
**Transparency Masters
to Accompany**

Introduction to Environmental Science

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**W. H. Freeman and Company
San Francisco**

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Introduction

These transparency masters are for use with *Introduction to Environmental Science*. The pages are unbound in order to facilitate making projection transparencies with a thermographic reproduction machine.

If you plan to make a complete set of the transparencies, you will need approximately 150 sheets of film. Because all of the masters bear only black-and-white images, 3M Type 588 film (which produces a black image on a clear background) should be entirely adequate. For variety, however, you may wish to use Type 888 film (which produces a black image on a red, blue, green, or yellow background) or Type 529 film (which produces a red, blue, green, or purple image on a clear background).

All of the masters are reproductions of line drawings that appear in *Introduction to Environmental Science*. The original figure numbers and legends have been left intact, and the masters are arranged in numerical order.

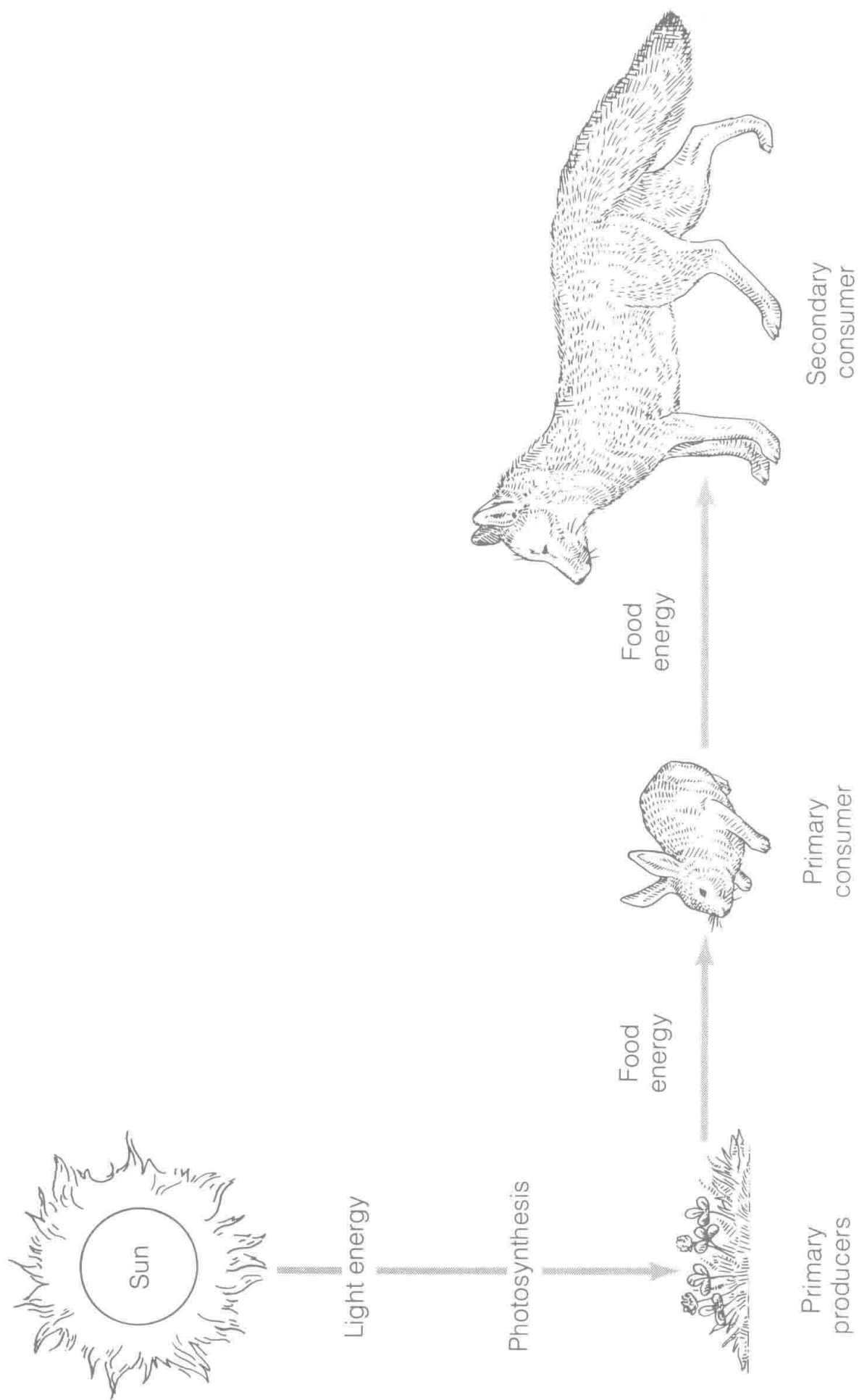


Figure 2.2 A grazing food chain.

