THE CASE OF THE HUMPBACK WHALE HARTWIN

(MEGAPTERA NOVAEANGLIAE)

IN THE WATERS OF EIGHT EUROPEAN STATES,

JANUARY – AUGUST 2026

A Critical Brief on the Institutional Refusal to Diagnose, Treat, or Otherwise Assist a Visibly Sick Juvenile Humpback Whale Who Crossed Eight Countries Over Seven Months, Was Observed and Photographed by All of Them, Was Examined by None of Them, and Died of a Bacterial Infection That Could Have Been Easily Diagnosed and Treated

STRANDED NO MORE

Anonymous watchdog group of stranding professionals

Version 1.0

Part I. Preamble

Subject animal

Juvenile male humpback whale (*Megaptera novaeangliae*), approximately 10.0 metres in length and approximately 7 tonnes in weight at the time of necropsy, estimated at 3 to 4 years of age [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. The animal was designated Hartwin by Stranded No More on the basis of a heart-shaped marking visible on his dorsal surface. This brief uses Hartwin throughout, as no other designation was assigned to the animal by any authority in any of the eight countries through whose waters he passed.

Period covered

Late December 2025 or early January 2026 (first documented sighting near Egmond aan Zee, Netherlands) through 15 August 2026 (completion of necropsy at the NAUTINEUM facility of the Deutsches Meeresmuseum, Stralsund, Germany). The body was reported drifting in the Greifswalder Bodden at 08:16 on 13 August 2026, was recovered by the Wasserstraßen- und Schifffahrtsamt Ostsee, and was transferred to the Deutsches Meeresmuseum at 19:30 the same day [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. Death is estimated to have occurred on 12 or 13 August 2026 [ibid.]. The preliminary necropsy findings, released on 18 August 2026, identify the probable cause of death as bacterial infection with suspected sepsis [ibid.; Nordkurier, 18.08.2026].

Countries traversed

Hartwin was documented in the waters of eight European states during 2026. In approximate chronological order: the Netherlands, Belgium, the United Kingdom (England and Scotland), Norway, Denmark, Germany (both Schleswig-Holstein and Mecklenburg-Vorpommern), and Poland. None of these states conducted a veterinary examination, collected a diagnostic sample, or administered any form of treatment during the approximately seven months in which the animal was under continuous public observation. The total straight-line distance between documented sighting positions exceeds 6,200 kilometres [SNM sighting database, strandednomore.org/hartwin].

Authoring perspective

This brief is the position of Stranded No More (SNM), an initiative of stranding professionals critical of the established stranding-response institutions in Europe and worldwide. SNM holds that the doctrine of non-intervention for large whales, as practiced across northern European states and codified most explicitly in the Danish Beredskabsplan for Havpattedyr (2024), is not supported by the peer-reviewed scientific and operational literature, does not reflect evidence-based veterinary medicine, and in the case of Hartwin produced an outcome that was preventable.

The central argument of this brief is that Hartwin died of a treatable bacterial infection that was never diagnosed because nobody ever collected a sample, and was never treated because nobody ever tried. The necropsy confirms suspected sepsis arising from massive abscesses along the spine, one of them 110 centimetres in length, with pus-filled cavities reaching the vertebral bone [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. The scientist who

conducted the necropsy stated publicly that the animal must have suffered enormous pain, particularly during movement, because the majority of the abscesses were located directly on the spine [Nordkurier, 18.08.2026]. This suffering was watched, photographed, discussed in the press, while it was also the subject of expert commentary across multiple countries and in multiple languages. And it was allowed to continue for months, not because the tools to diagnose and treat the animal did not exist, but because the institutional consensus across all eight countries was that a whale of this size should be observed until it dies.

The blow sampling method described by O'Mahony et al. (2024) in *Molecular Ecology Resources*, which collects exhaled breath condensate containing bacteria, fungi, hormones, cytokines, and cellular material using a drone or a sterile cup on a pole without any physical contact with the animal, would have identified the bacterial infection in days [O'Mahony et al., 2024]. The antibiotic darting method documented by Gulland et al. (2008), which delivered antibiotics to free-swimming humpback whales in the Sacramento River from a boat using a modified dart gun without capture or restraint, would have provided a treatment pathway for the exact condition the necropsy found [Gulland et al., 2008]. Neither method was attempted, considered or even was mentioned by any official or expert quoted in the press of any of the eight countries through which Hartwin passed, with the sole exception of the SNM correspondence and the SNM Actionable Plan, both of which were dismissed or ignored.

Companion documents

The following documents, all produced by SNM during the period covered by this brief, are published alongside it and should be read together with it.

The Actionable Plan for Hartwin: A White Paper (July 2026) sets out the six-step diagnostic and treatment plan that SNM proposed for the animal while he was alive and in German waters, including the legal pathways under the Bundesnaturschutzgesetz, the specific institutions and individuals competent to authorise and execute each step, and the peer-reviewed literature supporting every element of the plan [SNM, Actionable Plan for Hartwin White Paper, July 2026].

The Letter to the Danish Environmental Protection Agency and the Danish Nature Agency (27 June 2026) identifies six specific deficiencies in the Danish Beredskabsplan for Havpattedyr (2024) and requests immediate veterinary attention for Hartwin and a timetable for revising the protocol [SNM, Letter to Danish Authorities, 27.06.2026].

The Follow-Up Letter to the Danish Environmental Protection Agency (30 June 2026) notes that the agency's response did not engage with any of the substantive points raised, and repeats the request for intervention [SNM, Follow-Up Letter, 30.06.2026].

The Open Letter to Heiko Buch-Illing and Carl Kinze (30 June 2026) addresses the two Danish marine scientists whose public statements shaped the media and policy response, and documents the peer-reviewed evidence they omitted from their public commentary [SNM, Open Letter to Danish Scientists, 30.06.2026].

The Letter to the Danish Animal Ethics Council (12 July 2026) requests a statement of ethical principle on whether a state bears an obligation to establish a diagnosis before deciding to let a protected animal die, where non-invasive diagnostic methods are available and unused [SNM, Letter to Ethics Council, 12.07.2026].

The Consolidated Letter to the German Authorities (23 July 2026) brings together six months of correspondence and objections, addresses the Schleswig-Holstein Minister for Environment directly, and sets out the legal, scientific, and ethical case for immediate diagnostic intervention under BNatSchG §45(5) [SNM, Letter to German Authorities, 23.07.2026].

All documents are available from Stranded No More at strandednomore.org/hartwin.

A note on the difference between this case and the case of Hope

The reader familiar with the SNM Critical Brief on the case of the juvenile humpback whale Hope (also known as Buckli and Timmy), published alongside this document, will recognise structural similarities between the two cases. Both involved juvenile humpback whales in northern European waters. Both involved the same institutional actors, including the Deutsches Meeresmuseum in Stralsund. Both produced the same outcome: a dead whale and a necropsy.

The difference, and it is an important one, is that Hope's case involved a protracted argument about the method and propriety of a rescue operation that ultimately took place. Hartwin's case involves no such argument, because no rescue operation took place and no attempt at rescue was ever made. There was a whale with a progressive, visibly worsening bacterial infection who swam across eight countries over seven months while experts told the press he would die, while authorities told each other and the public that there was no legal basis to intervene, and while nobody at any point collected a sample, made a diagnosis, or delivered a treatment.

The Hope case was complicated but the Hartwin case was simple. A sick animal was watched until he died, and the necropsy showed that what killed him was exactly the kind of infection that the diagnostic and treatment tools cited throughout this brief and throughout the SNM correspondence are designed to identify and address. That is the whole of it.

Part II. Executive Summary

Between January and August 2026, a juvenile male humpback whale designated Hartwin by Stranded No More crossed the waters of eight European states: the Netherlands, Belgium, the United Kingdom, Norway, Denmark, Germany, and Poland. He was documented in 35 separate sightings by citizens who photographed and filmed him in harbours, fjords, and coastal waters across 6,266 kilometres. His skin condition deteriorated progressively and visibly over those seven months, from a dorsal marking in January to extensive whitening, sloughing, and blistering by June, to a protruding spine indicating severe emaciation by August. Furthermore, the spine curvature and unusual hunching of the back was observed as well.

None of the eight countries through which Hartwin passed conducted a veterinary examination, collected a diagnostic sample, or administered any form of treatment. No blow sample was collected, no antibiotic dart was prepared, no acoustic herding was attempted, and no cross-border coordination was initiated. The institutional response across all eight countries consisted of watching, commenting in the press, issuing press releases, and waiting for the body.

On 24 June 2026, the head of a Danish marine research centre told the media that there was no chance for the whale and that it would die. After that prediction, Hartwin travelled over 1,125 kilometres across three countries over 50 days. The same expert revised his prognosis three weeks later, acknowledging that the animal was fitter than initially assumed, but did not revise his recommendation. No expert who spoke to the press at any point during the seven months of coverage mentioned blow sampling, antibiotic darting, acoustic herding, or any of the published rescue precedents. The media amplified the death prediction without challenge and actively ridiculed the only organisation calling for intervention.

Hartwin's body was found drifting in the Greifswald Bodden on 13 August 2026. The necropsy, conducted on 14 and 15 August at the Deutsches Meeresmuseum in Stralsund, found four pus-filled abscesses along the spine, the largest measuring 110 centimetres in length and encompassing four vertebral bodies. Porous vertebral bone indicated chronic osteomyelitis. The stomach was empty. The small and large intestines were empty. The blubber layer measured 6 centimetres. The probable cause of death was bacterial infection with suspected sepsis. The scientist who conducted the necropsy stated publicly that the whale must have suffered enormous pain, particularly during movement, because the majority of the abscesses were located directly on the spine.

Bacterial infection is among the most common and most treatable categories of disease in veterinary medicine. The blow sampling method described by O'Mahony et al. (2024) collects exhaled breath condensate from a whale using a drone or a pole, without any physical contact, and identifies bacteria, fungi, hormones, and cellular material within days. The antibiotic darting method documented by Gulland et al. (2008) and operationally demonstrated by NOAA in 2020 delivers antibiotics to a free-swimming whale from a boat using a ballistic syringe, without capture or restraint. Alexander, Solangi and Riegel (1989) documented the successful treatment of vertebral osteomyelitis and suspected discospondylitis in a bottlenose dolphin using long-term antibiotic therapy alone, with the animal remaining symptom-free 1.5 years after diagnosis. German federal law, specifically BNatSchG §45(5), authorised veterinary intervention on a sick strictly protected

species without a permit. The equipment cost less than €5,000. Every element of the diagnostic and treatment plan that SNM presented to the Danish and German authorities was peer-reviewed, published, and operationally precedented.

SNM sent six formal communications to authorities, scientists, and ethical advisory bodies in Denmark and Germany between 27 June and 23 July 2026. The Danish agency restated existing policy without engaging with the substance, while the Danish scientists did not respond. The Danish Ethics Council provided a procedural acknowledgment but no ethical statement. The German letter, addressed to the Schleswig-Holstein Environment Minister produced no intervention. The Mecklenburg-Vorpommern Ministry issued a press release on 27 July claiming the whale appeared healthy, a claim contradicted by five weeks of photographic evidence and by the necropsy findings eighteen days later.

The Danish Beredskabsplan for Havpattedyr, the protocol governing Denmark's response, contains no provision for veterinary intervention on live large whales, no diagnostic standard, no rescue methodology, and no framework for cross-border coordination. Its authors include representatives of the same institutions whose experts told the press that nothing could be done. The protocol is, in substance, a specimen-collection document. It makes detailed provision for recovering and analysing dead marine mammals, while it makes no provision for keeping them alive.

The peer-reviewed conservation ethics literature, including Johnson et al. (2019), Ramp and Bekoff (2015), Beausoleil (2020), Katz (2024), and Wallach et al. (2020), establishes that individuals matter regardless of population status, that compassion in conservation means caring for individuals, populations and species, and that a recovering population does not diminish the suffering of a single animal. For example, elephants with bacterial infections are treated with antibiotics or wolves with injuries are rehabilitated. In Germany, tens of thousands of injured wild animals receive veterinary care annually. The marine mammal exception is not legal, scientific, or ethical. It is doctrinal.

Hartwin's death is the controlled experiment that the Hope case could not provide. Hartwin's death cannot be attributed to any intervention, because none was attempted. The doctrine of non-intervention was tested in its purest form and produced a prolonged, painful, preventable death from a treatable bacterial infection in a strictly protected species under the jurisdiction of some of the wealthiest and most scientifically advanced nations on earth.

The necropsy report, by presenting only the terminal pathology without reference to the eight-month sighting chronology, erased the window during which intervention could have changed the outcome. The sighting record shows that Hartwin was not always sick, weak, malnourished, and dying. There was a period of months during which the infection was developing but the animal was still feeding, travelling, and mobile. That was the window for diagnosis and treatment and it closed because nobody opened it.

This brief recommends the establishment of a minimum diagnostic standard for live large whales in European waters, the procurement and pre-positioning of blow sampling and antibiotic darting equipment, the revision of the Danish Beredskabsplan, the creation of a cross-border coordination framework for migratory cetaceans, the incorporation of compassionate conservation principles into European marine mammal management, the development of ECHO (Early Cetacean Hazard Observation) for pre-stranding detection and escort, and the establishment of GWRA (Global Whale

Rescue Alliance) as a parallel rescue capability. Every recommendation is based on a method, a protocol, a legal pathway, or an institutional model that already exists somewhere in the world.

In Hartwin's case all tools existed and, importantly, the law permitted their use. Similarly, the knowledge was available, while the cost was negligible. Hartwin paid for his life for the decision not to act, but the next whale does not have to.

Part III. The Animal: 6,266 Kilometres Across Eight Countries

Hartwin's journey across European waters was documented not by scientists, not by government agencies, and not by the institutional marine mammal research network. It was documented by citizens. Fishermen, harbour workers, birdwatchers, kayakers, dog walkers, ferry passengers, and people standing on piers with their phones recorded the whale as he passed through their waters, uploaded the footage to Facebook and YouTube, and in doing so created the only continuous record of this animal's movements that exists. The scientific and governmental institutions of the eight countries through which Hartwin passed contributed, between them, not a single diagnostic observation to this record. They watched the citizen footage, commented on it in the press, and used it to form prognoses that they then cited as reasons not to act. The sighting chronology that follows is therefore a record of public observation and civic documentation. It is also, by implication, a record of institutional absence.

The sighting chronology

The following table sets out every documented sighting of Hartwin between January and August 2026, together with the approximate straight-line distance from the previous sighting and the source by which the sighting was recorded and reported. Where a sighting coincided with a significant statement by an expert or authority, this is noted in the commentary that follows the table. The total documented distance across all legs exceeds 6,266 kilometres [SNM sighting database, strandednomore.org/hartwin].

Date	Location	Country	Leg (km)	Reported by
18 Jan 2026	Bloemendaal	Netherlands		waarneming.nl
2 Feb 2026	Bloemendaal aan Zee	Netherlands	7	waarneming.nl
13 May 2026	Lofoten	Norway	1,840	Citizen video, YouTube
23 May 2026	Beauly Firth, Inverness	UK (Scotland)	1,515	Citizen video, Facebook
3 Jun 2026	South Shields Pier	UK (England)	334	Watch This South Shields
5 Jun 2026	Kruiningen, Zeedijk	Netherlands	533	Citizen report, Facebook
5 Jun 2026	Scheldt, near Doel nuclear power plant	Belgium	22	KBIN (Royal Belgian Institute of Natural Sciences); Jan Haelters, marine biologist
18 Jun 2026	Odde Harbor, Zealand	Denmark	678	Citizen report, Facebook
20 Jun 2026	Lillebælt, Middelfart	Denmark	91	Linda Frølund Hansen
21 Jun 2026	South of Årø, Årøsund	Denmark	29	Jimmy Johansen
21 Jun 2026	Sønder Vilstrup Strand	Denmark	4	Jørn Matzen
23 Jun 2026	Fænøsund, nr Middelfart	Denmark	29	Newstime broadcast footage

Date	Location	Country	Leg (km)	Reported by
24 Jun 2026	Varnæsvig, nr Aabenraa	Denmark	50	Jørgen Jensen
26 Jun 2026	Entrance to Stegsvig, Als Fjord	Denmark	17	Marth-Finn Mischke
27 Jun 2026	Aabenraa Fjord	Denmark	27	Jan Schubmann
29 Jun 2026	Sønderborg Bay, towards Flensburg Fjord	Denmark	27	News 5 livestream
4 Jul 2026	Bascule bridge, Sønderborg	Denmark	<1	Local reports
5 Jul 2026	Egernsundbroen	Denmark	12	Jesper Schjødt Lykke Nielsen
5 Jul 2026	Holnis, Flensburg Fjord	Germany	5	Local reports
9 Jul 2026	Aarhus island, from lighthouse	Denmark	148	Charlotte Sandberg
9 Jul 2026	Port of Aarhus	Denmark	1	Anke Gerhard
10 Jul 2026	Aarhus Ø	Denmark	1	TV2 Østjylland / Facebook
11 Jul 2026	Vejle Fjord	Denmark	55	Torben Christensen
12 Jul 2026	Bogense, Funen	Denmark	22	Peer Petersen
13 Jul 2026	Between Samsø and Fynshoved	Denmark	30	Citizen report
16 Jul 2026	Dahrendorf / Heiligenhafen	Germany	140	Thomas Rockel
17 Jul 2026	Kiel Fjord (mouth)	Germany	53	Handelsblatt; SH Ministry confirms
18 Jul 2026	Kiel Fjord, near Hörnbrücke	Germany	9	Yachtcharter Kiel
22 Jul 2026	Schönberger Strand	Germany	30	Kati Sivka
24 Jul 2026	Inner Flensburg Fjord	Germany	75	traditionssegler_albin_koebis
25 Jul 2026	Sønderhav	Denmark	6	Carina Kalika Andersen
27 Jul 2026	Wismar Westhafen	Germany	160	nm-mecklenburg; MV Ministry press release No. 235/2026
29 Jul 2026	Wustrow / Darß	Germany	80	MDR
9 Aug 2026	Woliński Park Narodowy, Wolin Island	Poland	160	WOPR (Polish Water Rescue Service)
13 Aug 2026	**Greifswald Bodden**	**Germany**	**85**	**Wasserstraßen- und Schifffahrtsamt Ostsee**

What the chronology demonstrates

Several facts emerge from the sighting record that bear directly on the arguments made throughout this brief.

First, Hartwin was not an animal hiding in deep water beyond anyone's reach. He was a whale who entered harbours, swam past bridges, surfaced in marinas, and was photographed at close range by members of the public in Aarhus, Vejle, Sønderborg, Kiel, Flensburg, and Wismar. Boats were within metres of him on multiple occasions [SNM, Letter to Ethics Council, 12.07.2026]. The claim that the animal could not be approached for diagnostic purposes is contradicted by the photographic and video record, which shows him tolerating close approach repeatedly across multiple locations and multiple countries.

