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Old Grey

The Greenland Shark Through the Eyes of Icelandic Shark Fishermen



Sæmundur Sæmundsson (1869-1958) & Greenland shark

Sæmundur Sæmundsson (1869-1958) was a renowned Icelandic shark fisherman and a brave captain who challenged the forces of nature, including turbulent waves, treacherous icebergs, and the biting Arctic cold, in his quest for the Greenland shark (*Somniosus microcephalus*). Sæmundur devoted decades to hunting the Greenland shark in Icelandic waters, acquiring extensive knowledge about the behavior of this mysterious coldwater shark. This knowledge transformed Sæmundur into one of his era's most renowned shark fishermen, establishing his mastery of the sea. However, even a seasoned captain like Sæmundur was not immune to the emotional conflict that comes with the sea. When he had become an elderly shark fisherman, he faced the harrowing experience of almost losing all of his sons at sea within a brief period. This intense inner turmoil profoundly impacted his relationship with the ocean and its inhabitants. Sæmundur wondered if the sea was trying to take his sons in return for what he had taken from it. He articulated his thoughts, musing, "Perhaps the ocean believes I have taken too much from it without giving it anything in return except for fish blood and sweat." Sæmundur wrestled with deep emotional

¹ Hagalín, Virkir dagar [Working days], 267.

conflict regarding his relationship with the ocean, considering if he could have given it more by taking less.

Today, Sæmundur's reflection serves as a poignant reminder of the past and a predictor of the future. Human activity is increasingly threatening the ocean's health, posing a significant threat to the survival of the Greenland shark, the longest-living vertebrate and a key predator in the North Atlantic and Arctic oceans.² Due to international overfishing, the decline in the Greenland shark population began in the 16th century and persisted until the mid-20th century. This historical decline has led to the classification of the Greenland shark as a vulnerable species on the IUCN Red List.³ As a historian, I reflect on the following: What lessons can we learn from history? How can history shape our future interactions with the oceanic waters and the Greenland shark? The urgency of these questions is underscored by the current status of the Greenland shark and the escalating phenomenon of worldwide climate change, making the need for its conservation more pressing than ever.

Understanding the historical relationship between humans and the ocean is of paramount importance. It provides valuable insights into our past and shapes our future interactions with the marine environment. As the historian W. Jeffrey Bolster once wrote, "historians are uniquely situated to reconstruct the inextricably tangled stories of people and the oceans." Humans are naturally inclined to protect what they are familiar with, making it crucial for historians to establish a deep historical connection between humans and nature. Encouraging empathy for fish is a vital part of this. The perception of fish as food rather than sentient beings presents a significant challenge, stemming from human terrestrial nature and limited direct interactions with live fish. This perception is exemplified by the Greenland shark species, which holds economic and cultural significance as a vital natural resource (meat and liver oil) in Icelandic history. The Greenland shark holds a significant position as a meat product within Icelandic folk narratives; however, as a living entity, it is rarely represented in the Icelandic mythological canon. There is limited historical documentation of the Greenland shark as a living organism in Icelandic history, except among Icelandic shark fishermen. Stories told by shark fishermen over the centuries provide captivating insights into the biology and behavior of the Greenland shark.⁵ Furthermore, these accounts of

² See Nielsen et al., "Distribution and feeding ecology of the Greenland shark (Somniosus microcephalus) in Greenland waters"; Nielsen et al., "Assessing the reproductive biology of the Greenland shark (Somniosus microcephalus)."

³ Kulka et al., Somniosus microcephalus. The IUCN Red List of Threatened Species.

⁴ Bolster, "Opportunities in Marine Environmental History", 569. See also Rozwadowski, "The Promise of Ocean History for Environmental History"; Máñez, and Poulsen, eds. *Perspectives on Oceans Past*, 1-10.

⁵ See for example the documentation of knowledge from fishermen in Greenland regarding the Greenland shark.: Idrobo, Carlos Julián and Fikret Berkes, "Pangnirtung Inuit and the Greenland Shark: Co-producing Knowledge of a Little Discussed Species".

hunting shed light on the unique oceanic interplay between humans and the Greenland shark as a living being.

The longstanding interaction between Icelanders and the Greenland shark is a compelling but relatively unexplored topic in history.⁶ In a previous research project, I examined the impact of natural forces and technological advancements on the behavior and work environment of Icelandic shark fishermen from the 19th century to the 21st century.⁷ However, this study delves into the effects of these factors on the fishermen's perception of the Greenland shark as a living organism during their hunting endeavors in the same time period. The paper underscores the importance of examining the dynamic interplay between fishermen and fish in environmental history, underlining the potential for insights into the natural world and contributions to wildlife conservation through physical labor, despite its historical association with ecological harm.⁸ Additionally, it illuminates the precarious status of the Greenland shark due to bycatch and the influence of global warming, highlighting the need for conservation efforts to safeguard this species.

This study employs a qualitative methodology to investigate the dynamic between shark fishermen and Greenland sharks, utilizing firsthand narratives from shark fishermen as the primary data source. During the late 19th and early 20th centuries, there was a noticeable surge in autobiographical works by working-class individuals in Iceland, including shark fishermen. These autobiographies offer a unique insight into a bygone era shaped by men's interactions with the maritime environment and the behavior of the Greenland shark. However, there is minimal documentation on shark fishing in Iceland from the transition to mechanized fisheries in the early 20th century to the 21st century. I conducted six oral history interviews with retired and working professional shark fishermen to bridge this gap. Although the paper centers on how shark fishermen perceive the Greenland shark based on their memories, it also offers insights into the relationship between the Icelandic nation and the Greenland shark by examining the nation's position on shark fishing, the utilization of sharks for trade and consumption, and shark conservation.

⁶ Limited research has been conducted on shark fishing in Iceland, mainly concentrating on fishing techniques and shark meat processing during the peak of the shark industry in the 19th century. The most comprehensive investigation on this subject was carried out by Lúðvík Kristjánsson (1911-2000), Iceland's leading maritime historian. See Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea]. See also: Þór, *Sjósókn og sjávarfang* [Fishing and seafood]; Guðmundsson, *Skátuöldin* [Schooner age].

⁷ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 57-97.

⁸ See White, ""Are You an Environmentalist or Do You Work for a Living?"; Bailey, "Red and Green."

⁹ I also interviewed fishermen on commercial fishing vessels; shark processing workers and people who remember or know stories of past shark fishermen from the 19th century and early 20th century.

