

ALASKA LEGISLATURE COMMITTEE FILES 1983-1984 8672

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NAME	SEX	SIZE		CAPTURE DATE	PLACE ²	POD ³	AQUARIUM ⁴	STATUS	FINAL SIZE	
		length (cm.)	weight (kg.)						length (cm.)	weight (kg.)
29 Calypso	F	518	2,000	12/69	PH, B.C.	A5	Marineland, FR. (Cleethorpes Zoo, G.B.)	D. 12/70, cause unknown	—	—
30 Corky (II)	F	366	—	12/69	PH, B.C.	A5	Marineland, CA	Alive as of 10/80		
31 Patches	F	287	499	12/69	PH, B.C.	A5	Marineland, CA	D. 8/71, salmonellosis	365	—
32 No name	M	411	—	12/69	PH, B.C.	A5	Marineland, CA	D. 5/72, pneumonia	493	—
33 Nepo	M	366	1,136	12/69	PH, B.C.	A5	Marine World, CA	D. 7/80, pneumonia	686	4,082
34 Yaka	F	320	662	12/69	PH, B.C.	A5	Marine World, CA	Alive as of 10/80		
35 ———	?	457?	—	2/70	CI, WA	—	Seattle, WA (?)	Unknown	—	—
36 Chime	F	351	—	3/70	PB, B.C.	M	Sealand, B.C.	D. 11/72, Chediak-Higashi Syndrome	427	—
37 Nootka (Nootka)	F	411	1,814	3/70	PB, B.C.	M	Marineland, ONT. (first at Sealand, B.C., Japanese Deer Park, CA, Seven Seas, TX)	Alive as of 10/80		
38 Scarred-jaw Cow	F	579	—	3/70	PB, B.C.	M	Sealand, B.C. (held at Pedder Bay)	D. 5/70, malnutrition	—	—
39 Charlie Chin	M	670	—	3/70	PB, B.C.	M	Sealand, B.C. (held at Pedder Bay)	Released 10/70		
40 Pointed nose Cow	F	610	—	3/70	PB, B.C.	M	Sealand, B.C. (held at Pedder Bay)	Released 10/70		
41 Lil Nooka	M	351	—	8/70	PC, WA	L8?	Sea-Arama, TX	D. 3/71	—	—
42 Winston (Ramu III)	M	406	—	8/70	PC, WA	L8?	Sea World, CA (Windsor Safari Park until 10/78)	Alive as of 8/80		
43 Lolita	F	430	909	8/70	PC, WA	L8?	Miami Seaquarium, FL	Alive as of 8/80		
44 Jumbo	M	475	1,300	8/70	PC, WA	L8?	Kamogawa, JAP.	D. 7/74, liver dysfunction	533	1,600
45 Chappy	F	350	600	8/70	PC, WA	L8?	Kamogawa, JAP.	D. 4/74, periostitis of lumbarbone	382	555
46 Clovis	M	335	—	8/70	PC, WA	L8?	Marineland, FR.	D. 2/73, clostridial myositis	520	—
47 Ramu (IV)	M	351	726	8/70	PC, WA	L8?	Marineland, AUST.	D. 8/71	—	—
48 Whale	F	280	—	8/70	PM, WA	—	Munich, W. GER. (first at Seattle, WA)	D. 10/71, cause unknown	—	—
49 Kona	F	434	—	8/71	PC, WA	L8	Sea World, CA	D. 9/77, mediastinal abscess (containing bullet)	582	2,409
50 Kandu (II)	M	396	818	8/71	PC, WA	L8	Marineland, ONT. (first at Seattle, WA, Bremen, W. GER.)	D. 10/79, pneumonia	—	—
51 Kandu (III)	F	323	864	8/71	PC, WA	L8	Sea World, CA	D. 6/75, uremia-nephritis	508	—
52 ———	M	401	—	11/71	CI, WA	—	Seattle, WA (?)	D.	—	—
53 ———	M	411	—	11/71	CI, WA	—	Seattle, WA (?)	D.	—	—
54 Kanuck	M	290	800	3/72	CI, WA	—	Sea World, CA	D. 12/74, anemia, fungus (Candida) infection	419	—
55 Sandy	F	488	—	3/73	OC, WA	—	Sea World, FL (first at Seattle, WA, Sea World, CA)	D. 10/77, cerebral hemorrhag:	579	3,182
56 Nootka (II)	F	579	—	8/73	PB, B.C.	K	Sealand, B.C.	D. 5/74, ruptured aorta	579	—
57 Taku ("KI")	M	700	—	8/73	PB, B.C.	K	Sealand, B.C. (held at Pedder Bay)	Released 10/73, (radio-tagged)	700	—
58 Kandy	F	540	1,818	8/73	PB, B.C.	—	Marineland, ONT.	D. 11/73, pneumonia	540	—
59 Frankie	M	594	—	8/73	PB, B.C.	—	Sea World, CA	D. 1/74, pneumonia (influenza?)	594	—
60 Nootka (III)	F	381	864	8/75	PB, B.C.	Q	Sealand, B.C.	D. 5/76, perforated post-pyloric ulcer	344	1,041
61 ———	F	427	1,164	9/75	PB, B.C.	Q	Marineland, ONT.	Alive as of 9/80		
62 ———	F	610	—	1/76	BL, WA	O	Seattle, WA	Released 4/76, (radio-tagged)		
63 ———	M	549	—	1/76	BL, WA	O	Seattle, WA	Released 4/76, (radio-tagged)		

