

# Trophic Interactions

A photograph of an alligator resting on a log in a swampy environment. The alligator is dark and textured, with its head raised and looking towards the right. The background is filled with dense green vegetation, including palm trees and other tropical plants. The water is calm, reflecting the surrounding greenery.

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Interim results presented at UF/SJRWMD CRISPS Annual Meeting- Sept 1, 2015



How did we go from here.....



How did we go from here.....



.....to here?



# EUTROPHICATION PROGRESSION SCHEME

**INCREASED  
NUTRIENT  
DELIVERY**



**GRAZING**

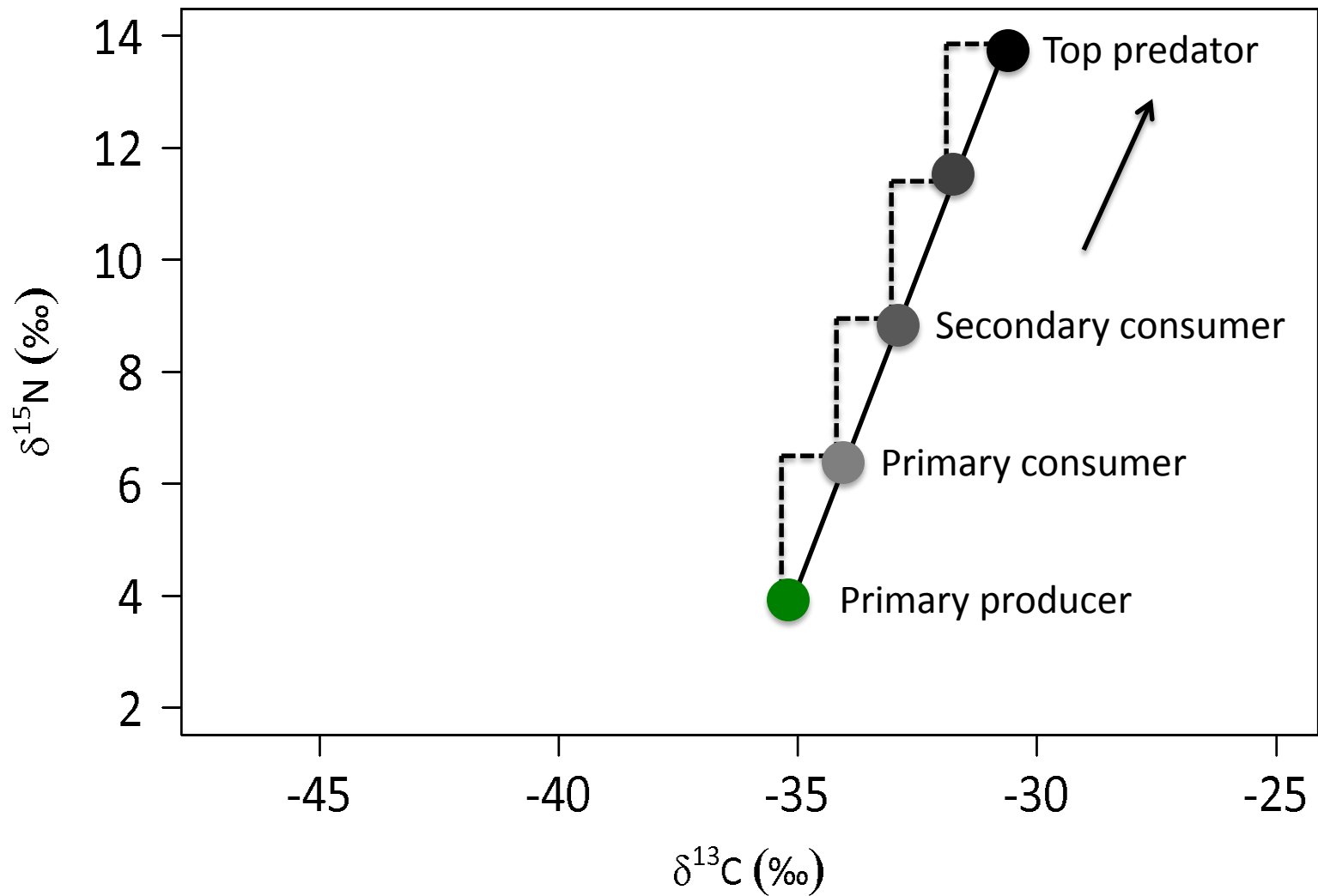
**ENHANCED  
MICROALGAL AND  
MACROALGAL GROWTH**



