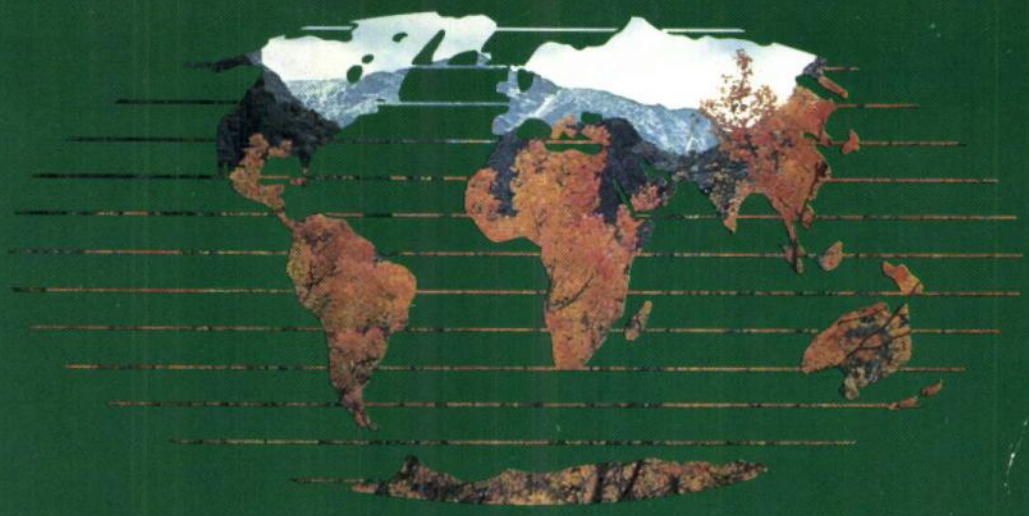
For the CONSERVATION *of* EARTH



Vance Martin
Editor

For the

CONSERVATION *of* EARTH

WORLD WILDERNESS INVENTORY

Wilderness areas remaining in the world

The result of inventory conducted for the 4th World Wilderness Congress.

For the CONSERVATION *of* EARTH

Vance Martin
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Fulcrum, Inc.
Golden, Colorado

Book and Cover Design by
Jody Chapel
Cover to Cover Design

Library of Congress Cataloging-in-Publication Data

World Wilderness Congress (4th: 1987: Denver, Colo.)
For the Conservation of Earth

1. Nature conservation—Congresses. 2. Natural areas—Congresses. 3. Wilderness areas—Congresses.
I. Martin, Vance. II. Title.

QH75.A1W67 1987 333.78'2 88-16319
ISBN 1-55591-026-2

Printed in the United States of America
10 9 8 7 6 5 4 3 2

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nineteenth century, for instance, that most materialistic and deterministic and mechanistic of all centuries, we find such persons followed their dreams as Abraham Lincoln, who has left a record of them, Dostoyevski, Robert Lewis Stevenson(who dreamt the plot of Dr. Jeckyl and Mr. Hyde) and Emily Brontë.

Dreams also are filled with symbols drawn from nature. Earthquakes, forests, streams, rivers, meadows and flowers abound. As an analyst I could always tell how well someone is related to their unconscious psyche by examining their dreams to see if they are in a good relationship with the animals that appeared in their dreams. Just five days ago a man brought to me a dream with a sketch of a magnificent spider web. In Jungian understanding, this is a dream of that center I mentioned earlier which, like a spider, catches disparate things and brings them together into its web and its center.

Does nature dream? We know that animals dream. Maybe Jung is right. Maybe everything dreams. I would rather quote the American Indian shaman, Lame Dear: "A human being is many things. We must learn to be different, to feel and taste the manifold things that are us. The animals and plants are taught by Wakantonka what to do. They are not alike. They all have their own ways—the leaves of one plant on the same stem. None is exactly alike. The Great Spirit likes it that way. All creatures exist for a purpose. Even an ant knows what that purpose is, not with its brain, but somehow it knows. Only human beings have come to a point where they no longer know why they exist. They don't use their brains and they have forgotten the secret knowledge of their bodies and their senses and their dreams." Whether we have recognized it or not, many people are conscious today of such hunger in themselves. Our souls are empty and they yearn to be filled.