NAME	SEX	SIZE		CAPTURE		POD ¹	AQUARIUM ⁴	STATUS	FINAL SIZE		TIME CAPT
		length (cm)	weight (kg)	DATE	PLACE ²				length (cm)	weight (kg)	
64 Kim	F	450	1,400	10/76	ICE.	—	Marineland, FR.	Alive as of 8/80			3 1/2
65 Kenau (7601)	F	300	420	10/76	ICE.	—	Sea World, CA (Dolfinarium, NETH. until 6/77)	Alive as of 7/80			3 1/2
66 Gudrun	F	270	350	10/76	ICE.	—	Dolfinarium, NETH.	Alive as of 9/80			3 1/2
67 No name	M	228	200	2/77	Live birth	—	Marineland, CA	D. 3/77, pneumonia, bowel stasis, cerebral edema	228	145	18 da
68 Miracle	F	305	364	8/77	MB, B C	—	Sealand, B.C.	Alive as of 9/80			3 yrs
69 Kona (II) (7791)	F	300?	—	10/77	ICE.	—	Sea World, CA (Dolfinarium, NETH. until 12/77)	Alive as of 6/80			2 1/2
70 Kanuck (II) (7705)	M	300?	—	10/77	ICE.	—	Sea World, CA (Dolfinarium, NETH. until 12/77)	Alive as of 6/80			2 1/2
71 Kandu (V) (7706)	F	300?	—	10/77	ICE.	—	Sea World, CA (Dolfinarium, NETH. until 12/77)	Alive as of 6/80			2 1/2
72 Hoi Wai (Susie Wong)	F	270	350	10/77	ICE.	—	Ocean Park, HONG KONG (first at Dolfinarium, NETH., Windsor Safari Park, G.B. till 1/79)	Alive as of 6/80			2 1/2
73 Winnie	F	275	—	10/77	ICE.	—	Windsor Safari Park, G.B. (first at Dolfinarium, NETH.)	Alive as of 9/80			2 1/2
74 No name	M	326	—	10/77	ICE.	—	Dolfinarium, NETH.	D. 12/77, agranulocytic anemia	326	490	2 mo
75 No name	M	236	210	10/78	Live birth	—	Marineland, CA colitis	D. 11/78, pneumonia,	236	159	11 d
76 7801	M	300?	—	10/78	ICE.	—	Sea World, CA	Alive as of 4/80			1 1/2
77 7802	F	300?	—	10/78	ICE.	—	Sea World, CA	D.			—
78 7803	F	300?	—	10/78	ICE.	—	Sea World, CA	Alive as of 4/80			1 1/2
79 7804	F	300?	—	10/78	ICE.	—	Sea World, CA	Alive as of 4/80			1 1/2
80 Betty	F	—	—	10/78	ICE.	—	Marineland, FR.	Alive as of 6/80			1 1/2
81 ———	F	300?	—	10/78	ICE.	—	Sea World, CA (Marineland, ONT. until 6/79)	Alive as of 4/80			1 1/2
82 No name	?	300?	—	11/78	ICE.	—	Sædyrasafnid, ICE.	D. 1/79, heart attack			2 n
83 No name	?	300?	—	11/78	ICE.	—	Sædyrasafnid, ICE.	D. 1/79, pneumonia			2 n
84 No name	?	300?	—	11/78	ICE.	—	Sædyrasafnid, ICE.	Released. 2/79			3 n
85 No name	?	300?	—	11/78	ICE.	—	Sædyrasafnid, ICE.	Released. 2/79			3 n
86 No name	?	300?	—	11/78	ICE.	—	Sædyrasafnid, ICE.	Released. 2/79			3 n
87 ———	M	700	4,000	2/79	JAP.	—	Taiji Whale Museum, JAP.	Alive as of 6/80			1 y
88 ———	F	610	3,100	2/79	JAP.	—	Taiji Whale Museum, JAP.	D. 5/79			3 m
89 ———	F	635	3,100	2/79	JAP.	—	Shirahama, JAP.	D. 3/79			1 m
90 ———	F	650	—	2/79	JAP.	—	Shirahama, JAP.	D. 4/79			2 m
91 ———	M	520	—	2/79	JAP.	—	Shirahama, JAP.	Alive as of 6/80			1 y
92 King	M	370	760	6/79	ICE.	—	Kamogawa, JAP. (first at Sædyrasafnid, ICE., Lubeek, W. GER., Marineland, ONT. until 3/80)	Alive as of 9/80			1 y
93 No name	M	300	—	10/79	ICE.	—	Marineland, ONT (first at Sædyrasafnid, ICE.)	Alive as of 9/80			11 m
94 Kandy (II)	F	300	—	10/79	ICE.	—	Marineland, ONT (first at Sædyrasafnid, ICE.)	Alive as of 9/80			11 m
95 No name	M	300	—	10/79	ICE.	—	Marineland, ONT. (first at Sædyrasafnid, ICE.);	D. 1/80, acute enterotoxaemia			3 n

