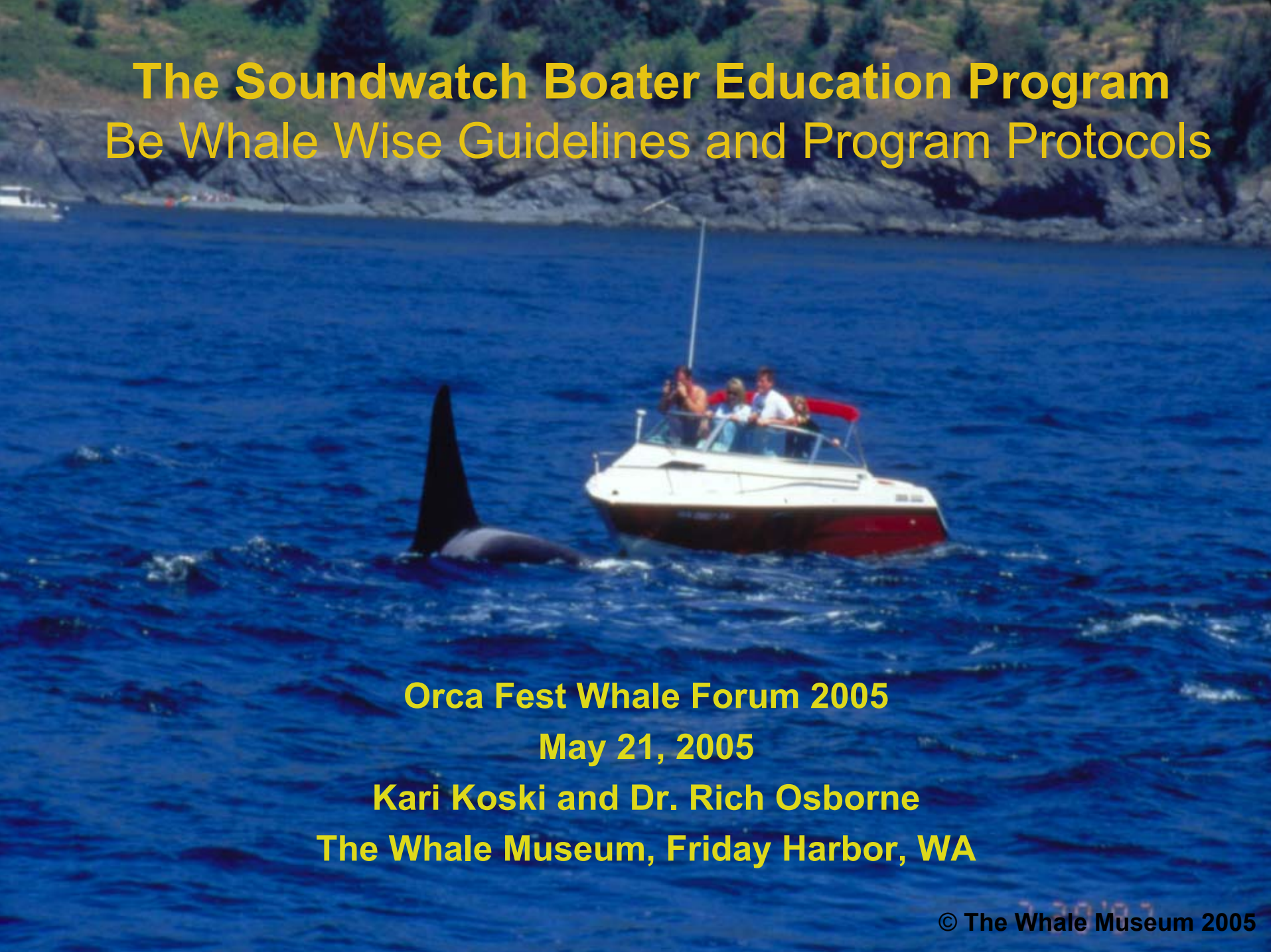


# **The Soundwatch Boater Education Program**

## **Be Whale Wise Guidelines and Program Protocols**



**Orca Fest Whale Forum 2005**

**May 21, 2005**

**Kari Koski and Dr. Rich Osborne**

**The Whale Museum, Friday Harbor, WA**

# The **Whale** Museum

EDUCATION • RESEARCH

Promoting stewardship of whales and the Salish Sea ecosystem through education and research.



[www.whalemuseum.org](http://www.whalemuseum.org)

Friday Harbor • San Juan Island • Washington

© The Whale Museum 2005

# The Whale Museum's Soundwatch Boater Education Program



## Program Mission

**To promote responsible stewardship of the Salish Sea through the development, distribution, and implementation of best practice guidelines for marine wildlife viewing by residents, visitors and commercial users.**

# The Whale Museum's Soundwatch Boater Education Program



## Program Goal

**To reduce disturbances to marine wildlife  
by irresponsible boater behavior.**

# The Whale Museum's Soundwatch Boater Education Program



## Program Objectives

- **Educate boaters on the best practices for viewing wildlife before they leave the shore.**

# The Whale Museum's Soundwatch Boater Education Program



## Program Objectives

- Reinforce the learning experience in the actual context where disturbances take place.



# Evolving Soundwatch Voluntary Guidelines (1989-Present)

**HELP PROTECT MARINE MAMMALS**

**DON'T LET THEM BE HARASSED**

To protect whales and other marine mammals, laws have been enacted. It is required under the U.S. Marine Mammal Protection Act (1972), the U.S. and Canadian governments have developed guidelines for marine mammal watching in Pacific Northwest waters.

**WHALE WATCHING GUIDELINES**

**VEHICLES:** Should not approach marine mammals closer than 100 yards. Should not impede feeding and resting.

**AIRCRAFT:** Should not fly under 1000 feet over marine mammals.

**DISRUPTIONS:** Should not disturb any action that could affect directly or indirectly the behavior of marine mammals. Includes but is not limited to: feeding, resting, nursing, social interaction, and other behaviors.

**THE WHALE HOTLINE**  
1-800-562-8832 (in Washington State)  
1-800-334-8832 (in British Columbia)

**PRODUCED BY**  
**THE WHALE MUSEUM**  
Friday Harbor, WA

**No Boat Zones**

- 1/2 mile
- 1/4 mile

## NO SOUND IN THE SOUND DAYS



### JUNE 28TH & AUGUST 9TH, 1994 A GESTURE FOR THE ORCAS

No sound in the sound days is simply getting everyone to agree to shut off their engines when whales pass two days this summer. This will create a buffer of silence around the whales when they swim through the 35 mile (60 km) zone that is the location for about 80% of their exposure to whale watching.

**IF YOU SEE THE ORCAS IN THIS ZONE ON JUNE 28th OR AUGUST 9th, 1994: MAKE THE WHALES FEEL WELCOME, SHUT OFF YOUR ENGINE !**

*San Juan Islands*

**WHALE WATCHING**

*Guide and Guidelines*

**SOUNDWATCH**  
BOATER EDUCATION PROGRAM

**Best Practices for Viewing Marine Wildlife**

**BOATER GUIDELINES**

**YIELD**

a stewardship program of  
**The Whale Museum**

PO Box 945 • Friday Harbor, WA • 98250  
1.800.946.7227 • www.whale-museum.org



# The Whale Museum's Soundwatch Boater Education Program

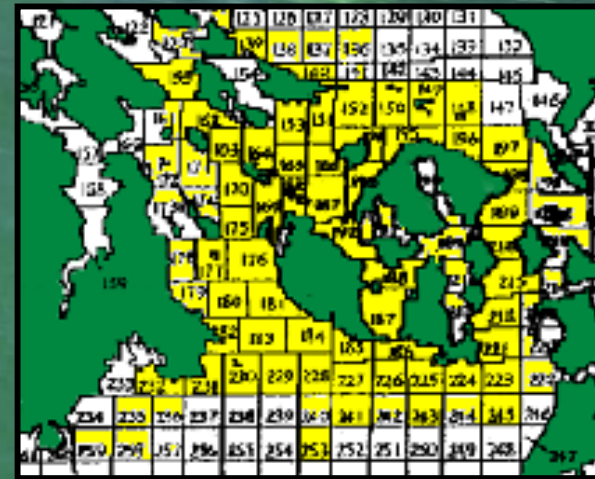
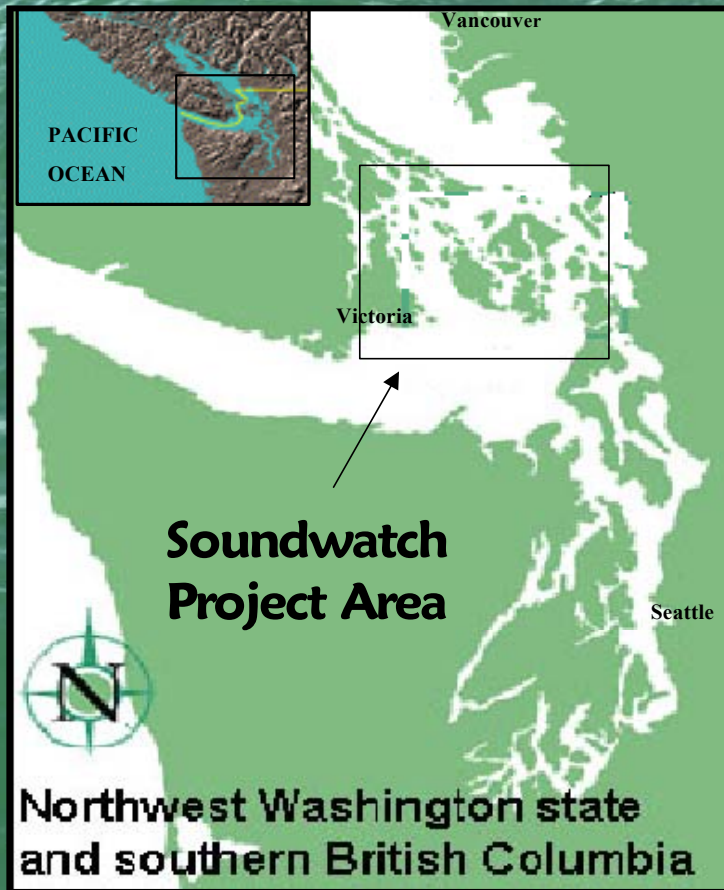