20,000 YEARS OF ANIMAL ART

David M. Lank

Our legacy of wildlife art provides the most enduring record of how man has seen—and interacted with—the world around him. In the earlier years, the artistic outpouring seldom consciously segregated man from his world, for man never questioned that he was one with his surroundings. Reviewing 20,000 years of creativity is, therefore, not only an aesthetically delightful exercise, but also a trustworthy way of gaining insight into our own social roots. It is my firm

conviction that any civilization worth its salt must be judged on how it views and treats the world around it. The written record covers too short a time span, and changes of words, language and meaning distort our ability to understand fully the tempers of people past. The visual record is a far more trustworthy guide.

It is a rather extraordinary task to present 20,000 years of art in a paper such as this covering all cultures and all mediums. You will therefore be glad to know that during the introductory paragraph we covered the first 13,000 years. It is a shame to gloss over time and art, the two elements that most firmly establish our place in the total scheme of things.

We are part of the animal kingdom, the biosphere and the ecosystem. But the dividing line between man and animal is now being examined more closely than ever before. Our traditions taught us that we were "Man the Thinker." We now have extensive empirical data showing that a lot of animals can consciously think, at least to a limited extent. We have long talked about "Man the Toolmaker" as a dividing criterion, but then we see Secretary birds grabbing large pebbles and hurling them at ostrich eggs. Chimpanzees and the great apes pile up chairs to get at the last banana, and the Darwinian woodpecker finch uses a tiny thorn to pry a grub out of a rotting Palosanto tree in the Galapagos Islands. So, "Man the Toolmaker" isn't quite as good as it used to be to separate us from the rest of the animal world.

What about "Man the Artist?" Man the artist is unique. I do not consider finger painting by a chimpanzee to qualify, even though it is more than qualified to hang in some of the more trendy art galleries.

Long before man had been dissected and studied by anthropologists and sociologists, before we were conscious of skin color or contending religions, the artistic impulse appears to have been at the forefront of our entire civilizing evolution. And art has continued as a vital part of all cultures over the 20 millennia since man emerged from prehistory into protohistory. In the limestone caves of Lascaux and Altamira and the Pyrenees region between France and northern Spain, some of the greatest animal art of all time was created *NOT* to be seen. The artists selected the darkest almost impenetrable recesses where few could have gone. Art was the vehicle chosen to underline man's inexorable participation in nature—man and animals meant man and life.

There is an artistic message that comes across the centuries. The various species, the movement, the character are all forcefully depicted yet sparse in detail. You cannot see every hair. The artists felt no need for the microscopic detail which tragically, from my prejudiced point of view, seems to be the leading religion of many of today's wildlife artists. Let me sound a cautionary note: most of the Limited Edition Art Prints—or prints in unlimited numbers with limited art—are to serious art what pop stars are to serious music.

In cave paintings the essence of the animal was there, whether on monumental or diminutive scale. This applied to primitive sculpture, whether in clay modeling of an extinct European bison from 13,000 B.C. or a flotilla of tiny seabirds of ivory from the Inuits of St. Lawrence Island in the Bering Sea.

The currents of art run deep. After thousands of years of isolation, the Quechua Indians of the Inca Empire would put little totemic figures of llamas into graves for use in the afterlife by the deceased. Parallels can be found in all primitive cultures throughout the world. Primitive animal art was less a celebration of the animal itself than it was an attempt to integrate animal life into human activity. Animal art, as we shall see, assumes a very different meaning as we enter the modern era.

Styles obviously change. The Egyptians knew how to draw, but their style appears distorted and flat to our eyes. They understood that perspective is a trick of the eye and that the farther away something is, which is the same size as you are, the smaller it appears, not the smaller it becomes. To compensate for this optical distortion, they made all of the cattle the same size, even though some are farther removed from the viewer than others. And yet in their art you can feel the powerful movement of that herd—almost hear the lowing—as it walks to its destination. It would appear similarly when they depict a gaggle of geese—the rules of perspective that we insist on today would be ignored. But the bustle and the imminent chaos would still be there.