**INCREASED SHADING AND  
BENTHIC RESPIRATION**

**MACROPHYTE LOSS**

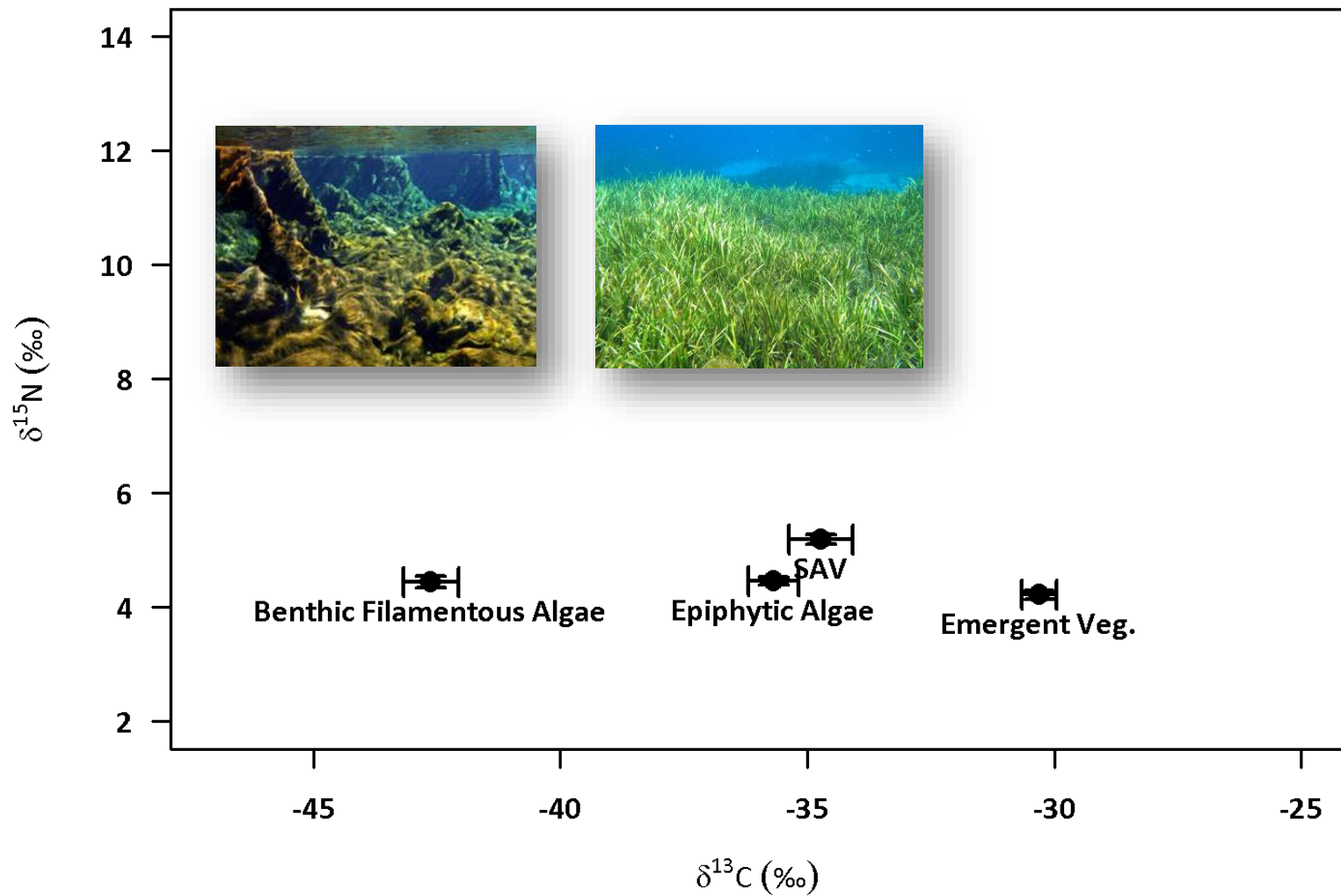