Second, the animal demonstrated sustained navigational capacity and physical endurance throughout the period in which experts were publicly predicting his imminent death. On 24 June 2026, Heiko Buch-Illing of Fjord&Bælt told the press that there was no chance for Hartwin and that the whale would die [Newstime, 24.06.2026; Frankfurter Rundschau, 30.06.2026]. After that prediction, Hartwin travelled over 1,125 kilometres across three countries over 50 days. On 17 July, the same expert told the same broadcaster that what confused him was the distance between the sighting in northern Funen and the sighting in German waters, and the short time in which it had been covered, concluding that the animal was fitter than initially assumed [Newstime, 17.07.2026; SNM, Letter to German Authorities, 23.07.2026]. The prognosis was revised not because new clinical information had been gathered, since none had been gathered at any point, but because the whale did something the prognosis said he could not do. This is the second time in 2026 that a remote visual assessment of a humpback whale in northern European waters proved wrong in the same direction and for the same reason: Hope, whose experts predicted death within days, survived for months [SNM, Critical Brief on Hope, 2026].

Third, the condition of the animal deteriorated progressively and visibly over the seven months of documented observation. In January and February, off the Netherlands, the whale displayed a large marking on his back but otherwise appeared in reasonable body condition. By May, off Norway and Scotland, the skin involvement had spread and a marine scientist with field experience of cetaceans noted a heavy cyamid infestation and markings on the fluke consistent with prior entanglement [SNM, Letter to Ethics Council, 12.07.2026]. By June and July, in Danish waters, roughly half the back had turned white with extensive sloughing and blistering [Frankfurter Rundschau, 30.06.2026; VRT NWS, 05.06.2026; Omroep Zeeland, 05.06.2026]. At one point, the spine curvature became evident along with hunching posture. By August, in Poland, photographs showed a protruding spine indicating severe emaciation [Radio Szczecin, 09.08.2026]. The necropsy on 15 August confirmed a blubber layer of only 6 centimetres, an empty stomach, an empty small intestine, and an empty large intestine with only a trace of brownish material in the final 60 centimetres [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. This decline was not sudden or hidden. It unfolded over months in full public view, documented frame by frame by the citizens of eight countries, and watched by the experts and authorities of all of them.

Fourth, the sighting record demonstrates that Hartwin crossed international boundaries repeatedly and routinely, moving between Danish and German waters multiple times during July alone. The jurisdictional implications of this are discussed in Part IX, but the factual point is straightforward: the argument that any single country bore sole responsibility for this animal is not supportable. Every country through whose waters he passed had the opportunity to collect a blow sample. The sample takes minutes. The equipment is a sterile cup on a pole, or a consumer drone with a petri dish [O'Mahony et al., 2024; SNM, Actionable Plan, July 2026]. None of the eight countries attempted it.

Fifth, and finally, the citizens who recorded these sightings did so voluntarily, on their own initiative, and without coordination from any authority. They are the reason we know what happened to Hartwin. Without their footage, the animal's route, condition, and rate of decline would be undocumented. The contrast between the quality of the civic record and the total absence of any institutional diagnostic record is, in itself, an indictment. The people of eight countries cared enough to film a dying whale. The institutions of eight countries did not care enough to swab his breath.

Part IV. The Doctrine of Non-Intervention: What Denmark's Protocol Actually Says

The Danish Beredskabsplan for Havpattedyr, published by the Miljøstyrelsen in April 2024, is the document that governs Denmark's response to stranded and distressed marine mammals. It is the protocol that was in force throughout Hartwin's time in Danish waters, and its provisions shaped every decision that was made and every decision that was not made. What follows is a direct textual analysis of the protocol, because the document says things that the public discussion has not fully reflected, and because the positions taken by the Danish authorities and the Danish experts during the Hartwin case are not personal opinions or ad hoc judgements. They are the protocol, applied as written.

Section 5.3: Marine mammals are not taken into care

The protocol states, under the heading *Havpattedyr tages ikke i pleje* (marine mammals are not taken into care): "I Danmark tages sæler og andre nødstedte havpattedyr ikke i pleje" [Beredskabsplan for Havpattedyr, 2024, §5.3]. The decision, it explains, was made by the Miljøstyrelsen on the basis of agreement within the preparedness group. The justification given is threefold: that released animals could infect the wild population with foreign diseases acquired in captivity; that care of abandoned seal pups in an unnatural environment with close human contact carries a risk of habituation; and that the natural selection of weak individuals would be undermined, because in nature the weakest animals are sorted out so that the population remains healthy and robust.

These are legitimate considerations for seal pup rehabilitation, and SNM does not dispute them in that context. They are not, however, applicable in any meaningful way to the case of a free-swimming juvenile humpback whale with a bacterial skin infection. Hartwin was never in captivity, and there was no facility to release him from. The risk of foreign disease acquired in captivity does not arise when the animal has never been in captivity. The habituation concern is relevant to young pinnipeds being hand-reared over weeks or months; it is not relevant to a single blow sample collected from a drone, or a single antibiotic dart delivered from a boat. And the appeal to natural selection is, in this context, an argument that a protected Annex IV species should be left to die of an infection that may well have been caused or exacerbated by anthropogenic factors, including entanglement in fishing gear, low-salinity stress from climate-driven habitat disruption, and the immunosuppressive effects of ocean pollution, because doing so serves the health of the population.

The protocol does not distinguish between these fundamentally different scenarios. A seal pup that should be left on the beach for its mother is treated under the same policy heading as a ten-metre humpback whale dying of sepsis in a fjord. The framework offers no provision for clinical assessment, no provision for non-invasive diagnostics, and no provision for pharmaceutical intervention on a live large whale. The only options the protocol contemplates for a whale over four metres are abandonment or euthanasia, and it acknowledges that euthanasia is impractical at that size. In practice, this means the protocol's only option for a large whale is to watch it die.

Section 5.4: The four-metre threshold

Section 5.4 establishes that the Miljøstyrelsen has decided the threshold for handling whales is approximately four metres, on the grounds that handling whales larger than this could pose a risk to humans and to the animal. Whales longer than four metres are therefore, as a default, left alone and nature takes its course: "Derfor lades hvaler længere end 4 meter i fred og naturen går sin gang" [Beredskabsplan for Havpattedyr, 2024, §5.4].

The protocol then adds a sentence that is central to understanding everything that followed in the Hartwin case: "Beredskabsplanen organiserer ikke såkaldte redningsaktioner, der forsøger at trække strandede hvaler tilbage i havet" [ibid.]. The protocol does not organise so-called rescue operations that attempt to pull stranded whales back into the sea. This is presented as a safety and welfare decision, based on the same reasoning as the provisions on euthanasia and care.

There are several problems with this framework as applied to Hartwin, and SNM identified all of them in the Letter to Danish Authorities of 27 June 2026 [SNM, Letter to Danish Authorities, 27.06.2026].

The first is that the four-metre threshold treats physical size as a proxy for the feasibility of intervention, when the peer-reviewed literature demonstrates that size is not the barrier the protocol assumes it to be. Thalmann et al. (2008) documented the successful refloating of stranded sperm whales in Tasmania weighing over 30 tonnes each, using a net-tow method, after 96 hours of stranding. These animals were several times the weight of Hartwin. Gulland et al. (2008) documented antibiotic darting of free-swimming humpback whales from a boat in the Sacramento River without any physical handling of the animal at all. The four-metre line does not correspond to any threshold in the published operational literature. It is a policy choice that the protocol presents as though it were a physical constraint.

The second is that the protocol conflates rescue, which involves physically moving a stranded whale, with diagnosis and treatment, which in the case of a free-swimming animal involves neither physical contact nor physical handling. Hartwin was not stranded for most of his time in Danish waters. He was swimming. The blow sample method described by O'Mahony et al. (2024) involves flying a drone through the whale's exhaled breath, or holding a sterile cup on a pole above the blowhole from a boat. The antibiotic dart method described by Gulland et al. (2008) involves shooting a dart from a boat. Neither of these requires handling the animal, poses any risk to human safety or falls within the category of "rescue operations that attempt to pull stranded whales back into the sea." The protocol does not mention either method, and its authors appear not to have considered the possibility that a large whale might be helped without being touched.

The third is that the protocol contains no minimum diagnostic standard for assessing a live whale before making the decision to abandon it. Section 5.4 contemplates euthanasia for animals showing clear signs of disease or abnormal behaviour, but establishes no clinical assessment protocol, no blood work standard, no imaging requirement, and no sampling requirement. The decision to let a whale die can therefore be made on the basis of a visual inspection from a distance, which is exactly what happened in Hartwin's case. The NOAA NY4236 necropsy of a stranded juvenile humpback whale in East Hampton, New York, demonstrated that a comprehensive diagnostic workup including complete blood count, serum chemistry, urinalysis, bacterial culture, morbillivirus PCR, and a biotoxin panel found no underlying disease and could not determine the cause of stranding [NOAA

NY4236 necropsy report, 2010]. A visual inspection cannot establish what a full laboratory workup sometimes cannot. Using it as the basis for a terminal prognosis is not science, it is guesswork dressed in institutional authority.

Who wrote the protocol

The authorship of the Beredskabsplan is not incidental to the analysis. The protocol was authored by representatives of the Miljøstyrelsen, Aalborg Universitet, Fiskeri- og Søfartsmuseet, Aarhus Universitet DCE, Naturstyrelsen, Københavns Universitet, Statens Naturhistoriske Museum, Fødevarestyrelsen, and Fjord&Bælt [Beredskabsplan for Havpattedyr, 2024, p. 2]. Kirstin A. Hansen of Fjord&Bælt is listed as a co-author. Fjord&Bælt is the institution headed by Heiko Buch-Illing, the marine biologist who told the press on 24 June 2026 that there was no chance for Hartwin and that the animal would die [Newstime, 24.06.2026]. Daniel K. Johansson of the Statens Naturhistoriske Museum is listed as a co-author. The Statens Naturhistoriske Museum is the institution where Carl Kinze, the whale expert who told the press that the humpback population is growing and that more whales will come, is based [Danish radio, cited in SNM Open Letter, 30.06.2026].

The experts who told the Danish and international press that nothing could be done for Hartwin are, in several cases, the same individuals or the direct colleagues of the individuals who wrote the protocol that says nothing should be done. The protocol is not an independent scientific assessment that the experts then applied. It is a document that the experts' own institutions authored, and whose doctrine the experts then presented to the public as settled science. The closed loop between protocol authorship and public expert commentary is a structural problem, not a personal one, and it explains why no dissenting scientific voice appeared in the Danish public discussion at any point during the seven months of Hartwin's decline. There was no independent voice because the protocol was written by the same network that provides the expert commentary, and the expert commentary restates the protocol. The public received a single position from what appeared to be multiple independent sources, when in fact it was a single source with multiple institutional addresses.

What the protocol does not contain

SNM identified six specific absences in the Letter to Danish Authorities of 27 June 2026, and none of them were addressed in the agency's reply [SNM, Letter to Danish Authorities, 27.06.2026; SNM, Follow-Up Letter, 30.06.2026]. The protocol contains no provision for veterinary intervention on live large whales, no rescue or refloating methodology, no acoustic herding or luring capability. It contains no minimum diagnostic standard for assessing a live animal before deciding to abandon it. There is also no framework for cross-border coordination in live stranding or distressed-animal cases. Importantly, it makes absolutely no distinction between a seal pup that should be left to natural processes and a large whale that has become geographically trapped or is suffering from a treatable infection in waters where it would not normally be found.

These are not obscure technical gaps, because they are the basic components of a functional large-whale response capability, and they are documented in the published literature that the protocol does not cite. The NRE Tasmania 2022 Cetacean Incident Manual provides detailed protocols for triage, refloating, herding, transport, release, and post-release monitoring for cetaceans of all size classes. The Sharp et al. (WHOI-2024-05) workshop report from Woods Hole documents the strap method for large whale refloating. The Gulland et al. (2008) case documents antibiotic darting. The Humphrey cases document acoustic luring over distances exceeding 100 kilometres. None of these

sources appear in the Beredskabsplan. The protocol's bibliography cites IJsseldijk et al. (2019) for the decomposition classification of dead specimens, but contains no clinical reference for the assessment or treatment of live animals [Beredskabsplan for Havpattedyr, 2024].

The Beredskabsplan is, in substance, a specimen-collection protocol. It is efficient at recovering dead marine mammals and routing them to laboratories. It is not a stranding-response protocol in any sense that the international operational literature would recognise, because it makes no provision for keeping the animal alive. The decision not to diagnose, so that one is never obliged to treat, is itself a decision, and it carries consequences. In Hartwin's case the consequence was a whale who died of a bacterial infection that a blow sample would have identified and an antibiotic dart would have treated, in a country whose protocol does not mention either tool.

Part V. The Expert Predictions: Death Sentences Issued Without Diagnosis

Between 24 June and 29 July 2026, a small number of scientists issued a series of public prognoses about Hartwin through the German and Danish media. These prognoses were treated by the press and by the public authorities as expert consensus. They shaped public opinion, they justified institutional inaction, and they were wrong. What follows is a chronological account of who said what, and what they did not say.

24 June 2026: Buch-Illing declares death inevitable

On 24 June 2026, Newstime broadcast an interview with Heiko Buch-Illing, described as the head of the Fjord&Bælt Knowledge and Research Centre in Kerteminde, Denmark. The article's headline stated his position in full: "No chance. He will die." In the interview, Buch-Illing told the broadcaster that the whale was severely weakened, that its skin was very light and looked heavily infested, and that it was moving remarkably slowly and staying unusually close to the surface. His prognosis was unequivocal. He stated that there was no chance for the whale and that it was going to die. He estimated that in a month at the latest, maybe a week, maybe two, the whale would strand [Newstime, Buch-Illing interview, 24.06.2026].

In the same interview, Buch-Illing stated that there would be no rescue operation from the Danish side, that regardless of the cause of death the stranded whale would be left to decompose because that was the natural process, and that the treatment of Hope in Germany had constituted animal cruelty. He described the German rescue attempt as torture and stated that expert advice had been disregarded and that decisions had been made based on gut feeling rather than animal welfare [Newstime, 24.06.2026].

At no point in this interview did Buch-Illing mention the possibility of collecting a blow sample to determine what was causing the skin condition. At no point did he mention the existence of antibiotic darting as a treatment modality for free-swimming large whales. At no point did he acknowledge the published rescue literature, including the successful humpback whale interventions in California (Gulland et al., 2008), Tasmania (Thalmann et al., 2008), Brittany (Olhasque et al., 2025), or San Francisco (the Humphrey cases, 1985 and 1990). He offered the public a binary: death by drowning or death by stranding. There was no third option because the protocol he co-authored does not contain one, and he did not inform the public that one exists in the published literature.

25 June 2026: The MV Ministry adopts the prediction

The following day, Newstime reported that the Mecklenburg-Vorpommern Ministry for Climate Protection, Agriculture, Rural Areas and the Environment had issued a statement about Hartwin's possible future in Germany. A spokesperson told the broadcaster that the ministry would act appropriately to the situation, that the possibility of a stranding was pure speculation, and that the whale was a wild animal for which there was no legal basis to interfere with its life. The spokesperson emphasised that the animal was not in their territorial waters. The ministry stated that it was monitoring the reports and that there had been no contact with the Danish authorities regarding the matter [Newstime, MV Ministry statement, 25.06.2026].

The framing of the story is notable. The broadcaster asked whether Germany was prepared for the next humpback whale after the months-long Timmy fiasco. The final paragraph of the article speculated about whether the multimillionaires were already thinking about the next rescue mission. The editorial framing positioned intervention as eccentric private activism rather than evidence-based wildlife management, and positioned the ministry's refusal to engage as the reasonable institutional default. The ministry's statement that there was no legal basis to interfere with the whale's life would later be contradicted by the provisions of BNatSchG §45(5), which SNM identified in the Letter to German Authorities [SNM, Letter to German Authorities, 23.07.2026].

29 June 2026: Dörnath reinforces the death sentence from a different institution

On 29 June, MDR Aktuell published an interview with Dr. Kerstin Alexandra Dörnath, described as a wildlife veterinarian with 30 years of experience. The interview's headline stated that the newly sighted humpback whale would have little chance of survival in the Baltic Sea. Dörnath told the broadcaster that the whale's skin was not physiological, extensively non-physiological, in other words not normal. She noted that the animal reportedly stayed regularly at the surface, which was also not a good sign. She stated that it was unusual for such a whale to swim towards or into the Baltic Sea, that the Baltic was a hostile habitat for such whales, and that it was practically a dead end [MDR Aktuell, Dörnath interview, 29.06.2026].

Dörnath was asked directly about the whale's chances. She stated that if the whale really got lost in the heart of the Baltic Sea, then his chances were really not good. She described the Baltic Sea as a surf trap and a dead end, a high-risk area for large whales, and noted the problems of underwater noise, heavy shipping traffic, and the pursuit of fish schools as contributing factors [MDR Aktuell, 29.06.2026].

Dörnath's interview was more cautious than Buch-Illing's in tone. She acknowledged environmental and anthropogenic factors, including shipping noise and low salinity, and she described the osmotic pressure of the Baltic as a problem for the whale's already damaged skin. But she, too, offered no mention of diagnostic sampling, no mention of antibiotic darting, no mention of acoustic herding, and no mention of the published rescue precedents. The interview's premise, accepted by both the interviewer and the interviewee, was that a whale in the Baltic Sea is a whale that will die, and the only remaining question was whether the death would come sooner or later. The possibility that a diagnosis could be made and a treatment delivered was not part of the conversation.

30 June 2026: The Frankfurter Rundschau amplifies

On 30 June, the Frankfurter Rundschau published an article under the headline "First 'Timmy', now 'Hartwin': Expert believes the next Baltic humpback whale will die." The article repeated Buch-Illing's prognosis and included his visual assessment of the whale's skin: that it looked very infested, that it was very light, and that humpback whales are normally dark-coloured, so the light skin indicated a severe parasite infestation. The article stated that Buch-Illing did not think Hartwin would be the last humpback whale Denmark would see that year [Frankfurter Rundschau, 30.06.2026].

This article is significant because it circulated through the German-language wire services and was picked up by multiple outlets, establishing Buch-Illing's visual-assessment prognosis as the reference position for the entire German media landscape. By 30 June, the expert consensus in the press was settled: Hartwin would die, nothing could or should be done, and anyone who suggested otherwise

was either naive or repeating the mistakes of the Hope case. This consensus was based entirely on one expert's visual assessment of the whale's skin colour from photographs and video taken by members of the public.

6 July 2026: The KSTA warns against misguided animal love

On 6 July, the Kölner Stadt-Anzeiger published an article under the headline "Experts warn after sighting of humpback whale 'Hartwin'." The sub-headline stated that experts were concerned and warned against misguided animal love. The article repeated Buch-Illing's prognosis and Kinze's population-growth framing, and described SNM as a private initiative that had named the whale. The editorial positioning was clear: the experts were the responsible voices, and anyone calling for intervention was motivated by emotion rather than science [Kölner Stadt-Anzeiger, 06.07.2026].

The phrase fehlgeleitete Tierliebe, misguided animal love, would recur throughout the German media coverage of Hartwin. It served a specific rhetorical function: it reframed the question of whether a sick animal should be diagnosed and treated as a question of whether the public was being sentimental. The peer-reviewed literature on blow sampling, antibiotic darting, acoustic herding, and large-whale rescue was thereby reduced to a matter of feelings versus expertise, when in fact the published science was overwhelmingly on the side of intervention and the expertise being offered to the public was overwhelmingly a restatement of the Danish stranding protocol's doctrine of non-intervention.

