

EXHIBITION NO. 22

INTRODUCTION

This exhibition evolved from discussions with members of the Wilkes College Biology Department, especially Charles B. Reif, Robert E. Ogren, and Department Chairman Lester J. Turoczi. Their original proposal to the Sordoni Art Gallery was for assistance in the proper storage of the prints contained in the Reif Collection, to preserve them according to archival standards. Later we mutually realized that the Collection could provide the basis of an informative and visually pleasing exhibition from several viewpoints, including the history of scientific observation and the development of printmaking techniques. The oldest work in the Collection is an unattributed woodcut of an oak tree printed in Germany circa 1485, while the most recent is a lithograph of a bird of paradise by J. Gould and W. Hart dated circa 1875-1888. Such important artists as Mark Catesby, John Selby, Francois LeVaillant, and John Gould are represented.

Drs. Ogren and Reif cataloged the Collection, identified and researched the artists, printers, and publishers, and made careful measurements of each work. Dr. Reif prepared notes for most of the prints, and these were edited by Dr. Ogren, who wrote additional comments where necessary for the purpose of this brochure and checklist. Where possible, Dr. Ogren has identified each species and, in cases where the scientific name has changed since the print was made, provided its current name. For both men this has been a labor of love.

For the purpose of making this exhibition more complete, works from the private collections of Drs. Reif and Ogren are also included, and we are grateful to them for the loan of these pieces. Further thanks are given to Jean Adams for her assistance in measuring and matting the prints, to Annie Bohlin for her editorial comments and design of this brochure, and to the Wilkes College Biology Department for providing funds for the re-matting of the Collection in archival materials.

Judith H. O'Toole, Director
Sordoni Art Gallery
Wilkes College

C. B. REIF COLLECTION OF NATURAL HISTORY PRINTS

As biologist, naturalist, collector, and painter, Dr. Charles Braddock Reif has had a interest in art, particularly in biological works. Along with his scientific studies he had four years of course work in the Art Department at the University of Minnesota, where he received his B.A. in 1935. His undergraduate adviser at Minnesota was Dr. Dwight E. Minnich, then Chairman of the Department of Zoology, who was also interested in natural history art. A strong friendship between the two men developed over the years, and they began a collection of diverse works as a joint project. Between 1920 and 1965, Dr. Minnich and his wife Helen traveled each year to Europe, where they bought art relating to natural history, fashion illustration, and book ornamentation. The Minnichs obtained extra copies of natural history prints which Dr. Reif then purchased for his own collection. The extent of Dr. Minnich's broad collection was described in "A Botanical Cabinet," an essay which Richard Campbell wrote for an exhibition of watercolors and prints from the Minnich Collection that celebrate the golden years of European flower illustration, 1550-1850 (Arts, The Minneapolis Society of Fine Arts, May, 1987, pp.11-13).

After receiving his Doctor of Philosophy degree in Zoology in 1941 at Minnesota, and coming to Wilkes College as Chairman of the biology Department in 1942, Dr. Reif maintained his interest in collecting natural history prints. About 1950, he began to develop what he called the "Minnich Collection of the Department of Biology of Wilkes College," an eclectic assemblage of prints in many media dating from 1485 through 1888. It was his aim to develop a collection of prints for the Biology Department before they were too difficult or expensive to obtain and as a way of conserving the heritage of past biologists and artists.

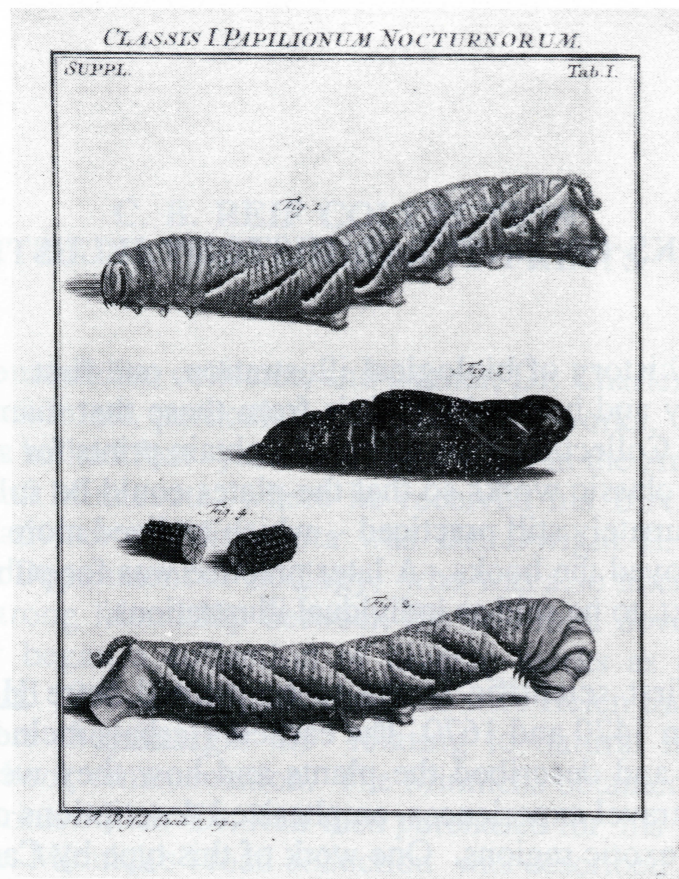
Dr. Reif regarded the collection as a teaching aid and he used it to present a lecture each year during the Biology seminar course, "History of Biology." Although the fundamental purpose of the collection was to teach natural history, the prints are also of interest to art historians and general historians. Wilkes College is indeed fortunate to have this valuable collection as a resource available to faculty and students.