= NAME	SEX	SIZE		CAPTURE		POND	AQUARIUM*	STATUS	FINAL SIZE	
		length (cm)	weight (kg)	DATE	PLACE				length (cm)	weight (kg)
96	M	300	—	11/79	ICE	—	en route to Kamogawa/JAP. Connlyland, SWITZ. (first at Sædyrasafnid/ICE, Mannheim, W. GER.)	Alive as of 6/80	6 mo	
97. Caren	F	362	915	11/79	ICE	—	Kamogawa, JAP (first at Sædyrasafnid, ICE, Marineland, ONT until 3/80)	Alive as of 9/80	16 mo	
98	?	—	—	11/80	ICE	—	En route to Spain 12/80, (first at Sædyrasafnid, ICE.)	Alive as of 12/80	1 mo	
99. No name (no. 1)	F	300	400	11/80	ICE	—	Vancouver, B.C. as of 12/80, en route to Marine World, CA. (first at Sædyrasafnid, ICE.)	Alive as of 12/80	1 mo.	
100. Blossa	F	400	820	11/80	ICE	—	Vancouver B.C.	Alive as of 12/80	1 mo.	
101. Finna	M	350	600	11/80	ICE	—	Vancouver, B.C. (first at Sædyrasafnid, ICE.)	Alive as of 12/80	1 mo.	
102. No name (no. 4)	F	—	—	11/80	ICE	—	Vancouver, B.C. as of 12/80, en route to Japan (first at Sædyrasafnid, ICE.)	Alive as of 12/80	1 mo	

APPENDIX 7 INSTITUTIONS WHICH HAVE KEPT KILLER WHALES CAPTIVE

AUSTRALIA

Marineland of Australia
P.O. Box 823
Southpost, Q 215, Main Beach
Gold Coast, Queensland, Australia
(Two orcas exhibited 1969-1971; none since then)

Telephone: 93-334949
Private company
Owner: Roland de la Poype
Manager: Michael Riddell
Trainer: Martin Padley
Consulting vet: Dr. D.C. Taylor and Dr. A.G. Greenwood
(Four orcas exhibited since 1970; two alive 9/1980, both captured off Iceland)

CANADA

Marineland and Game Farm
7657 Portage Road
Niagara Falls, Ontario
Telephone: 416-356-8250
Private company
Owner: John Holer
Vet: Dr. Charles Godsell
Head trainer: Bill Roberts
(Seven orcas exhibited; four alive 10/1980)

GREAT BRITAIN

Cleethorpes Zoo and Leisure Park (Closed 1978)
Kings Road
Cleethorpes, South Humberside
Great Britain
Consulting vet: Dr. D.C. Taylor
(One orca exhibited for a few months in 1970; none since then)

Sealand of the Pacific Ltd.
1327 Beach Drive
Victoria, B.C. V8S 2N4
Telephone: 604-598-3366/73/74
Private company
Owner: Bob Wright
Manager: Angus Matthews
Vet: Dr. Alan Hoey
Head trainer: Cees Schrage
(Six orcas exhibited; two alive 10/1980)

Dudley Zoological Society Ltd. (Dudley Zoo)
Castle Hill
Dudley, Worcester
Great Britain
Telephone: Dudley 52401
Owned by zoological society
Director: M.J. Williams
Curator: C.B. Round
Consulting vet: Dr. D.C. Taylor and Dr. A.G. Greenwood
(One orca exhibited 1971-1974; none since then)

Vancouver Public Aquarium
P.O. Box 3232
Vancouver, B.C. V6B 3X8
Telephone: 604-685-3364
Owned by nonprofit society
Director: Dr. Murray A. Newman
Curator: K. Gilbey Hewlett
Head trainer: Klaus Michaelis
(Nine orcas exhibited, including Moby Doll and several orcas at Pender Harbour; three alive 12/1980)

Flamingo Land (Flamingo Park Zoo)
Kirby Misperton
Malton, Yorkshire
Great Britain YO17 0UX
Telephone: Kirby Misperton 287
Private company
Consulting vet: Dr. D.C. Taylor
(One orca exhibited 1968-1971; none since then)

FRANCE

Marineland Côte D'Azur
avenue Mozart, 06600
Antibes, France

Royal Windsor Safari Park
St Leonards
Windsor, Berkshire



Ginger Baine
Senator Vic Fischer
Pouch V, State Capitol
Juneau, AK. 99811

January 12, 1984

Dear Senator Fischer:

Sea World, Inc.'s permit to capture 100 orcas (killer whales) in Alaska coastal waters over the next five years may possibly jeopardize the State's viable orca population. As a result, Rep. Rod Chandler (R-WA) has introduced a bill to the U.S. House of Representatives that will serve to prohibit the capture of orcas for commercial public display. Also, some Alaska officials are considering the introduction of similar legislation to protect the State's orcas. I am providing your office with pertinent information concerning the practice of holding orcas in captivity.

**GREENPEACE
NORTHWEST**

GOOD SHEPHERD
CENTER
4649 SUNNYSIDE
AVENUE NORTH
SEATTLE, WA
98103

TELEPHONE
206/632-4326

Sea World's precedent-setting permit--which has been issued by the National Marine Fisheries Service (NMFS)--not only threatens the viability of the Alaska population, but also could hold detrimental implications for the International Whaling Commission (IWC) commercial whaling ban that will take effect in 1986. The United States' credibility as a world leader for protection of whales could be undermined if a whale capture operation of Sea World's magnitude is allowed.

A rising awareness of the plight of the whale has induced growing public opinion that the cruel practice of capturing orcas and the inhumanity of holding them captive must end. Not only will the whales captured for permanent display be impacted, as often other family (pod) members have been injured or traumatized--and even killed--during such operations. Then, in captivity, an orca's lifespan averages approximately seven years (according to Sea World's figures), while orcas usually live from 50 to 100 years in the wild.

