

# Catch composition analysis

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## Contents

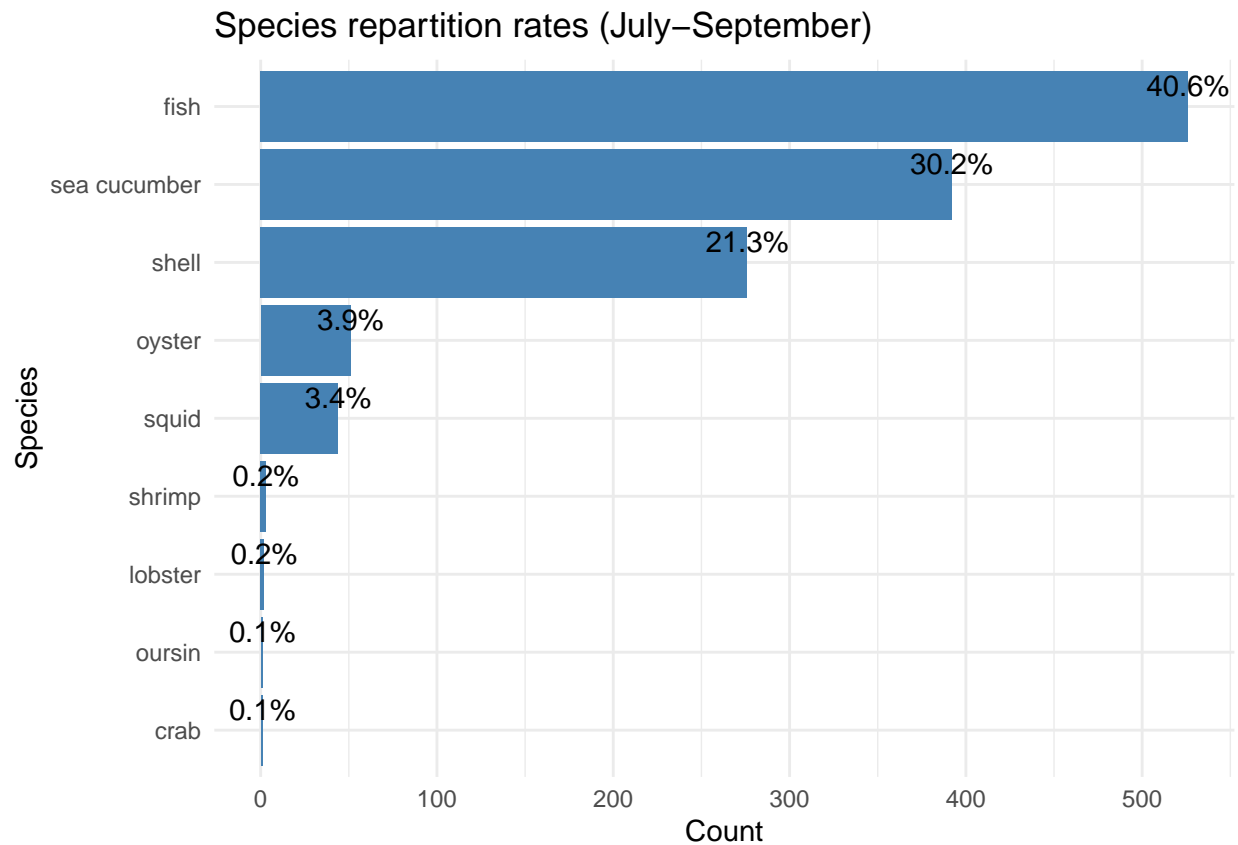
1. INTRODUCTION . . . . .	1
2. Species repartition . . . . .	1
3. Species time series global . . . . .	2
4. Species time series by village (Morombe) . . . . .	4
5. Species time series by village (Andavadoaka) . . . . .	5
6. Who catches what ? . . . . .	13
6.1 Gender proportion . . . . .	15
7. CONCLUSION . . . . .	15

## 1. INTRODUCTION

The three-month analysis (from July to September) of octopus fisheries data provides a detailed understanding of the catch composition in areas where Blue Ventures is active, particularly in the southwest region of Madagascar. This timeline doesn't just offer a comprehensive snapshot; it highlights the intricate nature of catch composition within octopus fisheries and its broader implications. As we conclude September, we are embarking on another in-depth assessment to identify the patterns and changes after three months of meticulous data collection. Focusing on catch composition analysis grants a more nuanced perspective on our interventions and their subsequent impacts. Dive in for a thorough exploration and enlightening findings!

