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ECOLOGICAL RESERVES COLLECTION GOVERNMENT OF BRITISH COLUMBIA VICTORIA, B.C.

# REPORT ON 1989 ROBSON BIGHT VISITORS PROGRAM

Submitted to:

Ministry of Parks

Strathcona Zone

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September, 1989



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#### SUMMARY

Bufo Incorporated operated the Robson Bight visitor information / warden program from 7 July through to 4 September 1989. Operations were based out of Boat Bay on nearby West Cracroft Island, and took place seven days a week, weather permitting. The visitor program consisted primarily of two information officers patrolling the ecological reserve in a 14 'inflatable. The information officers would approach any vessel entering the reserve, make contact, and inform the visitors about the ecological reserve and the guidelines which govern visitor activities in this area.

Over the course of the project, information officers contacted a total of 3143 visitors including 1080 when the information officers were invited to board the cruiseship Stardancer. Not including the Stardancer, an average of 40 visitors were contacted daily. Boat type percentages contacted (not including Stardancer) were as follows: charter boats 40.4%; power vessels 19.3%; sail vessels 12.1%; kayaks and canoes 23.3%; other 4.5%. These figures show an increase in all categories except charter vessel passengers since 1987.

On the water, information officers contacted 12 different whale-watching tour companies and five different kayak/canoe touring companies as well as numerous private citizens. Information officers were filmed in the performance of their duties by ABC-TV, Force Four productions and Italian Television reinforcing the international significance of Robson Bight reserve.

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## TABLE OF CONTENTS

			<u>Page</u>		
SUMI	MARY		i		
Tabl	le of	Contents	ii		
1.0	TNT	RODUCTION			
1.0		Area of Operations	1		
	1.2	Objectives	1		
			2		
2.0	VISI	TOR PROGRAM OPERATIONS	3		
	2.1	Program Description	3		
3.0	VISITOR PROGRAM CONTACTS				
	3.1	Vessel Contacts	5 5		
		3.1.1 Charter Vessels	5		
		3.1.2 Power Vessels	6 -		
		3.1.3 Sailboats	6		
		3.1.4 Kayaks and Canoes	7		
	3.2	Brochures and Signs	9		
	3.3	Film Crew Contacts	10		
	3.4	Visitor Contacts on Land Portion of Reserve	10		
	3.5	Killer Whales in Johnstone Strait, 1989	11		
4.0	PROG	RAM PERSONNEL AND LOGISTICS	12		
	4.1	Collaboration with Other Groups	13		
		4.1.1 Researchers	13		
		4.1.2 Agencies and Individuals	13		
5.0	RECO	MMENDATIONS	• •		
		On The Water Encounters	14		
	5.2	Visitor and Monitoring Program Options	14		
		5.2.1 Work Program	15		
		5.2.2 Base of Operations	15		
		5.2.3 Co-operative Management	16		
		5.2.4 Expanded Jurisdiction	18 18		
	5.3	Information Dissemination Outside the Reserv	10		
		3.3.1 Information Session with Charters	19		
		5.3.2 Slides Shows in Communities	20		
		5.3.3 Brochures	20		
		5.3.4 Sign at Telegraph Cove	21		
		5.3.5 Media	21		
		5.3.6 Boundary Identification	21		
5.0	REFE	RENCES	22		
APPEI	MDIX	ROBSON BIGHT ATTENDANCE RECORDS	22		

Ĺ	ist	of Tables:	Page
1		1989 Visitor Contacts by Month and Boat Type	8
2	2:	Percent Comparison of 1987 and 1989 Visitor Contacts by Boat Type	8
3	3:	1989 Average Daily Visitor Contacts by Boat Type	9

#### 1.0 INTRODUCTION

In June of 1989, Ministry of Parks awarded Bufo Incorporated the contract to operate a visitor information / warden program in the area of Robson Bight Ecological Reserve. This report summarizes the operation of the program and provides recommendations for future operations.

Verbal confirmation that the contract had been awarded was received on 23 June 1989 after negotiations to reduce the contract cost. In response to these negotiations, Bufo Incorporated employed the field team as subcontractors instead of employees, reduced the orientation period to such time as was available on the water, and arranged for provision of some support services by other groups operating in the same area. Additional savings were realized as a result of the late start-up date for the project.