I use the Egyptian experience to emphasize that there is no one right way of making art. There are lots of different approaches, each of which, when excellently done and conceived in the right spirit, is equally meritorious.

The Greeks knew that art and utility were not in conflict. Some of the finest classical art is to be found on pottery intended for domestic use. For example, there is this wonderful black-figure kylix of Dionysius returning on his little vessel with the grape arbor mast. Joyously guiding him home are dolphins leaping and sporting. They are not "accurate" in the modern Richard Ellis sense of underwater painting, but there is no doubt as to what they are doing.

The Scythians were considered barbarian nomads, but they appreciated the work of their captured Greek goldsmiths. On a 2,000-year-old pectoral, there is a 3/4-inch long sheep being milked, which is a study of the mutuality of interest between flock and shepherd. In no manner should size determine artistic greatness.

In the Pompeiian frescoes, even with the passage of two millennia, one has no difficulty at all in recognizing a magpie or a guinea fowl. There are no guinea fowl in southern Italy, nor have there ever been. It is an imported species from Africa. Animal art begins telling us where people traveled and traded. When Vesuvius erupted in 79 A.D., the magnificent Roman frescoes of Pompeii and Herculaneum were snuffed out, and for almost 1,800 years were lost.

The development of our Western animal art really sprang from indigenous roots whose continuity was snipped off from the classical world. The thrust of Western animal art has been profoundly influenced by *Genesis* 1:28, in which God gave man "dominion over" everything that flies, swims, walks and crawls. Not surprisingly, this conceit led to a corpus of art with animals in the service of man, not of animals in their own right.

Above all, animals represented food. Food meant hunting or domestication.

Food also meant cooking and eating. There are thousands of examples of animals in art depicted in one of these settings. Even as great an artist as Rembrandt could portray a flayed ox.

With status came institutionalization of killing. There is a subtle difference implied between killing for food—hunting—and killing for fun—sport. Based on hunting paintings, if you are a scorekeeper, the animals were not winning. They are usually shown at the wrong end of someone's spear, gun, trap, net or fishing rod. Such paintings number in the thousands.

In all such cases the animals were in the service of man. Overwhelmingly, animals in their own right were ignored. Great painters such as Titian, Tintoretto and most of those we associate with the Italian Renaissance boasted about the fact that they knew nothing about animal anatomy because the church taught that animals had no soul and, therefore, animals were beneath the dignity of a serious artist. The examples of awful animal renderings in so-called masterpieces are truly embarrassing. Leonardo, Albrecht Dürer and Bruegel are real exceptions.

In order to trace the evolution of animal art as we know it today, we find the real thread of continuity, tenuous though it might be, in books. Some of the earliest admittedly paralleled the developments in other art forms. The illuminated manuscripts in the sumptuous Books of Hours for the Duc de Berry have gem-like butterflies, flowers and birds in the margins for use as decorations, religious symbols or real participants in historical events—but always in the service of man. Not surprisingly, some of the earliest books containing animal art dealt with hunting and falconry.

But sometimes the tables were turned—engravings of man in the services of animals. One of the most delightful examples dates from 1633 in Olina's book on birds, presenting how to recognize them, take care of them, feed them and—back to the service of man—how to eat them. One plate on how "to stimulate the nightingale to sing" shows several clusters of musicians on lutes, dulcimers and celestes playing for their stimulation. Another plate shows how to prepare special food in a noble's kitchen, but another gives graphic instructions on how to impale little birds on a tree, before roasting 16 at a time on a skewer, before popping them into your mouth.

Then as now, art needed patrons. The church—directly and indirectly—was the largest patron and animals, therefore, could not expect much support. Ironically, a pre-Christian author was largely responsible for the lack of change in attitudes. Pliny, who died in the eruption of Vesuvius, wrote in his *History of the World* about whales that were 600 arpents long and three feet wide which, conveniently, lived in the deserts of Arabia where verification was difficult. This total divergence of fact and reason suited the church just fine. Down to 1634 with the first English translation, Pliny's 2,000 year out-of-date natural history was widely accepted as a sort of parallel gospel.

