

No substitute for the wild

Ending captive breeding of polar bears and dolphins in Queensland

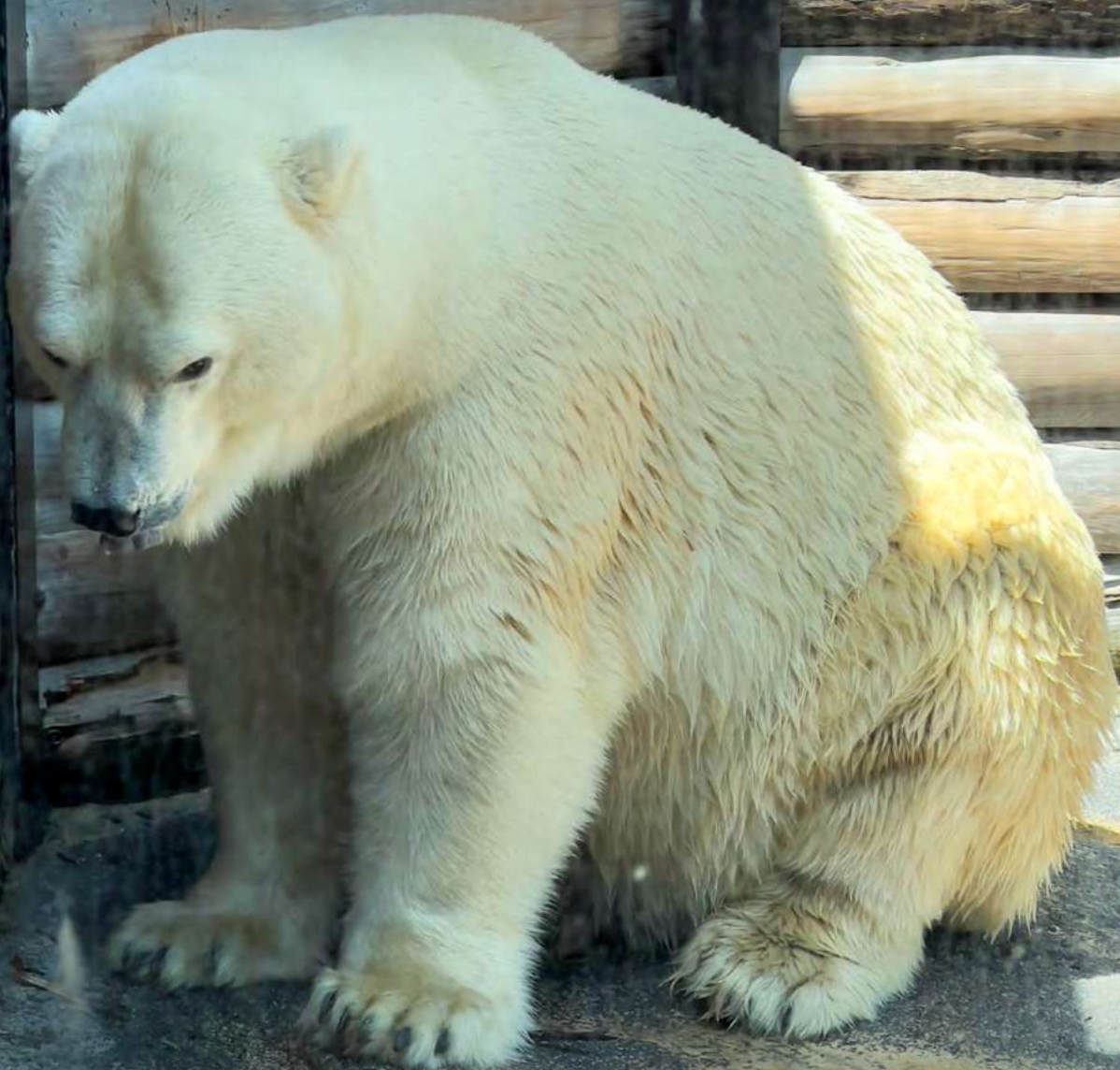


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Cover image: Captive polar bear at Sea World Gold Coast.



About the authors

Action for Dolphins advocates for dolphins to live free from suffering. We work tirelessly to change laws, educate the public, and promote institutional reforms that lead to safer, healthier lives for dolphins and the marine ecosystem they need to thrive.

For more than 75 years, World Animal Protection has been moving people, companies and governments to act to improve the lives of animals. We campaign to transform the tourism industry from one that harms to one that ensures every wild animal can thrive in an abundant natural habitat that is humanely protected.

Together, we played an instrumental role in achieving the legislative ban on captive dolphin breeding in New South Wales. We are advocating for an end to captive breeding of dolphins and polar bears in Queensland and for a phase-out of their use for entertainment.



Image: A bottlenose dolphin swimming in the open ocean off Baja California Sur. © Gerald Corsi

Executive summary

Sea World on the Gold Coast¹ is the last facility in Australia breeding polar bears and dolphins for display and entertainment, under Queensland Government regulation and oversight. Sea World claims their animal enclosures replicate the naturalistic environment of the species and animal welfare is their highest priority.² The evidence presented in this report shows that the mere act of keeping polar bears and dolphins in captivity at a theme park is at odds with this claim due to the structural constraints of captivity.

This report focuses on dolphins and polar bears because both species have complex ecological needs. They are long-lived, with the estimated lifespan for a polar bear being 20 - 30 years³ and 40 - 60 years for a bottlenose dolphin.⁴ They are highly mobile and in the wild they live in environments defined by vast space, environmental variation, and behavioural choice.

The research summarised in this report shows wild polar bears and dolphins use vast, complex environments to meet their needs.⁵ Polar bears occupy vast Arctic ranges, depend on cold conditions, and manage social contact through distance and avoidance.⁶ Dolphins travel long distances each day, forage across varied habitats, rely on sound to navigate and communicate, and regulate their social lives through flexible groupings.⁷

Captivity limits these needs. The analysis in this report draws on peer-reviewed science and advocacy insights. When considered together, the evidence highlights that the physical spaces, social settings and environmental conditions provided to polar bears and dolphins at Sea World fall short of the species-specific needs of these animals when compared to the wild.

These conditions arise due to the inherent constraints of captive facilities. As a result, the same welfare constraints apply year after year. Research shows that wide-ranging species like polar bears and dolphins can experience poorer welfare when confined to restricted, simplified spaces.⁸

Breeding extends this problem. Each dolphin calf or polar bear cub born in captivity will experience conditions shown to be mismatched to their species-specific needs. Continued breeding increases the number of animals exposed to those conditions and lengthens the period over which Sea World must care for these animals and the Queensland Government must regulate their welfare. A breeding ban addresses the problem at its source. It stops the captive population from growing and prevents future dolphins and polar bears from being born into the same constraints.

The structural limitations of captivity for polar bears

Captivity prevents a polar bear's species-specific needs from being fully met.



Space restrictions



Simplified habitats



Limitations with controlling social environment



Chronic noise exposure



For polar bears in Queensland, not living in an Arctic climate

The structural limitations of captivity for dolphins

Captivity prevents a dolphin's species-specific needs from being fully met.



Space restrictions



Simplified habitats



Limitations with controlling social environment



Chronic noise exposure

A breeding ban aligns with many other regions that have acted to prevent new generations of dolphins from entering captivity due to welfare concerns, from Canada to Mexico. The travel sector is also moving in the same direction, with well known travel companies creating animal welfare policies and no longer selling or promoting tickets to venues that display dolphins and whales for entertainment.

A breeding ban is a sensible, proportionate response grounded in science, public expectations, and good long-term governance. We are urging Sea World and the Queensland Government to work together and take action in implementing a breeding ban of dolphins and polar bears.

What we recommend: For Sea World and the Queensland Government to work together and take action in implementing a breeding ban of dolphins and polar bears.