The field team of Robin Taylor (team leader), Julie Kimmel, and Steve Wischniowski, all had experience working with killer whales, and familiarity with the Robson Bight area. Ms Taylor had provided similar services in 1987.

## 1.1 AREA OF OPERATIONS

Robson Bight Ecological Reserve was created in 1982 to: preserve core habitat for a population of killer whales (Orcinus orca) which regularly utilize the area, and; to protect an undisturbed estuarine environment. As with all ecological reserves, Robson Bight protects habitat and/or unique features and may be used for educational purposes or scientific research.

Robson Bight has become renowned in recent years as the area offering the most reliable opportunities to view and photograph killer whales. At least 15 companies currently conduct whalewatching tours in the vicinity of the reserve (Blood et. al., 1988).

Robson Bight is located at the mouth of the Tsitika River on northern Vancouver Island approximately 20 kilometers southeast of Alert Bay on Johnstone Strait. Accessibility to Johnstone Strait from the north end of the island increased dramatically in 1982 with completion of a highway to Port Hardy, north of the study area. The marine component of the reserve is 1248 ha in size and the terrestrial component is 505 ha. The marine component extends approximately one kilometer out into the strait,

and from east to west is eight kilometers long. Ninety-three hectares (at the eastern end of the reserve) of the current 505 ha land portion were added in August of 1989.

### 1.2 OBJECTIVES:

The objectives of the 1989 Robson Bight Visitors Program were as follows:

- 1) To patrol the marine reserve boundary to contact boaters entering the reserve area, distribute information provided by the ministry, answer questions, and to request compliance with whale observation guidelines by all parties entering the reserve area.
- 2) To enforce Ecological Reserve regulations that apply to the water access portion of the land reserve.
- 3) To keep daily records of the number of visitors and whales in the reserve and record visitor/whale interactions on the forms provided by the Ministry.
- 4) To keep abreast of the whale research programs in the Robson Bight area and act as a liaison between researchers and visitors.
- 5) To submit a report, by 30 September 1989, to the ministry representative detailing the operations of the program including a summation of all data and records required as part of this contract.

The goal of our program was, within the bounds of the stated objectives, to provide visitors with a satisfying and educational experience, while minimizing the impacts of visitation on the habitat and resources of Robson Bight Ecological Reserve.

## 2.0 VISITOR PROGRAM OPERATIONS

The monitoring and information officer program at Robson Bight was carried out between July 7th and September 4th 1989. Monitoring was conducted between 8 am and 8 pm daily and the information program was conducted during the same time period when visitors were in the vicinity.

## 2.1 PROGRAM DESCRIPTION

The program was implemented primarily within the bounds of the marine portion of the reserve, as well as outside the reserve, when it appeared likely that whale-watching boaters would enter the reserve.

A typical day started with surveillance of the reserve from shore to monitor visitor and whale activity. This was accomplished by scanning the reserve with a 20x - 45x scope from a viewpoint at Boat Bay camp at 15 minute intervals. Two crew members would leave Boat Bay to monitor from the reserve.

The two information officers monitored the reserve from a 4.6 m (14') inflatable boat and maintained radio contact with whale researchers, charter boat operators and other boaters in the area. Radio contact was essential for a number of reasons:

- to determine location and direction of travel of the killer whales and charter boats;
- 2) to make contact with visitors and to offer information on the reserve;

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and for safety.

The location of Robson Bight in Johnstone Strait, which is part of the Inside Passage and an active shipping channel, means that all boaters who enter the reserve are not necessarily whale watching. To ascertain the intentions of boaters, a number of criteria were used. Boaters were considered to be whale watching, and subsequently contacted, if they were in or heading into the reserve and:

- if they were a whale-watching charter;
- 2) if they were engaged in whale-oriented behaviour\*; or
- 3) if it appeared they were looking for whales, by slowing down, or going close to shore in the reserve.

\*Whale-oriented behaviour was defined as activities such as stopping the boat or following near a group of whales, changing direction towards the whales, or altering speed.

A typical contact consisted of 1) the approach, 2) identification and establishing rapport, 3) guideline clarification, 4) interpretation, and 5) conclusion. Approaches to boaters were an important component of the contact. Our boat speed varied with the speed and type of boat we were contacting. As we made the final approach, we would wave to make clear our intentions were friendly. After approach, we immediately introduced ourselves. Identification of our purpose was greatly enhanced by our yellow exposure suits equipped with Ecological Reserve flashes. We would then point out the reserve and its boundaries, and briefly outline whale watching guidelines.

