Attachment 1

Research Plan ( for DDP students only)

|  |  |
| --- | --- |
| Research Theme | Impacts of tuna fisheries bycatch on sea turtle populations in Central and Western Pacific Ocean |
| Abstract of Research | The incidental capture from various fisheries could be the biggest threat to global sea turtle populations. Sea turtles are ancient large marine reptiles that have been alive on earth for at least 100 million years, and are of great ecological, scientific, cultural, ornamental and economic value. With slow growth rates and long sexual maturity, sea turtle populations have been severely threatened since the 1950s. In recent years, many countries and international organizations have realized the importance and urgency to protect sea turtle resources, thus various sea turtle mitigation methods from different research perspectives have been designed on the investigation of various sea turtle populations, and a series of conservation management measures and documents for sea turtles have been released. At present, there are so many studies on the basic biology and mitigation methods of sea turtles at home and abroad, but the understanding of the population structure and resource status of sea turtles under the influence of incidental capture is relatively shallow. According to the latest population assessment reports in different sea areas, the overall sea turtle population maintained a decreasing trend. Hence it is necessary to evaluate the bycatch impacts by oversea fisheries on sea turtle populations. |
| Research Contents | 1.The objective of my thesis study is to evaluate population-level bycatch impacts by various fishing gears on sea turtles, thus identify monitoring priorities and provide management suggestions for the long-term conservation of sea turtles. 2.I have read lots of articles about several species of sharks and sea turtles last year. My graduation research for undergraduate degree was the preliminary analysis of the system structure and function of sea ecosystems of Wangjia Island in Dalian.3.I plan to study some stock assessment methods and use appropriate models to evaluate bycatch impacts by tuna fisheries on sea turtle populations at Host university.4.In the future, I intend to study the validation of some sea turtle mitigation measures of different fishing gears, and assess the resources of other bycatch species like dolphins and whales. |
| ProspectiveSupervisors | To evaluate population-level bycatch impacts of tuna fisheries on sea turtles in Central and Western Pacific Ocean. |