Image: A bottlenose dolphin surfacing from the open ocean water.
© Madelein Wolf/Getty Images Signature

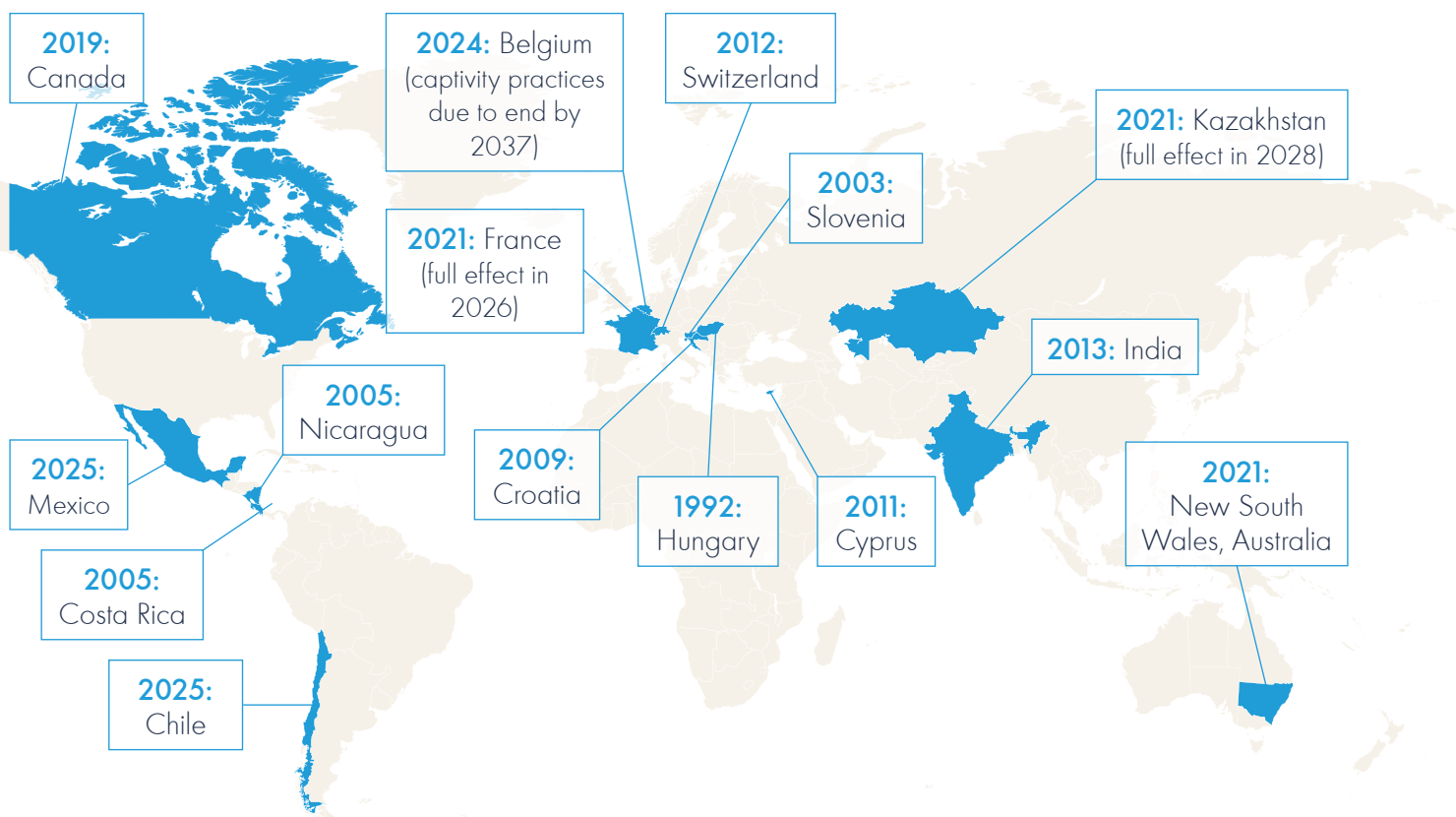
Shifting attitudes about keeping animals in captivity

Expectations for how animals in entertainment are treated have risen, as people question whether intelligent, long-lived, wide-ranging species like dolphins belong in captivity, performing tricks and taking part in close contact encounters. That shift is reflected in regulatory bans all over the world to stop new generations of dolphins being kept in captivity.

In Australia, New South Wales is the most recent state to ban the captive breeding of dolphins, leaving Queensland as the only state with a captive dolphin breeding facility: Sea World, under Queensland Government regulation.

Regions worldwide are moving to end dolphin captivity

These regions are progressively banning dolphin breeding, dolphin importation or dolphin displays, effectively ending the practice.



The travel sector is moving in the same direction. Well known travel companies, including Expedia Group, Jet2holidays, Nordic Leisure Travel Group, Tripadvisor and Virgin Holidays, have all created animal welfare policies and no longer sell or promote tickets to venues that display dolphins and whales for entertainment to align with changing public sentiment.⁹ Furthermore, Airbnb and easyJet holidays have established animal welfare policies pledging they will not sell or promote venues that keep marine mammals in captivity.¹⁰ These decisions reflect shifting public expectations about using sentient, intelligent animals for entertainment.

Survey data reflects this shift. In a 2024 survey by the Zoo and Aquarium Association Australasia, 74% of Australian respondents agreed that the welfare

of animals in Australian zoos and aquariums is something they show concern about (ranging from 'a little' to 'very concerned'), an increase from 59% in 2020 and 69% in 2023.¹¹ In 2020, World Animal Protection reported 66% of Australians preferred to see dolphins in the wild.¹²

A national survey commissioned by World Animal Protection in January 2026 shows strong and consistent community concern about keeping dolphins and polar bears in captivity at Sea World, and clear support for ending the breeding of these animals in captivity. Results show closely aligned views between the Queensland sample and the broader national sample, with Queenslanders often expressing equal or stronger opposition to captivity and stronger support for breeding bans.¹³

Support for ending captive breeding at Sea World

Survey responses from Australians

62% would support a ban on Sea World breeding polar bears

58% would support a ban on Sea World breeding dolphins

87% think the Gold Coast climate is extremely unacceptable or somewhat unacceptable for polar bears to live

79% find it extremely unacceptable or somewhat unacceptable that polar bears are kept in captivity at Sea World on the Gold Coast

59% find it extremely unacceptable or somewhat unacceptable that dolphins are kept in captivity at Sea World on the Gold Coast

Survey responses from Queenslanders

68% would support a ban on Sea World breeding polar bears

59% would support a ban on Sea World breeding dolphins

89% think the Gold Coast climate is extremely unacceptable or somewhat unacceptable for polar bears to live

80% find it extremely unacceptable or somewhat unacceptable that polar bears are kept in captivity at Sea World on the Gold Coast

58% find it extremely unacceptable or somewhat unacceptable that dolphins are kept in captivity at Sea World on the Gold Coast

Source: National survey of 1,018 Australians, conducted in January 2026

Polar bears

Sea World houses three polar bears.¹⁴ The two male polar bears were born in the wild, housed in a facility in Canada and transferred to Sea World. The female polar bear was born at Sea World.¹⁵

The structural constraints of captivity discussed below sit uneasily with Sea World's assurances that its exhibits are naturalistic, and designed for animals to express normal behaviours.¹⁶ Based on the research, we believe enclosures of this nature lack the scale, environmental diversity and behavioural opportunities that characterise polar bears' natural habitats. This restricts the polar bears from fully expressing their species-specific behaviours.

Temperature mismatch

The publicly accessible areas of the Polar Bear Shores exhibit are located outdoors. Sea World describes the exhibit as an enclosure with a large pool, freshwater springs, and a variety of land surfaces.¹⁷ Sea World presents the Polar Bear Shores enclosure as a replica of an Arctic summer, based on the Hudson Bay region in Canada. This framing suggests the enclosure reflects temperature conditions experienced by wild polar bears in that region.¹⁸

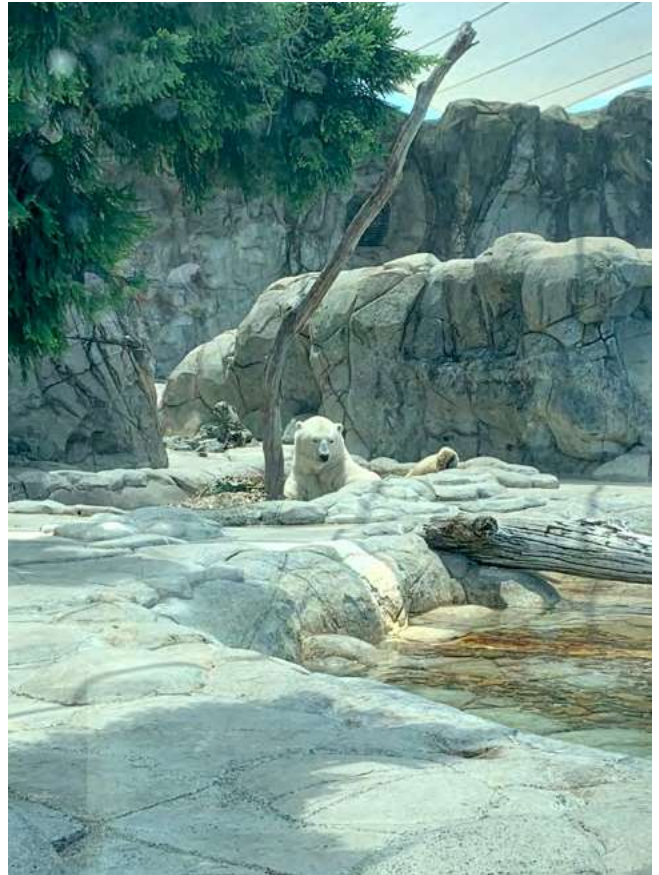


Image: A polar bear in Sea World's Polar Bear Shores enclosure during summer © Action for Dolphins