## Program Objectives

- **Provide a scientific platform to monitor vessel activities around marine wildlife.**

# The Whale Museum's Soundwatch Boater Education Program

## Program Study Area:

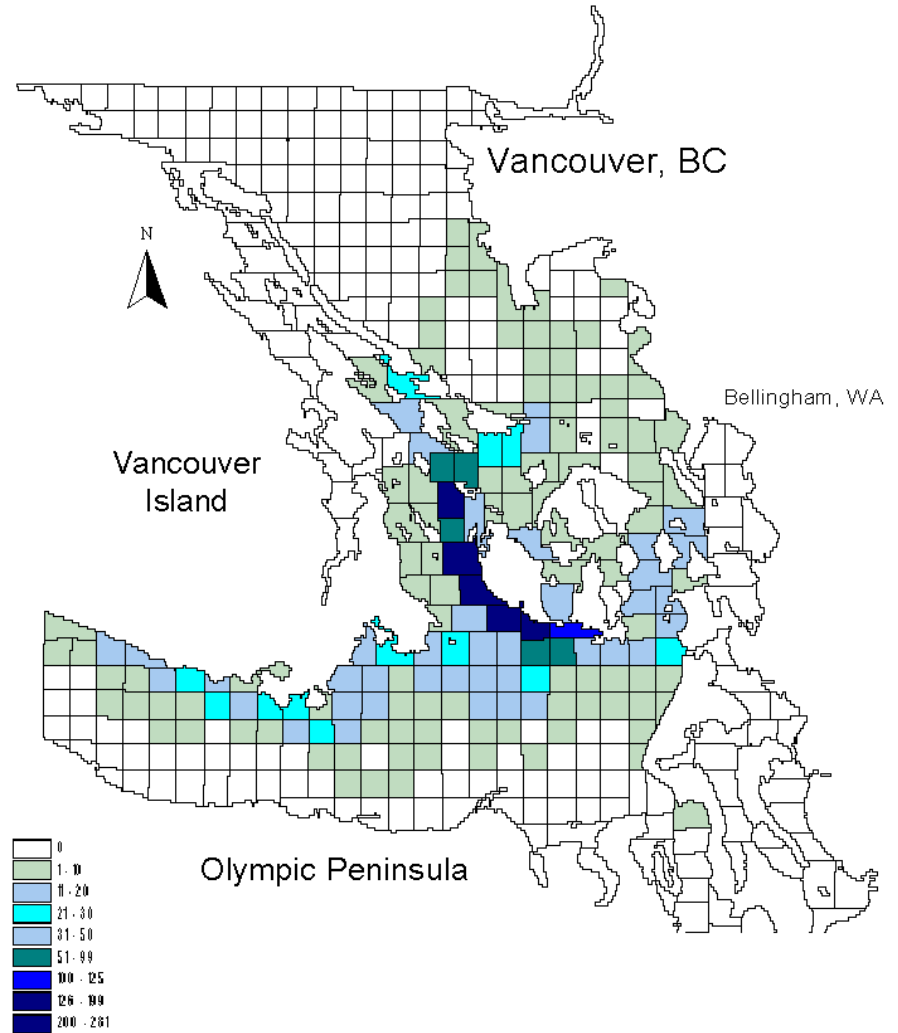


**Yellow quadrants represent  
Soundwatch program most  
frequented monitoring areas.**

Spatial density of where  
S.R.K.W.s were followed  
by whale watching boats.

(GIS plot of Commercial pager data  
Jean Olson, The Whale Museum)

## Southern Resident Days/Quadrant May-September 1996-2000



# The Whale Museum's Soundwatch Boater Education Program Staff and Volunteers:

**1 Full Time Coordinator**

**1-2 Seasonal vessel  
operators/educators**

**40+ Volunteers**

**1-2 Academic Interns**

**Volunteer Hours 2004:  
1,400**

**May 15-Sept 15**

**7-days a week**

**Ave 8 hours day**





# The Whale Museum's Soundwatch Boater Education Program Partnerships

- **U.S. and Canadian federal, provincial, state and local governments**
- **Marine Mammal Monitoring Program (M3)**
- **Whale Watch Operators Association (WWOANW)**  
(Includes owners, operators and naturalists)
- **Regional NGO's and Foundations**
- **Science community**
- **Recreational boating/fishing community, stakeholders**
- **Academic institutions**

# U.S. National Marine Fisheries Service

U . S . D e p a r t m e n t o f C o m m e r c e



**Northwest Regional Office**



NOAA Fisheries

National Marine Fisheries Service



## 2003 & 2004 Partial Funding for Soundwatch Operations and Reporting on Vessel Activities

- Assistance with Be Whale Wise Guideline Brochure and Poster Development Printing and Distribution (along with Fisheries and Oceans Canada), Including:
  - Washington State Ferry System
  - Washington Department of Fish and Wildlife 2005/06 Sport Fishing Rules Guide
  - Billboards along the I-5 Corridor and Arterials to Major Marinas
  - TV and Radio Be Whale Wise Bulletins
  - Bumper stickers and 10 Bus sides



# U.S. National Marine Fisheries Service

## Service

**Working in  
Partnership to  
Increase  
Enforcement  
Presence**

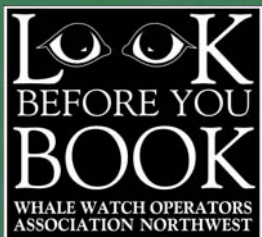
**Washington Department of  
Fish and Wildlife**



# The International Whale Watch Operators Association Northwest WWOANW



The international Whale Watch Operators Association Northwest (WWOANW) was created in 1994. Association members adhere to an international, voluntary set of guidelines specific to commercial boat operators that are more explicit than those outlined by both the **U.S.** and **Canadian** Federal governments. Soundwatch works closely with the association to develop and promote better boating behavior and jointly holds commercial driver meetings to interpret guideline changes. Soundwatch encourages people who wish to go whale watching from a commercial vessel to choose a WWOANW member company.



*Remember to Look Before You Book!*





Detail

## Marine Mammal Monitoring Program and Soundwatch:

A Transboundary **BE WHALE  
WISE** Partnership since 2001

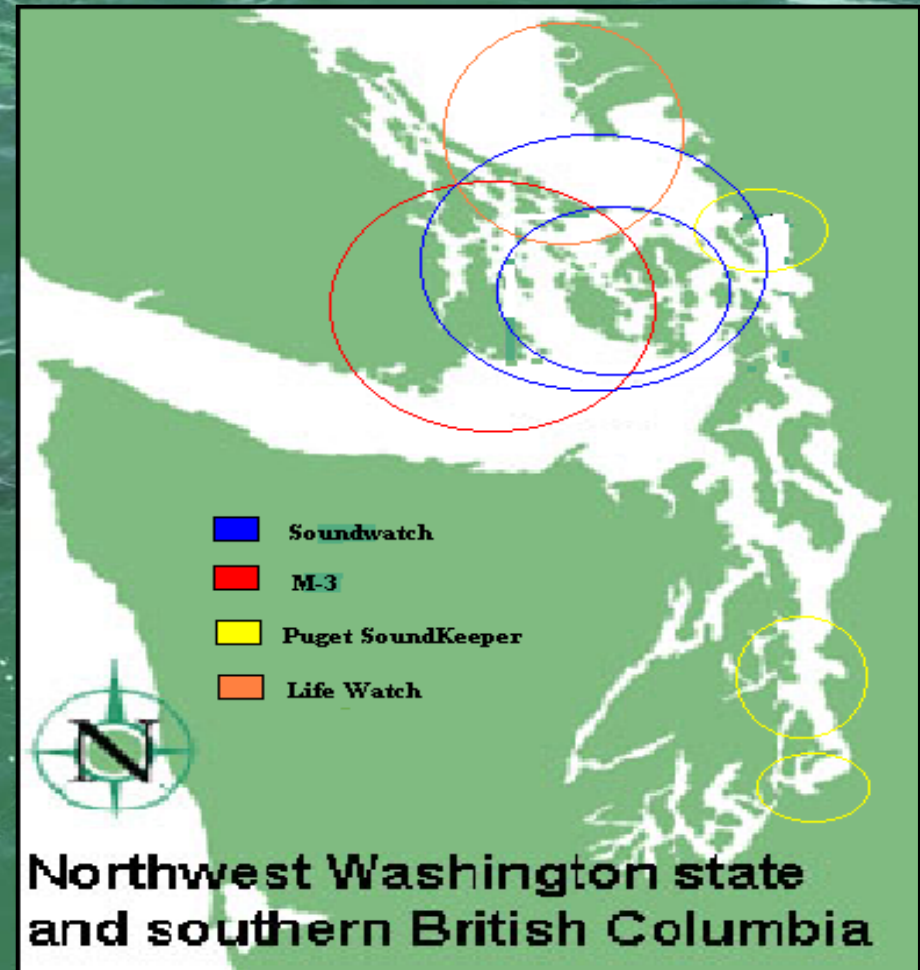


Northwest Washington state  
and southern British Columbia



# What vessel-based monitoring programs currently exist in the Haro Strait region ?

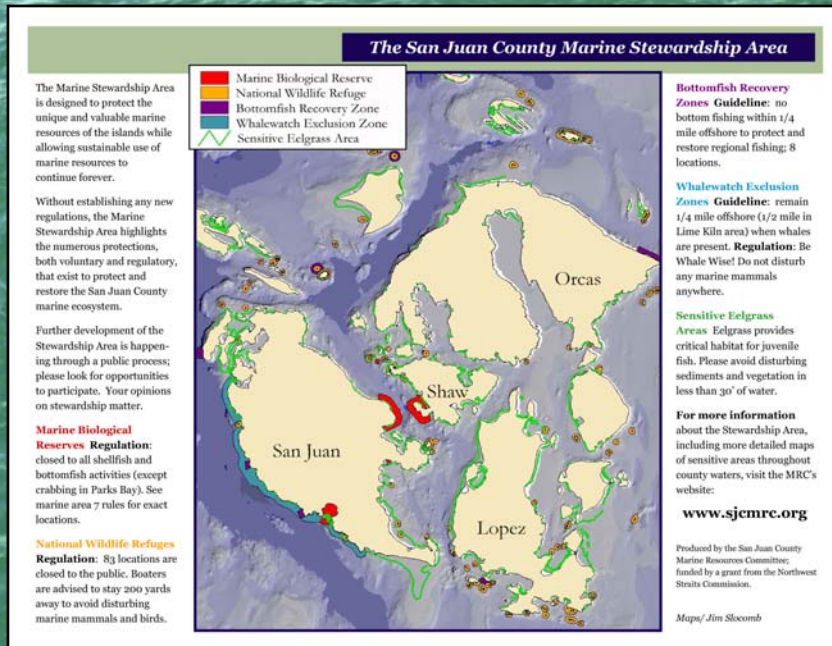
- The Whale Museum's Soundwatch Boater Education Program: 1993-Present.
- Lifeforce's Life Watch Boater Education Program: 1998-Present.
- Puget Soundkeeper Alliance
- Marine Mammal Monitoring Program (M-3): 2001-Present.



