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by Anynomuious Rajab

Submission date: 27-May-2020 12:51PM (UTC+0300)

Submission ID: 1332711048

File name: There_is_an_irrefutable_evidence_supporting_that.docx (19.92K)

Word count: 670

Character count: 3665

Implication of parasites in ecosystem

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There is an irrefutable evidence supporting that, parasites can potentially have diverse implications in ecosystem and uniquely affects relationship between the host and ² flow of energy in a food web. To understand the diversity of implication of parasites in an ecosystem the food webs are paramount in getting their general patterns based on different tropic levels. To understand the response and impacts of parasite in an ecosystem a wide range of species community is incorporated with different tropic levels and inclusion of parasites and then linking predators to their preys. Here, a host can be exploited by some parasites. This is a good way to prove how the parasites responds to anthropogenic change. To reveals that to determine parasite's general pattern in a food web, the existing food webs are repaired where the parasites are missing and also consider constructing new ones and apply food web theory to include some parasites (Lafferty et al, 2008). This will allow for expansion food web and scale the relationship of parasites in the ecosystem that can used to explain the dynamics of infectious disease.

As argued by Hatcher, Dick, & Dunn (2012), there is a diverse impact of parasites within an ecosystem. While, parasites are viewed for their negativity like altering cycling of nutrients in an ecosystem, there are some benefits associated. They have positive attributes for the ecosystem as they potentially enhance stability and biodiversity. The complex arrays of interaction between host and non-host as well as parasites affects ecosystem. Interdependence between parasitism and biodiversity, is a drive for the emergence or even extinction of species of parasites. The conceptual model of diversity by Hatcher, Dick, & Dunn (2012) reveals that, lowering biodiversity of hosts lowers the rate of transmission as well as parasite prevalence in the event where transmission is parasite depends of its density. Perhaps, reduction of host diversity, increase the rate of parasitic transmission in a food web.

Parasites, are capable of converting food to not only reproduction but also for growth through homeostatic gathering of food and its mobility is influenced by hosts. However, parasites can do this while draining energy and consuming from the hosts. The study of parasitic biomass within an ecosystem seems to fit well with the emerging interests on the parasite's role in a food web. Ideally, parasites affect topology ¹in a food web through increased ¹chain length (Kuris, et al, 2008).

Although parasites seem to have some positive influence, in an ecosystem, they end up manipulating hosts and this end up interfering with their ecological processes. Parasites that are manipulative affects ecosystem functioning and creates new habitats through alteration of host's traits as they modify resources available to different species . There are several ways in which food web is affected by manipulative parasites. Firstly, these parasites modulate energy flow in a food web through trophic's links strengthening involved in transmission. Secondly, they alters the strength of other trophic links and thus it means such trophic links are not involved in parasitic transmission. Last and not the least, manipulative parasites, completely creates interactions of novel trophic hence excluding parasites from the community which affects structure of a food web since other trophic links are as well removed (Lefèvre,et al, 2009).

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