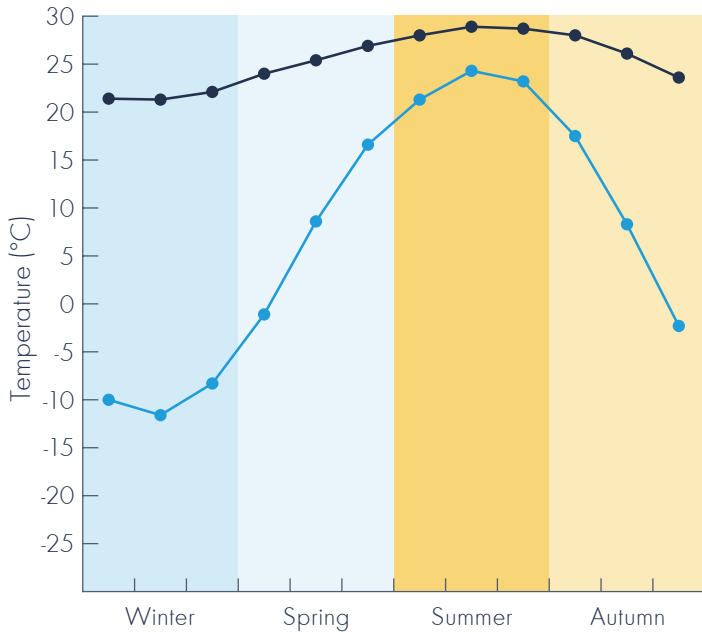
Image: Sign displayed at Sea World's Polar Bear Shores enclosure, photographed November 2025. The sign describes the enclosure as an Arctic summer environment based on Hudson Bay, Canada. © Voiceless

Climate data from Environment and Climate Change Canada and the Australian Bureau of Meteorology tell a different story. Average temperatures in the Gold Coast often exceed those recorded in the Hudson Bay region and remain elevated across the year.¹⁹ The following charts compare seasonal daily maximum and minimum temperatures using long-term climate normals for both regions.²⁰ These comparisons illustrate regional climate differences rather than conditions inside the enclosure at any given moment.

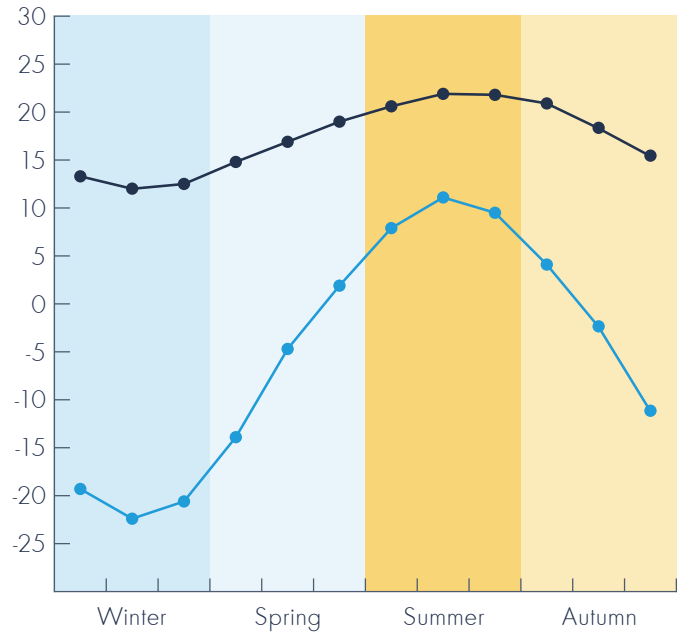
Seasonal temperature comparison: Hudson Bay and Gold Coast

Average temperatures on the Gold Coast sit above what polar bears experience in the Arctic, and they remain high throughout the year.

Daily maximum temperature, Climate normals (1991 - 2020)



Daily minimum temperature, Climate normals (1991 - 2020)



● Hudson Bay, Canada ● Gold Coast, Australia

Note on seasonal definitions: We understand that standard scientific usage varies in its description of Arctic seasons. We have included typical seasons for ease of comparison. Hudson Bay data ordered Dec-Nov and Gold Coast data ordered June-May.

Higher temperatures have been linked to measurable physiological stress responses in polar bears. A large peer-reviewed study analysed over 8,000 faecal samples from captive polar bears and examined how temperature affected cortisol, a hormone involved in physiological stress responses.²¹ The authors found that in adult polar bears cortisol levels increased when ambient temperatures exceeded 20°C, after accounting for age, sex, humidity, and breeding season. This increase is interpreted as a response to higher thermoregulatory demands, meaning the polar bears' bodies needed to expend more effort to maintain a stable internal temperature. The authors noted that repeated elevations in cortisol associated with higher temperatures could contribute to cumulative physiological load over time, even when immediate harm is not observed. This study measured physiological stress markers and did not assess behavioural welfare, health outcomes, or long-term impacts.²²



Image: A polar bear sitting in shallow water within Sea World's Polar Bear Shores enclosure. © Wildlife Portraits

Limitations with size and environmental complexity

Size

Multiple studies have tracked polar bears' home ranges, which is the area they occupy for their everyday activities. Researchers have found that extensive movement across large, variable environments is a defining feature of polar bears' ecology and behaviour.²³

Researchers found that polar bears in the Southern Beaufort Sea who spent summers on land had an average home range of 22,000km², whereas polar bears who remained on sea ice during summer increased their home range to an average of 176,000km² as ice melted.²⁴ Other researchers found the average home range for female polar bears across different regions was 125,500km².²⁵

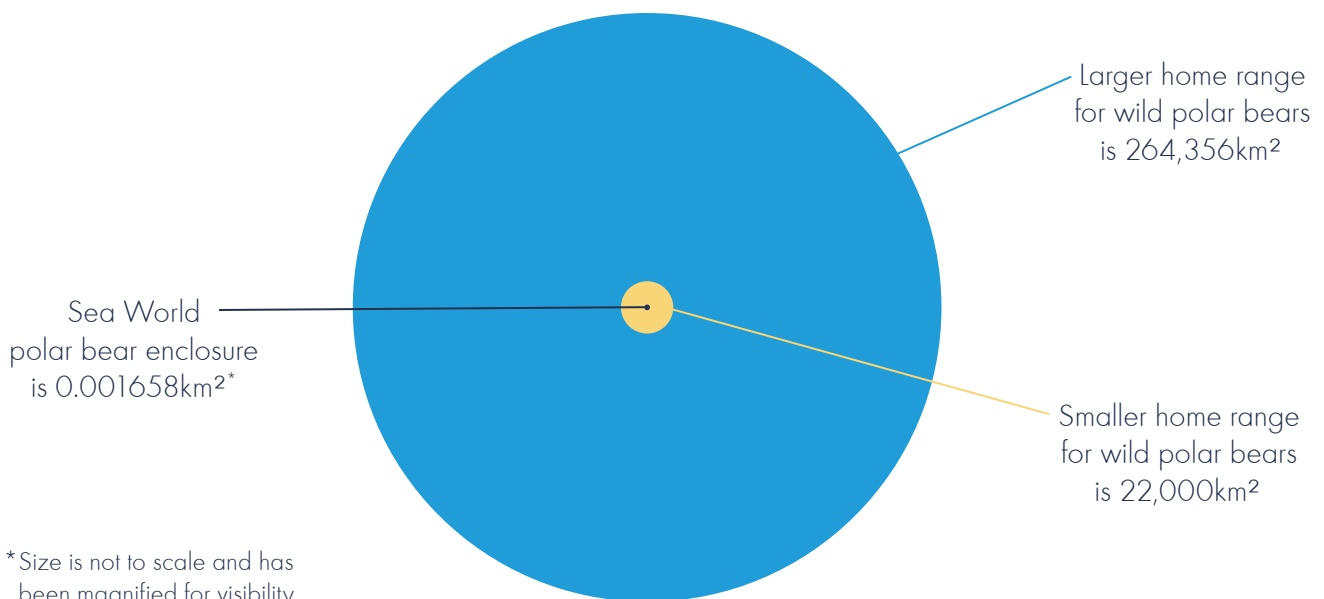
Researchers who studied polar bears in Hudson Bay found an average home range of 106,613km².²⁶ Different researchers reported larger average home ranges for Hudson Bay polar bears, including approximately 264,356km² in the 1990s and 353,557km² between 2004 and 2012.²⁷ While methods differ between studies, all report home ranges that extend across tens to hundreds of thousands of square kilometres.



