

# ECOLOGICAL SUCCESSION

5

(part B)

- Invasion: It involves successful establishment of a species in a bare area. It involves 3 steps.
- a) Migration: It involves reaching seed, spores etc. in a bare area through air, water etc.
- b) Ecosis (establishment): It involves the successful adjustment of a species with the prevailing conditions of the area.
- c) Aggregation: It involves the increase in number of organisms through the process of reproduction.
- ③ Competition and Co-action: It involves the development of intraspecific as well as interspecific competition among the members due to their large number but limited food and space.
- d) Reaction: It involves the modification of the environment through the influence of living organisms. The modified area <sup>become</sup> ~~is~~ least favourable for the existing community which is sooner or later replaced by another community called Seral Community and the process is repeated. The whole sequence of community which replaces one another in the given area is called Sere and various communities constituting the sere is called Seral Community.
- 5) Stabilization (climax):

Finally, there occurs a stage in the process, when the final terminal community becomes more or less stabilized for a long<sup>er</sup> period of time and it can maintain itself in equilibrium with the climate of the area. The final community is not replaced and is known as Climax Community.

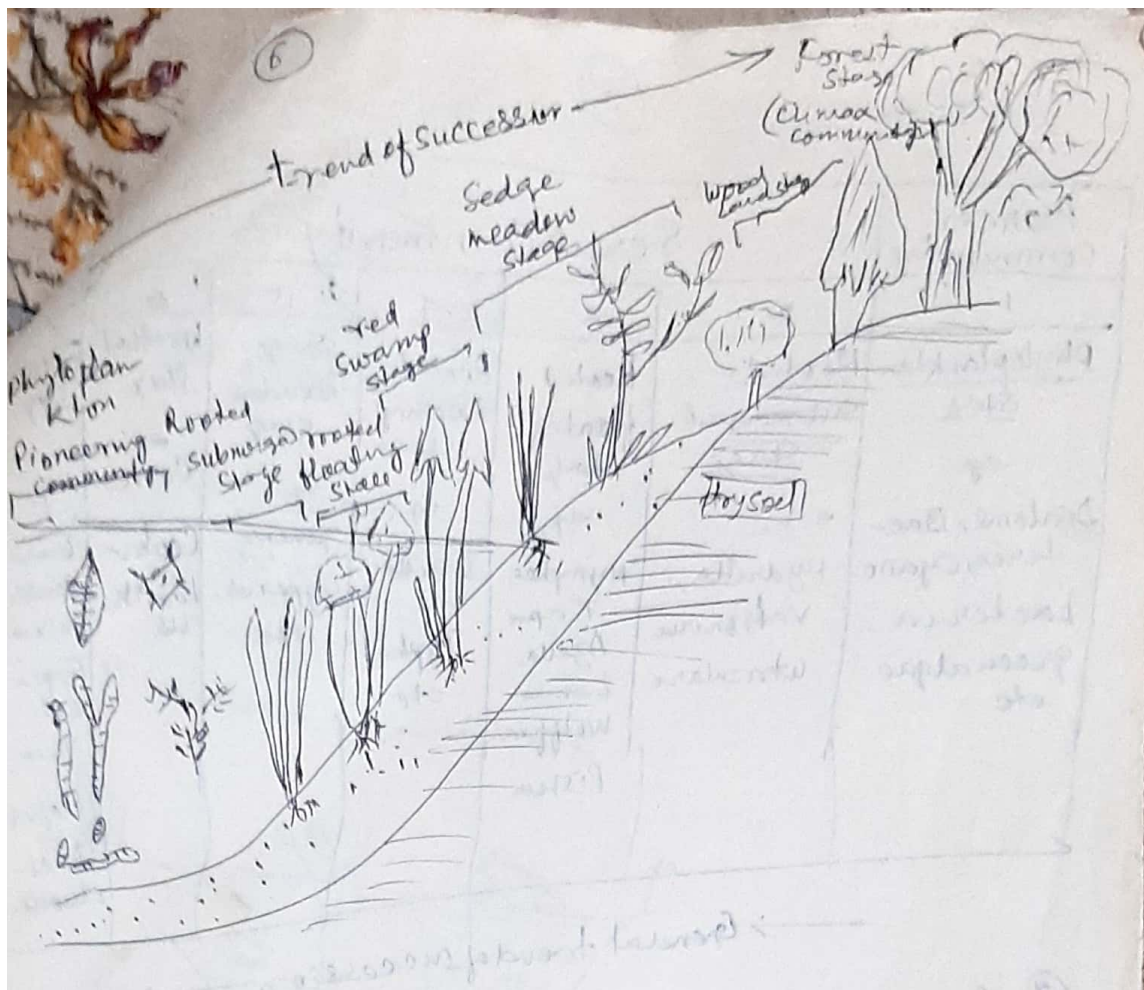


Fig - Diagrammatic representation of Succession through autogenic process in lake or pond (Hydrosere).