# The Whale Museum's

## Soundwatch Boater Education Program

### Monitoring Vessel Activities in the San Juan County Marine Stewardship Area



- San Juan National Wildlife Refuge System
- San Juan County Voluntary Bottomfish Recovery Zones
- San Juan Biological Reserves
- Voluntary Whale Watch Exclusion Zone

The Soundwatch program conducts surveys to monitor vessel activities and assist with marine bird population counts within the San Juan County Marine Stewardship Area. The Soundwatch crew contacts boaters in the vicinity of reserves to handout responsible wildlife viewing materials.

# The Whale Museum's Soundwatch Boater Education Program

## SAN JUAN ISLAND SPECIAL ORCA VIEWING AREAS

**HARO STRAIT VOLUNTARY NO MOTOR BOAT ZONE FOR WHALES** is a voluntary whale protection zone for Orcas when they are present along the western shoreline of San Juan Island, Washington.

The main zone extends from Mitchell Point until Eagle Point from the shore out to  $\frac{1}{4}$  mile (440 yards).

In Addition, the 2mile area around Lime Kiln Washington State Park / Whale Watch Park from the shore out to  $\frac{1}{2}$  mile (880 yards) provides a motor-boat free area for park visitors viewing whales from shore.



# Be Whale Wise

## Guidelines for Watching Marine Wildlife

Seeing killer whales and other marine wildlife in their natural environment can be a thrilling experience.

In our excitement, we sometimes forget that our presence has an effect on the animals and their habitat. Just like us, marine animals need space to find food, choose mates, raise young, socialize and rest.

When we get too close, approach too fast, or make too much noise we may be disrupting these activities and causing the animals unnecessary stress. In some cases, we may be threatening their lives. Please follow these guidelines for watching marine wildlife.

Set an example for other boaters, and help protect this area's spectacular wildlife resources.

### Why do we need guidelines?

The diversity and complexity of marine life in the coastal waters off British Columbia and Washington is truly extraordinary.

But it is a fragile world. Pollution, global climate change and other impacts are taking their toll at all levels of the coastal food web. Some species, such as the southern resident population of killer whales, are showing signs of vulnerability and decline.

Meanwhile, the number of boats in the area is steadily increasing, placing added pressures on marine animals and their habitats.

### We need to minimize our impact.

These guidelines are designed to help you enjoy your wildlife encounter, and reduce the risk of disturbance.

#### To report a marine mammal disturbance or harassment:

**Canada:**  
Fisheries and Oceans Canada  
1-800-465-4336

**US:**  
National Marine Fisheries Service  
Office for Law Enforcement: 1-800-853-1964

#### To report marine mammal sightings:

BC Cetacean Sightings Network  
[www.wildwhales.org](http://www.wildwhales.org) or (604) 659-3429

The Whale Museum Hotline (WA state):  
1-800-562-8832 or [hotline@whalemuseum.org](mailto:hotline@whalemuseum.org)

OrcaNetwork  
[info@orcaneetwork.org](mailto:info@orcaneetwork.org)

#### Need more information?

**Canada:**  
Fisheries and Oceans Canada  
[www.pac.dfo-mpo.gc.ca](http://www.pac.dfo-mpo.gc.ca)

Marine Mammal Monitoring Project (M3)  
(Victoria and Southern Gulf Islands):  
(250) 480-2656 or  
[www.salishsea.ca](http://www.salishsea.ca)


Straitwatch  
(Johnstone Strait and Northern Vancouver Island)  
[www.straitwatch.org](http://www.straitwatch.org)

**US:**  
Soundwatch Boater Education Program  
(Washington State, Haro Strait Region)  
(360) 378-4710 or  
[www.whalemuseum.org](http://www.whalemuseum.org)

NOAA Fisheries, NorthWest Region  
[www.nwr.noaa.gov](http://www.nwr.noaa.gov)

NOAA Fisheries, Office of Protected Resources  
[www.nmfs.noaa.gov/pr/MMWatch/MMVlewing.html](http://www.nmfs.noaa.gov/pr/MMWatch/MMVlewing.html)



 Fisheries and Oceans Canada Pêches et Océans Canada



Canada

### Whale Watching:

1. BE CAUTIOUS and COURTEOUS: approach areas of known or suspected marine mammal activity with extreme caution. Look in all directions before planning your approach or departure.
2. SLOW DOWN: reduce speed to less than 7 knots when within 400 metres/yards of the nearest whale. Avoid abrupt course changes.
3. AVOID approaching closer than 100 metres/yards to any whale.
4. If your vessel is unexpectedly within 100 metres/yards of a whale, STOP IMMEDIATELY and allow the whales to pass.
5. AVOID approaching whales from the front or from behind. Always approach and depart whales from the side, moving in a direction parallel to the direction of the whales.
6. KEEP CLEAR of the whales' path. Avoid positioning your vessel within the 400 metre/yard area in the path of the whales.
7. STAY on the OFFSHORE side of the whales when they are traveling close to shore. Remain at least 200 metres/yards offshore at all times.
8. LIMIT your viewing time to a recommended maximum of 30 minutes. This will minimize the cumulative impact of many vessels and give consideration to other viewers.
9. DO NOT swim with or feed whales.

### Porpoises and dolphins:

1. OBSERVE all guidelines for watching whales.
2. DO NOT drive through groups of porpoises or dolphins for the purpose of bow-riding.
3. Should dolphins or porpoises choose to ride the bow wave of your vessel, REDUCE SPEED gradually and avoid sudden course changes.

### Seals, sea lions and birds on land:

1. AVOID approaching closer than 100 metres/yards to any marine mammals or birds.
2. SLOW DOWN and reduce your wake/wash and noise levels.
3. PAY ATTENTION and back away at the first sign of disturbance or agitation.
4. BE CAUTIOUS AND QUIET when around haul-outs and bird colonies, especially during breeding, nesting and pupping seasons (generally May to September).
5. DO NOT swim with or feed any marine mammals or birds.

**DO YOUR PART TO  
PROTECT MARINE MAMMALS –  
FOLLOW THE VIEWING GUIDELINES**

### Viewing wildlife within Marine Protected Areas, Wildlife Refuges, Ecological Reserves and Parks:

1. CHECK your nautical charts for the location of various protected areas.
2. ABIDE by posted restrictions or contact a local authority for further information.

### The Laws:

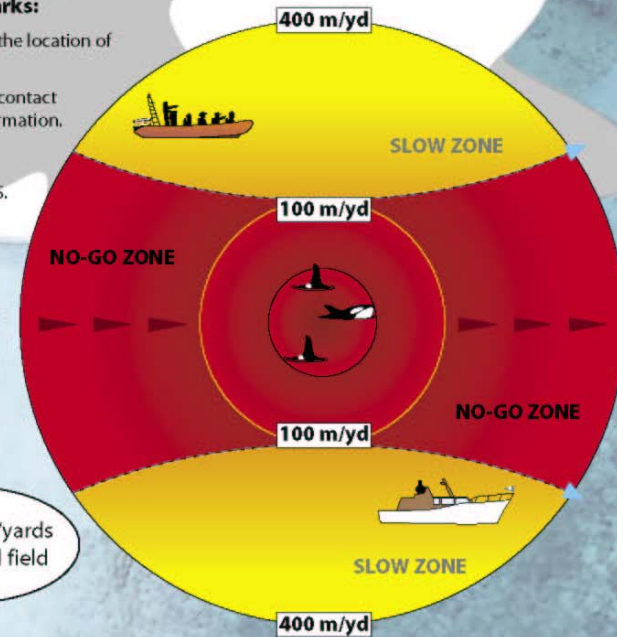
Regulations in Canada and the U.S. prohibit the harassment and disturbance of marine mammals.

### What is a disturbance?

Disturbance is when we interfere with an animal's ability to hunt, feed, communicate, socialize, rest, breed and care for its young.

These are critical life processes, necessary for healthy marine mammal populations.

100 metres/yards  
= 1 football field



# Be Whale Wise Guidelines for Viewing Marine Wildlife

## Whale Watching:

**Be Cautious and Courteous**: approach areas of known or suspected marine mammal activity with extreme caution. Look in all directions before planning your approach or departure.

**Slow Down**: reduce speed to less than 7 knots when within 400metres/yards of the nearest whale. Avoid abrupt course changes.

**Avoid** approaching closer than 100metres/yards to any whale.

If your vessel is unexpectedly within 100 metres/yards of a whale, **stop immediately** and allow the whales to pass.

**Avoid** approaching whales from the front or behind. Always approach and depart whales from the side, moving in a direction parallel to the direction of the whales.

