

Lifeforce Marine Wildlife 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 were praised by the responsible US government agency. It could have been used in the plan to reunite Luna with his family. In 1997 Mr. Hamilton designed 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 fifteen 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 marine wildlife populations 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

Phone: Spring, Ecological Resources of LifeForce, Whale and Dolphin Hotline (604) 457-4771 or 457-5238
 Lifeline: Standing by on 914, 1-8-6-1
 Home: 604-457-4355
 Fax: 604-457-4355
 Website: www.life-force.ca

Responsible Whalers
 Please stay on the water. Do not approach whales or dolphins. Do not feed them. Do not use binoculars or cameras to take pictures of whales or dolphins. Do not use flash photography. Do not use drones. Do not use loudspeakers. Do not use any equipment that could harm whales or dolphins. Do not use any equipment that could harm the environment. Do not use any equipment that could harm the water.

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. It is a migratory species and is found in both the northern and southern oceans.

Minke Whale
 The minke whale is a smaller whale that is found in the North Pacific Ocean. It is known for its long, straight back and its ability to breach the surface of the water. It is a migratory species and is found in both the northern and southern oceans.

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 other marine mammals. It is a migratory species and is found in both the northern and southern oceans.

Whale Watching Guidelines

Single Whales
 - The whale is a protected species and it is illegal to harass or hunt them.
 - Whales are sensitive to noise and vibration. Do not use loudspeakers or other equipment that could harm them.
 - Whales are sensitive to pollution. Do not throw anything overboard.
 - Whales are sensitive to disturbance. Do not approach them too closely.
 - Whales are sensitive to harassment. Do not chase them or feed them.

Whale Watching Guidelines
 - Do not approach whales or dolphins too closely.
 - Do not feed whales or dolphins.
 - Do not use binoculars or cameras to take pictures of whales or dolphins.
 - Do not use flash photography.
 - Do not use drones.
 - Do not use loudspeakers or other equipment that could harm whales or dolphins.
 - Do not use any equipment that could harm the environment.
 - Do not use any equipment that could harm the water.

- 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. In 2008 we started a campaign to get funding for enforcement agencies.
- 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. We also have tested Stop/Yield traffic paddles.
- 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 personalities of 120+ members for safe and respectful viewing

Whale Watching
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 - Do not feed whales or dolphins.
 - Do not use binoculars or cameras to take pictures of whales or dolphins.
 - Do not use flash photography.
 - Do not use drones.
 - Do not use loudspeakers or other equipment that could harm whales or dolphins.
 - Do not use any equipment that could harm the environment.
 - Do not use any equipment that could harm the water.

Respectful Whalers, Research and Monitoring for Whales and Dolphins
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The Southern Community - J Pod, K Pod and L Pod

LifeForce is proud to announce the formation of the Southern Community, a group of whale and dolphin enthusiasts who are dedicated to the protection and conservation of these magnificent animals. The Southern Community is a non-profit organization that is committed to the education and research of whales and dolphins. We are currently conducting research on the J Pod, K Pod, and L Pod of orcas in the southern region of British Columbia and Washington.

SONG PATTERNS BY MEMBER
 - Each member of the Southern Community has a unique song pattern that is used to identify them. These patterns are recorded and analyzed to help us understand the social structure and behavior of orcas.

IDENTIFICATION BY MEMBER
 - Each member of the Southern Community has a unique identification number that is used to track their movements and activities. This information is used to help us understand the migration and behavior of orcas.

SEARCHING FOR PODS - DID YOU ATTEMPT TO TOUCH FEED OR SWIM WITH WHALES?
 LifeForce is currently searching for pods of orcas in the southern region of British Columbia and Washington. We are looking for pods that are active and visible to the public. If you have any information about a pod, please contact us immediately.

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- 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, including Liferforce studies of a lone false killer whale, 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 Eco-tourism 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, could have been 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.



For Further Information:

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