



## METHODS OF TEACHING ZOOLOGY

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### Annotation

Zoology is a discipline of biology concerned with the study of animals and animals in general. Individual animals and their components, down to the molecular level, as well as populations of animals, the complete fauna, animal-animal relationships, plants, and the non-living environment are all studied. Opinions and remarks about the purposes of zoological science and the importance of its teaching in schools were expressed in this article.

**Keywords:** Zoology, functions of science, evolution, anatomy, physiology.

### Introduction

What are the benefits of studying zoology in your life? The scientific study of animal and human evolution, anatomy, physiology, behavior, environment, and health has had a significant impact on our planet. We gain a better understanding of how we work and interact with ourselves and the environment around us by observing animals. What are the benefits of studying animals? Animals are studied by scientists to learn more about how living beings function and how diseases influence the human body. Both people and animals benefit from these discoveries.

Animals are also studied in order to learn how they adapt to varied settings. This can benefit species that are on the verge of extinction or are on the verge of extinction. It also includes details on individual work duties, as well as training options and pay. Zoologists, sometimes known as life scientists, study animals in both labs and natural settings[1]. They research species' origins and evolution, as well as their habits, behavior, and interactions.

A man's attitude toward food and other dangerous creatures was defined by his survival as a hunter before history. Animals are brought into folklore and philosophical consciousness as various living creatures as man's cultural legacy evolves. Animals living at home led people to look at animal life in a methodical and quantitative way, especially after urbanization, which demanded a continual and plentiful supply of animal goods. After Hippocrates considered the source of disease - Demons, as a result of which the organs of the body could not operate harmoniously - The ancient Greeks' study of the animal world became more rational, in the contemporary meaning, in the scientific sense. Aristotle's detailed description of





living things, as well as his relationship with the Greek concept of order in nature and idealized persistence in nature, prompted the methodical study of animals.

Zoology assists us in comprehending the lovely natural world around us. The Secrets of the lovely beauty of untrained wild creatures and their "subordinated" character to each of them will be disclosed when you study Zoology. The subject's magic will assist in unraveling Mother's magic. When you grasp the life cycles that coexist in nature, you'll understand what peace is, and you'll realize that animals' values are far superior to ours.

Many scientific fields have been inspired by cell conception, including Embryology, where cells play an essential role in the transformation of a fertilized egg into a new life. Karl Baer, a comparative embryologist taught by numerous workers, particularly Germans, first noticed a mammalian egg in the ovary[2], detailed the genesis of these events. Christian Heinrich Pander, a German teacher and embryologist, brought the concept of microbiological or tissue layers into Embryology in 1817. The development of the microscope and a superior technique for painting with aniline dyes in the second half of the nineteenth century accelerated the study of internal cell structure. By this time, it was necessary to entirely reassess man's perspective on nature in light of Darwin's theory that biological change occurs as a result of natural selection. The idea of evolution, which states that organisms are constantly evolving into more adapted forms, necessitated the rejection of the stationary belief that all species are formed, as well as the violation of Linna's species conceptions. Darwin agreed that comprehending the principles of heredity is required to comprehend evolution. Despite the fact that Mendel had invented the concept of hereditary components prior to that time, Darwin was unaware of his lost work until it was recovered in the 1900s. Genetics arose in the twentieth century and has since become a fundamental aspect of a variety of biological sciences. A major accomplishment of contemporary biology has been the identification of the gene as a guiding genetic element for all forms of life. There was also a better grasp of how creatures interact with their surroundings. Such environmental studies just serve to highlight the interconnectedness of three major categories of organisms: plants as producers; animals as consumers; and microbes as intermediaries, and mushrooms, and many bacteria, as a shredder - but they give the information that a person needs to manage the environment and eventually survive on Earth. It is strongly linked to the study of animal behavior, and the study of ecology. Such research is typically interdisciplinary, as a combination of ecology, physiology, genetics, development, and evolution leads to an attempt to explain why an organism behaves the way it does[3].





If you have no knowledge of animals or biology, nature appears to be a jumble. Everything seemed to have happened by chance. However, after studying life cycles and the food chain, you will gain a greater understanding of natural events. You will learn why animals behave in certain ways from students as you go through the themes in the lesson. The value of Zoology stems from the fact that it allows you to observe nature as it truly is. It is a collection of biological forms that interact beautifully with one another, rather than a random disorder. Understanding animals and having a sense of their environment is crucial. As a result, we are a part of nature itself.