Visitors were asked not to enter the reserve when whales were This message would be reinforced by information in the Robson Bight brochure which was distributed to visitors at this If there was time, killer whale behaviours - particularly those indicating disturbance or resting - would be described. As conditions allowed, a hydrophone (underwater microphone) was used as an interpretive tool. The set up, deployment, and operation of the hydrophone provided an excellent opportunity to elaborate on previous information and answer any questions prior to terminating the contact. Laminated single page whale identification photos - extracted from Bigg et.al. (1987) - were shown to boaters on many occasions both to familiarize them with the whales in the area, and to further emphasize the significance of these populations and degree of concern with which they were regarded i.e. populations were well-documented and subject to ongoing research.

If more than one encounter or situation was happening in the reserve at the same time, they were ranked according to priority and dealt with accordingly. Approaches to recreational boaters who were within the reserve and whale watching had the highest priority. People camping onshore within the reserve were also contacted as soon as possible. Boaters who were looking for whales or charter boats which had been contacted previously were next in order.

Encounters were recorded on forms provided by the Ministry. Data gathered included:

- number of boats during two-hour periods throughout the day,
- 2) boat types,
- 3) number of passengers,
- 4) weather,
- 5) whale identifications and locations, and
- 6) salient remarks.

In addition, a log was maintained in which we recorded these data in more detail, as well as the vessel name and the quality and content of the encounter.

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Contacts were coded according to boat type. Boat types were coded in the log and summary sheets as follows:

CB - charter vessel, sail or power

PB - power boat SB - sail boat

K - kayak or canoe

Other - commercial fish boats, Federal Fisheries vessels, log salvage boats, etc.

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# 3.0 VISITOR PROGRAM CONTACTS

Our primary means of providing visitors with information was through visitor contacts. Other indirect means were through signs posted at the reserve boundaries and in Telegraph Cove and through the media.

## 3.1 VESSEL CONTACTS

A total of 59 days were spent by the team monitoring whale watching activity at Robson Bight Ecological Reserve. Of these, eight (8) days were "weather days" - days spent monitoring activity from camp because of high winds on Johnstone Strait. Therefore, the time spent actively contacting boaters was 51

There were 3143 visitors contacted on the water at Robson Bight during the period July 8 - September 4, 1989 (Table 1). However, a large portion of these (1080) were contacted aboard the cruiseship "Stardancer" on August 24th. Not including the cruiseship passengers, 2063 people were contacted aboard charter vessels, sail and power boats, kayaks and canoes, and miscellaneous other vessels for an average of 40 contacts per day. A comparison of visitor contacts by boat type between 1989 and 1987 reveals a significant increase in small non-charter vessel contacts (Table 2).

Approximately 750 brochures were distributed during the season, at the rate of one or two per vessel. Kayak tour groups often had their own copy laminated.

## 3.1.1 Charter Vessels

The largest proportion (40%) of visitors were contacted aboard charter vessels - a daily average of 16.3 visitors (excluding Stardancer). Average daily visitor contacts by boat type are summarized in Table 3. There were 51 charter boats contacted; an average of one (1) per day during the season.

Twelve different charter vessels were boarded at least once. Presentations made aboard charter vessels generally lasted a minimum of ten (10) minutes and would often be followed by numerous questions by passengers. Some of our highest quality contacts took place aboard charter vessels.

The Stardancer had been observed altering course to observe whales a week previous to the date boarded. When this occurred, the ship was contacted in order to offer our information services. The day we were requested to come aboard, the Stardancer's sailing schedule had been delayed by tides at Seymour Narrows, giving them some extra time to view wildlife along the way. We were invited to the bridge and gave a 15 minute presentation over the ship's public address system. The captain indicated willingness to continue the program in the future as well as offering to make the presentations more personalized, for example, by staging them in the ship's auditorium.

Including the Stardancer, 1912 visitors were contacted aboard charter vessels for a daily average of 37.5 visitors. With this cruiseship, charter contacts constituted 61% of those made during the season.

### 3.1.2 Power Vessels

Small and large power vessels constituted 398 (19%) of the vessel contacts, or a daily average of 7.8 contacts. Boaters in large pleasure cruisers were often the least aware of their environment. However, contact with the skippers of these vessels revealed that many had been educated by whale watching programs in Glacier Bay National Park. A large proportion originated either in Seattle or Vancouver and were often enroute through the area to points north, such as Alaska.