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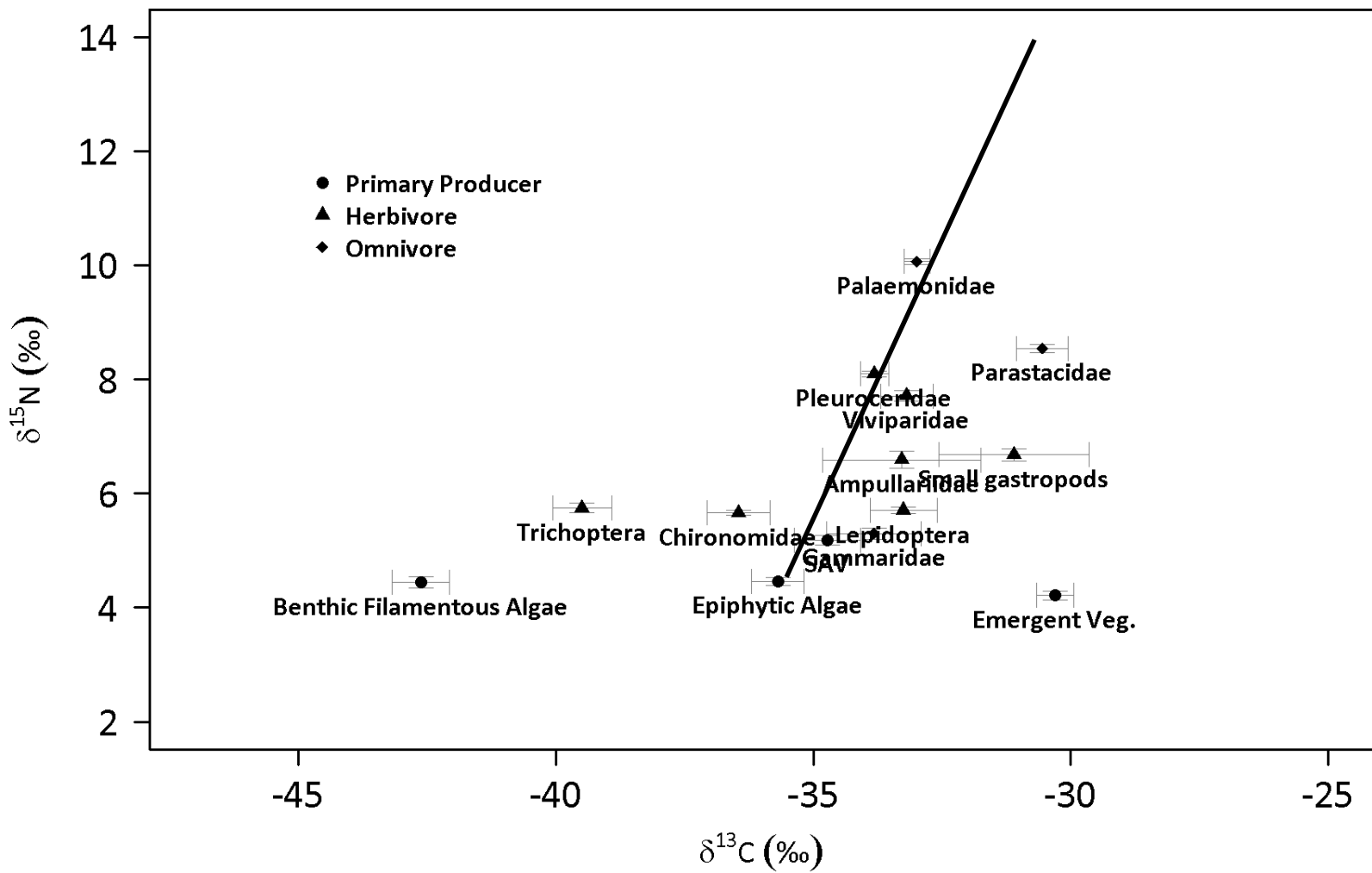
# Pleuroceridae

