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A REVIEW OF NEWSPAPER AND INTERNET PORTRAYALS OF THE SIXGILL SHARK, *HEXANCHUS GRISEUS* (BONNATERRE, 1788) (CHONDRICHTHYES: HEXANCHIDAE), CAUGHT IN TURKISH WATERS BETWEEN 1974–2009

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ABSTRACT

Analysis of 81 Hexanchus griseus related articles published in major Turkish newspapers and internet media between 1974 and 2009 revealed that the tenor of the coverage was neutral in 40 (49.3%) articles, 37 (45.6%) were negative and only 4 (4.9%) were positive. A utilitarian perspective prevailed, appearing in 51 (62.9%) of the articles examined. Since 2004, the diversification of media opportunities has caused an increase in the number of published articles on H. griseus. In Turkey, people share the preconceived notion of sharks that has been deeply embedded into their psychology by years of irresponsible media reporting. Articles depicting the sixgill shark as a possible source of profit can motivate the fishermen to catch this vulnerable species and cause an artificial fishing pressure on H. griseus.

Key words: Sixgill shark, *Hexanchus griseus*, Turkey, portrayals, media, conservation

REVISIONE DI RITRATTI PUBBLICATI SU GIORNALI ED INTERNET DI SQUALO CAPOPIATTO, *HEXANCHUS GRISEUS* (BONNATERRE, 1788) (CHONDRICHTHYES: HEXANCHIDAE), CATTURATO IN ACQUE TURCHE NEL PERIODO 1974–2009

SINTESI

L'autore presenta l'analisi di 81 articoli correlati a Hexanchus griseus, pubblicati dai più importanti giornali della Turchia e sul Web nel periodo 1974–2009. I risultati dell'analisi evidenziano che il tono di copertura era neutrale in 40 articoli (ossia nel 49,3% dei casi), negativo in 37 articoli (45,6% dei casi) e positivo in soli 4 articoli (4,9% dei casi). In 51 articoli esaminati (62,9% dei casi) prevaleva una prospettiva utilitaria. La diversificazione delle opportunità offerte dai mass media ha causato un aumento del numero di articoli pubblicati su H. griseus a partire dal 2004. In Turchia la popolazione condivide i pregiudizi sugli squali, che sono stati profondamente radicati nella loro psicologia da anni di servizi giornalistici irresponsabili. Gli articoli che descrivono lo squalo capopiatto quale possibile fonte di guadagno possono motivare i pescatori a catturare questa specie vulnerabile e causare una pressione artificiale di pesca su H. griseus.

Parole chiave: squalo capopiatto, *Hexanchus griseus*, Turchia, ritratti, mass media, conservazione

INTRODUCTION

In a 2005 study dealing with the grey nurse shark (*Carcharias taurus*) and human interactions, Boissonneault *et al.* (2005) analyzed the impact of the newspaper media on attitudes and understandings that the public had developed towards the grey nurse shark. The study consisted of a content analysis of the articles published in major Australian newspapers over a prescribed period of time, and concentrated on the way the species was portrayed in these articles. Boissonneault *et al.* (2005) concluded that the amount of interest that was generated on the topic could have a direct impact on the conservation of the grey nurse shark itself.

The sixgill shark *Hexanchus griseus* (Bonnaterre, 1788) is a wide-ranging hexanchid shark in both the northern and southern hemisphere (Compagno, 1984). Although many shark species occurring in the seas of Turkey are in danger of extinction, this study will concentrate on the portrayal of the sixgill shark *H. griseus* in various Turkish newspapers and internet media. *H. griseus* is not consumed by humans in Turkey. It is a rare by-catch by Turkish fishermen and incidentally captured specimens are generally landed for display. Public and media interest in large sharks as well as fishermen's anticipation of extra benefits from incidentally captured sixgill sharks are the main reasons for such landings. Recently, Kabasakal (2006) reported on 60 sixgill sharks incidentally caught and landed by the commercial fishermen in Turkish waters. According to most recent surveys of newspaper and internet articles, as well as field observations of specimens displayed at fishmongers', the total number of the by-caught sixgill sharks in Turkish waters between 1974–2009 increased to 128 (H. Kabasakal, *unpubl. data*). *H. griseus* is considered as 'vulnerable' on the Red List of IUCN/SSG (Soldo, 2003). Therefore, implementation of an effective conservation strategy for sixgill shark is urgently needed (Kabasakal, 2006).