Hunter-prey relationship in pre-industrial Iceland

While Icelandic medieval literature provides details about whales and encounters with sea monsters, there is a scarcity of information about sharks and shark fishing. Nevertheless, historical records suggest that shark fishing was a common practice in Iceland in ancient times, and it increased over the centuries. 10 Initially, Icelandic shark fishermen primarily caught sharks for their meat, which they processed and sold domestically. Since the 17th century, there was a growing demand for shark liver oil in European urban centers, particularly for its use as a biofuel in oil lamps. 11 This demand led to a significant surge in shark oil production in Iceland, especially in the 18th and 19th centuries, akin to an Icelandic oil rush scenario. Thus, Icelandic fishermen began concentrating on capturing Greenland sharks mainly for their oil-dense livers, frequently tossing the rest of the sharks back into the sea. Although profitable, this historical fishing practice bore similarities to the controversial modern-day practice of shark finning, where the shark is caught for its fin, with the remaining carcass typically discarded back into the ocean. In the 19th century, there was significant growth in the Icelandic shark industry, representing a critical development in the country's economic progress.¹² However, by the end of the 19th century, the shark liver oil industry experienced a notable decline due to decreased international demand. By 1910, hunting sharks for their liver oil mainly had ceased, and Iceland halted all shark oil exports by 1939.¹³



Njörður Sæberg (b. 1945) shark ship model builder & author/Dalrún Kaldakvísl

¹⁰ Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea], 320–321.

¹¹ See Guðmundsson, *Skútuöldin* [Schooner age], 109-120; Sigtryggsson, *Frá Hvanndölum til Úlfsdala* [From Hvannsdölum valleys to Úlfsdala valleys], 944.

¹² See Þór, *Sjósókn og sjávarfang* [Fishing and seafood], bls. 186-186.

¹³ See Guðmundsson, *Skútuöldin* [Schooner age], 109-120.

In the 19th century, Icelandic farmers and farm laborers utilized custom-designed open rowing boats and small-decked sailing vessels for shark hunting, with a typical capacity of 8 to 12 men. Shark fishing usually occurred in late winter and early spring when Greenland sharks gathered in shallow regions before migrating to deeper waters in the summer. Shark fishermen historically congregated in fishing huts near the fishing areas, fostering a strong sense of camaraderie among the fishermen in their work environment. Even though shark fishing huts were very primitive residences, they were known to be a place of freedom, where men would amuse themselves by drinking and wrestling – like the famous shark fishing hut called Gjögur, located in one of the most isolated areas in Iceland: "When the men gathered inside the huts, they would share stories and recite rímur [epic songs]." Traditionally, shark fishing, much like shark meat processing, was male-dominated, with men primarily responsible for fishing activities at sea. However, historical records indicate that women were also engaged in the shark fishing industry. Women such as Jófríður Hansdóttir (1818-1885), who bore a child on a shark fishing expedition, and Steinunn Árnadóttir (1852-1933), who ensured herself a spot on her father's shark ship by showcasing her physical prowess to the ship crew: She lifted the heaviest stone on the sea shore."

The work identity of the 19th-century shark fishermen was based on their accomplishments at sea: how many sharks (i.e., oil-rich livers) they captured and how courageous they were at sea. The work culture aboard shark rowboats and schooners was centered on the notion that each crew member's mental and physical resilience was essential for survival. Shark fishing in Iceland historically required fishermen to venture farther out to sea and endure more extended periods on the ocean than other fishing activities, earning shark fishermen the esteemed reputation of supreme sea heroes. Historical shark fishing was associated with traits of hypermasculinity, portraying those involved as exemplars of strength and courage. Young men and even adolescent boys would venture out to hunt for sharks as a way to establish their masculinity among older and more seasoned shark fishermen, as one shark fisherman recalled in his memoir: "The young men, embarking on their first shark fishing expedition, found the experience exciting

¹⁴ Jónsson, *Strandamannabók* [Strandamannabook], 123.

¹⁵ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 85-87; Lúðvík Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea], 208–203, 365. See in regards to the underrepresentation of women in Icelandic fisheries: Willson, *Seawomen of Iceland. Survival on the Edge.*

¹⁶ Halldórsdóttir, "Óvenjulegir fæðingarstaðir á fyrri öldum" [Unusual birthplaces in previous centuries], 18; Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 88.

¹⁷ Njörður Sæberg Jóhannsson (b. 1945), interview by Dalrún Kaldakvísl, 2022.

¹⁸ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 82-85.

¹⁹ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 85-89; Kaldakvísl, "Karlmennskuímynd hákarlamanna fyrr á tíð." [The masculinity of Icelandic shark fishermen]

and intriguing, quite unlike anything they were accustomed to at home; they eagerly anticipated testing their strength against the sharks as they ventured out to sea."²⁰

The challenging conditions at sea, including adverse weather, cold temperatures, and the constant threat of shipwrecks, injuries, and drowning, made shark fishing in pre-industrial Iceland one of the most dangerous professions in the country. In memoirs of many shark fishermen, they detailed their harrowing experiences surviving storms and shipwrecks, highlighting the profound link between shark fishing and mortality, which was a constant source of fear for shark fishermen and their families. Before mechanization came to the Icelandic fishing industry toward the beginning of the 20th century, shark captains had to rely on their sensory understanding to navigate the ocean. Shark captains honed their ability to interpret the ocean's auditory and visual cues, such as the sounds of waves and icebergs and the dynamic patterns of the sea's surface. The shark captains also had to possess knowledge of the Greenland shark's behavior to hunt it down. Shark captains frequently fished in secret shark fishing spots passed down through generations within their families, highlighting the lasting tradition of their profession. ²¹ Catching the Greenland shark required fishermen to have a lot of patience as they waited to hook the shark, with a fishing line in hand, typically baited with decayed seal blubber and horse meat soaked in alcohol. In the past, fishermen employed poetry recitals to directly address the Greenland shark in the deep and lure him to the baited hook. Shark calling is a rare phenomenon in human history, with a similar practice found among societies in certain Papa New Guinea islands, as discussed in the book *Demon Fish*: "In these remote outposts, a select group of men are trained in the ritual of shark calling: after performing elaborate rituals, they hunt them by hand, bring them home for feasts, and end up earning more respect than anyone else."22 Icelandic shark fishermen traditionally used Icelandic shark poetry to lure the Greenland shark to the fishing hook while passing the time and keeping each other entertained and alert while waiting for the sharks to bite.²³ These poetic verses depict the longstanding hunting traditions of Icelandic fishermen targeting Greenland sharks. The shark poems typically convey the excitement of encountering the Greenland shark, the predatory instincts of the hunters, and a somewhat insincere empathy for the shark, often portrayed in a satirical manner.

