COLLECTION OF BEETLES ARRIVES FROM VIENNA

By RUPERT L. WENZEL
CURATOR OF INSECTS

DURING the first week of January, the staff of the Division of Insects welcomed a present that had arrived on the last working-day of December, a little too late to be included in the Christmas celebration but in time for the New Year's greeting. The gift—from the Museum's Board of Trustees—was contained in a large packing case, 6 by 6 by 7 feet and weighing 2,600 pounds, large even by museum standards, shipped from Vienna, Austria. The case contained a collection—more properly, two collections—of approximately 119,000 beetles. Its arrival marked the successful culmination of negotiations and plans begun more than six months previously, but that had their origin in plans and hopes dating back a good many years.

MORE THAN A TON OF BEETLES ARRIVES

Much manpower is required to move huge packing-case from Vienna onto Museum's receiving platform, an elevator that carries shipment from outdoors into basement freight room. The crate, 6 by 6 by 7 feet, contains approximately 119,000 specimens. These include both European and worldwide collections.

In the hectic week that followed the arrival and unpacking of the collection, five questions were so repeatedly asked that it seems desirable to answer them here, at least in part. The questions were: What is it? Why was it purchased? How do you find out about such collections? How did you go about getting it? And finally, why on earth was the whole collection packed in one tremendous box instead of in several smaller boxes that could be more easily handled?

The collection actually consists of two separate collections, both purchased from Dr. Eduard Knirsch, a Viennese dentist who was an amateur coleopterist (beetle specialist) and who built up significant general and specialized collections of beetles. One of these collections was accumulated by Dr. Karl Brancsik, of Trencsen (later in Czechoslovakia), who had been an adviser to Emperor Franz Josef and a professor of higher physics in Trencsen. He was an ardent amateur naturalist and had accumulated significant collections of mollusks, bugs, flies, bees and wasps, grasshoppers and their allies, and beetles. His general world-collection of beetles consisted of about 150,000 specimens representing 35,000 identified species.

Shortly after Brancsik's death in 1915, his beetle collection was sold to Dr. Knirsch. The collection at present consists of about 67,000 specimens representing about 20,000 identified species (parts of it—containing certain large families—had been disposed of before it was acquired by Chicago Natural History Museum). The remaining valuable series of identified beetles, particularly from Africa, Australia, Europe, and the New World tropics help to fill out our world representation of identified material to the extent that we now have some of the more important genera at least represented by "signposts" that will aid us in identifying, organizing, and handling unidentified research materials from these parts of the world. Before the acquisition of the Brancsik Collection, we had almost no African material.

The second collection, of about 53,000 specimens representing about 8,500 species consists of Eurasian and North African beetles and was formed by Knirsch himself. It is a *palearctic* collection; that is, it consists of specimens from the Old World north-temperate zone (*see map*). Such collections are of particular importance to students of the North American insect fauna because of the close relationships that exist between many of the animals of the Old and New World (*nearctic*) north-temperate zones, which together constitute the zoogeographic region called the *holarctic*.

RESEARCH SCOPE BROADENED

In the past, entomologists of the United States largely confined their studies to North American insects. Our fauna was large and unknown and the entomologists engaged in classifying the American species felt that they had enough to do without venturing abroad. Further, the important world-collections so necessary for studies of the insects of other parts of the world were in Europe and thus were essentially unavailable to American workers. Time and events have caused the world to shrink for United States entomologists, too. More than ever before they recognize that the more provincial their studies are, the less valuable they are. They particularly realize that because of the many genera and species that are common to North America and Eurasia,

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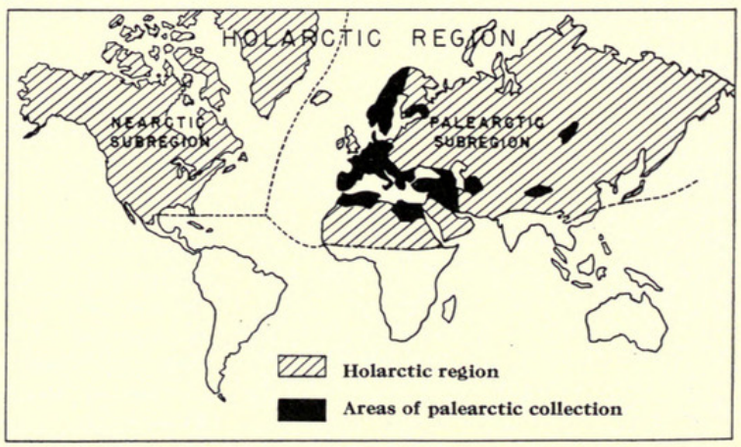


GEOGRAPHIC SOURCES OF BEETLE COLLECTIONS

Map of the world showing holarctic region (shaded) and areas (solid black) well represented by Knirsch Collection.

