



# ADOPT A BELUGA



PROJET  
BÉLUGA  
Saint-Laurent

## WHY ADOPT?

The first alarm call sounded in the early 1980s: after having bounced back from whaling, belugas were now found to be heavily contaminated. The mobilization that followed inspired the creation of the Saguenay—St. Lawrence Marine Park, large-scale decontamination and the adoption of appropriate policies and regulations. Despite these efforts, belugas are declining again. The threats they face are varied and the solutions are complex. We need a deeper understanding of belugas so that we might better protect them. By symbolically adopting a beluga, you will be supporting the efforts of the St. Lawrence Beluga Project, a consortium of private and academic research groups led by the GREMM. Scientific research holds the key to the belugas' future, to the future of the St. Lawrence, to our own future.

---

BELUGAS ARE  
ENDANGERED.

---

---

IF WE ACT  
NOW, THE  
BELUGA CAN  
STILL BE SAVED.

---

Population monitoring by researchers under the St. Lawrence Beluga Project has seen a dramatic increase in the mortality of newborns and pregnant females since 2010. This situation may be accelerating the decline of the population. Climate change, collapse of fish stocks, disturbance by shipping and recreational boating and persistent toxic products in the food chain are also being blamed. We must therefore step up our efforts to understand the situation and identify solutions. Time is running out.

## WHY NOW?

## WHY YOU?

The fate of belugas concerns all of us. Belugas are the barometer of the health of the St. Lawrence, from the Great Lakes to the Gulf. Protecting belugas is not only about preserving our world's natural heritage, it's also about demonstrating that we are capable of sharing our environment with other living species. Join an extensive network of St. Lawrence Beluga Project partners striving to make belugas the emblem of responsible and sustainable co-existence.

---

THE BELUGAS'  
STORY IS THAT  
OF THE  
ST. LAWRENCE,  
THEIR FUTURE  
IS OUR FUTURE.

---

# ADOPT A BELUGA

## WHEN YOU ADOPT A BELUGA...

- You support **scientific research**  
*Researchers of the St. Lawrence Beluga Project will be at sea with belugas on your behalf*
- You participate in the **search for solutions**  
*Research results inform our choices as a society*
- You **increase awareness** of belugas and their plight  
*Education and knowledge transform society*
- You show **your attachment** to the St. Lawrence and its inhabitants  
*The St. Lawrence Beluga Project gives your gesture wings*

## STEPS

- 1 Choose your beluga from amongst those featured in the photo-ID family album. Belugas available for adoption can be found at [adoptabeluga.org](http://adoptabeluga.org)  
*No need to provide it with food or shelter... we'll keep an eye on your beluga for you out on the water.*
- 2 Come up with a name. *This name will then be used to designate this beluga in all our official communications.*
- 3 To complete the adoption, make your donation of \$5,000. We suggest that you renew your donation twice, as a symbol of the care a mother gives to her young.  
*Three years is the amount of time a female beluga nurses and raises her young.*

Since 1988, over 150 belugas of the approximately 350 featured in our family album have been symbolically adopted by companies, municipalities, citizen groups and individuals.

## WHAT DO YOU GET IN RETURN?

- You receive an adoption certificate as well as your beluga's personal story.
- Your name appears in the sponsor zone and, if you wish, you can add a text or video explaining what inspired you to adopt a beluga;
- Your gesture is recognized on GREMM's platforms and in its newsletters and social networks;
- You receive updates on researchers' encounters with your protégé;
- Electronically and by mail, you receive the newsletter *With the Belugas*, which reports on the most recent research conducted in the context of the St. Lawrence Beluga Project



# ST. LAWRENCE BELUGA PROJECT

## Research for Conservation



Since 1985, we have been carrying out a beluga research program as well as monitoring of the St. Lawrence and Great Lakes ecosystem. Our mission: to better understand belugas by scientifically studying their behaviour and habitat and monitoring their health status, assisting stray or stranded live belugas, and raising the awareness of the general public with regard to these animals. Scientific research and education are essential in order to define and implement concrete actions for the recovery of the beluga and the conservation of its habitat.

Coordinated by the GREMM, the St. Lawrence Beluga Project is led by a consortium of private and academic laboratories in close collaboration with Fisheries and Oceans Canada's Maurice Lamontagne Institute and the Saguenay-St. Lawrence Marine Park.

## PROJECTS

### FAMILY ALBUM

Monitoring of individuals that have been photo-ID'd is the cornerstone of our program. Every summer since 1985, we spend hundreds of hours at sea with belugas in order to compile individual observation records. We study the links between belugas' social structure and their habitat use, as well as how this organization influences their exposure to anthropogenic threats.

### HEALTH RECORDS

Using drones, we collect photogrammetric data on each beluga featured in the family album. These measurements provide clues regarding the physical condition and reproductive status of females. Compiling individual health records aims to portray the health of the population and better identify the factors that influence it.



### MORTALITY MONITORING

With the support of a vast network of volunteers and public participation, the Quebec Marine Mammal Emergency Response Network maintains a beluga mortality monitoring program. A team is dispatched to the field to examine and take samples from any carcass discovered on the shores of the St. Lawrence.