Hákarlgreyið, heyrðu mér, hérna niðri sértu,

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²⁰ Friðriksson, Hákarlalegur og hákarlamenn [Shark fishing and sharkmen], 29.

²¹ Lúðvík Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea], 186.

²² Eilperin, Demon Fish.

²³ Friðriksson, Hákarlalegur og hákarlamenn [Shark fishing and sharkmen], 59, 66.

matinn teygi' ég móti þér, mikið feginn vertu.²⁴

[Poor shark, listen to me, you are down below, I extend food to thee, how glad you should be.]



Björn Ólafur Jónsson (1864-1924) shark captain

In the anticipation-filled moments before the shark took the bait, the fishermen had to maintain constant vigilance and rely on their astute instincts. Holding the fishing line, they carefully monitored the shark's movements and behavior, sensing its presence as it swam past the hook, engaged with it, and ultimately took the elusive bite. Then, swiftly, the fishermen hauled the shark from the depths to the surface. The Greenland shark is not renowned for being a big fighter, but its immense size and strength could pose a significant challenge for shark fishermen. As the Greenland shark emerged from the deep, the fishermen swiftly dragged the shark to the hull with a large hook (ice. *ifara*). After that, the fishermen knocked the shark out to immobilize it by using a club (ice. *bákarlahnallur*), then they killed it with a shark spear (ice. *bákarlaskálm*) and subsequently extracted its liver before throwing it back into the ocean. When the fishing was good, the sea would swarm with sharks, who would feast on the discarded shark carcasses – then the shark fishermen would use shark harpoons to spear sharks at the ocean's surface. Historical shark fishermen

²⁴ Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea], 361.

frequently likened shark fishing to a battle in their memoirs. Their descriptions of shark fishing often evoke combat imagery, where they characterize their fishing equipment as weapons and perceive the Greenland shark as an enemy to overcome.

The ship is roaring and creaking. We've caught a big one. After a little while, the shark appears shackled in iron. But Mister Grey wants to protect himself and manages to escape from the hands of his enemies. Now, he opens his mouth and clamps down on the hook, already submerged in his jaw, causing a cracking sound. – During the transition from high to low tide in the early morning, Mister Grey fought tirelessly, keeping everyone busy. "Quickly, pass me the harpoon," one seaman called out to the captain. It was accomplished swiftly. He aimed the harpoon into the deep until it struck a giant shark. "Old Tough" lurked below, devouring his fallen comrades. It was a mistake; if we could harpoon or hook him, his demise was inevitable. It was a full-blooded battle at daybreak.²⁵

The Greenland shark holds a significant position as a meat product within Icelandic folk narratives; however, as a living entity, it is rarely represented in the Icelandic mythological canon. This lack of representation may show a bigger gap between the natural world and the stories that build cultural identity, leaving the shark mostly overlooked in Iceland's rich folklore. This contrasts starkly with its depiction in Greenlandic mythology, where the species is more frequently acknowledged and integrated into cultural narratives. The Greenland shark however occupies a significant role within Icelandic fishing culture, reflecting its historical and contemporary importance in local marine ecosystems and economic activities. Historical fishermen employed over 90 names for the Greenland shark, underscoring its significance in Icelandic fishing traditions.²⁶ The various shark names refer to different factors, e.g., the shark's length, gender, the size of their liver, and other distinctive characteristics. The marine historian Lúðvík Kristjánsson has noted that fishermen also used various names for the Greenland shark due to superstitions, i.e., fishermen believed that bad things would befall them if they called it by its proper name, so they used various substitute names.²⁷ Fishermen usually called the Greenland shark "Gamli grái," meaning "Old Grey," alluding to the shark's greyish color, slow movements, and aged appearance. Historical shark fishermen tended to humanize the Greenland shark, attributing humanlike characteristics to it. The historians Gaynor and McCann have emphasized the intricate nature of the relationship between fishermen and fish, highlighting the tendency of fishermen to attribute

²⁵ Hermannsson, "Hákarlalegur", [Shark fishing], bls. 639.

²⁶ See Halldórsson, Ö*rlög orðanna*.

²⁷ Kristjánsson, *Íslenskir sjávarhættir* [Icelandic custom of the sea], 394.

human qualities to the fish, adding a layer of complexity to this dynamic: "While the act of killing marine animals may require fishers to believe that their prey are not like us, the fact that such animals are capable of displaying humanlike behaviors complicates this hunter-prey relationship and may even foster respect for individual animals and species. "28 By applying human attributes to the Greenland shark, the shark fishermen regarded it with particular esteem as an adversary. It did, however, not create empathy towards the shark; on the contrary, it made an enemy out of it. Shark fishermen often personified the formidable elements they faced and battled on their voyages, such as the sea, the wind, the icebergs, and the sharks. Viewing the Greenland shark as a competitor was possibly a way to create an emotional distance between the fishermen and the sharks during the hunting expeditions, which involved removing alive sharks from the water and often violently extracting their livers while still alive.

The Greenland shark was unpopular among traditional fishermen due to its ravenous appetite and propensity to become entangled in fishing gear. One shark fisherman born in the late 19th century remarked that fishermen cursed the Greenland shark more than any other fish: "Even the shark fishermen themselves, who invested considerable effort in catching the Greenland shark, also cursed it." Historical shark fishermen characterized the Greenland shark as being a peculiar and hideous creatures embodying aggressive, monstrous, and predatory characteristics. It was common for shark fishermen to describe the shark's greediness, often citing that its greed was so excessive that it drove it to consume fellow captured individuals; "the sea was swarming with live sharks, which began to feast on their dead companions." The fishermen would simultaneously describe the Greenland shark as being a picky eater with a ravenous appetite for meat, fat, and alcohol (i.e., bait soaked in rum); one shark fisherman humorously described the Greenland shark as a drunk if he could get his fins on alcohol. Shark fishermen frequently noted that the Greenland shark's killing instincts and eating habits left it susceptible as prey.

The portrayal of the Greenland shark in shark fishermen's memoirs is multifaceted and contradictory. While the shark's predatory nature was viewed as a vulnerability when targeted by humans, the fishermen also held admiration for it as a formidable marine predator. The Greenland shark's impressive size, immense strength, relentless demeanor, and insatiable appetite commanded the fishermen's respect as they pursued it. The 19th-century portrayal of the Greenland shark as a symbol of wild masculinity is noteworthy. Centuries after the initial settlement, the Greenland shark was originally known as "hákerling" (with "kerling" denoting an

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²⁸ Gaynor and McCann, ""I've Had Dolphins...Looking for Abalone for Me"", 174.