Since the formation of Ichthyological Research Society (I.R.S.) in 2000, the author has been collecting newspaper and internet articles, dealing with the sixgill sharks caught by Turkish fishermen, as part of an extensive research in order to determine the current status of sharks in Turkish waters. The primary aim of the present article is to draw a general portrayal of the sixgill shark based on the mentioned newspaper and internet articles. Furthermore, defining public attitudes about the sixgill sharks and the impact of media news on the conservation of the species are discussed.

METHODS

Following the research design of Boissonneault *et al.* (2005), which was adapted from Wolch *et al.* (1997), a content analysis was conducted on 81 *H. griseus* related articles appearing in newspapers such as *Akşam*, *Hürri-*

yet, *Milliyet*, *Posta*, *Sabah*, *Stargazete*, *Takvim*, *Tercüman*, *Vatan* and *Yeni Asya*, and on several websites, between 1974 and 2009. The selection of specific newspapers and websites for this study depended on availability. The articles were gathered through the use of library archives for the years prior to their inclusion in online newspaper databases, screening the daily issues of newspapers and through an internet search. They were chosen on the basis of content referring specifically to the sixgill shark. Articles appearing in different newspapers were only considered as one when the content of the articles was identical.

The attitudes expressed within the article, as classified through the use of Kellert's (1985) typology of attitudes towards animals (in Boissonneault *et al.*, 2005), were used to determine the overall tone of an article *i.e.*, positive/supportive, negative/oppositional, or neutral. The overall tone of the articles, as distinguished by the attitudes expressed in each of the articles, was analyzed from a qualitative perspective. This tone was determined from an examination of: (a) specific attitudes that illustrate either a humanistic, moralistic, utilitarian, negativistic, dominionistic, naturalistic or ecologicistic perspective; (b) the terminology used (e.g. an article using such terms as 'monster' or 'intruder', and phrases such as 'the worst nightmare' or 'the best shark is the dead shark', would be deemed negative) and (c) any informational bias, which refers to the way in which the available information source, *i.e.* scientists or lack thereof, can sway the decision-maker or reader (Boissonneault *et al.*, 2005).

Kellert's (1985) typology of attitudes towards animals (in Boissonneault *et al.* 2005) is used to assess individual statements within these articles (Tab. 1). Within Kellert's model, the range in attitudes varies from a belief that the purpose of animals is to serve as resources for humans (*i.e.* utilitarianism and dominionism) to attitudes that accentuate kindness towards animals whereby the ethical treatment of animals is defended (*i.e.* humanism and moralism), as well as the absence of concern or even negative attitudes towards animals (*i.e.* negativistic attitudes). This analysis was conducted following the standard tenets of qualitative methodology.

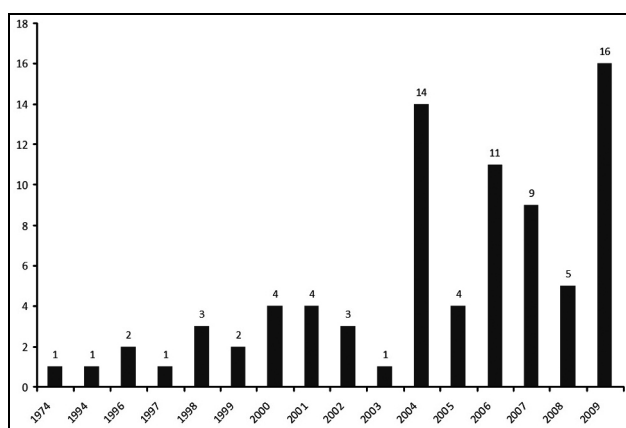
RESULTS AND DISCUSSION

Distribution of 81 *H. griseus* related articles by years is presented in Fig. 1. Only one article on sixgill shark was published in 1974, and the lack of articles on *H. griseus* is obvious throughout the subsequent twenty years (Fig. 1). The missing years within the graph shown in figure 1 are representative of years in which articles pertaining specifically to *H. griseus* were either not found or not published. With regard to 59 articles (72.8%; 9.8 articles per year) published between 2004–2009 only 22 articles (27.1%; 2.2 articles per year) published between 1974–2003 were obtained (Fig. 1). The

Tab. 1: Attitudes towards animals (Kellert, 1985; in Boissonneault et al., 2005).**Tab. 1: Odnos do živali (Kellert, 1985; v Boissonneault et al., 2005).**

Humanistic	Interest and strong affection for individual animals, principally pets.
Moralistic	Concern for the right and wrong treatment of animals, with strong opposition to the exploitation and cruelty toward animals.
Utilitarian	Concern for the practical and material value of animals or their habitats.
Negativistic	Avoidance of animals due to indifference, dislike or fear.
Dominionistic	Interest in the mastery and control of animals, typically in sporting situations.
Naturalistic	Interest and affection for wildlife and the outdoors.
Ecologicistic	Concern for the environment as a system, for interrelationships between wildlife and natural habitats.