I have included Rep. Chandler's H.R. 4457; a Greenpeace position paper; the Washington State Senate Resolution that prohibits capture of orcas in State waters; pertinent news clippings; as well as a selection and an appendix from Erich Hoyt's The Whale Called Killer (New York: E.P. Dutton, 1981).

Please act to protect the orca population of Alaska. Please do not hesitate to contact me at Greenpeace's Seattle office for any additional information and assistance. I look forward to working with you.

Yours Sincerely,

Alan Reichman
National Wildlife Coordinator
Greenpeace, U.S.A.

A NON-PROFIT
TAX-EXEMPT
ORGANIZATION

GREENPEACE U.S.A.

2007 "R" St. N.W.
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GREENPEACE U.S.A. POSITION CONCERNING THE CAPTURE AND PUBLIC DISPLAY OF KILLER WHALES (ORCINUS ORCAS)

Orcas have become a top attraction for aquariums and amusement parks worldwide. Unfortunately, the dangers of orca capture operations and the problems associated with keeping representatives of the species alive in captivity warrant the end of this practice. Greenpeace U.S.A. urges that no more permits be issued to allow the capture of orcas for public display, and non-benign, intrusive research purposes.

Greenpeace U.S.A. is opposed to the capture of orcas for public display for the following reasons:

1-The life expectancy of orcas in captivity is considerably lower than for wild, free orcas residing in their natural habitats. Furthermore, a significant number of orcas do not survive initial introduction to captive enclosures and die during their first year in captivity.

2-Sustained capture operations in specific geographic regions have resulted in considerable drops in orca populations within those regions. Given the high mortality rate for captive orcas, and aquariums' continuous need to replace deceased orcas--as well as the desires of additional facilities to obtain orcas for display--any issuance of a capture permit will sanction the issuance of future permits. As a result, serious population depletions could be incurred in areas such as Alaska, Iceland, etc.

3-Given the physical size of orcas and the intricate, dynamic nature of their family units (pods) humane capture techniques for the species have not been devised. Orcas have been killed incidentally during capture operations in the past. Also, the rigors of transport in boats and cargo planes are considerable.

4-Captive enclosures for orcas simply are not suitable for the well-being and health of the animals. An adequate habitat replica for orcas simply cannot be created at the present time. The orca's inability to reproduce in captivity clearly illustrates this problem.

5-As highly intelligent marine mammals, orcas suffer tremendous stress and trauma in captivity. Scientists have observed psychological and physiological differences between captive and free orcas. This stress and trauma factor causes psychological and physiological ailments in captive orcas.

Greenpeace U.S.A. urges that the capture of orcas for captive display and non-benign, intrusive research not be permitted. We must weigh human wants for entertainment against the needs of these animals for well-being--and survival. Research should be conducted in a benign, non-intrusive fashion; orcas should not be herded and captured for research purposes.

GREENPEACE U.S.A.

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-2-

Orcas should not be held in captivity. Moreover, eventually the captivity and public display of other cetacea species should be phased out. Many of the problems associated with holding orcas in captivity apply to other species as well.

IN THE LEGISLATURE
of the
STATE OF WASHINGTON



SENATE RESOLUTION 1976-222

By Senators, Cunningham, Bailey, Lewis (Harry), McDermott, Wilson and vonReichbauer:

WHEREAS, Certain species of marine mammals are, or may be, in danger of extinction or depletion as a result of man's activities and such species should not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part; and

WHEREAS, There presently exists within Puget Sound and the salt waters contiguous thereto a species of mammal commonly known as the "killer whale;" and

WHEREAS, There is inadequate knowledge of the ecological and population dynamics of such mammals and of the factors which bear upon their ability to reproduce and survive in an atmosphere of continuing encroachment by man; and

WHEREAS, It is the sense of the Washington Legislature that the killer whales should be protected and encouraged to develop in a natural state and that the primary objective of their management should be to maintain the health and stability of the marine ecosystem; and

WHEREAS, Present methods and techniques of pursuing and capturing the killer whales present substantial and serious questions as to their efficiency, humaneness and effect on marine life in this delicate ecosystem;

NOW, THEREFORE, BE IT RESOLVED, By the Senate of the State of Washington, that the United State Congress be requested to declare an immediate moratorium on the intimidation, harassment, hunting and capturing of killer whales in Puget Sound and adjacent salt waters;

BE IT FURTHER RESOLVED, That the United States Congress be requested to direct the appropriate federal agencies to cease issuing permits to hunt and/or capture this mammal and revoke all such existent permits;

AND BE IT FURTHER RESOLVED, That copies of this resolution be sent to the United States Department of Commerce, the National Marine Fisheries Service, members of the Congressional delegation from this state, the Marine Mammal Commission, and the Scientific Advisors on Marine Mammals.

Adopted March 9, 1976



SUBMISSION TO NMFS PUBLIC HEARING, SEATTLE, WASH. AUGUST 16-17, 1983

My name is Paul Spong. I am the director of ORCALAB, a 13 year old research station located on Hanson Island in the Johnstone Strait region of British Columbia, Canada.

I wish first to thank you for the opportunity to be here and secondly to say that I am somewhat disappointed at having just ten minutes allocated, as I had hoped to occupy your attention for half an hour. However, I have negotiated a few minutes here and there from some of the other participants who have read my written submission and think it deserves to be heard in its entirety. I therefore beg your indulgence. I won't take half an hour, but I may take twenty minutes. If I cease to be relevant I shall of course expect you to stop me.