Researchers say a polar bear's typical enclosure size is about **one-millionth** of its minimum home-range size.²⁹

Image: A wild polar bear in the Arctic.
© Alexey Seafarer/Getty Images Pro

The permit provided to Sea World by the Queensland Department of Primary Industries and released under Right to Information laws outline that the Polar Bear Shores enclosure is 0.001658km² (1,658m²).²⁸



*Size is not to scale and has been magnified for visibility.

Environmental complexity

Arctic marine environments are dynamic landscapes composed of a shifting mosaic of sea ice, open water, and coastal land.³⁰ These variable conditions offer polar bears multiple opportunities to hunt, primarily on annual sea ice located over the shallow, productive waters of the continental shelf.³¹ Polar bears are also highly proficient swimmers, navigating through open water between drifting floating ice or completing long-distance journeys to reach stable habitat.³²

Researchers found when animals like polar bears have adapted to such large, variable habitats, they are more susceptible to negative behavioural outcomes when housed in spatially restricted and environmentally simplified settings.³³ The authors explain these mammals can exhibit high levels of stereotypic pacing

and elevated infant mortality, attributed to limitations on movement and behavioural expression.

A multi-institutional study of captive polar bears reported high levels of repetitive pacing, an abnormal behaviour used in animal welfare science as an indicator of potential welfare compromise.³⁴ These researchers identified associations between pacing frequency and changes in faecal glucocorticoid metabolites, a physiological measure used to assess stress responses, which varied depending on the level of enrichment and space provided.

Taken together, this research shows captive enclosures limit movement and behavioural choice relative to the environments under which polar bears evolved.



Image: A polar bear in the Sea World Polar Bear Shores enclosure. © Wildlife Portraits

Social environment

Polar bears are naturally solitary animals, with adults typically living alone outside of brief mating periods or when females are caring for cubs.³⁵ In the wild, interactions between unrelated adults are infrequent and temporary, and potential conflict is avoided by individuals maintaining distance from each other and withdrawing from encounters.³⁶ The ability to regulate social contact through space is a key feature of polar bear behaviour.

In a captive enclosure, the polar bears share a fixed space unless separated by keepers. Where enclosure design does not allow polar bears to avoid one another, opportunities to use normal conflict-avoidance behaviours may be limited, raising welfare concerns for a species adapted to living largely alone.³⁷

Polar bears rely heavily on smell to understand their surroundings, detect other bears, and locate food, often before animals are visible.³⁸ In the wild, this ability allows bears to assess their environment at a distance and respond by either approaching or moving away, supporting a social system based on avoidance rather than close or prolonged interaction.³⁹

Scent is also central to foraging behaviour, with polar bears able to locate seal breathing holes more than 800 metres away and detect the scent of seals up to 32 kilometres away.⁴⁰ In captive settings, polar bears may be exposed to ongoing scent cues from nearby polar bears and typical food sources (e.g. seals) who are also held within the facility. They lack the ability to move away or resolve these cues through normal behaviour.⁴¹ Animal welfare research shows that limited choice and control over the environment are key risk factors for reduced welfare in captive wild animals, particularly for species that rely on space to manage social contact.⁴²

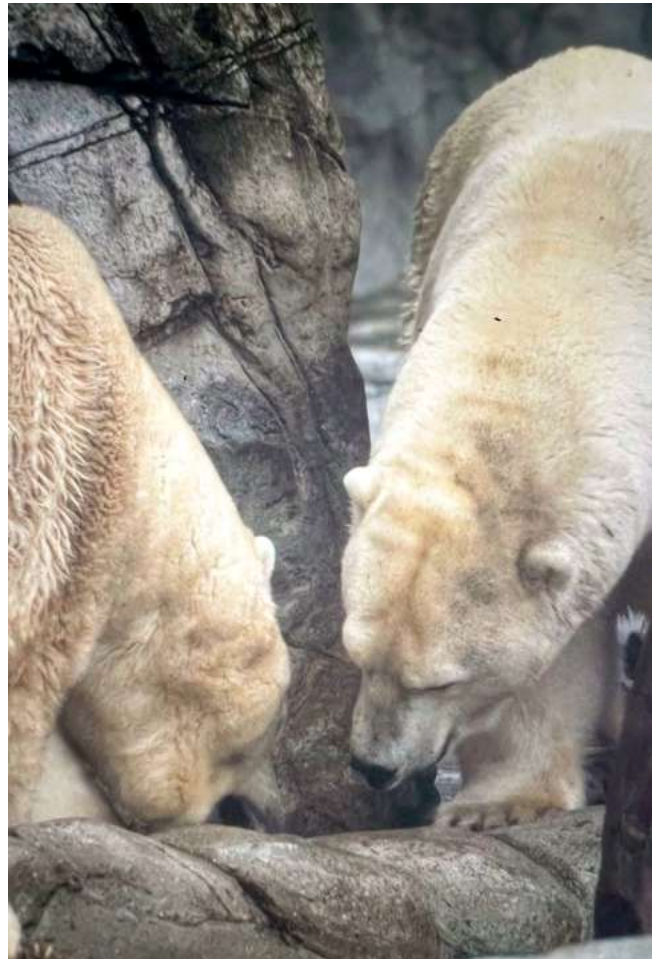


Image: Two polar bears at Sea World's Polar Bear Shores enclosure in close proximity. © Wildlife Portraits

Repeated exposure to food cues without the opportunity to forage or hunt has also been linked to frustration and poorer welfare in captive carnivores,⁴³ including evidence that stereotypical behaviours in polar bears may arise from frustrated appetitive motivations.⁴⁴ Consistent with this, studies of captive polar bears show that forced proximity to other polar bears and limited opportunities for avoidance are associated with increased stereotypical behaviours.⁴⁵

Statements from exhibit designers

Publicly available statements from the designers of the Polar Bear Shores exhibit describe the project scope, timeframes, and site constraints.⁴⁶ In a blog post discussing the design brief, the exhibit designers wrote: 'The challenge was to build a polar bear habitat of such perceived excellence that the public would forget about the frozen cold of the Arctic, where bears are most happy and be thrilled into thinking "aren't the bears lucky to be living here"'.⁴⁷

Sea World's 'world-class' claim falls short

Sea World says that its animal exhibits are 'world-class and designed for the animal's best interest and to ensure maximum comfort'.⁴⁸ Sea World has also referred to the polar bear exhibit 'one of the world's best zoological facilities'.⁴⁹ This appears hard to justify when compared to other polar bear enclosures who also advertise as world-class.

Comparisons with Scandinavian Wildlife Park, Jimmy's Farm, RZSS Highland Wildlife Park and Yorkshire Wildlife Park illustrate the scale of the gap.⁵⁰ These facilities provide larger areas, more extensive water bodies, and natural surfaces such as grasslands and woodland.

Comparing 'world-class' claims across polar bear facilities

Although each facility advertises itself as 'world-class', the scale and natural features of their polar bear enclosures vary, with Sea World providing the smallest and least natural environment.