PREHISTORIC CULTURE OF CHICAGO AREA UNCOVERED

By ELAINE BLUHM
ASSISTANT IN ARCHAEOLOGY
AND DAVID J. WENNER, Jr.

EARLY IN JUNE, 1953, a Cook County Forest Preserve superintendent, John Eenigenburg, learned that a new superhighway was to pass over an area in the forest where many Indian artifacts had been found. Because he believed that this site might be important, members of the Museum staff were notified of its location. During that spring and summer, members of the Earth Science Club of Northern Illinois had been conducting a survey (under the direction of Wenner) of archaeological sites in the Chicago area. When the notice of the site in the forest preserve came to the Museum, we visited it and decided that it would be well to excavate part of it before it was destroyed.

CHICAGO AREA 'DIG'

Excavation of prehistoric Indian site was begun by classic archaeological method: opening selected squares, in this case about five feet in dimensions. The earth removed was then systematically sifted for artifacts.

Members of the Earth Science Club agreed to do the digging and to be responsible for collecting and cleaning the specimens. A permit to excavate was granted the group by Charles G. Sauers of the Cook County Forest Preserve District, with the provision that the specimens be sent to Chicago Natural History Museum and the University of Illinois so that they would be available to students for study in the future. Then the work began.

The Hoxie Farm Site, as it was named, was excavated, under our direction, in ten weekends during the summer by members of the Earth Science Club and other interested amateur archaeologists. Usually the weather was hot and disagreeable, but the crew worked carefully with no compensation other than the satisfaction of knowing that they were contributing to scientific research.

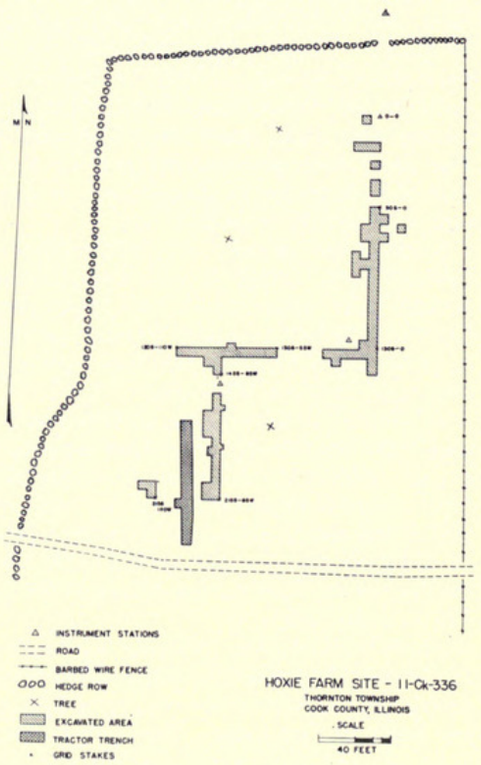
In terms of area tested and amount of material recovered, the dig represented the largest scientific excavation ever conducted in the Chicago area and one of the largest in the state. The number of specimens found and the information obtained from the site about its former inhabitants stand as a tribute to this group of excavators. The success of the work also must be credited to the kindness and co-operation of Mr. Eenigenburg and Andrew Ross, of the forest preserve staff, who realized the value of the site and protected it from vandalism during the weekdays that we could not be there.

Archaeological sites in the Chicago area frequently are not very large or very rich, and many are doubtlessly destroyed as the city and suburbs expand. Therefore it is important that we locate and protect the few that remain so that they may be studied and the story of the early Indian inhabitants of the area may be revealed before it is too late.

The Hoxie Farm Site was located on a sandy ridge about fifteen feet above a stream. Records by early settlers indicate that as late as 1850 this stream was navigable by small boats and that the lowland to the north and east was a swampy area that attracted many birds and other animals. The quantity of animal bones recovered from the excavation indicates that this condition must have prevailed in aboriginal times. Deer, elk, raccoons, beavers, ducks, turkeys, turtles, and many fishes were represented in the collection (presumably these animals were used as food by the Indians). To the south and southeast and across the stream were fields suitable for agriculture. Thus this site, with sandy soil that provided good drainage and dry footing for houses, land for cultivation, water for household needs and transportation, and an abundance of mammals, birds, and fish for food, satisfied all the requirements of the aboriginal inhabitants of our area who had to utilize every resource in order to sustain their primitive society.