## 2. Species repartition

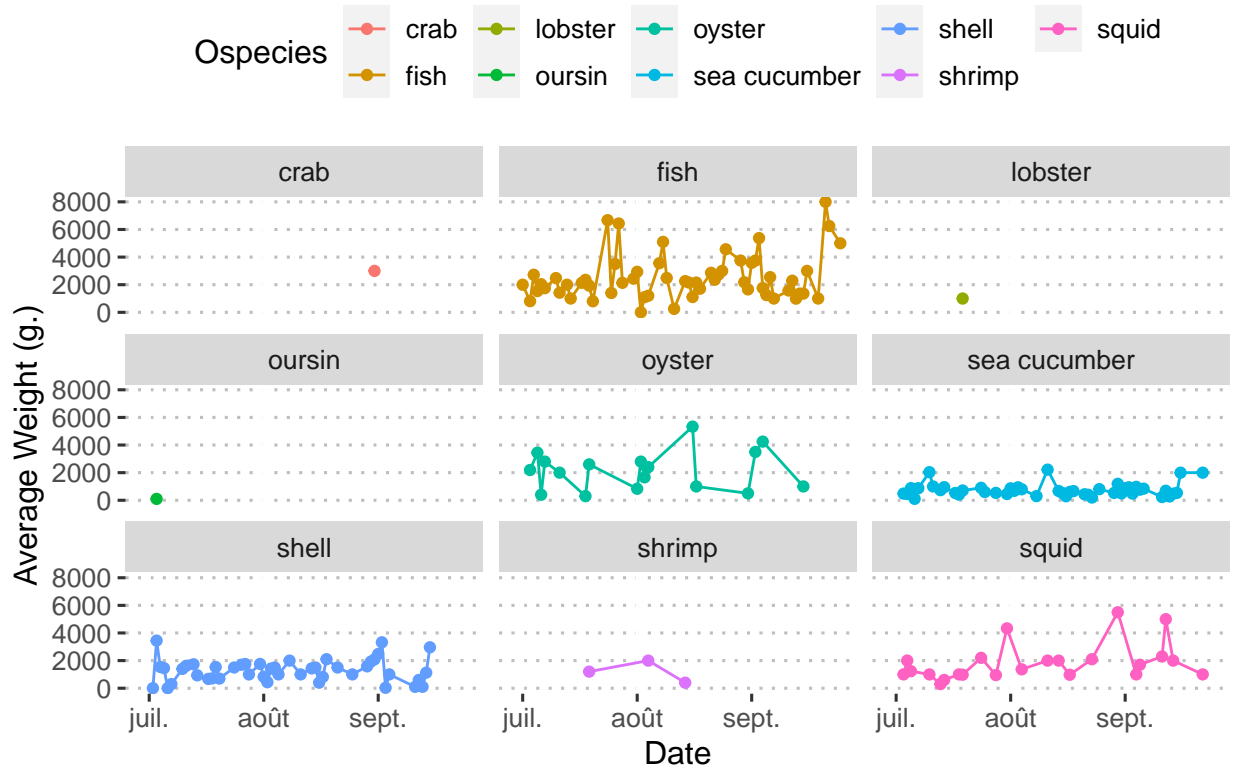
The figure suggests that catch composition is dominated by Fish, Sea Cucumber, and Shell, which combined represent over 90% of the total. Other species like Oyster and Squid are present, but in smaller proportions. The least common species (Shrimp, Lobster, Crab, and Oursin) are rare, each contributing less than 1% to the overall count.



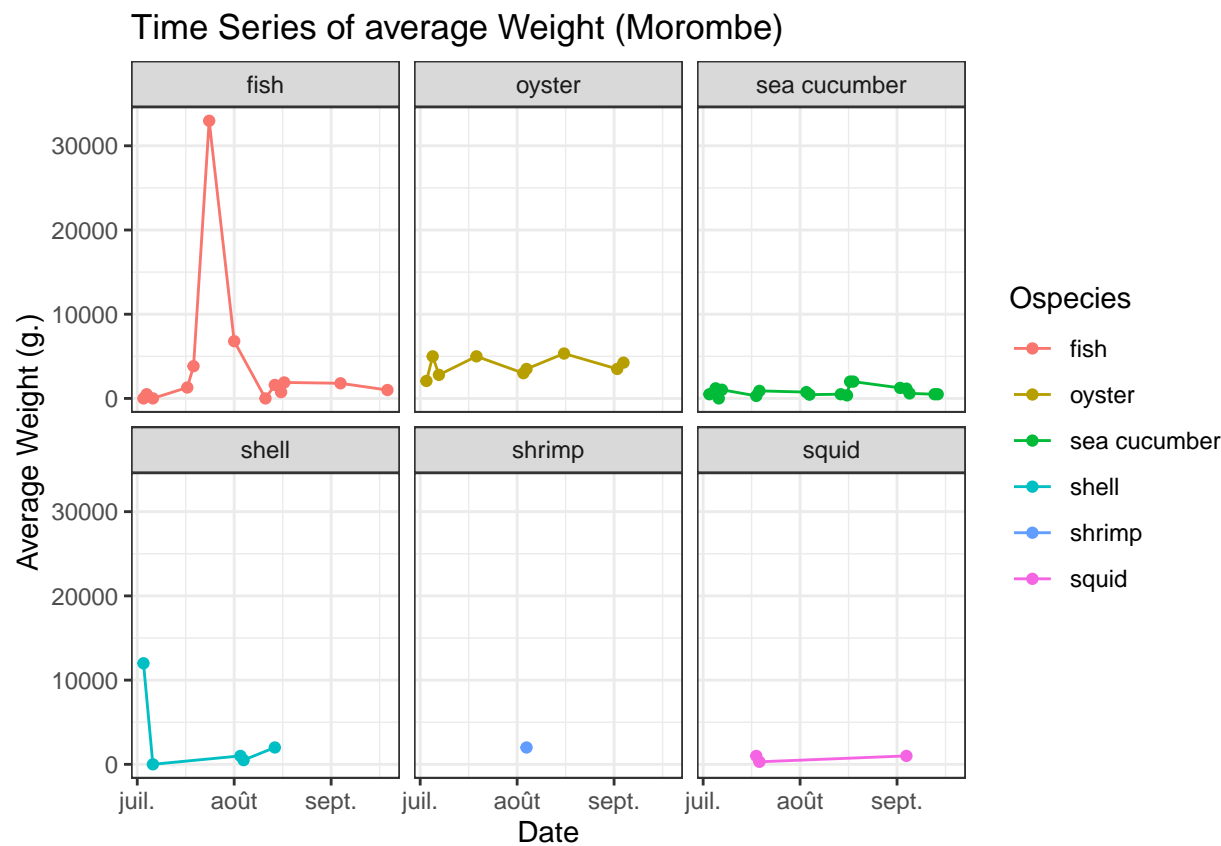
### 3. Species time series global

We observe that catch composition is dominated by Fish, Sea Cucumber, and Shell across three months. then we see also squid and oyster. It may be time to think about the management of those species in the future.

