

## **Seabird Conservation Education on Board: a preliminary training programme for the Taiwan longline fishermen in Port Louis, Mauritius, 2005**

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### **Abstract**

In 2005, Wild Bird Federation Taiwan (WBFT) has conducted a preliminary educational programme for the Taiwan fishermen in the Port Louis, Mauritius. This programme was the first trial to discuss the bycatch problems and the efficiency of mitigation measures with the fishermen in their cabins, which was supported by the Fisheries Agency (FA), Taiwan. In the twenty two Taiwan vessels been visited in the fortnights, almost all of them equipped with the bird line (or Tori line), and all of them are willing to discuss how to apply the mitigation measure more efficiently. Some skippers expressed interested in the future cooperation for the new mitigation trials. Among 22 vessels, only 11 are authorized to fish for Southern Bluefin Tuna.

### **Introduction**

The longline fisheries from Taiwan, R.O.C. has been considered as one of the most crucial fleets of the world recently. The continuous or extension education for the fishermen working overseas is necessary, especially on the conservation of natural resources and sustainable fishery management, such as the seabird by-catch mitigation measures for increasing the fishing efficiency.

Since the seabird conservation issue has been raised and been acknowledged globally, the very first Regional Technical Workshop on Seabird By-catch and Mitigation in Asia was organized by BirdLife International (BL), Wild Bird Federation Taiwan (WBFT), Fisheries Agency, Taiwan (FA) and the Taiwan Tuna Association (TTA), held in Kaohsiung, Taiwan, January, 2004. The aim of the meeting is to reduce the seabird by-catch caused by longline fisheries, and to promote sustainable fishery management. Therefore, an education proposal for the Taiwan longline fishermen in Port Louis, Mauritius was initiated by WBFT and facilitated by FA and TTA in 2005, as the extension work of the meeting. The proposal is trying to visit fishermen working overseas, and to conduct the preliminary education of conservation with them on board.

### **Study site and Methods**

Port Louis (20° 09'S, 57° 29'E) is the capital of the Mauritius and the biggest port of the country, which is 800km east of the Madagascar (figure 1). The port is an important supply base of the Taiwan longline fisheries. After the fishing season, most of the longline fishing vessels will spend weeks in the port to unload their fish harvest and to get supplies, such as food, water, fuel and goods. During the anchored period, the conservation educational programme was conducted on board to advocate the necessity of conservation, to measure the attitude of the fishermen to the mitigation measures for reducing seabird by-catch risk, and to stimulate the fishermen's attitude to the seabird conservation.

In this preliminary survey, the qualitative analysis is applied to evaluate the attitude of conservation in the opinion, cognition, and behaviour of the skippers investigated in the port. The theme of the talk on board is the fishing efficiency to build a common ground for communication.

The date of the survey started from the first of October to the 11<sup>th</sup> of October on board.

## **Result**

This programme was the first trial to discuss the bycatch problems and the efficiency of mitigation measures with the fishermen in their cabins, which was supported by the Fisheries Agency (FA), Taiwan. In the twenty two Taiwanese vessels been visited in the fortnights, almost all of them equipped with the bird line (or Tori line), and all of them willing to discuss how to use the mitigation measure more efficiently. But none of them could identify the species name of albatrosses and petrels. Among 22 vessels, 11 are authorized to fish for Southern Bluefin Tuna.

In the fortnight, there were twenty two Taiwan longline fishing vessels visited; the tonnage distribution of them has been showed in figure 2. Sixteen of them are larger than or equaled to two hundred tons. There were four vessels made in FRP material.

The age distribution of the visited skippers has been showed in the figure 3. Over half of the skippers, thirteen in twenty two, are younger than fifty years old (figure 3).

## **Discussion and Conclusion**

The preliminary qualitative analysis for the attitude of seabird conservation of the skippers investigated in the port has found that the cost, efficiency, durability and user-friendly of mitigation measures are the key factors related to the willing to apply during fishing. The theme of the talk on board is the fishing efficiency to build a

common ground for communication which made the advocacy for seabird and sea turtle conservation easier (figure 4a and 4b). Some skippers expressed interested in the future cooperation for the new mitigation trials

The identification of stakeholders for the conservation has been expanded to all the fisheries related business, including the fishery company, the frozen storage company, ship yards, the vessel goods suppliers, etc (figure 5a, 5b, and 5c). Also, it is possible to discuss our future cooperation for the seabird and sea turtle conservation programme.