FIREPITS AND BURIALS FOUND

At the beginning of the project we extended a long line down the length of the site and divided the area into five-foot squares. Selected five-foot squares were then excavated, the soil from each being removed in six-inch layers. All objects recovered were sacked and identified by square and level, so that we would know where each had been found. Walls and floors of the squares were carefully smoothed, and firepits, refuse pits, burials, and other features found in the soil were plotted on graph paper. In addition, the whole site was mapped, using surveyors' instruments, and thus we now have a record of all of the excavated area.



HOXIE FARM SITE

Map shows total area that has been excavated.

The major purpose of any archaeological excavation is to find out how the inhabitants lived, what kinds of tools and objects they made and used, and, if possible, when they

lived there, how long the site was occupied, and who they might have been. This information is obtained by study, with plans and notes of the site, of the artifacts, skeletons, animal bones, and objects in refuse pits and by comparing this material with that from other sites.

Once the pottery and stone and bone artifacts were catalogued, the job of study and analysis began, and it is not yet complete. The animal bone was turned over to an osteologist and the shell to Dr. Fritz Haas, Curator of Lower Invertebrates in the Museum's Department of Zoology, for identification. Results of their work were studied by Philip Young, a student member of the expedition.

THOUSANDS OF POTTERY FRAGMENTS

More than 10,000 potsherds (broken pieces of pottery) were recovered from the site. More than 90 per cent of these are shell-tempered—that is, when the pottery was made, the Indians mixed tiny pieces of ground clamshells in the moist clay to prevent it from cracking when it was fired. Shell-tempered pottery in the Middle West is an indication of a late site, dated, we guess, from between A.D. 1300 to 1600. Most of these sherds indicate that the pottery vessels were of globular shape with outflaring rims and sometimes small handles on the sides. Surfaces of most sherds were smoothed, but others were cordmarked. Many pots were small, between 6 and 10 inches in diameter, but some sherds indicate that the Indians also made much larger containers. The usual decoration on the pottery consists of wide trailed or incised lines in patterns of chevrons or parallel lines.

Some of the pottery was grit-tempered and had been traded perhaps from Indian villages near what is now the Northwest Side of Chicago or Joliet. Other sherds resemble types found in northern Indiana, Ohio, and southern Wisconsin.

In addition to the pottery, we found more than 1,200 stone tools and some of bone and antler. Most of the stone tools were chipped from cream-colored flint found in nearby creeks and glacial deposits. More than half of the tools were small scrapers with retouched edges, used for smoothing hides as well as other things.

There were slender, tapering flint drills and small thin flakes with sharpened edges, probably used much as we use paring knives and pocket knives today. Projectile points, or arrowheads, represented one-fourth of the chipped stone artifacts; most of them were small, thin, well-made triangular points.

There were also some ground stone tools in the collection—sandstone pieces with grooves used to straighten arrow shafts and to sharpen awls; flat shallow stones and smaller hand stones used for grinding corn and, in one case, for grinding red pigment; and rounded pebbles used as hammerstones for chipping flint.

There was an unusual variety of bone and antler tools at the site. Antler tips were hollowed out for fastening on a shaft to serve as arrowheads. Other antler tips were found that showed use as tools for chipping flint. Fragments of ribs and long bones served as awls, and one was perforated for use as a needle. Other fragments were smoothed for use, we postulate, as counters in a gambling game. One rib fragment was notched, and we believe it served as a musical rasp, making a sound somewhat like that of a washboard. Short sections of hollow bird-bones were cut and smoothed to form tubular bone heads. A whole turtle shell

PREHISTORIC CHICAGOAN
An extended burial found on Hoxie Farm Site.

was found that may have been a musical rattle. The largest bone tools were the hoes made from the shoulder blades of the deer and elk. These were often found in pairs on the top of cache pits.