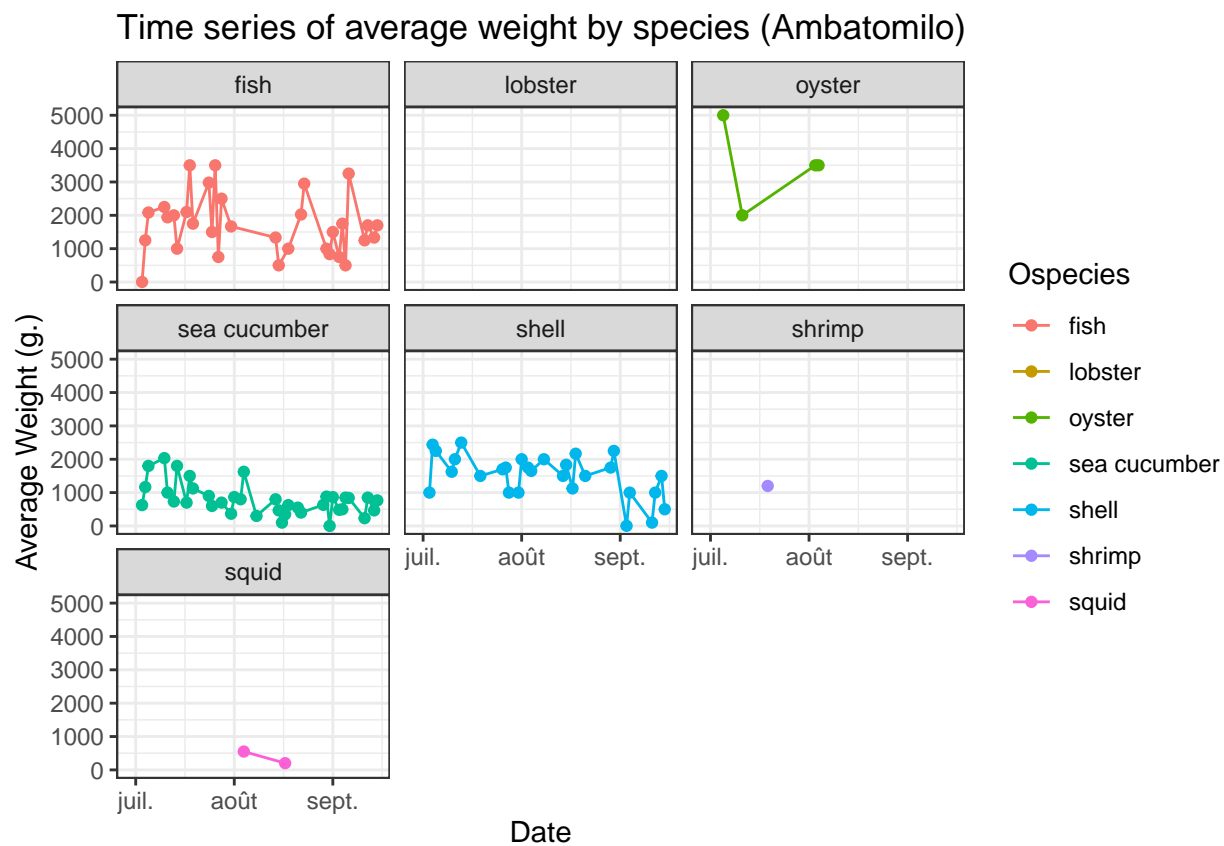
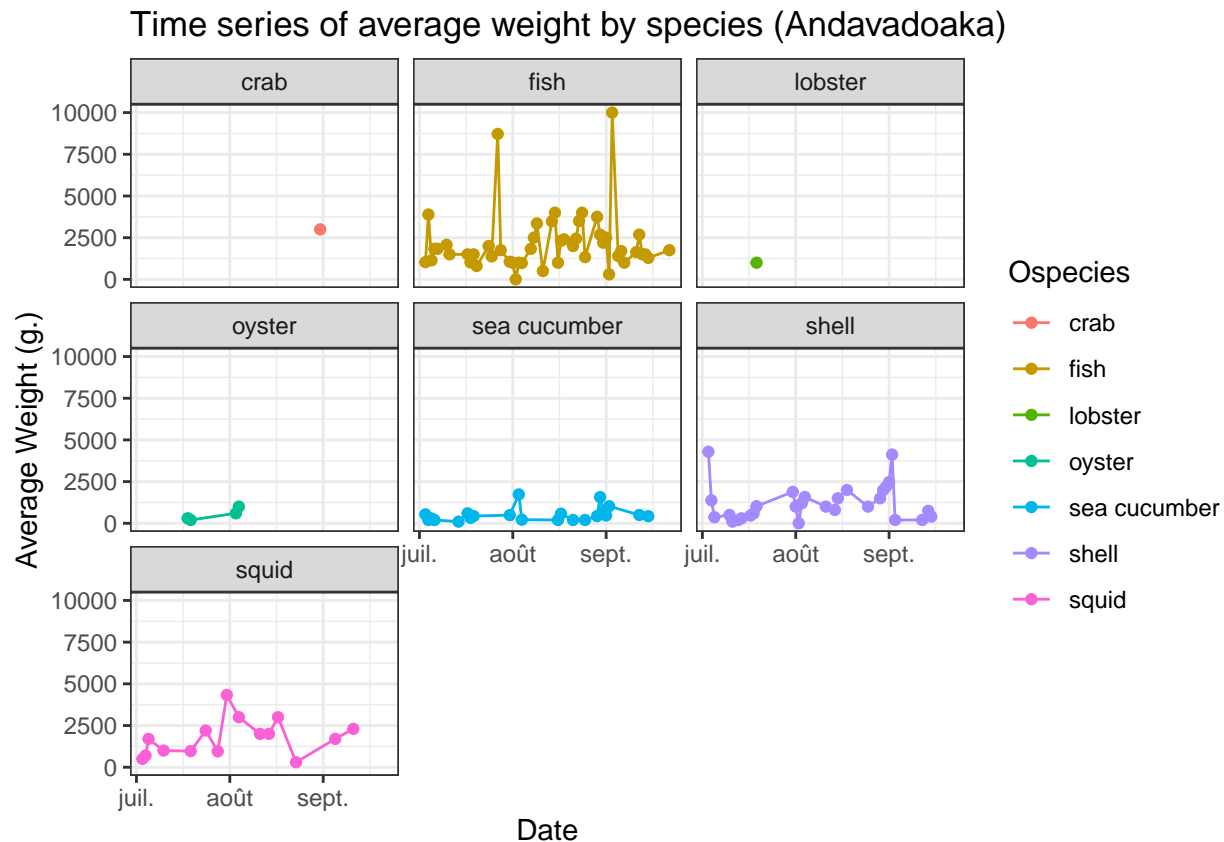
# Time Series of Weight by species



