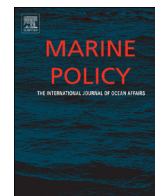




ELSEVIER

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol

Public perceptions of sharks: Gathering support for shark conservation



Laura A. Friedrich*, Rebecca Jefferson, Gillian Glegg

Centre for Marine and Coastal Policy Research, Marine Institute, Plymouth University, Reynolds Building, Drake Circus, Plymouth PL4 8AA, UK

ARTICLE INFO

Article history:

Received 6 August 2013

Received in revised form

3 February 2014

Accepted 3 February 2014

Available online 19 February 2014

Keywords:

Public engagement

Public perception

Shark conservation

Shark fisheries

ABSTRACT

With increasing evidence of the destructive impacts of human activities on the ocean there is a growing call for stronger public engagement in marine governance. An understanding of marine issues and pro-environmental values are key elements that influence an individual's engagement in conservation and pro-environmental behaviour. This paper presents a study on public perceptions of sharks and shark conservation in the UK. The study investigated knowledge of and attitudes towards sharks of a group of individuals with a clear interest in the marine environment, as well as possible factors that might influence their perceptions of sharks, in order to make recommendations on how to foster engagement in shark conservation. The key finding was that important prerequisites for engagement in shark conservation exist among parts of the UK public. However, this does not seem to be enough to motivate actual engagement. The study discusses a number of specific challenges with regard to sharks which might be influencing the way in which society connects to shark related issues. It concludes with priority recommendations for further investigation into potential catalysts for public engagement in shark conservation.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

1.1. The public as an actor for the marine environment

As the impacts of human activities on the ocean and the potential consequences for human wellbeing become increasingly evident, there is a growing call for stronger public engagement in the governance of the marine environment [1–4]. The emerging concept of marine citizenship recognises each member of the public as a potential agent of change to address marine environmental issues through their behaviour choices [5,6]. Behaviour choices can include consumer decisions such as purchasing sustainably sourced seafood, or engagement with campaigning for policy change. Public support and engagement can be an important driver of environmental policies. The controversy surrounding whaling between whaling and non-whaling countries illustrates how public opinion can shape a country's position on the exploitation or protection of wildlife [7]. In Ireland, public support for a policy that in 2002 introduced a 15 Euro cent tax on plastic carrier bags achieved a significant change in behaviour. Since then, there has been a 90% reduction in the use of plastic

bags [8]. It is not possible to predict how successful this policy would have been without public support, but the result of publicity and policy combined has been a public willing to make a significant behavioural change [9].

Public engagement in conservation and pro-environmental behaviour change is influenced by many variables [10]. There remain many uncertainties of how to catalyse marine citizenship; however, connectivity with the marine environment, an understanding of marine issues and pro-environmental values are likely to be key components [5,6,9].

A well-informed public that understands an issue and its potential solutions is in a stronger position to exert pressure on policymakers to address environmental concerns [6]. Studies on public perceptions of marine wildlife have found that individuals with high levels of knowledge of and positive attitudes towards animals such as sharks or dolphins are more likely to support their conservation and avoid behaviour potentially harmful to these animals [11–13]. Attitudes and knowledge with regard to the marine environment and wildlife are shaped by several factors, including an individual's general interest, values and preconceptions, the physical and behavioural characteristics of an animal, formal educational exposure as well as socioeconomic and demographic variables [11–15]. Personal experience is another important influence on environmental attitudes and motivation for personal engagement and conservation behaviour [16–18].

Despite being important elements of behaviour change, good knowledge and pro-environmental attitudes alone are often

* Correspondence to: Centre for Marine and Coastal Policy Research, Marine Institute, Plymouth University, Level 3 Marine Building, Drake Circus, Plymouth PL4 8AA, UK. Tel. +44 1752 587881; fax +44 175 586101.

E-mail addresses: laura.friedrich@plymouth.ac.uk (L.A. Friedrich), rebecca.jefferson@plymouth.ac.uk (R. Jefferson), gglegg@plymouth.ac.uk (G. Glegg).

insufficient to encourage behavioural changes or active conservation engagement [5,6,10]. Previously, the “knowledge deficit model” was accepted, which stated that behaviours could be changed by informing individuals of the negative impacts of their behaviours. Environmental behaviour models now recognise that behavioural choices are influenced by multiple factors, including internal variables such as values, attitudes and knowledge, and external factors such as infrastructure, policies and culture [10]. To successfully achieve behaviour change, a better understanding of how these factors influence public engagement with the particular issues must be gained.

Environmental knowledge, attitudes and values are known to vary throughout populations; the public is not homogenous in its perceptions of conservation issues [9,19,20]. This variation in the key factors influencing behaviour change is likely to lead to different responses to attempts to catalyse marine citizenship from different groups within the public [21]. This can lead to a differential uptake of new ideas across the population, with some groups adopting behaviour changes before others. This in itself can influence greater levels of behaviour changes as non-engaged groups are encouraged by those already performing the behaviour [20].

