13.1 Carolus Linnaeus

Carl Linnaeus is sometimes called the Father of Taxonomy. He devoted most of his life to creating a workable naming system for every known plant, animal, and mineral. He was not the first person to try to create such a system, but he was the first one to do it so effectively. His published volumes became the standard for other scientists. His work is the basis for the scientific classification system still used today.

Pastor or doctor?



In 1707, Carl Linnaeus was born in a small town in southern Sweden. His father was a Lutheran pastor and an avid gardener. By the age of five, Carl had a garden of his own. In school, he was not a very good student, but he loved anything to do

with nature.

His parents wanted him to become a pastor like his father, but his teachers advised against it. A wealthy doctor was so impressed with Carl's knowledge of plants that he agreed to send Carl to college to become a doctor. This was a natural career choice for him since, at that time, doctors were expected to make their own drugs from plants.

In 1727, Carl went to the University of Lund to study medicine. After one year, he transferred to the University of Uppsala, the best school in Sweden. Throughout his life, Carl had a way of making friends with rich and important people. He always found someone willing to pay for his education and his scientific expeditions. Sometimes he tutored, gave lectures, or worked in their gardens as repayment.

Traveling and writing

Between 1731 and 1735, Linnaeus traveled to Lapland and other remote areas of Sweden collecting rare plants and gathering information. He published detailed accounts of his trips.

In 1735, he proposed to Sara Elisabeth Moraea. Her father, a doctor, refused to let Linnaeus marry his daughter until he completed his medical degree. Linnaeus went to the Netherlands to a university that was known for giving quick exams. Within a few days, he had his license to practice medicine. Over the next few years, he worked at a number of botanical gardens in Amsterdam, England, and Paris. His reputation as an expert was spreading. He returned to his fiancé, and the two were married in 1739.

Fame and success

In 1741, Linnaeus became a professor at the University of Uppsala. He was responsible for the care of the botanical garden, plus he taught botany and natural history. Students loved him and came from all over Europe to take his courses. In 1747, he was appointed physician to the royal family, a great honor. In 1749, he was named as the head of the university. In 1757, the king of Sweden made Linnaeus a nobleman, and he changed his name to Carl von Linne. When he was in his sixties, he suffered a series of strokes. He never regained his health and died in 1778 at age seventy-one.

His Legacy

Before Linnaeus, plants had long, difficult Latin names. The same plant often had more than one name. There was a huge need to simplify the naming system and make it the same everywhere. Linnaeus identified about 7,700 known plants and gave each one a two-part name. The first was a Latin name for the genus, and the second was a more specific name for the species. He did the same thing for about 4,400 known animals. He published his names for plants in 1753 and for animals in 1758. Those names are still used today.

Linnaeus also created a classification system. He divided plants and animals into two kingdoms and grouped them based upon observable characteristics. Even though some of the groups have changed over the last two centuries, the basic plan was his.

His classification of plants was a little radical for his time. He was the first person to observe that plants reproduced sexually. He grouped plants according to the number of stamens and pistils they had and where these parts were located. Many people thought it was scandalous to talk about male and female parts of plants. When one doctor criticized him severely, Linnaeus got even by naming an ugly little weed after the man.

Reading Reflection

- Please highlight each question in a different color and then highlight where you foind that answer with the same color highlighter in the reading.
- 1. Why was medical school a good choice for Linnaeus?
- 2. How was the son of a poor pastor able to afford to go to the best university in Sweden?
- 3. Why do you think that Dr. Moraea would not let Linnaeus marry his daughter until completed his medical degree?
- 4. List three of Linnaeus' achievements during his life at the University of Uppsala.
- 5. Why was Linnaeus' system for naming plants important?
- 6. What observation did Linnaeus make that offended some people of his time
- 7. How was Linnaeus's classification system different from others that had been done?