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Biotic components, or biotic factors, can be described as any living component that affects another organism or shapes the ecosystem. This includes both animals that consume other organisms within their ecosystem, and the organism that is being consumed. Biotic factors also include human influence, pathogens, and disease outbreak. Each biotic factor needs the proper amount of energy and nutrition to function day to day.

Biotic components are typically sorted into three main categories:

1. producers, otherwise known as [autotrophs](https://en.wikipedia.org/wiki/Autotrophs), convert energy (through the process of photosynthesis) into food. An autotroph or primary producer is an organism that produces complex [organic compounds](https://en.wikipedia.org/wiki/Organic_compound) (such as [carbohydrates](https://en.wikipedia.org/wiki/Carbohydrate), [fats](https://en.wikipedia.org/wiki/Fat), and [proteins](https://en.wikipedia.org/wiki/Protein)) using [carbon](https://en.wikipedia.org/wiki/Carbon) from simple substances such as [carbon dioxide](https://en.wikipedia.org/wiki/Carbon_dioxide),[[1]](https://en.wikipedia.org/wiki/Autotroph#cite_note-Morris_2019-1) generally using energy from light ([photosynthesis](https://en.wikipedia.org/wiki/Photosynthesis)) or inorganic chemical reactions ([chemosynthesis](https://en.wikipedia.org/wiki/Chemosynthesis)).
2. [Consumers](https://en.wikipedia.org/wiki/Consumer), otherwise known as [heterotrophs](https://en.wikipedia.org/wiki/Heterotrophs), depend upon producers (and occasionally other consumers) for food. A heterotroph is an [organism](https://en.wikipedia.org/wiki/Organism) that cannot produce its own food, instead taking nutrition from other sources of organic carbon, mainly plant or animal matter. In the food chain, heterotrophs are primary, secondary and tertiary consumers, but not producers.
3. [Decomposers](https://en.wikipedia.org/wiki/Decomposer), otherwise known as [detritivores](https://en.wikipedia.org/wiki/Detritivores), break down chemicals from producers and consumers (usually antibiotic) into simpler form which can be reused. Detritivores (also known as detrivores, detritophages, detritus feeders, or detritus eaters), are [heterotrophs](https://en.wikipedia.org/wiki/Heterotroph) that obtain [nutrients](https://en.wikipedia.org/wiki/Nutrient) by consuming [detritus](https://en.wikipedia.org/wiki/Detritus) (decomposing plant and animal parts as well as [faeces](https://en.wikipedia.org/wiki/Faeces))

Importance of environmental geology

1. It is a fundamentally important branch of science because it directly impacts every single person on the planet every single day. There is simply no way to avoid the environment around you.
2. Environmental geologists have a solid understanding of not only currently occurring geologic events, but historical geologic events, such as past earthquakes and floods. This knowledge of the past is important because it helps them to get a better idea of what types of geologic events repeat themselves, with what frequency they might occur, and what types of damage occurred because of those events.
3. It helps us understand our immediate environment better and by doing so, helps us take better care of ourselves
4. It helps government and others environmental companies make decision that won’t tamper with the environment
5. The knowledge of environmental geology can help predict natural disasters and hence prevent maximum damage