numerical scarcity of *H. griseus* specific articles during 1974–2003 period suggests that sixgill shark might not be newsworthy in those years. Furthermore, with regard to locality of capture of the sixgill sharks appearing in the articles between 1974–2000 in particular, it was found that most of the specimens were caught in the adjacent waters of Istanbul city where headquarters of the significant newspapers with high circulation rates are located. Therefore, it is possible to suggest that sixgill sharks caught in remote localities far from Istanbul, were not accessed by the reporters, and therefore, not included in the contents of the analysed newspapers published between 1974–2000. It is important to note that a marked increase in the number of sixgill shark articles has been observed since 2004, which coincides with the increase of online newspaper articles on the topic in Turkish internet media. Thus, sixgill shark captures which were previously not included in the content of daily newspapers, could find room for publication and become accessible.

**Fig. 1: Number of articles on the capture of sixgill sharks, published in the period between 1974 and 2009.**

Sl. 1: Število člankov o ulovu morskega psa šesteroškrgarja, objavljenih v obdobju med letoma 1974 in 2009.

Figure 2 is an example of how the articles have been assessed with reference to their tone over the years covered in this study. Of the 81 articles about the sixgill shark that this study has identified, the tenor of the coverage was neutral in 40 (49.3%) articles, 37 (45.6%) were negative and only 4 (4.9%) were positive (Fig. 2). In neutral and negative articles pertaining to *H. griseus*, sixgill shark was frequently labelled as 'jaws' in 27 (33.3%) of them. The first appearance of the term 'jaws' in an article was on 10 July 1994. It has been the most frequent term used for defining the sixgill shark; the most recent appearance of this term in an article was on 15 December 2009. Another term frequently appearing in the articles was 'the giant shark'. This term appeared in 17 (20.9%) articles, the first time on 29 November 2004 and most recently on 8 December 2009, respectively. Another term used for negatively defining the sixgill shark was 'monster'; it appeared in 9 (11.1%) articles, the first time on 26 November 1974 and most recently on 18 December 2007, respectively.

The most common attitudes used to describe the sixgill shark within the 81 articles examined were struggle (18; 22.2%), aggressor (10; 12.3%), anxiety/terror (10; 12.3%), panic/fear (10; 12.3%), astonishment (9; 11.1%), intruder (4; 4.9%) or nightmare (3; 3.7%). With special reference to term 'intruder', exaggerated denotations claiming that 'the sixgill shark is a pestering monster occurring in the seas of Turkey' or 'the population of the sixgill shark is excessively increased in certain localities along the Turkish coast', were used in the articles published on 28 November 2006 and 30 March 2007. Similar exaggerated statements were observed in the articles where the term 'aggressor' appeared. In 18 (22.2%) of the examined articles, negative statements which can directly provoke shark fear were used deliberately. For example, in the article published on 18 July 2000, 'the best shark is a dead shark' statement was used to portray the sixgill shark. Terms such as 'nightmare' or 'baby killer', were also used to describe the sixgill shark in the articles published on 9 May 2005 and 16 April 2007, respectively. Continually juxtaposing *H.*

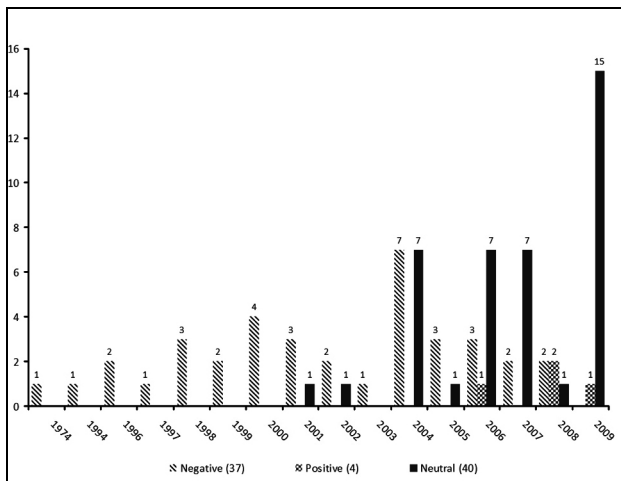


Fig. 2: Tone of articles, depicting the sixgill shark in different perspectives, per year.

Sl. 2: Ton poročanja v člankih, ki prikazujejo morskega psa šesteroškrjarja v različnih perspektivah, na leto.

griseus with such terms reinforces the perception that the species is dangerous even when the initial alarmist descriptor is undervalued within the later context of the article.