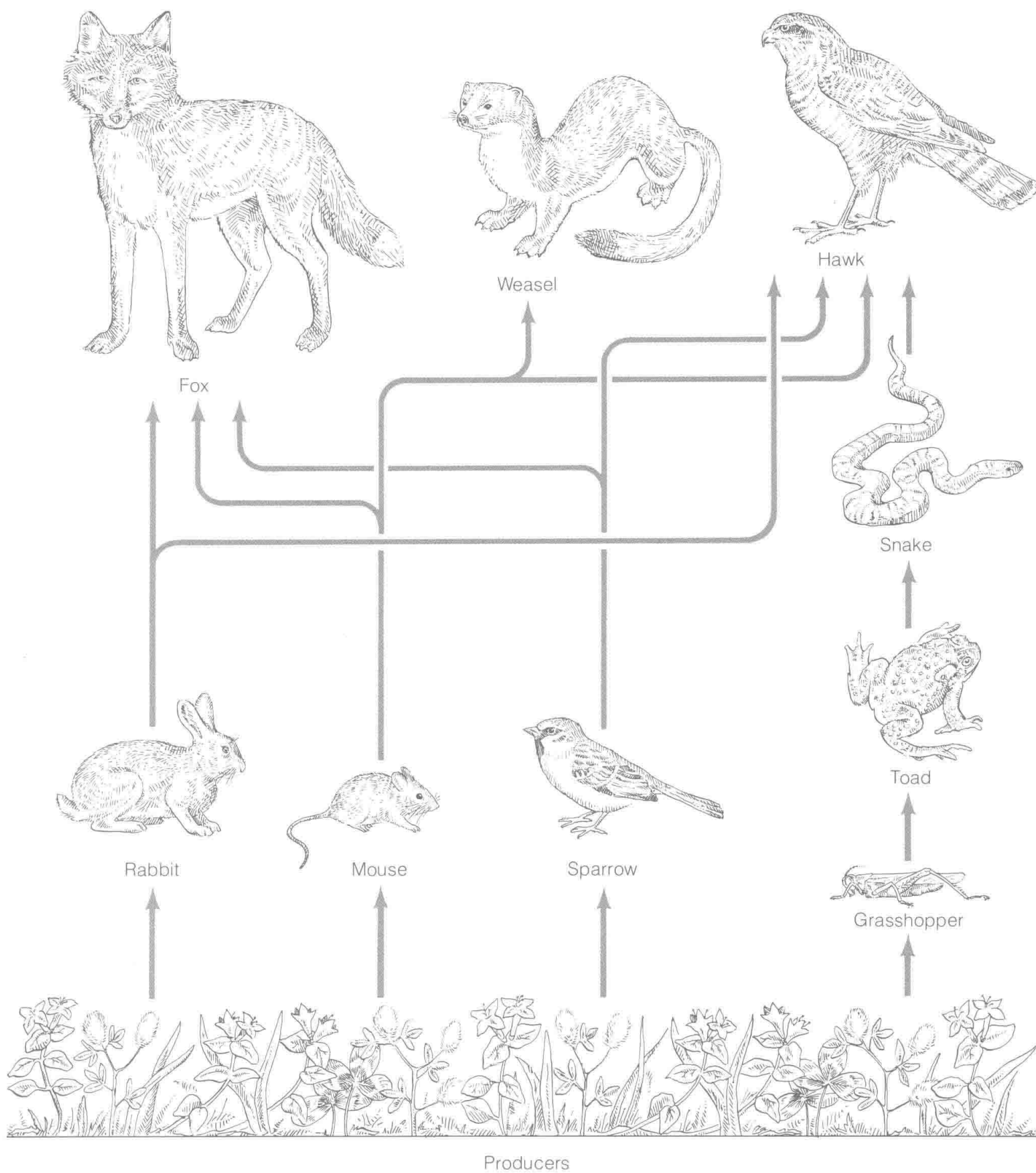


Figure 2.3 A very simplified food web, made up of a network of interconnected food chains.

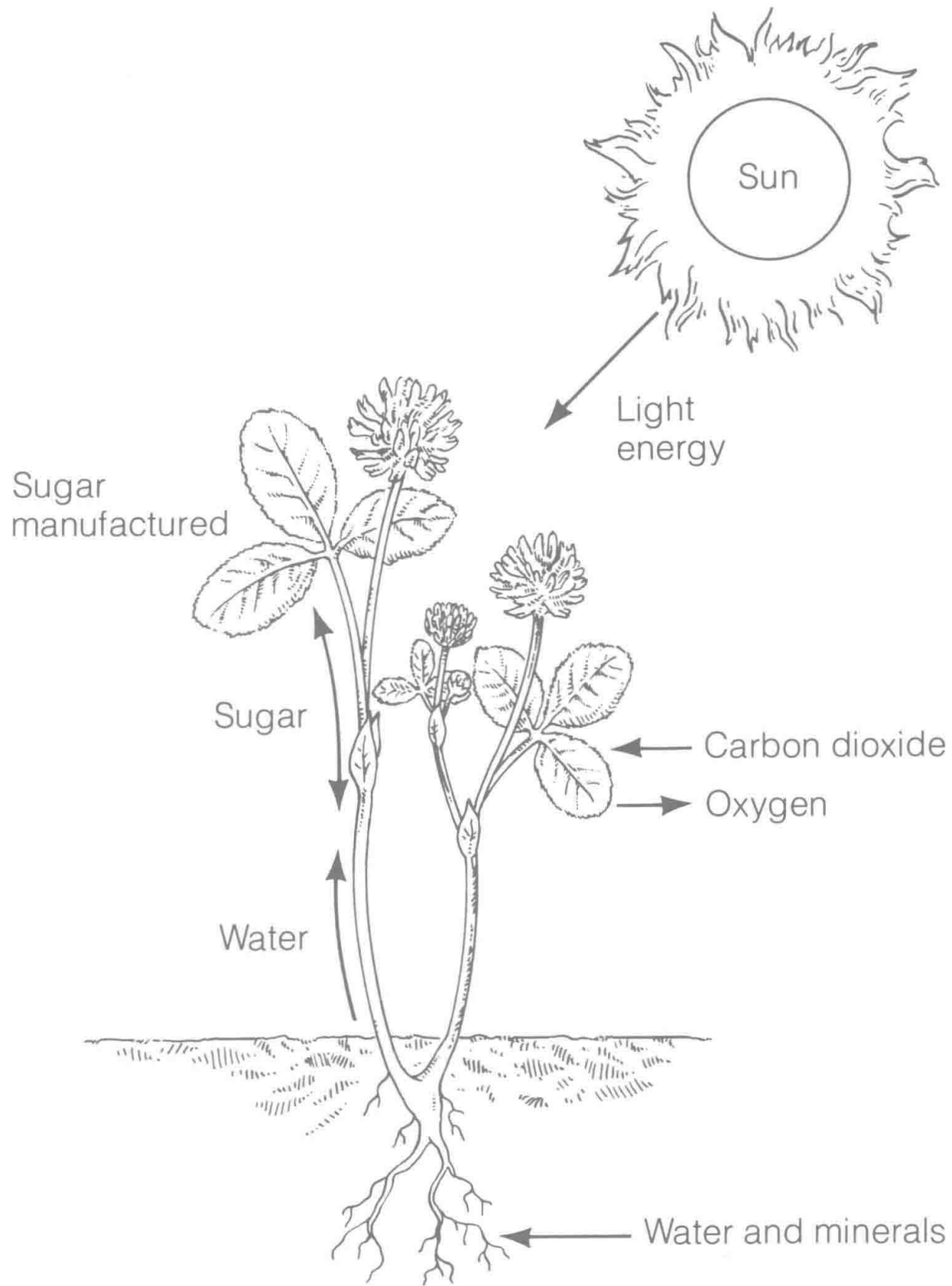


Figure 2.4 Sources of raw materials and the distribution of the products of photosynthesis in a clover plant. Sugars can move upward through the stem to be used for growth or stored in seeds or fruits, or they can move downward to be used for growth or stored in roots.