17 July 2026: Buch-Illing revises his own prognosis

On 17 July, Buch-Illing appeared again on Newstime. By this time, Hartwin had been sighted off Heiligenhafen in Schleswig-Holstein, 140 kilometres south of his last known position in Danish waters, having covered the distance in approximately three days. Buch-Illing told the broadcaster that what confused him was the distance between the sighting in northern Funen and the new sighting in German waters, and the short time in which that distance had been covered. He concluded that the animal was fitter than initially assumed [Newstime, 17.07.2026; cited in SNM, Letter to German Authorities, 23.07.2026].

This revision is extraordinary when placed beside the 24 June prognosis. Three weeks earlier, the same expert had told the same broadcaster that there was no chance for the whale and that it would strand within a month at the latest. The whale had not stranded. It had swum 140 kilometres in three days, crossing from Danish into German waters. The prognosis was not revised because new clinical data had been obtained, since no clinical data had been obtained at any point. It was revised because the whale did something the prognosis said it could not do. The expert's confusion was the consequence of having issued a terminal prognosis on the basis of a visual assessment, without any diagnostic foundation, and then watching the patient refuse to comply.

Despite revising the prognosis, Buch-Illing did not revise the recommendation. He did not suggest that the fact that the animal was fitter than assumed might make it a better candidate for diagnostic intervention. He did not suggest that the window for blow sampling or antibiotic darting might now be wider than previously thought. The revised assessment changed nothing operationally, because the operational framework was never based on the animal's actual condition. It was based on the protocol, and the protocol's position does not change regardless of whether the animal is moribund or swimming 140 kilometres in three days.

29 July 2026: Dörnath warns against activism and rescue operations

On 29 July, MDR Aktuell published a second interview with Dörnath. The headline read: "New stray whale in the Baltic Sea: 'This remains a dead end.'" The article stated that veterinarian Alexandra Dörnath warned in an interview against renewed activism and rescue operations. The article noted that a whale had been sighted again in Wismar harbour, and that the German Oceanographic Museum suspected it was the same animal.

Dörnath's framing in this interview is revealing. She characterised the growing frequency of whale sightings in the Baltic as a trend toward expansion, but her response to the trend was not to recommend improved diagnostic and response capability, as it was to warn against rescue operations. The word activism is used by the broadcaster, and Dörnath does not correct it. The effect is to position any attempt to help the whale as activist overreach rather than veterinary medicine, and to position the decision to watch the whale die as professional restraint [MDR Aktuell, Dörnath interview, 29.07.2026].

The pattern

Across all of these expert statements, spanning five weeks and multiple outlets, a consistent pattern is visible. Every expert who spoke to the press predicted death and none of them recommended diagnosis, mentioned blow sampling, or antibiotic darting. Interestingly, none cited the published rescue literature or acknowledged that the condition they were describing, a progressive bacterial skin infection in a free-swimming whale, was exactly the condition for which the diagnostic and treatment methods described by O'Mahony et al. (2024) and Gulland et al. (2008) were developed. Every one of them presented the choice as binary: rescue (which they opposed, citing the Hope case) or death (which they accepted, citing the protocol). The third option, diagnosis and treatment without rescue, was absent from every interview, every statement, and every article.

On 15 August, the necropsy found four massive pus-filled abscesses, one of them 110 centimetres long, running along the spine. It found suspected sepsis. It found a bacterial infection. The scientist who conducted the necropsy, Lisa Klemens of the Deutsches Meeresmuseum, told the Nordkurier that the whale must have suffered enormous pain, particularly during movement, because the majority of the abscesses were located directly on the spine [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026; Nordkurier, 18.08.2026]. The experts who told the press that the whale would die were correct that it would die. They were correct in the way that a doctor who refuses to examine and treat a patient and predicts that the patient will die is correct when the patient dies. The prediction was accurate because the refusal to diagnose is what made it inevitable.

Part VI. The Media as the Doctrine's Amplification Layer

The German and Danish media coverage of Hartwin did not merely report on the institutional refusal to help the whale. It reinforced that refusal, supplied its rhetorical framework, and in several cases actively ridiculed the only voices calling for intervention. The coverage was not uniformly hostile, and individual journalists sometimes included details that undercut the expert consensus they were presenting. But the overall editorial pattern across the major outlets was consistent: the experts were treated as authoritative, the protocol was treated as reasonable, and the suggestion that a sick whale should be diagnosed and treated was treated as sentimental overreach by people who did not understand how nature works. This section documents that pattern.

The editorial frame: nature takes its course

The phrase "nature takes its course" and its variants appeared across the coverage like a liturgical response. It originated in the Beredskabsplan itself, which states that whales longer than four metres are left alone and nature takes its course [Beredskabsplan for Havpattedyr, 2024, §5.4]. From the protocol it passed into the expert commentary, where Buch-Illing told Newstime that the stranded whale would be left to decompose because that was the natural process [Newstime, 24.06.2026]. From the expert commentary it passed into the editorial framing, where it became the organising principle of the coverage. Nature was taking its course, the whale would die, this was sad but inevitable. Anyone who thought otherwise was naive, or sentimental, or had not learned the lessons of the Hope case.

What no outlet in the German or Danish mainstream press appears to have asked, at any point during the seven months of coverage, is whether Hartwin's condition was in fact natural. The necropsy found a bacterial infection with suspected sepsis [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. The SNM Open Letter to Buch-Illing and Kinze pointed out that the increasing appearance of humpback whales in the Baltic may be driven by climate change, ocean warming, shifting prey distribution, and anthropogenic disruption of migratory routes rather than by simple population growth [SNM, Open Letter to Danish Scientists, 30.06.2026]. The whale's fluke markings were consistent with prior entanglement in fishing gear [SNM, Letter to Ethics Council, 12.07.2026]. The low salinity of the Baltic Sea, itself a water body undergoing anthropogenic change, exacerbated the skin damage [MDR Aktuell, Dörnath interview, 29.06.2026]. If the whale was in the Baltic because of anthropogenic disruption, and if its infection was caused or worsened by anthropogenic factors including entanglement and pollution-driven immunosuppression, then what was happening to Hartwin was not nature taking its course. It was the consequence of human activity, observed by humans, and left untreated by humans who called it nature.

No major German or Danish outlet pursued this line of inquiry. The editorial frame of natural inevitability was accepted wholesale and repeated without examination.

The dismissal of SNM and the actionable plan

The coverage of Stranded No More followed a consistent pattern across outlets. Where SNM was mentioned at all, it was described in terms designed to minimise its credibility. The Kölner Stadt-Anzeiger described it as a private initiative that had named the whale, placing the description in the context of a warning against misguided animal love [Kölner Stadt-Anzeiger, 06.07.2026]. The Newstime coverage on 25 June speculated about whether the multimillionaires were already thinking about the next rescue mission, conflating the diagnostic intervention SNM was proposing with the large-scale private barge operation that had characterised the Hope case [Newstime, 25.06.2026].

The most revealing treatment came from the TAZ, a left-wing weekly newspaper that might have been expected to scrutinise institutional inaction rather than amplify it. On 7 August, the TAZ published a commentary under the headline "No seagull crows for him," a play on the German expression for nobody caring. The article's author, Eiken Bruhn, opened by noting that unlike Hope, there were no live blogs and no demonstrations for Hartwin. The article described SNM as a self-described anonymous watchdog group of stranding experts, noting that the website contained no legal notice, no information about their expertise, and no founding history, and that the group did not respond to a request for comment from the TAZ [TAZ, 07.08.2026].

The article then described the name Hartwin as heartless, suggesting that the diminutive "Harty" would have been a bare minimum of endearment and somewhat gender-neutral. It described the actionable plan as involving taking samples from the whale's breath and dousing it with medicated darts, then luring it out to sea with underwater recordings of whale songs, accompanied by a fleet of boats. The tone was openly mocking and the article then stated: "Unfortunately, it's not as funny as it sounds" [TAZ, 07.08.2026].

What the TAZ did not do was examine the scientific content of the actionable plan it was ridiculing. The blow sampling method it described as taking samples from the whale's breath is a peer-reviewed technique published in Molecular Ecology Resources by O'Mahony et al. (2024), validated across multiple cetacean species, and capable of identifying bacterial and fungal infections, measuring stress hormones, and performing cytological analysis without any physical contact with the animal. The medicated darts it described as dousing were the antibiotic darting method documented by Gulland et al. (2008) in a NOAA Technical Memorandum, successfully used on free-swimming humpback whales in the Sacramento River. The underwater recordings of whale songs it described as luring were the acoustic herding technique used successfully in the Humphrey cases in San Francisco Bay in 1985 and 1990, documented in Krause (1991) among other sources, where a humpback whale was guided over 130 kilometres back to open water. Every element of the plan the TAZ mocked as absurd has a basis in the published scientific and operational literature.

The article's editorial position was that the German public had learned its lesson from the Hope case and was now wisely allowing the whale to die in peace. The article framed this as maturity, as growth, as the public choosing science over sentiment. The irony is that the science, the actual published peer-reviewed science on cetacean diagnostics and treatment, supported exactly the intervention the article was mocking, and the sentiment, the feeling that nothing could be done and that watching was enough, was what the article was celebrating as rational progress.

What no outlet reported

Across the entire body of German and Danish mainstream media coverage of Hartwin from January to August 2026, SNM has been unable to identify a single article in a major outlet that cited any of the following:

The O'Mahony et al. (2024) blow sampling study in Molecular Ecology Resources. The Gulland et al. (2008) antibiotic darting of free-swimming humpback whales. The Olhasque et al. (2025) rescue of a juvenile humpback in Brittany, published in Animals three months before the Hope case began. The Thalmann et al. (2008) sperm whale refloating in Tasmania. The Humphrey cases in San Francisco Bay. The NRE Tasmania 2022 Cetacean Incident Manual. The Sharp et al. (WHOI-2024-05) workshop report from Woods Hole. The Mitchell and Young (2026) paper in Frontiers in Marine Science on why abundance alone cannot assess population sustainability. The Chami et al. (2022) IMF valuation framework for living whales.

These are not obscure or inaccessible sources. They are published in mainstream scientific journals by researchers at recognised institutions, including NOAA, Woods Hole Oceanographic Institution, the IMF, and the University of Tasmania. They are available online, in English, and they collectively represent the international state of knowledge on cetacean diagnostics, treatment, rescue, and conservation economics. Not one of them appeared in the German or Danish press.

What did appear, repeatedly, was Buch-Illing. Dörnath. Kinze. the Beredskabsplan. The media treated a single institutional network's position as the entirety of expert opinion and did not look beyond it. No outlet contacted a cetacean veterinarian outside of northern Europe for a second opinion or the authors of the blow sampling or antibiotic darting studies. No outlet contacted NOAA, or Tasmania's wildlife service, or the teams that rescued Humphrey, or the French team that rescued the Brittany humpback three months earlier. The coverage was not balanced reporting of a scientific debate because the media did not seek one.

The contrast with Hope

The TAZ article made a point that, though intended as evidence of public maturity, actually underscores the role the media played in determining Hartwin's fate. The article noted that unlike Hope, there were no live blogs and no demonstrations for Hartwin. The Rheinische Post, which had continued providing readers with information about Hope for weeks after the carcass was found, was silent on Hartwin. The Bild liveticker that had run continuous updates on Hope did not run for Hartwin [TAZ, 07.08.2026].

This is not evidence that the public stopped caring about whales between May and August 2026. It is evidence that the media stopped covering them. The Hope case received saturation coverage in part because there was a dramatic rescue operation to follow, and in part because the operation generated conflict between private rescuers and public institutions. Hartwin's case generated no such conflict because no rescue was attempted. Without a dramatic intervention to cover, the media reverted to the institutional default: report the expert prognosis, note that nature is taking its course, and move on. The editorial decision not to cover Hartwin with the same intensity as Hope was itself a form of participation in the outcome. A whale that is not in the news is a whale that the public cannot pressure institutions to help.

The media's structural role in institutional non-intervention

The pattern documented in this section is not a conspiracy; it does not require bad faith on the part of individual journalists. It requires only the following: that reporters covering a whale story contact the nearest marine biology institution for expert comment; that the institution provides an expert who restates the protocol; that the reporter treats the expert's statement as the scientific position; and that nobody in the editorial chain asks whether there might be a different scientific position worth reporting. This is how institutional doctrine becomes public consensus without ever being tested. The experts speak for the protocol, the media speak for the experts, and the public hears a settled scientific consensus where in fact there is an untested policy position contradicted by an international body of published evidence that nobody in the reporting chain looked up.

In Hartwin's case, this structural failure had a direct operational consequence. The media coverage created and sustained the public impression that nothing could be done, which removed the political pressure on authorities to do something, which ensured that nothing was done, which ensured that the whale died, which confirmed the expert prediction that the whale would die. The circularity is complete. The prediction created the conditions for its own fulfilment, and the media was the mechanism through which those conditions were transmitted from the experts to the authorities to the public and back again.

After the necropsy results were released on 18 August 2026, the same outlets that had spent seven months amplifying the death prediction without questioning it reported the findings of four abscesses and suspected sepsis with evident shock. The Nordkurier quoted Lisa Klemens saying the whale must have suffered enormous pain [Nordkurier, 18.08.2026]. The Stern reported the findings as news. The Tagesspiegel and Handelsblatt picked up the wire reports. None of these outlets noted that the condition the necropsy found, a bacterial infection, was exactly the condition that the blow sampling and antibiotic darting methods described in the SNM correspondence and the SNM actionable plan were designed to detect and treat. None of them noted that the experts who had told them nothing could be done had never suggested collecting a sample that would have identified this treatable condition. The necropsy findings were treated as a sad postscript to a natural tragedy rather than as evidence that the tragedy was not natural and did not need to happen. The editorial frame held: Nature had taken its course. The question of whether human institutions had helped nature along, by refusing to diagnose what a blow sample would have found and refusing to treat what an antibiotic dart would have addressed, was not asked.

Part VII. What Could Have Been Done: The Peer-Reviewed Interventions That Were Never Attempted

This section sets out, in concrete terms, what could have been done for Hartwin while he was alive, who could have done it, and what published scientific and operational evidence supports each intervention. The purpose is not hypothetical, because every method described here has been used before, on the same species, in comparable or more difficult circumstances, and is documented in the peer-reviewed or official operational literature. The SNM Actionable Plan for Hartwin (July 2026) presented all of this to the German authorities while the whale was alive and in German waters, but the authorities did not act on it. The whale died of the condition these methods were designed to detect and treat [SNM, Actionable Plan for Hartwin White Paper, July 2026].

Blow sampling: diagnosis without contact

The single most consequential failure in the Hartwin case was the failure to collect a blow sample. This is not a speculative or experimental technique, because it is a validated, peer-reviewed, non-invasive diagnostic method that has been used successfully on humpback whales and other cetacean species across multiple continents.

O'Mahony et al. (2024), published in *Molecular Ecology Resources*, documented the collection and analysis of exhaled breath condensate from baleen whales using a consumer drone fitted with sterile petri dishes. The drone flies through the whale's exhalation plume as the animal surfaces and breathes, and it does not touch the animal. The distance between the drone and the whale is typically several metres. The condensate collected on the petri dishes contains bacteria, fungi, viruses, hormones including cortisol and reproductive hormones, cytokines, lung epithelial cells suitable for cytological examination, DNA for individual identification and population genetics, and pollutant metabolites. A single blow sample, collected in a single exhalation event lasting seconds, provides a comprehensive diagnostic profile of the animal's health [O'Mahony et al., 2024].

The alternative collection method, equally validated, is the pole-and-cup technique. A sterile collection cup or petri dish is mounted on a pole of three to five metres in length. The operator, standing on a boat, holds the cup above the whale's blowhole as the animal surfaces. The whale exhales into the cup. The operator retrieves the cup. The procedure takes seconds, requires no specialised equipment beyond a sterile container and a pole, and has been used in field research for years [O'Mahony et al., 2024; SNM, Actionable Plan, July 2026].

In Hartwin's case, the blow sample would have identified the bacterial infection that the necropsy later confirmed as the probable cause of death. The necropsy found four pus-filled abscesses, suspected sepsis, and bacterial colonisation of the vertebral bone [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. A blow sample collected at any point during the whale's seven months of documented travel would have detected the bacterial pathogen in the respiratory condensate, would have identified the specific organism through standard microbiological culture, and would have provided an antibiotic sensitivity profile indicating which drugs the infection would respond to. The turnaround time for priority veterinary microbiology is days, not weeks. Suitable

laboratories exist within Germany, including the Stiftung Tierärztliche Hochschule Hannover, which has veterinary marine mammal expertise [SNM, Actionable Plan, July 2026].

Hartwin was photographed and filmed at close range by members of the public on dozens of occasions across multiple countries. He entered harbours, swam past bridges, surfaced in marinas, and was approached by boats without apparent distress. The sighting record documented in Part III demonstrates beyond reasonable dispute that a drone or a boat operator with a pole could have collected a blow sample at multiple points during the animal's journey. The equipment costs less than a consumer drone. The technique has been validated in the peer-reviewed literature for the exact species involved. It was not attempted by any authority, any institution, or any expert in any of the eight countries through which Hartwin passed.

Antibiotic darting: treatment without capture

Gulland et al. (2008), published as a NOAA Technical Memorandum, documented the first successful antibiotic darting of free-swimming humpback whales. Two humpback whales had entered the Sacramento River in California, a freshwater environment, and had sustained visible skin damage from prolonged freshwater exposure, a condition directly analogous to the skin damage observed in Hartwin from the low-salinity Baltic environment. The intervention team delivered antibiotics to the whales using a modified dart gun fired from a boat. The darts penetrated the blubber layer and delivered the medication intramuscularly. The whales were not captured, restrained, or handled in any way. Both animals survived and the freshwater skin damage reversed within approximately 24 hours of the animals returning to salt water [Gulland et al., 2008].

The relevance to Hartwin is direct and specific. The necropsy found a bacterial infection with suspected sepsis. Antibiotics are the standard treatment for bacterial infection. The Gulland et al. method delivers antibiotics to a free-swimming humpback whale from a boat without physical contact. The method has peer-reviewed precedent, the species is identical, and the clinical indication, a bacterial infection in a humpback whale with skin damage in a low-salinity environment, is closely analogous. The practical requirements are a boat, a dart gun, and the correct antibiotic, all of which could have been sourced and deployed within days of a blow sample confirming the bacterial diagnosis [SNM, Actionable Plan, July 2026].

The claim made by multiple experts and authorities during the Hartwin case was that nothing could be done for a whale of this size. Gulland et al. darted humpback whales of comparable size from a boat in a river, so the claim is refuted by the published record.

