



	्रिवthshala पाठशाला	Govt. of India
Development Team		
Principal Investigator:	Prof. Neeta Sehgal Head, Department of Zoology, University of Delhi	
Co-Principal Investigator:	Prof. D.K. Singh Department of Zoology, University of Delhi	
Paper Coordinator:	Prof. D.K. Singh Department of Zoology, University of Delhi	
Content Writer:	Dr. Kapinder and Dr. Haren Ram Chiary Kirori Mal College, University of Delhi	
Content Reviewer:	Prof. K.S. Rao Department of Botany, University of Delhi	

Principles of Ecology

ZOOLOGY

Ecosystem Processes-II; Part-I



Description of Module			
Subject Name	ZOOLOGY		
Paper Name	Zool 12 Principles of Ecology		
Module Name/Title	Ecosystem		
Module Id	M33 Ecosystem Processes-II; Part-I		
Keywords	Ecological succession, mechanism of succession, theories of succession, climax characteristics		

References

Colinvaux, P. A. (1993). Ecology. II Edition. Wiley, John and Sons, Inc.

Kearns, A; Barnett, G. and Nolan, A. (2006). An Ecological Design Strategy for the Planning and Development of Healthy Urban Habitat. *Australian institute of landscape architects*.

Krebs, C. J. (2001). Ecology. VI Edition. Benjamin Cummings.

Odum, E.P. (1969). The strategy of ecosystem development. *Science*, 164: 3877; pp 267-270.

Odum, E.P. (2008). Fundamentals of Ecology. Indian Edition. Brooks/Cole

Ricklefs, R.E. (2000). Ecology. V Edition. Chiron Press

Sharma, P.D. (2012). Ecology and Environment. XI Edition.

Smith, R.L. and Smith, T.M. (2001) Element of Ecology, Benjamin-Cummings Pub Co

Glossary:

Autogenic Succession: It is the type of succession in which one type of community is replaced by another due to the alteration of the environment by the communities themselves.

Allogenic Succession: It is the type of succession in which one type of community is replaced by another due to some external factors not the communities itself.

Biomass: standing crop of living organisms, in terms of weight, present at any given time in the environment.

ZOOLOGY

Principles of Ecology

Ecosystem Processes-II; Part-I



Climax: it is the stable community developed in the process of succession that maintains itself over longer period in equilibrium with the prevailing environment conditions.

Ecological succession: A natural process by which different communities colonies the same re over a period of time in definite sequences.

Energy flow: It is the transfer of energy through one trophic level to other trophic levels in a food chain.

Pioneer Community: The first group of organisms either plants or animals which become established in such an area is termed as Pioneer community.

Primary succession: Succession on a previously unoccupied substrate is called primary succession.

Secondary succession: Succession which starts on a site previously occupied by a community is called secondary succession. For eg., Abandoned crop field or deforestation etc.

Sere: It is the complete sequence of communities in which one form replaces the other in a given area.

3

Principles of Ecology

ZOOLOGY

Ecosystem Processes-II; Part-I