

# HUMPBACK WHALE ENTANGLEMENTS: THE DEADLY TOLL OF THE QUEENSLAND SHARK CONTROL PROGRAM

## HUMPBACK WHALE ENTANGLEMENTS AND DEATHS IN QSCP EQUIPMENT 1962–2023

Published: May 2024

### KEY POINTS:

- NSW has removed shark nets for whale migration season since 1989
- QLD briefly removed some shark nets during whale migration season in the early 1990s, then stopped
- Data projections suggest up to 17 whale entanglements and one fatality this migration season (2024)
- Between 1962 and 2023, the QSCP documented 159 whale entanglements, resulting in eight confirmed deaths by drowning, with an unknown number of whales dying post release
- The Miles Government's anti-science approach has repeatedly ignored the Scientific Working Group's recommendation for shark net removal during whale migration season
- QLD uses ineffective and disproven 'pingers' in a futile attempt to reduce entanglements
- QLD fails to track whale survival post-release, however the last all-but-confirmed whale to die post-release was August 2021. It has also been hypothesised that Migaloo may have been killed by a shark net that was never recovered.



Of major concern is that our statistical analysis of the QSCP catch data suggests a projected occurrence of up to 17 whale entanglements this year, with the potential for at least one whale death without urgent action to remove shark nets for migration season this year.

## INTRODUCTION

Each year, as humpback whales migrate along Australia's East Coast, the Queensland Shark Control Program's (QSCP) nets become deadly obstacles for these majestic animals on the Humpback Highway. Whales are crucial for tourism however economic advantage aside, whales also deserve protection in their own right.

Humpback whale populations have rebounded after the cessation of whaling in the 1960s, however, this rise in population has also seen a rise in whale entanglements and deaths in QSCP equipment during their migration season each year.

Of major concern is that our statistical analysis of the QSCP catch data suggests a projected occurrence of up to 17 whale entanglements this year, with the potential for at least one whale death without urgent action to remove shark nets for migration season this year.

While Queensland continually ignores this otherwise preventable crisis, New South Wales (NSW) has taken action for over three decades by removing shark nets during the peak humpback whale migration period since 1989.

Additionally, Queensland's reliance on provenly ineffective pingers - acoustic devices intended to deter whales from shark nets - appears to be more of a

political manoeuvre to preserve the status quo than a genuine attempt to mitigate the threat posed by shark nets to whales and other marine mammals.

The Queensland government frequently cites the necessity of shark nets for safeguarding the tourism industry as a rationale for inaction, without considering the devastating damage done to the Queensland brand by entangling and killing whales on a regular basis.