In 17 (20.9%) of the examined articles, the sixgill shark was misidentified or misnamed. In 15 (88.2%) out of 17 articles, the sixgill shark were named as 'pamuk balığı = cotton shark'. In the article published on 24 July 2006, the sixgill shark was named as 'blue shark,' a totally different species. The sixgill shark (*H. griseus*) was misidentified as *Carcharodon carcharias* (great white shark) or *Galeorhinus galeus* (tope shark) in the articles published on 3 December 2006 and 22 January 2009, respectively.

The tenor of the coverage of only 4 articles (4.9%) examined in this study was positive (Fig. 2), and found presenting reliable and scientifically proven information on the sixgill shark. Of the positive articles pertaining to the sixgill shark, scientific name of the species (*Hexanchus griseus*) was used in only 1 (1.2%) article. Turkish common name of *H. griseus*, 'bozcamgöz = grey shark', was used in 2 (2.4%) articles. Two of these four articles presented the expert opinion, and emphasised that the sixgill shark was a vulnerable species. Furthermore, three of these four articles highlighted that the sixgill shark was not a proven man-eater, and emphasised that as *H. griseus* was a deep-water inhabitant and rose to surface in dusk, the possibility of a man and sixgill shark encounter was remarkably low.

Based on the Kellert's (1985, in Boissonneault *et al.* 2005) typology of attitudes towards animals, a utilitarian perspective prevailed appearing in 51 (62.9%) articles observed. 38 (46.9%) out of these 51 articles suggest that the landed sixgill sharks are sold, but no information

on the price of the sold sharks was given. Price information appeared in 13 (16.0%) articles, and ranged from 1.5 to 30 Turkish Lira (TL; 1 to 15 US\$). According to the article published on 24 July 2006, a whole sixgill shark was sold for 2000 TL (750 US\$).

With the expanding utilization of internet services in Turkish media since 2000s, articles pertaining to the sixgill sharks caught in remote localities along the coast of Turkey became accessible. The resultant diversification of media opportunities has caused an increase in the number of published articles on *H. griseus*, in particular since 2004 (Fig. 1). The highest number of the published articles pertaining to the sixgill shark was recorded in 2009.

The data generated by this study serve to exemplify the perceptions of *H. griseus* as represented by major Turkish newspapers and internet media between 1974 and 2009. The way in which an article describes its subject may generate an image within the reader that the author is trying to portray (Boissonneault *et al.*, 2005). This particular image that is constructed serves to accentuate the opinion that is being conveyed within the written piece and has the ability to shape public attitudes towards the issue at hand. Negative portrayals of the predatory animals, such as sharks, created by the mass media, can have tremendous effects on conservation efforts (Wolch *et al.*, 1997; Boissonneault *et al.*, 2005). Furthermore, it has been established that certain aspects of a species such as its usefulness, perceived intelligence, dangerous or loveable and attractive qualities can considerably impact public opinion (Driscoll, 1995). The power that the popular media holds when it comes to forming and influencing the public's perception of sharks is best illustrated by 1975 film *Jaws* (Peschak, 2006). Almost overnight the great white shark was subjected to a fatal metamorphosis from an obscure ocean dweller to a man-eating monster. In the wake of the film, a great white hunting frenzy followed, provoked and driven by an irrational and exaggerated fear of shark attack; it brought *C. carcharias* near the edge of extinction in several parts of the world oceans.

The fear of sharks is not something humans are born with but is a product of environment and culture. The power the media holds in influencing the public's perception of sharks is tremendous. Regarding agenda-setting, the media therefore has a responsibility to ensure that its content is factually correct since it is nearly impossible for non-specialists to separate scientific facts from science fiction. However, as Peschak (2006) has recently emphasized, especially in the daily news sectors the media often fails in its responsibilities by publishing incorrect information, elevating non-qualified people and their opinions to expert status and perpetuating unrealistic shark stories. Although the Turkish common name of *H. griseus*, 'bozcamgöz', has been known since the first writings on the marine fishes of

Turkey (Deveciyan 1926), it was used only in 2.4% of the articles examined. This example indicates how the authors of the articles neglect the facts and elevate irrelevant information about the sixgill shark.

In the remote corners of the western Pacific, sharks are worshipped and revered as gods (Taylor, 1985; Peschak, 2006). According to Pacific islanders, sharks are believed to harbour the souls of long departed and cherished ancestors. In Turkey, unlike in the western Pacific, people share the preconceived notion of sharks that has been deeply embedded into their psychology by years of irresponsible media reporting. Whether deliberately or not, the media perpetuate the fear of sharks and the negative image of a blood-thirsty and fearsome animal on a daily basis.