But the first glimmerings of what we would call science were discernible by the mid-sixteenth century. Pierre Belon of France and Conrad Gesner of Zurich

produced major works which included hundreds of woodcuts of birds, animals and fish to accompany texts that, while incorporating some new material, relied heavily on Pliny, Aristotle and even earlier naturalists. It was Ulysses Aldrovandus of Bologna who was the first man ever to hold the title professor of natural history as opposed to natural philosophy. His multivolume sixteenth century work included firsthand field knowledge, and represents a significant pushing back of the frontiers of ignorance.

Woodcuts from the sixteenth century are stiff, but only because of the technical limitations imposed by the grain against and across which the engraver had to incise his lines. The original watercolours from which the cuts were made show that art was filled with subtle and fluid lines when the medium permitted.

Before being too quick to criticize the crude-looking cuts, let's admit that most of the species are instantly recognizable, which was no mean feat without the aid of colour. And remember, too, that 400 years ago, when these were done, Copernicus was still alive, Kepler had not yet discovered the laws of planetary motion, Newton had not yet been hit on the head by the apple, Descartes had not yet begun to think and therefore wasn't, the earth—not the sun—was the center of the official universe and, of course, Galileo had not been forced to recant. The woodcuts in the books of Belon, Gesner, Aldrovandus and their contemporaries are a visual link with the dawning of intellectual scientific thought in our Western civilization. In effect, they come from a world as different from ours as are the planets revealed by modern space probes.

Freedom of artistic expression in books was accelerated by the introduction of new technology. This is part of the human experience: technology allows leaps forward, not just leaps backward.

Copper engravings were used successfully for the first time at the end of the sixteenth and beginning of the seventeenth centuries. The birds and fish found in the books of Willoughby and Ray are a quantum jump beyond the woodcuts on which many were based. The most obvious next step was to combine the freedom allowed by copper with the artistic potential inherent in colour.

The first natural history book published with colour plates (as opposed to black and white intended for future colouring) was Eleazar Albin's *Natural History of Birds* from 1728 to 1731. On the title page of the first edition we read that the book was "published by the author, Eleazar Albin and carefully coloured by his daughter and self." She was so much better an artist that her name was taken off the title page of the second edition by her jealous father. In Elizabeth's work one notices not just a bird, but decorative elements that add an appropriate touch to the scene.

Mark Catesby was working on *A Natural History of Carolina, Florida and the Bahama Islands*, the first comprehensive natural history of North America. As a botanist Catesby taught himself how to engrave plates. He was beyond his predecessors in that he introduced birds and animals doing something, rather than just sitting there. His meadowlark and blue jay are classic examples of poses that show an activity associated with a particular species.

Catesby did magnificent plates of snakes, and this brings to mind the fact that we in North America tend to be species-oriented rather than art-oriented. A really bad painting of a bald eagle will surely sell more easily that the greatest portrait of a Wampum snake. Catesby achieved new levels of layout and artistry in his snake plates, but they can hardly be called popular.

Catesby also pioneered placing his animals and birds into settings that incorporated appropriate ecological elements. For this he is often called the "Colonial Audubon." If some of his figures are less than perfect, we can kindly remember that they had been collected 20 years previously and had been stored in kegs of dark navy rum. Catesby had to reconstruct a lifelike rendering from a soggy mess and copious field notes.

The evolution of animal art picked up speed as we approached the close of the eighteenth century. Peter Paillous was producing imposing life-sized raptors and water fowl for Thomas Pennant's *British Zoology*, one of the most important books on natural history of all time. Perspective, foreshortening, creative torsion and tension in the bodies were now standard elements.