The study of Zoology allows students to gain a better understanding of animal behavior. Tigers and sharks, for example, frequently believe that they are inept murderers. However, when you consider their nature and environment, it's evident that they'll only pose a threat to their activities if people have a role in it. Examining this problem also eliminates a lot of problems. The belief that all snakes are poisonous persists. One of the reasons that Zoology is important is because it improves knowledge and eliminates ignorance. Fear and uncertainty arise when we are uninformed of something. We can act more responsibly if we have more information. This also leads to a positive relationship with the world of animals. Learning animal facts and numbers entails more than just retaining the information in your head. This will also assist in comprehending why environmental conservation and balance are critical for human survival.

The concept of ecological culture is a person's spiritual life and his behavior, manifested in everyday life, his to preserve the invaluable wealth of nature, Biological Diversity and indicates activity on reproduction. Ecological concepts all that is called in the textbook of Zoology three in topics. Successful environmental training implementation in the minds of students of the textbook it begins with the formation of concepts about the presented living environment and its factors. In the next training session students' knowledge in the field of Ecology is achieved.

All systematic groups and the external and internal structure, Reproduction, Development and distribution of the species belonging to them are described from an ecological point of view. When carrying out environmental training, it is better to compare the structure and vital properties of animals with the living environment, so that the study gives a good result. In order to strengthen and expand the ecological knowledge, it is better to compare the structure and life of animals living in the droughts, water and air environment with the purpose of studying them.

You will learn about animal behaviors, diet, and behavior as you learn about their lives. You'll notice that they're all working together. When one species goes extinct, others suffer. It should be emphasized that Zoology is significant because it leads to a







greater understanding of nature. There is no evil in economic development if one understands man's function in nature. However, destroying the rainforest or the entire species should not be avoided. When we cause harm to nature, there will undoubtedly be retaliation. Flooding will occur if trees are cut down and forest wildlife is destroyed. If you evict the animals from their homes, they will turn into a plague. Material properties and objects that animals kill are destroyed when natural disasters strike. In other words, more issues occur. Only when you've figured out the animal riddles will you realize there's a problem, and so on. Knowing about the subject, it becomes clear why it is so important to balance economic growth with natural growth. Zoology classes and extracurricular activities develop the scientific outlook of students. It helps to direct them to the profession and prepare them for practical life. Zoology Botany on the curriculum of secondary schools after the subject is taught. The purpose of this science is to provide students with give general knowledge about animals, independent life of young people and to prepare for labor, in them the mother consists in nurturing the spirit of kindness in relation to nature. Zoology course the task also comes from the realization of this goal, includes the following:

- Provide students with the structure, growth, development of animals and To have knowledge about the legislation of life expectancy;
- Formation of scientific worldview in students, upbringing them in the spirit of patriotism, appreciation of natural resources;
- Integration of ideas of national independence into the minds of students;
- Knowledge of agricultural production, preservation and feeding of domestic animals, protection of the environment and To acquire skills;
- To allow students to prepare for professional orientation;
- Develop students cognitive activities and thinking skills, make them ready for independent reading and self-control.

This technique is currently receiving a lot of interest since it provides useful information regarding man's biological legacy, that is, his historical genesis from non-human creatures. Classical Zoology was affected in two ways by the emergence of animal biology. First, zoology has been reduced to a separate scientific research area; workers, for example, consider themselves to be geneticists, ecologists, or physiologists who study animals rather than plant materials. They frequently select a problem that appeals to their intellectual preferences, which is significant enough that they only produce useful experimental data[4]. Historical background to the study of the animal world in the textbook of Zoology viewed from the point of view. Learning them is the most simple structured one starting from the cellular, the most belonging





to the class of mammals it is completed with highly structured humanoid monkeys. Textbook animal in the mind of the reader who seriously studied the materials included hundreds of millions depending on the side of its world from simple to complex years of historical development are ravaged. Each of the students a learned organism or a taxonomic group precedes it relatively complex structured and from a historical point of view-after all they will have a scientific understanding of the origin. The one there for this reason, the school Zoology course is scientific in the minds of students of great importance in the formation of the materialistic worldview.

As a result, modern zoology is, in many ways, the sum of studies undertaken on the materials of biological organisms. Second, it emphasizes a well-coordinated approach to life sciences. Cell theory, natural selection and evolution, the stability of the internal environment, the main similarity of genetic material in all living species, and the flow of matter and energy through the ecosystem are all notions that appeared in the late 19th and early 20th centuries.

## **Conclusion**

Theoretical models are currently employed for the lives of bacteria, plants, and animals, which were previously not susceptible to constrained empiricism. This is especially true in molecular research, where the combination of biology and chemistry allows for the successful application of Physical Science's technique and quantitative emphasis to the study of biological systems. Furthermore, the study of zoological science in school will aid pupils in their imaginative learning of a variety of topics such as wildlife, animals, their structure, and habitat. It will also act as a foundation for the future development of other Zoological regions. Most importantly, animals are believed to be a part of this nature, which includes our life. They play an important role in the agricultural and food industries, as well.

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