I wish to present the report of a workshop on the Sea World application to capture 100 and take 10 Orcinus orca. Those involved wish to make it clear that they participated as individuals, not as representatives of the universities, government or private organisations to which they belong. Collectively, the group effort represents the insight of more than 70 years of scientific and other observation of Orcinus orca, in captivity and in the ocean.

Sir, may I proceed?

REPORT OF WORKSHOP ON:
SEA WORLD APPLICATION TO
CAPTURE 100 AND TAKE 10
ORCINUS ORCA.

TC: National Marine Fisheries Service,
Washington, D.C.

PARTICIPANTS: David Bain
Grahme Ellis
Linda Ellis
Deborah Ford
John Ford
Jeff Jacobsen
Susan Kruse
Paul Spong

OBSERVERS: David Garrick
Helena Symonds
Peter Thomas

INFORMATION: Michael Bigg

INTRODUCTION:

1. The meeting was convened by Spong and held at Orcalab, Hanson Island, B.C. and at locations in the Johnstone Strait region, August 12-15, 1983. Bigg was consulted by phone and reviewed the final draft.

2. Although the participants were willing to comment upon the content of the Sea World proposal, it was agreed that others had spoken capably regarding many specifics and to therefore emphasise the potential of field work with *Orcinus orca*, it's relevance and it's need regarding proposals such as Sea World's.

3. To preface with the conclusion, the Alaskan *Orcinus orca* population, being unexploited and available, represents a unique scientific opportunity which should be grasped before uninformed exploitation occurs. The Sea World breeding plan might be feasible in the future but is unlikely to succeed given the present state of knowledge.

4. The IWC has adopted a mandate to regulate the take of *Orcinus orca*; under it's evolving rules a previously unexploited population should be subject to numerical determination before exploitation. Though it has been started, this has not been concluded for the Alaskan *Orcinus orca* population. Obviously, it should reach a point of scientific and statistical satisfaction before exploitation is permitted.

5. Contemporary field studies of *Orcinus orca* (Bigg et al, 1976; Bigg, 1981; Balcomb et al, 1980; Ford and Fisher, 1981) began as a result of live capture from Puget Sound-British Columbia pods in the absence of any knowledge about the population being exploited, and concern for the impact of these removals on the population.

75 animals were removed from this unknown population between 1964 and the present.

It was soon found that individual whales could be identified by natural markings. By 1976 the total B.C. population was individually identified and an accurate census reached.

The conclusion from this work was that the total B.C. population of *Orcinus orca* was just a fraction of what it was previously thought to be. The present B.C. population is 285.

These photo ID studies resulted in discovery of pod dynamics: a family-based social system in which pods are individual family groups stable over time.

Studies of pod distribution indicated there was another level of social organisation, into communities comprising several pods which may occupy home ranges.

Age structure of the population was determined.

Studies of dialects in *Orcinus orca* began in 1978. It was determined that there are pod differences in calls and that stock structure and relationships between pods can be examined using calls. These and related studies continue. There is a good chance that they will succeed in illuminating presently unclear relationships between individuals and pods that are critical to reproduction. Until this information is available, it makes little sense to cull individuals for a breeding programme, as it would amount to haphazard selection and therefore be unlikely to succeed.

Given sufficient effort, it is likely that within a few years there could be sufficient information for selection of certain individuals from the Alaskan *Orcinus orca* population, and have a good chance that they will breed successfully. At present, breeding dynamics are largely unknown and any breeding programme that involves selection and removal of pairs is unlikely to succeed.

SPECIFIC COMMENTS:

1. Proposal to pull teeth:

(i) In general, the purpose of aging teeth is to determine the age structure of a population, mortality rates and birth rates. In *Orcinus orca*, the technique should be avoided, it doesn't work well, tooth rings become occluded at 25-30 years, although one individual has been aged at 34 years (Christenson, 1982). Mitchell's 1981 conclusion that an animal visually identified over a continuous period that implied an age of 80 at least, was just 35 years old at death, illustrates the problem. The periodicity of dentine layering has not even been clearly established yet.

(ii) Animals selected for captivity do not need to be aged 'v pulling teeth: length is sufficient.

(iii) If it is correct that tooth extraction is an easy procedure, it should be possible to prove it on captive. How many existing Sea World or other animals (Oo) have been aged using this technique, with what results?

(iv) Tooth extraction may cause structural damage to the lower jaw, involve possibility of infection, nerve and bone damage.

(v) In view of recent collections (e.g. USSR take of 920 in 1981) there are likely to be sufficient available teeth for any conclusion that would be informative regarding the species; the Sea World contribution would be a small addition to the collection presently available for analysis.

(vi) A proven technique exists for determining population age structure, reproduction and mortality: long-term photo identification. In British Columbia analyses of a 10 year data file indicate a median age of 48 years, so any definitive study would take some time.

(vii) Conclusion: if the study will not yield population age structure, there is little point in doing it.

2. Proposal to Examine Stomach Contents:

(i) Field work, though it might not be as conclusive regarding specifics, is likely to be sufficiently informative regarding feeding habits and needs. For example, in British Columbia scale sampling has established that all salmon species are taken.

(ii) If stomachs are sampled from an entire pod, content analyses are likely to be duplicate, therefore multiple replication of the procedure in a single capture is likely redundant.

(iii) If the whales are lifted on deck for this treatment, the stress involved may induce vomiting, though in such cases material might be salvaged from deck scrapings. If animals are left in nets for a prior adaptation period, digestion might reduce the usefulness of the lavage.