A more recent precedent is equally significant. In January 2020, a North Atlantic right whale calf, the offspring of female #2360 known as Derecha, was spotted off the coast of Georgia with severe propeller injuries including damage to its mouth that could hamper feeding. NOAA Fisheries coordinated a multi-agency operation involving the Florida Fish and Wildlife Conservation Commission, the Georgia Department of Natural Resources, Clearwater Marine Aquarium Research, SeaWorld, Blue World Research Institute, and the International Fund for Animal Welfare (IFAW). On 15 January, the team relocated the mother-calf pair off Fernandina Beach, Florida. An on-site veterinarian assessed the calf's condition and determined that antibiotics would benefit the animal. The team then remotely administered a long-acting cephalosporin antibiotic intramuscularly using a Paxarms MK24C ballistic syringe projector system. The syringe held 57 millilitres of antibiotic, was tethered for rapid post-injection recovery, and used a 6-inch needle with three side injection ports

to ensure delivery within approximately 3 seconds. The mother and calf were assessed before delivery and observed after injection [NOAA Fisheries, North Atlantic Right Whale Calf Injured by Vessel Strike, 16.01.2020; IFAW, press release, January 2020]. This operation demonstrates that remote antibiotic delivery to a free-swimming large whale calf, in open coastal waters, is not a theoretical concept. It was done by NOAA, the same agency whose technical memoranda document the Gulland antibiotic darting method, using a ballistic syringe system designed for exactly this purpose, on one of the most critically endangered species on earth, with a population of approximately 450 animals where every individual matters. The institutional will to help a sick whale existed in the United States in January 2020. It did not exist in any of the eight European countries through which Hartwin passed in 2026.

Addressing the abscess argument: why the sceptics are wrong

Following the release of the necropsy findings, a counter-argument has circulated that the discovery of spinal abscesses proves intervention would have been futile, on the grounds that abscesses of this kind can only be treated surgically, that antibiotics cannot penetrate the abscess capsule, that the infection was caused by mechanical trauma such as a ship strike, and that treatment of a free-swimming whale over the necessary duration would have been logistically impossible. Each of these claims is contradicted by the published veterinary and marine mammal literature.

Abscesses can arise from systemic bacterial infection, not only from trauma. The claim that spinal abscesses in cetaceans are caused exclusively by ship collisions or net entanglement is factually incorrect. Brucella ceti, a bacterial pathogen first identified in marine mammals in the 1990s, is a well-documented cause of osteomyelitis, discospondylitis, subcutaneous abscessation, and a range of other pathologies in cetaceans, entirely independent of physical trauma. Davison et al. (2017), published in the Journal of Wildlife Diseases, reported Brucella ceti infection in a common minke whale associated with a large abscess approximately one metre long in the throat region, containing several litres of watery yellow fluid and necrotic material. Critically, the authors state that no obvious foreign body or trauma was associated with the abscess. The abscess was long-standing, was significant as a nidus of infection, and probably hampered foraging and swallowing. This is direct evidence, in a baleen whale, that large abscesses can arise from systemic bacterial infection without any mechanical trauma whatsoever [Davison, N.J. et al., 2017. Brucella ceti Infection in a Common Minke Whale (Balaenoptera acutorostrata) with Associated Pathology. Journal of Wildlife Diseases, 53(3)]. The Merck Veterinary Manual confirms that in cetaceans, B. ceti-associated pathological findings include osteomyelitis, arthritis, subcutaneous lesions, meningoencephalitis, and hepatic and splenic necrosis [Merck Veterinary Manual, Bacterial Diseases of Marine Mammals]. The necropsy on Hartwin found no external injuries from ship propellers or nets [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026], which is consistent with a systemic infectious origin rather than a traumatic one.

Antibiotics are a standard and effective treatment for vertebral osteomyelitis in cetaceans, and this has been demonstrated in practice. The claim that abscesses involving the vertebral bone cannot be treated with antibiotics and require surgery is refuted by the published case literature in the very species group in question. Alexander, Solangi and Riegel (1989), published in the Journal of Wildlife Diseases, report the case of a 21-year-old male Atlantic bottlenose dolphin (Tursiops truncatus) with vertebral osteomyelitis and suspected discospondylitis. The pathology is directly comparable to Hartwin's: sclerosis of the vertebral body, narrowing of the intervertebral disc space,

periosteal response, and a large soft tissue swelling. The animal was treated with a sequential antibiotic regimen consisting of flunixin meglumine and gentamycin sulfate with ampicillin for 7 days, followed by cephalexin for 30 days, followed by trimethoprim-sulfadiazine for 60 days. No surgery was performed. The white blood cell count returned to normal approximately 10 days after antibiotic therapy began. Activity returned to normal after approximately 6 weeks. Radiographs taken 4 months after the initial diagnosis showed no further extension of the disease process. At the time of publication, 1.5 years after diagnosis, the animal remained free of clinical signs. The authors conclude explicitly: "As with any infection involving the bone, successful treatment is based upon an early diagnosis and aggressive, long-term antibiotic therapy" [Alexander, J.W., Solangi, M.A. and Riegel, L.S., 1989. Vertebral Osteomyelitis and Suspected Diskospondylitis in an Atlantic Bottlenose Dolphin (Tursiops truncatus). Journal of Wildlife Diseases, 25(1), 118-121]. This case is the direct precedent for what could have been attempted with Hartwin. The pathology is the same. The anatomical location is the same. The treatment, antibiotics without surgery, is the same treatment SNM proposed. The outcome, full clinical recovery after early diagnosis, is the outcome that was available to Hartwin if anyone had collected a blow sample and identified the infection while it was still in its early stages.

The Merck Veterinary Manual further confirms that for conditions including spinal infections, treatment includes systemic and local antimicrobial therapy, with infections usually recovering with administration of penicillins, tetracyclines, or chloramphenicol and supportive care. Even for intracellular pathogens such as Brucella, the Manual states that resolution generally requires long-term antimicrobial therapy targeting this intracellular pathogen, confirming that long-term antibiotics are the recognised approach, not an impossibility [Merck Veterinary Manual, Bacterial Diseases of Marine Mammals].

New technologies make sustained delivery feasible. The logistical challenge of delivering multiple antibiotic doses to a free-swimming whale is real but is being actively addressed by veterinary science. Research is exploring sustained-release, antibiotic-impregnated biodegradable microspheres for treating chronic bone infections in marine mammals, and pharmacokinetic studies are documenting drug metabolism in cetaceans to ensure proper dosing over extended periods. These technologies offer the prospect of a single dart delivering a depot preparation that maintains therapeutic antibiotic levels for weeks, significantly reducing the number of repeat interventions required. Long-acting depot antibiotic preparations already exist in veterinary practice for terrestrial species and are being adapted for marine mammal use.

Hartwin could have been tagged for monitoring and repeat treatment. The argument that a whale cannot be tracked and re-treated in the open ocean ignores the reality of Hartwin's situation. This was not a whale in the open ocean. This was a whale who spent months in harbours, fjords, and coastal waters, who was photographed at close range by citizens on dozens of occasions, who entered the Kiel Fjord and Wismar harbour, and who was visible and approachable throughout the period in which treatment would have been delivered. Satellite tagging using dart-deployed tags is a routine research method for humpback whales that would have allowed the intervention team to relocate the animal for repeat doses. The combination of satellite tagging and long-acting antibiotic depot preparations would have provided a practical framework for multi-dose treatment over the weeks required for therapeutic effect.

Early intervention would have been far more effective than delayed intervention. The most important point, and the one the abscess argument is designed to obscure, is that the sceptics are reasoning backwards from the terminal pathology. By the time of the necropsy on 15 August, the infection had progressed to four massive abscesses, porous vertebral bone, and suspected sepsis. Treatment at that stage would indeed have been extremely difficult. But Hartwin was observed for eight months. The sighting record documented in Part III shows that in January and February the animal was in reasonable condition. By May, the skin involvement was spreading. By June, the deterioration was visible but the animal was still swimming strongly. The abscesses that the necropsy found in August did not exist in January. They developed over months, progressing from an initial bacterial infection through soft tissue involvement to abscess formation to bone invasion to systemic sepsis. At the early stages of this progression, before the abscesses had fully formed and encapsulated, before the infection had invaded the vertebral bone, before the fibrin barriers the sceptics cite had sealed the bacteria away from systemic antibiotics, treatment with antibiotics would have been far more effective. The standard principle of infectious disease management across all species is that early intervention produces better outcomes than delayed intervention. A blow sample collected in late June, when SNM first requested it, would have identified the pathogen, determined its antibiotic sensitivity, and initiated treatment at a stage when the infection was still responding to the immune system and the animal was still feeding and mobile. The argument that the abscesses found in August prove that treatment was always impossible is the argument that a house that burned to the ground proves that fire extinguishers do not work. The fire extinguisher works best when used early. Nobody used it.

Acoustic herding: guidance without handling

Hartwin repeatedly entered confined and potentially dangerous waterways: the Kiel Fjord, the inner Flensburg Fjord, and the harbour of Wismar. Each of these represented a risk of shallow-water stranding, ship strike, or entrapment. The question of how to guide a large whale out of enclosed waters without physical handling was answered over forty years ago.

In 1985 and again in 1990, a humpback whale known as Humphrey entered San Francisco Bay and travelled deep into the Sacramento River delta. In the 1985 incident, a team guided Humphrey over 130 kilometres back to the Pacific Ocean using underwater acoustic playback of humpback feeding and social calls broadcast from a boat. The operation took seven hours. Humphrey was resighted alive and healthy in subsequent years. The 1990 incident was resolved using the same technique. The cases are documented by Krause (1991) and constitute the foundational precedent for acoustic herding of large whales in confined waters [Krause, 1991; SNM, Open Letter to Danish Scientists, 30.06.2026].

Olhasque et al. (2025), published in *Animals*, documented the rescue of a juvenile humpback whale trapped behind a tidal power station in the Rance Estuary, Brittany, France. The rescue used coordinated boat herding, non-invasive techniques, and was completed within approximately two days. The paper was published three months before the Hope case began, meaning it was available to every expert and authority who commented on or decided not to act in the Hartwin case [Olhasque et al., 2025].

During the periods when Hartwin was inside the Kiel Fjord, Flensburg Fjord, or Wismar harbour, acoustic herding using the techniques proven in the Humphrey cases and updated in the modern

operational literature could have been used to guide the animal toward deeper and more open water, reducing the risk of stranding and creating better conditions for blow sample collection and, subsequently, antibiotic darting. This was proposed in the SNM Actionable Plan and it was not attempted.

The legal pathway: BNatSchG §45(5)

German federal law did not prevent intervention, it authorised it. Under the Bundesnaturschutzgesetz §45(5), a veterinarian may take up an injured, helpless, or sick strictly protected animal for the purpose of nursing it back to health, deviating from the prohibitions of §44 which otherwise protect strictly protected species from disturbance. No formal permit application is required, because the veterinarian acts on professional judgment. All cetaceans in German waters are strictly protected under EU Habitats Directive Annex IV, implemented through BNatSchG §44 [SNM, Actionable Plan, July 2026].

The provision uses the word aufnehmen, to take up, which in the context of a free-swimming whale collecting a blow sample and delivering an antibiotic dart is a stretch of the literal text. But the alternative legal pathway, BNatSchG §45(7) Nr. 3, provides for individual research exemptions from §44 for purposes of scientific research, requiring only that no reasonable alternative exists and that the conservation status of the population must not worsen. A non-invasive blow sample collected by drone poses no risk whatsoever to the conservation status of the North Atlantic humpback whale population. A third pathway, §45(7) Nr. 5, allows exceptions for compelling reasons of overriding public interest, including species conservation. The SNM Actionable Plan identified the competent permit authority in Schleswig-Holstein as MEKUN, Referat 52: Schutzgebiete, Artenschutz, and provided the name and contact details of the responsible official [SNM, Actionable Plan, July 2026; SNM, Letter to German Authorities, 23.07.2026].

The MV Ministry spokesperson told Newstime on 25 June that there was no legal basis to interfere with the whale's life [Newstime, 25.06.2026]. This statement is incorrect as a matter of German federal law. The BNatSchG provides multiple legal bases for exactly the kind of non-invasive diagnostic intervention that SNM proposed. What was lacking was not legal authority, it was institutional will.

What it would have cost

The SNM Actionable Plan estimated that the blow sample collection, laboratory analysis, and initial antibiotic darting could be accomplished within days and at a cost that is trivial by comparison with the resources routinely deployed in wildlife management in Germany. A consumer drone suitable for blow sampling costs between €1,000 and €3,000. A pole and sterile cups cost under €100. Priority veterinary microbiology laboratory analysis costs several hundred euros. An antibiotic dart system, including the dart gun and the pharmaceutical preparation, is standard veterinary equipment available through existing wildlife management procurement channels.

The Chami et al. (2022) IMF valuation framework, cited in the SNM Open Letter to Buch-Illing and Kinze, estimates the ecosystem services value of a single living humpback whale at over $8.6 million at the social cost of carbon, accounting for phytoplankton-mediated carbon capture through the whale pump mechanism, ocean nutrient cycling, fisheries productivity, and ecotourism revenue [Chami et al., 2022; SNM, Open Letter to Danish Scientists, 30.06.2026]. A whale rescue typically

costs $10,000 to $100,000. In Hartwin's case, the diagnostic intervention alone would have cost under €5,000. The return on investment, even at conservative market carbon prices, exceeds any reasonable cost-benefit threshold. Germany invests billions annually in carbon capture and green technology. The cost of a drone flight through a whale's breath was, by comparison, invisible.

Part VIII. The Correspondence Timeline: Contacted, Ignored, Brushed Off

Between 27 June and 23 July 2026, SNM sent six formal communications to authorities, scientists, and ethical advisory bodies in Denmark and Germany. These communications identified a dying whale, cited the peer-reviewed diagnostic and treatment literature, set out the legal pathways for intervention under both Danish and German law, provided the names and contact details of the specific officials competent to authorise action, and requested, in increasingly urgent terms, that somebody collect a blow sample from an animal whose condition was visibly deteriorating week by week. The following table records the full chronology of this correspondence and the responses it received.

Date	From / To	Action	Response
27 Jun 2026	SNM → Nynne E. Lemming, Miljøstyrelsen (Danish EPA); Rune Juelsborg Karsten, Naturstyrelsen (Danish Nature Agency)	Letter identifying six deficiencies in the Beredskabsplan. Requests immediate veterinary assessment of Hartwin and timetable for protocol revision.	Reply received restating existing policy of non-intervention. None of the six specific deficiencies addressed.
30 Jun 2026	SNM → Martin Nielsen, Miljøstyrelsen	Follow-up letter noting that the agency's response did not engage with any substantive point. Repeats request for intervention.	No substantive response received.
30 Jun 2026	SNM → Heiko Buch-Illing, Fjord&Bælt; Carl Kinze, Statens Naturhistoriske Museum (published open letter)	Open letter documenting the peer-reviewed rescue literature omitted from their public statements. Challenges the population-growth justification for inaction. Presents the IMF whale valuation framework.	No response received from either scientist.
12 Jul 2026	SNM → Det Dyreetiske Råd (Danish Animal Ethics Council)	Letter requesting a statement of principle on whether a state bears an ethical obligation to establish a diagnosis before deciding to let a protected animal die, where non-invasive diagnostic methods are available.	Procedural acknowledgment received. No substantive ethical statement issued during Hartwin's lifetime.
Jul 2026	SNM → Published white paper (public)	Actionable Plan for Hartwin: six-step diagnostic and treatment plan identifying blow sampling, antibiotic darting, acoustic herding, the legal pathways under BNatSchG, the competent authorities, and the peer-reviewed literature.	Plan dismissed by TAZ as amusing. Not adopted or acknowledged by any authority.
23 Jul 2026	SNM → Tobias Goldschmidt, Minister MEKUN (SH); Dr. Joseph Schnitzler, ITAW Hannover/Büsum; Amt für Umwelt, Kreis Plön; Veterinary Office, Kreis	Consolidated letter bringing together six months of correspondence. Sets out the legal, scientific, and ethical case for immediate diagnostic intervention under BNatSchG §45(5). Provides specific contact details for the permit authority.	No intervention ordered, no blow sample collected, no permit application filed. The whale continued east into MV waters and then to Poland.

Date	From / To	Action	Response
	Plön		
27 Jul 2026	MV Ministry (press release No. 235/2026) → Public	Ministry states whale sighted in Wismar Westhafen, claims animal 'appears to be healthy,' states aim is to enable whale to return to deeper waters.	Statement issued ten days after Hartwin entered German waters with visibly deteriorating condition. 'Appears healthy' contradicted by photographic record and subsequent necropsy findings.
13 Aug 2026	**— → —**	Body found drifting in Greifswald Bodden at 08:16.	**Recovered by Wasserstraßen- und Schifffahrtsamt Ostsee. Transferred to Deutsches Meeresmuseum.**
15 Aug 2026	**Deutsches Meeresmuseum → Public (press release)**	Preliminary necropsy findings released: four abscesses, suspected sepsis, bacterial infection, empty stomach, 6 cm blubber.	**The diagnosis that was never made in life was made in death.**

The pattern of non-engagement

The correspondence record reveals a consistent institutional behaviour across two countries and multiple agencies. The Danish Miljøstyrelsen replied to the first letter with a generic restatement of existing policy. It did not address the six specific deficiencies SNM identified in the Beredskabsplan. It did not engage with the peer-reviewed literature on blow sampling, antibiotic darting, or acoustic herding. It did not explain why a non-invasive diagnostic sample should not be collected from a visibly sick animal. It restated that the protocol says what the protocol says, and it stopped there [SNM, Follow-Up Letter, 30.06.2026].

The follow-up letter to Martin Nielsen at the same agency, sent three days later, pointed out that the response had not engaged with any substantive point. No further substantive response was received. The open letter to Buch-Illing and Kinze, which documented the rescue literature they had omitted from their public commentary and challenged the population-growth justification for inaction, received no response from either scientist [SNM, Open Letter to Danish Scientists, 30.06.2026].

The letter to the Danish Animal Ethics Council asked a narrow and specific question: whether a state bears an ethical obligation to establish a diagnosis before deciding to let a protected animal die, where non-invasive methods of doing so are available. The Council provided a procedural acknowledgment. No substantive ethical statement was issued during Hartwin's lifetime. The question remains unanswered [SNM, Letter to Ethics Council, 12.07.2026].

The consolidated letter to the German authorities on 23 July was addressed to four recipients: the Schleswig-Holstein Environment Minister Tobias Goldschmidt personally, Dr. Joseph Schnitzler at the Institute for Terrestrial and Aquatic Wildlife Research (ITAW) at the University of Veterinary Medicine Hannover Foundation in Büsum, the Lower Nature Conservation Authority in Kreis Plön, and the Veterinary and Food Inspection Office in Kreis Plön. The letter ran to multiple pages. It set out the six-month history of the case, the full correspondence record with Danish authorities, the expert prediction that had already been revised by the expert who made it, the published rescue and

diagnostic literature, the legal pathways under BNatSchG §45(5) and §45(7), and the specific steps of the actionable plan. [SNM, Letter to German Authorities, 23.07.2026].

Nothing was done and the whale left Schleswig-Holstein waters, transited through Mecklenburg-Vorpommern, entered Poland, returned to German waters, and died in the Greifswalder Bodden on or about 12 August 2026. The necropsy found a bacterial infection with suspected sepsis. The diagnosis that SNM had been requesting was made on 15 August, from a dead whale, by the same institutional network that had spent seven weeks declining to make it from a living one.