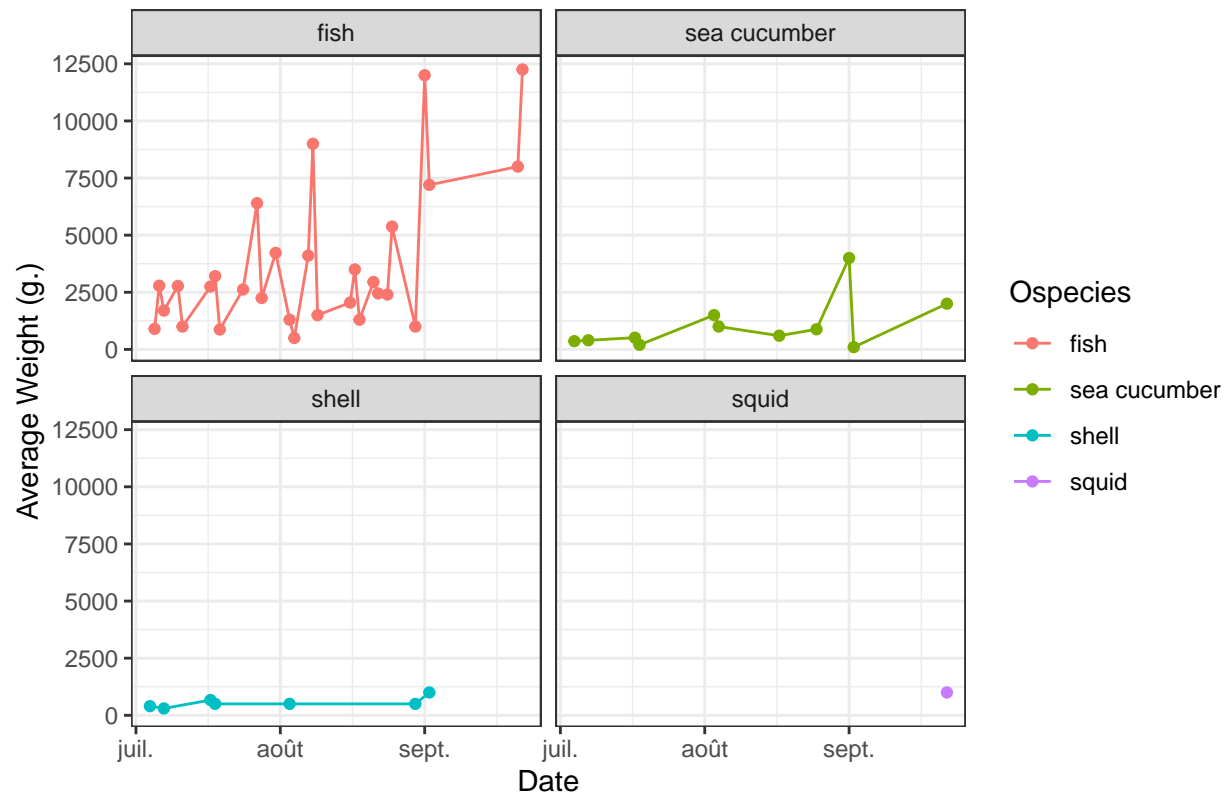
4. Species time series by village (Morombe)



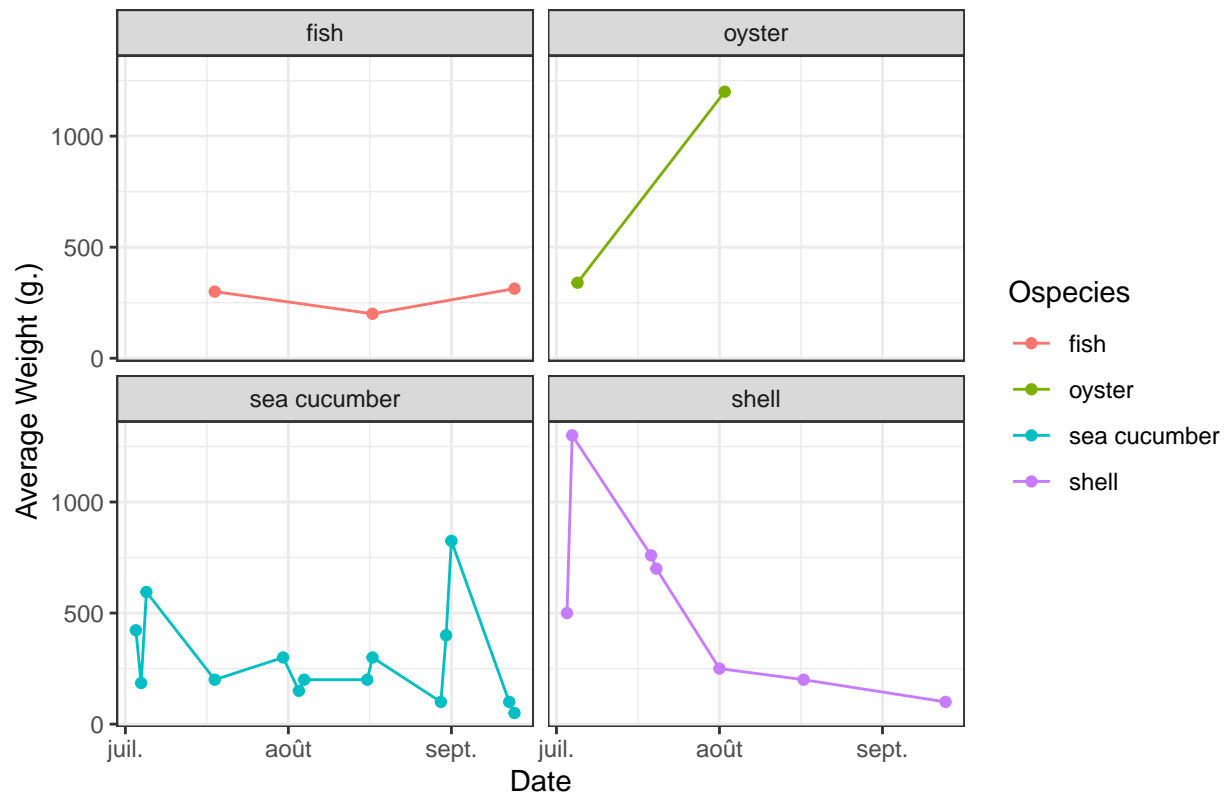
## 5. Species time series by village (Andavadoaka)