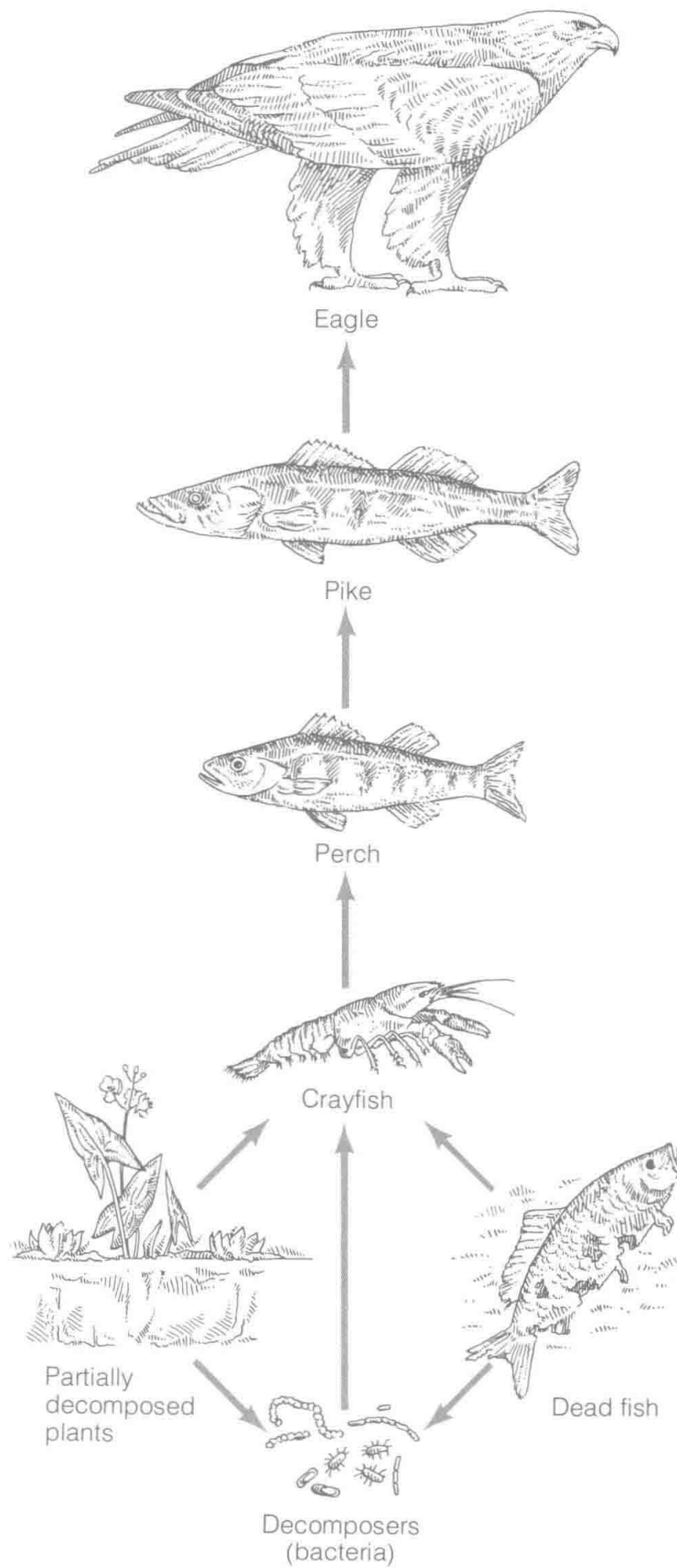


Figure 2.5 A simplified detritus food web.

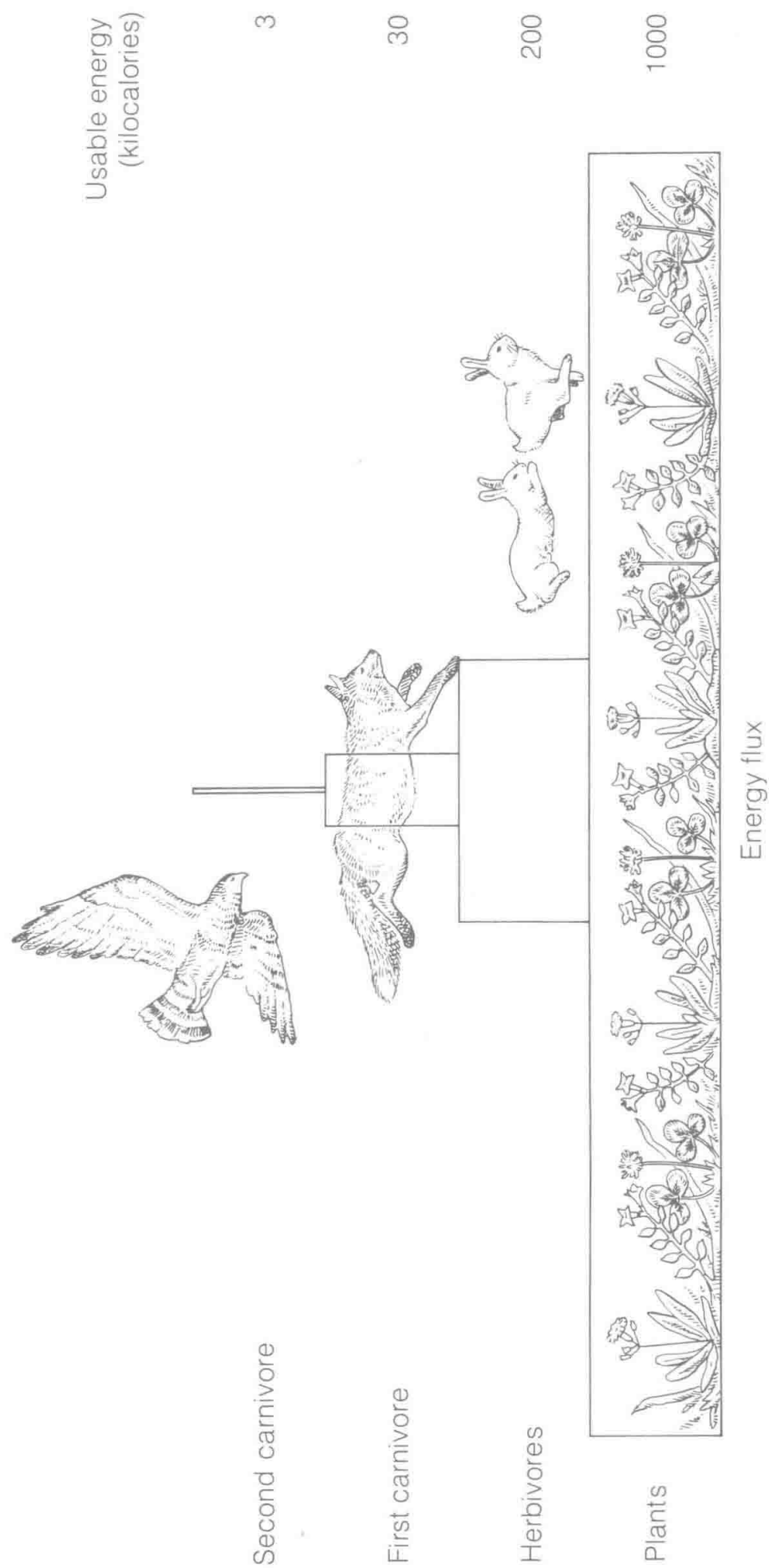


Figure 2.6 A pyramid of energy illustrating the low efficiency of energy transfer between trophic levels.