At that time, there were even artists/naturalists who were trying to make a living in the publication of natural history books. Edward Donovan was one such entrepreneur. He could rightly point out that the more than 2,000 hand-coloured copper engravings in his 30-odd volumes were individual works of art. The underlying engraving was so faint that it basically ceased influencing the tonality of the finished plate. He laid on the colours in lavish amounts and completed the detail where necessary with a single-hair brush. On his insects, he added gold leaf and individually varnished the wings of dragonflies. The process was too expensive and too time-consuming to be economically viable, and so Donovan's books are considered among serious collectors to be little more than highly treasured oddities.

The artist who had the biggest impact was Donovan's contemporary, Thomas Bewick from Newcastle-upon-Tyne. Bewick's *Birds and Quadrupeds* revolutionized the art of the time and the art in books. By the simple act of turning the wood blocks on end to remove the impediment imposed by parallel grain, he was able to move his graver with the same freedom as would a silversmith. His birds—drawn from life—were brilliantly alive, and the textures of feather, rock, leaf and water were wondrously differentiated. Everything was accomplished with only black and white lines. His creatures were seldom more than an inch or two long, frequently far less, but they proved that monumental art could be achieved on a miniature scale.

Bewick is worth mentioning for another special reason. In 1790 he recognized the uniqueness of his thumbprint, and used an engraving of it as a receipt for copies of his *Fables of Aesop*. This was a century before Francis Galton published his great study on thumbprints which laid the foundation for a branch of forensic science. A hundred years earlier, an artist had anticipated a scientist. This is one of the reasons why I am pleased that art is treated seriously at the 4th World Wilderness Congress, because artists have every bit as much right to have

input into the environmental consciousness as do those of a scientific bent.

The turning point between the old and the new was focused on Alexander Wilson. After this Scottish poet wrote some unnecessarily accurate verses about the good burghers of Paisley, he found himself on the next boat to America, where he devoted the rest of his life to the first comprehensive bird book of the new world. As he had been trained as a poet, it is not surprising that his text was magnificent. As an artist, at his best he was better than any who had come before, but at his worst he had little to commend him. Yet, the whole of Philadelphia fell over themselves to become his champion and his patron. Ironically, the adulation of Wilson closed the eyes of Americans to the greatness of John James Audubon who, when he had seen Wilson's birds, rightly published his own.

Audubon's start was quite modest. After Wilson's early death, Charles Lucien Bonaparte published what is known as *The Continuation of Wilson*, being those birds that the Scot had not seen. One of the plates in Bonaparte's book was of the great crow blackbird, known to us as the boat-tailed grackle. In the picture, the male in the foreground was by Rider. It was obviously nailed to the branch. There was no accuracy or truth in the rendering of the body or feathers, and the muscle and skeletal structures were completely lacking in conviction. It was, in short, a typical bird painting of the period. However, the female in the background could not have been done by the same artist, and it wasn't. The bird is alive, full of tension, and exhibits the essence of species. And it was the first painting by Audubon to be published.

But Philadelphia scornfully rejected the man who would change our way of viewing wildlife—and by extension, the way we see ourselves in relation to wildlife. Audubon took his portfolios over to Edinburgh and London, where he was to publish the greatest bird book of all time, *The Birds of America*, four double-elephant volumes with 435 hand-coloured copper plates.

To say that Audubon was a mere illustrator or just a wildlife painter says more about the critic than it does about this man of towering genius. History had, however, perhaps been too lavish in its praise of Audubon's originality, for many of the things that Audubon is credited with were actually pioneered by others. Others had painted birds life-size, but not up to the size of the whooping crane. Others had used proper ecological backgrounds, but never had they been so spectacular. But working away in Henderson, Kentucky and other backwoods areas, Audubon had not really had access to what others had done before. He independently arrived at the solutions and, in the process, far surpassed anything done by anyone before.

Time and again its so-called distortions have been proven incredibly accurate through the advent of high-speed photography. And time and again have critics pointed out specific faults in a small number of plates in order to condemn the whole. Despite admitted failures and even occasional plagiarism, it can be said that John James Audubon marks the transition from the old to the modern, and that he represents the first truly great wildlife artist in history.