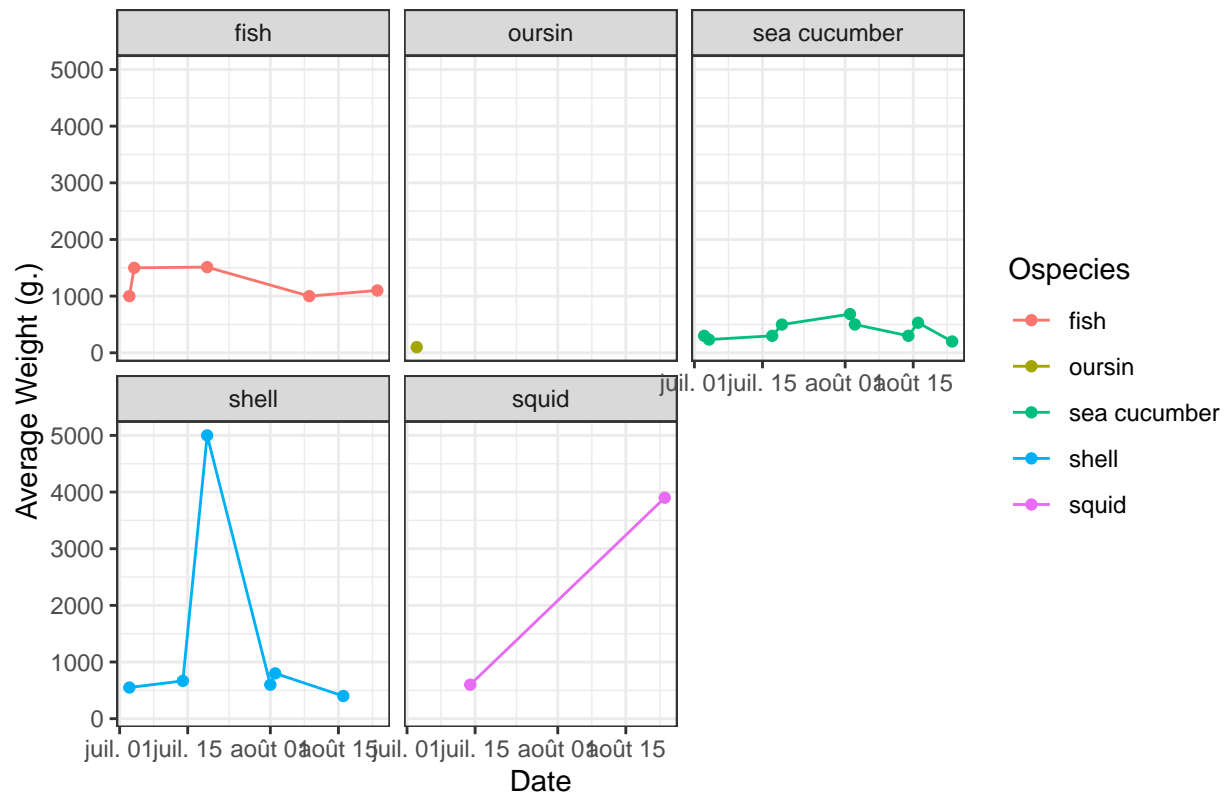
Time series of average weight by species (Bevohitse)



Time series of average weight by species (Nosy Ve)

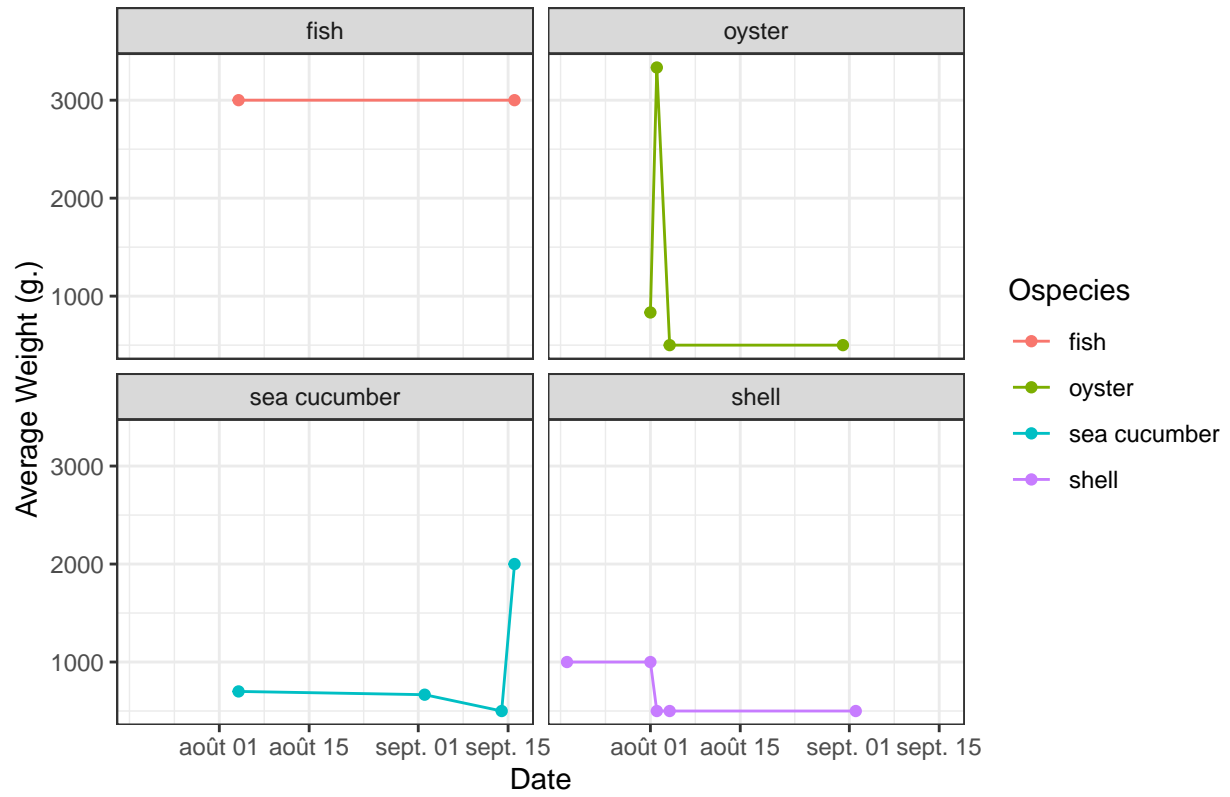


Time series of average weight by species(Ankitambagna)

