

Hull survey – preliminary analysis of responses

Introduction

Our hull maintenance survey in June 2016 drew more than 180 responses, reflecting the level of understanding within the boating community of the risk that marine pests pose to the environment.

The main objective of the survey was to better understand how clean or dirty Northland vessels are, some of the hull maintenance practices and the barriers to keeping hulls clean.

The majority of responses were from Auckland boat owners, who in recent years have become familiar with the 'six or one' requirements of Northland marinas. Visiting vessels have to supply evidence of having been antifouled within six months of leaving Auckland, or have had a lift and wash within a month of leaving. Until this year, those requirements have only applied to Auckland-based vessels but with Mediterranean fanworm now having established a foothold in Whangarei Harbour, Northland-based vessels will be asked for the same evidence.

Location

Of the Northland respondents, most were from the Bay of Islands and Tutukaka (Figure 1), with smaller numbers from Whangarei, Mangonui and Whangaroa.

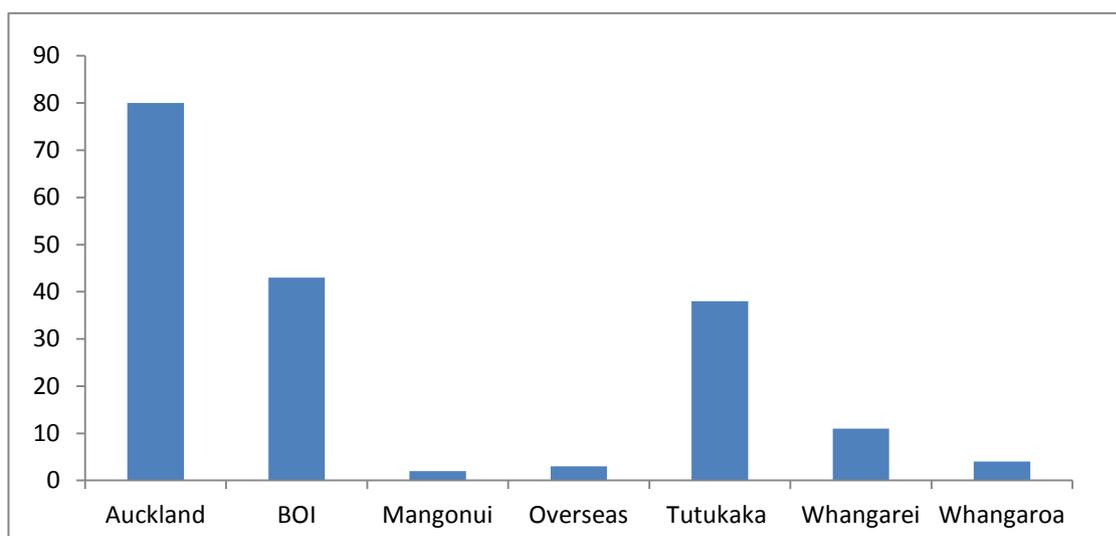


Figure 1: The number of survey respondents by 'home port' (the location where the vessel is usually moored, anchored or berthed).

Antifoul type

The data indicates a possible mismatch between the type of antifoul applied, as compared with how often the vessel is used.

Ablative antifoul was by far the most popular but many of the vessels that used ablative antifoul moved their vessels fewer than five times a year (Figure 2). Ablative paints are designed for vessels that move a lot and slough off thin layers as the vessel moves, taking any newly-settled fouling with it. Ablative antifouling may be the cheapest option per litre but for boats that are not moved, fouling may accumulate faster, costing more in fuel and cleaning costs over time.

This may link to the feedback from boat owners that antifoul paints have become less effective, whereas the issue may be the choice of antifoul for the frequency of use.

