An American Naturalist

American painter Martin Johnson Heade (1819–1904) specialized in landscapes, seascapes, and still lifes during his long career. Born the son of a farmer in rural Bucks County, Pennsylvania, Heade began to paint in his late teens after he received art training from a neighbor. At age twenty-four, Heade launched a career as a portrait painter and spent the next fifteen years traveling around the United States and Europe in search of commissions. He was nearly forty years old when he began to paint the New England coastline and salt marshes, subjects whose light and atmosphere would preoccupy him for several years.

Heade began painting hummingbirds in 1862. He had long been fascinated by the tiny birds’ quivering movements and jewel-like plumage. The next year, in 1863, he journeyed to Brazil on the first of three expeditions he made to South and Central America. At that time many artists and scientists undertook similar trips to study, draw, and document the exotic plants and animals of the lush tropical rain forests. Heade was particularly interested in the many types of hummingbirds in Brazil, as only the ruby-throated species was found in the northeastern United States. In Brazil, he began a series of small pictures called “The Gems of Brazil,” which depicts the great variety of hummingbirds in landscape settings.

In the 1870s, after his final visit to the tropics, Heade lived in New York City. There, relying on his memory as well as on the nature studies he made during his travels, he began to paint another series of hummingbirds with orchids in their natural habitat. This group of works poetically combines Heade’s interests in botany, birds, and landscape. *Cattleya Orchid and Three Hummingbirds* is a dazzling example of his inventive compositions.

“From early boyhood I have been almost a monomaniac on hummingbirds.”

Martin Johnson Heade

A Close-up View of Nature

Heade’s painting offers an intimate glimpse into a corner of nature. Precisely rendered, the flowers and birds seem to come alive.

**Look closely to find:**

- **Three hummingbirds**, a Sappho Comet (green with a yellow throat and brilliant red tail feathers) and two Brazilian Amethysts (green with pink throats)
- **A hummingbird nest**
- **The Cattleya orchid**, a bright pinkish-purple flower that is much sought after by orchid collectors and is found in the wild only in Brazil
- **Moss hanging from tree branches**
- **The mist of the jungle atmosphere**

**Imagine you have traveled to this place**

- **What sounds might you hear?**
- **What might you smell?**
- **Describe something that would feel smooth or rough.**
- **How would you dress for this trip?**
- **When a rainstorm comes, where might the birds go?**
Hummmmm…Hummmmm…

Hummingbirds got their name because their wings vibrate so rapidly that they make a humming sound. Their wings can beat at a rate of up to two hundred times per second, and the birds can fly through the air at speeds of up to sixty miles per hour. Also, they are the only bird that can fly backward. The smallest of all birds, hummingbirds can weigh as little as two grams. (That’s as light as a penny!) Since they have no sense of smell, hummingbirds find their food by sight. There are approximately 340 different kinds of hummingbirds, and they are often called “gems” or “jewels” because of their iridescent feathers.

Heade painted hummingbirds from life, unlike some artists who preferred to use stuffed birds for models. Imagine how difficult it was to study such glittering, fluttering creatures!

“In the midst of the foliage [the hummingbird] appeared like a piece of lapis lazuli surrounded by emeralds. . . . Everywhere throughout Brazil this little winged gem . . . abounds.”
James C. Fletcher, *Brazil and the Brazilians*, 1857
Audubon’s Birds

The French American ornithologist, naturalist, and painter John James Audubon (1785–1851) gave himself a challenge: to record all species of birds in North America. Using the observation skills of an artist and a scientist, Audubon traveled widely and made detailed watercolor, pastel, and graphite drawings of nearly five hundred types of birds. He vividly depicted each bird in its natural habitat, often showing it in motion—hunting, preening, fighting, or flying—and he portrayed each bird life-size. To make the flamingo, swan, and other large birds fit on the page, he presented them in bent positions. Audubon’s lifetime of work culminated in *The Birds of America* (1827–1839), an important book that documents all types of birds with 435 hand-colored engravings.

Birding Journal

Look out a window, wander around your yard, or take a walk in your neighborhood or local park. Find a place to sit and quietly observe the world around you. Use a pad of paper or notebook, colored pencils, and a camera to record your observations with words and pictures.

**Study** the birds you see and take field notes. Describe the colors and shapes of their feet, beaks, and feathers. **Observe** their behaviors. How do they fly, eat, and interact with one another and their surroundings? **Note** the sounds they make. **Imagine** how the world looks from a bird’s perspective. **Write** the date and time of day on your field notes. **Make** a drawing of the birds or take a photograph.

**Reflect:** What did you learn from this experience? Did you see something that you’ve never noticed before? What else would you like to know?

Repeat this activity every day for a week, once a week or once a month for a year, or whenever you want to explore nature and learn about birds.

“I know I am not a scholar, but meantime I am aware that no man living knows better than I do the habits of our birds. . . . With the assistance of my old journals and memorandum-books which were written on the spot, I can at least put down plain truths which might be useful and perhaps interesting.” *John James Audubon*