²⁹ Dúason, Einu sinni var [In times gone by], 179.

³⁰ Jónsson, "Hákarlaveiðar." [Shark fishing]

³¹ Friðriksson, *Hákarlalegur og hákarlamenn* [Shark fishing and sharkmen], 71.

elderly woman). However, with the rise in shark fishing activities in Iceland, the masculine term "hákarl" (with "karl" representing a male) gained greater prominence. Crawford's book *Shark* discusses the tendency of humans to assign gender characteristics to shark species: "Sharks can appear almost sexual. For a start, they are beautiful, many of them easily feminized in their slender shapes and sinuous movements. Others, such as white sharks or great hammerheads with their large and powerful dorsal fins, are readily cast as masculine figures."³²

Historically, shark fishermen often depicted themselves in a manner similar to how they depicted the Greenland shark, establishing a noteworthy parallel between their own image and that of the shark. Therefore, the Greenland shark was not perceived as an exotic creature by these fishermen, but rather as a representation of themselves within the uncontrolled natural environment. Shark fishermen saw themselves as outsiders in human society, living on the fringes of civilization in isolated fishing huts or on the open ocean, adhering to their own unique rules and societal structures. The fishermen characterized themselves much like the Greenland shark, as unusually large, strong, aggressive, primitive, and greedy - claiming to possess an insatiable appetite for food and alcohol. The fishermen who pursued Greenland sharks often discussed being driven by their hunting instincts and transforming into savages when the sea teemed with sharks. They viewed their predatory skills as advantageous in their hunting relationship with the Greenland shark and felt a sense of dominance and control as the predator. The respect for the predatory characteristics of the Greenland shark among the community was not predicated on fear of the species itself, as it is not considered a threat to humans and is generally regarded as nonaggressive. Instead, the apprehension primarily relates to the consumption of its meat, which is known to contain toxic compounds if not properly processed, rendering it unsafe for immediate ingestion. Although the Greenland shark is not classified as a cannibal, there are Icelandic folk tales about how human flesh was used as bait, especially marginalized humans, such as red-haired boys and elderly individuals who relied on welfare.

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³² Crawford, Shark.

Hunter-prey relationship after the mechanization of fishing boats



Helgi Héðinsson (b. 1928) shark fisherman

"I started hunting sharks with my father when I was a teenager. I used to go shark hunting almost every year, but I stopped about 5-6 years ago," explained a 95-year-old retired shark fisherman in our interview: "Catching a shark is not too difficult; they surrender easily. The real problem arises if they get tangled in the fishing line."33 Through my interviews with modern-day shark fishermen, I discovered significant changes in the working environment of Icelandic shark fishermen from the 19th to the 21st century and the consequent impact on their relationship with the ocean and its marine life. Shark fishermen of the 20th and 21st centuries are traditional fishermen who engage in shark fishing on the side. Instead of targeting large quantities of sharks for their liver oil like their 19th-century predecessors, modern-time shark fishermen focus solely on hunting the Greenland shark for their meat, which they prepare and market independently. Throughout the 20th and 21st centuries, the processing of shark meat has played a significant role in the occupational identity of shark fishermen. This era saw a notable shift in the self-identity of shark fishermen, moving away from hunting sharks to focusing on the processing of shark meat; as one shark fisherman said: "Catching sharks is a rapid operation today, but the real difficulty lies in the extensive and laborious task of processing the shark meat. My primary goal is to produce highquality shark meat."34

³³ Helgi Héðinsson (b. 1928), interview by Dalrún Kaldakvísl.

³⁴ Sverrir Björnsson (b. 1939), interview by Dalrún Kaldakvísl.

Ríkharð: In Iceland, we have a unique tradition of eating sharks, while sharks are known for eating people in other parts of the world.³⁵



Sverrir Björnsson (b. 1939) shark fisherman

The shark fishermen I interviewed frequently portrayed shark fishing as a casual way to earn extra money. Shark meat in the late 20th and 21st centuries was usually in higher demand than supply; the fishermen even discussed selling the sharks before catching them, demonstrating the need for their catch, especially for the Icelandic midwinter festival, Porrablót, commemorating Icelandic culture and heritage. During our interviews, I observed that shark fishermen often anthropomorphize shark meat by describing it as if it were alive. While this characterization may seem inaccurate, there is some truth to it. The process of fermenting shark meat leads to the development of a diverse microbial community, with the meat serving as a habitat for various bacteria. The conventional method for preparing shark meat, known as "kæstur hákarl," has remained consistent for centuries. It begins with butchering the shark and burying the meat in the sand and rocks near the seashore for several weeks. The shark meat ferments due to the actions

³⁵ Ríkharð Lúðvíksson (b. 1964), interview by Dalrún Kaldakvísl.

of microorganisms, preventing spoilage and allowing the high concentrations of trimethylamine oxide (TMAO) to gradually drain from the flesh, rendering it safe for consumption.³⁶



Gísli Konráðsson (1903-1982) shark meat processor

The shark fishermen of the 20th and 21st centuries continued to process shark meat in the same conventional way as their ancestors. However, instead of burying the shark meat at the beach, the modern fishermen traditionally ferment the meat using a perforated wooden container, which they later replaced with a plastic container: "It is a dirty job – you always come home smelling of ammonia." Subsequently, the shark processors cut the flesh into strips and transfer it to a drying shed called "hákarlahjallur," where it would hang for drying for a few weeks or months. The way shark meat is preserved, either through fermentation or drying, allows it to be edible for a long time. Icelandic culture has widely embraced fermented shark meat due to its long shelf life and the significant change in flavor as it ages; fostering a legendary image of fermented shark meat as a living thing in Icelandic culture. Over time, fermented shark meat has held various roles in

³⁶ See Jensen, "Unlocking the Microbial Diversity and Chemical Changes Throughout the Fermentation Process of "Hákarl", Greenland Shark."

³⁷ Ríkharð Lúðvíksson (b. 1964), interview by Dalrún Kaldakvísl.

Icelandic society, from being seen as food for the less fortunate to a symbol of primitiveness. It has also been used as a form of currency and a frugal meal, and even considered a remedy for pregnant women and nursing mothers. Despite the stories about its nutritional value, scientific research has shown that consuming shark meat can be risky due to high levels of mercury. In modern times, shark meat is not a common food in Iceland, but it has become a symbol of national identity, particularly due to the tourism industry. It is often served along with the traditional Icelandic liquor, brennivín, which has historically been consumed by shark fishermen to keep warm. Offering shark meat paired with brennivín has been viewed as a traditional and masculine activity, and it is common to observe the reactions of foreigners when they try it. The popularity of shark meat has faded among younger generations, but it has seen a revival in Iceland because of the tourism industry. There, it is promoted alongside the Icelandic signature liquor brennivín (known as Black Death), which shark fishermen historically used to keep themselves warm. Eating shark meat flavored with ammonia served with the spirit brennivín has long been considered a manly pursuit. It is a common practice to offer the dish to foreigners to observe their often disgusted reaction.