Audubon did not just represent wildlife art; he represented art. His Great

Eskimo Curlew is a case in point. The upward motion of the neck and the slight swelling of the guttural sack tell of notes you can hear if your eyes become your ears. The angle of the beak is echoed by the countermovement of the waving grasses. In his plate of the yellow-breasted chat there is a visual bond between the male and the female on the nest. The two birds flying with their feet hanging down are not a mistake— that is the way chats fly during their nuptial dance. We are seeing birds as they are in nature, not artificially composed decorations conforming to the dictates of some passing taste.

The Birds of America overshadowed Audubon's other great project, *The Viviparous Quadrupeds of North America*, perhaps the greatest animal book of all time. An author stated recently in a leading wildlife magazine that Audubon did not know his animals as well as he knew his birds. To show that the poses were contorted, the author chose as his example the grey fox. I once spent a day with a grey fox. Every time it changed direction or something caught its attention, the fox would hunch his back and raise his paw for just a split second. By studying the picture carefully, at the extreme top right of the plate you can notice a small feather wafting down. The bird has just escaped, and the fox strikes the exact pose I had seen so fleetingly. Genius manifests itself in unexpected ways. Audubon's powers of observation were phenomenal, and so was his art. Give genius a chance, and mere talent is silenced.

Once Audubon—and his sons Victor and John Woodhouse—had showed the way, there were many other artists waiting in the wings. John Gould in England was one person who immediately understood the potential in publishing animal and bird art in this new form. He himself rarely completed a painting although surviving sketches and watercolours indicate that he possessed a fair amount of talent. Rather, he engaged the services of others, including his wife Elizabeth and artists such as Edward Lear of *The Owl and the Pussycat* fame. Hart and Richter were two more of the artists who worked for Gould. Altogether Gould published 40 folio volumes containing 2,999 hand-coloured lithographs which, for quality and consistency, constitute the most ambitious publishing venture undertaken during Victorian times.

The greatest of the artists who worked for Gould was Joseph Wolf, known in his day as "peerless," "impeccable" and by other similarly adulatory words. Wolf was only 20 when he did his famous portraits of falcons for *A Treatise on Falconry*, before emigrating from Germany to England. By the time he died in 1899 he had completed thousands of paintings and sketches, none of which were more beautiful than those done for Daniel Giraud Elliot's monographs of the *Pheasants, Birds of Paradise*, and *The Cat Family*, considered by many today to be the most sumptuous books of all time.

The finished plates were hand-coloured lithographs that had been translated onto stone from Wolf's original charcoal sketches by two other artists, Joseph Smit and John Keulemans. From the artistic point of view, these sketches far exceed the final product, because they bring you face to face with that once-in-a-lifetime microsecond when the artist sees and experiences nature. You share

his reactions before he has a chance to go back into the studio to polish, change, edit and thereby lose the magic of the moment.

In Wolf, art and science were finally reconciled. The artistic approach was carried on by younger men such as Keulemans who, during a working career that spanned 50 years, produced more than 30,000 paintings and drawings of remarkable quality. But Keulemans was the sunset of the Victorian style. He overlapped with a newcomer, Archibald Thorburn, who can be called the first of the truly modern painters. In his early paintings for Lord Lilford's *Coloured Figures of the Birds of the British Islands* (1885 to 1897), we find for the first time an understanding of the role of light. Thorburn saw reflection and refraction and light diffused by differing atmospheres. He also understood how birds flew and floated, and how they interacted with gravity. He built up his paintings in planes of perspective that started at the viewer's feet, so that the viewer became a participant in the painting, not merely an observer. In Thorburn's paintings the animals owe nothing to man. There are no cooks, farmers, hunters or sportsmen. There are only animals for their own sake. Perhaps this signaled a new degree of maturity in our civilization.