	Sea World	Scandinavian Wildlife Park	Jimmy's Farm	RZSS Highland Wildlife Park	Yorkshire Wildlife Park
 Space allocation	1,658m ²	26,000m ²	20,234m ²	40,468m ²	40,468m ²
 Water area size	One pool 471m ² , 4 metres deep	1 lake, 5,000m ² and 5 metres deep. Second lake, 350m ² , depth unknown	Three deep lakes (size not specified), with the deepest being 16 metres deep	Not stated, ponds	Several lakes, with the largest being 5,000m ² and 8 metres deep
 Ground surfaces	Loam soils, gravel, rocks, pool	Organic, grasslands, lakes, large rocks	Natural woodland, open pasture, lakes	Grassy areas, ponds, trees	Grassy plains, rocky beaches, water pools, and shaded caves
 Weather protection	Overhead shade cloth with simulated rainfall/mist, pool for cooling	Open, trees for shade, lakes for cooling	Open, trees for shade, lakes for cooling	Open, trees for shade, ponds for cooling	Open, trees and caves for shade, lakes for cooling

Sea World's polar bear enclosure is **24 times smaller** than the polar bear enclosures at RZSS Highland Wildlife Park and Yorkshire Wildlife Park.

Interestingly, the European Association of Zoos and Aquaria (EAZA) has acknowledged that since 2010, EAZA institutions have accepted that small facilities are inappropriate for polar bears and have begun to provide much more space, sometimes many hectares.⁵¹

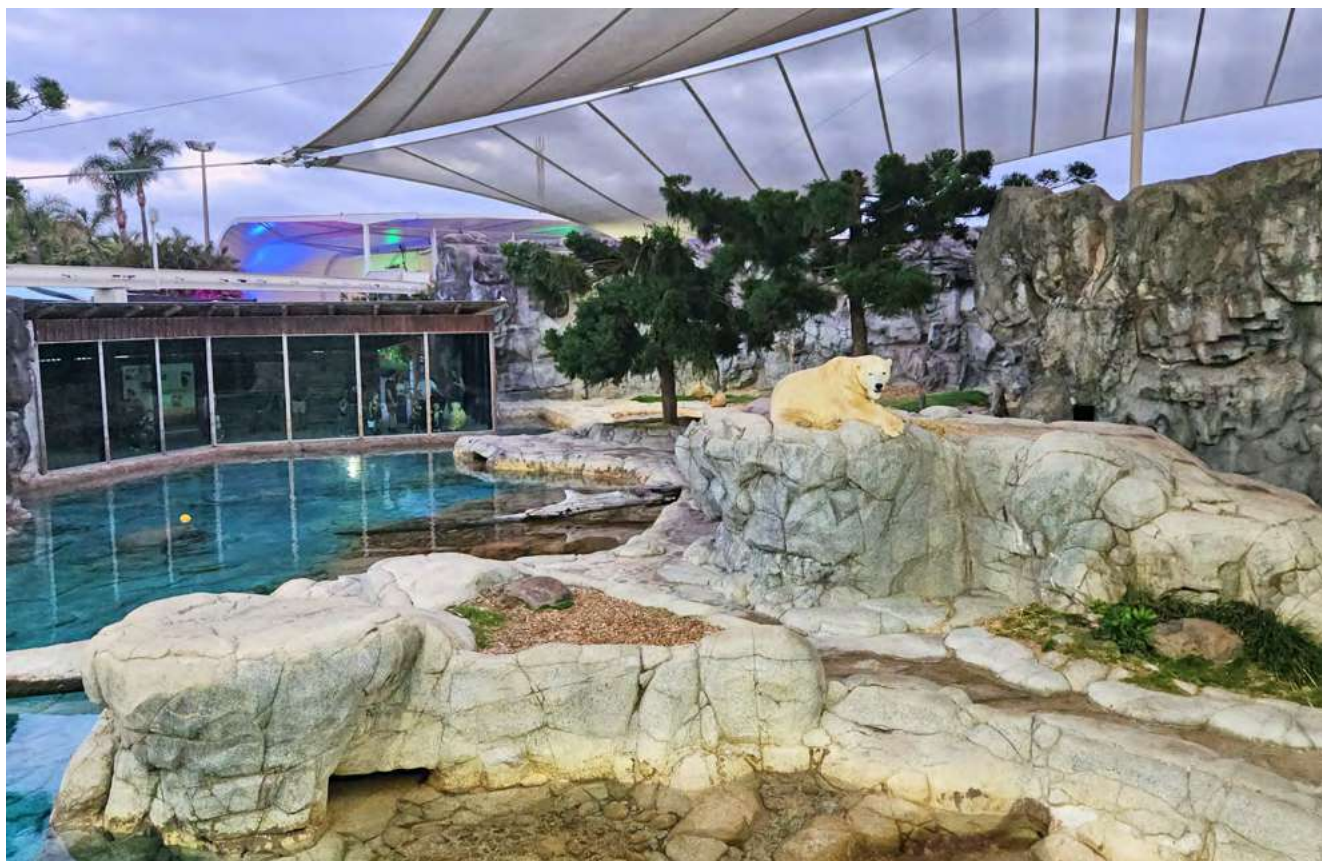


Image: A polar bear lying in the Sea World Polar Bear Shores enclosure at dusk with a light display visible nearby during Spooky Nights, an annual Halloween event hosted by Sea World. © Josh Wong

Noise exposure

Polar bears are sensitive to noise, and possess acute, wide-range hearing.⁵² Their hearing sensitivity overlaps with the frequency range of many human-generated sounds, raising concern about potential impacts of exposure to noise from human activity.⁵³

At Sea World, the captive polar bears are exposed to multiple loud noise sources. For example, Sea World runs multiple amusement rides, such as the Leviathan, Vortex and the Jet Rescue Coaster, as well as frequent helicopter flights operating from the park.⁵⁴ Sea World also runs two special events, Spooky Nights and Carnivale, which run during February and October. During these events, Sea World opens the park at night, runs light shows and displays fireworks.⁵⁵ These shows generate sudden noises, vibrations and bright flashing lights, and are accompanied by loud music.⁵⁶

Studies in the wild have found that disturbance from noise-producing activities such as vehicles, aircraft, and industrial operations can alter polar bear behaviour, particularly for females with cubs and bears using dens, where opportunities to move away are limited.⁵⁷ In some cases, disturbance has been linked to den abandonment, which can place cub survival at risk.⁵⁸ In captive settings, polar bears cannot avoid or retreat from external noise sources. Research on captive polar bears shows that environmental disturbance is associated with changes in behaviour and increased stereotypical behaviours, which are commonly used indicators of reduced welfare.⁵⁹ Taken together, this evidence suggests that environmental and noise disturbance can pose a welfare concern for polar bears, particularly where they lack the ability to control their exposure.

Dolphins

Sea World houses Indo-Pacific bottlenose dolphins and common bottlenose dolphins.⁶⁰ Sea World is reported to house 26 bottlenose dolphins, with only 6 (23%) being 'rescued'.⁶¹ The remaining dolphins housed at Sea World have been bred in captivity.⁶²

Sea World says that the health and wellbeing of its dolphins are its highest priority.⁶³ Sea World says the lagoons are modelled around the naturalistic environment for dolphins and include the appropriate features to suit their needs.⁶⁴ Sea World outlines the dolphin lagoons have a sandy bottom and the largest lagoon has a 10-metre depth.⁶⁵

Sea World explains that it uses an evidence based animal welfare system modelled on the Five Domains, which it calls Welfare Wise.⁶⁶ Dr Isabella Clegg has also conducted a dolphin welfare assessment at Sea World using the C-Well® assessment tool.⁶⁷

RSPCA Australia explains that the C-Well® assessment tool is a good step in the right direction, but is 'limited in terms of assessing restrictions on expression of natural

behaviours, i.e. omission of foraging/hunting, travelling and complex social interactions'.⁶⁸

RSPCA Australia says that to understand the full impact of keeping dolphins in captivity, it is critical to consider the full range of normal behaviours of wild dolphins in their natural environment.⁶⁹ When comparing a dolphin's natural environment to a captive setting, RSPCA Australia highlights there are several obvious differences which are likely to impact dolphin welfare. These include the:

- » space available,
- » complexity of the environment,
- » number of dolphins with which an individual dolphin can interact, and
- » impact that human activity has on dolphins.⁷⁰

This view is supported by researchers who emphasise that one of the greatest stressors for captive dolphins is the loss of control over movement, food, and who they socialise with.⁷¹



Image: A single dolphin swimming in the lagoon at Sea World. The enclosure is bordered by walkways and visitor areas, illustrating the limited space, simplified habitat, and close proximity to human activity experienced by dolphins in captivity. © World Animal Protection