Bjarki Bjarnason: During my travels as a tourist guide around the country, I sometimes stopped with tourists at the farm Kross on Berufjarðarströnd. Högni Albertsson (1928-2010) lived there at the time, a shark hunter who processed the catch himself. He graciously demonstrated his shark-catching and preparation techniques to our group. Afterward, he invited us to sample the shark, and we enjoyed it with some Icelandic liquor brennivín. Although most tourists liked the shark and the drink, none asked for seconds – except for one who asked if he could have another bite, adding, "Do I then get another sip of brennivín?" ¹³⁸

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³⁸ Bjarki Bjarnason (b. 1952), a conversation with Dalrún Kaldakvísl.



Bjarki Bjarnason & Högni Albertsson shark fisherman

Unlike other fish in Iceland, sharks are not restricted by quotas, allowing shark fishermen to fish without constraints.³⁹ Because shark fishermen operate outside the national quota system, it allows them greater flexibility and autonomy in their operations. One shark fisherman told me, "Shark fishing offers absolute freedom." Usually, these seasoned fishermen, many elderly and declining in numbers, embark on solo or small crew expeditions for shark fishing during late winter and early spring. Once the shark motor boat arrives at the fishing grounds, the fisherman meticulously lowers drop lines equipped with a heavy sinker at the bottom of the line and a series of baited hooks to attract and catch sharks. The hooks are commonly baited with fresh seal meat/fat and porpoise meat/fat: "It was previously believed that decayed bait was necessary to catch a Greenland shark. However, after I stopped using decayed bait, I caught more sharks. The shark has a strong sense of smell, so it quickly detects the scent of blood in fresh meat."⁴¹



Shark hook

³⁹ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 66.

⁴⁰ Björgvin Agnar Hreinsson (b. 1964), interview by Dalrún Kaldakvísl, 2022.

⁴¹ Hreinn Björgvinsson (b. 1943), interview by Dalrún Kaldakvísl, 2022.

After a night or two, the shark fisherman returns to retrieve the catch. If the shark is still alive on the hook, it is usually killed before being brought ashore; one shark fisherman said: "I used a shark machete, "while another stated: "I always used a shotgun – a 12-gauge." Then, a sling is fastened around the shark's tail and hauled onto the shore or behind the boat. The utilization of oral history proved valuable in examining shark fishing practices in the 20th and 21st centuries, given that shark fishermen generally do not maintain written records of their catches.

As the 20th century progressed, shark fishermen began utilizing advanced marine technology such as GPS, depth sounders, radios, and daily weather forecasts to navigate motorboats through open waters to reach shark fishing grounds. So, in contrast to their predecessors, modern shark fishermen no longer depended heavily on instincts and memory. For instance, they have abandoned specific names for shark fishing grounds. However, the interviews showed that memory and history continue to impact shark fishing to this day; shark fishing continues to remain a longstanding family tradition in certain families, with some shark fishermen using the same fishing grounds as their fathers and even their grandfathers: "I'm a true islander, born and raised on Grímsey Island. My grandpa used to go shark fishing in a little rowboat during the winter – sometimes, he had to wait for days until a shark took the bait – he taught me about all the fishing spots around the island." Although modern shark fishing doesn't pose the same risks and requires as much physical and mental effort as it did in the past, fishermen still find it thrilling to capture these large, powerful creatures. In interviews, they spoke about their excitement when reeling in sharks. They often shared anecdotes of bringing their shark catches to shore, where villagers sometimes gathered on the pier to witness the impressive haul.

Hreinn: As a kid, I loved watching the boats bring in the shark catch in our village – it was such a lively event. Later, I became a shark fisherman, and I'll never forget the time I caught seven sharks simultaneously. It was such an exciting moment for the kids in the village that they even got a day off from school to see the sharks at the pier. It was a joyful and unforgettable time for everyone.⁴⁵

⁴² Helgi Héðinsson (b. 1928), interview by Dalrún Kaldakvísl.

⁴³ Óli Hjálmar Ólason (b. 1931), interview by Dalrún Kaldakvísl, 2022.

⁴⁴ See also Einar Friðriksson. "Shark fishing". [Unpublished manuscript].

⁴⁵ Hreinn Björgvinsson (b. 1943), interview by Dalrún Kaldakvísl, 2022.



Helgi Héðinsson (b. 1928) shark fisherman & author/Dalrún Kaldakvísl

Throughout the 20th and 21st centuries, shark fishing/processing in Iceland was mainly done by men. In Western popular culture, the act of killing sharks is often viewed as a traditionally masculine endeavor. Sharks are frequently depicted as symbols of humanity's deep-rooted fear of the unknown, a theme explored in literature like Ernest Hemingway's *The Old Man and the Sea* (1952) and Morten Andrea Strøksnes book *Shark Drunk* (2017) – and in iconic films such as Steven Spielberg's *Jaws* (1975).⁴⁶ However, recent interviews with modern shark fishermen in Iceland

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⁴⁶ Steven Spielberg's *Jaws* (1975) made its European premiere in Iceland. During the film's intermission, the theater invited guests to include in a feast featuring shark meat. The theater director was quoted as saying: "About halfway

revealed a shift in perspective. Unlike their predecessors, these fishermen do not emphasize the idea of masculinity. The modern shark fishermen disliked using the word masculinity, unlike their historical counterparts, and showed a dismissive attitude towards the idea of maritime masculinity and even made fun of it. The interviewees would scoff and laugh, saying, "Masculinity? Certainly not!" The interviewees saw masculinity as a past behavior shaped by nature and part of nature—a behavior that no longer existed due to technology: when shark fishermen fished on rowboats and schooners: "Back in the day, shark fishermen had to row the boats and haul in the catch by hand – shark fishing was a tough and dangerous job, with plenty of shipwrecks. It was a whole different time." The fishermen believe that traditional notions of masculinity no longer apply in today's context due to these advances: "It's completely different nowadays – now we travel on boats powered by engines."

