

Lifeforce Foundation Orca Conservation Programs



Photo Captions: Start Top left Clockwise

1. Over fishing and entanglement in fishing nets and other debris is a threat to orcas.
2. Boaters should be aware of and adhere to whale watch guidelines.
3. Boat noise interrupts foraging, navigating, rest and communication.
4. Pollution such as PCBs and dioxins affect immune and reproductive systems.
BC orcas are the most toxic of all animals worldwide.

Lifeforce Foundation

Lifeforce Founder Peter Hamilton has worked in the field of ecology and animal behaviour since 1978. He has designed various methods to enrich the lives of captive animals by mimicking the species' natural environment. He published two peer-reviewed papers on this subject.

His studies of "The Behaviour and Travel Patterns of *Orcinus Orca* (Southern Community Killer whales)" have been conducted under research permits from the Canadian Department of Fisheries and Oceans (DFO). Research findings from this study were reported in Lifeforce's Orca Field Guide.

In 1982 Lifeforce helped stop another capture of the Southern Community near Victoria, BC. An estimated 48 orcas in these families had been taken in the late 60s and 70s. These captures not only resulted in the loss of the 48 orcas but has also created a very low birth rate. The abnormal age and sex ratio will take decades to return to normal.

Mr. Hamilton wrote a book entitled "Orca - A Family Story" in 1993. Methods of orca transport were discussed in this book and could be use in the plan to reunite Luna with his family. In 1997 Mr. Hamilton design and wrote the "Whale Watching Guidelines for Southern BC and Washington" in consultation with DFO and NGOs.

Lifeforce has been conducting Marine Life Programs for over twelve years. Our programs increase our knowledge of orcas and contribute to the development of strategies for Orca Recovery Plans.

Lifeforce Foundation's Contribution to the Orca Recovery Process.

Many of Lifeforce's Marine Life Program objectives are to conduct programs in cooperation with government plans to mitigate any harm to the Southern Resident Orca Population and their habitats.

Disturbance due to vessel traffic



- **The Lifewatch Boater Awareness Program** was the first in Southern BC to conduct monitoring activities to stop vessel traffic disturbances. We distribute **Whale Watch Guidelines** for compliance among commercial and recreational boaters. This was the first area specific one developed through consultation with government and others. We are helping to mitigate boat harassment by education and reporting whale watch guidelines violations to appropriate agencies.

Whale Watching Guidelines for Southern BC & Washington

Report Sighting, Stranding, Harassment or Lifeline, Whale and Dolphin Hotlines
 Lifeline: 1-800-451-4355
 Report Sighting, Stranding, and Harassment to: Department of Fisheries and Oceans (DFO)
 1-800-451-4355
 Report Stranding to: BC Wildlife
 1-800-451-7664

Responsible Practices
 When you observe whales, dolphins, or porpoises, you are part of a special community. You are helping to build a better understanding of these animals and their needs. You are also helping to ensure that they are protected and that their habitats are preserved.

Species Commonly Seen in Southern BC & Washington

Natural History of Species Commonly Seen

Humpback Whale
 The humpback whale is a large whale that is found in the North Pacific Ocean. It is known for its long, curved back and its ability to breach the surface of the water.

Minke Whale
 The minke whale is a smaller whale that is found in the North Pacific Ocean. It is known for its long, slender body and its ability to breach the surface of the water.

Orca
 The orca is a large, black and white marine mammal that is found in the North Pacific Ocean. It is known for its intelligence and its ability to hunt in packs.

Whale Watching Guidelines

Single Whales
 - The number of whales seen during a whale watching trip should be limited to one whale per hour.

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- Lifeforce has been developing standard operating practices and data collection under a **Marine Wildlife Monitoring and Enforcement Policy**. In 2003, we organized a meeting of monitoring organizations.
- Lifeforce is developing **technology and methodology** to reduce harm to wildlife caused by boat traffic. For example, we have tested the use of an arrow bar to stop and direct boats approaching orcas.
- Lifeforce provides a **Whale and Dolphin Hotline** for public involvement in reporting sightings, stranding and harassment.