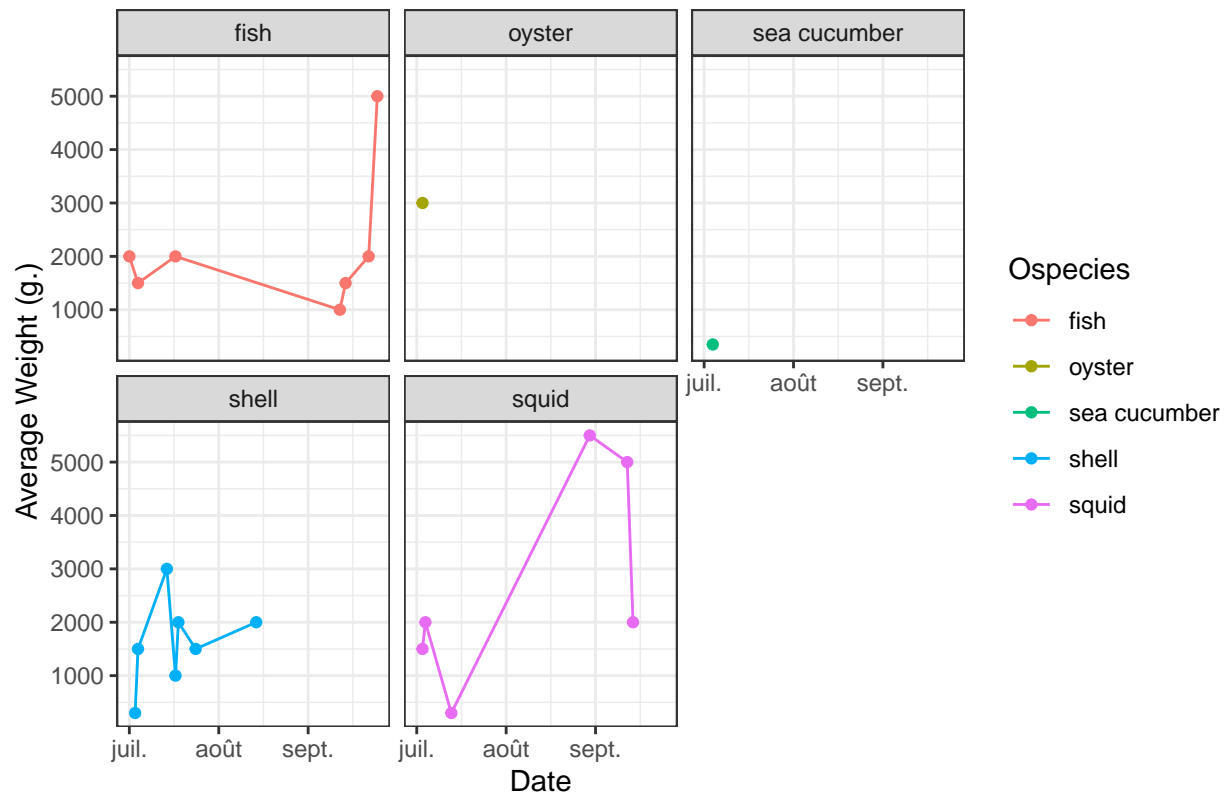




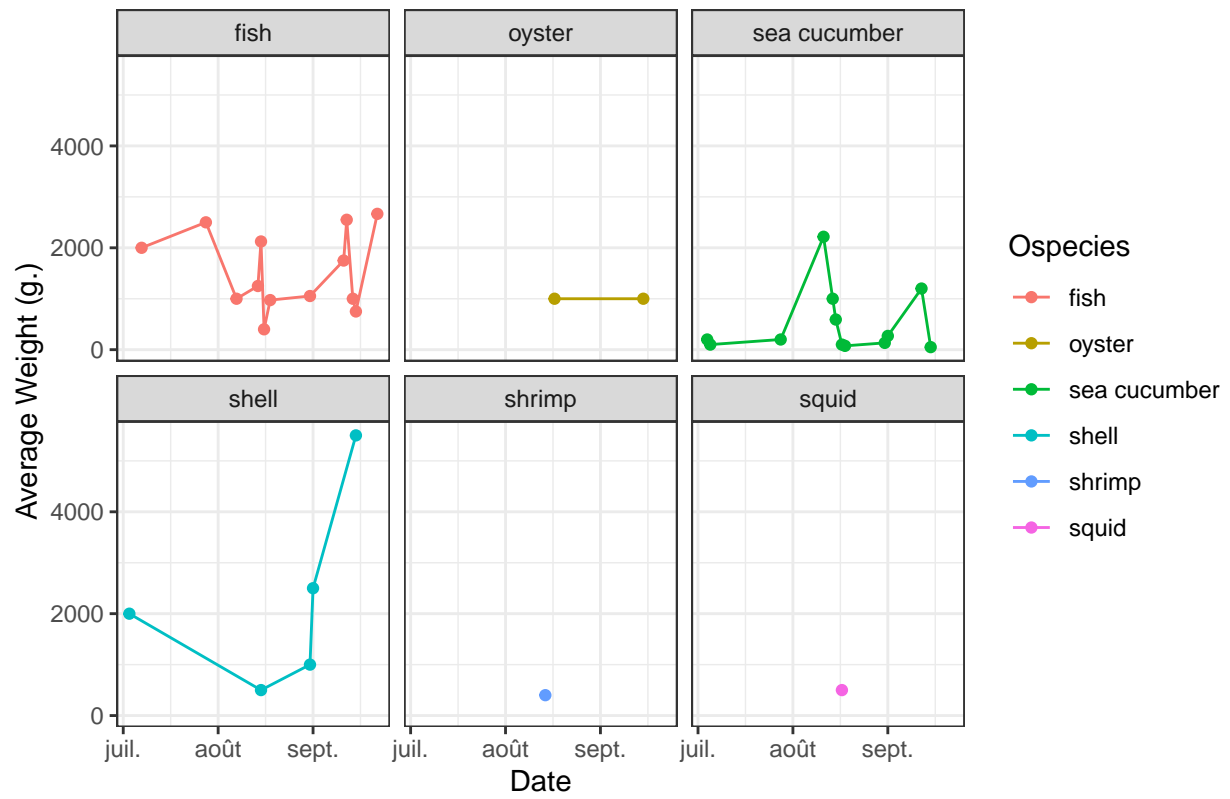
Time series of average weight by species (Bevato)