Small pleasure vessels were generally launched locally at harbours such as Telegraph Cove, Port McNeill, or Alert Bay. Many of these boaters were in the area primarily to sportfish, although whale watching was often a highlight of their trip. With these smaller, more maneuverable craft, a visitor could approach a pod of whales, watch the group briefly and be gone, all within the space of a few minutes. A number of contacts with these vessels were missed, because of their brief encounter time with the whales and their tendency to speed off once the encounter was over.

#### 3.1.3 Sailboats

Sailboats comprised 12% of vessels contacted. Visitors contacted aboard sailboats averaged 4.9 daily.

Sailboats, having restricted maneuverability, were generally not able to get as close to groups of whales as power boats. Sailors were usually aware of Robson Bight, although the boundaries and guidelines often needed to be clarified. There was usually considerable difference in the behaviour of sailors on days with wind versus days without. On the former, they were generally in a hurry and less likely to be distracted either by whale watching or information about the reserve.

## 3.1.4 Kayaks and Canoes

An average of 9.6 kayakers or canoeists were contacted daily. The boaters generally travelled in groups of two to eight boats, and a large proportion of the kayaks were in organized groups. Some of the groups which regularly include Robson Bight as part of their tour package are:

Northern Lights, Seattle Ecosummer, Vancouver Discovery Tours, Parksville Pacific Rim, Victoria Jeff Evans Tours, Chilliwack

Generally, organized tour groups constituted the best informed and most responsible visitors in their behaviour in the reserve and around the whales. None of these groups camped within the reserve, however tour groups in the area generally visited the land portion of the estuary. Although probably not a concern at the present time, if kayaking activity in the area continues to increase, some measures may be required to minimize trampling of vegetation in the estuary.

These self-propelled boaters also arrived independently of tour groups. Often, these people were less informed about the reserve than organized groups, and required more persuasion to comply with the guidelines. One canoeist insisted on camping in the reserve at a spot which he had used for a number of years prior to the establishment of the land portion of the reserve. He was eventually cajoled into leaving. However, he was typical of people who have visited the area repeatedly over the years, and have developed a sense of "ownership" about the bight and the whales.

With the development of access from eastern Johnstone Strait, there has been concern that increasing numbers of kayakers will choose Naka Creek to launch their craft. In fact, we noticed no increase in the number of kayakers from this direction. The lack of available campsites east of Robson Bight is probably the major contributing factor. The one reasonable campsite at the east end of the reserve has a new clearcut above it. It is also quite exposed to both northwesterlies and southeasterlies, the two prevailing wind directions. In contrast, many of the beaches between Telegraph Cove to the west and the reserve are sheltered and have spaces cleared for tents.

Stubbs Island Charters estimates that the number of kayak launchings from their community in the past four years is as follows:

1986 - 600 1987 - 1000 1988 - 2000 1989 - 3000

In contrast to other boat types which were decreasing towards the end of August and into September, kayak numbers were holding steady or increasing at that time. In 1987, kayaks and canoes constituted 16.9% of visitor contacts. In 1989 this percentage increased to 23.8% of contacts.

Table 1: 1989 Visitor Contacts by Month and Boat Type, Robson Bight Ecological Reserve, 1989

	CHARTER	POWER	SAIL	KAYAK/ CANOE	OTHER
JULY (n=21)	310	131	135	129	35
AUG (n=26)	479 (1559)*	225	113	322	57
SEPT (n=4)	43	42	2	40	0
TOTAL (n=51)	832 (1912)*	398	250	491	92
GR	AND TOTAL	2063	3 (3143)*		

<sup>\*</sup> Indicates totals with the visitors contacted aboard the cruiseship "Stardancer".

Table 2: Percent Comparison of 1987 and 1989 Visitor Contacts by Boat Type, Robson Bight Ecological Reserve

	CHARTER	POWER	SAIL	KAYAK/ CANOE	OTHER
1987	51.8	10.8	3.7	16.9	16.8#
1989*	40.3	19.3	12.1	23.3	4.5

<sup>\*</sup> Indicates percentage without "Stardancer" visitors.

<sup>#</sup> Includes attendance at slide shows in Telegraph Cove