ECOLOGY

Habitat selection by two size classes of fish and shrimp in the Tambun stream in Danum Valley

Abstract

The length of animals and the water depth were measured to see variation of habitats in the stream and sizes of fish and shrimp. More than 200 fish individuals and 150 shrimp individuals were caught in the 200 m of the Tambun stream at Danum Valley Field Centre. Our study demonstrated that the size of fish and shrimp varied significantly amongst water depth. Two predation experiments were done. In the first experiment big fish and small shrimp and small fish were collected as prey items. In the second experiment prey items were small fish (live/dead) and shrimp (live, dead). Our study showed that both big shrimp and big fish are predators. Big fish preferred to eat small shrimps. Big shrimp preferred to eat dead prey items.

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2011

Acoustic niche segregation: Does it happen at Danum Valley?

Abstract

Acoustic signals play an integral role in many animals' communication. Acoustic environments can be very complex. Competition for limited acoustic channels and space could drive the partitioning of the acoustic environment resulting in niche segregation. However, few studies have examined the distribution of calls from individuals across different taxonomic groups. This study examines time as a factor by which species across different taxonomic groups segregate into acoustic niches. Birds and cicadas dominated the day while frogs and crickets dominated the night. Within the cicada and cricket group, some species were more specialised in the calling times than others. Acoustic niche segregation by time was found to occur in the primary dipterocarp forests of Danum Valley to a certain degree. However, there was not a clear cut pattern of acoustic niche segregation, suggesting that factors other than time of day might be important.

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2010