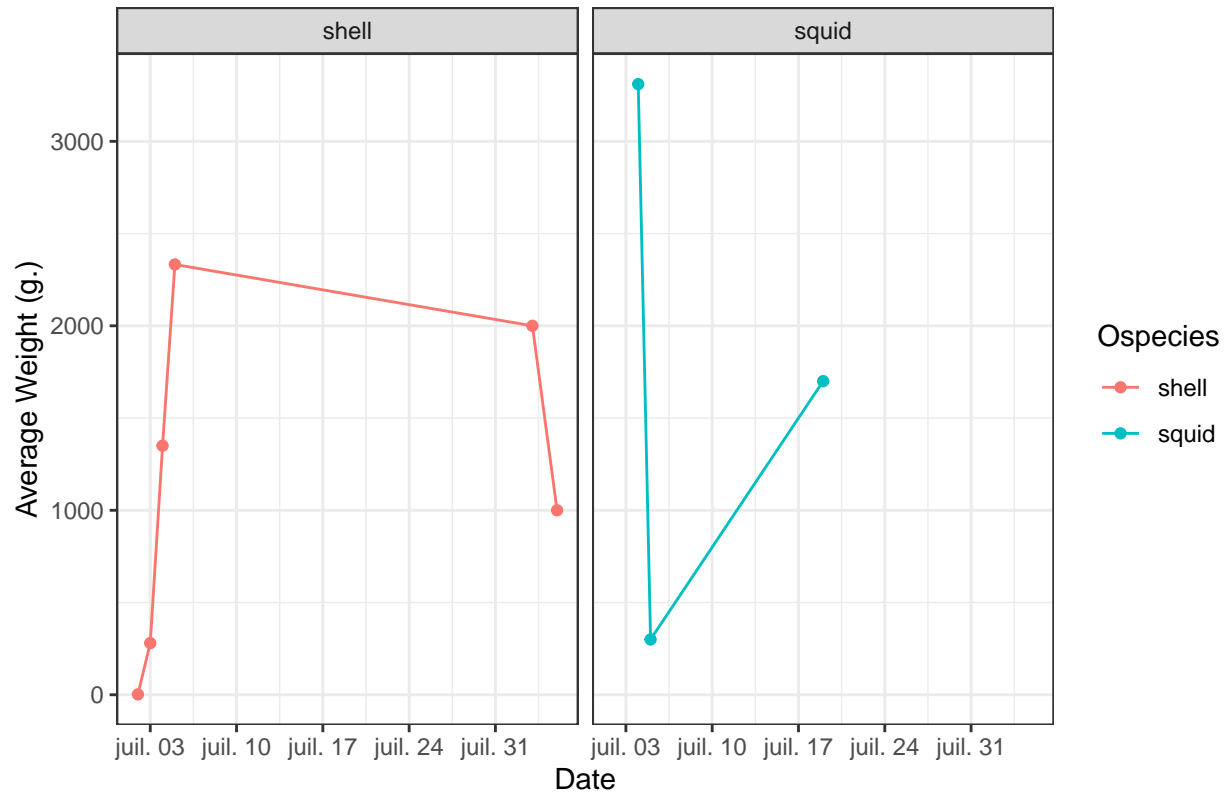
Time series of average weight by species(Tampolove)

