

## "Illustration of Biological Specimens"

By Prof. A. Shashikala

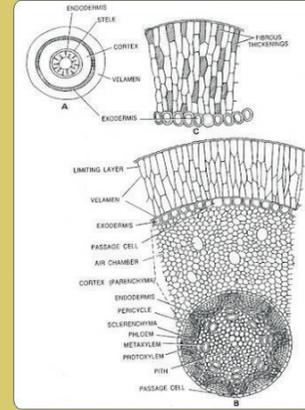


**Scientific illustrations** are one of the possible outcomes of a natural history museum's research, communication or dissemination efforts. It is common that, given their role in science representation and dissemination, illustrations feature and occupy large areas of exhibition space, replacing text information.



Biological illustration is the use of technical illustration to visually communicate the structure and specific details of biological subjects of study. This can be used to demonstrate anatomy, explain biological functions or interactions, direct surgical

procedures, distinguish species, and other applications. The scope of biological illustration can range from the whole organism level to microscopic.



Biological illustrations can be found in use in history and anatomy textbooks, nature guides, natural history museums, scientific magazines and journals, botanical gardens, zoos and aquariums, surgical training manuals, and many more applications. Biological illustration can be pursued as a degree in the undergraduate, graduate, and technical college levels.

Biological illustration has traditionally employed the techniques of using carbon dust, colour, stipple pen and ink, lithography, watercolour and gouache; however, digital illustration has recently become more important in the field.

A dip pen or nib pen usually consists of a metal nib with capillary channels like those of fountain pen nibs, mounted in a handle or holder, often made of wood. Other materials can be used for the holder, including bone, metal, and plastic;

some pens are made entirely of glass. Generally, dip pens have no ink reservoir, so the user must recharge the ink from an ink bowl or bottle to continue drawing or writing. There are simple, tiny tubular reservoirs that illustrators sometimes clip onto dip pens, which allow drawing for several minutes without recharging the nib.

Drawing with a Crow Quill pen is beginning to be a lost art form. Aside from the traditional looking aesthetic this exercise helps to develop hand skills that are useful for all drawing medium. It is the value of learning to control the pressure that you apply to the support one



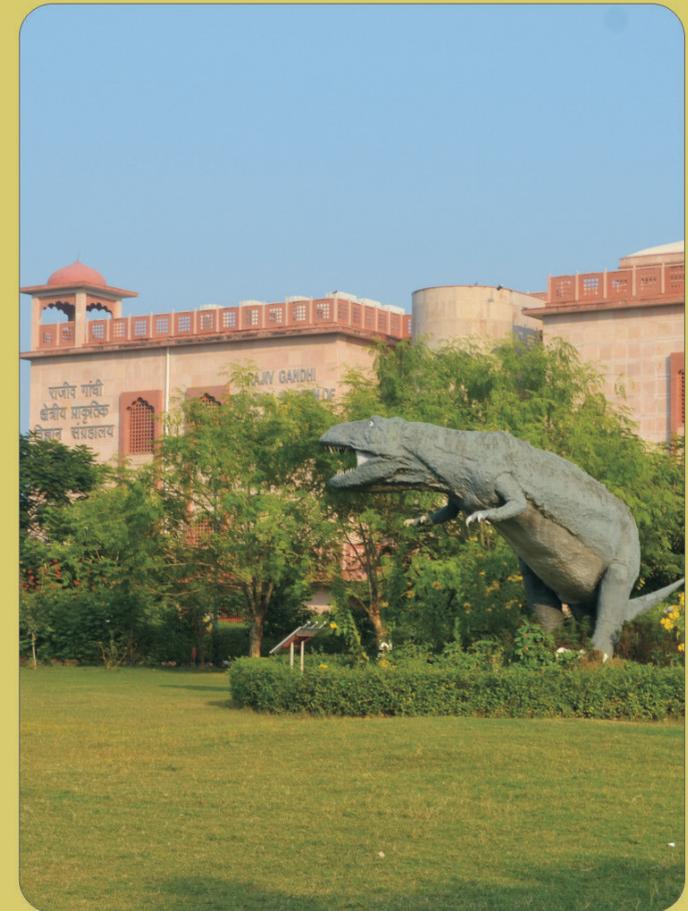
working with.

Illustrator **A. Shashikala**, an retired professor, Department of Zoology, Sarada Vilas College, Mysuru, has displayed few of her illustrations at the Museum. She has drawn all kinds of animals, birds, microscopic structures observing through microscope and has displayed them to make students aware that drawing diagrams are very easy, and helps them



including the dots and lines provided a three dimensional perspective. Such diagrams take hours, even a day to complete, and require total concentration, knowledge and utmost attention to detail. The "dip nib" used to achieve this is called "Crow Quill" which is a fine pointed type of Artist's nib. The ink used was indelible, black "India ink". The Crow Quill "dip nib lithography" was a printable bundle of gorgeous lines & dots. Prof. A. Shashikala's has more than 20 years of experience in preparing illustrations for book printing. She was the only woman illustrator from 1969 for over a decade and one of the leading illustrator of all times.

Students who visit the museum, regularly can benefit immensely from these precise scientific diagrams of Botany and Zoology. These diagrams along with a bottle specimen or a microscopic slide will give a lot of information which is essential in learning and presentation of practical record, theory paper, project work, dissertation, theses etc. The display will motivate students to improve their drawing skill.



**Organized By:  
Rajiv Gandhi Regional Museum  
Of Natural History**

(Ministry of Environment, Forest & Climate Change, Govt. of India)  
Ramsinghpura, Ranthambhore Road, Post- Sherpur,  
Sawai Madhopur-322001 (Rajasthan)

**Timing: 10 AM to 6 PM**

**Museum will be remain close on every  
Monday & National Holidays**

to score good marks.

Before the days of Digitised Photoshop and CorelDraw each diagram was handwritten and painstakingly created to achieve texture and depth. The diagrams

