

# Floating islands: does size really matter?

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**Abstract:** In the Amazon, streams are primary receptors for nutrients and organic matter inputs from terrestrial ecosystems and play a key role as regulators of downstream flows of materials to larger rivers. Part of the fallen organic material in the water are consumed by the aquatic fauna, but most of this debris are deposited on the stream bottoms or drifts downstream until it becomes trapped by a variety of retention mechanisms. They may form a deep layer of dead plant material receiving the name “kinon”. Given that floating litter banks tend to increase in size over time, their areas may correlate with species richness of associated fish assemblage. Our work adds information related to the diversity of organisms in these environments and aim to verify the existence of correlation between kinon volume and diversity. We sampled all the kinons we could find during the two days in the field. To determine the volume of each kinon, we used a branch and a measuring tape to record the length, width and depth. Fish, decapods and larger aquatic insects were collected by a fish hand net. We did not detect a positive correlation between kinon richness and kinons volume or between kinon abundance and kinon volume. The fact that the kinon structure is changed multiple times a day, affect diversity. Exchange of leaf litter between kinons also moves fauna between them, thus decreasing variance between kinons. This makes the volume less important for diversity. Other factors might be important, such as age of kinons or river movement dynamic.