Limitations with size and environmental complexity

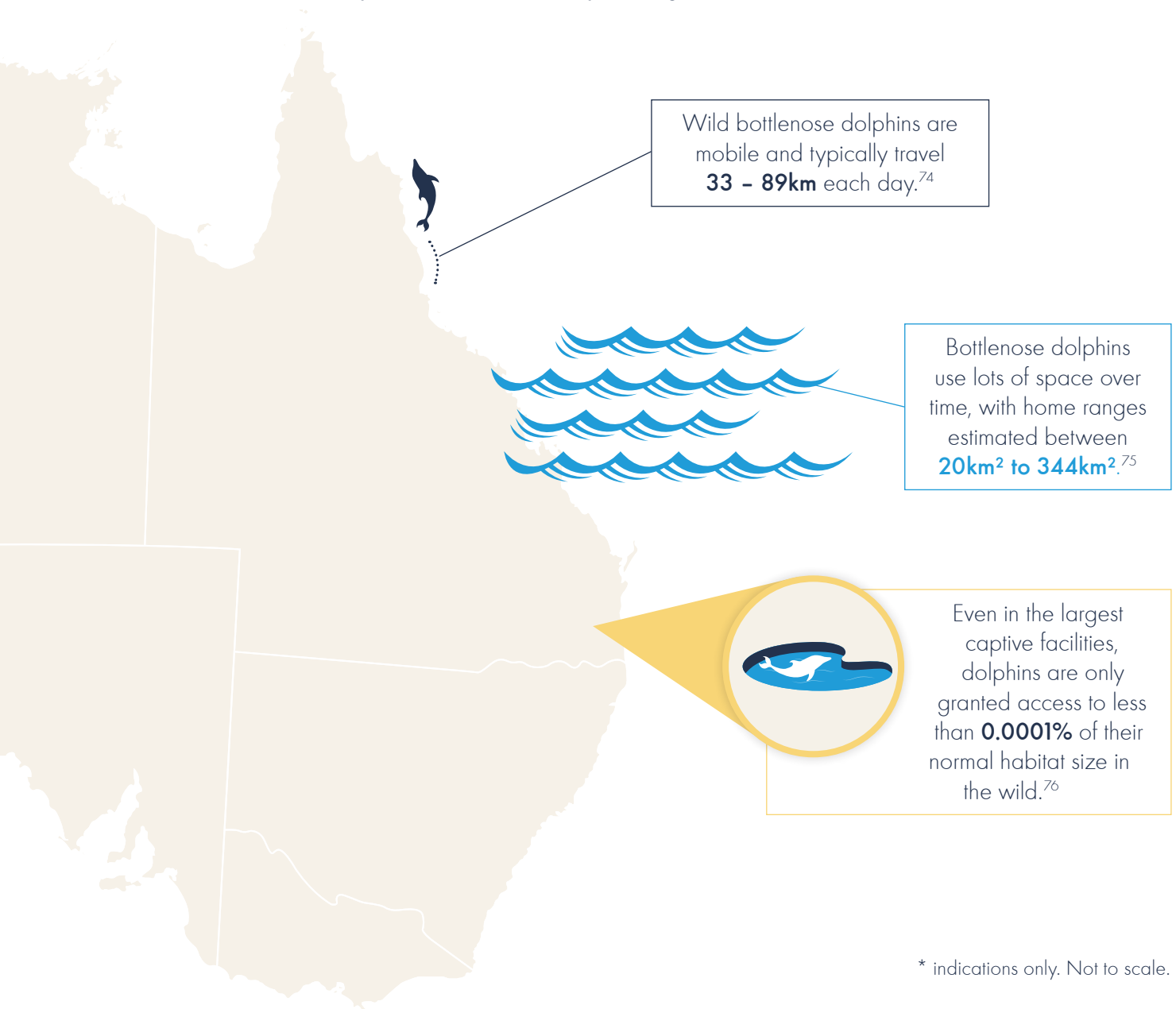
Size

Researchers explain that captive settings cannot match the space, variation or behavioural opportunities dolphins have in the wild. Even the best accredited facilities face significant and practical limitations to provide bigger, more complex and variable environments that would allow dolphins to express a greater range of natural behaviours.⁷²

The authors highlight that dolphins have evolved to be efficient, long-distance swimmers and good divers, and these activities are severely restricted in captivity. Researchers also identify significant impacts when wide-ranging mammals like dolphins are held in restricted, monotonous spaces, including reduced neural development, disrupted brain function and stress-linked behaviours.⁷³

Captivity restricts dolphins' movement to a fraction of their natural range

Research shows wild dolphins occupy large home ranges and travel long distances each day, which contrasts with the space limitations of captive lagoons.



* indications only. Not to scale.

Environmental complexity

Research demonstrates that bottlenose dolphins move between habitats with a wider variety of environmental complexity than what is found in a sandy-bottomed captive lagoon. Researchers found bottlenose dolphins used seagrass beds, sand and reef habitats, with seagrass the most common.⁷⁷ Researchers reported that bottlenose dolphins prefer deeper coastal and offshore waters that are 10 - 25 metres deep.⁷⁸ The authors also found dolphins used coastal, estuarine and offshore waters seasonally.

In the wild, dolphins devote substantial time and energy to locating, pursuing and capturing their food. Researchers found dolphins spent 19% of their time feeding and 38% travelling, reflecting the physical and cognitive demands of foraging.⁷⁹ These behaviours involve fast swimming, deep diving, rapid directional changes and complex problem-solving.

Captive dolphins are often fed with their heads above the water and fish thrown directly into their mouths.⁸⁰ Researchers outline this is far removed from the way dolphins eat in the wild and this requires 'none of the cognitive or behavioural engagement necessary in the wild'.⁸¹ Researchers also explain that having food readily available and consistently consumed does not satisfy the 'biological drive to engage complex cognitive and physical faculties inherent in foraging and hunting, which involves travelling to locate food along with capturing and consuming the prey'.⁸²

RSPCA Australia states that behaviours such as hunting, selecting food and using varied foraging strategies are 'virtually impossible' in captivity.⁸³ Taken together, this evidence shows that feeding dolphins in captivity cannot replicate the ecological, physical and cognitive dimensions of foraging that shape wild dolphins' natural lives.



Image: A dolphin in Sea World's lagoon next to floating objects provided for enrichment. This is in contrast to the varied substrates, depths, and ecological features dolphins use in the wild. © World Animal Protection

Social environment

Research shows appropriate social groupings, combined with space and complexity that allow individuals to spend time together or apart, are among the most important determinants of welfare for dolphins.⁸⁴ Captive settings struggle to satisfy dolphins' social needs because they limit group size, restrict movement, and prevent the formation of broad, dynamic social networks.⁸⁵

In the wild, bottlenose dolphins live in fission-fusion societies. This means that dolphins regularly split into smaller groups and later rejoin others, sometimes within hours or days. Group composition changes frequently depending on factors such as prey availability, habitat, reproductive status, or season.⁸⁶

Researchers explain that this type of flexible social system cannot be replicated in captive settings, where both group size and ability to alter social relationships are inherently constrained.⁸⁷ As a result, dolphins in captivity are unable to exercise the level of social choice and autonomy that characterises their natural lives.

Avoidance is a critical feature of natural social regulation for dolphins. When conflict arises, wild dolphins can distance themselves from others by leaving the group. In captivity, this option is usually unavailable without human intervention. Researchers warn that social environments in captive settings pose risks of aggression, monopolisation of resources, and social stress.⁸⁸ Researchers have documented cases where social instability in captive groups led to illness and mortality, driven by an inability to leave dominant individuals.⁸⁹

Changing social groups using gates, as Sea World describes, is a managerial decision rather than a reflection of dolphins' own social strategies. This is an example of why captivity does not provide the autonomy, diversity and spatial freedom that underpin natural dolphin societies.

Taken together, this evidence shows that captivity fundamentally limits dolphins' ability to control their social environment. The restricted space and fixed groupings of captivity prevents the range of associations, avoidance behaviours and social flexibility that are central to dolphin welfare in the wild.



