-forms in the new habitat group, and the installation, are the work of Emil Sella, Chief Preparator, aided by Milton Copulos, David Henner and others. The landscape which forms the background was painted by Staff Artist Arthur G. Rueckert. The material on which it is based was collected by several Field Museum expeditions.

MRS. J. N. RAYMOND GIVES $6,000 FOR CHILDREN'S PROGRAMS

The Museum received a gift of $6,000 last month from Mrs. James Nelson Raymond, for the support of current activities of the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures. The Foundation was established by Mrs. Raymond in 1925 with an endowment of $500,000 and she has made additional gifts each year since that time. With the latest gift, the total of these additions now amounts to $93,000.

Due to her interest and faithful support, the Foundation has through the years been enabled to expand its activities constantly, and provide more and more supplementary scientific education for children in the schools of Chicago and suburbs. Approximately 250,000 children benefit each year from the free series of spring, summer and autumn motion picture programs which the Foundation presents in the James Simpson Theatre of the Museum, and from the extension lectures given in school assemblies and classrooms by members of the Raymond Foundation staff. Other work carried on by the Foundation includes the publication of stories for children, radio programs, lecture tours at the Museum, special training courses to assist teachers who conduct classes in natural science studies, and various related activities.

ANTHROPOLOGICAL PROBLEMS

By PAUL S. MARTIN
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Anthropological research on cultural and racial contacts has world-wide implications and is of vital importance in the entire range of the sciences of man. Other sciences need the data and results of anthropology. Research will go further and be more worth while if it is correlated with other researches. The botanist studying the origin and distribution of corn should know the distribution of corn both in space and time. These data the archaeologist would be able to give him. Researchers in the field of medicine need to call on the anthropologist for information on the food habits and the health of various peoples; on the physical anthropologist for the apparent effects of climate on race; and on the ethnologist for information as to taboos and other social customs that may affect the prevention and control of diseases. These are but a few examples of ways in which anthropology can serve our society.

Anthropological research aims to be a contribution to the understanding and control of life. Its laboratories are the cultures of primitive people, and its purpose is to derive from them some general knowledge of human ways, not merely to collect miscellaneous and curious information. The changes that occur in our own more complex culture are more easily understood when similar changes are studied in simpler primitive societies where factors and situations are relatively few.

PSYCHOLOGY OF CULTURES

If specimens and photographs help in securing and explaining the complete psychological pattern of a culture, then they are carefully collected and brought back to the Museum; but they are collected only in order to help give our audience a picture or an idea of how a given people of a given culture meet their daily problems and manage to exist and thrive in an unfriendly, poor world. Some expeditions do no collecting; they merely try to reclaim some fragments of the culture of a people from whom our early Museum men hurriedly gathered thousands of miscellaneous specimens which at present have no special meaning or value to us or to anyone else.

In the field of exhibition techniques we are interested in interpreting facts about mankind to an interested lay audience. This means that we no longer jam our exhibition cases with a tiresome and duplicative array of specimens distressingly similar and monotonous. Rather, we insist on using a few specimens, placed on attractively colored backgrounds, in order to illustrate some phase of man's history. A beginning has been made in Hall B—Archaeology of the New World. In this way, we can convey easily and quickly to our audience whether a given culture is advanced or not, is based on farming and hunting, or has or has not been greatly influenced by its environment.

The emphasis of our work has now been shifted from pure research as such to research which will aid and benefit our society. We are eager to educate and to give help to all those who desire to learn. We still cater to specialists and professionals providing them with necessary factual material, but we are also interested in reaching as many people as possible and influencing them profoundly. We can do this through publications, exhibitions, expeditions, and research.

FUTURE DEVELOPMENTS

In what direction does the department hope to reach out in the future?

It seems certain that the results of research in Anthropology must be applied more and more to our daily life and problems. The field of Applied Anthropology is a fairly new one but is growing rapidly. Applied Anthropology uses all of the present disciplines of anthropology plus those of psychology, psychiatry, and other social sciences. It endeavors to interpret and smooth out the conflicts in our own society. The day may come when we shall have a Curator of Applied Anthropology.

We shall certainly want to continue improving our exhibitions, using what we have already accomplished in Hall B as a springboard for future changes. Before we can go much further along this path, it will be necessary to study the psychological habits of our visitors in order to know how to meet their requirements. This is virtually an unexplored field and much work needs to be done.

To predict further would only lead us into a fool's paradise. It is impossible to state now what we are going to do except in a most general way. Most of all, it is imperative for us to be alert and receptive to changes and new ideas; to lead the procession rather than bring up the rear. We must study man's desires, impulses, and quirks so as to help society control the conflicts, both major and minor, which create unstable, even psychotic tendencies and bring about unnecessary unhappiness. Wherever these studies of Man lead us, we shall go.

Games With String

The string figure game known as "cat's cradle" is widely played among African children. Complicated figures are constructed, and competitions are held in which children challenge one another. Speed and accuracy decide the winner. Such string games are played by native tribes of Australia, and seem to be almost world-wide.

MUSEUM TO CLOSE CHRISTMAS AND NEW YEAR'S DAY

in order to permit as many employees as possible to spend the holidays with their families.