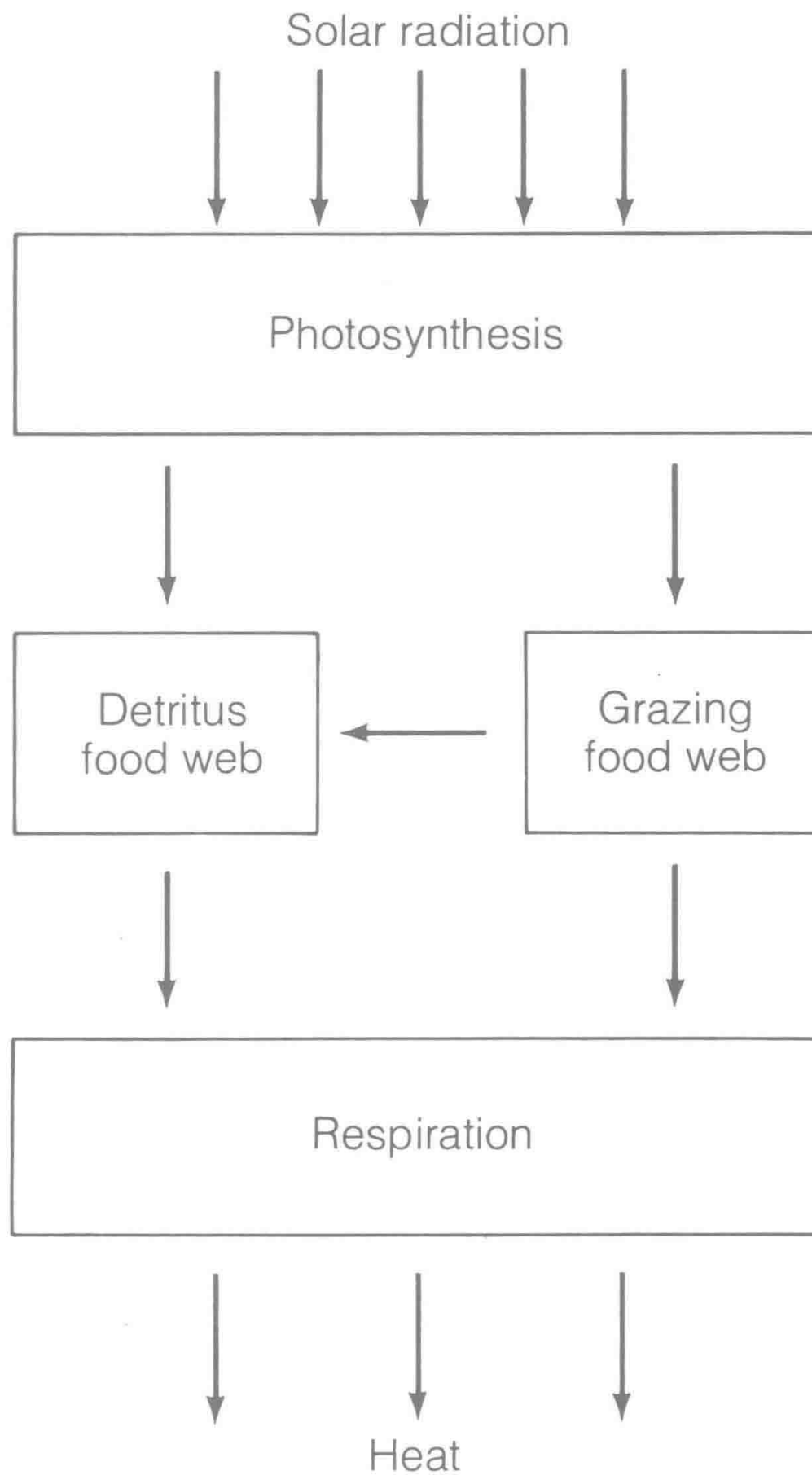
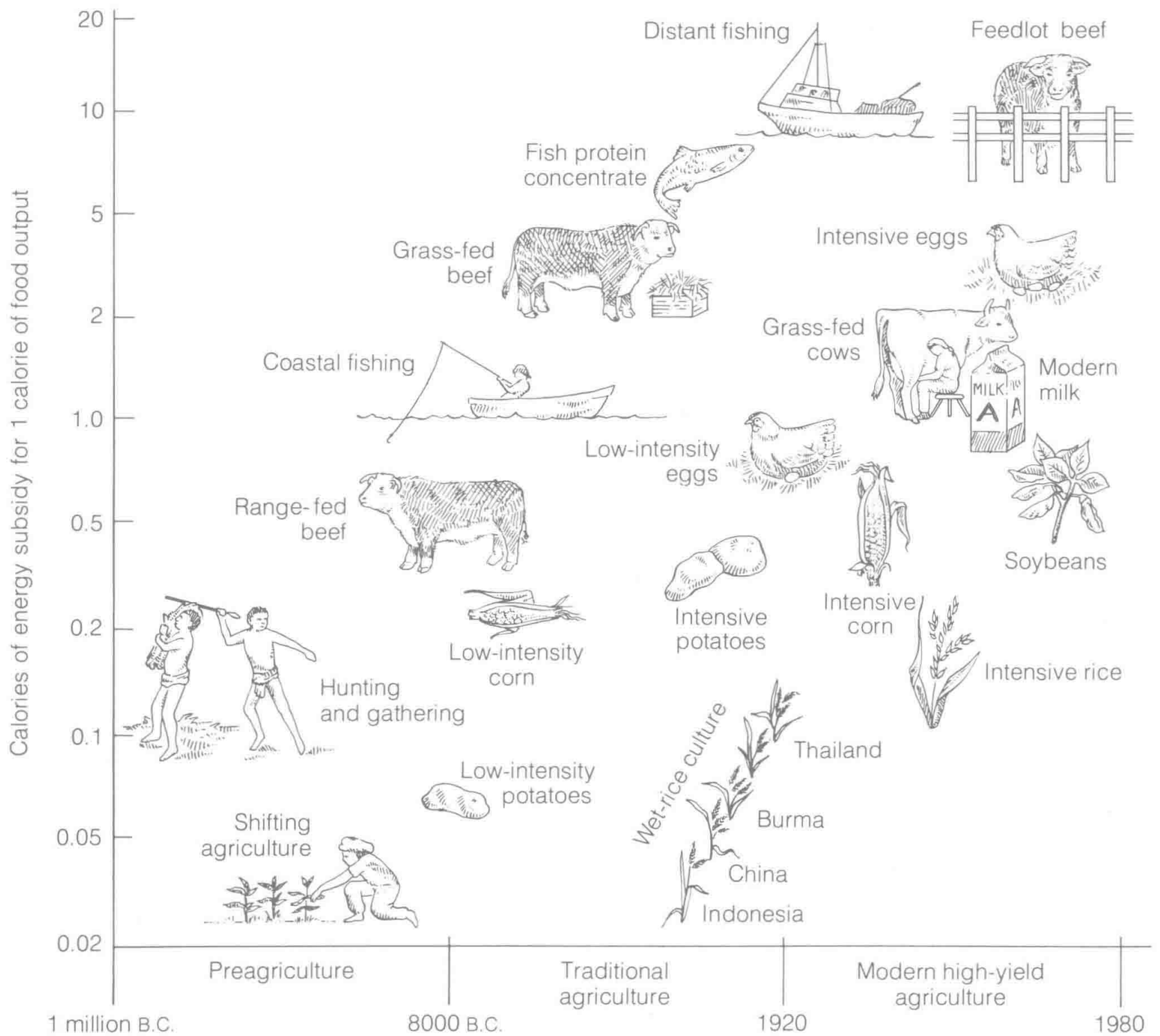