Image: A pod of wild dolphins swimming together. © Rafael Fernandez from Pexels

Noise exposure

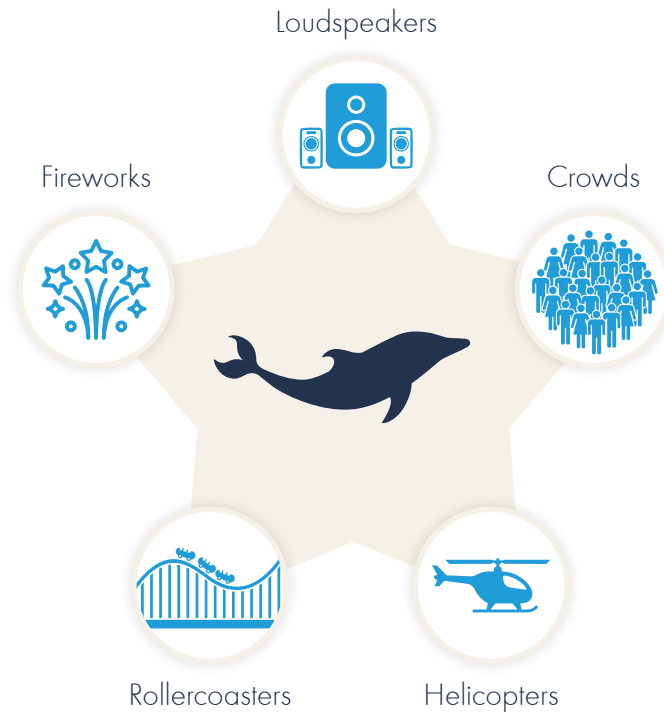
Sound is central to dolphins' lives. Dolphins rely on acoustic signals for navigation, locating prey through echolocation, and maintaining social relationships. These functions depend on the ability to send, receive, and interpret sound in a relatively stable acoustic environment.⁹⁰ Behavioural research shows that disturbance is strongly shaped by exposure context,

including background noise levels, persistence of sound, and whether animals can move away from the sound source, rather than sound level alone.⁹¹

In captive settings, these conditions differ markedly from the wild. Dolphins housed in confined lagoons have limited ability to reduce exposure to loud or persistent noise.

Captive dolphins can be exposed to chronic noise, which research links to welfare implications⁹²

Captive dolphins can be exposed to:



The potential impacts of chronic noise exposure:



As an example, helicopter activity is a repeated intermittent noise source. Sea World offers daily low-altitude helicopter tours departing from the theme park car park.⁹³ Low-altitude helicopter flights have been shown to disturb dolphins, particularly in shallow coastal waters where animals have limited scope to avoid sound exposure.

Documented responses include changes in behaviour linked to resting and social activity, with dolphins typically attempting to avoid exposure by diving away from the sound source.⁹⁴

The physical properties of shallow water further influence how noise affects dolphins. In shallow lagoons, sound attenuates less efficiently and reflects repeatedly between the water surface and the substrate, producing strong reverberation and prolonged sound persistence. This causes noise to spread unpredictably and remain in the environment for longer periods than in deeper waters.⁹⁵

This evidence outlines that dolphins housed in shallow, spatially confined lagoons can be impacted by exposure to persistent and overlapping noise sources without the ability to avoid them.



Image: The lagoons at Sea World are in close proximity to the rollercoasters and rides, such as the Vortex. © Action for Dolphins

Performances and interactions

Sea World offers dolphin shows and close-contact encounters that are framed as 'education and conservation based with the behaviours demonstrated extensions of the animals' natural behaviours ensuring their dignity and respect is maintained'.⁹⁶

Dolphins perform in twice-daily shows as part of general admission, and in close-contact encounters where people enter shallow water to pat, shake fins with and interact closely with the dolphins.⁹⁷ Sea World promotes these experiences as an important part of dolphins' enrichment.⁹⁸

Advocates explain that dolphins' public-facing behaviours are shaped by conditioning and repetition, not by autonomous choices. Behaviours performed for visitors are often exaggerated or presented out of context.

For a species who rarely encounter unfamiliar individuals at close range in the wild, frequent forced proximity to large numbers of visitors is an additional stressor for bottlenose dolphins rather than improving welfare.⁹⁹

Action for Dolphins observed Sea World's twice daily dolphin performance, called ONE Dolphin Presentation, in December 2025.¹⁰⁰ Action for Dolphins also observed the previous dolphin performance, called Affinity, in 2023 and 2024.

Sea World trainers were observed being propelled forward while either standing on top of one or two dolphins or being pushed forward by their rostrums (colloquially known as their snout).

Research shows that a dolphin's rostrum is one of the most sensitive parts of its body¹⁰¹ and is important for sensing the environment.¹⁰² Using this area to push or support human weight places force on tissues not adapted for that purpose and raises animal welfare concerns, including concerns previously raised in relation to SeaWorld parks in the United States.¹⁰³



Image: Dolphins beaching during the ONE dolphin performance. © Action for Dolphins

Sea World trainers were observed instructing the dolphins to beach themselves. Action for Dolphins observed a dolphin's head out of the water with their mouth open and they were being patted by a member of the public while beaching. The head and eyes of this dolphin were facing directly into sunlight, potentially harming their skin and eyes.¹⁰⁴

Close-contact interactions raise additional health considerations. Dolphins can transmit organisms that cause disease in humans and vice versa, with marine mammal workers reporting conjunctivitis, viral dermatitis, bacterial dermatitis, and non-specific contact dermatitis.¹⁰⁵ No screening of visitors was observed before physical contact occurred with dolphins.

In Queensland, people are prohibited from feeding, touching or closely approaching wild dolphins.¹⁰⁶ The International Whaling Commission Sub-Committee on Whale Watching warns that allowing these behaviours in captive facilities can undermine this protection. When people are encouraged to touch and feed captive dolphins, they are more likely to view similar interactions with wild dolphins as acceptable. This weakens public understanding of the law and complicates compliance and enforcement.¹⁰⁷

What visitors say

Visitor feedback reflects growing unease about the conditions experienced by dolphins and polar bears at Sea World. Across multiple Google reviews, visitors described the dolphin lagoons as confined and lacking natural features, and the polar bears appearing uncomfortable in the heat.¹⁰⁸ Visitors frequently comment on behaviours they interpret as signs of stress. Certain visitors reported that the enclosures appear smaller, more artificial and more

restrictive than they expected based on Sea World's public statements.

These observations offer insight into public expectations and concerns. They also highlight a disconnect between Sea World's representations and what certain visitors perceive when viewing the polar bears and dolphins firsthand. A sample of these reviews are below. The spelling has not been changed.

Visitor reviews of Sea World on Google

These reviews highlight a disconnect between Sea World's representations and what certain visitors perceive when viewing the animals firsthand.

★ ★ ★ ★ ★ 5 months ago

I must say, I found it immensely cruel. I seen dirty tanks, sad animals and just a general sense of animals suffering. How the heck are polar bears who require space locked in those enclosures? How does making dolphins perform shows and be petted help? Absolutely disgusting. I would advise people not to go, ever!!! You will be supporting cruelty and support this cruel animal welfare.

★ ★ ★ ★ ★ 2 years ago

I am shocked and saddened to see the beautiful polar bear held in this enclosure which SeaWorld claims is 'climate controlled'. The poor animal is lying on the one slab of ice provided in 20 degrees (a Winter day). In this day and age we shouldn't be allowing this profiteering to occur in the name of 'animal welfare'.



★ ★ ★ ★ ★ Edited 4 years ago

Polar bear on the Gold Coast? under 30°C ? Next to the take-off and landing helicopter tour area ... what a shame !

★ ★ ★ ★ ★ 3 years ago

The rides are fantastic, shows amazing and staff friendly and accomodating. The theme park is becoming more attractive catering for older kids rather than just Nickelodeon. Unfortunately I felt the animal enclosures were too small eg the polar bear was sitting under a shade sail on a 38 degree day in a rock prison and the penguins were jam packed into a small enclosure. Also the pelicans had their wings clipped and were trapped in a net enclosure plus the dolphins / walrus were in small tanks - far from the life they had prior to being 'rescued' by SeaWorld.. I believe tourists would like to see better care for the animals and bigger habitats. In light of the money injected into the park and the Gold Coast, I feel it's their duty to the animals. * The photo attached was of the dolphin in the large performance tank, not the usual tanks where the reside.



★ ★ ★ ★ ★ a year ago

It has to be 1 star due to the enclosures for the polar bears and dolphins. Animals in unnatural and very small enclosures, noticeably bored and depressed. Rides etc were fun but shocking that it's 2024 and the animal welfare is still so so low here.

★ ★ ★ ★ ★ a year ago

Do something about the poor Polar Bear pacing back and force in a small enclosure and stinking hot heat. Sea World can afford new rides but apparently can't improve the quality of life for this beautiful creature. Disgusting.