The excavation revealed a little about the village itself. Many round-bottomed pits were uncovered, particularly in the southern half of the site. These may have been used originally for storage of corn and later were filled in with refuse. A few firepits were also found. We searched diligently for evidence of houses, but found only one or two places where sturdy posts had once been driven into the ground and several traces of what may have been smaller posts. This is not conclusive evidence, but it suggests that perhaps the Indians lived in houses supported by sturdy center posts and light superstructure built on smaller posts that were not planted very firmly in the ground. Similar houses with mat or bark walls and roofs are known to have been used by historic tribes in this area.

The burials were the most exciting finds in the site. Eleven were recovered from the burial area in the northern part of the village; others were uncovered but in some cases the bone was so soft that it could not be removed without crumbling. The bodies had been placed on their backs in shallow rectangular pits. Often a small pot was placed near the head of the burial. Near the shoulder of one individual had been placed an otter skull, covered with a piece of copper and powdered red ochre. The otter has ceremonial significance for some Indian groups in this area and may indicate the man was an important member of his family or clan. Other burials had arrowheads or copper ornaments placed with them.

CULTURAL TRAITS TRACED

All in all, our summer excavations at the Hoxie Farm site were well worth while. We learned much about the Indians who lived in that village on the edge of the creek. We know they hunted and fished, and we assume they planted corn and other crops nearby, although we found only the agricultural tools and none of the corn. Their houses are still something of a mystery, but we have much evidence about their storage pits and firepits. We know they buried their dead in an area somewhat apart from the main living-area of the village, with some care and ceremony, placing objects with them that show their daily life or perhaps prepared them for the journey to the other world. Their tools were well made and reflect much of their daily life and economy. Pipe fragments were found, which indicates smoking, a ceremonial activity among the Indians. The bone rasp and possible turtle-shell rattle are indications of their musical knowledge.

Trade was carried on with other areas and sites. The copper probably came from northern Michigan, a pipe found at the site came from Wisconsin, and some of the pottery may have been traded from, or influenced by, groups in Wisconsin, Indiana, and other sites in Illinois.

Exactly when this site was occupied we do not know. We found no trade silver or brass, which suggests the Indians lived there some time before the white men came into the area in the latter part of the 17th century. Probably the site was occupied some time around A.D. 1500 to 1600. Who these Indians were is still an unsolved mystery, but perhaps if we excavate other late sites and study documented sites in the area we may someday be able to identify this group. We can now say that they might have been Miami or Pottawatomi. As is true of every archaeological excavation, we have uncovered some information, but, in addition, we have found more problems that can be solved only by future work.

Sunday afternoon lectures and films will be given at the Museum in March and April.

BEETLES—

(Continued from page 4)

it is undesirable—and in many cases virtually impossible—to do certain types of work on the fauna of the one subregion without reference to that of the other. Yet, good representative general collections of European insects have been largely lacking in this country. Our staff has long wanted to acquire such collections, but no opportunities arose that would make it possible to translate these wishes into reality. The collections simply were not being offered on the market.

In the spring of 1955, I attended a meeting of insect curators in Washington, D.C., that was held to discuss mutual problems and policies, and to exchange information on subjects ranging from collections to technique. One of the items discussed was the desirability of stressing the need for American entomologists to study the palearctic fauna, and the associated need for United States museums to acquire Eurasian collections. Dr. P. J. Darlington, Jr., of the Museum of Comparative Zoology at Harvard, informed me that they had recently been offered a large collection of palearctic beetles by Dr. Knirsch and that they had purchased one large segment, the ground beetles, for their collection. The Harvard museum was not in a position to purchase the main collection.

This information was surprising, because Chicago Natural History Museum had been corresponding with Dr. Knirsch since 1946 in connection with other collections that he was offering for sale and Knirsch had never given any indication that he had a palearctic collection. The information was passed on to Dr. Clifford C. Gregg, Director of our Museum, who forwarded an inquiry about the collection to Dr. Knirsch's representative. His answer revealed that Knirsch still had the palearctic collection and that he also had a general world-collection, the Brancsik collection, that he was offering for sale.

Dr. Austin L. Rand, Chief Curator of Zoology, then approved a memorandum submitted to him by the Division of Insects and recommended to the Director that action be taken and that an offer be made. This recommendation was concurred in by the Director and Stanley Field, President of the Museum.