As animal art concentrated less on man and more on animals, the vast majority of works came from artists whose mother tongues were not Romance languages. The French, Italians, Spaniards and Portuguese did not paint wildlife. This strange fact may in part be accounted for by a parallel lack in any of their languages of a word for "wilderness." Each has a phrase or two that defines part of the concept, but nothing that is all-embracing. No single word comes down from the time when wilderness still existed in the Mediterranean world. Statistically, out of all proportion to their populations, the greatest animal painters have come from Northern countries: England, Scotland, Germany, Holland, Canada, the United States and Scandinavia. In fact, the greatest animal painter of all was Bruno Liljefors of Sweden, and in my opinion the finest bird painter was a Swiss, Leo-Paul Robert.

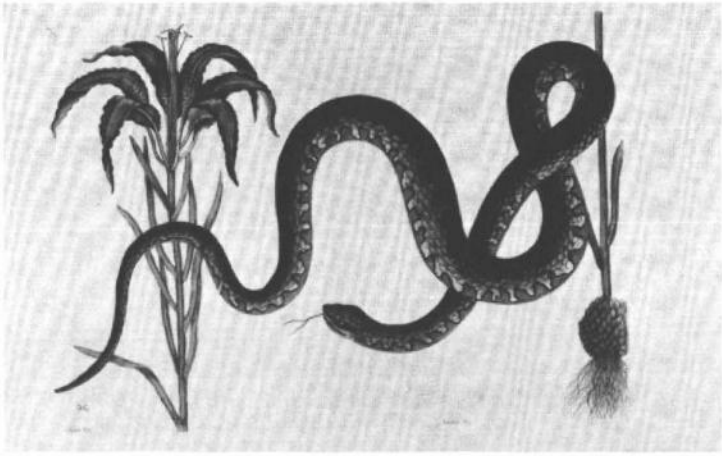
As unbelievable as Robert's bird paintings were, he always claimed that his greatest masterpieces were the 500 life-sized portraits of the caterpillars of his native Jura Mountains. Just as Catesby's snakes proved two centuries earlier, Robert's caterpillars emphasize how we tend to be species-oriented rather than art-oriented.

For centuries, animals in art played a subservient role and, within the total framework of art, animal art—or more accurately, animals in art—did not constitute a very large proportion. In fact, a case can be made for surprise as to how much there was, given the lingering prejudice of *Genesis* and the divinely bestowed "dominion." By the nineteenth century, quality and quantity of animal art took a quantum leap forward. Who were these people to whom we owe so much? I've described some, but many remain anonymous. In 1834, in Edinburgh, there appeared the first volume of *The Naturalist's Library*, an encyclopedic work that would span a decade and consist of 40 volumes. There were over 1,700 hand-coloured, copper engravings in each edition, and there were an

average of at least 5,000 copies of each volume. Simple mathematics shows that almost 50 million beautifully hand-coloured engravings were required for this one publishing venture alone. In one of the volumes there was an interesting publisher's advertisement which stated: "Altogether independent of the gratification which these plates have given to the public, the publication has opened up a source of agreeable, permanent, and profitable employment, to a very numerous class of most deserving and industrious persons in Edinburgh, whose rank in society and whose education precluded them from applying themselves readily to any other occupation than that of colouring." Men and women of towering genius have combined with the lowest of the low to bring us 400 years of animal art in books.

The importance of the development of animal art in books cannot be overestimated, as the chief repository of animal representation was found in the engravings and later the lithographs that accompanied a vast outpouring of books dealing with science, travel and sport. It has been rightly remarked that, until the popularization of the camera, more about science was learned through the sights of a gun than through any scientific instrument.

The patronage for wildlife books—even spectacular folios with hand-colored lithographed plates—was relatively widespread compared to the support given to wildlife paintings. It was only in 1874, after all, that the U.S. Congress finally authorized the unheard-of expenditure if $10,000 for a large painting of the Grand Canyon, by Thomas Moran, to hang in the Senate lobby. Even though it is dangerous to ascribe precise motives to the actions of others taken in other times, perhaps we can state that the Grand Canyon painting does mark a turning point in the official view of the importance of wilderness, and by extension, of wildlife. Since then the interest in and appreciation of wildlife and wilderness art has grown to the extraordinary levels they enjoy today.



© *Drawing by Catesby, ca. 1731*