★ ★ ★ ★ ★ a year ago

A group of us visited Sea World yesterday and we were extremely disappointed with a few things. Firstly, it is overpriced for what you get- definitely not value for money. Secondly and most importantly, we were appalled at the polar bear which was kept isolated in a regularly small area in 28 degree heat. This is not the place for a polar bear to be. There is no need for the polar bear to be in Sea World at all it doesn't add to the enjoyment of Sea World. In fact, it makes it so upsetting for people to see a poor, lonely polar bear. It's torture. Will not be going back or recommending to anyone.

★★★★★ a year ago

My recent visit to Sea World didn't live up to my expectations. The visit was primarily to experience the beauty of the polar bear exhibit, which was marketed as one of their main attractions. Unfortunately, the polar bear enclosure appeared to lack the necessary space and environment that would replicate their natural habitat. This was a letdown, as I had hoped to see these magnificent creatures in conditions that were more representative of their natural Arctic surroundings. Sea World needs to improve on this to offer a more authentic and respectful experience for both the animals and visitors.

★★★★★ 2 years ago

Wish I'd done my research before we went - I thought Seaworld cared for its animals and supported conservation efforts. Actually, they blatantly abuse animals for profit. Tanks and enclosures were hideously overcrowded, the penguins looked bedraggled and grotty, the poor polar bear was stuck in a tropical environment with just a couple of token piles of ice in its small enclosure, and the dolphins were treated like circus animals 50 years ago - 'trainers' even stuck their feet on top of the dolphins' faces to get 'rides'. It was hideous and I'm gutted I gave them my money.

★★★★★ a year ago

Polar bears shouldn't live in Australia, watching a polar bear stretch out with its head against the wall and panting in this heat, knowing its stressing and overheating is unpleasant. Hate knowing I've supported it's captivity by paying for a ticket.

★★★★★ 3 months ago

Disgusting to have an polarbear in a place like this. You should not go there if you have 1% Empathie. This is one of the saddest things I've ever witnessed, not just the bear all of this beautiful animals . . . Justice will come for all of you.

★★★★★ 2 years ago

Visited sea world for the mother in law.

Wasn't on my top ten list of things to do but went in with an open mind.

To be honest I though everything was pretty good, staff were friendly, food was good and at a reasonable price for a theme park.

I gave it a one star after passing polar bear bay. They have a Polar bear, alone, no ice, 29 degrees. In the sub tropics of queensland. I understand conservation and education but there's no reason to keep a polar bear in the climate of the Gold Coast. Alone only for an attraction to Show people.

There's a sign saying that polar bears are ok to withstand up to 40 degrees celcius, an interesting sign to put when clearly a polar bears natural habitat is not close to that.

I hoped as humans we were better than that, and I hope children don't leave feeling excited and happy seeing an animal being mistreated like that.

Do better.



★★★★★ Edited 11 months ago

I didn't really want to go to SeaWorld as I knew they made dolphins perform there, however my toddler loves sea life so we decided to go for him and in the hope I'd be pleasantly surprised by their living conditions and be proved wrong about my worries! However as soon as we arrived and saw dolphins crammed together in small pools, acting very strangely and clearly depressed I burst into tears (please note I'm not an overly emotional person this is not normal behaviour for me I'm quite level headed) I don't understand how having dolphins living in those conditions is still legal, and how the people working there are ok with this! Fingers crossed more people can see this is cruel and something is done to help them asap! Come on Australia be better

In response to you're reply " The exhibits are modelled around the naturalistic environment for specific species"

How is a tiny pool with no features in it anything like the naturalistic environment Dolphins live in in the wild? Are you all crazy?

This is such a mad response to my review I'm astonished!

★★★★★ a year ago

I am sad to see how this polar bear is treated. No ice at all considering that their habitat is literally Artic. Zoom in on his face look how miserable he looks. So sad



★★★★★ 2 months ago

So sad to see dolphins in such small pools. Walked in and just saw a poor dolphin swimming aimlessly around bored as he'll. Stop breeding these in captivity. Stop animal tourism.

Why a breeding ban is the appropriate response

The evidence in this report identifies potential welfare risks arising from the structural limits of captivity for dolphins and polar bears. These stem from fixed conditions, including restricted space, limited control over social interactions, chronic noise exposure, and simplified habitats. They cannot be fully resolved through revised standards or incremental improvements.

This has direct implications for Sea World and the Queensland Government. Where welfare risks are structural and long-term, continued breeding by operators, permitted by regulators, increases both the scale and duration of the problem. Each new dolphin calf or polar bear cub commits Sea World and the Queensland Government to decades of ongoing care and oversight within facilities described to be mismatched to species-specific needs.

Dolphins and polar bears are long-lived animals. Allowing breeding to continue extends obligations to these animals into the future and compounds long-term compliance, monitoring, and end-of-life responsibilities.

Implementation could involve Sea World ceasing breeding practices and the Queensland Government formalising the ban through regulation, licensing conditions, or permit settings.

A dolphin and polar bear breeding ban addresses this risk directly. It targets the source of future harm rather than attempting to manage its consequences indefinitely.

Breeding ban: what it does and doesn't do

What a breeding ban does	What a breeding ban doesn't do
<p>Caps the captive population: prevents the total number of dolphins and polar bears living in captivity from increasing.</p>	<p>Require facilities to close down: facilities can continue operating and promoting their attractions.</p>
<p>Establishes a defined endpoint: provides a clear, long-term timeline for phasing out the use of dolphins and polar bears for entertainment.</p>	<p>Prohibit rescue and rehabilitation: a ban applies to breeding dolphins and polar bears for display, not to the rehabilitation of injured wild animals.</p>
<p>Helps shift facility focus: allows facilities to transition their resources towards their other attractions.</p>	<p>Require current animals to be released: many long-term captive animals cannot be safely released into the wild due to lack of survival skills.</p>
<p>Prevents generational suffering: ensures that no future generations of polar bears and dolphins are born into captive enclosures.</p>	<p>Change welfare standards: a ban must always be paired with high standards of care for the current population of dolphins and polar bears.</p>

A breeding ban aligns with scientific evidence, community expectations and international trends. It is a measured, responsible and future-focused policy response that prevents the problem from expanding and supports a planned transition for the sector.

Conclusion

Sea World on the Gold Coast is now the only facility in Australia breeding dolphins and polar bears for entertainment. The evidence in this report shows a consistent gap between what these species have evolved for and what captivity provides. That gap has clear consequences for the everyday lives of these animals.

For polar bears, the mismatch is stark. Research describes a species adapted to Arctic climates, with extensive space to roam, and a preference for solitary living. Evidence suggests the Gold Coast climate, the relatively small enclosure and the limited natural substrates make it difficult to properly meet the ecological needs of polar bears.

For dolphins, the limitations relate to space, environmental complexity, autonomy and social structure. Wild dolphins travel long distances, use varied habitats and maintain broad social networks. Sea World's lagoons offer a relatively smaller and simplified environment that constrains natural foraging and social choice. Research links these types of constraints to stress, altered behaviour and reduced neural development.

Both marine mammals are sensitive to sound, and they can experience chronic noise exposure in a busy theme park.

Public expectations are also changing. Jurisdictions overseas have acted to restrict or end captive breeding of dolphins or whales. Major travel companies have stepped away from promoting dolphin and whale shows. Visitor feedback expresses concern about enclosure sizes, heat exposure and animal behaviour. The direction of travel is clear. Queensland risks being left behind if Sea World and the Queensland Government do not act on these shifts.

Research shows captivity cannot meet all of the species-specific needs of dolphins and polar bears. Breeding extends these structural constraints for another generation. Each birth commits a facility to caring for an animal whose needs, as documented in the scientific literature, are different to what a theme park can provide when compared to the wild.



Image: Close up of a polar bear in Sea World's Polar Bear Shores enclosure.
© Wildlife Portraits



Image: Close up of a dolphin in Sea World's sandy lagoon enclosure.
© World Animal Protection

A breeding ban is a practical and proportionate response. It prevents the population from expanding, supports a planned transition for the sector, aligns Queensland with national and international practice and reduces long-term regulatory risk.

Sea World and the Queensland Government now face a clear decision. We urge them to work together and take action in implementing a breeding ban of dolphins and polar bears.

Endnotes

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Action for Dolphins

Level 17/31 Queen Street Melbourne VIC 3000

T: + 61 427 399 056

E: actionfordolphins@afd.org.au

afd.org.au

World Animal Protection Australia

GPO Box 3294 Sydney NSW 2001

T: 1300 139 772

E: info@worldanimalprotection.org.au

worldanimalprotection.org.au