**Keep clear** of the whales' path. Avoid positioning your vessel within the 400 metre/yard area in the path of whales.

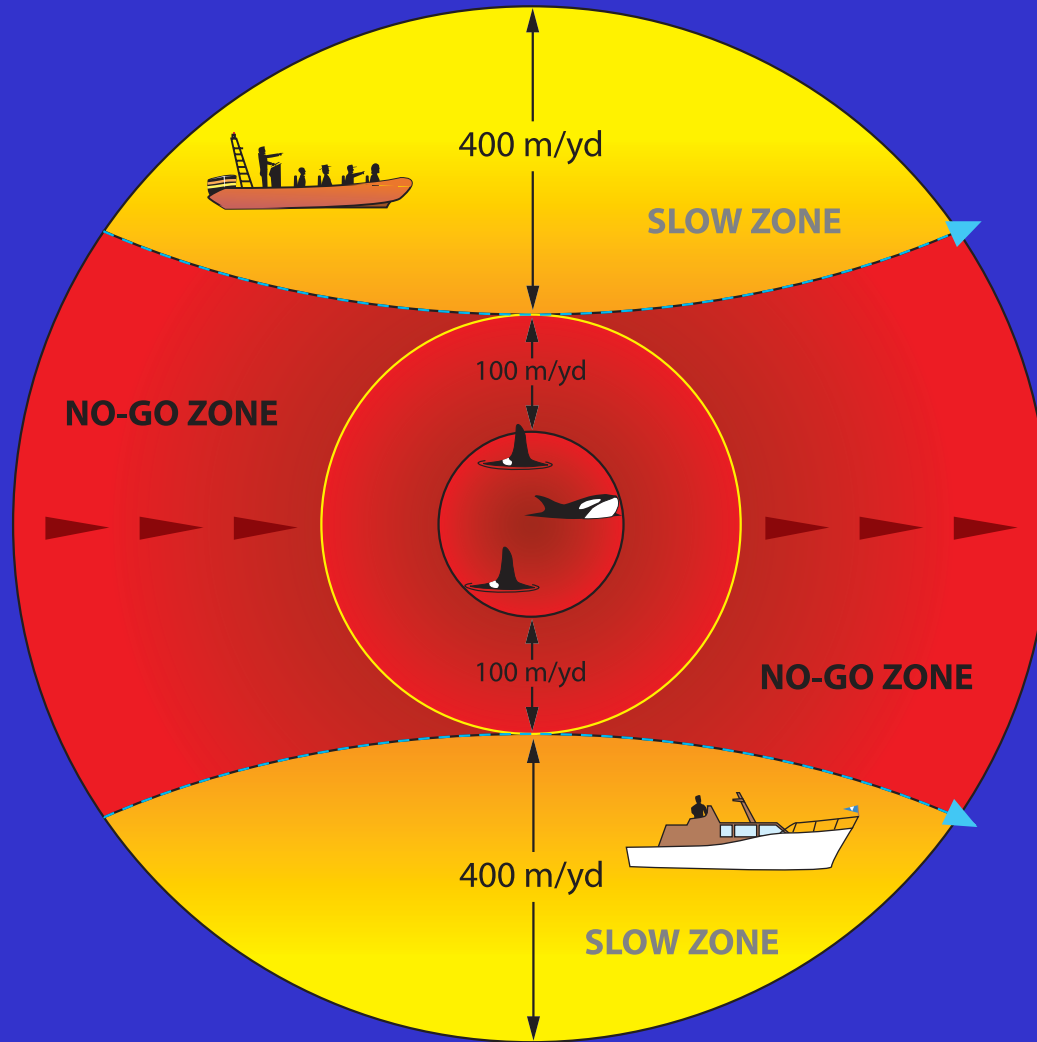
**Stay** on the **offshore** side of whales when they are traveling close to shore. Remain at least 200 metres/yards offshore at all times.

**Limit** your viewing time to a recommended time of 30 minutes. This will minimize the cumulative impact of many vessels and give consideration to other viewers.

**Do not** swim with or feed whales.



# THE WHALE WATCH NO-GO ZONES



## Porpoises and Dolphins:

**Observe** all guidelines for watching whales.

**Do not** drive through groups of porpoises or dolphins for the purpose of bow riding.

3 Should porpoises or dolphins choose to ride the bow wave of your vessel, **reduce speed** gradually and avoid sudden course changes.

## Seals, Sea Lions and Birds on Land:

**Avoid** approaching closer than 100 metres/yards to any marine mammal or birds.

**2 Slow down** and reduce your wake/wash and noise levels.

**3 Pay attention** and back away at the first sign of disturbance or agitation.

**Be cautious and quiet** when around haul-outs and bird colonies especially during breeding, nesting and pupping season (generally May to September).

**5 Do not** swim with or feed any marine mammals or birds.

**Prepared By:**

The Whale Museum

P.O. Box 945

Friday Harbor WA 98250

(360) 378-4710

[Soundwatch@whalemuseum.org](mailto:Soundwatch@whalemuseum.org)

[www.whalemuseum.org](http://www.whalemuseum.org)

**Sample**

**Soundwatch Feedback Report**

**FOR: Whale Watch Company Name**

(Insert Company Name)

<b>Incident Date:</b>	<b>Incident Time:</b>	<b>Location:</b>	<b>Vessel Name:</b>	<b>Observed Behavior:</b>
7/1/2000	1:30:00 PM	False Bay	Company Boat	Parked in Path
7/1/2000	1:45:00 PM	Hannah Hts.	Company Boat	Within 440 yards of SJI No-Boat Zone
7/3/2000	4:58:00 PM	Open Bay	Company Boat	Inshore of whales
7/4/2000	3:39:00 PM	Pile Pt.	Company Boat	Inshore of whales
7/7/2000	3:45:00 PM	Hein Bank	Company Boat	Parked in Path

**Sample Soundwatch  
Feedback Report Card.**

# Traditional Soundwatch and M3 Monitoring Program Vessel Behavior Incident Categories and Definitions

Under power within 100 yards/metres= vessel under power (moving) w/in 100 yds/m of a whale, use laser range finder when possible.

**Within ¼ mile (440 yards) SJI Voluntary No Boat Zone=** vessels w/in 440 yd of shoreline in the determined Zone when whales present, use radar/laser range finder when possible, or shore-based Theodolite study team.

**Within ½ mile (880 yards) Lime Kiln=** vessels w/in 880 yd of shoreline one mile radius of Lime Kiln Light when whales present, use radar/laser range finder when possible, or shore-based Theodolite study team

Note: area expanded Lime Kiln to Edwards Point for NMFS research end of 2003 and into 2004 season.

**Within 1/8 mile (220yards) of shore**= vessels w/in 220 yd of any shoreline when whales present, use radar/laser range finder when possible, or shore-based Theodolite study team.

**Inshore of whales**= any vessel on the inshore side of whales when whales are traveling in relatively predictable pattern (large or small groups) within 1/2 mile (880 yd) of shore, use radar/laser range finder when possible, or shore-based Theodolite study team.

**Crossing path of whales**= Vessels traveling across expected path of whales when whale are traveling in relatively predictable pattern (large or small groups).

**Chasing/pursuing whales**= Vessel traveling behind a whale or group of whales 400-100 y/m when whales are traveling in relatively predictable pattern.

**Parked in Path**= Intentionally positioning vessel in the path of whales and/or not moving out of path of whales when there is time and space to do so, so that whales pass closer than 100 yds/m when whales are traveling in relatively predictable pattern.

**Airplane within 1000 feet**= Aircraft flying lower than 1000 ft, use laser range finder when possible, or shoreline reference

**Within 200 yards of NWR**= Vessel within 200 yd NWR site, use radar/laser range finder when possible

**Other as defined in comments**= Something out of the ordinary or other distinct behavior not in the spirit of the guidelines such as: aircraft repeated low circling, using current to drift into path, people throwing a Frisbee from vessel for dog into group of whales, multiple circles through Dall's Porpoise, closer than 200 yd to known a seal haul out or bird rookery, or other behavior contrary to Marine Protection Area guideline or regulation.

**Fast within ¼ mile (440 yards)**= Vessel motoring faster than 7 knots within ¼ mile (440 yd) from whales, use laser range finder/speed gun/radar when possible.

**1st approach head-on, behind or inshore**= when vessel new on scene approaches head-on, from behind or on the inshore side of whales when whales are traveling in relatively predictable pattern.

**Kayaks spread out**= kayaks not grouped up when whales are traveling in relatively predictable pattern

**Kayaks w/whales outside ¼ mile SJI Zone**= Kayaks not staying inshore in the determined Zone when whales present, paddling outside ¼ mile (440 yd) offshore to meet whales when whales are traveling in relatively predictable pattern.

**Kayaks paddling within 100 yards of whales**= kayak paddling w/in 100 yds/m of whale, use laser range finder when possible



**K.E.L.P. (Kayak Education and Leadership Program) is a kayak-specific component of The Soundwatch Boater Education Program. K.E.L.P. educators teach commercial and private kayakers about marine stewardship and promote the Responsible Kayaker Code to help reduce disturbances to marine wildlife by irresponsible boating practices.**