The asymmetry between what was asked and what was required

It is worth pausing on what SNM was actually asking for, because the institutional non-response might create the impression that the requests were extraordinary, impractical, or outside the scope of what the authorities could reasonably have been expected to do.

SNM was asking a government to fly a drone through a whale's breath. That was the first request. Everything else followed from the results of that sample. The drone costs €1,000 to €3,000, the petri dish costs cents, and the laboratory analysis costs several hundred euros. The legal authority to do it was already in the statute book, because the technique is published in a peer-reviewed journal. The animal was accessible and was swimming in harbours where boats were within metres of him. The entire diagnostic intervention could have been accomplished in a single afternoon by a single boat with a single drone operator and a single veterinarian, at a cost that would not have appeared as a line item in any ministry's annual budget.

Instead, the combined governmental apparatus of Denmark and Germany, two of the wealthiest nations in Europe, with annual environment ministry budgets running to billions of euros, produced six weeks of correspondence, multiple press releases, at least two ministerial statements, and a four-page press release from the MV Ministry claiming the whale appeared healthy, and at no point during any of this did anyone fly a drone through the whale's breath.

The Ethics Council letter asked whether a state bears an obligation to diagnose before deciding to let die, and the question was not answered. But the correspondence record answers it by implication. The institutional position, demonstrated through seven weeks of practice, is that the obligation does not exist. A protected Annex IV species can be observed in visible decline for seven months across eight countries, and the collective response of the European institutional marine mammal management system is to watch, to comment, to issue press releases, and to wait for the body. The blow sample was never collected because the institutional framework does not contemplate collecting it, and the correspondence that asked for it to be collected was processed through channels that had no mechanism for acting on the request even if they had wanted to.

Hartwin did not die because the letters were not sent, he died because the institutions that received them were not built to do what the letters asked.

Part IX. Eight Countries, Zero Diagnoses: The Jurisdictional Failure

Hartwin crossed the waters of eight European states between January and August 2026. Each of these states is a party to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), to the Convention on the Conservation of Migratory Species of Wild Animals (CMS), and, with the exception of Norway, to the EU Habitats Directive, which lists all cetaceans under Annex IV as species requiring strict protection. Several are also parties to ASCOBANS, the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas, which despite its name has been interpreted to cover conservation measures affecting all cetaceans in the agreement area. Each country had a legal obligation to protect a strictly protected migratory species in its waters. None of them protected Hartwin. What follows is what each country did and did not do.

The Netherlands (January, February, June 2026)

Hartwin was first documented off Bloemendaal in January 2026 and again in early February, reported through waarneming.nl, the Dutch citizen science platform for wildlife observations. At this stage the whale's condition was not yet a subject of public concern, and the sightings were treated as interesting but unremarkable. In June, after the whale had crossed the North Sea and returned south through the English Channel, he was again documented in Dutch waters at Kruiningen on the Western Scheldt. Marine biologist Jeroen Hoekendijk of SOS Dolfijn confirmed the sighting [Hart van Nederland, 19.01.2026; Hart van Nederland, 05.06.2026].

The Netherlands has an established marine mammal stranding network and the infrastructure to respond. The country did not, at any point, collect a diagnostic sample from the whale or initiate a veterinary assessment. A local animal welfare organisation told the regional broadcaster Omroep Zeeland that the animal's skin was in poor condition, which could indicate health problems [Omroep Zeeland, 05.06.2026]. This concern was noted and not acted upon.

Norway (May 2026)

Hartwin was documented at the Lofoten Islands on 13 May 2026, recorded in citizen video uploaded to YouTube. Norway has a sophisticated marine research infrastructure and is home to the Institute of Marine Research (Havforskningsinstituttet), one of the largest marine science institutions in Europe. Norway is also the only country on this list that continues to conduct commercial whaling of minke whales, which means it has both the expertise and the operational capability to approach, assess, and handle large whales from boats in open water.

Norway did not collect a diagnostic sample. The whale passed through Norwegian waters and continued south toward Scotland.

United Kingdom: England and Scotland (May and June 2026)

Hartwin was documented at Beauly Firth near Inverness in Scotland on 23 May and at South Shields Pier in England on 3 June. At Bempton Cliffs in Yorkshire, an RSPB volunteer recorded a humpback whale during a routine shorewatch survey on 3 June, likely the same animal [The Scarborough News,

03.06.2026]. In Scotland, the sighting attracted attention from a marine scientist working as a research assistant with an Australian whale research foundation, who noted a heavy cyamid infestation and fluke markings consistent with prior entanglement. This observation, made from citizen photographs, was the closest thing to a clinical assessment that anyone in any country produced during the entire seven months of Hartwin's documented travel [SNM, Letter to Ethics Council, 12.07.2026].

The United Kingdom has the Scottish Marine Animal Stranding Scheme (SMASS), the Cetacean Strandings Investigation Programme (CSIP), and the British Divers Marine Life Rescue (BDMLR), one of the most experienced cetacean rescue organisations in Europe. None of these organisations were mobilised for diagnostic assessment, and no blow sample was collected. The whale passed through UK waters and continued south.

Belgium (June 2026)

On 5 June, the same day Hartwin was documented returning to the Netherlands, the Royal Belgian Institute of Natural Sciences (KBIN) confirmed that an injured humpback whale had been sighted in the Scheldt River near the Doel nuclear power plant. Marine biologist Jan Haelters stated that this was the first time a humpback whale had swum so far into Belgian waters. Haelters acknowledged that the animal appeared injured but stated that the nature and severity of the injury were unknown [VRT NWS, 05.06.2026].

Belgium did not collect a diagnostic sample. The Joint Nautical Authority, responsible for shipping safety in the Western Scheldt, issued a warning to vessel traffic. The animal's welfare was noted as a concern and not acted upon. The whale turned around and swam back toward the North Sea under its own power.

Denmark (June and July 2026)

Denmark is where Hartwin spent the longest continuous period and where the most sightings were recorded. Between 18 June and 25 July, the whale was documented at least fifteen times in Danish waters, in locations including Odde Harbor on Zealand, the Lillebælt near Middelfart, the waters around Funen, Aabenraa Fjord, Sønderborg, Vejle Fjord, Aarhus harbour, and the Flensburg Fjord. He swam past the Fjord&Bælt research centre at Kerteminde, past the home of the expert who had publicly declared him beyond help. The Danish Environmental Protection Agency (Miljøstyrelsen) acknowledged that the animal appeared unwell. The Beredskabsplan was the governing protocol [Beredskabsplan for Havpattedyr, 2024].

Denmark did not do anything but issued a public warning to keep distance from the animal and waited for it to leave. The institutional response to the SNM correspondence is documented in Part VIII. The expert statements are documented in Part V. The protocol is analysed in Part IV.

Germany: Schleswig-Holstein and Mecklenburg-Vorpommern (July and August 2026)

Germany had the whale in its waters for the significant period of time, spread across two federal states. Hartwin was first confirmed in German waters at Holnis on the Flensburg Fjord on 5 July, was documented at Heiligenhafen on 16 July, entered the Kiel Fjord on 17 July, swam deep into the inner fjord near the Hörnbrücke on 18 July, was seen at Schönberger Strand on 22 July, returned to the inner Flensburg Fjord on 24 July, appeared at Wismar Westhafen in Mecklenburg-Vorpommern on

27 July, and was documented at Wustrow on the Darß on 29 July before continuing east toward Poland. His body was found in the Greifswald Bodden on 13 August.

Germany has two separate state-level environment ministries with jurisdiction over the Baltic coast. Schleswig-Holstein is governed by MEKUN under Minister Tobias Goldschmidt. Mecklenburg-Vorpommern is governed by the Ministry for Climate Protection, Agriculture, Rural Areas and the Environment under Minister Till Backhaus. Both were aware of the whale. Both issued public statements and neither collected a diagnostic sample. The German failure is detailed in Part X.

Poland (August 2026)

Hartwin was documented at Woliński Park Narodowy on Wolin Island on 9 August 2026, reported by WOPR, the Polish Water Rescue Service. This was the eighth and final country in which the whale was seen alive. The sighting drew the attention of WWF Poland, whose representatives publicly stated that they could not determine the species of the whale, variously speculating that it might be a minke whale or a harbour porpoise, despite the animal being approximately ten metres long [Radio Szczecin, 09.08.2026; SNM, strandednomore.org/hartwin]. Photographs from the Polish sighting show a protruding spine, indicating severe emaciation consistent with the necropsy findings two weeks later.

Poland did not collect a diagnostic sample. The whale left Polish waters and returned to Germany, where it died in the Greifswald Bodden on or about 12 August.

The cross-border failure

The jurisdictional pattern is straightforward. Each country treated the whale as a transient visitor that would soon move on. Each country's institutional framework was oriented toward its own territorial waters, its own stranding protocol, and its own expert network. No country initiated cross-border coordination for the assessment or treatment of the animal as no country contacted the country the whale had just left or the country the whale appeared to be heading toward. The Newstime article of 25 June noted explicitly that the MV Ministry stated there had been no contact with the Danish authorities regarding the matter [Newstime, 25.06.2026]. The SNM Letter to Danish Authorities of 27 June identified the absence of any framework for cross-border coordination in live stranding or distressed-animal cases as one of the six deficiencies in the Beredskabsplan [SNM, Letter to Danish Authorities, 27.06.2026].

The result is that a whale who crossed eight countries was effectively in nobody's jurisdiction for seven months. Each country could point to the others. Denmark could note that the whale had left its waters. Germany could note that it had not yet stranded. Poland could note that it did not even know what species it was looking at. The jurisdictional structure of European marine mammal management, which assigns responsibility on the basis of territorial waters, is not designed for an animal that moves between countries continuously and does not strand. Hartwin fell through every gap in the system because the system has nothing but gaps.

The EU Habitats Directive requires member states to establish a system of strict protection for Annex IV species. The Bern Convention requires parties to take appropriate measures to ensure the conservation of wild fauna. ASCOBANS requires parties to cooperate in the conservation of small cetaceans and, by extension through its resolutions, to support conservation measures for all cetaceans in the agreement area. None of these obligations produced a single diagnostic sample

from a visibly sick, strictly protected migratory species that was under continuous public observation in the waters of their signatories for seven months. The obligations exist on paper. In practice, for a whale swimming between countries with a bacterial infection that was killing it by degrees, they meant nothing at all.

Part X. The German Failure: Two States, Two Ministries, No Action

Germany is the country where Hartwin spent the significant period of time, where the most detailed legal and scientific case for intervention was presented to the authorities, where the applicable federal law most clearly authorised diagnostic action, and where the whale ultimately died. The failure is spread across two federal states, Schleswig-Holstein and Mecklenburg-Vorpommern, each governed by a separate environment ministry, each aware of the whale, each in possession of the legal authority to act, and each choosing not to. This section documents what each state knew, what each state said, and what each state did not do.

Schleswig-Holstein: the whale in the Kiel Fjord

Hartwin first entered German waters near Holnis on the Flensburg Fjord on approximately 5 July 2026. On 16 July he was documented off Heiligenhafen by citizen Thomas Rockel, and the German Oceanographic Museum (Deutsches Meeresmuseum) in Stralsund confirmed that it had received sighting reports from the area, though it stated that the image and video material was of such poor quality that it could not confirm whether this was the same whale seen off Denmark [Focus Online, 17.07.2026]. The Schleswig-Holstein Ministry for Energy Transition, Climate Protection, Environment and Nature (MEKUN), under Minister Tobias Goldschmidt, confirmed the sighting.

On 17 July, Hartwin was documented at the mouth of the Kiel Fjord. The SH Ministry acknowledged the sighting and stated that the whale appeared to be moving back toward open sea [Handelsblatt, 17.07.2026]. The following day, 18 July, citizen video from Yachtcharter Kiel showed the whale deep inside the inner Kiel Fjord, near the Hörnbrücke in the centre of the city, directly contradicting the ministry's statement from the previous day. The whale was not moving back to open sea. It was swimming deeper into one of Germany's busiest naval and commercial ports.

Over the following days Hartwin was documented at Schönberger Strand on 22 July by citizen Kati Sivka, then moved north again, appearing in the inner Flensburg Fjord on 24 July. On 25 July he crossed back into Danish waters at Sønderhav before returning south through German waters toward Wismar.

Throughout this period, Schleswig-Holstein had the whale in its territorial waters repeatedly. The MEKUN had been directly addressed in the SNM Letter to German Authorities of 23 July 2026, which was sent to Minister Goldschmidt personally, to Dr. Joseph Schnitzler at the ITAW in Büsum, to the Lower Nature Conservation Authority in Kreis Plön, and to the Veterinary and Food Inspection Office in Kreis Plön. The letter set out the full legal, scientific, and ethical case for immediate diagnostic intervention, identified BNatSchG §45(5) as the legal pathway requiring no permit, identified BNatSchG §45(7) Nr. 3 as the research exemption pathway, provided the name and contact details of the responsible official at MEKUN's Referat 52 (Manfred Bohlen), and attached the six-step actionable plan with the specific methodology for blow sampling and antibiotic darting [SNM, Letter to German Authorities, 23.07.2026].

No blow sample was collected in Schleswig-Holstein, no veterinarian was authorised to assess the whale, and no permit application was filed under either §45(5) or §45(7). Further, no explanation

was provided for why the provisions of the BNatSchG, which SNM had identified with specificity, were not used. The whale left Schleswig-Holstein waters and continued east.

Mecklenburg-Vorpommern: the whale that appeared healthy

Hartwin was documented in Wismar Westhafen on 27 July 2026, reported by nm-mecklenburg and confirmed by the Wismar Water Police Inspectorate. The Mecklenburg-Vorpommern Ministry for Climate Protection, Agriculture, Rural Areas and the Environment, under Minister Till Backhaus, issued press release No. 235/2026 the same day [MV Ministry, press release No. 235/2026, 27.07.2026].

The press release is a remarkable document and it warrants close reading. It states that a whale was sighted in Wismar's western harbour, that the Wismar harbour authority reported the animal to the Wismar Water Police Inspectorate at around 9 a.m., and that according to current information the whale appears to be healthy. It states that the exact species cannot yet be definitively determined, that its size can only be estimated at approximately eight metres, and that initial observations indicate the whale appears to be healthy. It states that the relevant authorities and agencies were immediately informed and are in close contact, that the water police are also on site, that the aim of all measures is to enable the animal to return to deeper waters with minimal disturbance, and that the situation is being continuously monitored [MV Ministry, press release No. 235/2026, 27.07.2026].

The claim that the whale appears to be healthy was made on 27 July 2026, six weeks after Buch-Illing had told the press that the animal was severely weakened and would die, five weeks after Dörnath had described its skin as extensively non-physiological, and four weeks after citizens had been photographing the progressive whitening and sloughing of its dorsal surface across Danish waters. By 27 July the photographic record, compiled entirely by members of the public, showed an animal whose back was substantially discoloured, whose skin was visibly deteriorating, and whose condition had been worsening for months. The MV Ministry's claim that the whale appeared healthy contradicts the photographic evidence, the expert commentary of the preceding weeks, the statements of the Danish Environmental Protection Agency (which had acknowledged the animal appeared unwell), and the necropsy findings that would follow eighteen days later. The necropsy found four abscesses, one of them 110 centimetres long, suspected sepsis, an empty stomach, and a blubber layer of six centimetres [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. An animal in that condition did not appear healthy on 27 July. The ministry either did not look at the available photographic record, or it looked and reached a conclusion that the evidence does not support.

The statement also says the exact species cannot yet be definitively determined. By 27 July, the animal had been identified as a humpback whale by citizen observers, by the Danish Environmental Protection Agency, by Buch-Illing, by Dörnath, by every media outlet that had covered the story, and by SNM. The MV Ministry's claim that the species was uncertain is difficult to reconcile with the preceding five weeks of public discussion, unless the ministry was genuinely unaware of all of it.

The statement says the aim is to enable the animal to return to deeper waters with minimal disturbance. This is the same passive approach documented throughout the case: monitor, keep distance, hope it leaves.

The MV Ministry had already stated its position before the whale arrived

The MV Ministry's approach in late July was consistent with the position it had stated publicly a month earlier. On 25 June, before Hartwin had entered German waters, a spokesperson for the ministry told Newstime that the ministry would act appropriately to the situation, that the possibility of a stranding was pure speculation, that the whale was a wild animal for which there was no legal basis to interfere with its life, and that the animal was not in their territorial waters. The spokesperson added that there had been no contact with the Danish authorities [Newstime, MV Ministry statement, 25.06.2026].

The claim that there was no legal basis to interfere with the whale's life is the statement that most directly conflicts with the text of the Bundesnaturschutzgesetz. BNatSchG §45(5) states, in the SNM translation provided in the Letter to German Authorities: deviating from the prohibitions of §44(1)(1) and the possession prohibitions, it is furthermore permissible, subject to hunting law provisions, to take up injured, helpless, or sick animals for the purpose of nursing them back to health. This provision requires no permit. It requires only a veterinary professional judgment that the animal appears sick, which by 25 June had already been stated publicly by a Danish marine biologist and a German wildlife veterinarian. The MV Ministry's assertion that there was no legal basis to act is contradicted by the statute it administers [SNM, Actionable Plan for Hartwin White Paper, July 2026; SNM, Letter to German Authorities, 23.07.2026].

The Saarbrücker Zeitung on 29 June reported the ministry's position under the headline indicating that the MV Ministry had issued a clear rejection, noting that if the whale continued toward the Baltic Sea it could strand in Germany, and that the ministry headed by Till Backhaus had issued a clear statement on the matter [Saarbrücker Zeitung, 29.06.2026]. The ministry's position was settled before the whale arrived, before any assessment of the animal's condition had been made in German waters, and before the SNM correspondence had been received. The decision not to act preceded the information on which a decision to act could have been based.

Two states, one outcome

Between them, Schleswig-Holstein and Mecklenburg-Vorpommern had the whale in their waters for a combined period of approximately five weeks. MEKUN in Kiel had the specific legal analysis, the named permit authority, the contact details of the responsible official, the six-step actionable plan, the peer-reviewed citations for every element of that plan, and the direct personal address to the minister. The MV Ministry in Schwerin had the whale in its harbour, issued a press release claiming it appeared healthy, and waited for it to leave.

On 29 July, MDR reported the whale at Wustrow on the Darß, still in MV waters, continuing east. On 9 August, WOPR documented it at Wolin Island in Poland. On 13 August, the body was found in the Greifswald Bodden, back in Mecklenburg-Vorpommern. The Deutsches Meeresmuseum, whose spokesperson had said the image quality was too poor to confirm the species, was now in possession of the entire animal. The necropsy was completed on 15 August.

The necropsy found what a blow sample would have found weeks earlier: a bacterial infection. It found what a veterinary assessment would have confirmed: an animal in severe decline. It found what the photographic record had been showing for months: progressive, worsening pathology. And it found what antibiotic darting could have treated: an infection susceptible to pharmaceutical intervention. All of this information was generated from a dead whale, in the same state whose

ministry had claimed the animal appeared healthy, by the same institutional network that had been asked to collect a diagnostic sample while the animal was alive and had declined to do so.

