

PURPOSE AND IMPORTANCE OF FIELD TRIP

1. observation is the basic pillar to develop scientific temper & knowledge.
2. The field trip gives the student an opportunity to practically observe the nature and understand the subject better than normal lectures.
3. Apart from understanding the subject field, trips provides an opportunity to the students, to interact among themselves and with their lectures, which ultimately leads to the spread of knowledge.
4. Knowledge acquired through practical observation lasts longer than normal process of learning.

POND ECOSYSTEM IN BUIRANPALLY

The department of Botany organised the trip on 9th September 2018, to study the pond ecosystem of Gullagudem pond, which is located 5 km away from the college campus. The field trip was successfully organised under the leadership of M. Ramulu, lecturer in Botany, and under the supervision of D. Shiva lecturer in chemistry.

The students of both I & III BSc (BZc) actively participated in the field trip. The students showed great enthusiasm and actively participated in the field trip to Buiranpally pond.

"Pond ecosystem" is a part of ecology, in the syllabus of BSc (BZc) I year Botany, students of second year BSc (BZc), along with BSc (BZc) III year students (Botany) participated the field trip to have a practical, experience by watching, observing pond ecosystem.

The fresh water pond ecosystem have unique diversification of both phytoplankton and zooplankton. The growth of primary productivity is the availability of pond nutrients

Like nitrates, phosphates, oxygen, carbon dioxide and other micro and macro nutrients.

The biotic and abiotic factors are essential for unique diversification life, light temperature is one of the major factors for the growth of phytoplankton primary productivity, it produces food through photosynthesis.

Students observed that some portions of the pond are over crowded by floating hydrophytes like nymphaea and other plant and they noticed that this increase in organic matter may limit the availability of light and dissolved O_2 in the pond.

The pond colour is mainly depending upon the growth of phytoplankton of the pond.

This is mainly used by the zooplankton like copepods, rotifers, mysis, snails, fish fingerlings and other big fishes.

These planktons are primary and secondary producers, here we can see the food web, food chain and energy flow. The hydrophyte play an important role for the production of O_2 and CO_2 ratio in the pond ecosystem. The hydrophytes consumed by herbivores animal like grass Carp etc.

DECOMPOSERS

Various types of bacteria and fungi act as decomposers they decompose the organic matter present in the pond. In this context student came to know the concept of Biological oxygen demand (BOD).

The students also observed the human activity across the pond. The human activity include washing clothes, animal grazing, fishing etc.

The students also came to know the threats of pond ecosystem like overlapping of animals, fishing, overcrowding of pond with hydrophytes like pistia, valisnaria, nymphaea, chara etc.. student keenly observed the tank, they enquired the quality of water with villagers and got some details of its usage as drinking water source for agriculture.

The villagers told the importance of the pond for their irrigation and drinking purposes and use of the crops. This tank is also used for culturing some fishes like catla catla.

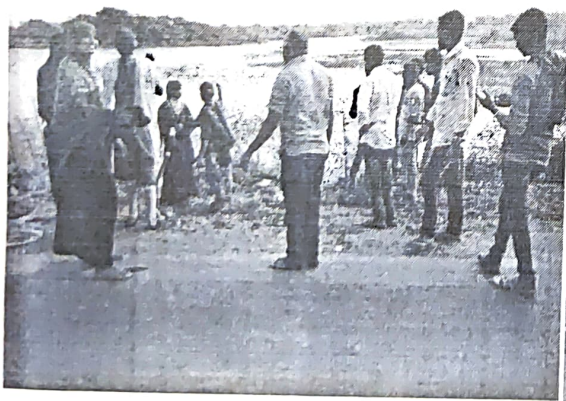
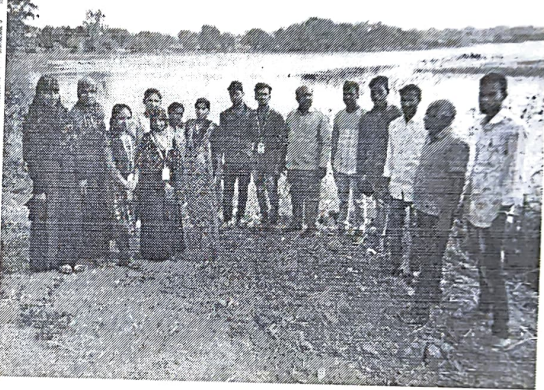
The student were calculated algal pistia, wolfia, lemna etc., and water for observing protozoan like euglena, paramecium etc., and for testing pH of water and salinity.

CONCLUSION

Finally, This field trip gave the chance to explore the vegetation of Bujranpally pond ecosystems. The students with the help of the lectures studied several aspects of ecosystem.

Apart from their Academic studies, This fieldtrip created an excellent opportunity to interact among themselves & their lectures. For the lectures also it a fine occasion to know the behavior and attitude of their students beyond the walls of the class room.

This field trip is successful one as the purpose of field trip met.



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