**PADDLE BY THE CODE & HELP PROTECT MARINE WILDLIFE!**



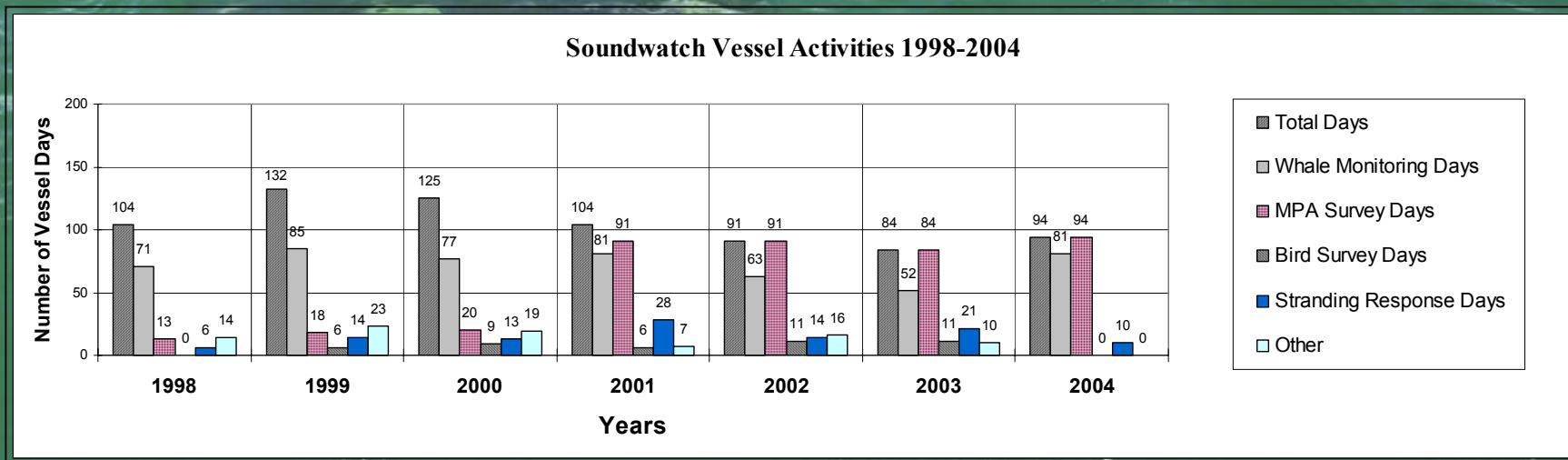
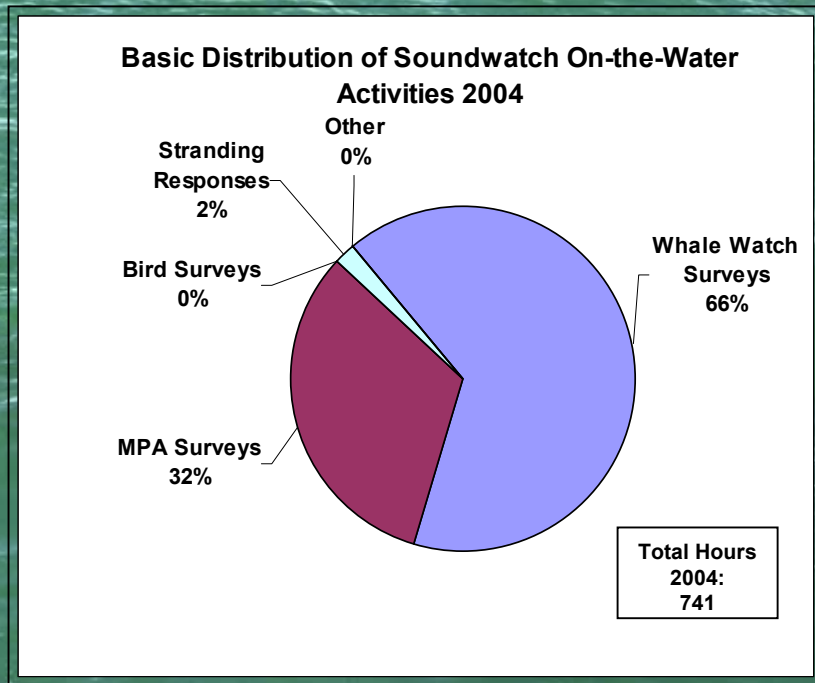
**👍 DO NOT INTENTIONALLY POSITION YOURSELF IN THE PATH OF WHALES, PADDLE INTO GROUPS OF WHALES OR CHASE WHALES.**

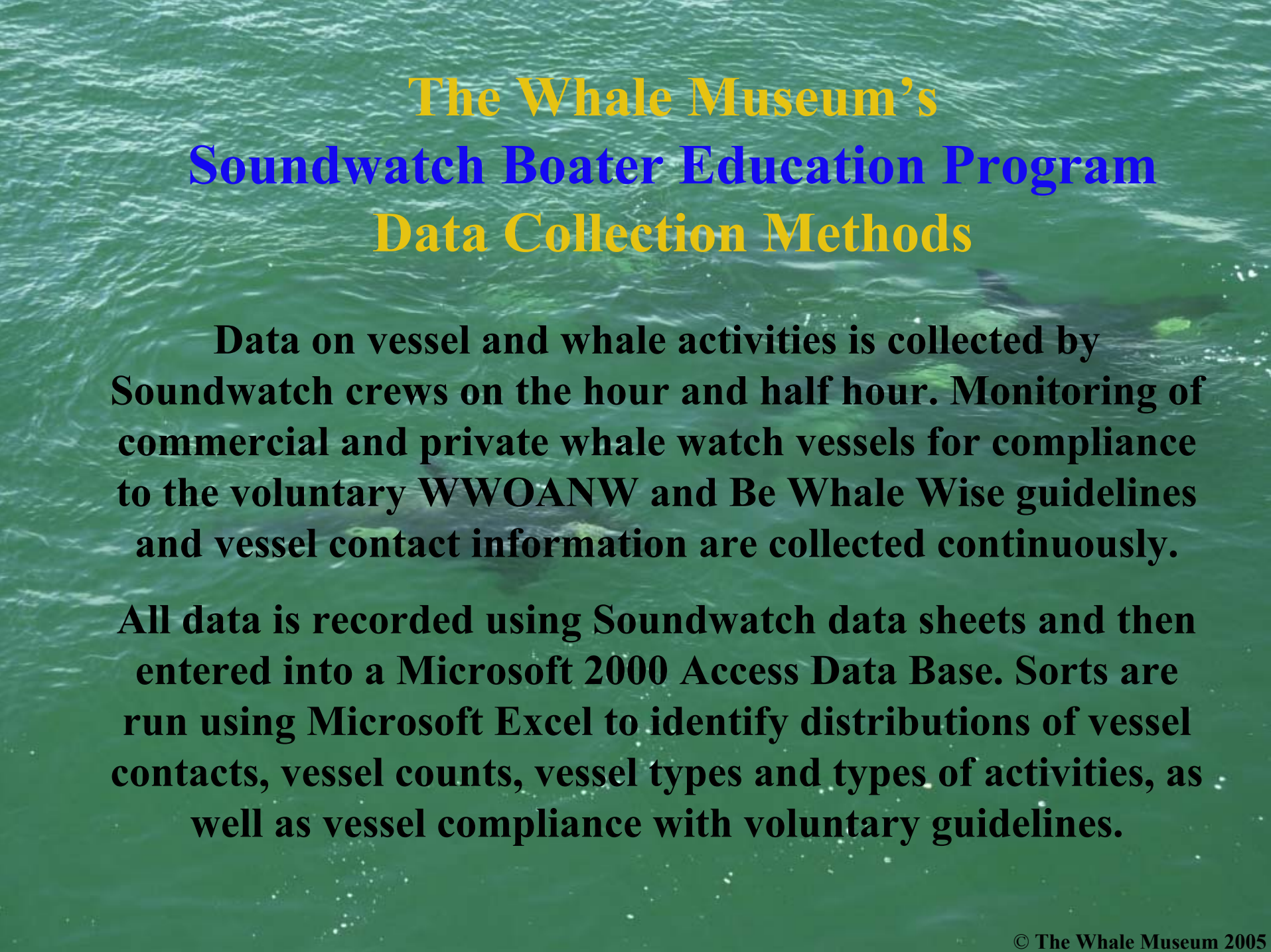
**Move out of the whales route and position yourself and your group at least 100 yards/meters from whales, preferably towards the shore or in kelp beds. Raft up together and stop paddling. Wait for the whales to pass before paddling again.**



**👍 RESPONSIBLE KAYAKER CODE**

# Soundwatch Activities 2004



The background of the slide is a photograph of a whale breaching the ocean surface. The water is a deep greenish-blue, and the whale's dark back and tail are visible as it moves through the water, creating a splash. The text is overlaid on this image.

# **The Whale Museum's Soundwatch Boater Education Program Data Collection Methods**

**Data on vessel and whale activities is collected by Soundwatch crews on the hour and half hour. Monitoring of commercial and private whale watch vessels for compliance to the voluntary WWOANW and Be Whale Wise guidelines and vessel contact information are collected continuously.**

**All data is recorded using Soundwatch data sheets and then entered into a Microsoft 2000 Access Data Base. Sorts are run using Microsoft Excel to identify distributions of vessel contacts, vessel counts, vessel types and types of activities, as well as vessel compliance with voluntary guidelines.**

# **The Whale Museum's**

## **Soundwatch Boater Education Program**

### **Data Collection Methods**

#### **Vessel Contacts:**

**Whenever Soundwatch approaches a vessel to distribute guidelines the interaction is recorded. Soundwatch notes the date, time, location, vessel type, # of people on board and vessel identification. Soundwatch records if the boat operator takes the guidelines, has been previously contacted, or if Soundwatch has to re-approached throughout the day.**

**If the vessel operator is behaving contrary to guidelines it is recorded as an incident, with special notation on the contact page if we have contacted them, if we have video documentation if the incident warrants follow-up from enforcement.**



# **The Whale Museum's**

## **Soundwatch Boater Education Program**

### **Data Collection Methods**

#### **Vessel Counts:**

**Every half-hour the vessels within a ½ mile radius of where all known whale activity is occurring are counted according to type: commercial whale watching (Canadian or US), private recreational (whale watching or actively fishing), kayak (lumped commercial and private), aircraft (commercial or private), research, shipping traffic or other (as defined in comment section).**

**The time, date, location, latitude and longitude are recorded. Whale pod (s), direction and basic behavior is also recorded. Vessel counts are also conducted on-shore at Limekiln Whale Research Lab when whales are present and at regular fixed times with or without whales present.**

**SOUNDWATCH**

**Vessel Counts**

**Date** \_\_\_\_\_

**Crew** \_\_\_\_\_

Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other
Time	Lat			Long			Quad	Pod	Dir	Comments/ Whale Behavior		
Total Vessels	CWW:	US	Can	Private:	Rec	Fish	Kayak	Research	Shipping	Aircraft	Other	Define Other

The Whale Museum 2004

**Whale Behavior Categories:** Configuration: **Contact/Tight/Loose/Spread** Direction: **Directional/Non-Directional** Speed: **Motionless/Slow/Med/Fast/Porpoising**  
**Other Behaviors: Percussive/Play Object/Milling/Surface Vocal/Peis/Fish Visible**



