

## CHAPTER V. CONCLUSION AND SUGGESTION

### A. Conclusion

Based on the research which was conducted done on *S. longirostris*, it can be concluded that:

1. *S. longirostris* has been detected the distribution is in around the Marine Protected Area of Pieh Island around the islands in the Marine Protected Area the habitat of *S. longirostris* until now. The location of occurrence of *S. longirostris* around Bando Island, Pieh Island, Pandan Island, and Toran Island. And also the location of occurrence in waters with coral reefs with a depth of around 0-500 masl, where the coral reefs provide a source of food and the water conditions that support *S. longirostris*.
2. The frequency of bow-riding activity of *S. longirostris* on this research which was held on July 8<sup>th</sup>, 2021 is more often sighted than the on on January 20<sup>th</sup>, 200. The total frequency of bow-riding on July 8, 2021 was 92 jumps with total duration of 7 minutes and 45 seconds, while the frequency of occurrence of bow-riding *S. longirostris* on January 20, 2022 is 31 jumps with a total recording of 1 minute 35 seconds. The frequency of occurrence of the bow-riding activity of *S. longirostris* is influenced by the speed of the boat. With the speed at 8-10 knots is favored by *S. longirostris*, while below 8 knots will indicate low frequency of bow-riding activity by *S. longirostris*.
3. The pattern of bow-riding behavior of *S. longirostris* is to swim left and right (zig-zag) and jump near the boat. Allegedly the purpose of zig-zag

swimming is to adjust the swimming speed of the speed of the boat, and jumping while bow-riding near boats is performed in order to release parasites from the body and play. And also another behavior observed during the study were feeding activities characterized by the presence of schooling fish, aerials behavior characterized by very high jumps with somersaults and turning entering the water and avoidance, where the *S. longirostris* move away from the boat and swim to certain direction in pod.

### **B. Suggestion**

To find out whether the groups which were found at different coordinates are the same or different *S. longirostris* groups, a suitable and good devices are required in order to identify the movements of *S. longirostris* as a pod and individual accurately with tagging or marker, it is necessary to conduct long-term research in Pieh island MPA to find out which month *S. longirostris* appears the most and specific location that where the possibility of encountering *S. longirostris* is very large. And also examine the effect of tides on the existence of *S. longirostris* in Pieh Island MPA.

