



## Biology 101

### Biomes & Environments

Remember to practice with the study questions on the BIOL 101 web site.

Annual	Heterotroph
Autotroph	Inorganic
Biomass	Life zones
Carnivore	Limiting factors
Climate	Organic
Consumer	Perennial
Deciduous	Predator
Decomposer	Prey
Ecology	Producer
Ecosystems	Rain shadow
Evergreen	Temperate
Feral	Tropics
Food web	Tundra
Herbivore	



1. Suppose that a fox feeds only on rabbits, squirrels, mice, and seed-eating birds, all of which feed on plant material. How many square meters of plant material are then required to support the fox if the net primary productivity of the plant material is  $8000 \text{ Kcal/m}^2/\text{year}$ ? Assume that the fox's daily caloric requirement is 800 Kcal, and that only 10% of the energy at one trophic level can be passed on to the next. If the fox were to feed only on insect-eating birds, how many square meters of plant material would be required?
2. Using an atlas or encyclopedia, find a map of Hispaniola. This island is divided between the countries of Haiti and the Dominican Republic. Provide an ecological explanation for the more abundant forests in Haiti. In an effort to produce food and sell wood, the forests in Haiti have been cut down. Explain why farming the land in Haiti has been extremely difficult.