Figure 2.8 Basic pathways of energy flow through an ecosystem.



Energy subsidies for various food crops. After *Energy: Sources, Use and Role in Human Affairs* by Carol Steinhart and John Steinhart. © 1974 by Wadsworth Publishing Co., Inc., Belmont, Ca. 94002. Reprinted by permission of the publisher, Duxbury Press.

From Box 2.2.

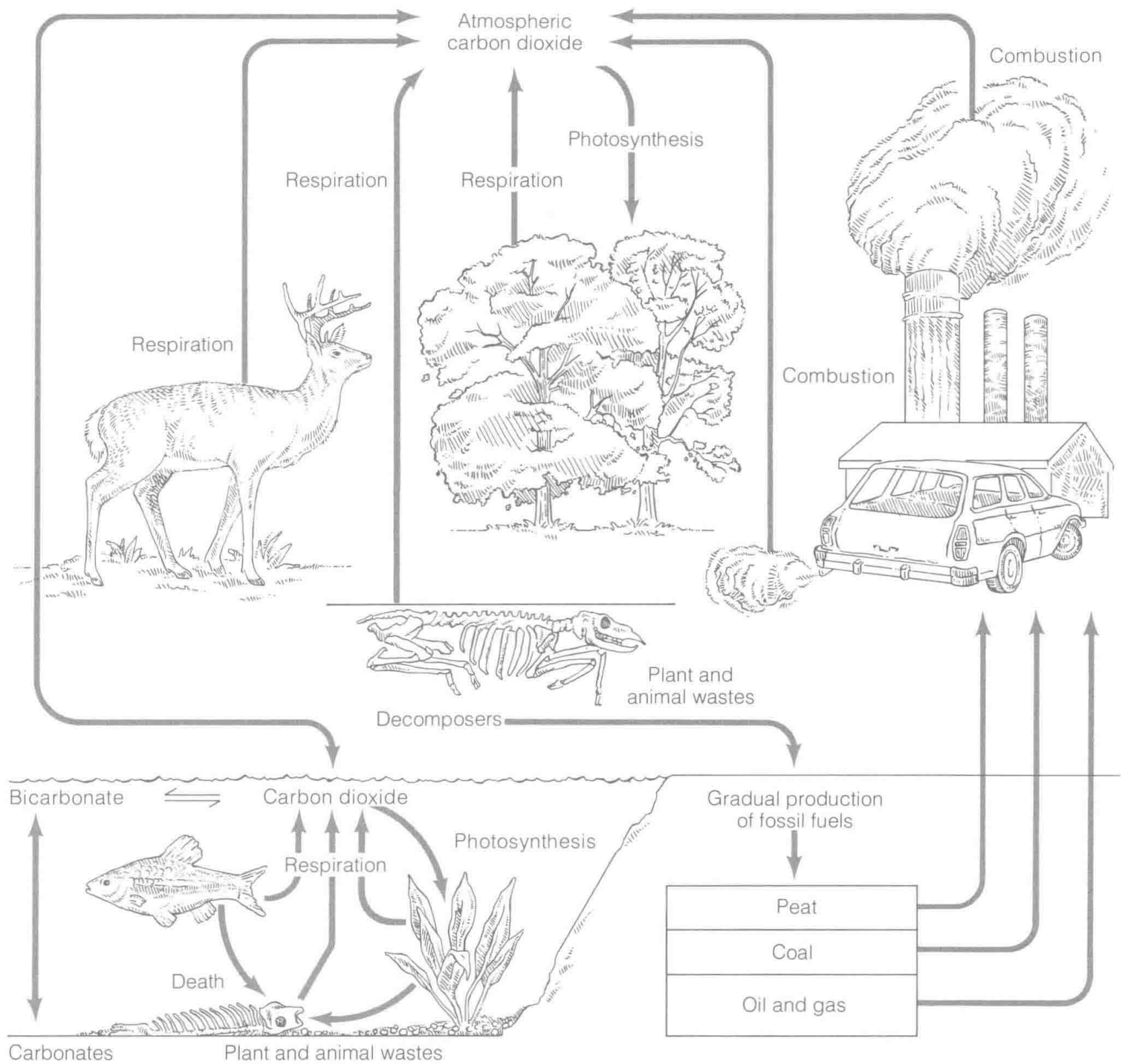


Figure 2.10 The carbon cycle.