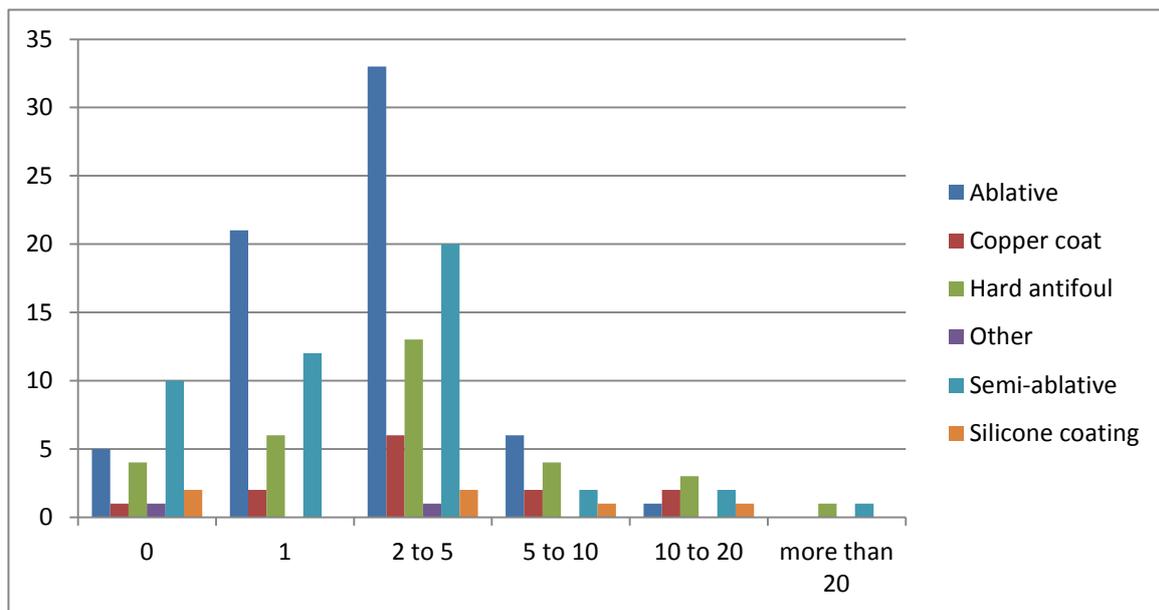


Figure 2: The number of times the vessel moves between harbours or leaves its home port, plotted against the type of antifoul used. Most vessel owners do fewer than five big trips a year. Ablative and semi-ablative paints are the most popular.

Barriers to keeping hulls clean

Overall, financial cost was cited as the main barrier to keeping hulls clean, followed by lack of haul-out capacity and facilities. However, this was dependent on location (Figure 3, on following page). In Whangaroa and Mangonui, the lack of facilities stood out as the main barrier to clean hulls. In the Bay of Islands, more boaties found that the rate of fouling on their vessels was too high for them to effectively keep their hulls clean.

This information will help us understand what would be a reasonable approach to ensure marine pests are not spread into and around our region.

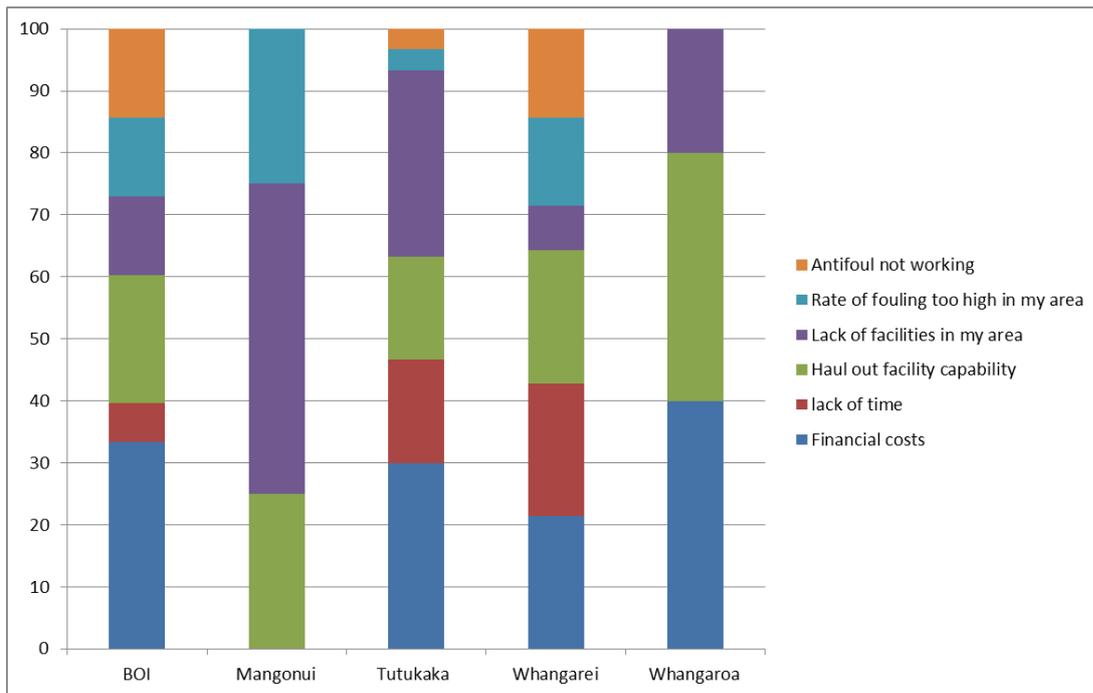


Figure 3: The proportional spread barriers to keeping hulls clean in the Northland region. Financial cost was a significant barrier for all areas except Mangonui, where a lack of facilities was the more important factor.

Conclusion

From a biosecurity perspective, fully clean hulls at all times would be ideal; however, this is not feasible for vessel owners, so a balance needs to be found between the maintenance costs to owners and the environmental impacts.