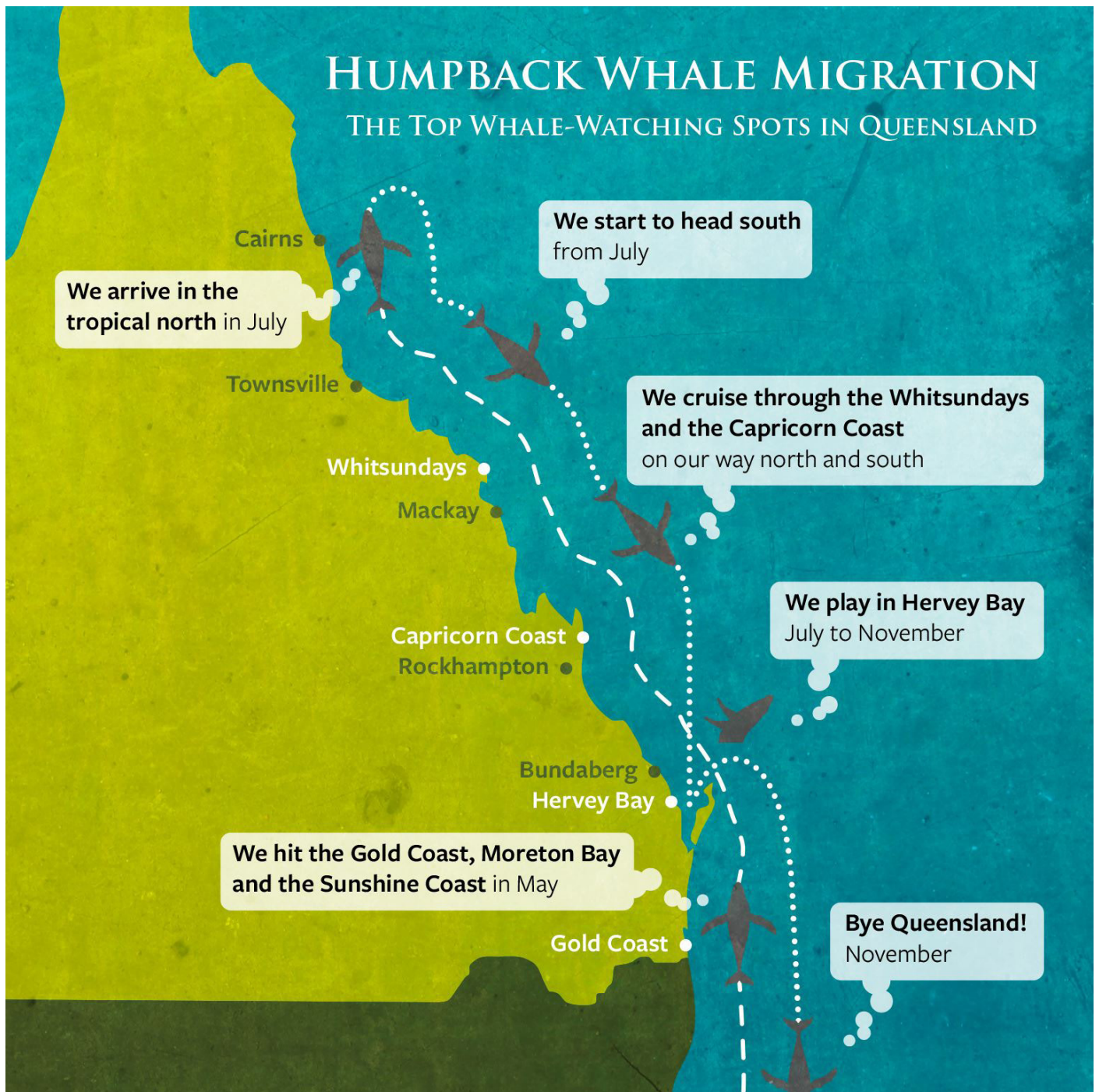
Increasing community and media scrutiny places pressure on Queensland's leadership to adopt conservation-aligned reforms and responsible stewardship. Failure to do so jeopardises Queensland's reputation as a sustainable tourism destination and also threatens long-term environmental and economic damage.

Information provided in this paper is based on publicly available information and research, information obtained under Queensland's Right to Information legislation and Administrative Release of catch data to Envoy Foundation by the Queensland Department of Agriculture and Fisheries (QDAF) which manages the QSCP.



# HUMPBACK WHALE MIGRATION

## THE TOP WHALE-WATCHING SPOTS IN QUEENSLAND



*Image courtesy of Queensland National Parks*

# HISTORY

The QSCP began in 1962, deploying nets and drumlines as a futile means of keeping beach goers safe from shark interactions. It now spans across 86 beaches year-round, regardless of whales' migration patterns. Appendix 1 details humpback whale entanglements from 1962 to 2023.

At the same time as sharks began being culled in Queensland, humpbacks became protected: *"The Humpback Whale has been protected in the southern hemisphere since 1963 and a worldwide moratorium on whaling was declared in 1986"*<sup>1</sup>.

A resurgence from 150 individual humpback whales in the east Australia population to over 40,000 whales has occurred following the end of commercial whaling of humpbacks in the 1960s<sup>2</sup>. This in turn has led to more humpback whales coming in contact with and being caught by QSCP equipment. In response to the rising entanglements, NSW has removed nets during the peak of the migration season since 1989. In contrast, Queensland continues to deploy shark nets year-round.

This proactive approach from NSW has notably decreased humpback whale entanglements off their coastline, to almost zero. Queensland briefly kept pace with its southern neighbour, removing some Gold Coast shark nets during whale season in the early 1990s, but abandoned this after only a few years for undisclosed reasons.

Queensland now stubbornly lags 30+ years behind NSW, as the Premier of Queensland and other key Ministers refuse to support the repeated and consistent recommendation from the Queensland Shark Control Scientific Working Group for the removal of shark nets during the annual humpback migration.

Scientific evidence<sup>3</sup> clearly shows the threat posed by these nets to marine life, especially humpback whales migrating along Australia's East Coast between May and November each year<sup>4</sup>. Our following statistical analysis emphasises the risk of increasing humpback whale deaths in QSCP equipment, stressing the urgent need for immediate, proactive measures.