# ST. LAWRENCE

# ST. LAWRENCE BELUGA PROJECT



## GENETIC PROFILING

Using genetic data obtained from tiny skin samples (weighing just a few milligrams) taken from photo-ID'd individuals or data collected from carcasses washed ashore, we study the fundamental biological characteristics of the beluga population as well as the influence of genetic characteristics on the health, mortality and reproductive success of individuals.



## HEALTH AND PATHOLOGY

Carcasses that are accessible and in good condition are transported to Saint-Hyacinthe to undergo a comprehensive examination in order to determine the cause of death and to detect any pathologies that might relate to beluga morbidity. Initiated in 1983, this monitoring program is the longest in the world for a marine mammal species.



## HEALTH AND TOXICOLOGY

Analysis of contaminants in tissues taken from photo-ID'd belugas and carcasses found on the shoreline serves as a basis for monitoring how the quality of their ecosystem is evolving. This program has already allowed researchers to detect significant declines of several persistent organic pollutants that had been banned in the 1970s and to document the emergence of new classes of industrial chemicals.



## BELUGAS IN DISTRESS

In small isolated populations at risk, the survival and reproductive success of each individual can make a difference in the overall recovery of the species. Over the years, we have adopted a code of ethics and protocols to come to the assistance of belugas that have become stranded, gotten trapped or gone astray.



## ACOUSTIC UNIVERSE

Belugas communicate, hunt and find their way with sound. We study the belugas' acoustic universe to better understand the effect of anthropogenic noise on their behaviour and health and identify how we can reduce the acoustic footprint of human activities.

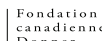


## EDUCATION THROUGH FASCINATION

At the Tadoussac Marine Mammal Interpretation Centre and at whalesonline.org, we combine research and education to share the most up-to-date knowledge of the status of belugas and the state of the St. Lawrence. In doing so, we reach hundreds of thousands of people and educate them with both rigour and creativity on the fascinating world of belugas.



## OUR KEY PARTNERS



Pêches et Océans Canada

Fisheries and Oceans Canada



Parcs Canada

Parks Canada



We would like to thank the sponsors of the Adopt a beluga program [AdoptaBeluga.org](http://AdoptaBeluga.org).





---

# BRIEF HISTORY OF THE ST. LAWRENCE BELUGA



**PROJET  
BÉLUGA**  
Saint-Laurent



---

During the last ice age, the belugas of the Canadian Arctic found refuge in the St. Lawrence. As the glaciers retreated, all these small white whales returned to their natural habitat in the Arctic... All of them? No! Indeed, a small population remained here in the St. Lawrence, at the southern limit of the species' range, isolated from its cousins to the North. The beluga seems to have occupied a special place in the culture of the first inhabitants of the shores of the St. Lawrence. Later, the Basques navigated up the St. Lawrence in pursuit of this whale. On his second voyage in 1535, Jacques Cartier made sure to report his encounter with belugas and their unique character...

From the very beginning of the colony, seigneurs took an interest in belugas. It seemed that beluga hunting was poised to become a large-scale commercial activity, but by 1730 this ambition had faded. In 1928, the Ministry of Colonization, Mines and Fisheries yields to pressure from fishermen who «accuse» the beluga of being responsible for the decline of the cod fishing industry. The Ministry would later distribute rifles and ammunition to fishermen and encourage them to shoot belugas.

---

"The next day we set sail and carried on our journey, and discovered a sort of fish, which to this day no man has ever seen or heard. The said fish are as big as cod, of unknown stock, with bodies and heads built rather like those of a greyhound, white as snow, with no spots, and plentiful in the said river, living between the sea and fresh water. Native inhabitants call them Adthothis, and told us that they are quite good tasting, and affirmed that they are not to be found anywhere in this river or country but in this place." - Jacques Cartier

---

# BRIEF HISTORY

# HISTORY OF THE ST. LAWRENCE BELUGA



From 1932 to 1938, a bounty of \$15 would be paid for every tail produced. Areas frequented by belugas were even bombed. This «beluga war» ends in 1939 with the publication of the Vladykov report which concludes that there is no link between the decline of the fisheries and the belugas' feeding habits.

After the Second World War, demand for beluga oil, blubber, and meat begins to fall. Commercial hunting ends in 1955. Between 1866 and 1955, over 16,000 belugas are killed in the St. Lawrence.

By the early 1970s, the status of the species begins to worry researchers. Their concerns include the small population size, the concentration of toxic contaminants and the prevalence of cancer. In 1988, hundreds of scientists and observers convene in Tadoussac for the International Forum for the Future of Belugas. The beluga's alarm call is heard and an important mobilization begins to take shape. The «Adopt a Beluga» campaign is launched to fund research and introduce the beluga to the general public. In 1998, the Saguenay-St. Lawrence Marine Park is inaugurated. There is new hope for the white whales.

