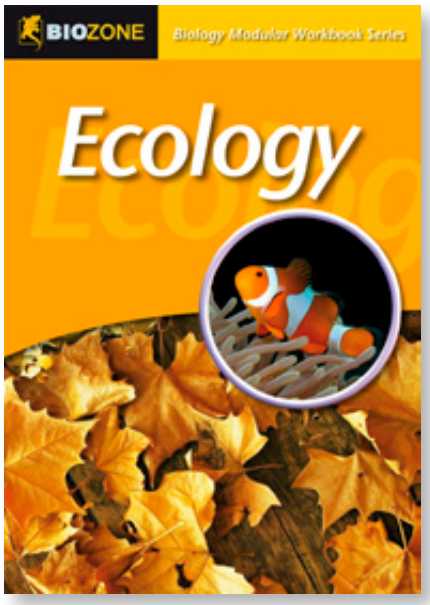


Ecology

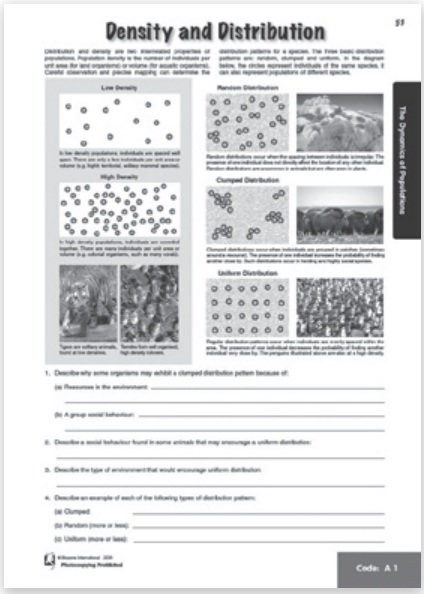
Explore fundamental concepts in ecology, from the nature of ecosystems and the basics of ecosystem structure and function, to the complex relationships within and between species and between humans and their environment.

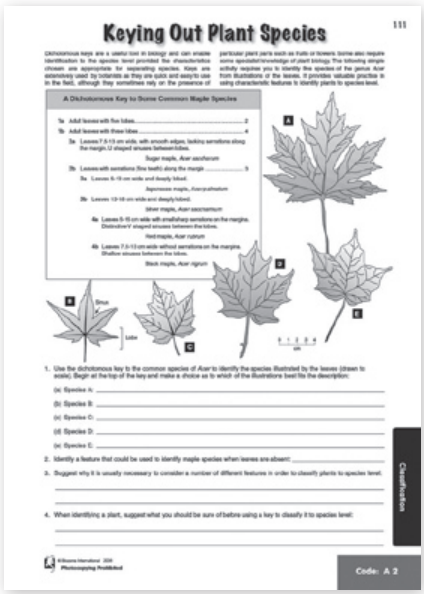
Suitability:

- Grades 10-12
- Community College

ISBN: 1-877329-86-X Pages: 124

Biozone's unique formula encourages self direction, while dovetailing with traditional resources.





Chapters

- Ecosystems
- Energy Flow & Nutrient Cycles
- The Dynamics of Population
- Practical Ecology
- Classification
- Changes in Ecosystems

Features

- **Introduction to the topic:**
  A concise introduction to the concepts in the activity.
- **Easy to understand diagrams:**
  Highly visual, clearly annotated diagrams improve the accessibility of information.
- **Consolidation and branching out:**
  Activities provide information to consolidate basic knowledge, while allowing scope for exploring. Differential instruction becomes easier and students at all levels are encouraged to be 'thinkers'.
- **Write-on format:**
  Activities provide information to consolidate basic knowledge, while allowing scope for exploring.
- **Tear-out pages:**
  Each page has a perforation to allow easy removal for marking, or placement in a ring binder.
- **Activity Code:**
  Each activity is coded to identify the skills required for its completion.

BIOZONE

Fact Sheet

Ecology

Content Overview

ECOSYSTEMS
- Biomes
- Components of an Ecosystem
- Habitats
- Law of Tolerances
- Dingo Habitats
- Physical Factors and Gradients
- Community Change With Altitude
- Shoreline Zonation
- Stratification in a Forest
- Ecological Niche
- Ecological Niches
- Adaptations to Niche
- Competition and Niche Size

ENERGY FLOW & NUTRIENT CYCLES
- Energy in Ecosystems
- Plant Productivity
- Food Chains
- Pesticides and Bioaccumulation
- Constructing a Food Web
- Dingo Food Webs
- Energy Inputs and Outputs
- Energy Flow in an Ecosystem
- Ecological Pyramids
- The Carbon Cycle
- The Nitrogen Cycle
- The Phosphorus Cycle
- The Water Cycle

THE DYNAMICS OF POPULATION
- Features of Populations
- Density and Distribution
- Population Regulation
- Population Growth
- Life Tables and Survivorship
- Survivorship Curves
- Population Growth Curves
- Growth in a Bacterial Population
- r and K Selection
- Population Age Structure
- Species Interactions
- Predator-Prey Strategies
- Niche Differentiation
- Interspecific Competition
- Intraspecific Competition
- Predator-Prey Interactions

PRACTICAL ECOLOGY
- Sampling Populations
- Designing Your Field Study
- Monitoring Physical Factors
- Indirect Sampling
- Quadrat Sampling
- Quadrat-Based Estimates
- Sampling a Leaf Litter Population
- Transect Sampling
- Mark and Recapture Sampling
- Sampling Animal Populations
- Sampling Using Radio-tracking
- Monitoring Change in an Ecosystem
- Using Chi-Squared in Ecology

CLASSIFICATION
- Features of Taxonomic Groups
- Features of the Five Kingdoms
- Features of Microbial Groups
- Features of Macrofungi and Plants
- Features of Animal Taxa
- Classification System
- Classification Keys
- Keying Out Plant Species

CHANGES IN ECOSYSTEMS
- Environmental Change
- Ecosystem Stability
- Ecological Succession
- Wetland Succession
- Pollution
- Global Warming
- Loss of Biodiversity


Stratification in a Forest

Structure of a Tropical Rainforest

Code: RA 2

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