<sup>1</sup> Australian Conservation Status - Humpback Whales, Australian Museum, <https://australian.museum/learn/animals/mammals/humpback-whale/>

<sup>2</sup> Dust off your binoculars, because a record number of humpback whales are on their way past our coastline, 15 November 2023, <https://www.timeout.com/melbourne/news/dust-off-your-binoculars-because-a-record-number-of-humpback-whales-are-on-their-way-past-our-coastline-111523>

<sup>3</sup> Why do whales keep getting tangled in shark nets? And what should you do if you see it happen? , Vanessa Pirotta, July 2022, <https://www.australiangeographic.com.au/news/2022/07/why-do-whales-keep-getting-tangled-in-shark-nets-and-what-should-you-do-if-you-see-it-happen/>

<sup>4</sup> Australia's east coast humpback whales: Satellite tag-derived movements on breeding grounds, feeding grounds and along the northern and southern migration, Andrews-Goff V, et al, December 2023, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10729012/>

# A DEEPER DIVE INTO THE NUMBERS

Between 1962 and 2023, the QSCP documented 159 whale entanglements, resulting in eight confirmed deaths by drowning. The fate of whales that were released alive (151), self-released (unknown) or remained entangled post-release (at least one) is unclear, but it is feared that many may not have survived. Despite the known risks of injuries and complications post-entanglement, the Queensland government fails to track whale survivability post-release.

The majority of entanglements in Queensland, 84 out of the recorded 159 cases, have occurred at Gold Coast beaches, with other significant locations including Sunshine Coast and Rainbow Beach. Nine of the 159 humpback whales caught in the North Stradbroke area were hooked on drumlines. There are no nets in this region. Queensland's approach to remove shark nets from migration season on the Gold Coast in the 1990s was positive, but has sadly regressed for the last 30 years, seemingly placing politics above people and wildlife.



Photo Credit: HSI/AMCS/Nicole McLachlan



Photo Credit: HSI/AMCS/Nicole McLachlan



It's only a matter of time before the next whale drowns in a QSCP shark net.

## POST-RELEASE MORTALITY

The Queensland government encourages the celebration of 'successful' releases of humpback whales from shark nets. However, QDAF catch data reveals that 'rescued' whales are being released while still entangled or dragging remnants of QSCP equipment like chains, ropes, or netting, significantly endangering their chances of survival. The department claims this is due to the difficulty and danger to rescue teams involved in the release. Experts caution that likely injuries, depleted energy reserves or releases involving dragging QSCP equipment endanger the whale's life and often is a 'death sentence'.

Wayne Phillips, Head of Marine Sciences at Sea World Queensland, has emphasised the tragic consequences, stating that even minimal gear left on a whale will likely cause a slow, agonising death<sup>1</sup>. *"Even the smallest amount of gear will slowly cut into the animal. So if we don't remove everything... it is a slow death and it's not a nice one."* The number of unreported incidents involving self-released whales, those still dragging equipment, and unwitnessed deaths remains unknown.

The government doesn't monitor whales post-release<sup>2</sup>, leaving the true number of entanglements and resulting deaths unknown<sup>3</sup>. It's only a matter of time before the next whale drowns in a QSCP shark net, whether in situ or as it swims away dragging equipment such as netting, chain, buoys and rope.

<sup>1</sup> Rescuing whales on Australia's 'humpback highway', by Tiffanie Turnbull, October 2022, BBC News, Sydney, <https://www.bbc.com/news/world-australia-61991111>

<sup>2</sup> 2023 Independent Annual Review: Queensland Shark Control Program, Envoy Foundation, published March 2024, [https://www.envoy.foundation/files/ugd/1d67c4\\_ef51bb2464cf41089e7cc651b4c195ee.pdf](https://www.envoy.foundation/files/ugd/1d67c4_ef51bb2464cf41089e7cc651b4c195ee.pdf)

<sup>3</sup> Shark nets removed ahead of wild weather, Queensland government media release, 25 October 2023, <https://statements.qld.gov.au/statements/98997#:~:text=The%20Gold%20Coast%20contractor%20will,Kirra%20Beach%20and%20Coolangatta%20Beach>

## INEFFECTIVE WHALE 'PINGERS'

Queensland relies heavily on pingers, promoted as an effective solution to deter whales from entanglements, despite widely available evidence which suggests they are completely ineffective.