3. Proposal for Radio Tagging:

(i) Radio tags involving bolt attachment of packages to dorsal fins have proven ineffective and harmful in past studies (Bigg, pers. comm.) Photographs are appended documenting this point.

(ii) Suction tags have proven useful as a short-term method of benign radio tagging in other cetacean species (Goodyear, 1981), and should be used prior to any potentially injurious procedures.

(iii) Satellite tracking and benign attachment procedures may prove useful in the future, but at this time studies of movement using natural markings are likely to be more informative, especially if conducted over a long period.

(iv) At the present time, studies of movement using natural markings are probably more effective and less harmful than the proposed radio tagging.

4. Proposal to attach Spagetti or Streamer Tags:

(i) This is largely redundant, given the effectiveness of photo identification. The only advantages would be easier identification of marked animals by aerial observation and by untrained observers.

5. Proposal for Freeze Branding:

(i) This proposal is also redundant.

(ii) Cryogenic markings have a limited duration, almost certainly less than that of natural markings (Bigg, pers. comm.)

6. Proposal to conduct Hearing Studies:

(i) In itself, the use of surface electrodes and computer extraction of auditory evoked potentials would not be harmful.

(ii) However, stress associated with removal of the animals from the water is cause for concern. The procedure would prolong deck time, as it could not be accomplished simultaneously with gastric or stomach lavage.

(iii) In view of the small number of subjects required for this type of study, there are probably already sufficient numbers of captives available. How many captives has the procedure been applied to?

7. Proposal to conduct Liver Biopsies:

(i) This procedure, presumably of use in the selection of animals for permanent removal, is also likely to be stressful.

(ii) Blood analyses are likely to be as useful for chromosome study and health screening.

(iii) Has the procedure been proven safe and useful with captives?

8. Proposed Breeding Programme:

(i) Given the present state of knowledge, selection of animals for breeding will be difficult. It is not even possible to say whether they should be from the same or different pods or dialect groups. For example, Marineland's Orky and Corky, the only captive pair to produce offspring to date (4, all failed to survive infancy), are from the same dialect group. However, another pair from a single capture, Marineworld's Yaka and Nepo, did not breed or even attempt copulation.

(ii) Of all the combinations of haphazard captive pairings that have occurred over the past 15 years, none has resulted in successful breeding and rearing. This indicates the dimension of the problem.

(iii) Experiential, as well as genetic factors seem likely to be critical. In the Marineland case, the parents do not seem to have sufficient knowledge about rearing to conduct it successfully. Although this factor might be countered by placement of mature animals in the captive group, this presents another problem: mature *Orcinus orca* do not survive very long in captivity.

(iv) Possibly the best experience/age compromise would be to take 4-5 year old animals that had younger siblings. These might have learned something about rearing and still be young enough to survive.

(v) Given sufficient field effort, it would probably be possible to make selections with a fair chance of success. Once the breeding units

are sorted out, this could be done. Skin and blood samples would enable determination of parents and offspring. However, this would require invasive procedures. Moreover, it is first necessary to determine pod membership, a task that requires at least two years of intensive effort.

(vi) Cytogenetic studies might be useful in determining blood lines. For example, saddle patch consistency between individuals very likely results from close genetic association. In Alaska, this study could possibly be done in 2-3 years.

(vii) If haphazard selection procedures are used, which would be the case if the project proceeds in the absence of the required knowledge, removals could be detrimental to pod survival. For example, in B.C.'s "B" pod, there is a single female; if she were to be taken the pod would eventually terminate.

(viii) If transient animals are selected first, they are very unlikely to breed with other individuals from resident pods. Would this mean the breeding programme would have to rely entirely on transients? It may not be immediately apparent which pods are transient and which are resident.

(ix) The proposal covers a size range from birth to sexual maturity. As indicated above, mature animals have very little chance of captive survival. Furthermore, the taking of mature reproducing members of a pod would likely diminish the reproductive potential of the pod, and as well disrupt the close-knit social structure of the pod by removing key members. Mature animals should not be taken.

(x) Determination of genetic associations, using acoustics, cytogenetics, behavioural observation and other methods, is one of the most exciting aspects of current field investigations of *Orcinus orca* in British Columbia and Puget Sound. Yet, in both populations the genetic situation is clouded by the fact that these are already exploited stocks. The Alaskan population, being unexploited, therefore represents a great scientific opportunity and challenge. It would be most unfortunate if the scientific opportunity is not fully exploited before physical interference with the pods occurs.

(xi) To conclude, not enough is presently known about the key factors involved in *Orcinus orca* reproduction for the Sea World breeding proposal to have any real chance of success at this time. However, if the needed scientific effort is made, perhaps within a few years enough will be known to justify the attempt.

SCALE OF TAKE:

1. If the Sea World request is granted, in fairness NMFS and others will be constrained to issue permits for further removals to replace existing display animals at other sites over the next five years.

2. This need can be anticipated as follows:

Miami 2 (Hugo, recently dead, Toki, old)

San Francisco	1-2	(Yaka, old, Nepo recently dead)
Los Angeles	2	(Orky, Corky, old)
Ontario	1-2	(Kandu, Nootka, old)
Vancouver	0-1	(Hyak, old)
Total	6-9	

Other sites:

Victoria	0	(just got 3 Icelandics, 2 alive)
Sea World	0	(have enough Icelandics to last a while)

Unexpected deaths are an unknown factor.