# **The Whale Museum's Soundwatch Boater Education Program Data Collection Methods**

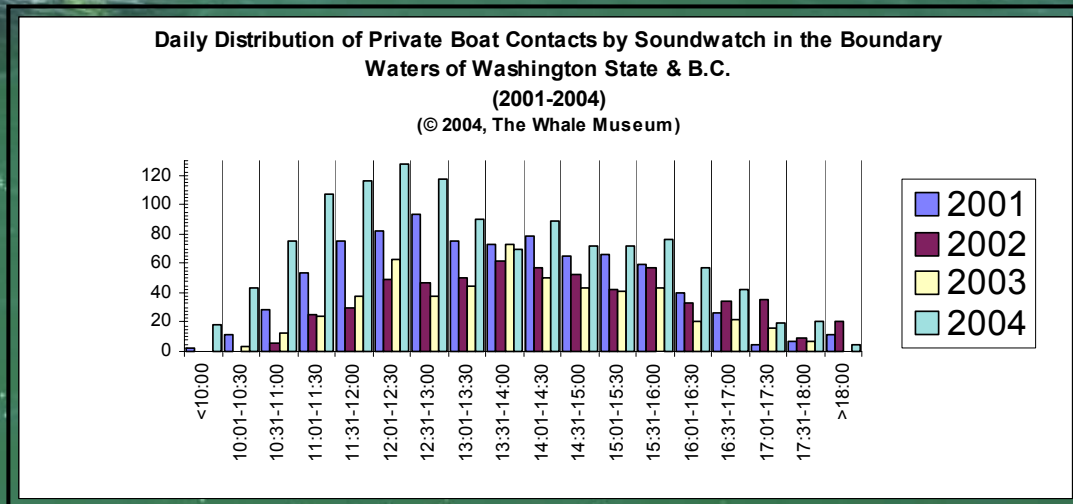
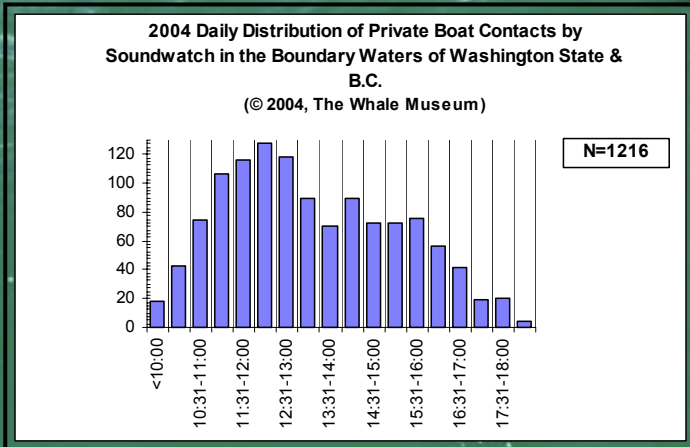
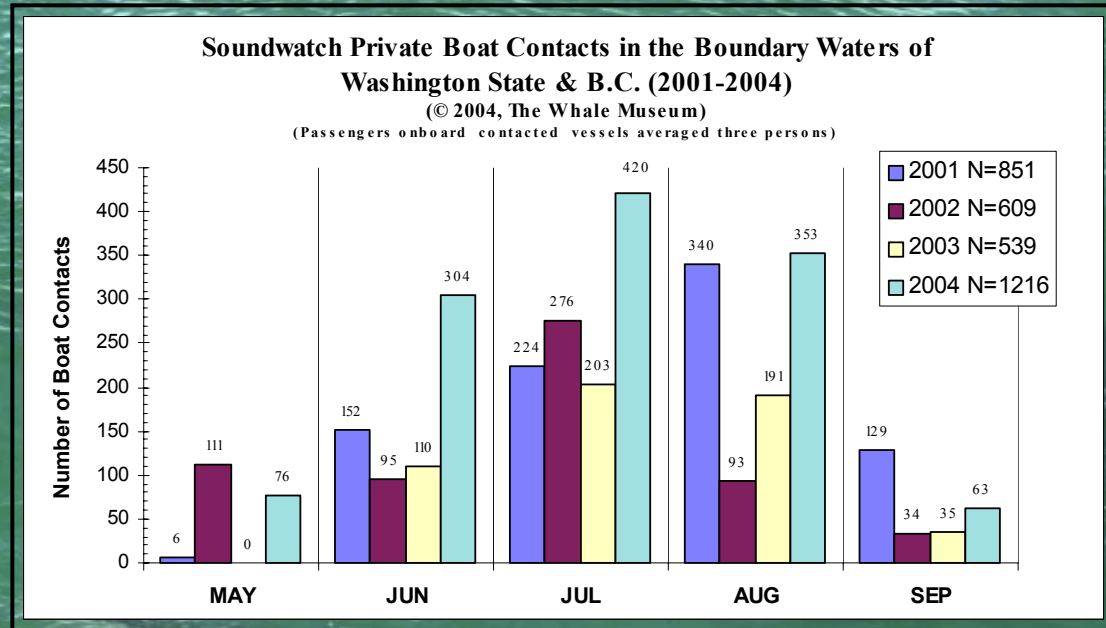
## **Vessel Incidents:**

**An incident is defined as a driver of a commercial whale watch vessel, or a private boat operator operating contrary to the agreed upon voluntary WWOANW or Be Whale Wise Guidelines. Incidents are recorded whenever a Soundwatch operator observes an incident.**

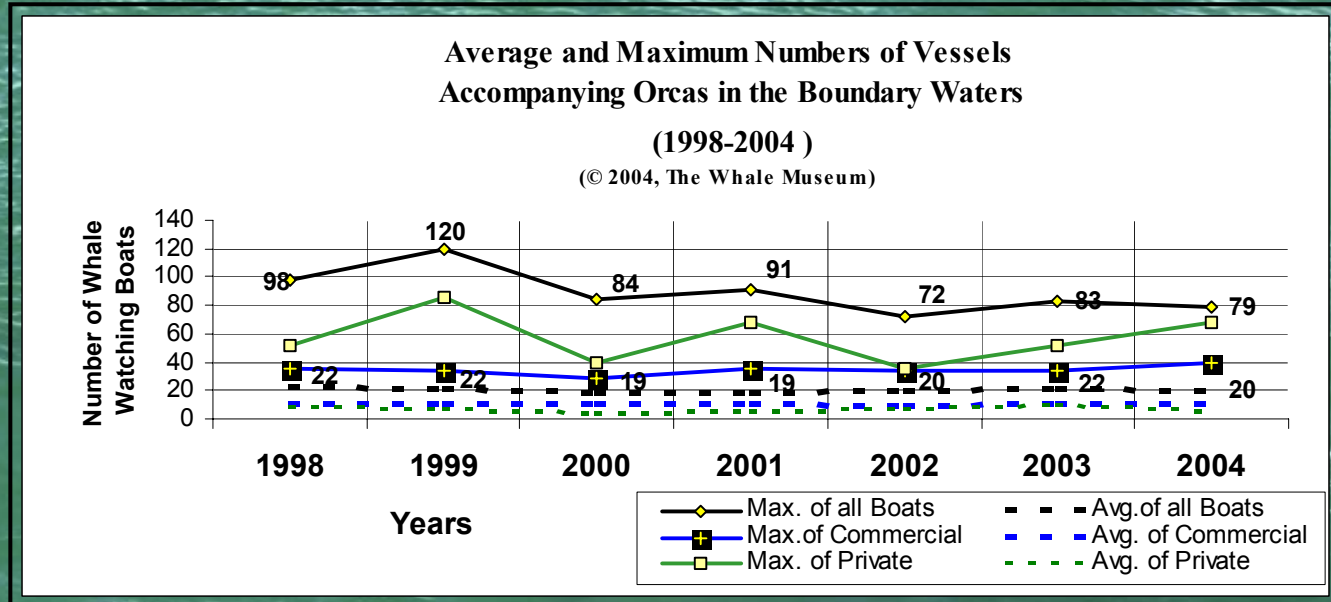
**A vessel's company and/or name must be identified, preferably the actual name and registration number of the specific vessel. The date, time and exact location are recorded as well as the type of incident(s). Photos and/or videos are taken when possible especially in the case of repeated or blatant disregard for guidelines.**