*"There was no discernible response to the alarm. Whale pods did not differ in directionality, course heading or dive duration when within detectable range of the alarm, whether it was on or off, and a number of pods passed directly over the alarm while it was operational."*

and

*"Whales showed no detectable response to either alarm. Whale direction and surfacing behaviour did not differ whether the alarm was 'on' or 'off'"<sup>2</sup>.*

The QSCP catch and kill data also shows pingers prove ineffective for dolphins. Given this information, we believe the this ineffective solution should not be used in Government messaging that in any way implies or suggests efficacy.

<sup>1</sup> [https://www.researchgate.net/publication/264384057\\_A\\_whale\\_alarm\\_fails\\_to\\_deter\\_migrating\\_humpback\\_whales\\_An\\_empirical\\_test](https://www.researchgate.net/publication/264384057_A_whale_alarm_fails_to_deter_migrating_humpback_whales_An_empirical_test)

<sup>2</sup> [https://www.researchgate.net/publication/284195152\\_Migrating\\_humpback\\_whales\\_show\\_no\\_detectable\\_response\\_to\\_whale\\_alarms\\_off\\_Sydney\\_Australia](https://www.researchgate.net/publication/284195152_Migrating_humpback_whales_show_no_detectable_response_to_whale_alarms_off_Sydney_Australia)

"The government is willing to tolerate the collateral damage of humpback whale entanglements, in an effort to continue their smoke screen of an effective shark mitigation strategy."

## TOURISM

The Queensland whale watching industry's economic significance starkly contrasts the lack of commensurate efforts to ensure the safety and welfare of these majestic creatures. Humpback whales are integral to the marine ecosystem and serve as a cornerstone of Queensland's tourism economy. Placing a series of shark nets in their migration path is nonsensical and unethical.

The Queensland government often cites tourism as a justification for maintaining the status quo, claiming that shark nets are necessary for tourism. However, this assertion lacks empirical evidence, as studies have repeatedly shown the ineffectiveness of shark nets in reducing shark bite incidents. It appears that the government is willing to tolerate the collateral damage of humpback whale entanglements, in an effort to continue their smoke screen of an effective shark mitigation strategy.

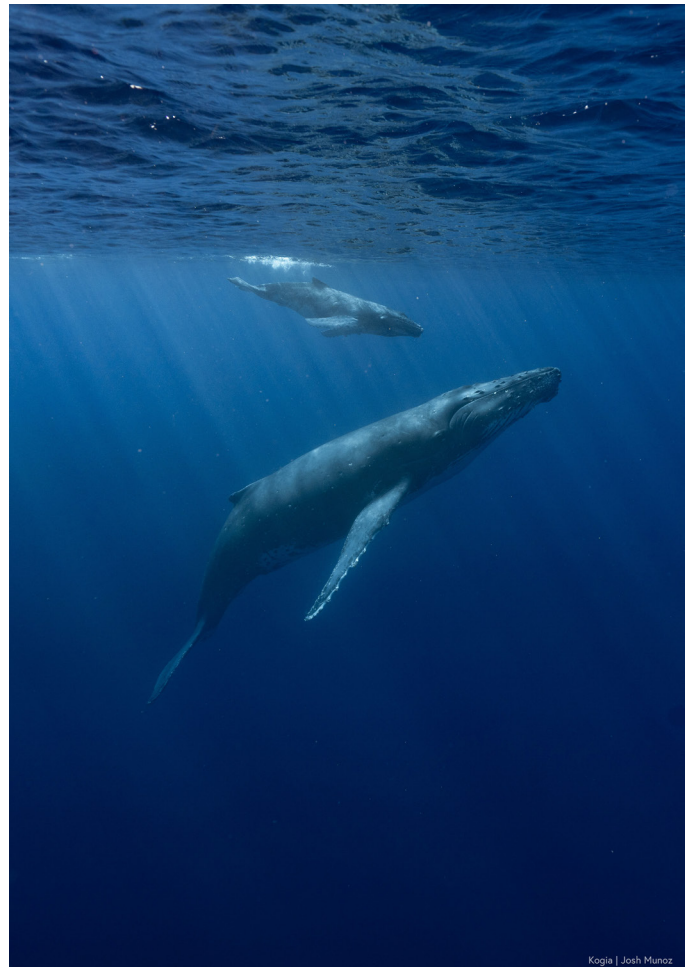
Western Australia (WA) abandoned its policy of killing sharks for beach safety in 2014. In the decade since that occurred, shark bites have not escalated in WA, and tourism has continued to grow strongly. From this, and other evidence, it is clear that abandoning lethal shark mitigation does not increase shark bite incidence, nor does it decrease tourism value.