In the correspondence that followed, a tentative purchase price was agreed upon, pending an examination of the collections by a representative of the Museum. Fortunately, Dr. Charles H. Seevers, Research Associate in our Division of Insects, was in London studying rove beetles at the British Museum (Natural History). At our request he flew to Vienna and, with the help of Mrs. Seevers, examined and inventoried the collections. He then sent us a critical, detailed, and comprehensive report. On the basis of his report, it was decided to proceed with the purchase. John R. Millar, Deputy Director of the Museum, then began arrangements with the American Express Company in Vienna, and later in Chicago, for the shipment of and payment for the collection. Dr. Josef Eiselt of the Naturhistorisches Museum of Vienna had assisted me in packing the Bernhauer Collection for shipment in 1951. He agreed to do the same work on the Knirsch collections. During the period that the collection was being packed, Dr. Knirsch died and progress was delayed for a short time pending clarification of the legal status of the transaction. Payment was made through a lawyer appointed by the Austrian courts as executor of the estate, in favor of Knirsch's widow.

SAFEGUARDS IN TRANSIT

The final crating of the collection, as for the Bernhauer Collection, was accomplished by Bäuml & Co., a Viennese firm that handled the packing and shipping of the Viennese art treasures during their extended tour of the United States following World War II. It was at their suggestion that the collections were packed in the single huge liftvan. Their experience had been that when large collections of extremely fragile materials were packed into a container that could be lifted only by a crane, damage was reduced to negligible proportions and frequently eliminated altogether. Further, fragments of the shipment could not go astray. From our own experience, as well as that of other institutions, we know this to be a sound procedure for such large transoceanic shipments. Two large, valuable, and extremely fragile collections have now been moved from Vienna to Chicago Natural History Museum *without loss of any kind.*

The complex task of negotiating for the purchase, arranging for permits, packing, crating, shipping, and payment of such a collection from a foreign country can be fully appreciated only by those who have had to see it through. It is time-consuming, at times exasperating, and always surrounded by doubts and difficulties, as Mr. Millar can testify. But the day of arrival and unpacking that tells you whether or not judgment was sound and the fates kind is exciting and satisfying.

Daily Guide Lectures

Free guide-lecture tours are offered daily except Sundays under the title "Highlights of the Exhibits." These tours are designed to give a general idea of the entire Museum and its scope of activities. They begin at 2 P.M. on Monday through Friday and at 2:30 P.M. on Saturday.

Special tours on subjects within the range of the Museum exhibits are available Mondays through Fridays for parties of ten or more persons. Requests for such service must be made at least one week in advance.

SATURDAY LECTURES BEGIN MARCH 3

"North to Adventure," a lecture by Frederick Machetanz illustrated with a really thrilling color motion-picture of life in the Yukon country, will be presented in the James Simpson Theatre of the Museum on March 3 at 2:30 P.M. It is the opening program in the spring course of lectures and films on science and travel for adults—the 105th such series to be offered under the provisions of the Edward E. Ayer Lecture Foundation Fund. Eight other lectures will be given on Saturday afternoons throughout March and April, all at 2:30 o'clock.

Machetanz, received with acclaim by Museum audiences at lectures in other seasons, spent more than a year in exploration of the fabulous pass between the Indian village of Kaltag, Alaska, on the Yukon River and the Bering Sea while making his latest film. He was accompanied by his wife and a team of sled dogs headed by his famous white dog Seegoo.

A schedule of the other eight lectures will appear in the March issue of the BULLETIN. For all the programs, a section of the theatre is reserved for Members of the Museum, each of whom is entitled to two reserved seats. Requests for reserved seats should be made in advance by telephone (WAbash 2–9410) or in writing. Seats will be held in the Member's name until 2:25 P.M. on the day of the program.

Free Movies for Children

Nine free programs of motion pictures for children will be presented on Saturday mornings throughout March and April in the spring series offered by the James Nelson and Anna Louise Raymond Foundation. First program, on March 3, will be "North to Adventure," and Frederick Machetanz, the explorer who made the film, will be present to give a children's version of the lecture he will give for adults on the afternoon of the same day. No tickets are needed. Children are welcome either alone, accompanied by parents or other adults, or in groups from schools, clubs, and other centers. A schedule of the eight other programs will appear in the March BULLETIN.

Books by Machetanz

Books by Frederick Machetanz, lecturer on Alaska scheduled for both the adult and children's programs at the Museum on March 3, are available in The Book Shop of the Museum. Those for adults are *Here Is Alaska* ($3.50) and *Where Else But Alaska* ($3). Titles for children are *Panuck, an Eskimo Sled Dog* ($2.50), *On Arctic Ice* ($2.50), *Barney Hits the Trail* ($2.50), and *Rick of High Ridge* ($2.50).