Saturna Island, BC

- Lifeforce is implementing **Orca Trails Whale Watching** to encourage land-based whale watching in marine parks. As part of this program we will also look at the possibility of using boats to take people to the parks. Marine Protected Areas could incorporate such drop off points and various types of tourism related businesses could be developed.
- Lifeforce has created an **Orca Field Guide** to educate everyone about the behaviour of orcas for understanding and safe vessel operation.

ORCA (Orcinus orca)

A FIELD GUIDE TO KILLER WHALE WATCHING IN SOUTHERN BC AND WASHINGTON

Understanding behavior and individual characteristics of 13 clan members for safe and respectful viewing

Report Sighting, Stranding and Harassment to:
 Whale and Dolphin Hotline (800) 451-4355
 Lifeforce Helpline or 1-800-10-ORCA
 Report Stranding, Whales and Dolphins to:
 Department of Fisheries and Oceans (DFO) 1-800-451-4355
 Report Stranding to: BC Wildlife 1-800-451-7664

The Southern Community - J Pod, K Pod and L Pod

Learn about the Southern Community of orcas, including the J, K, and L pods. This community is found in the southern part of the Strait of Georgia and is known for its unique behaviors and social structures.

IDENTIFY PODS BY ANATOMY

SEARCH WHALES, DO NOT ATTEMPT TO TOUCH, FEED OR SWIM WITH WHALES

Let Them Be! Stay at least 100 metres away. Do not approach and do not enter the Marine Protected Region.

- Liferforce is conducting studies:
 - a) **“The Behaviour and Travel Patterns of *Orcinus Orca* (Southern Community Killer whales)”**
To collect data regarding boat traffic impacts on behaviour and travel patterns in order to secure **No-Whale-Watch zones, marine protected areas, improvements in commercial whale watching activities and improvements in marine mammal protection regulations.**



False killer whale following Liferforce boat.

- b) **“The Behaviour and Travel Patterns of a Lone False Killer Whale”**
To collect data that will contribute to our knowledge of lone dolphin behaviour.
- Liferforce hopes to work with others to develop a **Model Whale Watching Plan**. This feasibility study would look at changing the face of present whale watching activities. It would replace the haphazard, prolonged presence of commercial boats with organized Whale Watching Zones and No Whale Watching Zones. The travel patterns of the Southern Community are very predictable and would support the creation of designated water zones for whale watching. These zones would be marked by GPS and land coordinates. The zones would be approximately 2 miles apart. Commercial boats would wait within the zone for the orcas. The number of boats would be limited and the number of zone visits restricted. This model would also incorporate **Ethical Ecotourism Standards** by training and licensing operators. Land-based whale watching would also be urged and promoted.

Disturbance due to contamination by anthropogenic activities





- Lifeforce provides a fully equipped **Marine Wildlife Rescue Mobile Unit** and service for stranding and other emergencies. Our equipment includes cetacean pontoons to refloat dolphins.
- Lifeforce is conducting studies:

a) **Orca Reaction to Benign, Novel Sound Stimuli: Implications for Reuniting Orcas and Developing Strategies to Prevent Exposure to Environmental Hazards**

This study looks at the development of innovative methodology to reduce the harm to orcas caused by anthropogenic activities. Lifeforce proposes to look at the responses from *Orcinus orca* to safe levels of novel sound stimuli. The purpose is to:

1. To determine if orcas, such as Luna and L pod, can be reunited by using methodologies such as boat following and lead sound signals.
2. To determine if benign, novel sound stimuli can be used to alert and/or change the direction of endangered orcas to stop exposures to hazards such as oil/chemical spills.

Disturbance due to noise by anthropogenic activities

Lifeforce helps **mitigate impacts of seismic studies**. In May 2002 there were 24-hour seismic tests in Southern Georgia Strait. The test areas range from Pt. Grey, BC to Lummi Island, WA. In order to avoid any harm to the endangered Southern Orca Community, Lifeforce advised the researchers when the orcas and other marine wildlife would be close to the test sites. The researchers would then shut down the underwater air guns. The US team contacted Lifeforce every day in order to determine the location of the orcas. They would then choose test sites where they would not be near the orcas.



For Further Information:

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