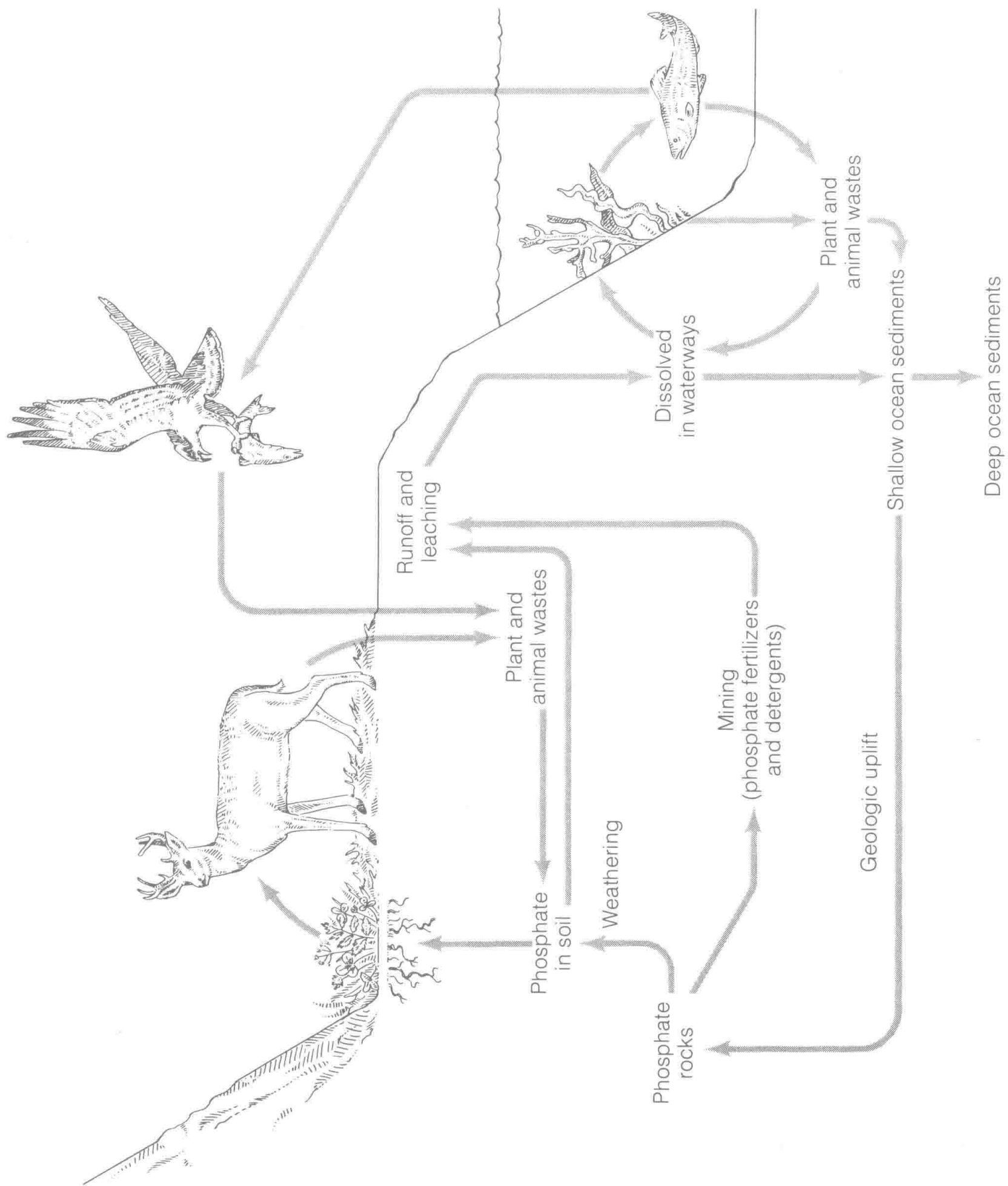


Figure 2.13 The phosphorus cycle.

