

## Barriers for Sustainable Consumption of Antifouling Products in the Baltic Sea

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**Abstract :** The purpose of this paper is to study consumer practices and meanings of different antifouling methods in order to identify the main barriers for sustainable consumption of antifouling products in the Baltic Sea. The Baltic Sea is considered to be an important tourism area. More than 3.5 million leisure boaters use the sea for recreational boating. Most leisure boat owners use toxic antifouling paint to keep barnacles from attaching to the hull. Attached barnacles limit maneuverability and add drag which in turn increases fuel costs. Antifouling paint used to combat barnacles causes particular problems, as the use of these products continuously adds to the distribution of biocides in the coastal ecosystem and leads to the death of marine organisms. To keep the Baltic Sea as an attractive tourism area measures need to be undertaken to stop the pollution coming from toxic antifouling paints. The antifouling market contains a wide range of environment-friendly alternative products such as a brush wash for boats, hand scrubbing devices, hull covers and boat lifts. Unfortunately, not a lot of boat owners use these environment-friendly alternatives and instead prefer the use of the traditional toxic copper paints. We ask "Why is the unsustainable consumption of toxic paints still predominant when there is a big range of environment-friendly alternatives available? What are the barriers for sustainable consumption?" Environmental psychology has concentrated on developing models of human behavior, including the main factors that influence pro-environmental behavior. The main focus of these models was directed to the individual's attitudes, principals, and beliefs. However, social practice theory emphasizes the importance to study practices, as they have a stronger explanatory power than attitude-behavior to explain unsustainable consumer behavior. Thus, the study focuses on describing the material, meaning and competence of antifouling practice in order to understand the social and cultural embeddedness of the practice. Phenomenological interviews were conducted with boat owners using antifouling products such as paints and alternative methods. This data collection was supplemented with participant observations in marinas. Preliminary results indicate that different factors such as costs, traditions, advertising, frequency of use, marinas and application of method impact on the consumption of antifouling products. The findings have shown that marinas have a big influence on the consumption of antifouling goods. Some marinas are very active in supporting the sustainable consumption of antifouling products as for example in Stockholm area several marinas subsidize costs for using environmental friendly alternatives or even forbid toxic paints. Furthermore the study has revealed that environmental friendly methods are very effective and do not have to be more expensive than painting with toxic paints. This study contributes to a broader understanding why the unsustainable consumption of toxic paints is still predominant when a big range of environment-friendly alternatives exist. Answers to this phenomenon will be gained by studying practices instead of attitudes offering a new perspective on environmental issues.

**Keywords :** antifouling paint, Baltic Sea, boat tourism, sustainable consumption

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