Just as the burden of contaminants inherited from the industrial era begins to decline, cancer rates begin to fall, and the population is considered stable,

the summer of 2012 sounds a new alarm: a record number of newborn carcasses are found and mortality in pregnant females is on the rise. The deeply concerned scientific community then launched a vast collective investigation which culminates in the 2014 publication of a Science Advisory Report entitled «Status of Beluga (Delphinapterus leucas) in the St. Lawrence River Estuary». The report raises four hypotheses to explain the increase in perinatal mortality: the presence of new contaminants; disturbance from commercial, recreational and observation vessels; changes in diet and climate change. The status update delivered a nasty surprise, however: while the population had previously been believed to be stable, it now appeared instead that it had probably been declining since the early 2000s.

As a result of this advisory report, the St. Lawrence beluga is classified as «Endangered». In light of this urgency to act, the «Adopt a Beluga» campaign is revived. A number of new research projects are undertaken. Initiatives to protect belugas and their habitat are on the upswing.

The fate of belugas is linked to the value we place on them. Their story is also the story of our relationship with the St. Lawrence. If their current situation is the result of our past actions, then their future depends on what we do today.



[gremm.org](http://gremm.org)



**PROJET  
BÉLUGA**  
Saint-Laurent

[projetbeluga.org](http://projetbeluga.org)



# AT A GLIMPSE



**PROJET  
BÉLUGA**  
Saint-Laurent



## 10,500 ± 150 BP

Oldest beluga fossil found in deposits of the Champlain Sea.

## 1550 - 1000 BP

Archeological studies have shown that the Iroquois hunted belugas at Île Verte.

## 1535

Jacques Cartier reports his encounter with belugas at Île aux Lièvres.

## 1580 - 1637

Basques hunt whales in the St. Lawrence Estuary.

## 1651

First account of colonists using beluga blubber to produce oil.

## 1701

Beluga fishing with set-line devices first attested at the Kamouraska tidal flats.

## 1720 - 1730

Forty-four active beluga fishing sites are identified in the St. Lawrence Estuary.

## 1860

First St. Lawrence beluga sent to New York, specifically to the Barnum's American Museum. Between 1860 and 1965, approximately 30 belugas were shipped by train to US aquariums.

## 1928

The Quebec government distributes rifles and encourages fishermen to shoot belugas to alleviate pressure on cod stocks.

## 1932 - 1938

The Quebec government pays a bounty of \$15 each for beluga tails.

## 1938 - 1946

Vladim Vladykov conducts a scientific investigation which concludes that the beluga has no impact on cod stocks.

## 1949

William Edward Schevill and his wife, Barbara Lawrence, record belugas for the first time in the Saguenay River. At the time, it was thought that belugas did not vocalize.

## 1955

Commercial beluga hunting ends due to a lack of profitability. Between 1866 and 1955, over 16,000 belugas were killed in the St. Lawrence.

## 1962

Pierre Perrault and Michel Brault resurrect the beluga hunt on Île aux Coudres, an adventure masterfully chronicled in NFB's documentary film *Of Whales, the Moon and Men*.

## 1973

The first census documented by Dave Sergeant of Fisheries and Oceans Canada estimates the population at less than 500 individuals.

# AT A GLIMPSE

# AT A GLIMPSE

1975

Leone Pippard and Heather Malcolm document belugas' movements at the mouth of the Saguenay and launch a campaign to protect the population.

1979

Beluga hunting banned in the St. Lawrence.

1982

Debut of beluga carcass recovery program spearheaded by Pierre Béland and Daniel Martineau.

1983

The St. Lawrence beluga is designated a «Species at Risk» by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

1985

Start of offshore research program conducted by the GREMM. The St. Lawrence Beluga Project is born.

1988

The International Forum for the Future of the Beluga takes place in Tadoussac and the «Adopt a Beluga» campaign is launched.

1996

St. Lawrence Beluga Recovery Plan published.

1998

The Saguenay-St. Lawrence Marine Park is established to protect the beluga and its habitat.

2004

The beluga's status of «Species at Risk» is reinstated (threatened population).

2008

A major red tide leads to the death of 10 belugas.

2012

The 2nd St. Lawrence Beluga Recovery Plan is published.

A record 17 newborn belugas are found dead on the shores of the St. Lawrence.

An expert group is formed to urgently reassess the status of the population. The situation is alarming: previously considered stable, the population has been declining since the early 2000s and the exact cause of mortality is unknown.

2013

Citizens engage in a major battle in an effort to block an oil port project in Cacouna. The project would eventually be abandoned by the developers.

2014

Release of the Science Advisory Report «Status of Beluga (Delphinapterus leucas) in the St. Lawrence River Estuary», which would lead COSEWIC to recommend that the status of the species be uplisted to «Endangered».

GREMM relaunches the «Adopt a Beluga» campaign.

2016

The beluga's legal status at the federal level is changed from «Threatened» to «Endangered». Research efforts are stepped up.

2017

The federal government legally protects critical St. Lawrence beluga habitat by prohibiting the «destruction» of any element of this habitat.



[gremm.org](http://gremm.org)



**PROJET  
BÉLUGA**  
Saint-Laurent

[projetbeluga.org](http://projetbeluga.org)