Germany's failure in the Hartwin case is not a failure of capability. Germany has some of the most advanced veterinary, marine science, and wildlife management infrastructure in Europe. The Stiftung Tierärztliche Hochschule Hannover, identified in the SNM correspondence as a suitable laboratory for blow sample analysis, is one of the leading veterinary research institutions in the world. The Christian-Albrechts-Universität zu Kiel has a marine biology department with active cetacean research programmes. The Deutsches Meeresmuseum has decades of experience with marine mammal pathology. Germany has the scientists, the veterinarians, the laboratories, the legal authority, and the financial resources to have diagnosed and treated a single humpback whale with a bacterial infection. What Germany lacked was the institutional framework to recognise that a visibly sick whale swimming through its harbours was a patient rather than a problem to be monitored until it went away or died. The monitoring continued. The whale died. The necropsy confirmed the diagnosis that nobody had been willing to make from a living animal. Germany's contribution to Hartwin's case was a press release, a refusal, and a post-mortem.

Part XI. The Necropsy: What They Found After It Was Too Late

The body of a humpback whale was reported drifting in the Greifswalder Bodden at 08:16 on 13 August 2026, at coordinates 54°N 12.2', 13°E 30.2'. It was recovered by the Wasserstraßen- und Schifffahrtsamt Ostsee after the carcass began sinking around midday, secured by the Wasserschutzpolizei, and transferred to the Deutsches Meeresmuseum at 19:30 the same day. Death was estimated to have occurred on 12 or 13 August. The necropsy was conducted on 14 and 15 August at the NAUTINEUM facility of the Deutsches Meeresmuseum in Stralsund. The preliminary findings were released to the press on 18 August 2026 [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

What follows is a detailed account of every finding in the necropsy report, because each finding, read in the context of the seven months that preceded it, tells a specific story about what could have been detected earlier, what could have been treated, and what was allowed to progress unchecked because nobody ever collected a diagnostic sample from the living animal.

The animal

Male. Length: 10.0 metres, plus or minus 0.1 metres. Weight: approximately 7 tonnes. Estimated age: 3 to 4 years. The carcass was externally fresh at the time of recovery, but initial gas formation had begun by the time it reached the Deutsches Meeresmuseum due to high water and air temperatures. Autolysis was already advancing by 14 August, resulting in the beginning decomposition of internal organs. The brain, lungs, and kidneys could no longer be sampled histologically [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

The loss of the lungs to autolysis before histological sampling is particularly significant in the context of this brief. The blow sampling method described by O'Mahony et al. (2024) collects exhaled breath condensate from the lungs. A blow sample collected during life would have captured the respiratory microbiome, the bacterial pathogens, the inflammatory markers, and the cellular material from the lung epithelium while the tissue was alive and intact. The necropsy team could not examine the lungs because the tissue had decomposed. The blow sample would have provided the lung data that the necropsy could not. This is not a theoretical point. It is a direct demonstration that ante-mortem diagnostics and post-mortem examination are not interchangeable, and that waiting for the animal to die in order to examine it resulted in the loss of the very tissue that the most important diagnostic method was designed to sample.

The skin

The necropsy report states that no external injuries from ship propellers or nets were found. Two round openings were present on the body surface, with diameters of 18 centimetres (anterior) and 16 centimetres (posterior), separated by 7 centimetres. These were punctuating openings through which abscess A had erupted from the inside outward. From the tip of the snout to the dorsal fin, the skin showed whitish to reddish-brown discolouration and the epidermis was missing over large areas. Swab results were pending at the time of the report [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

The extensive skin loss from snout to fin is consistent with the progressive discolouration and sloughing documented in citizen photographs throughout the sighting chronology, from the first indications in Norway in May to the advanced involvement visible in Danish waters in June and July. This was the condition that Buch-Illing described as looking very infested and very light on 24 June, that Dörnath described as extensively non-physiological on 29 June, and that the MV Ministry described as appearing healthy on 27 July. The necropsy confirms that the skin involvement was real, progressive, and associated with the underlying abscesses and systemic infection. It was visible on the outside because it was being driven from the inside.

The abscesses

The necropsy identified four distinct abscesses, all filled with whitish-greenish fluid (pus) containing whitish, flocculated tissue conglomerate. Their locations and dimensions are as follows.

Abscess A was a punctuating abscess on the left side of the body, meaning it had erupted through the skin from inside. It extended 13.5 centimetres in depth from the outer skin surface to the bone. Two openings were visible on the outside (the 18 cm and 16 cm holes described above). Two vertebral processes were affected, with approximately 3 centimetres of porous bone structure, indicating that the infection had been present long enough to erode the vertebral bone [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

Abscess B was located between the upper and lateral vertebral processes on the right side of the body. It measured 60 centimetres in length and 50 centimetres in width, encompassing two vertebral bodies [ibid.].

Abscess C was the largest. It measured 110 centimetres in length, with a thickness of 42 centimetres at the anterior end tapering to 12 centimetres at the posterior end. It was located in the immediate vicinity below and along the spine, encompassing four vertebral bodies. This abscess ran for over a metre along the spinal column of a ten-metre animal [ibid.].

Abscess D was located in the ball joint of the right flipper (pectoral fin). It measured 13 centimetres in diameter and 12 centimetres in depth [ibid.].

The combined picture is of a massive, multi-focal bacterial infection centred on the spine, with one abscess large enough to run along more than ten percent of the animal's total body length, another having eroded through the vertebral bone and erupted through the skin, and a fourth affecting the joint of the right flipper. The infection was not superficial. It was deep, structural, and had been developing over a prolonged period, as evidenced by the porous bone changes in the vertebrae affected by abscess A, which indicate chronic osteomyelitis rather than acute infection.

The spine and lymph nodes

Three vertebrae showed porous structures, with a direct connection to abscess A. This finding confirms that the infection had invaded the bone and had been present long enough to cause structural degradation of the vertebral column. Two intestinal lymph nodes were enlarged. Analysis of additional lymph nodes was not possible due to autolysis [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

Lisa Klemens, the scientist who led the necropsy, told the Nordkurier that the whale must have suffered enormous pain, particularly during movement, because the majority of the abscesses were

located directly on the spine [Nordkurier, 18.08.2026]. This statement, from the person who examined the body, is the institutional confirmation of what the sighting record had been showing for months. The whale was moving slowly. He was staying near the surface. He was entering confined waterways. He was not behaving like a healthy humpback whale, because he was not a healthy humpback whale. He was an animal in severe pain, swimming with a 110-centimetre abscess along his spine and pus-filled cavities eroding his vertebral bone, and the experts who watched the footage of his slow, painful movement used it to predict his death rather than to initiate his diagnosis.

Parasites

The necropsy found minimal parasite involvement: a small infestation of approximately 5 centimetres in size in the blubber layer near the left shoulder blade, with the rest of the body parasite-free [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. This finding is significant because Buch-Illing had suggested publicly that the whale's light skin colour indicated severe parasite infestation [Newstime, 24.06.2026; Frankfurter Rundschau, 30.06.2026]. The necropsy found the opposite. The skin changes were not caused by parasites. They were associated with the underlying bacterial infection and the systemic disease process. The expert's visual assessment, offered without a diagnostic sample and amplified across the German media as the expert explanation for the whale's condition, was wrong about the cause. A blow sample would have determined the actual cause. The blow sample was never collected.

Nutritional condition

The blubber layer measured 6 centimetres in thickness, which the necropsy report categorises as poor nutritional condition. The stomach was empty, the small intestine was empty, and the large intestine was empty, with only a small amount of brownish content in the final 60 centimetres [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

A humpback whale with an empty gastrointestinal tract and a blubber layer of 6 centimetres has not been feeding successfully for a sustained period. The emaciation visible in the Polish photographs of 9 August, where the spine was protruding, is consistent with these findings. The animal was starving, likely because the pain from the spinal abscesses made feeding behaviour difficult or impossible, and because the systemic infection was consuming metabolic resources faster than the animal could replenish them. This progressive starvation was occurring in plain view of the authorities and experts of eight countries, none of whom collected a sample to determine why the animal was not eating.

The timeline of infection: the window that was open and closed

The 3 centimetres of porous bone structure in the vertebral processes affected by abscess A is consistent with chronic osteomyelitis, a bone infection that develops when a soft-tissue abscess spreads to adjacent bone over a period of weeks to months. This type of bone erosion does not require eight months to develop. Depending on the virulence of the pathogen and the immune status of the host, significant vertebral involvement can occur within six to twelve weeks. This means that the bone invasion likely developed during the very period in which SNM was actively requesting a blow sample, from late June through July. If a sample had been collected when it was first requested on 27 June, the infection may well have been at a stage where the soft tissue abscesses were developing but had not yet invaded the bone. Earlier diagnosis would have meant earlier

treatment, before the chronic osteomyelitis set in, before the sepsis became systemic, and before the animal stopped eating. The window for effective antibiotic intervention was open during those weeks. It closed because nobody walked through it.

What the necropsy report omits: the eight-month clinical progression

The most significant flaw in the Deutsches Meeresmuseum's preliminary necropsy report is not what it found, it is what it chose not to consider. The report presents Hartwin as a static pathological specimen: a sick, infected, malnourished animal found dead in the Greifswalder Bodden. It documents the abscesses, the emaciation, the empty gut, the suspected sepsis, and it stops there. It does not mention, reference, or incorporate the eight-month sighting chronology that was publicly available and freely accessible on the SNM website at strandednomore.org/hartwin throughout the period of the necropsy and in the weeks preceding it.

This is a methodological failure of the first order. In any veterinary post-mortem analysis of a wild animal with a documented clinical history, the trajectory of the disease is as important as the terminal findings. The sighting record, compiled by citizens across eight countries and maintained by SNM with dates, locations, photographs, and video, constitutes the most comprehensive ante-mortem clinical progression record ever assembled for a free-swimming humpback whale in European waters. It shows that in January and February 2026, off the Netherlands, the animal displayed a dorsal marking but otherwise appeared in reasonable body condition. In May, off Norway and Scotland, the skin involvement had spread but the animal was covering enormous distances, travelling from the Lofoten Islands to Inverness in ten days. In June and early July, off Denmark, the skin deterioration was advancing but the animal was still swimming strongly enough to cover 148 kilometres from the Flensburg Fjord to Aarhus in four days, prompting Buch-Illing himself to revise his prognosis and acknowledge that the whale was fitter than initially assumed [Newstime, 17.07.2026]. In late July and early August, the decline accelerated. By 9 August, off Poland, the spine was protruding.

This progression is not ambiguous. It shows an animal whose condition deteriorated over time from a point of reasonable health to a point of terminal decline. It shows that Hartwin was not always sick, weak, malnourished, and dying. There was a period of months during which the infection was developing but had not yet overwhelmed the animal's capacity to feed, travel, and function. That was the window for diagnosis and treatment. The necropsy report, by presenting only the terminal snapshot without any reference to this trajectory, erases that window from the record. It presents the end-state pathology as though it were the entire story, as though this animal arrived in European waters already beyond help, as though the abscesses, the emaciation, and the sepsis were the only version of Hartwin that ever existed.

This omission is not neutral. It reinforces the doctrinal narrative that large whales in the Baltic Sea are animals with something gravely and inherently wrong with them, animals whose deaths are inevitable consequences of being in the wrong place, animals for whom intervention would have been futile because the condition was always too advanced. The sighting record proves the opposite. The condition was not always advanced. It advanced because nobody intervened while it was still developing. The necropsy team had access to the same publicly available sighting chronology that the media, the experts, and SNM had been referencing for months. The decision not to incorporate this clinical history into the post-mortem analysis, not to assess at what stage the abscesses might

have become treatable, not to consider whether earlier intervention could have altered the outcome, is a decision to present the death as a fait accompli rather than as the endpoint of a preventable decline. It is the final expression of the doctrine that shaped every institutional response to Hartwin from the beginning: the animal was going to die, and the only question worth asking was what it died of, not whether it needed to.

Cause of death

The necropsy report states: probable cause of death: bacterial infection; suspected sepsis; results of samples pending [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

Bacterial infection, suspected sepsis, these are not exotic, mysterious, or untreatable conditions. They are among the most common and most treatable categories of disease in veterinary medicine. Antibiotics are the standard treatment for bacterial infection in every mammalian species on earth. Sepsis is treated with targeted antibiotics, fluid support, and anti-inflammatory agents. The Gulland et al. (2008) antibiotic darting method was developed specifically to deliver antibiotics to free-swimming humpback whales without capture or restraint, and was used successfully on animals with skin damage from a freshwater environment analogous to the low-salinity Baltic. The blow sampling method described by O'Mahony et al. (2024) was designed to identify exactly the kind of bacterial pathogen the necropsy found, from exactly the kind of respiratory condensate that Hartwin exhaled every time he surfaced to breathe, dozens of times per hour, in harbours and fjords where boats were within metres of him for seven months.

The necropsy did not reveal a condition that was beyond the reach of modern veterinary medicine. It revealed a condition that modern veterinary medicine is specifically equipped to diagnose and treat. What it also revealed, by implication, is that the institutional decision not to diagnose the animal while it was alive was the decision that made the condition untreatable. By the time the necropsy was performed, the infection had progressed to sepsis, the abscesses had eroded the vertebral bone, the animal had stopped eating, and the organs had begun to decompose before the pathologists could examine them. The window for treatment had closed, not because the disease was incurable, but because nobody opened the window when the animal was still alive and the disease was still in a stage where intervention could have changed the outcome.

The Deutsches Meeresmuseum's preliminary necropsy findings are the final document in the Hartwin case. They are also, read together with everything that preceded them, the most damning. The institution that conducted the necropsy is part of the same institutional network that was asked to collect a diagnostic sample and declined. The findings confirm a treatable condition that was never diagnosed. The scientist who examined the body described enormous pain that was watched and photographed for months. The cause of death was a bacterial infection in a world where antibiotics exist, in a country where the law permits their delivery, in a species for which the delivery method has been tested and published. Everything the necropsy found could have been found earlier, from a living animal, using tools that cost less than the necropsy itself. The necropsy is the proof that the system failed, written in pus and bone by the system's own hand.

Part XII. Compassionate Conservation and the Terrestrial Disparity: Why Every Suffering Animal in Europe Is Helped Except Marine Mammals

Throughout the seven months of Hartwin's decline, a specific argument was repeated by experts, authorities, and media across multiple countries to justify the decision not to help him. The argument has several variants, but its structure is always the same: the humpback whale population is recovering, therefore the suffering and death of this individual animal does not require intervention. This section documents who made this argument, how many times it was made, and why it is both scientifically incomplete and ethically indefensible when measured against the standards that the same societies apply to every other category of suffering animal.

The argument as it was made

Heiko Buch-Illing of Fjord&Bælt told Newstime on 24 June 2026 that the humpback whale population was doing very well, that it was not threatened, and that the population was growing. He told the same outlet that whales were increasingly expanding their range, and that there would be more. He characterised Hartwin's situation as nature taking its course [Newstime, 24.06.2026]. In the same interview he stated that regardless of how the whale died, the stranded whale would be left to decompose because that was the natural process, framing the dead whale as a specimen-collection opportunity rather than a welfare failure.

Carl Kinze of the Statens Naturhistoriske Museum told Danish radio that the humpback whale population in the North Atlantic was steadily growing, that Denmark was seeing more and more humpback whales, and that young animals searching for food were straying into unfamiliar waters [cited in SNM, Open Letter to Danish Scientists, 30.06.2026]. The framing was consistent: population abundance made the loss of this individual scientifically unremarkable.

The Danish Beredskabsplan for Havpattedyr (2024) codifies the same logic in §5.3, stating that one of the three justifications for not taking marine mammals into care is that the natural selection of weak individuals would be undermined, because in nature the weakest animals are sorted out so that the population remains healthy and robust [Beredskabsplan for Havpattedyr, 2024, §5.3]. The individual is explicitly subordinated to the population. The individual's suffering is reframed as a population health mechanism. The individual's death is reframed as natural selection doing its work.

Dr. Kerstin Alexandra Dörnath, in two MDR interviews on 29 June and 29 July, reinforced the framing of the Baltic as a dead end for large whales, describing the situation as a natural consequence of population expansion and the funnel-shaped geography of the Kattegat and Skagerrak. She warned against rescue operations and activism [MDR Aktuell, 29.06.2026; MDR Aktuell, 29.07.2026]. The Kölner Stadt-Anzeiger on 6 July warned against misguided animal love [KSTA, 06.07.2026]. The MV Ministry spokesperson told Newstime on 25 June that the whale was a wild animal for which there was no legal basis to interfere with its life [Newstime, 25.06.2026].

Across these statements, a consistent doctrinal position emerges: the population is growing, the individual does not matter, the suffering is natural, the death is acceptable, and intervention is either impossible, unnecessary, or sentimental. The argument was made by at least three named scientists, codified in at least one national protocol, endorsed by at least two government ministries, and

amplified by every major media outlet that covered the story. It was never challenged in the mainstream press by a single dissenting scientific voice.

The compassionate conservation literature says otherwise

The argument that a recovering population makes individual suffering acceptable is not a settled scientific position. It is a policy choice that contradicts a substantial and growing body of peer-reviewed literature in conservation ethics, animal welfare science, and compassionate conservation.

Ramp and Bekoff (2015), writing in *BioScience*, established compassion as a practical and evolved ethic for conservation, arguing that the principle that individuals matter should be placed at the forefront of conservation practice alongside the traditional focus on populations and species. They were explicit that individual welfare is not a sentimental add-on but a necessary component of ethical conservation [Ramp, D. and Bekoff, M., 2015. Compassion as a Practical and Evolved Ethic for Conservation. *BioScience*, 65(3), 323-327].

Johnson et al. (2019), in a paper published in *Animals* with twenty-eight co-authors from institutions including Oxford, the Zoological Society of London, Panthera, and the IUCN, argued directly that compassion in conservation means caring for individuals, populations and species. The title itself is the counter-argument to the position taken by the Danish and German experts in the Hartwin case. The paper acknowledges the intrinsic value of sentient individuals while arguing for a consequentialist framework that weighs both collective and individual outcomes. It does not, at any point, argue that population recovery renders individual suffering irrelevant [Johnson, P.J. et al., 2019. Consequences Matter: Compassion in Conservation Means Caring for Individuals, Populations and Species. *Animals*, 9(12), 1115].

Russell (2020), writing in *Animals* from the Animal Welfare Science and Bioethics Centre at Massey University, stated explicitly that the principle of inclusivity in compassionate conservation aims to protect the interests of individual wild animals regardless of their origin, current population size or value to humans. This is a direct refutation of the argument used against helping Hartwin. Russell further argued that Conservation Welfare, the evidence-based application of animal welfare science to wild animals, requires that the well-being of individual animals be considered as part of every conservation decision, and that collectives matter precisely because they are made up of numerous individuals whose welfare depends on the health of the collective [Beausoleil, N.J., 2020. I Am a Compassionate Conservation Welfare Scientist. *Animals*, 10(2), 257].

Baker (2017), writing in the *Israel Journal of Ecology and Evolution*, demonstrated through translocation biology that individual variation in personality and welfare is integral to population and species recovery, directly countering the idea that individuals can be disregarded when the population is doing well. The welfare of individuals is not separate from population health. It is a mechanism through which population health is maintained [Baker, L., 2017. Translocation biology and the clear case for compassionate conservation. *Israel Journal of Ecology and Evolution*, 63(3-4), 52-60].