REMARKS ON NATURAL HISTORY ILLUSTRATION

To study the history of biological illustration, one first examines early books on biology and horticulture. It is from these that many of the oldest prints in the Reif Collection were taken. To obtain prints for sale, dealers cut up copies of the classic works so that the plates could be sold separately, a scheme -- unfortunately still practiced -- which realized more money for the dealers but destroyed the books. A later practice was for publishers to print plates without text, to be sold as individual illustrations.

Among the first scientific books to be printed were Herbals, which appeared between 1470 and 1670. The earliest Herbals included plants with medicinal value and described the plants and how they were used; later books, based on travel experiences, emphasized descriptions of the flora and fauna of various exotic regions. One work of this type by Carolus Linnaeus (1707-78) was "Flora Lapponica" (1737) which described the plants of Lapland. Another book by Linnaeus, "Hortus Cliffortianus" (1737), described and illustrated interesting plants in the Amsterdam garden of George Clifford, a wealthy Dutch financier and horticulturist. With the discovery of sexuality in plants and successful use of sexual characteristics in plant classification by Linnaeus, medical books, known as Pharmacopoeia, diverged from the botanically oriented works, which became known as Florae. The descriptive and often beautiful illustrations in these medical works and Florae were prepared primarily to illustrate the major features of particular plants or animals. Their aesthetic value, although secondary in purpose, is frequently of great importance to the modern collector.

Various print media were developed to improve the quality of illustration. The earliest works used the carved end grain of wooden blocks to make line prints, which could be left black and white, or colored with supplementary blocks or by hand. Later methods used copper plates for engravings, etchings and aquatints. In the nineteenth century the water resist process of lithography was developed. Prints in the Reif Collection illustrate the various media that preceded photography and the study of these prints reveals the historical progress of the accurate representation of plants and animals. This is especially evident in regard to birds: in early days only dead



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specimens, sometimes stuffed and mounted, were studied, and these were often placed in positions not true to life. An example of this is the work of Mark Catesby, an Englishman who worked in the early eighteenth century and who has been called the Founder of American Ornithology. As Roger Tory Peterson, American artist and author has commented:

Catesby's drawings are typical of those being done in Europe at that time. They are meticulously executed, but archaic and crude with little semblance of sound structural drawing. They do not for a moment give us the impression of living birds. Their antique captions give these quaint drawings a historical interest, but little more. ("Baby Elephant Folio," Audubon's Birds of America, 1981, Introduction, page 10.)

In the late 18th and 19th centuries more realistic representations were obtained by drawing from life, or from specimens in life-like poses, placed in natural settings of flowers and scenery. Similarly, early botanical illustrations of plants often failed to provide structural details while later works sometimes introduced too many details.

During the early period of scientific illustrations, the artist responsible for the drawing remained relatively anonymous. In later years artists such as Wilson, Gould, and Audubon were responsible for both the descriptive text and the original art work, and the engravers or lithographers undertook reproduction and publication of the artist's work; but naturalists often became involved in all phases of publication, from collecting and drawing to fundraising, printing, and sales. The books then published were magnificent works that represented the combined efforts of artists, printers, and publishers.

The evolution of the international scientific naming system is illustrated in these prints. In the period before 1750 the naming of plants and animals was not consistent. Then in 1753 Carolus Linnaeus introduced the binominal system of classification, which gives every organism two names, a binominal which must be in correct Latin form and written in italics. First is the name of the genus -- e.g.: Lilium -- and the second indicates the species -- e.g.: superbum -- a superb or outstanding lily. The generic name is capitalized; the specific name is not. The name of the person to first describe the species follows, and completes the modern scientific name. In this case, the complete name is written as Lilium superbum Linnaeus, followed by the common name, "Turk's Cap Lilly."

Common names vary in every country; and, although scientific names remain constant, opinion concerning the correct name for an organism may change, and the name given to the plant or animal on an early print may no longer be in use. For this reason corrections have been made on the checklist to reflect changes in nomenclature and in expert opinion. A print may show only a common name, or scientific name, or both. In some cases no name is used. Such aspects make the study of this collection interesting and valuable. The C. B. Reif Collection and this exhibition provide a sample of the natural history art that is available to the general public and to researchers and scholars at museums and libraries throughout the world.

Robert E. Ogren, Ph. D.
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Phenicopterus

The Flamingo