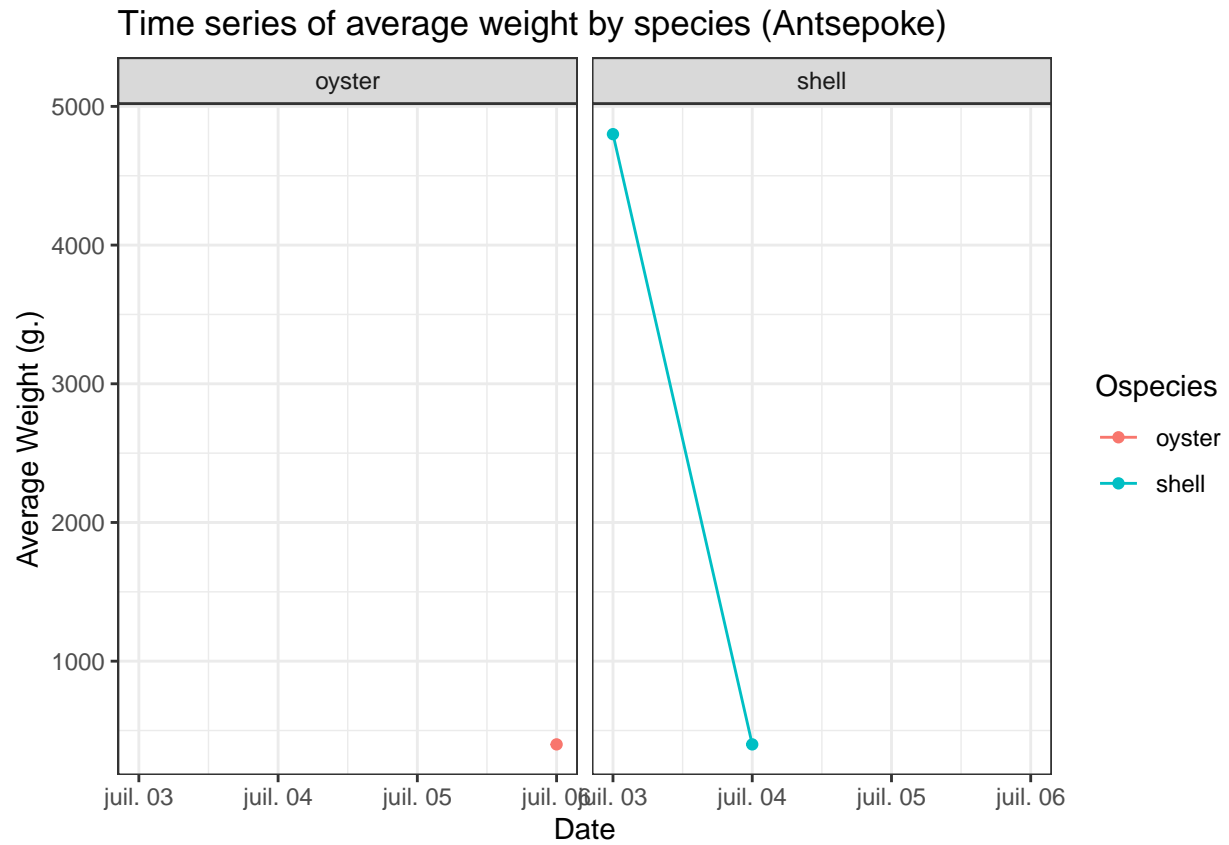


Time series of average weight by species(Ambohibao)



Time series of average weight by species (Andranombala)

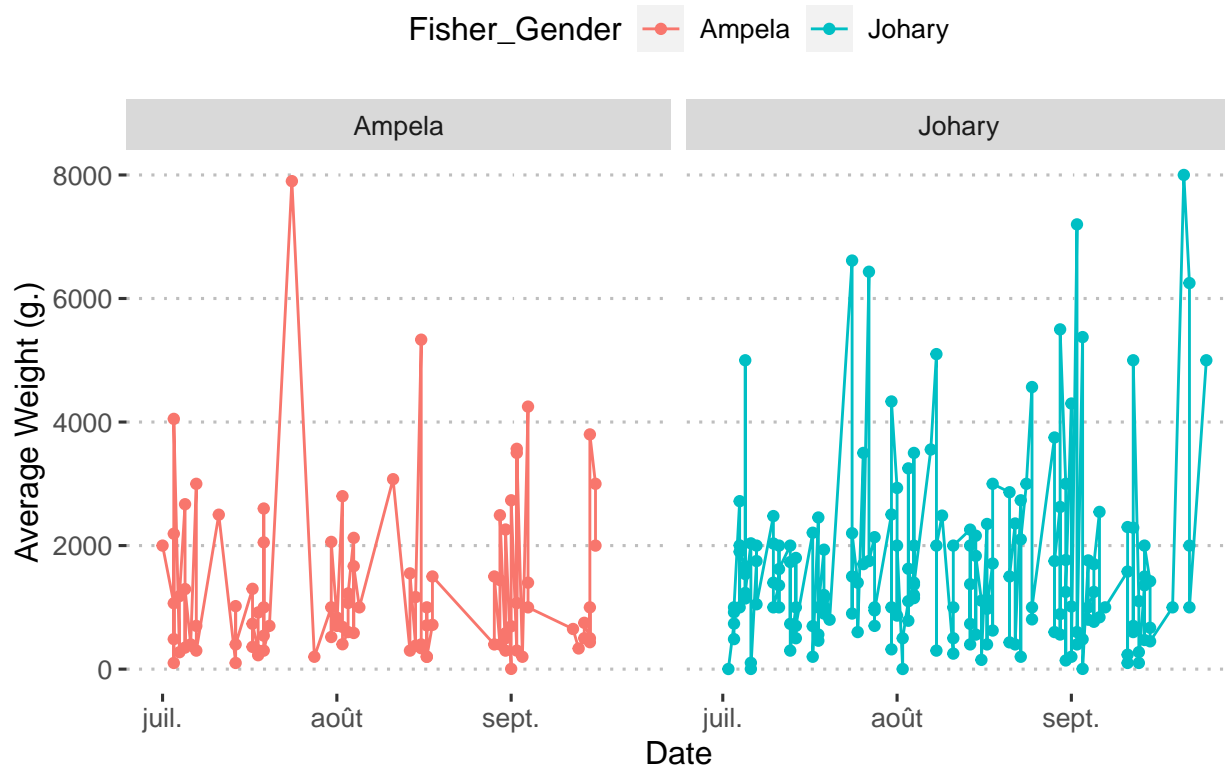




## 6. Who catches what ?

When gleaners don't catch octopus they find anything else to satisfy their daily needs. The women take sea cucumber, shell and oyster. And the fishermen take fish, crab and shrimp.





## 6.1 Gender proportion

```
## # A tibble: 2 x 3
##   f           n percentage
##   <fct> <int>     <dbl>
## 1 Johary   883     68.1
## 2 Ampela   413     31.9
```

## 7. CONCLUSION

Our three-month examination of octopus fisheries in the southwest region of Madagascar has unveiled a multi-faceted picture of catch composition. Blue Ventures' commitment to understanding and conserving this unique marine landscape is evident through the rigorous data collection and analysis undertaken. The data not only reinforces the complexity inherent in marine ecosystems but also underscores the importance of continuous monitoring and adaptive strategies. As we've observed specific patterns and changes within this short span, it's imperative to consider the potential long-term dynamics and implications for both the octopus fisheries and the broader marine environment. As we move forward, the insights gained will undoubtedly shape our future interventions. We remain committed to harnessing this knowledge for the benefit of the ecosystem and the communities reliant on it. The next steps will involve deeper dives into specific aspects of the data, consultation with local stakeholders, and the formulation of actionable recommendations.