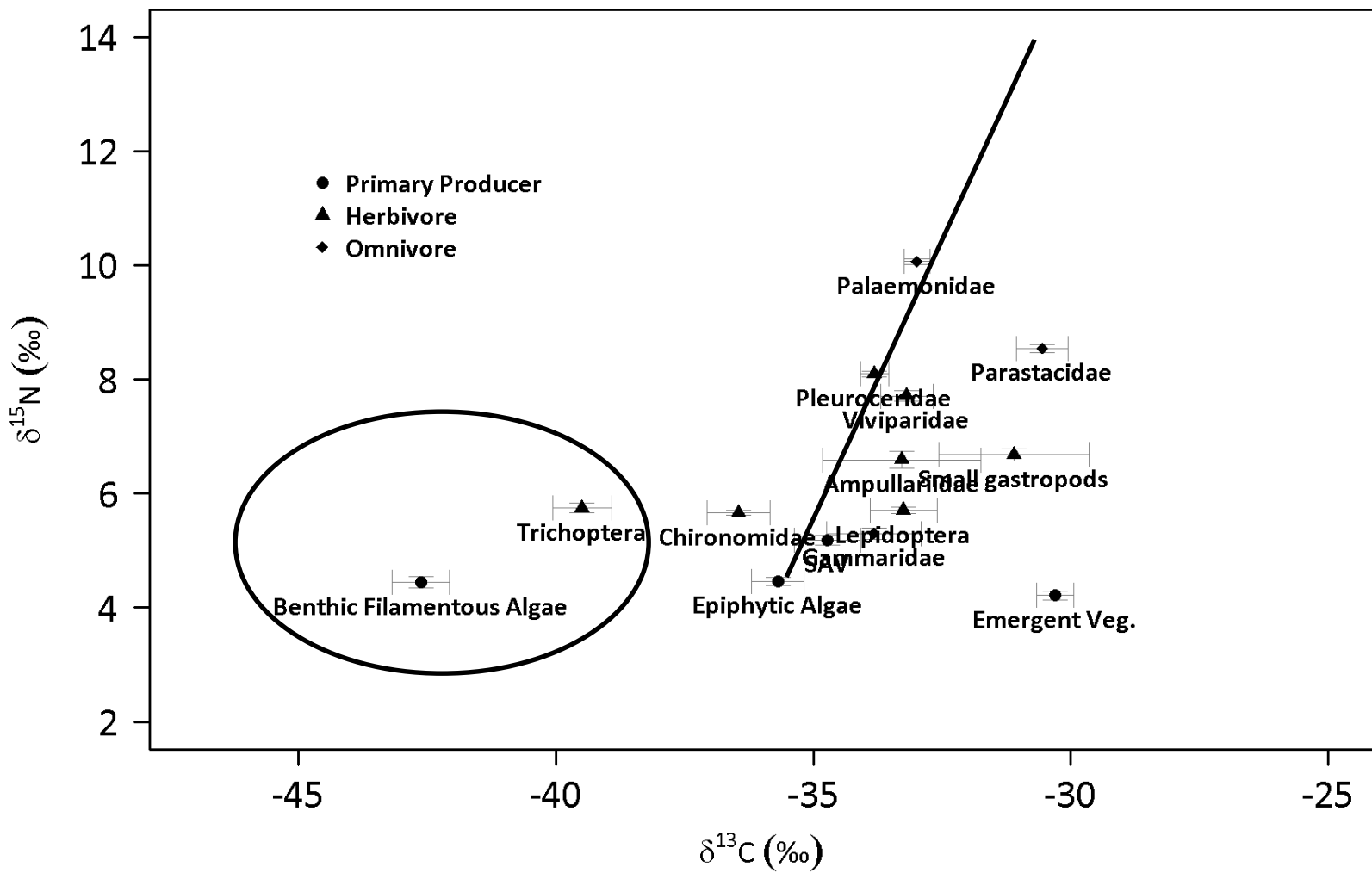
## *Elimia floridensis*