1.2. The public and sharks

With regard to sharks, public engagement and support for conservation is limited. The image of sharks as fearsome predators, cultural representation in movies such as *Jaws* and sensationalist media reports of shark attacks all contribute to frame sharks negatively in the public image [11,13,22,23]. Moreover, the physical and behavioural characteristics of most sharks, their predatory behaviour and the threatening image of their teeth, potentially influence attitudes towards them [14], even though three of the largest shark species are planctivorous and have no teeth at all. Personal experience with sharks could counteract the negative image of sharks [16,17]. A recent study on public perceptions of sharks in conjunction with shark bite incidents found that people living near shark frequented beaches hold high values of sharks and that these values do not appear to be negatively affected by shark bite accidents [24]. However, only a small minority of people is likely to encounter a shark in the wild. Negative preconceptions and inaccessibility of sharks to most of the public could be limiting public support for shark conservation. However, as mentioned above, the public is not uniform in its opinions and knowledge and therefore engagement with shark conservation may differ within the public audience.

1.3. Shark ecology, fisheries and policies

As top predators of the oceans, sharks play an integral role in the health and stability of marine ecosystems. However, they are particularly vulnerable to overexploitation as a consequence of their slow growth, late maturity, and low fecundity [25,26]. Over recent decades, commercial fisheries and other human activities have led to declining shark populations around the world [27–30]. The status of sharks in European seas is particularly critical with around half of all species being threatened with extinction or at risk of becoming endangered [31].

Since the mid-1980s, shark fisheries have increased considerably, driven by growing global fish consumption and declining catches in other fisheries [32,33]. Moreover, the rising demand for shark fins in East Asia's growing economies and the economic discrepancy between high value fins and low value meat have led to a dramatic expansion of the practice of finning [31,33]. Shark finning is defined as the removal of fins and discarding of the body at sea [34]. This is an inherently wasteful practice which contributes considerably to the depletion of sharks while hampering efforts to identify landed species and monitor populations [31,33].

Depletion of shark populations has potentially significant ecological and economic consequences [26,35]. In North Carolina, functional elimination of large sharks led to a proliferation of cownose rays which, in turn, reduced scallops to such low levels that the traditional local scallop fishery had to close [36].

Effective shark protection requires a coherent international strategy [37], changes in fisheries regulations worldwide, tailored conservation tools [38], improved data on shark ecology and species specific reporting of all catches [32,39]. However, despite growing recognition of their vulnerability and the potentially significant ecological and socioeconomic consequences of their depletion, sharks remain a low priority on the international conservation and management agenda [38,40]. Global shark catches are estimated to be three to five times higher than the official figures of the United Nations Food and Agriculture Organization due to lack of coherent reporting requirements [38,41,42]. No legally binding international agreement for shark conservation exists [39,40]. Implementation of the voluntary International Plan of Action for the Conservation and Management of Sharks by national governments, regional bodies and Regional Fisheries Management Organisations (RFMO) has been slow and ineffective [39,43,44]. Listings under international and regional fisheries agreements, conservation conventions and national legislation provide limited protection for only a small number of more charismatic shark species – such as basking shark, whale shark and great white shark [38–40,45,46]. Around the world, numerous Non-Government Organisations and organisations are working to raise public awareness and promote policies for improved shark conservation. However, their political influence is limited in the face of the considerable economic fisheries interests in sharks [39,40,43].

The European Union (EU) is a major player in global shark fisheries. EU fleets, in particular Spain, Portugal, France and the United Kingdom (UK), account for the second largest share of global shark catches behind Indonesia [33,47]. The EU is the main supplier of shark products to Hong Kong and the largest importer of shark meat [33,47]. More stringent EU regulation of shark fisheries and stronger conservation policies has the potential to reduce the pressure on sharks in European seas and EU fishing grounds worldwide. Moreover the EU could use its considerable influence in the RFMOs to drive towards improved protection and a cessation of finning [31,47]. While it is uncertain whether stronger EU policies, such as the newly amended fining ban [48], would be adopted elsewhere, a strong EU stance on shark conservation and management could influence national governments, RFMOs and other regional bodies. The EU could thus take a leading role in the protection of sharks.

1.4. Study aims

This study investigated public perceptions of sharks and shark conservation. The sample population was those with an active interest in the marine environment and therefore those most likely to engage with shark conservation issues. The study assessed: (a) respondent's knowledge of sharks and shark fisheries, (b) respondent's attitudes towards sharks and opinions on shark conservation, and (c) possible factors that influence respondent's knowledge and attitudes. The findings are used to make recommendations on how to create support for and enhance engagement in shark conservation.

2. Methods

2.1. Data collection

Questionnaires were delivered face to face over a three week period in June and July 2011 at the National Marine Aquarium in

Download English Version:

<https://daneshyari.com/en/article/1060425>

Download Persian Version:

<https://daneshyari.com/article/1060425>

[Daneshyari.com](https://daneshyari.com)