The Queensland Government, when evaluating the reputational risk of modernising shark control measures, does not seem to take into account the tens or hundreds of millions of dollars in negative earned media value that is generated for the Queensland brand by the shark control program. Images of humpback entanglements, brutal shark slaughter and related documentaries are all distributed globally, and heavily tarnish the Queensland brand internationally. As far as we are aware, no steps are being taken to understand the negative value or impact this is having on the tourism industry which the Queensland Government is claiming to protect.

Given that WA has shown that ending shark culling does not increase shark bites, nor does it harm tourism value, significant weight should be placed on the damage being done to Queensland's international brand by the QSCP, and the effect it is having on local tourism. Does Queensland really want to be the Humpback Drownings state?

## CONCLUSION

Addressing humpback whale entanglements in QSCP equipment demands urgent policy reform and decisive action across all levels of government. Evidence-based strategies and non-lethal alternatives must take precedence to safeguard wildlife while ensuring beachgoer safety. Queensland's government must promptly implement beach safety measures supported by conclusive evidence, moving away from outdated approaches that result in the unnecessary suffering and death of animals like humpback whales, merely to provide beachgoers with a false sense of security. There's no room left for excuses.



Kogila | Josh Munoz

# APPENDIX 1: TIMELINE WHALE ENTANGLEMENTS

The timeline below highlights humpback whale entanglement issues in QSCP equipment from 1962 to 2023, based solely on officially reported incidents, thus excluding unwitnessed and unreported events such as self-releases or entanglements in remote areas. These unrecorded incidents are acknowledged in Queensland Department of Agriculture and Fisheries (QDAF) reports, attributing equipment damage to occurrences like whales breaking free or self-releasing from shark control gear. This timeline clearly shows whale entanglements have been escalating since the 1960s.

## 1962–1967

- Indiscriminate culling of sharks commences in Queensland. In this early period no humpback whale entanglements are reported, this is expected to be due to the very small population of humpbacks remaining post-whaling, with reports detailing as few as 100 individuals remaining.

## 1968–1983

- 33 humpback whales were caught in QSCP equipment, and of those 2 drowned.

## 1989

- New South Wales (NSW) commences the removal of shark nets for the main part of the annual whale migration, between May and September each year. Despite this significant step forward by NSW, Queensland continues to set shark nets all year round with no relief during the humpback whale migrations.

## 1991–1999

- In the early 1990s, Queensland briefly removes shark nets from the Gold Coast in response to pressure to protect increasing whale populations following intensive whaling. The Gold Coast is where most whales continue to get entangled.
- 12 whales are caught and 2 of those drowned.

## 2000–2019

- New Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) takes effect July 2000, humpback whales are a protected species under the EPBC Act but it includes an exemption allowing the QSCP to continue catching and killing protected species.
- A whale entangled in Coolangatta dragging equipment was found by NSW DPI in Sydney as it made its way back to Antarctica. Annotated in QDAF catch data notes it was “Released alive off Sydney by NSW Fisheries” on 28 September 2019. Whale fate unknown.
- 73 whales are caught in QSCP equipment, and 4 of those drown.

## 2020–2023

- 41 whales are caught in QSCP fishing equipment
- According to QDAF data on 7 August 2023, two of these whales were found swimming with netting attached, “Whale and Calf was found 2 NM from the net location with netting material attached”, no data available to confirm the net was removed from the ‘whale and calf’.
- QDAF reports obtained under Right to Information legislation show that the shark net at Rainbow Beach went missing, among others, and was never recovered. This incident of missing QSCP shark net is particularly alarming as it coincides with the last sighting of Migaloo, a large white humpback whale, seen in this area around that time.

## 2024

- Analysis of the catch data by Envoy Foundation suggests a projected occurrence of up to 17 whale entanglements this year, with the potential for at least one whale death.
- However, it's reasonable to assume that without significant changes in policies and practices, the frequency of entanglements and deaths will continue at current rates or even increase due to increasing whale populations.

# EXTRA INSIGHTS

- Did Queensland kill this whale? A deep dive into whale entanglements, Envoy Foundation short film, <https://youtu.be/gRCTHeEP6hl?feature=shared>
- 2023 Independent Annual Review: Queensland Shark Control Program, Envoy Foundation, published March 2024, [https://www.envoy.foundation/\\_files/ugd/1d67c4\\_ef51bb2464cf41089e7cc651b4c195ee.pdf](https://www.envoy.foundation/_files/ugd/1d67c4_ef51bb2464cf41089e7cc651b4c195ee.pdf)