Added to the Sea World request, it is quite likely that permits for 20 removals from the Alaskan population could be issued in the next five years.

3. To maintain population levels with this level of removal, a capturable population of 500-1000 would be needed, if growth rates are similar to those of B.C. (1-2%). However, because the B.C. population is already depleted, it's growth rate is probably higher than that of the Alaskan population. It is reasonable to conclude that the Alaskan population should be demonstrated to comprise at least 1000 available animals before a take of 20 is permitted.

RESEARCH WORTH DOING:

This should be non-injurious to the whales, not like tagging or pulling teeth, and could include the following:

Blood tests:

- Health
- Enzymes
- Chromosomes
- Hormones (nepro status)

Photos: ID

- Morphology
- Sexing

Respiratory gases

Hearing tests

Measurements

Acoustics

Stomach contents (marginal)

Biopsies (for protein sequences - marginal)

RESEARCH THAT IS NOT PROPOSED BUT SHOULD BE:

Recordings of sounds from individuals, ? using contact hydrophones.

Stress measurement.

Extensive population study using photo identification techniques, prior to permit issuance.

POTENTIAL CANADIAN CONFLICT:

1. The Sea World application does not specify capture site: within Alaskan waters.
2. The northern British Columbia community of *Orcinus orca* probably spends some time in Alaskan waters, although the duration and distance of this penetration is not yet known.
3. Because of this there is a possibility that B.C. pods could be subject to capture within Alaskan waters.
4. This potential conflict should be resolved before any permits are issued to take the species in Alaskan waters.

SUMMARY:

1. The permit request to take 10 animals exceeds the number required for public display by Sea World.
2. Establishment of a breeding programme is the only justification for a large take, but:
3. *Orcinus orca* need experience to successfully rear calves.
4. Experienced animals will be very difficult to maintain.
5. Distantly related *Orcinus orca* may not be able to breed due to chromosomal incompatibility.
6. Closely related *Orcinus orca* may have inbreeding problems.
7. An appropriate pair could be determined for B.C. whales within 2

years (if politically acceptable, they could then be taken).

8. Several years of study will be needed before a pair of Alaskan animals could be taken that would have a reasonable chance of breeding.

9. As the Alaskan *Orcinus orca* population is still unexploited, great care should be taken to avoid repetition of the mistakes of the past that were made with B.C. and Puget Sound populations.

10. The IWC, as it has adopted a mandate to manage *Orcinus orca* stocks, should be involved in the process. If NMFS wishes to issue the permit requested by Sea World, it should be referred to the IWC for comment by the Scientific Committee.

CONCLUSION:

Sea World should show why their breeding programme will succeed where they and others have failed. Considerable research needs to be done before it is seriously considered. Once the research is done, a large take might be approved, provided the population is numerically sufficient to sustain it, and once Sea World has demonstrated that they have a reasonable chance to obtain a successful breeding result.

It would be foolish to proceed with a breeding programme in the present climate of knowledge about reproduction in *Orcinus orca*. In a few years more will be known, perhaps enough to do it successfully. To proceed now would be against Sea World's own best interest. If the programme is attempted now, and fails as it almost certainly will, NMFS might be heavily constrained to refuse any further application.

REFERENCES:

- Bigg, M.A., MacAskie, I.B. and Ellis, G. 1976. Abundance and movements of killer whales off eastern and southern Vancouver Island, with comments on management. Unpubl. Rep., Arctic Biol. Stn. Ste Anne de Bellevue, Quebec. 21pp.
- Bigg, M.A. 1981. An assessment of killer whale (*Orcinus orca*) stocks off Vancouver Island, British Columbia. Paper SC/JN81/KW4, International Whaling Commission, Cambridge.
- Balcomb, K.C., Boran, J.R., Osborne, R.W., and Haenel, N.J. 1980. Observations of killer whales (*Orcinus orca*) in greater Puget Sound, State of Washington. Rep. MMC-78/13 to U.S. Marine Mammal Commission, Washington, D.C. 41pp.
- Christenson, I. 1982 *KILLER WHALE IN NORWEGIAN COASTAL WATERS. REPORT OF THE INTERNATIONAL WHALING COMMISSION, 32, 633-41.*
- Ford, J.K.B. and Fisher, H.D. 1981. Killer whale (*Orcinus orca*) dialects as an indicator of stocks in British Columbia.

Paper SC/JN81/KW8. International Whaling Commission, Cambridge.

Goodyear, J. 1981. A new radio tag; the Remora, and behaviour of a humpback whale (*Megaptera novaeangliae*). *J. Ceta-Res.* 2, 7-8.

Mitchell, E. AND A.N.T. GER, 1980. AGE OF REPORTEDLY OLD KILLER WHALE (*ORCINUS ORCA*), CATCHED FROM EDEN, TWOFOLD BAY, AUSTRALIA. REPORT OF THE INTERNATIONAL WHALING COMMISSION, SPECIAL ISSUE #3, 143-54

That concludes the workshop report. I should like to add a few personal remarks.

I, too, am a person who is greatly impressed by Sea World, its achievements and in many ways its attitudes. When I say they do a great job exhibiting and breeding penguins, I am not making a merely flippant remark. They do, and this represents a significant scientific and zoological achievement. Penguins are not their only success in innovative captive husbandry.