Interestingly, modern-time shark fishermen referred to the Greenland shark only as "hákarl," disregarding the numerous names previously used to describe the shark's biological characteristics, signifying a shift in fishermen's language from the 19th to the 21st century. It was challenging to get my interviewees, the shark fishermen, to speak about their views on the Greenland shark as a living being. The modern shark fishermen never portrayed the Greenland shark or the oceanic environment as having humanlike qualities, and they never compared themselves to the Greenland shark as their historical counterparts did. Modern-time shark fishermen aboard motorboats utilize drop lines to capture Greenland sharks, thus they have less direct contact with the Greenland shark compared to their counterparts in the past, who would spend hours or even days at sea, holding a fishing line – allowing for a more intimate and prolonged interaction with the sharks. Upon retrieving the drop lines after a night or two, the sharks are often dead or weakened after being hooked for several days. This shift in hunting approach signifies that modern shark fishermen no longer perceive shark fishing as a confrontational endeavor: "When we bring sharks to the surface, they are often either dead or very calm - hardly moving, and sometimes they seem almost lifeless; they appear sleepy."⁵⁰ In the interviews, the shark fishermen predominantly viewed the Greenland shark as a marketable commodity to sell and consume, emphasizing its taste rather than acknowledging its living nature. The shark fishermen lacked empathy towards the Greenland shark, akin to 19th-century shark fishermen. They considered the

through the movie, let's take a break. Then the main actor, who is a shark, has already eaten several people. So let's go to the lobby and get revenge on him by eating some shark meat." Ókindin á gaffalbita?", *Morgunblaðið* 19.12.1975.

⁴⁷ Óli Hjálmar Ólason (b. 1931), interview by Dalrún Kaldakvísl.

⁴⁸ Kaldakvísl, "Hákarlamenn á hafi úti" [Icelandic shark fishermen out at sea], 89-94. See in regards to the relationship between masculinity and marine mechanization: Nevalainen, "a Real Men's Profession'. Finnish Sailors and Masculinities at the beginning of the Twentieth Century."

⁴⁹ Sverrir Björnsson (b. 1939), interview by Dalrún Kaldakvísl.

 $^{^{50}}$ Helgi Héðinsson (b. 1928), interview by Dalrún Kaldakvísl, 2023.

shark just another fish: "When I catch it, I view it just like I do a cod: merely as a product, not as a living organism."⁵¹

In interviews with shark fishermen about the Greenland shark, conflicting descriptions were initially given, resembling historical accounts. Initially, negative impressions were expressed, using terms such as "ugly," "slow," "asocial," "lazy," "stupid," and "the greediest animal in the ocean," highlighting the shark's cannibalistic behavior. These behaviors led to the fishermen's unsympathetic attitudes toward sharks: "The Greenland shark is a solitary and highly predatory creature. These sharks are so greedy that they even eat each other." However, the shark fishermen's perception changed as they described the diverse prey found in the sharks' stomachs, shifting to admiration and respect. The interaction with the shark's body during meat processing provided them insight into its gender, reproductive habits, feeding behaviors, and approximate age based on size.



Björgvin Agnar Hreinsson (b. 1964) shark fisherman

⁵¹ Ríkharð Lúðvíksson (b. 1964), interview by Dalrún Kaldakvísl.

⁵² Óli Hjálmar Ólason (b. 1931), interview by Dalrún Kaldakvísl.

Björgvin: I usually see the Greenland shark as a meat product, but it's undeniable that it is also a living creature. When you're reeling in a shark, it seems so calm. But when you bring it to shore and examine its stomach contents, you realize how fast and powerful it is, catching prey like gray bream, salmon, and seals. It could even take on a whale or a dolphin. Despite appearing sluggish when seen on a fishing line, it's pretty adept at hunting. We've dissected many sharks and found a variety of prey in their stomachs, from bottom-dwelling fish to birds like seagulls, showing that they feed at different depths.⁵³

Hreinn: We still have a lot to learn about the Greenland shark. I've found seven different types of fish in a single shark's stomach, including salmon. It's pretty puzzling. I've seen almost newborn seal pups in a shark's stomach, which suggests that the shark must come very close to the shore. This has always surprised me. Finding undigested small seals inside the shark, with no damage to their skin, suggests that the shark must be going all the way to the shore to hunt.

Interviewer: So, the sharks caught the seals alive; they did not scavenge dead ones?

Hreinn: If they had been scavenged, the evidence would have been visible, especially in the seal fur.

Interviewer: What types of fish did you most commonly find in a shark's stomach?

Hreinn: Cod, haddock, flounder, and even coalfish — I've even found a fish net ring and a can in a shark's stomach.⁵⁴

Target fishing for the Greenland shark has become increasingly rare in Iceland. Instead, it is more common for *non-fishing* shark processors to buy frozen Greenland shark meat from trawlers that accidentally catch Greenland sharks as bycatch, typically in the Greenland Sea. Trawler fishermen cut the shark and put it in a freezer until they come ashore, then they sell it to the shark meat processors and use the profits for their employee fund. In our interview, one retired shark processor told me: "I used to buy and process around 30 sharks yearly. I fermented the shark in a 20-foot container that I built and buried underground." My conversations with shark meat processors that buy frozen shark meat from commercial fisheries reveal that they usually lack

⁵³ Björgvin Agnar Hreinsson (b. 1964), interview by Dalrún Kaldakvísl.

⁵⁴ Hreinn Björgvinsson (b. 1943), interview by Dalrún Kaldakvísl.

⁵⁵ Lúðvík Ríkharð Jónsson (b. 1940), interview by Dalrún Kaldakvísl.

firsthand knowledge about the Greenland shark as an organism because the shark is cut and frozen before reaching them.

Greenland shark conservation

While basking sharks, porbeagle sharks, and spiny dogfish are protected species in Icelandic fishing zones, there are no specific regulations against fishing Greenland sharks, which raises concerns about the welfare of the longest-living vertebrate on earth. ⁵⁶ The conservation of Greenland sharks is paramount due to their vulnerable status and critical role as top predators. The marine biologist Sylvia A. Earle wrote about the gravity of hunting old and large marine predators: "The older and larger the consumer, the greater the investment of energy, pound for pound. It takes a lot of seeds and grass to make enough mice and rabbits to make a wolf; a lot of little plants to make sufficient numbers of small fish to make a shark."⁵⁷ The population of the Greenland shark is believed to have decreased by 30-49% over the last 450 years, primarily due to targeted fishing for oil. ⁵⁸ Despite the estimated 3% increase in the Greenland shark population in the past century, scientists stress that it remains a vulnerable species to overfishing because of its slow growth rate and late sexual maturity. Studies indicate that female Greenland sharks typically reach sexual maturity at around 156 years.⁵⁹ This species is ovoviviparous, meaning the offspring develop inside the mother and are born live after a gestation period of approximately 8-18 years (a single female can give birth to up to ten live pups) – which shows the importance of every individual and underscores the need for immediate conservation efforts. Scientists have also highlighted increased threats to the Greenland shark due to climate change. The potential loss of 50% of the Arctic ice in the next 100 years may impact the Greenland shark population, giving commercial fishing fleets more significant access to the Arctic.⁶⁰ Equally important are the devastating effects of bottom trawling on the ocean floor, as this outdated fishing technique destroys the habitat of the Greenland shark. Last but not least are the horrendous effects of commercial fisheries that extract long-lived sharks from the oceans and, by doing so, disrupt the carbon cycle.⁶¹