Griffin et al. (2020), in *Frontiers in Psychology*, identified individuals matter as a central moral principle of the compassionate conservation movement, one placed at the forefront of conservation practice. Even as critics of certain aspects of the movement, they acknowledged this as a core tenet that mainstream conservation was increasingly recognising [Griffin, A.S. et al., 2020. Compassionate Conservation Clashes with Conservation Biology. *Frontiers in Psychology*, 11, 1139].

Katz (2024), writing in *Biological Conservation*, argued for a revised framework of compassionate conservation that extends concern beyond harms caused directly by humans to encompass all sources of suffering, including natural ones. His framework replaces the principle of first, do no harm with minimize harm, precisely because a focus only on harms caused by humans leads conservationists to ignore treatable suffering in animals they have the capacity to help. He argued that compassion and respect for wild animals entails a more active management of nature where efforts are made to reduce the harms that wild animals face [Katz, T., 2024. Taking natural harms seriously in compassionate conservation. *Biological Conservation*, 299, 110791].

Wallach et al. (2020), writing in *Animal Sentience* and separately in *Conservation Biology*, argued for the recognition of animal personhood within compassionate conservation, using elephants as the paradigmatic case. They proposed that all sentient beings should be recognised as persons whose moral status is respected, and that this recognition has direct implications for how conservation institutions treat individual animals in distress [Wallach, A.D. et al., 2020. Compassionate conservation and elephant personhood. *Animal Sentience*, 2020.324; Wallach, A.D. et al., 2020. Recognizing animal personhood in compassionate conservation. *Conservation Biology*, 34(5), 1097-1106].

The peer-reviewed literature is clear, extensive, and published in mainstream conservation journals. The argument that population recovery renders individual suffering irrelevant is not the scientific consensus. It is one position within an active and well-documented debate, and the opposing position, that individuals matter regardless of population status, has been articulated by researchers at Oxford, Massey, the University of Technology Sydney, the University of Fribourg, and dozens of other institutions across six continents. None of this literature appeared in the public commentary of any expert who spoke about Hartwin.

The elephant in the room

The most effective way to expose the inconsistency of the doctrine applied to Hartwin is to consider how the same societies treat a different large, charismatic, difficult-to-handle mammal whose population is in many regions healthy and in some regions overabundant: the elephant.

African elephant populations in southern Africa have recovered to the point where several countries, including Botswana, South Africa, and Zimbabwe, have debated and in some cases implemented culling programmes to control numbers. The population is not endangered in those regions. It is, by the standards the Danish experts applied to humpback whales, doing very well. By the logic of the Beredskabsplan, the natural selection of weak individuals should not be undermined, and nature should take its course.

Yet when an individual elephant is found injured, trapped, or orphaned in any of these countries, or indeed in any country on earth where elephants are present, the institutional response is not to leave the animal to decompose so that samples can be taken. The response is rescue, veterinary treatment, and rehabilitation. The Sheldrick Wildlife Trust in Kenya has rehabilitated and released over 300 orphaned elephants. The Elephant Transit Home in Sri Lanka has released over 100. In India, the Wildlife SOS Elephant Hospital in Mathura operates a full veterinary facility for rescued elephants, including individuals with chronic infections, abscesses, and sepsis. Elephants with bacterial infections are treated with antibiotics, emaciated elephants are fed, those in pain are given

analgesics. Nobody suggests that because the population is healthy, the individual should be left to die.

The practical challenges of treating an elephant are at least as great as the challenges of treating a humpback whale. An adult African elephant weighs between 4,000 and 6,000 kilograms. Hartwin weighed approximately 7 tonnes. Elephants are dangerous, unpredictable, and require specialised veterinary expertise, custom-built facilities, and enormous resources. The cost of rescuing and rehabilitating a single orphaned elephant runs to tens of thousands of dollars and takes years. Yet it is done, routinely, across Africa and Asia, by institutions funded by governments, by NGOs, and by private donors, because the societies in which elephants live have decided that a suffering elephant is an animal that should be helped, regardless of the population's overall trajectory.

The point is that the animals are treated as individuals. Their suffering is treated as something that matters. The same is true for bears, wolves, lynx, eagles, and storks across Europe. Germany alone operates a national network of wildlife rehabilitation centres that treats tens of thousands of injured wild animals annually, including birds of prey, foxes, badgers, hedgehogs, and deer. The Tierschutzgesetz, Germany's animal welfare law, creates a legal obligation to help animals in distress. The BNatSchG creates obligations to protect strictly protected species. No veterinarian in Germany who encountered a wolf with four abscesses, suspected sepsis, an empty stomach, and a blubber layer indicating severe emaciation would be told that there was no legal basis to interfere with the animal's life: the wolf would be treated.

Hartwin was a strictly protected Annex IV species under the EU Habitats Directive, afforded at least as much legal protection as the wolf. The diagnostic tools to identify his condition existed and were published in peer-reviewed journals, while the treatment tools to address his condition existed and had been used on the same species. The legal authority to act also existed in German federal law, yet the institutional response across eight countries and seven months was to watch him die, because the population was recovering and nature was taking its course.

The marine mammal exception is doctrinal, not scientific

There is no biological principle that distinguishes the suffering of a whale from the suffering of an elephant, an orangutan, or a wolf. Pain is mediated by the same nociceptive pathways. Bacterial infection progresses through the same inflammatory cascade. Sepsis kills through the same mechanisms of organ failure. The necropsy report on Hartwin describes pathology that any veterinarian treating any large mammal would recognise: abscesses, pus-filled cavities reaching bone, bacterial colonisation, systemic infection, emaciation, and organ failure [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026]. The animal experienced, according to the scientist who examined his body, enormous pain [Nordkurier, 18.08.2026]. This is not a different category of suffering because it occurred in salt water rather than on land.

The distinction is doctrinal, as somewhere in the development of European marine mammal management, a decision was made that large cetaceans exist in a different moral category from other large mammals. While elephants or wolves are individuals who suffer, whales are units of a population that is recovering. Elephants or wolves with infections are patients, but whales with infections are specimens waiting to become carcasses. So it is not surprising then that elephants in distress activate rescue infrastructure, while whales in distress activate press releases. This distinction is not in the law, which protects both equally. It is not in the science, which documents

the same capacity for suffering. It is not in the published conservation ethics literature, which argues increasingly and from multiple ethical frameworks that individuals matter regardless of population status. It is in the protocol, and in the minds of the people who wrote it and the experts who restate it to the press.

Hayward et al. (2019), in their critique of compassionate conservation published in *Conservation Biology*, acknowledged that concern for individual animal welfare has become an important element in conservation best practices. Even from the most sceptical end of the academic spectrum, the principle that individuals have moral standing is no longer seriously in dispute. What is in dispute is how to weigh that standing against other considerations. In Hartwin's case, the weighing was never done, because nobody ever acknowledged that the individual had standing worth weighing. The whale was written off as a population statistic before anyone collected a sample to determine whether his condition was treatable. The population-recovery argument was not the conclusion of an ethical deliberation. It was a substitute for one [Hayward, M.W. et al., 2019. Deconstructing compassionate conservation. *Conservation Biology*, 33(4), 760-768].

The ethicist Herwig Grimm, in an interview with NEWS5 during the Hartwin case, stated that we carry increasing moral responsibility for the welfare of wildlife, particularly in an era of anthropogenic environmental change [NEWS5, Grimm interview, July 2026]. The question is not whether we are capable of helping a suffering whale, because we are. The question is not whether we are legally permitted to help a suffering whale, because we are. The question is not whether the science supports helping a suffering whale, because it does. The question is whether a whale is an animal that deserves to be helped, or whether it is a member of a recovering population whose individual suffering is an acceptable cost of nature taking its course. The answer that Europe gave in 2026, through its institutions, its experts, and its media, is that a whale is the only large mammal on the continent for which suffering is acceptable, diagnosis is unnecessary, treatment is unthinkable, and death is the expected and uncontested outcome. The compassionate conservation literature, the animal welfare science, and the ethical principles that Europe applies to every other category of animal say that this answer is wrong.

Part XIII. The Hope Case: The Lesson That Was Not Learned

The juvenile humpback whale known as Hope, Buckli, and Timmy died off the coast of Denmark on or about 14 May 2026, after a fifteen-month ordeal that included repeated strandings in the Baltic Sea, a controversial private rescue operation involving transport on a barge from Wismar to the Skagerrak, release into open water, and subsequent death in Danish territorial waters. The SNM Critical Brief on the Hope case, published alongside this document, details the failures of that operation and of the institutional response that preceded and followed it. The Hope case dominated the German media for months, generated public demonstrations, and became a subject of parliamentary questions in the Mecklenburg-Vorpommern Landtag [SNM, Critical Brief on Hope, 2026].

Hartwin was already in European waters when Hope died. The first documented sighting of Hartwin was in January 2026, four months before Hope's death. By the time Hope's body was recovered and the post-mortem debate began, Hartwin had been photographed off the Netherlands, had crossed to the Lofoten Islands in Norway, and had appeared off Inverness in Scotland. The entire Hartwin case, from the first sighting in Danish waters on 18 June through the necropsy on 15 August, unfolded in the immediate aftermath of the Hope case. Every expert, every authority, every ministry, and every media outlet that engaged with Hartwin's case was doing so in full awareness of what had just happened with Hope.

What the Hope case should have changed

The Hope case exposed, in extended and very public fashion, the absence of any functional large-whale response capability in northern Europe. The whale stranded repeatedly, while he authorities debated. When a private initiative stepped in and attempted the rescue, it was repeatedly obstructed. Naturally, the whale died and the recriminations continued for months. The public was confused, angry, and divided, and the institutions were embarrassed.

From this experience, several lessons were available to any authority willing to learn them. The first was that remote visual assessment of a humpback whale's condition, conducted from photographs and video by experts who did not examine the animal, had been proved unreliable. Hope's experts predicted death within days because she was in the dead-end Baltic waters, yet Hope survived fifteen months, fed successfully, and refloated herself repeatedly under her own power, and the German experts' own contemporaneous record described her as well nourished [SNM, Critical Brief on Hope, 2026]. The prognosis was wrong in the same direction and for the same reason as Hartwin's would later prove to be: it was formed by looking at a large wild animal from a distance rather than by examining it.

The second lesson was that the institutional framework for marine mammal response in both Denmark and Germany was not equipped to handle a large whale in distress. There was no protocol for diagnosis, no protocol for treatment, no protocol for guided escort, and no protocol for cross-border coordination. The entire Hope case was an improvisation, from the private barge to the contested release site, and the institutions that criticised the improvisation had nothing to offer in its place.

The third lesson was that the Deutsches Meeresmuseum in Stralsund, the institution that would later perform Hartwin's necropsy, had been centrally involved in the Hope case and had direct experience of the consequences of delayed and inadequate response. The same institutional network that watched Hope strand, get rescued, and die was now watching Hartwin swim through the same waters with the same category of visible illness.

The fourth lesson, and perhaps the most important, was that a blow sample had never been collected from Hope either. Throughout Hope's fifteen months in the Baltic, during which the whale was close to shore, approachable by boat, and repeatedly stationary in shallow water, nobody collected a respiratory sample. The diagnostic tools described in this brief, the O'Mahony blow sampling method and the Gulland antibiotic darting method, were available and published at the time of the Hope case. They were not used. Hope died without a diagnosis, just as Hartwin would die without a diagnosis three months later.

What the Hope case actually changed and how the Hope case was used against Hartwin

Nothing. In fact, it could be argued that the Hope case made it worse for all future whales (Hartwin included) who will enter Baltic waters.

When Hartwin appeared off Denmark three weeks after Hope's death, the institutional response was identical in every particular to the response that had failed with Hope. The same experts gave the same prognoses to the same media outlets. The same authorities issued the same statements about nature taking its course. The same protocol was applied, or more precisely, the same absence of a protocol was applied. The only difference was that with Hartwin there was no private barge, no controversial rescue attempt, and no contested release. There was only watching, and waiting, and the press releases, and eventually the body in the Greifswald Bodden.

The institutional response to Hartwin was not merely unchanged by the Hope case. It was actively shaped by it, in the wrong direction. Buch-Illing told Newstime on 24 June that the treatment of Hope in Germany had constituted animal cruelty, that the animal had been tortured, and that he hoped Hartwin would stay in Denmark so the whale would not have to go through the same thing [Newstime, 24.06.2026]. The Newstime coverage on 25 June speculated about whether the multimillionaires were already planning the next rescue mission [Newstime, 25.06.2026]. The KSTA on 6 July warned against misguided animal love [KSTA, 06.07.2026]. Dörnath on 29 July warned against renewed activism and rescue operations [MDR Aktuell, 29.07.2026]. The TAZ on 7 August celebrated the absence of demonstrations and live blogs as evidence that the German public had matured [TAZ, 07.08.2026].

In each of these instances, the Hope case was invoked not as a reason to develop better response capability, but as a reason to do nothing at all. The argument, stated or implied across multiple outlets and multiple experts, was that the Hope rescue had been a failure, that rescue itself was therefore discredited, and that the responsible position was to leave the next whale alone. The entire category of intervention was rejected on the basis of one case, without distinguishing between the specific failures of that case and the general question of whether a sick whale should be diagnosed and treated.

What nobody in this chain of reasoning acknowledged is that the SNM actionable plan for Hartwin was not a barge operation. The Hope case was used to foreclose the entire spectrum of intervention, including methods that bear no resemblance to what was attempted with Hope and that are

documented in the peer-reviewed literature as safe, effective, and minimally invasive. The lesson the institutions drew from Hope was not that they needed better tools. It was that they needed no tools at all, because tools had been tried once and had failed, and therefore the correct response to the next dying whale was to watch it die more quietly.

Two whales, one system, one outcome

Hope and Hartwin died within three months of each other in the same body of water, under the jurisdiction of the same institutional network, and their cases were handled by the same experts. Hope died after a rescue was attempted and failed. Hartwin died after no rescue was attempted at all. The common factor is not the presence or absence of a rescue operation. The common factor is the absence of a diagnosis. Neither whale was ever sampled or was ever examined. Neither whale's condition was ever identified through any method more sophisticated than looking at photographs on a screen. Both whales died of conditions that the necropsy teams documented after death but that nobody attempted to identify during life.

The Hope case was a warning. It demonstrated in the most public and painful way possible that northern Europe has no functional response capability for large whales, that the institutional framework produces death as its default outcome, and that the post-mortem is the only diagnostic the system is built to deliver. Three months later, the same system produced the same outcome with Hartwin. The warning was not heeded as the system was not changed: the whale was not helped. The necropsy was performed on schedule, by the same institution, at the same facility, and the findings were released to the same media that had covered the same story three months earlier. The lesson that was available from the Hope case was that the system needs to be rebuilt from the ground up to include ante-mortem diagnostics, evidence-based treatment protocols, and cross-border coordination for live animals. The lesson that was drawn from the Hope case was that the next whale should be left alone. Hartwin was left alone and he died.

Part XIV. What the Death Proves

The Hope case was complicated. There was a rescue operation, and the rescue operation failed, and the failure gave the institutions a narrative they could use: the intervention caused harm, the private rescuers were reckless, the experts were right to counsel against it. Whether that narrative is accurate is examined in the companion Critical Brief on Hope. What matters here is that the narrative existed, and it allowed the institutional network to attribute Hope's death, at least in part, to the intervention itself. The doctrine of non-intervention was thereby reinforced rather than questioned, because the one intervention that was attempted could be pointed to as the cause of the bad outcome.

Hartwin's death removes that argument entirely.

No intervention was attempted with Hartwin. The institutional process, in its entirety, consisted of watching the animal, commenting on it in the press, issuing press releases, and waiting for the body. The process ran exactly as the protocol intended, exactly as the experts recommended, and exactly as the authorities wished. Nobody did anything that the institutional network did not want done. And the whale, predictably, died.

He died of a bacterial infection with suspected sepsis, with four abscesses along his spine, with pus-filled cavities eroding his vertebral bone, with an empty stomach, with an empty intestinal tract, with a blubber layer of six centimetres, and with skin missing from his snout to his dorsal fin. He died in enormous pain, according to the scientist who examined his body. He died of a condition that a blow sample would have identified and an antibiotic dart would have treated. He died in a country where the law permitted intervention, where the veterinary infrastructure existed, and where the peer-reviewed literature supported every element of the diagnostic and treatment plan that had been presented to the authorities and ignored.

The death of Hartwin is the controlled experiment that the Hope case could not provide. Hope's death can be debated endlessly, because there was an intervention to blame. Hartwin's death cannot be debated, because there was no intervention to blame. The only variable was the institutional decision to do nothing, and the outcome of that decision is a dead whale with a treatable condition. The doctrine of non-intervention was tested in its purest possible form, without any confounding rescue operation, without any private initiative, without any external interference, and it produced exactly the outcome its critics predicted: a prolonged, painful, preventable death.

Every expert who said the whale would die was right. Every expert who said nothing could be done was wrong. The necropsy is the proof. The whale died of something that could have been treated. The experts were correct about the outcome and incorrect about its inevitability, and the distance between those two things is the distance between a prognosis and a death sentence. The prognosis said the whale would probably die. The institutional response turned that probability into a certainty by refusing to do the one thing that could have changed it: collect a sample and find out what was wrong.

Part XV. The Contradiction: Preferring Necropsy Over Diagnosis

On 24 June 2026, Heiko Buch-Illing told Newstime that regardless of the cause of death, the stranded whale would be left to decompose, because that was the natural process. He told the same outlet that the research centre's approach was to let the whale strand and then collect samples from the carcass [Newstime, 24.06.2026]. This statement, made by the head of a research institution that co-authored the Danish stranding protocol, is the clearest expression of a principle that governed every institutional decision in the Hartwin case: the preferred diagnostic event is the necropsy, and the preferred state of the animal at the time of diagnosis is dead.

The contradiction at the heart of this position is so straightforward that it barely requires elaboration, but it needs to be stated plainly because it was never stated plainly in the seven months of press coverage, expert commentary, and institutional correspondence that accompanied Hartwin's decline.

The institutions wanted samples and they said so publicly. Buch-Illing's statement about letting the whale decompose so that samples could be taken was a statement of scientific interest in the animal's pathology. The Deutsches Meeresmuseum performed the necropsy with evident thoroughness, documenting four abscesses, porous vertebrae, enlarged lymph nodes, blubber thickness, gastrointestinal contents, parasite load, and suspected cause of death. The necropsy report is a detailed and professional document. The institution clearly values diagnostic information and has the expertise to generate it.

The same diagnostic information, and more, could have been generated from a living animal using the blow sampling method. The blow sample captures bacteria, fungi, viruses, hormones, cytokines, lung epithelial cells, DNA, and pollutant metabolites [O'Mahony et al., 2024]. It provides a comprehensive health profile while the animal is alive, while the tissue is fresh, while the organs have not begun to decompose, and while the results can still be used to inform a treatment decision. The necropsy, by contrast, provides diagnostic information from a dead animal whose organs have already begun to autolyse, as the Deutsches Meeresmuseum's own report noted when it stated that the brain, lungs, and kidneys could no longer be sampled histologically [Deutsches Meeresmuseum, Vorläufige Sektionsergebnisse, 15.08.2026].