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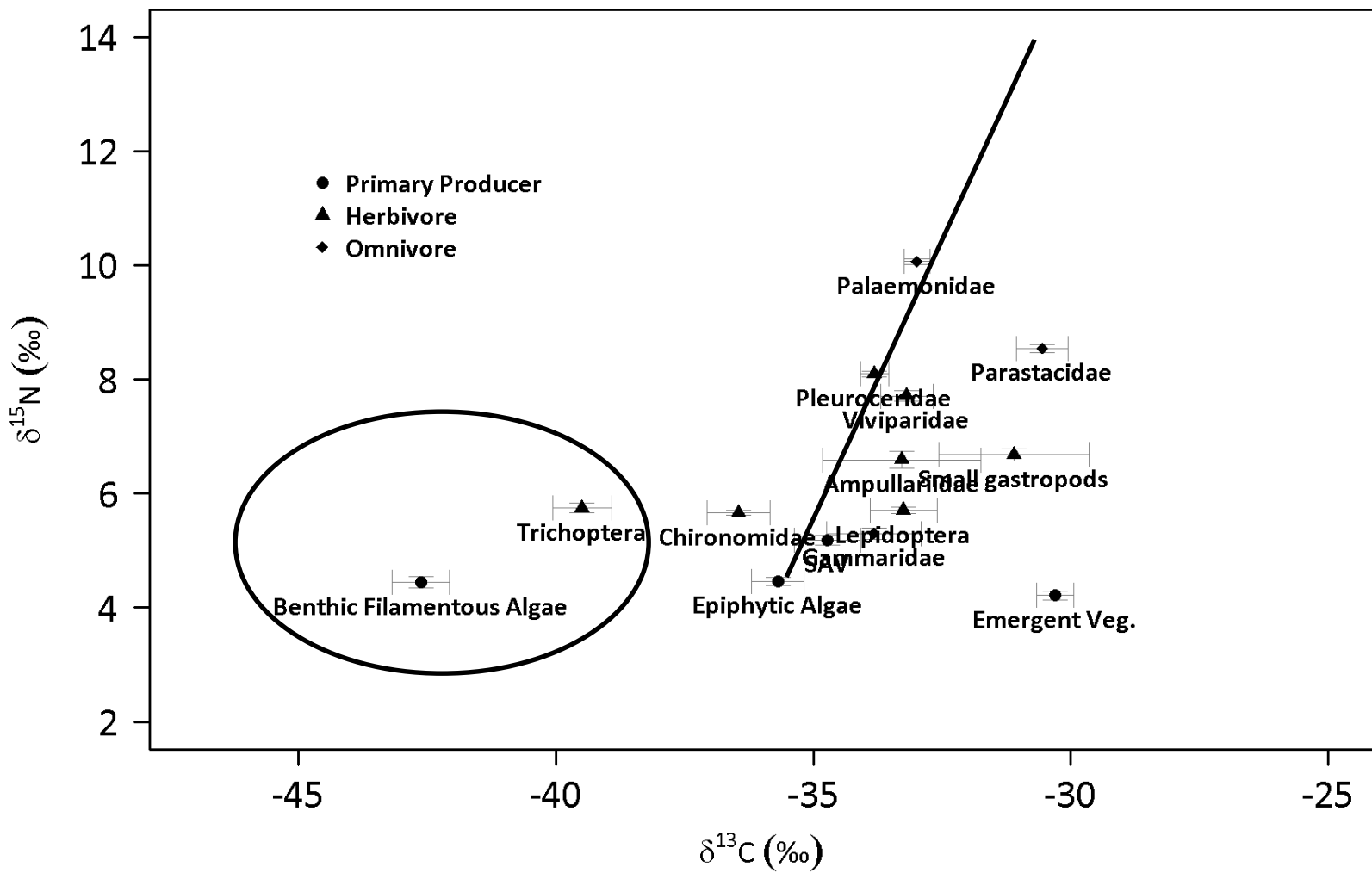