While direct shark hunting in Iceland is minimal and has a minor impact on the Greenland shark population, the same cannot be said for shark bycatch. Scientists estimate that approximately

⁵⁶ Reglugerð um bann við veiðum á háfi, hámeri og beinhákarli. [Regulation on the ban on fishing for spiny dogfish, porbeagle and basking shark]

⁵⁷ Earle, The World Is Blue, 26.

⁵⁸ Kulka et al., Somniosus microcephalus, 6.

⁵⁹ Kulka et al., Somniosus microcephalus, 7.

⁶⁰ Edwards, et. al, "Advancing Research for the Management of Long-Lived Species."

⁶¹ Earle, The World Is Blue, 161-162.

3500 Greenland sharks are unintentionally caught as bycatch annually in the Northwest Atlantic, Arctic Ocean, and Barents Sea. These numbers are possibly higher in regards to unrecorded bycatch and discards. In my interview with a shark fisherman who has worked on Icelandic bottom trawlers, he spoke about how common it was to catch and discard Greenland sharks in the Greenland Sea: "Last time we caught between 40-50 sharks as bycatch – that is usual. We throw them back to the sea; they are usually dead. Sometimes, the crew keeps a few or all of the sharks to sell to shark meat processors back home... We normally don't document the Greenland shark bycatch." My interviews and conversations with traditional fishermen revealed negative views towards the Greenland shark as a bycatch due to its propensity to get caught in their fishing gear. One Icelandic fisherman on a line boat articulated: "You never think about the Greenland shark or its life for one moment; it looks like it's half dead when it comes to the surface – the Greenland shark looks like a carcass." The interviewee went on to explain that when fishing for halibut in the Barents Sea, the fishing crew used specialized shark hooks to catch Greenland sharks that were preying on the bait. After catching them, the dead sharks were discarded back into the ocean, which can be seen as an intentional bycatch strategy.

Iceland has gained notoriety for its commercial hunting of large marine mammals in the late 20th and 21st centuries. The country has faced international criticism for persisting with its whaling practices, disregarding global regulations and the recommendations of the International Whaling Commission. Additionally, Iceland has taken no firm stand against shark hunting on the global stage, as evidenced by its decision to vote against the prohibition of fishing for 18 endangered shark species at the 2019 CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) conference. In 2022, the Northwest Atlantic Fisheries Organization (NAFO) banned deliberate fishing and retention of Greenland sharks caught as bycatch in international waters. However, these regulations may not apply to countries that have banned discarding fish, such as Iceland.

There has been a significant and growing domestic opposition to whaling among the Icelandic public in the late 20th century and 21st century, echoing global anti-whaling demonstrations. Despite widespread international protests against shark hunting, the Icelandic populace remains indifferent to the practice in their own country – fishing Greenland sharks is not a contentious issue in Iceland, whether intentionally targeted or incidentally caught. The question arises as to why the public in Iceland holds such different views on whaling and shark fishing.

62 Kulka et al., Somniosus microcephalus, 6.

⁶³ Anonymous, interview by Dalrún Kaldakvísl.

⁶⁴ Anonymous (b. 1982), interview by Dalrún Kaldakvísl.

⁶⁵ Northwest Atlantic Fisheries Organization (NAFO), 44th ANNUAL MEETING OF NAFO - SEPTEMBER 2022. Measure to Conserve Greenland Sharks.

Unlike whaling, shark fishing is a fundamental aspect of Icelandic hunting culture and national identity, evident in the meticulous preservation of knowledge and artifacts related to shark fishing in Icelandic museums around the country. Conversely, whaling does not have deep historical roots in Iceland, as it was primarily carried out by foreign nations in Icelandic waters until the mid-20th century. The lack of concern for shark fishing in the late 20th and 21st centuries, compared to the increasing concerns among the Icelandic public against whaling, also stems from ingrained speciesism. Sea mammals, like seals and whales, have significantly impacted Icelandic history due to their frequent appearances at the water's surface. This high visibility has facilitated humanmammal interactions, enabling activities such as observation (e.g., whale-watching trips), listening, communication, and even assigning individual names to these animals. One shark fisherman recalled a memorable encounter with whales in our interview: "I've had the experience of being in a whale school where there were killer whales, humpback whales, and dolphins – these are majestic animals in the sea. "66 The interrelations between humans and marine mammals have laid the groundwork for empathy and understanding among individuals, as demonstrated, e.g., in Icelandic folklore. In one of the interviews, a shark fisherman was appalled by whaling but admitted to feeling no compassion for the Greenland shark. "Iceland should seize hunting whales - I don't like this cursed thing; it is a shady business to kill such large animals."67 According to my interviewees, modern shark fishermen, Icelanders, may prioritize whaling because whales are considered beautiful and graceful creatures, while in contrast, sharks are seen as "just sharks": "Humans typically associate whales with speed and power, majestic sea creatures. But a shark is just a shark. "68

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⁶⁶ Björgvin Agnar Hreinsson (b. 1964), interview by Dalrún Kaldakvísl.

⁶⁷ Óli Hjálmar Ólason (b. 1931), interview by Dalrún Kaldakvísl.

⁶⁸ Björgvin Agnar Hreinsson (b. 1964), interview by Dalrún Kaldakvísl.



Greenland shark bycatch

Conclusion

Ancient myths about sharks are fascinating, mainly because they reveal how we—rather than the animals—have changed over time. They underscore how we used to be closer to the natural world, and were more invested in it.⁶⁹

- Juliet Eilperin, Demon Fish

The commercial hunting of Greenland sharks has been a longstanding tradition in Icelandic culture, with shark liver oil and fermented shark meat playing a significant role in Icelandic history. Despite its historical importance, the Greenland shark has not been thoroughly studied from a historical perspective. The Greenland shark meat occupies an important role in Icelandic folk narratives, particularly as a traditional meat product that is often highlighted in local cuisine and customs. Its unique preparation and consumption are steeped in cultural significance, reflecting the resilience and adaptability of Icelandic communities over the centuries. However, despite its prominence as a culinary staple, the Greenland shark as a living being is seldom featured in the rich tapestry of Icelandic mythology. This absence may reflect a broader disconnect between the natural world and the mythological narratives that shape cultural identity, leaving the living Greenland shark as a largely underrepresented figure in Iceland's storied folklore.

