Tourist management of the whale shark in the Mexican Caribbean

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Background
The whale shark population in the Mexican Caribbean is one of the largest in the world. Its touristic exploitation began in 2002, with 200 visitors and 25 licensees, and by 2012 its popularity had risen to 30,000 visitors. In 2013 a load capacity study for the visitors was launched, and it was determined that no more than 160 boats should visit the aggregation each day. However, given the social pressure to give access to more service providers, in 2015 up to 234 boats were allowed per day, but not simultaneously so that the load capacity was not exceeded. The service providers were allowed to work according to this management plan with one condition, they had to work only every other day. This condition was not submitted for public consultation because the service providers did not agree to it, but chose other alternatives to avoid exceeding the load capacity of the aggregation site. The objective of this study is to determine the compliance with this plan and the ease of its supervision.

Approach
Supervision of boat traffic at the aggregation was performed by the staff of the Whale Shark Biosphere Reserve from June 1 to September 17, 2015, on land from the boarding sites and on tours around the area on board official and touristic boats. The supervisors recorded all boats and tourist who did not obey the regulations. Moreover, surveys were applied to the service providers.

Results
Supervision was performed for 52 days from the docks and for 12 days on board touristic boats, and 19 supervisions were performed from boats inside the reserve.

Conclusions
The conclusion was that the management program was not met by 43% of tourist boats. The supervisors found it difficult to monitor the boats, as boats do not carry any visual flags to show if they are operating or not. It was found that the visible presence of park rangers in the area is fundamental for the service providers to abide by the rules. It was determined that the daily boat load capacity was not being exceeded, but other conditions of the permits were not being respected. All the service providers manifested their disagreement with this condition of the management plan, and proposed a rotation system that does not exceed 100 boats per day, along with one day a week in which no boats visit the aggregation, to reduce disturbance to the sharks.

Keywords: compliance, management plan, permits, disturbed, load capacity