

Contributions from fishers' knowledge to understand the trophic structure of fish fauna in clearwater rivers

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Introduction

- The trophic structure is a determining factor of energy flux in ecological communities.
- characterization of the trophic structure is extremely • The important for the understanding of natural and anthropogenic changes in ecosystems.

Objetives:

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- Determine the trophic position in the food web of fish species exploited by fishers.
- Compare the local ecological knowledge of fishers with stable \bullet isotope data.

Methods

Tapajós: 9 communities

Tocantins: 5 communities













Two







Results

The average biomass (kg) of fish caught in fish samplings did not differ between the rivers (t=0.21, df=5.47, p=0.84).



Figure 1: Biomass average in kilos of fish caught in biological samplings.

- of sets seven gillnets (~30 m each) 24 h sampling with visits each 4 to 6 h
- \bullet cited by fishers (t = -1.66, df = 6, p = 0.15).

Tapajós river:







Figure 2: Trophic chains based on those food items and predators most cited by fishermen. Numbers are percent of interviewed fishermen who mentioned each feeding interaction.



Acknowledgements: trackingchange Fishers

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The average trophic position of fishes indicated by fishers' knowledge not differ between the Tapajós (3.01 ± 0.91) and Tocantins (3.07 ± 0.94) on those food items and predators most

Solution Number interviews: Trophic structure similar

Next steps

• We are currently processing fish samples for stable isotopes analysis: 653 from the Tapajós and 175 from the Tocantins river.