This is the first trial to promote the conservation education on board for the Taiwan fishermen overseas. This extension training for the senior fishermen are welcomed by all stakeholders, such as the conservation NGO, the government agency, and the fishermen. The task force of seabird conservation programme, WBFT is happy to see the progress of on-board education programme. The aim of the programme is not only expanding the on-board education coverage to the main supply bases of Taiwan fishing vessels in the future, but also last long and making significant contribution to reduce the bycatch issue for the sustainable fisheries.

### **Acknowledgement**

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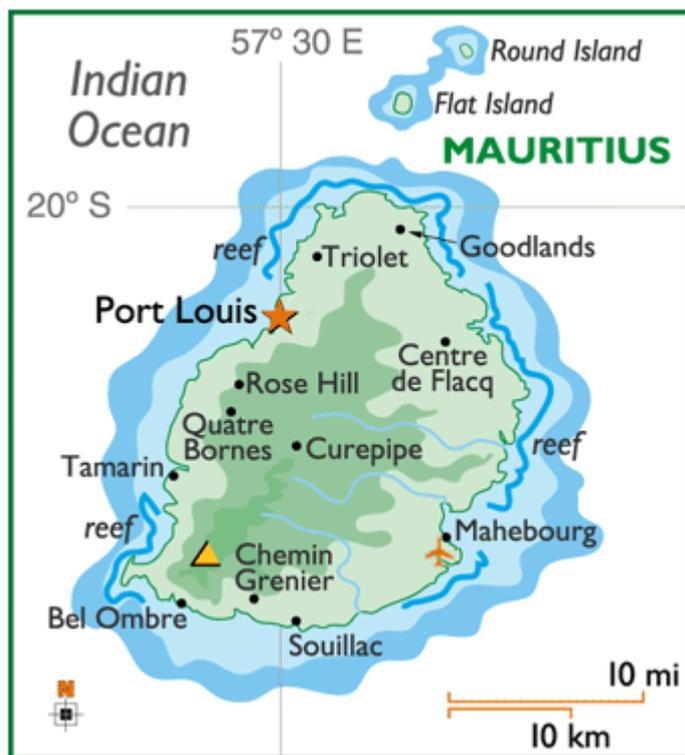


Figure 1. Port Louis (20° 09'S, 57° 29'E) is the capital of the Mauritius and the biggest port of the country

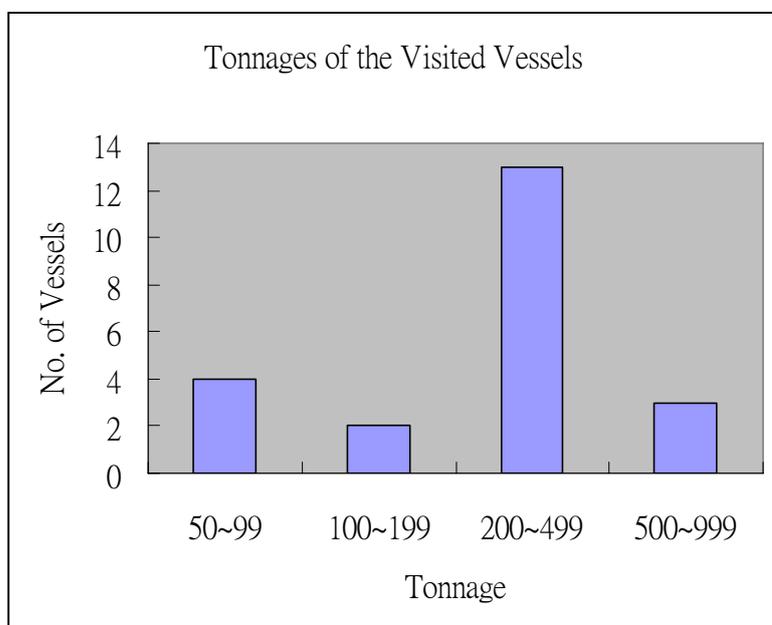


Figure 2. The tonnage distribution of the visited Taiwan longline fishing vessels in Port Louis, Mauritius, 2005



Figure 3. The age distribution of the visited Taiwan longline skippers in Port Louis, Mauritius, 2005.



Figure 4a. Visiting skippers and conducting seabird and sea turtle conservation education on board.



Figure 4b. Visiting skippers and conducting seabird and sea turtle conservation education on board.



Figure 5a. One of the stakeholders, fish buyer



Figure 5b. One of the stakeholders, the frozen storage company



Figure 5c. One of the stakeholders, the vessel goods supply company