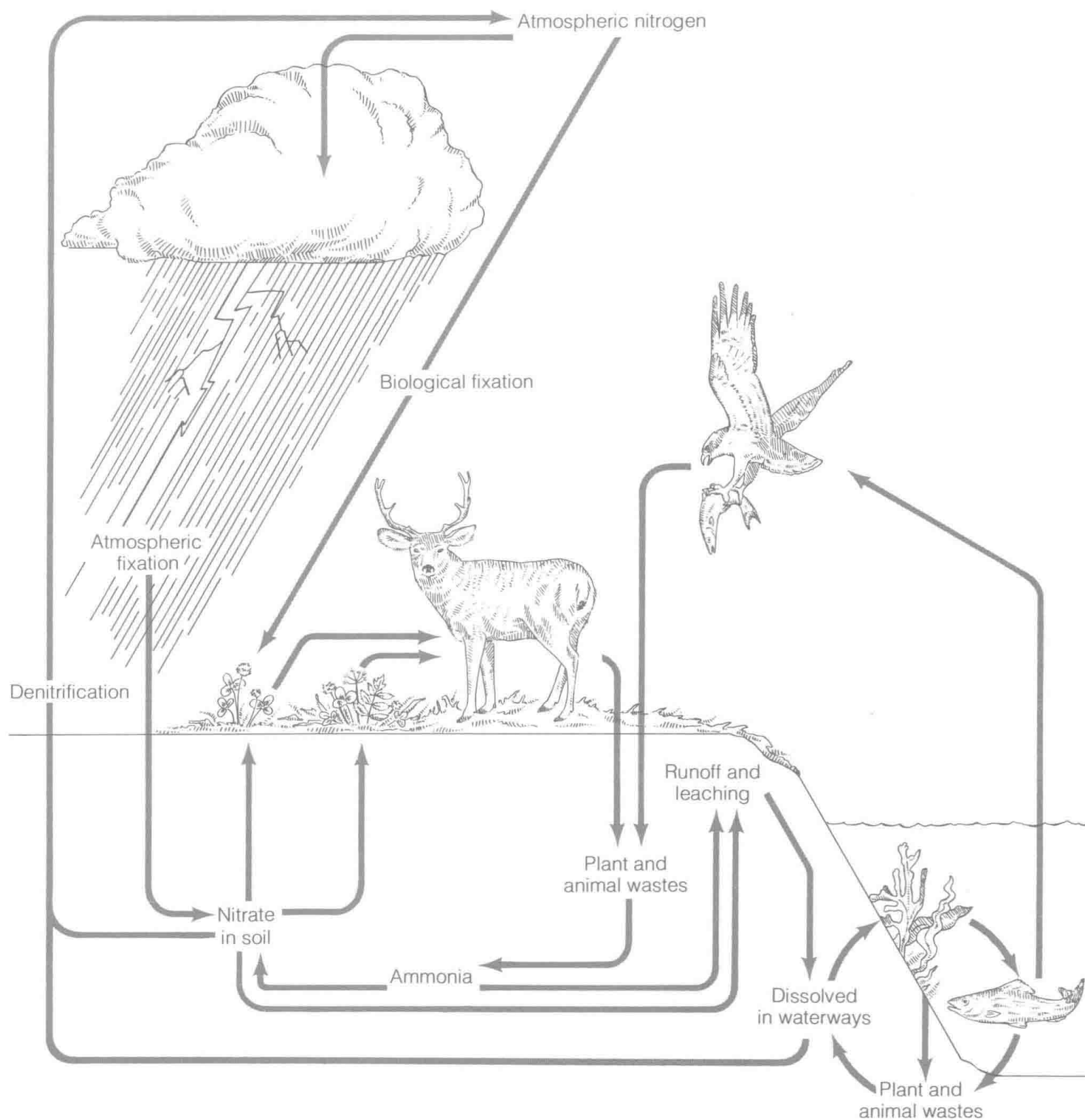


Figure 2.15 The nitrogen cycle.

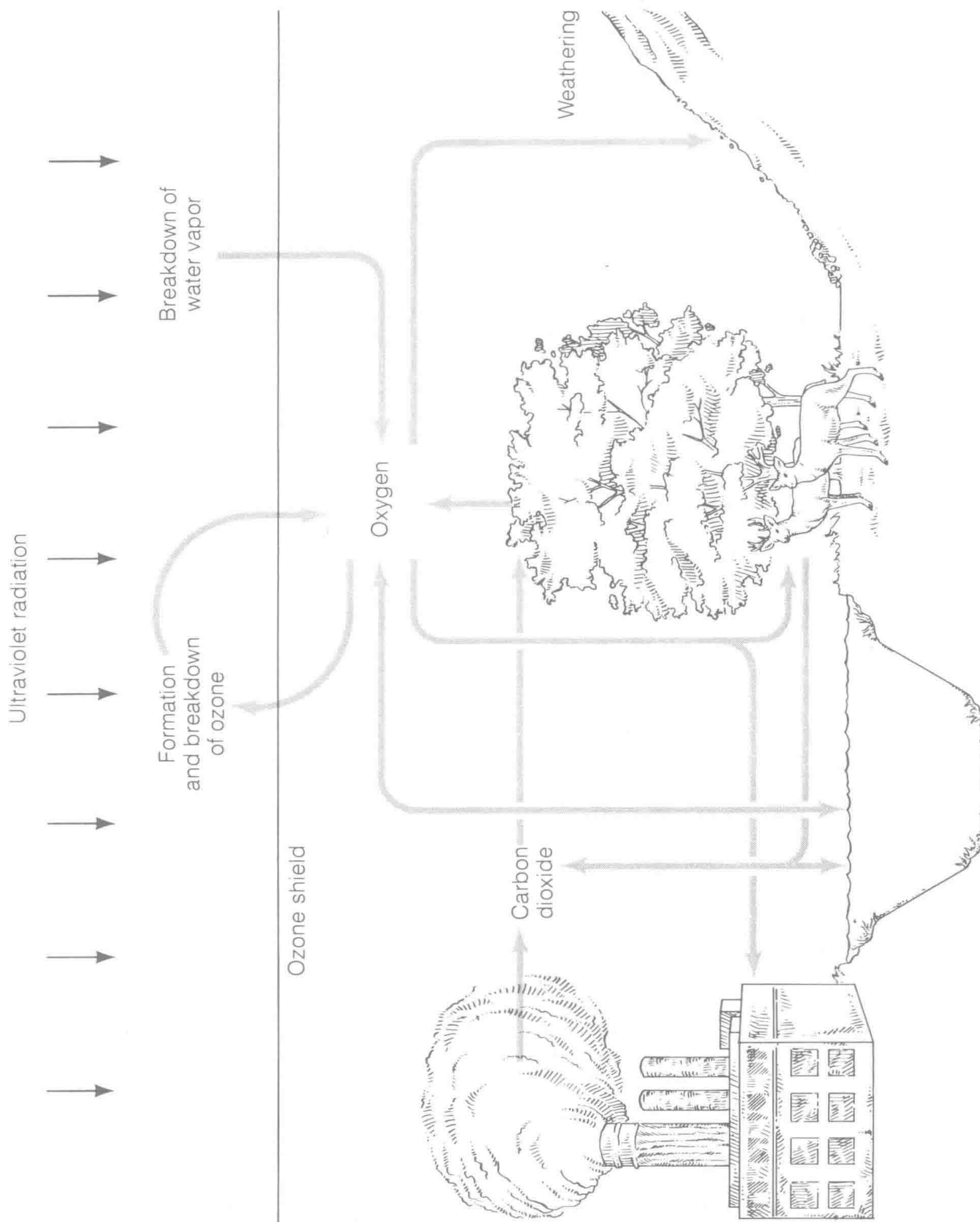


Figure 2.18 The oxygen cycle.