# Trichoptera larvae- caddisfly



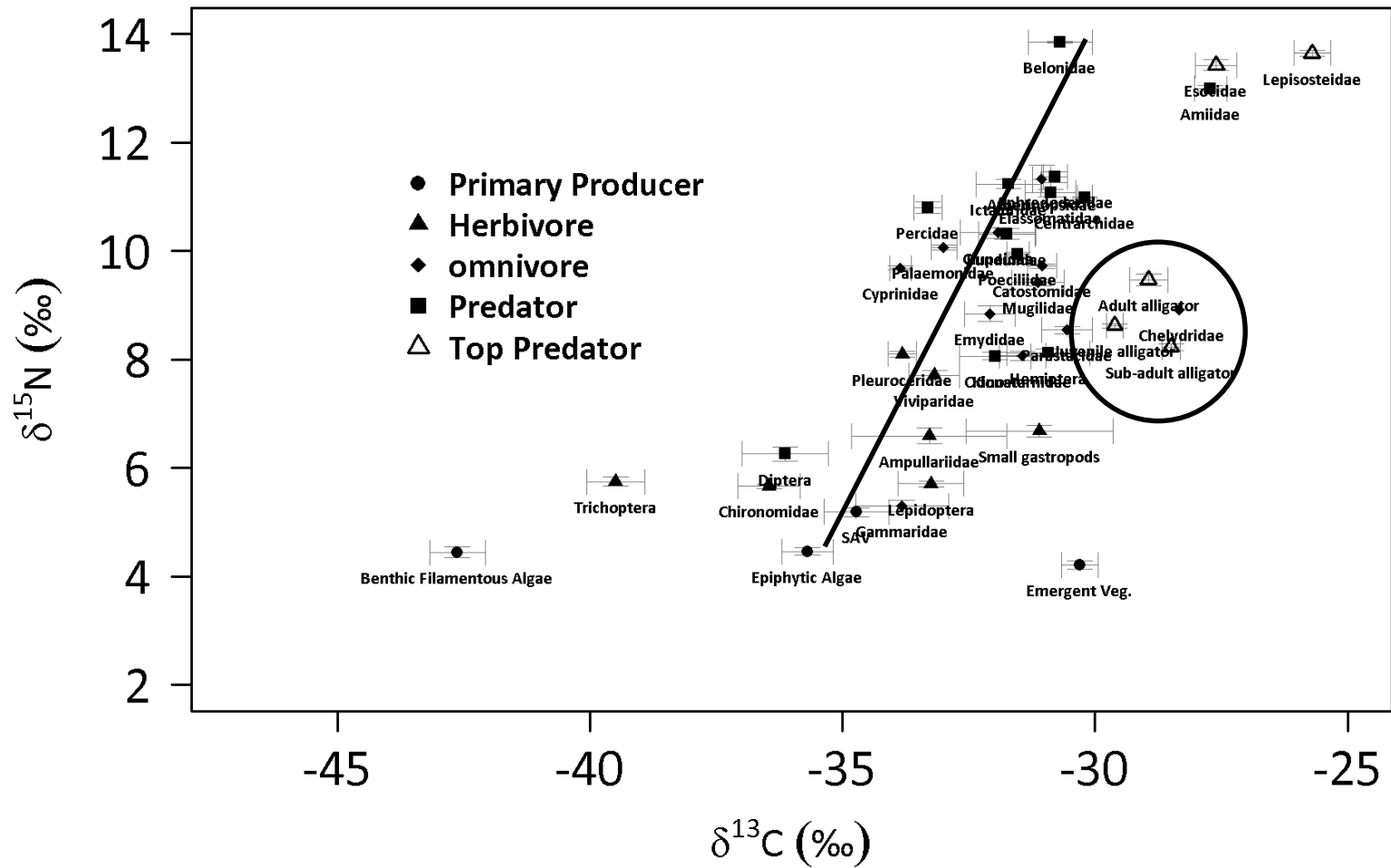




## Who are the top predators ?



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# Take home messages.....

- Stable isotopes provide useful insight into the flow of energy and material transport in the Silver River ecosystem.
- Rooted vascular plants and epiphytic algae form the foundation of the food web
- Nuisance filamentous algae DO NOT contribute substantially to the diets of key grazers such as snails and , in fact, may be largely decoupled from the aquatic food web
- American alligators are not top predators

# Questions?