According to Peschak (2006), the reason for perpetuating the fear of shark by media is a well-known fact that shark stories, especially sensational shark bite stories sell. Corbett (1992) states that in higher-circulation newspapers the old axiom of 'bad news sells' will prevail concentrating the reportage of wildlife around problematic human-animal interactions e.g., an attack. During the survey of newspaper and internet articles, it was observed that the similar sixgill shark can appear in several articles published in a few subsequent days, in which the coverage more or less garnished compared to previous article. Based on the case of *C. taurus*, Boissonneault *et al.* (2005) pointed out that the amount of manipulation generated on the topic, as well as conflict and adversarial presentation of issues within the media, could have a direct impact on the conservation of the species itself. Although the tone of the article published on 3 November 2008 was generally positive, the picture showing a dummy arm between the jaws of the sixgill shark (Fig. 3), depicted *H. griseus* as a man-eater. This is an obvious illustration of how accidental mistakes can unfairly juxtapose the sixgill shark with the man-eater reputation. Due to similar newspaper articles, which continually juxtaposed *C. taurus* with the term man-eater reinforces the perception that the species is dangerous even when the initial alarmist descriptor is undervalued within the later context of the article (Boissonneault *et al.*, 2005). Articles written without any concern of conservation or scientific facts serve to portray the predatory animals as criminals in the mind of the reader.

CONCLUSIONS

Due to its life-history characteristics (slow rate of growth, long living, low number of fecundity etc.) (Lipej *et al.*, 2004; COSEWIC, 2007), *H. griseus* is considered a 'K-selected' species. Therefore, like many other shark species, even the sustainable fishery strategies can cause dramatic declines in the stocks of the sixgill shark. *H.*



Fig. 3: (a) Sixgill shark displayed at the fishmonger's. (Photo: H. Kabasakal); (b) The photograph of the same sixgill shark, published in a major Turkish newspaper on 3 November 2008, arrow denotes the dummy arm between the jaws of the specimen.

Sl. 3: (a) Morski pes šesteroškrjar, razstavljen v ribarnici. (Foto: H. Kabasakal); (b) fotografija istega morskega psa šesteroškrjarja, objavljena v večjem turskem časopisu 3. novembra 2008, puščica kaže na umetno roko v čeljustih primerka.

griseus has been the focus of at least three known directed fisheries in Canadian waters during 20th century; however, all these attempts terminated due to conservation concerns (COSEWIC 2007). Not only the decline of the stocks of commercially important bony fishes, but the irresponsibly written articles, without scientific facts about the sixgill sharks, can have negative impacts on the survival of *H. griseus*. Similarly, articles depicting the sixgill shark as a possible source of profit can motivate the fishermen to catch this vulnerable shark and cause an artificial fishing pressure on *H. griseus*. In addition to subjecting *H. griseus* to 100% protection in the seas of Turkey, refining the articles about the sixgill shark from the triangle of blood, fear and irrelevant or erroneous information is an obvious necessity for the conservation of the species.

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PREGLED ČASOPISNIH IN MEDMREŽNIH PRIKAZOV MORSKEGA PSA
ŠESTEROŠKRGARJA *HEXANCHUS GRISEUS* (BONNATERRE, 1788) (CHONDRICHTHYES:
HEXANCHIDAE), UJETEGA V TURŠKIH VODAH V LETIH 1974–2009

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POVZETEK

Analiza 81 člankov o vrsti *Hexanchus griseus*, objavljenih v večjih turških časopisnih in internetnih medijih v letih 1974–2009, pri 40 člankih (49,3%) ugotavlja nevtralno poročanje, pri 37 (45,6%) negativno in samo pri 4 (4,9%) pozitivno. Prevladuje utilitarna perspektiva, ki jo lahko opazimo pri 51 (62,9%) obravnavanih prispevkih. Od leta 2004 se je zaradi diverzifikacije možnosti medijskega poročanja povečalo število objavljenih člankov o *H. griseus*. V Turčiji imajo ljudje vnaprej izoblikovano predstavo o morskih psih, ki se je v letih neodgovornega medijskega poročanja trdno zasedrila v njihovi zavesti. Članki, ki morskega psa šesteroškrjarja prikazujejo kot možen vir zasluzka, lahko ribiče vzpodbudijo k lovu na to občutljivo vrsto in povzročijo umeten ribolovni pritisk na *H. griseus*.

Ključne besede: morski pes šesteroškrjar, *Hexanchus griseus*, Turčija, prikaz, mediji, varstvo

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