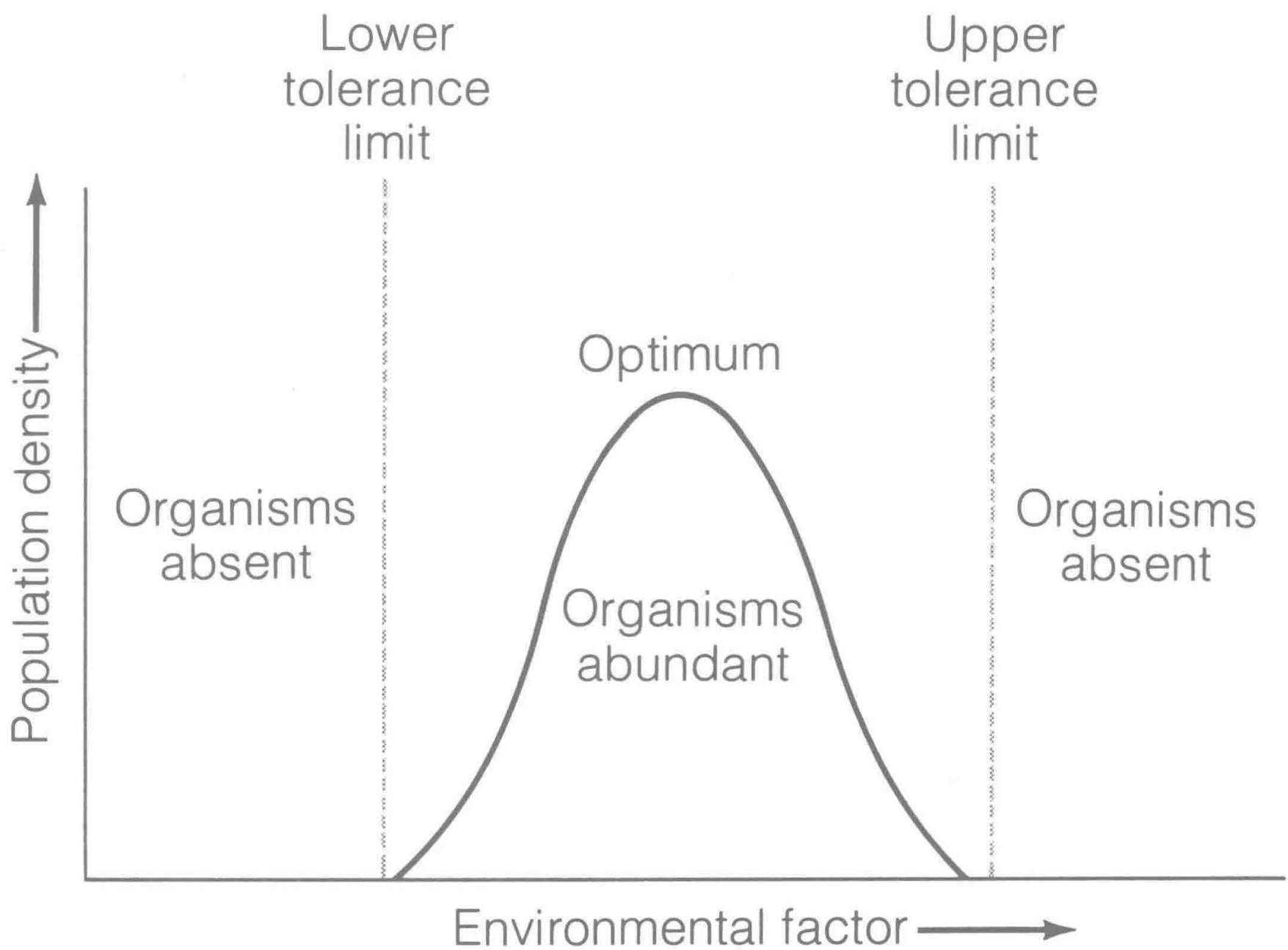


Figure 3.2 The law of limiting factors.

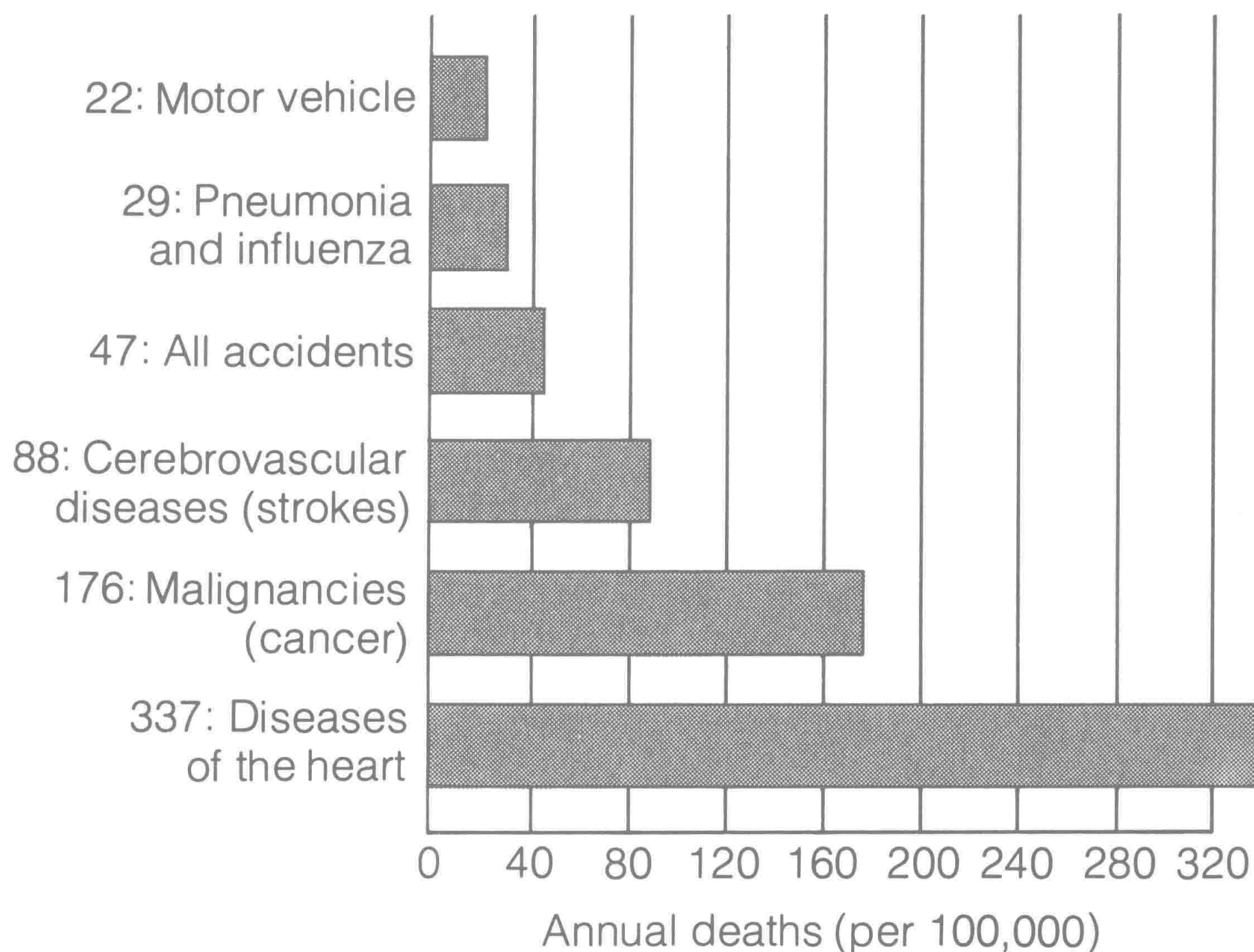


Figure 3.4 Leading causes of death among Americans. (After National Center for Health Statistics, U.S. Department of Health, Education and Welfare, 1978.)