Examples of Ecological succession:

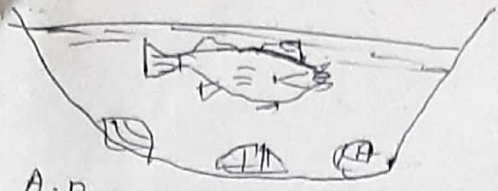
① Hydrosere or Hydarch - It involves the ecological succession in the newly formed pond or lakes.

The whole process of succession is divided into following stages -

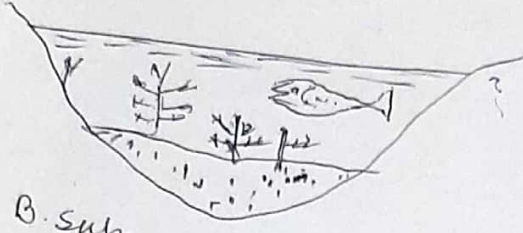
- ① Plankton stage
- ② Rotted submerged stage
- ③ Rotted floating stage
- ④ Sedge meadow stage
- ⑤ Woodland stage
- ⑥ Forest stage.

The trend of succession here are as follows -

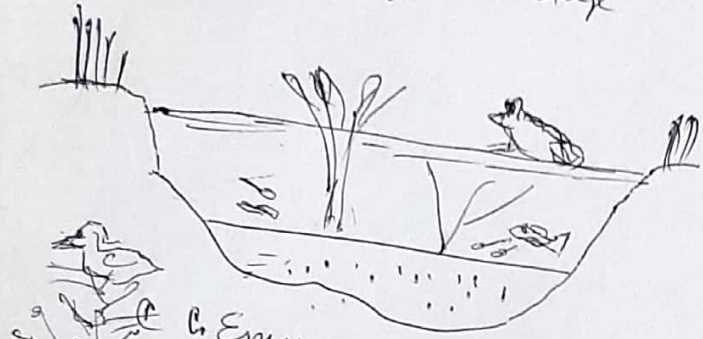
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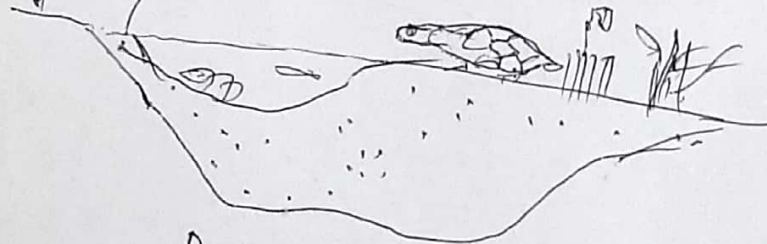
A. Bare Bottom stage.



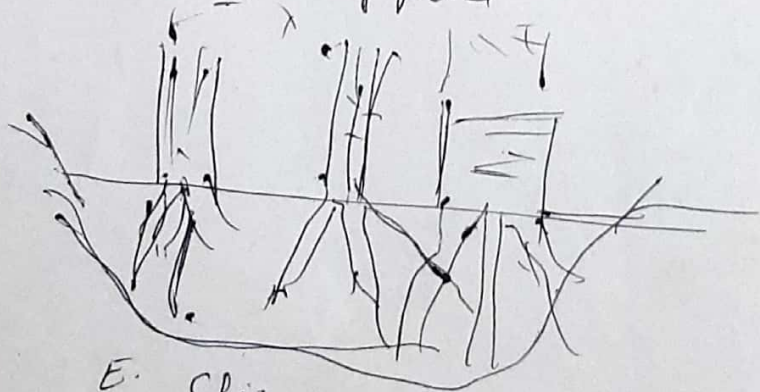
B. Submerge vegetation stage



C. Emerged vegetation stage



D. Temporary pond



E. Climax (Forest stage)

Primary Community Succession in a open pond.