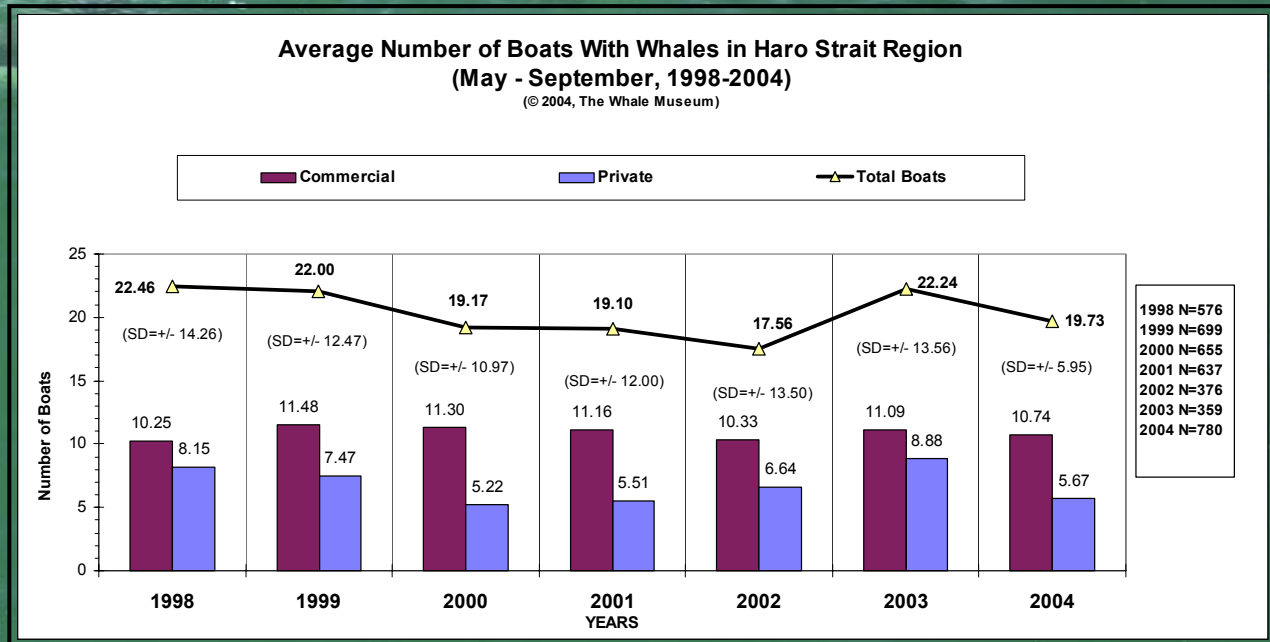
# Soundwatch Boat Contacts 2001-2004



# Average and Maximum Number of Vessels in the Vicinity of S.R.K.W.s.

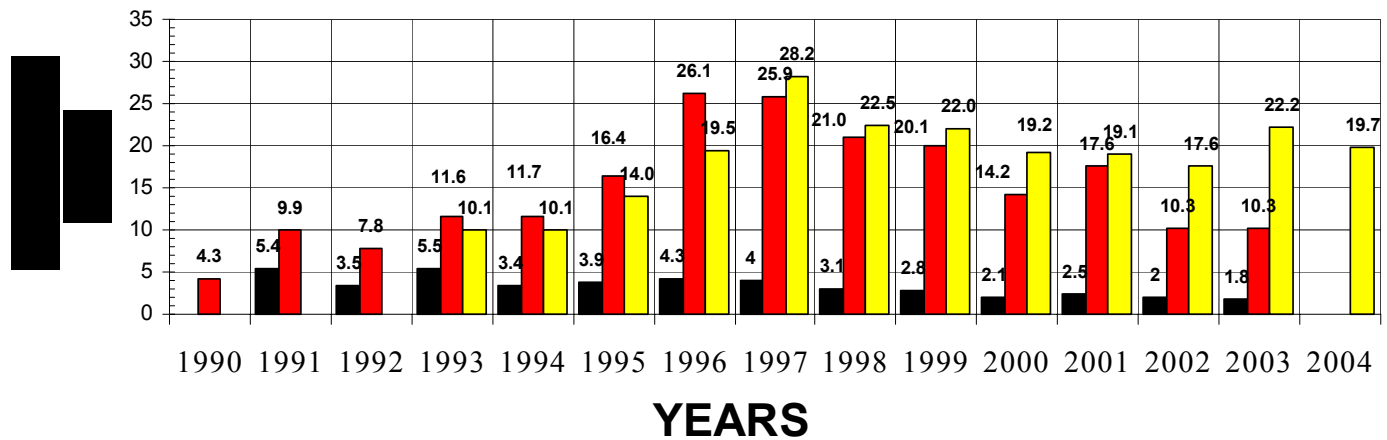


# Private vs. Commercial Vessels in the Vicinity of S.R.K.W.s.



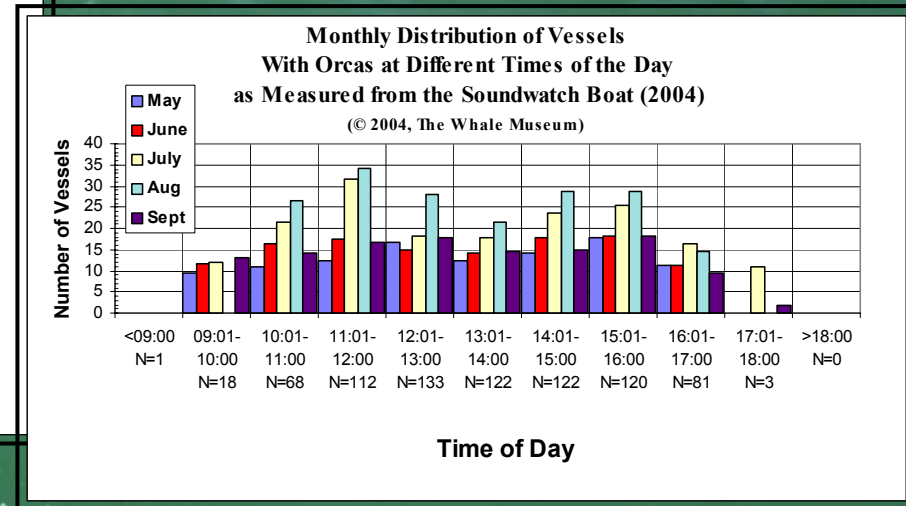
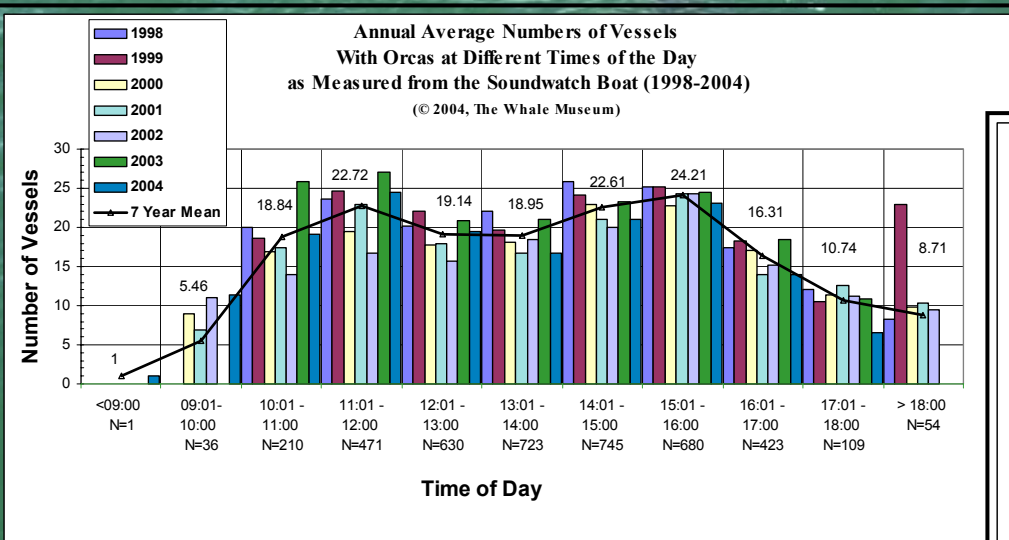
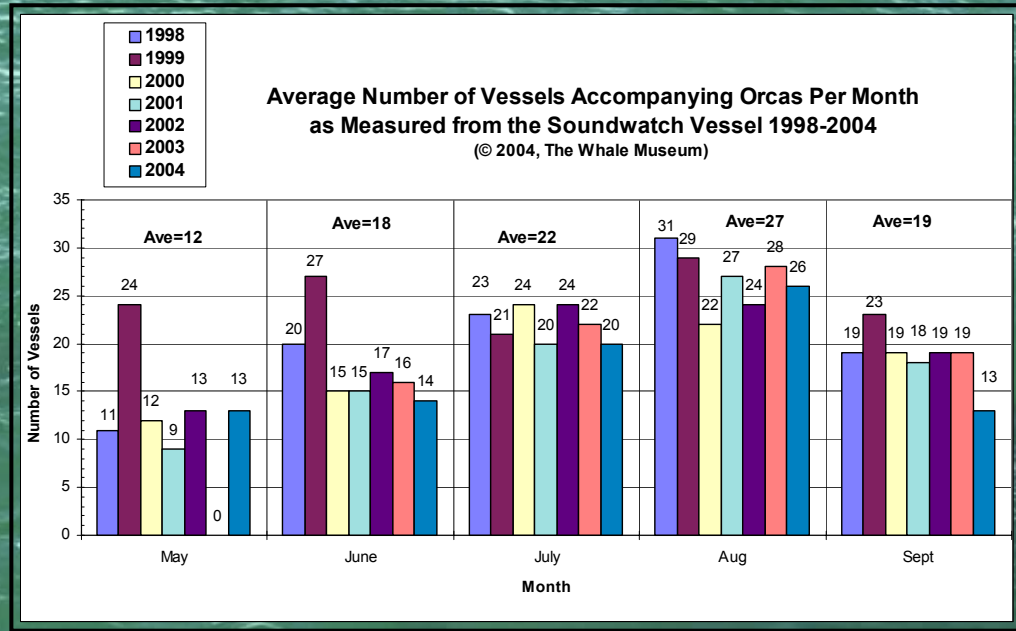
# Average Number of Boat with/without Whales In Haro Strait 1990-2004

**Average Number of Boats with/without Whales In Haro Strait  
(1990-2004)**  
(© 2004, The Whale Museum)



- Without Orcas Lime Kiln (Study Area = 1/2 Mile<sup>2</sup> Light House, May-July, R. Otis)
- With Orcas Lime Kiln (Study Area = 1/2 Mile<sup>2</sup> Light House, May-July, R. Otis)
- With Orcas Soundwatch (Study Area = All Other Areas, May- September)

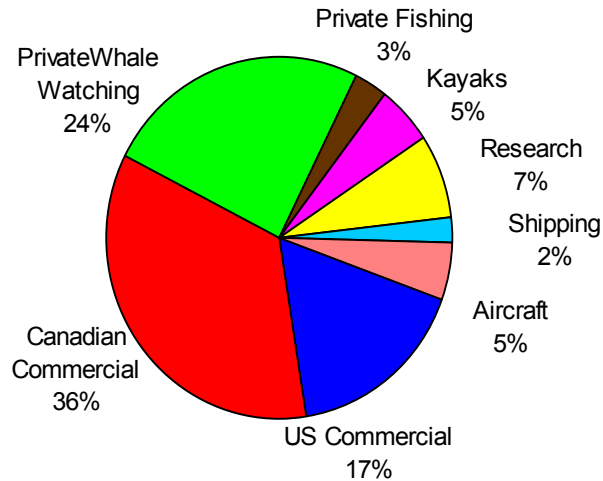
# Average Number of Vessels in the Vicinity of S.R.K.W.s. by Month and Time of Day 1998-2004