Understanding the species' historical context requires insights from shark fishermen and shark meat processors, as they have been the primary individuals encountering and hunting this elusive deep-sea species. By examining memoirs from 19th-century shark fishermen and conducting oral history interviews with shark fishermen/processors in the 20th and 21st centuries, it was evident that changes in fishing technology and shark utilization have led to notable shifts in the relationship between shark fishermen and the Greenland shark over time.

The Greenland shark has had a historically negative portrayal, particularly by Icelandic fishermen who considered it a kleptoparasite, consuming fish that could otherwise be caught by humans and a nuisance due to its tendency to become entangled in fishing gear. Despite this perception, historical shark fishermen in the 19th and early 20th centuries respected the Greenland shark, as it was a vital source of food (shark meat) and trade (shark liver oil) in their livelihoods. In the pre-mechanization era of the Icelandic fishing industry, the Greenland shark symbolized endurance and survival in the harsh marine environment. Shark fishing for liver oil during this period was high-risk, often resulting in maritime disasters and loss of lives. The pursuit of

⁶⁹ Eilperin, Demon Fish.

Greenland sharks required fishermen to endure long periods at sea to catch these marine creatures. This intense exposure to natural forces and the Greenland shark itself significantly shaped the close hunting relationship between historical shark fishermen and the shark, with the fishermen often humanizing the Greenland shark and considering it a direct rival. In their memoirs, shark fishermen frequently likened themselves to the Greenland shark, portraying themselves as formidable, primitive hunters, emphasizing the shark fishermen's connection with the Greenland shark in the wild. Thus historical shark fishermen identified themselves with the natural world by both mirroring the shark and anthropomorphizing it.

The relationship between Icelandic shark fishermen and the Greenland shark has significantly changed from the 19th century to the 21st centuries. In the early 20th century, shark fishermen utilizing motorized fishing boats shifted their focus from primarily extracting liver oil from sharks to exclusively harvesting shark meat. This transition resulted in a decline in shark fishing as an occupation, with shorter and less dangerous voyages and fewer men catching fewer sharks compared to the 19th-century shark oil rush. The advent of motorboats and modern fishing gear technology reduced the reliance on physical and mental strength characteristic of past practices, where fishermen were closely intertwined with the ocean and the Greenland shark. My interviewees, the modern shark fishermen, indicated a shift in perspective toward the Greenland shark. Unlike historical shark fishermen who caught sharks through handlining, modern shark fishermen viewed the shark as primarily a commodity instead of an adversary at sea. This paradigm shift created a disconnect between the hunter and the prey, facilitated by technological advancements. The contemporary shark fishermen did not anthropomorphize or identify with the shark, treating it purely as a resource rather than an entity with human-like qualities. Despite this disconnect, the processing of shark meat allowed modern shark fishermen to gain a deeper understanding and appreciation for the Greenland shark as a living creature. By examining the Greenland shark's stomach contents, the fishermen gleaned insights into the shark's impressive hunting capabilities.

The stories shared by shark fishermen highlight the profound impact of Greenland sharks on their lives and fishing activities at sea, and vice versa. Their narratives reveal that the Greenland shark is not merely a target or a resource; it plays a critical role as a top predator in the ocean's food chain, which humans are still striving to fully comprehend and appreciate. Although direct shark hunting off the coast of Iceland has become uncommon, scientists are concerned about the Greenland shark's global status due to unintentional catching and the impact of climate change on its marine habitat. It is surprising that the Icelandic government does not recognize the importance

of the Greenland sharkss as living creatures, regardless of whether they are caught intentionally or incidentally. In Iceland, the Greenland shark is not considered a protected species, and there are currently no specific regulations regarding their fishing. The accidental catching of Greenland sharks as bycatch and intentional fishing of the Greenland shark do not appear to provoke debate or controversy among the government or public in Iceland at present. This lack of concern stems partly from the challenge of empathizing with these sea creatures, as they are largely hidden from human view. However, history can be a valuable tool in developing a connection with these animals. By exploring the experiences of fishermen who have encountered Greenland sharks over the centuries, we can raise awareness about the human-shark interactions and generate interest in their conservation. Iceland has a long history of shark fishing, and I am hopeful that this history can lead the nation to take a lead in shark conservation efforts.

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Óli Hjálmar Ólason (b. 1931), interview by Dalrún Kaldakvísl, 2022. Ríkharð Lúðvíksson (b. 1964), interview by Dalrún Kaldakvísl, 2022. Sverrir Björnsson (b. 1939), interview by Dalrún Kaldakvísl, 2022.

Pictures

- 1. Sæmundur Sæmundsson (1869-1958) from Sæmundur's memoirs *Virkir dagar* & a photo of Greenland shark taken by Jóhannes Sturlaugsson
- 2. Photos of Njörður Sæberg (b. 1945) shark ship model builder & author
- Björn Ólafur Jónsson (1864-1924) shark captain from the private collection of Hólmfríður Sigurlína Björnsdóttir & a photo of a shark fish taken from Theódór Friðriksson book Hákarlalegur og hákarlamenn.
- 4. Helgi Héðinsson (b. 1928) shark fisherman photo taken by author/Dalrún Kaldakvísl
- 5. Sverrir Björnsson (b. 1939) shark fisherman photos from the private collection of Sverrir Björnsson.
- Gísli Konráðsson (1903-1982) shark processor photo from the private collection of Ólafur G. Sigurðsson
- 7. Shark hook photo taken by author/Dalrún Kaldkvísl.
- 8. Bjarki Bjarnason & Högni Albertsson shark fisherman photo from the private collection of Bjarki Bjarnason
- 9. Author/Dalrún Kaldakvísl and Helgi Héðinsson (b. 1928) shark fisherman photos taken by author/Dalrún Kaldkvísl.
- 10. Björgvin Agnar Hreinsson (b. 1964) shark fisherman photos taken by author/Dalrún Kaldkvísl.
- 11. A scrrenshot from the film *Ísland í lifandi myndum* (e. Iceland in live pictures) from 1925 - directed by Loftur Guðmundsson. Photo of a Greenland shark bycatch from the private collection of Dalrún Kaldakvísl