

## FIELD WORK

# POND VISIT FOR PLANKTON COLLECTION



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# ACKNOWLEDGEMENT

We express our sense of gratitude to the supervisor Smt. V. Swaroopa rani, Assistant professor of Zoology., for introducing us this interesting local field work. They have motivated , inspired and encouraged us during the course of this activity.

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B.Sc Students



# INTRODUCTION

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 nutrients. The biotic and abiotic factors are essential for life, temperature is one of the major factors for the growth of phytoplankton (primary productivity), it produces food through photosynthesis. The pond Color is mainly depending on the growth of phytoplankton and siltation of the pond. This is mainly used by the zooplankton like tadpoles, copipods, rotiphers, Mysis, zoea, snails, fish fingerlings and other big fishes. These planktons treated as primary and secondary productivity. Here we can see the food web, food chain and energy flow. The hydrophytes play an important role for production of O<sub>2</sub> and CO<sub>2</sub> ratio in the pond ecosystem. The hydrophytes consumed by herbivore animals like grass carps etc.



Observation of zooplanktons



collection of floating plankton



Explanation of plankntons Importance



zooplankton Observation



COLLECTION OF HYDROPHYTES



COLLECTION OF ALGAE



OBSERVATION OF PHYTOPLANKTON

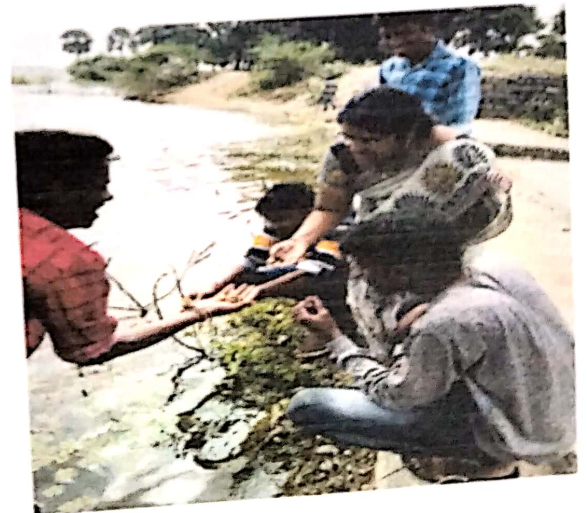


COLLECTION OF SMALL FISH



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EXPLANATION OF HYDROPHYTES



COLLECTION OF SNAIL

# CONCLUSION

Pond ecosystem is an important topic for all students because it provides multi-dimensional activity in aquatic organisms. It is a very good example of the food chain, the food web and energy flow. The plankton plays an important role in the food chain and food web.

This activity develops knowledge in the students from lab to land. It enriches their curricular knowledge. In this group activity they share their ideas and thoughts with each other. Such group activities need to be encouraged as it develops in them the inquisitiveness and by asking questions the fellow students they forgo inhibition. Since the students are physically involved, they will not forget what they have done.

Prepared

By

  
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