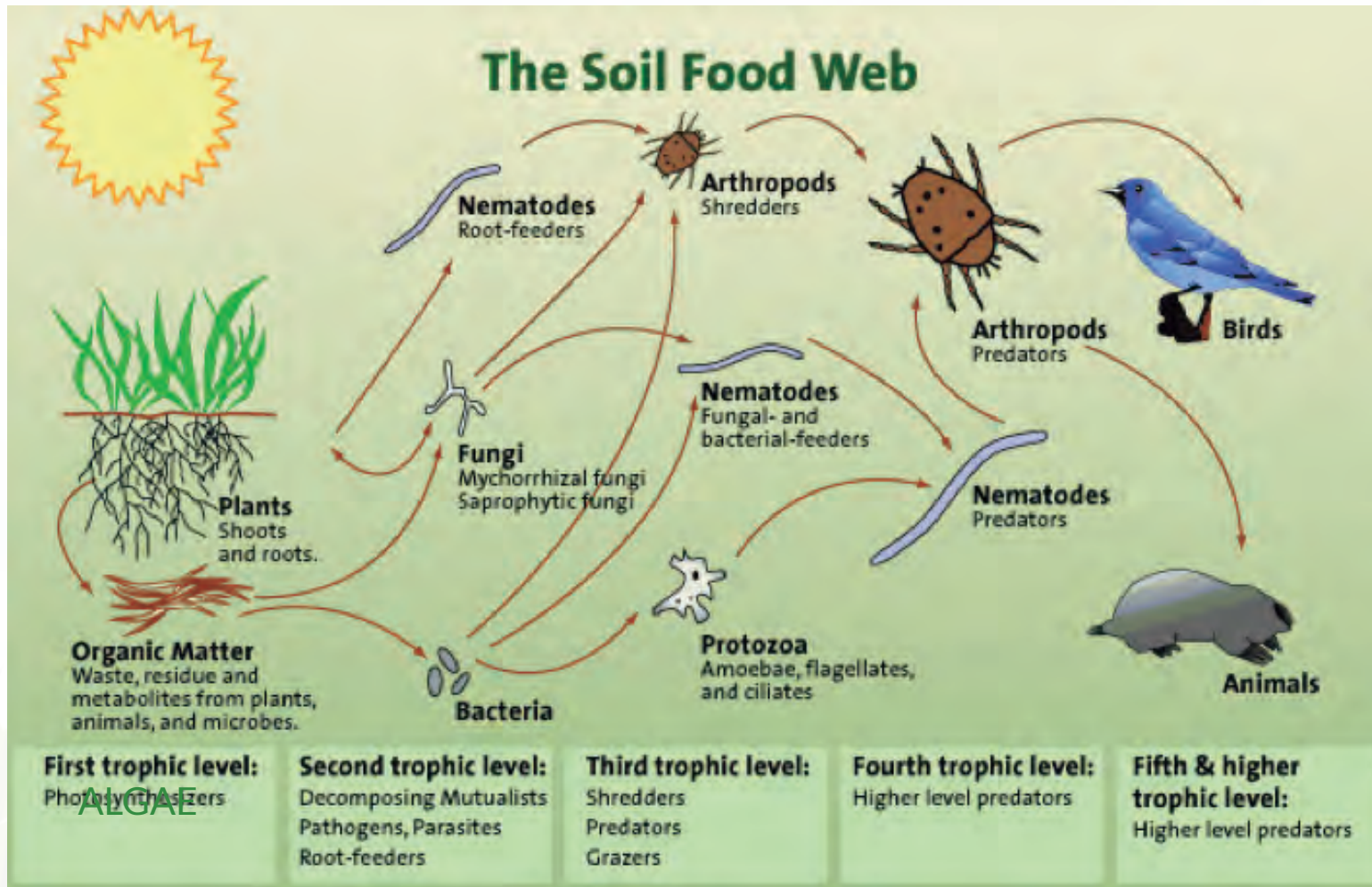


Activate



Functions / role of algae in soils



<https://gardenerd.com/blog/soil-food-web-intensive-part-1/>





Healthy Soil Microbes = Healthy Humans

- Act as the base of the food web in soils, providing food for other non-photosynthetic organisms in soils
- Secrete substances that protect associated plant root systems from attacks by diseases
- Convert atmospheric Nitrogen to NH_3 (nitrogen fixation) making Nitrogen available to plants
- Act as cementing agent in binding soil particles and thereby reduce/prevent soil erosion
- Mucilage secreted by algae is hygroscopic in nature and thus helps in increasing water retention capacity of soil for longer time/period





- Add organic matter to soil when die and thus increase the amount of organic carbon in soil.
- Through the process of photosynthesis liberate large quantity of oxygen in the soil environment and thus facilitate the aeration in submerged soils or oxygenate the soil environment.
- Reduce the loss of nitrates through leaching and drainage especially in un-cropped soils.
- Weather rocks thereby building up soil structure.

