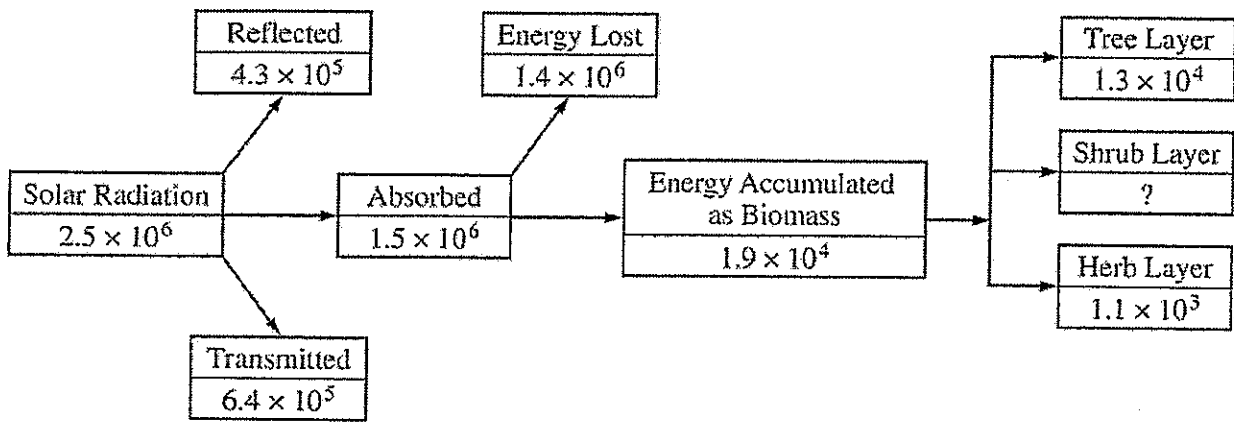
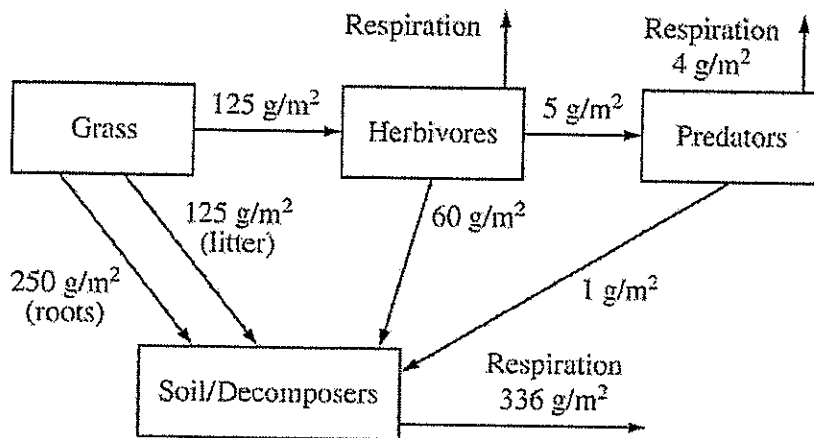


ENERGY FLOW IN A HARDWOOD FOREST (kJ/m²)



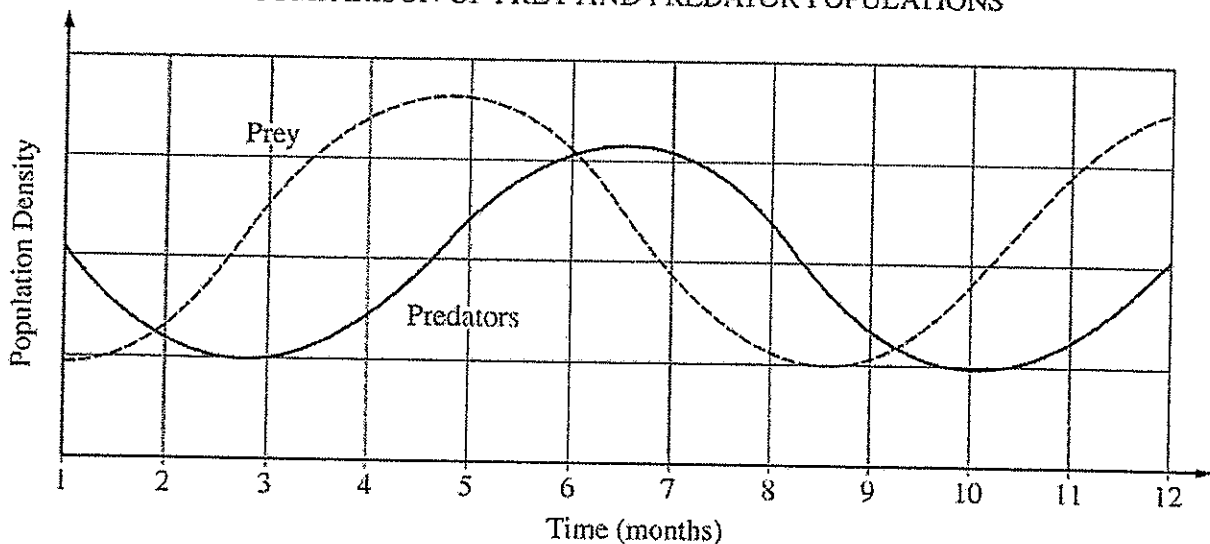
3. What percent of the biomass in the forest community represented above is tied up in the shrub layer? Give your answer to the nearest whole number.

CARBON FLOW IN A GRASSLAND ECOSYSTEM



6. How much carbon (in g/m²) is released into the atmosphere as a result of the metabolic activity of herbivores? Give your answer to the nearest whole number.

COMPARISON OF PREY AND PREDATOR POPULATIONS



5. Use the graph above to calculate the lag time in months between the change in the densities of the prey and the predator populations. Give your answer to the nearest tenth of a month.

Living organisms play an important role in the recycling of many elements within an ecosystem. Discuss how various types of organisms and their biochemical reactions contribute to the recycling of either carbon or nitrogen in an ecosystem. Include in your answer one way in which human activity has an impact on the nutrient cycle you have chosen.