The institutional position was therefore as follows: we want to know what is wrong with this animal, but we will wait until the animal is dead to find out, even though the method for finding out while the animal is alive exists, is published, is non-invasive, and would provide better data than the post-mortem because the tissue would not have decomposed. The institutions preferred a dead whale they could study over a living whale they could diagnose and potentially treat. The scientific interest in the animal was real, but the willingness to act on that interest while the animal was alive was zero.

This is not a matter of capability or resources. The same institution that mobilised a team, secured a facility, transported a seven-tonne carcass, and conducted a two-day necropsy within 36 hours of the body being reported could have mobilised a drone operator, flown through the whale's blow in a harbour where boats were within metres of the animal, and sent the sample to a laboratory within a single afternoon. The necropsy required more equipment, more personnel, more time, more space,

and more money than the blow sample would have required. The post-mortem infrastructure worked and there was no debate who would pay for all that. The ante-mortem infrastructure did not exist, because nobody built it, because the protocol does not call for it, because the doctrinal position is that the appropriate time to examine a large whale is after it has died.

The Hartwin case is not a case of institutions that did not care about the animal's pathology. They cared enough to perform a meticulous necropsy. It is a case of institutions that cared about the pathology but not about the patient. The science was valued, but the animal was not. The information was wanted, but the life was not. The contradiction is complete, and it is written into the structure of the Beredskabsplan, which contains detailed provisions for the collection and analysis of dead specimens and no provisions whatsoever for the assessment or treatment of living ones. The protocol is, in the most literal sense, a document for the dead. Hartwin was alive for seven months in the waters of its signatories, and the protocol had nothing to offer him until he stopped breathing.

Part XVI. Recommendations

The Hartwin case, read alongside the Hope case, demonstrates that the current European institutional framework for responding to large whales in distress is not functional. It is built to collect dead specimens, not to help living animals. The following recommendations are directed at the governments of Denmark, Germany, and the other European states whose waters large whales are increasingly entering, at the European Commission, at ASCOBANS, and at the scientific and veterinary institutions that advise them. They are based on the peer-reviewed literature cited throughout this brief, on the operational precedents documented in the international rescue and treatment record, and on the specific failures exposed by the Hartwin and Hope cases.

1. Establish a minimum diagnostic standard for live large whales

No European stranding protocol currently requires or even contemplates a diagnostic assessment of a live large whale before the decision is made to abandon the animal to natural processes. The Danish Beredskabsplan contains no provision for collecting a blow sample, a blood sample, or any other diagnostic specimen from a living cetacean over four metres in length. This must change. SNM recommends that all European stranding and marine mammal response protocols be amended to include a mandatory non-invasive diagnostic assessment for any large cetacean observed in distress or showing signs of illness in territorial waters. At minimum, this assessment should include blow sample collection using a drone or pole-and-cup method as described by O'Mahony et al. (2024), followed by microbiological culture, cytological analysis, and hormonal profiling. The assessment should be initiated within 48 hours of the first confirmed sighting of a visibly sick animal.

2. Procure and pre-position blow sampling and antibiotic darting equipment

The equipment required for blow sampling is a consumer drone (€1,000 to €3,000) fitted with sterile petri dishes, or a pole of three to five metres with a sterile cup. The equipment required for antibiotic darting is a Paxarms or equivalent ballistic syringe projector system with appropriate needles and tethering, and a supply of long-acting broad-spectrum antibiotics suitable for cetacean intramuscular delivery. This equipment should be procured and pre-positioned at a minimum of three locations along the European North Sea and Baltic Sea coasts: one in Denmark, one in Schleswig-Holstein, and one in Mecklenburg-Vorpommern. The total procurement cost for all three stations would be less than the cost of a single necropsy operation. Veterinary personnel at each station should be trained in the Gulland et al. (2008) darting method and the O'Mahony et al. (2024) blow sampling method, using the NOAA Paxarms MK24C protocol demonstrated in the 2020 North Atlantic right whale calf intervention as an operational reference.

3. Revise the Danish Beredskabsplan for Havpattedyr

The six deficiencies identified by SNM in the Letter to Danish Authorities of 27 June 2026 remain unaddressed. The Beredskabsplan should be revised to include provisions for veterinary intervention on live large whales, a rescue and refloating methodology based on the published international literature, an acoustic herding and luring capability, a minimum diagnostic standard for assessing live animals before deciding to abandon them, a framework for cross-border coordination in live stranding and distressed-animal cases, and a distinction between seal pup rehabilitation (where the current non-intervention policy may be appropriate) and large whale medical intervention (where it

is not). The four-metre threshold should be replaced with a clinical assessment framework that evaluates the feasibility of intervention based on the animal's condition, behaviour, location, and the available methods, rather than on body length alone.

4. Establish a cross-border coordination framework for migratory cetaceans in distress

Hartwin crossed eight countries. No country contacted any other country about the animal's welfare. The MV Ministry stated publicly that it had had no contact with the Danish authorities. The EU Habitats Directive, the Bern Convention, CMS, and ASCOBANS all create obligations to protect strictly protected migratory species, but none of them produced a single coordinated action during the seven months of Hartwin's documented decline. SNM recommends the establishment of a Global Whale Rescue Network. The network should be activated automatically when a large cetacean is confirmed in distress in the waters of any participating state.

5. Include ante-mortem clinical history in all necropsy reports

The Deutsches Meeresmuseum's preliminary necropsy report on Hartwin presented the terminal pathology without reference to the eight-month sighting chronology that was publicly available and freely accessible. This omission erased the window during which intervention could have changed the outcome and reinforced the doctrinal narrative that the animal was always beyond help. SNM recommends that all European cetacean necropsy reports be required to include, where available, a documented clinical history section incorporating the sighting record, photographic evidence of condition at different stages, and an assessment of the disease trajectory over time. Where a publicly documented sighting record exists, the necropsy team should be required to consult it and to assess at what stage the condition identified post-mortem might have been diagnosed and treated ante-mortem.

6. Incorporate compassionate conservation principles into European marine mammal management

The peer-reviewed conservation ethics literature, documented in Part XII, increasingly recognises that individuals matter regardless of population status, that compassion in conservation means caring for individuals, populations and species, and that a recovering population does not diminish the intrinsic value or suffering of a single animal. European marine mammal management currently operates on a framework that treats individual large whales as expendable units of a recovering population, a position that is contradicted by the published literature from Oxford, Massey, the University of Technology Sydney, the University of Fribourg, and dozens of other institutions. SNM recommends that the European Commission, ASCOBANS, and the national environment ministries of all North Sea and Baltic Sea coastal states formally review the compassionate conservation literature and issue a policy statement on the ethical obligations of EU member states toward individual large cetaceans in distress, with particular reference to the principles of minimize harm, individuals matter, and respect for autonomy as articulated by Katz (2024), Ramp and Bekoff (2015), and Johnson et al. (2019).

7. Fund research into sustained-release antibiotic delivery for free-swimming cetaceans

The logistical challenge of delivering multiple antibiotic doses to a free-swimming whale is real and is acknowledged in this brief. It is also being actively addressed by veterinary science through the

development of sustained-release, antibiotic-impregnated biodegradable microspheres and long-acting depot antibiotic preparations. SNM recommends that the European Commission, through its Horizon Europe programme or equivalent funding mechanism, issue a targeted research call for the development and field validation of sustained-release antibiotic delivery systems for large cetaceans, including pharmacokinetic studies in humpback whales and other baleen species, and field trials of depot preparations administered via ballistic syringe to tagged and monitored animals. The cost of such a programme would be a fraction of the annual European marine mammal research budget and would provide the veterinary tools that the next Hartwin will need.

8. Recognise the role of citizen science in cetacean welfare monitoring

The sighting chronology documented in Part III was compiled entirely by citizens. Fishermen, harbour workers, birdwatchers, kayakers, and people with phones created the only continuous record of Hartwin's movements and condition that exists. The institutional marine mammal research network contributed not a single diagnostic observation. SNM recommends that European marine mammal management formally incorporate citizen sighting data into its monitoring and response framework, establish a standardised reporting platform accessible to members of the public in all coastal states, and create a mechanism by which citizen reports of a visibly sick or injured large cetacean trigger a mandatory institutional response within 48 hours, including deployment of a blow sampling team to the animal's last known position.

9. End the practice of issuing terminal prognoses without diagnostic data

In the Hartwin case, a terminal prognosis was issued publicly on 24 June 2026 on the basis of a visual assessment of the whale's skin colour from photographs and video. The prognosis was amplified across the German-language media as expert consensus. It was revised three weeks later by the same expert when the whale did something the prognosis said it could not do. The necropsy subsequently showed that the expert's assessment of the cause of the skin condition (parasites) was wrong. SNM recommends that European marine mammal research institutions adopt a policy of not issuing public prognoses for individual animals unless a diagnostic assessment has been conducted. Where a prognosis is offered to the media on the basis of a visual assessment alone, the expert should be required to state explicitly that no diagnostic sample has been collected, that the assessment is speculative, and that the published literature contains non-invasive methods for establishing a diagnosis that have not been attempted.

These recommendations are not aspirational. Every element of every recommendation is based on a method, a protocol, a legal pathway, or an institutional model that already exists somewhere in the world. Blow sampling is published. Antibiotic darting is published and has been operationally demonstrated by NOAA. Acoustic herding has been used successfully over distances exceeding 100 kilometres. Cross-border coordination frameworks exist for marine mammal response in the United States and Australia. Compassionate conservation principles are published in mainstream conservation journals by researchers at leading universities. Sustained-release antibiotic technology is under active development. Citizen science platforms exist in every European coastal state. The tools are not missing. What is missing is the decision to use them. Hartwin died because that decision was not made. The next whale does not have to.

10. Support and develop ECHO: Early Cetacean Hazard Observation

The companion Critical Brief on Hope proposes ECHO, a pre-stranding detection, deterrence, and escort framework whose operational objective is to prevent large whale strandings and entrapments by detecting cetaceans as they approach the narrow passages leading into unsuitable waters and guiding them back to the open sea before they become trapped. ECHO comprises three operational pillars: monitoring and detection, deterrence, and escorting.

The monitoring pillar combines fixed-position automated detection stations at each bottleneck passage of the Danish Straits (the Øresund, the Great Belt, and the Little Belt), incorporating daytime optical cameras, thermal imaging cameras for night-time detection, and passive acoustic hydrophone arrays capable of identifying baleen whale vocalisations. An ECHO AI detection model, trained on a seed dataset of Baltic cetacean imagery, would enable automated species identification from optical and thermal feeds in near-real time. This is supplemented by a citizen-science reporting network and the Whale Detective public reporting channel, which invites anyone on or near the water to report sightings of large cetaceans [SNM, Critical Brief on Hope, 2026, Recommendation 11].

The escort pillar deploys trained rapid-response teams using proven non-invasive herding techniques, including acoustic lures, vessel formations, and bubble nets, to guide detected animals back through the straits to the North Sea. The Humphrey rescues of 1985 and 1990 demonstrated these techniques over distances exceeding 80 kilometres in San Francisco Bay. ECHO's escort teams would develop, drill, and maintain these techniques specifically for the geography of the Danish Straits and the western Baltic.

Hartwin's case demonstrates why ECHO is needed alongside the diagnostic and treatment recommendations above. Hartwin entered the Baltic through the Danish Straits around mid-June 2026. Had an ECHO detection station existed at the Great Belt or Little Belt, his entry would have been detected within hours. An escort response could have been initiated while the animal was still in open water and still mobile enough to be guided. Instead, he was first noticed by citizens in Danish waters on 18 June, was not identified as a whale of concern until 20 June when citizen Linda Frølund Hansen photographed his deteriorating skin, and was publicly declared beyond help by 24 June. ECHO closes the door before the animal enters unsuitable waters. The diagnostic and treatment framework proposed in Recommendations 1 through 7 is the response for when the door was not closed in time.

11. Support and develop GWRA: Global Whale Rescue Alliance

The companion Critical Brief on Hope proposes the establishment of a parallel global whale rescue network, the Global Whale Rescue Alliance (GWRA), that operates outside the existing stranding-response institutional network and offers local authorities a practical alternative when the established system refuses to act. The model follows the precedent of private search-and-rescue organisations such as the RNLI in the United Kingdom, which is a private charity providing the vast majority of UK maritime search and rescue via volunteer crews, operating under a declared service to HM Coastguard [SNM, Critical Brief on Hope, 2026, Recommendation 12].

GWRA is governed by six irrevocable founding principles: no euthanasia (the default institutional response of euthanasia for large whale strandings is rejected as a categorical rather than clinical application); no abandonment (GWRA will never abandon a stranded animal); immediate medical

intervention (including pharmacological support from the moment of engagement); post-release monitoring (satellite tags on every rescued animal); total transparency (every case documented and published); and speed (rescue initiated within hours of stranding, not weeks).

GWRA operates on a two-pillar structure. The first is a federation of independent, locally-based Certified Partners trained and accredited by GWRA, who hold their own national permits and provide regional rescue capability under standardised protocols. The second is a small, centrally maintained rapid-deployment team that can deploy internationally within 48 hours for European operations, with pre-positioned equipment caches including broad straps, pontoon systems, acoustic equipment, satellite tags, veterinary kits, and portable water-management systems.

The Hartwin case, where a visibly sick whale crossed eight countries over seven months and was helped by none of them, demonstrates the need for GWRA as forcefully as the Hope case does. A GWRA Certified Partner team in the Baltic region, equipped with blow sampling and antibiotic darting capability, operating under the six founding principles, and authorised through pre-negotiated memoranda with the relevant national authorities, could have deployed to Hartwin's position in the Kiel Fjord or Wismar harbour within hours, collected a blow sample, identified the bacterial infection, and initiated antibiotic treatment within days. The institutional network that was asked to do this and declined would not have needed to do anything except grant access. GWRA exists to provide the capability that the institutional network refuses to build and the willingness that the institutional network refuses to demonstrate.

Part XVII. Consolidated Timeline

The following table integrates all sightings, expert statements, authority responses, SNM correspondence, media events, and necropsy findings into a single chronological record.

Date	Category	Event
~Dec 2025	*Sighting*	Possible first sighting off Egmond aan Zee, Netherlands. Not confirmed as same animal.
18 Jan 2026	*Sighting*	Bloemendaal, Netherlands. First confirmed sighting (waarneming.nl).
2 Feb 2026	*Sighting*	Bloemendaal aan Zee, Netherlands (waarneming.nl).
13 May 2026	*Sighting*	Lofoten, Norway. Skin condition visible. Citizen video, YouTube.
14 May 2026	*Background*	Hope (Timmy) found dead off the coast of Denmark.
23 May 2026	*Sighting*	Beauly Firth, Inverness, Scotland. Heavy cyamid load noted by researcher.
3 Jun 2026	*Sighting*	South Shields Pier, England.
5 Jun 2026	*Sighting*	Kruiningen and Scheldt River near Doel, Belgium. KBIN confirms. Skin in poor condition. First health concerns raised publicly.
18 Jun 2026	*Sighting*	Odde Harbor, Zealand, Denmark. First documented sighting in Danish waters.
20 Jun 2026	*Sighting*	Lillebælt, Middelfart, Denmark. Photographs by Linda Frølund Hansen show extensive whitening.
23 Jun 2026	*Sighting*	Fænøsund, Denmark. Swims past Buch-Illing's home at Fjord&Bælt, Kerteminde.
24 Jun 2026	*Expert*	Buch-Illing tells Newstime: 'No chance. He will die.' Predicts stranding within one month.
25 Jun 2026	*Authority*	MV Ministry tells Newstime: 'no legal basis to interfere with its life.' No contact with Danish authorities.
27 Jun 2026	*SNM*	Letter to Danish EPA and Nature Agency. Identifies six deficiencies in Beredskabsplan. Requests immediate veterinary assessment.
29 Jun 2026	*Expert*	Dörnath tells MDR: Baltic Sea is 'a dead end' for large whales. Warns of poor chances.
29 Jun 2026	*Media*	Saarbrücker Zeitung: MV Ministry issues 'clear rejection.' No legal basis.
30 Jun 2026	*SNM*	Follow-up letter to Danish EPA. Notes agency response did not engage with substance.
30 Jun 2026	*SNM*	Open Letter to Buch-Illing and Kinze. Documents omitted rescue literature and IMF valuation.
30 Jun 2026	*Expert/Media*	Frankfurter Rundschau amplifies Buch-Illing death prediction across wire services.
5 Jul 2026	*Sighting*	Holnis, Flensburg Fjord. First confirmed entry into German waters.
6 Jul 2026	*Media*	Kölner Stadt-Anzeiger warns against 'misguided animal love.'
9–12 Jul 2026	*Sighting*	Aarhus, Vejle Fjord, Bogense, Denmark. Extensive Danish sightings continue. 148 km in 4 days.
12 Jul 2026	*SNM*	Letter to Danish Animal Ethics Council. Asks whether state has obligation to diagnose before abandoning.
16 Jul 2026	*Sighting*	Heiligenhafen, Germany. 140 km south of last Danish sighting in 3 days.
17 Jul 2026	*Expert*	Buch-Illing revises prognosis: animal is 'fitter than initially assumed.' No new

Date	Category	Event
		diagnostic data.
17–18 Jul 2026	*Sighting*	Kiel Fjord, Germany. Enters inner fjord near Hörnbrücke despite SH Ministry stating whale moving to open sea.
Jul 2026	*SNM*	Actionable Plan for Hartwin White Paper published. Six-step diagnostic and treatment plan.
23 Jul 2026	*SNM*	Consolidated letter to German authorities. Addressed to Minister Goldschmidt, ITAW, Kreis Plön. Full legal, scientific, ethical case.
24 Jul 2026	*Sighting*	Inner Flensburg Fjord, Germany.
27 Jul 2026	*Authority*	MV Ministry press release No. 235/2026: whale in Wismar, 'appears to be healthy.' Species 'not definitively determined.'
29 Jul 2026	*Expert/Media*	Dörnath tells MDR: 'This remains a dead end.' Warns against activism and rescue operations.
29 Jul 2026	*Sighting*	Wustrow / Darß, Germany. Continuing east.
7 Aug 2026	*Media*	TAZ publishes 'No seagull crows for him.' Mocks SNM and actionable plan. Celebrates absence of public outcry.
9 Aug 2026	*Sighting*	Woliński Park Narodowy, Poland. 8th country. Protruding spine. WWF Poland cannot identify species.
12–13 Aug 2026	***Death***	**Estimated date of death.**
13 Aug 2026	***Recovery***	**Body found in Greifswald Bodden at 08:16. Recovered by WSA Ostsee. Transferred to Deutsches Meeresmuseum at 19:30.**
14–15 Aug 2026	***Necropsy***	**Necropsy at NAUTINEUM, Stralsund. Four abscesses (110 cm, 60 cm, 13.5 cm, 13 cm). Porous vertebrae. Empty stomach. 6 cm blubber. Suspected sepsis.**
18 Aug 2026	*Publication*	Preliminary necropsy findings released. Probable cause of death: bacterial infection, suspected sepsis. Lisa Klemens: 'enormous pain.'

Part XVIII. Source List

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