# Vessel Types Accompanying Whales in Haro Strait 2004

**Distribution of Vessels When Whales are Present  
June-September 2004**

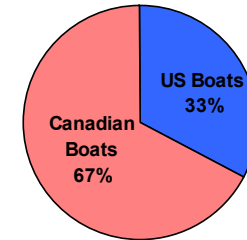
(© 2004, The Whale Museum)



In 2004 there was an average of 19.73 boats accompanying whales

**2004 Distribution of Commercial Whale  
Watching Boats When Whales are Present**

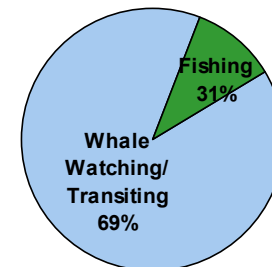
(© 2004, The Whale Museum)



In 2004 commercial boats made up 53% of boats accompanying whales

**2004 Distribution of Private Boats  
When Whales are Present**

(© 2004, The Whale Museum)

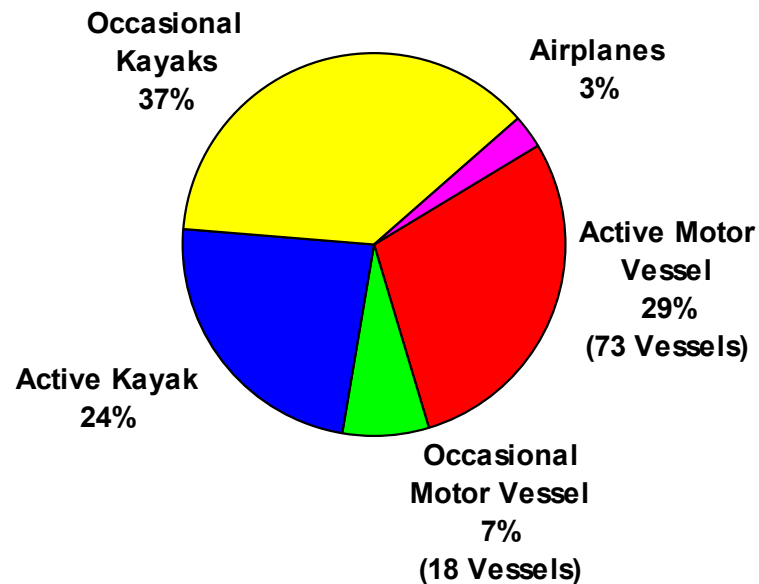


In 2004 private boats made up 27% of boats accompanying whales

# 2004 Active and Occasional Commercial Whale Watch Platforms in Haro Strait

## 2004 Commercial Whale Watch Platforms in the Boundary Waters of Haro Strait

(© 2004, The Whale Museum)



Estimated Active = >1 day/w k

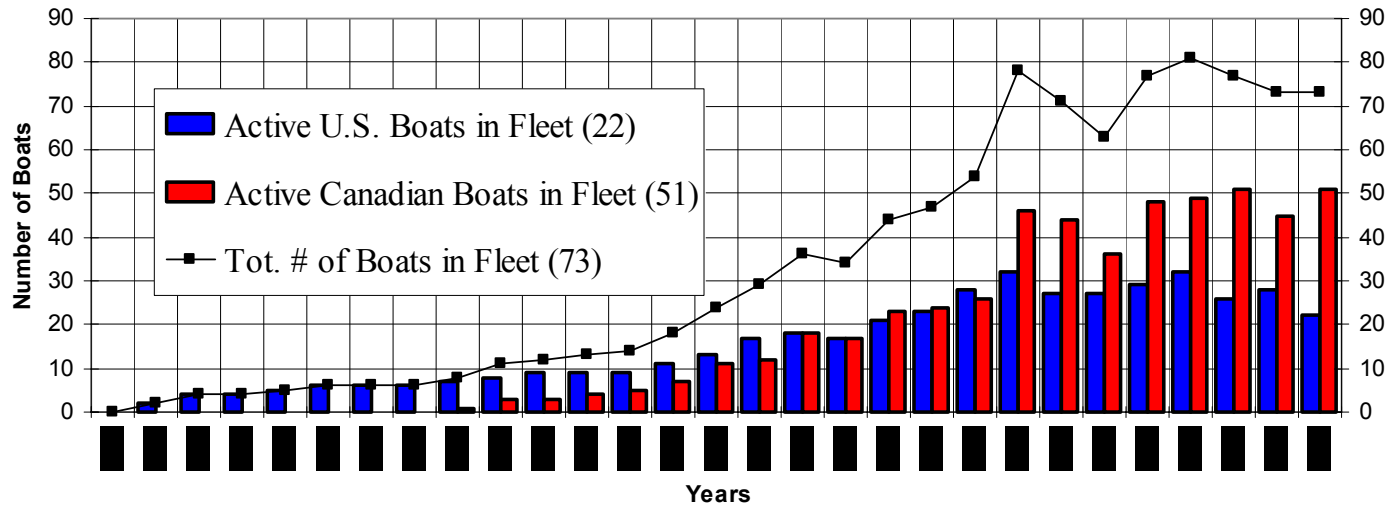
Estimated Occasional= <= 1 day/w k. Or 10 days/season



# U.S. and Canadian Commercial Whale Watch Industry Growth 1976-2004

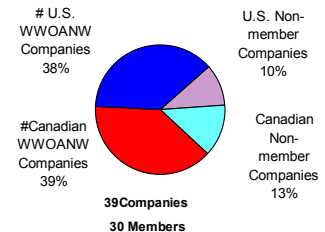
## Growth of Commercial Whale Watching in the Boundary Waters of Haro Strait (1976-2004)

(© 2004, The Whale Museum)

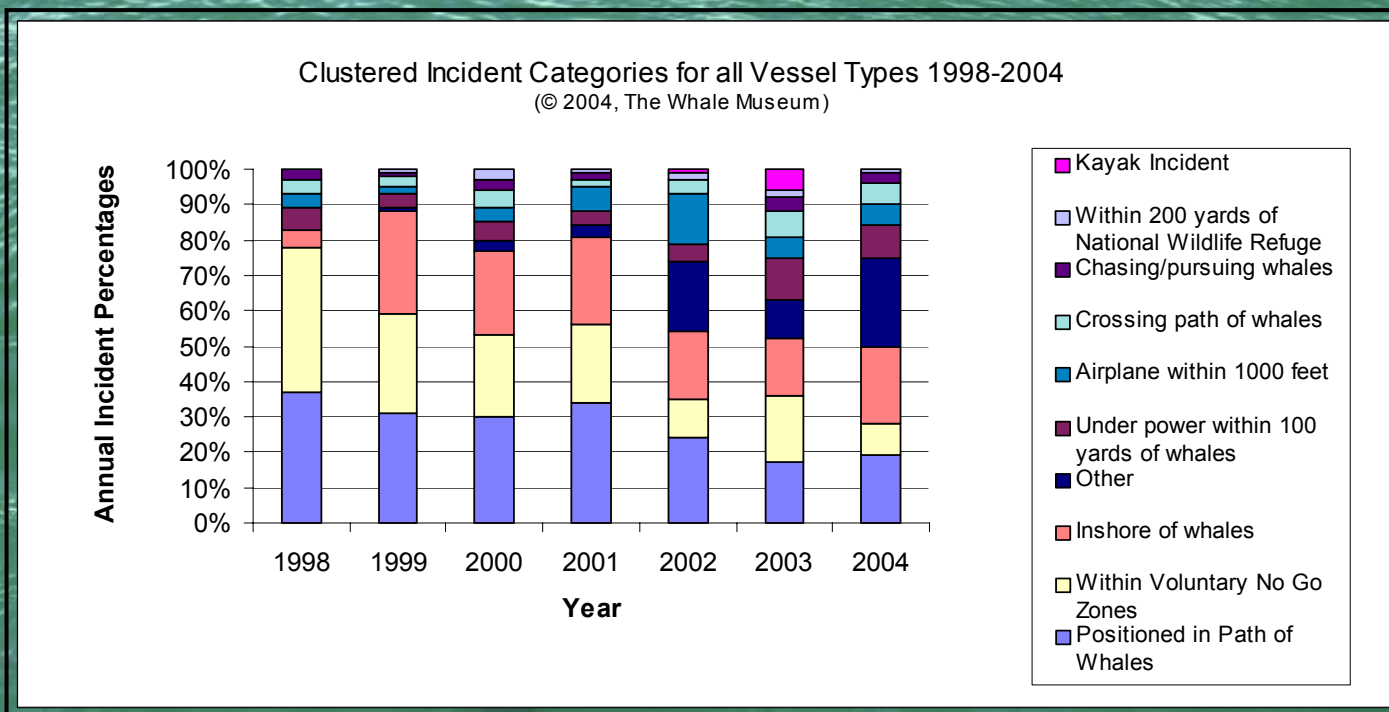


### 2004 Percentage of U.S. and Canadian Companies in the Whale Watch Operators Association Northwest (WWOANW)

(© 2004, The Whale Museum)



# Vessel Behaviors Contrary To Voluntary Guidelines



Clustered Incident Categories for all Vessels 1998-2004*							
	1998	1999	2000	2001	2002	2003	2004
Positioned in Path of Whales	37%	31%	30%	34%	24%	17%	19%
Under power within 100 yards of whales	6%	4%	5%	4%	5%	12%	9%
Within Voluntary No Go Zones	41%	28%	23%	22%	11%	19%	9%
Crossing path of whales	4%	3%	5%	2%	4%	7%	6%
Chasing/pursuing whales	3%	1%	3%	2%	<1%	4%	3%
Inshore of whales	5%	29%	24%	25%	19%	16%	22%
Airplane within 1000 feet	4%	2%	4%	7%	14%	6%	6%
Within 200 yards of National Wildlife Refuge	0%	1%	3%	1%	2%	2%	1%
Other		1%	3%	3%	20%	11%	25%
Kayak Incident					1%	6%	0%
Total %	100%	100%	100%	100%	100%	100%	100%
Total Observed Incidents	398	791	653	533	259	373	761
Estimated Observation Hours	426hr	510hr	462hr	486hr	378hr	312hr	486hr

\*Prior to 2003 private vessel incidents underrepresented