I recently had the pleasure of being escorted around Sea World by Lanny Cornell, Frank Powell, Frank Todd and Bill Evans. This was very helpful to me in gaining a clear perspective. There is no question that Sea World, in many ways, does a marvellous job. Yesterday someone described Sea World as the Disneyland of the ocean. I agree, and again this is not merely a flippant remark. Disney's achievements are a form of excellence. So are Sea World's. And in the field of marine and cetacean science, so are the achievements of Hubbs-Sea World Research Institute. Bill Evans, who cannot be here with us because of a serious illness, is a man whom I have known and respected for many years. He is a fine and serious scientist, and a compassionate and insightful man. I am sure we all wish him well and a speedy recovery.

Steve Leatherwood, whom I've also known and respected for many years, is a hardworking and competent, dedicated and thoughtful scientist and human being. He is also one of the most generous and best organized people I know. Try asking Steve for something sometime: he'll deliver. The only good thing I have heard about the Sea World plan so far is that Steve will direct and implement it. So far as the Sea World plan can be implemented, Steve Leatherwood will do a good job of it.

But there, I am afraid, we part company.

In my considered opinion, the Sea World proposal is ill-timed, for the following reasons:

1. Not enough is presently known about pod dynamics as they relate to breeding patterns to give the core project a real chance of succeeding. Such knowledge can be gained, but we shall have to be patient a little longer.

2. Approval of the project at this time would contradict the U.S. position in support of the IWC Convention. The guidelines under which the IWC operates clearly call for population evaluation, to a point of

satisfaction under review by the Scientific Committee of that body, prior to exploitation.

When I was at Sea World, Frank Todd, the brilliance who put together the penguin success, told me: "Paul, we should be working together, not against each other." I agree, I too want to end the acrimonious debate. When Bill Evans showed me his 300' long towed hydrophone array - a piece of gadgetry that enables him to follow cetacean sounds from up to six miles away - I wanted it. It's application to present field studies would end one of their prime deficiencies, namely the impact of close and continuous contact by scientists in boats.

The direction my own work is taking is towards less and less interference with the whales, without loss, indeed with enhancement of data gathering capabilities. I believe, for example, that it is entirely feasible to gather the entire range of physiological data proposed in the Sea World plan by working with co-operative, free subjects. I wish I had time to review a planned facility designed for this purpose.

My point is simply this: yes, let us work together, in good faith. Let us all hold our options open.

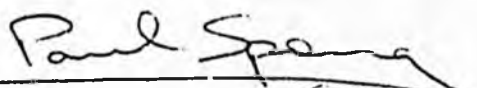
I suggest Sea World withdraw its full application for now, and that the NMFS approve a substitute proposal for two or three years of benign field work with the Alaskan Orcinus orca population. Then let us see where we should go.

In this spirit, I should like to offer the facilities of ORCALAB for the convening of a workshop, perhaps in mid-September, aimed at designing the first two years of the Alaskan programme.

I am grateful for your patience and the opportunity to speak.

Thank you very much.

Respectfully submitted by:


8.17.83

Paul Spong, Ph.D.,
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Alert Bay, B.C.
Canada VON 1A0.

AQUABIONICS INC

CONSULTING IN AQUATIC BIOLOGY & FISHERIES

NEW WAVE SEAFOODS

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July 11, 1983

Mr. Robert Brumstead
Acting Chief of the Protected Species Division
U. S. Department of Commerce
National Marine Fisheries Service
Washington D. C. 20235

Dear Mr. Brumstead:

I am writing regarding the proposal by Sea World of San Diego to study and capture killer whales in Alaskan waters.

I am a retired marine biologist and my son and I fish commercially in Prince William Sound, as well as operate a small private salmon hatchery. We observe killer whales frequently and suspect that they are taking salmon although the numbers killed are probably insignificant in comparison with other sources of mortality. From the article in the Cordova paper, the Sea World application sounds like an excellent program and we strongly support it. The program should provide much needed information, particularly on the possibility of a breeding program. We also believe that the Prince William Sound killer whale population could well support the capture of a few animals without endangering the species or interfering in the least with the viewing pleasure of kayakers, tour boat customers or ferry travelers. In a sense it would be multiple-use of a resource, with millions of clients enjoying killer whales in a Sea World Park contrasted to the few hundreds that presently may or may not see a pod of killer whales on their trip over the Sound.

Thank you for your consideration,

AQUABIONICS INC.

Jack Van Hyning
Jack M. Van Hyning, Ph.D.
President

APR 2 1984

7/18/83



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 1668
Juneau, Alaska 99802

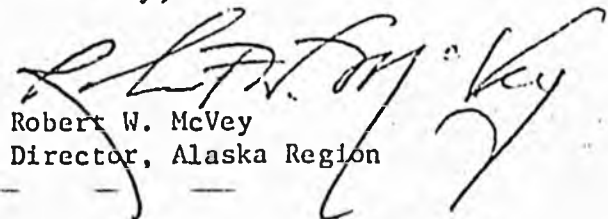
April 28, 1983

Lanny H. Cornell, D.V.M.
Senior Vice President/Zoological
Director, Sea World
1720 South Shores Road
San Diego, California 92109

Dear Mr. Cornell:

We have reviewed your permit application to take killer whales and we do not foresee objecting to its issuance. The proposal appears to be in line with the legal requirements of the Marine Mammal Protection Act and a worthwhile research effort. As you point out in your application, this issue has created public controversy in the past. We strongly encourage and commend your efforts to meet and discuss this issue with interested parties prior to commencing this project.

Sincerely,


Robert W. McVey
Director, Alaska Region

APR 2 1984





Alaska Princess CHARTERS inc.

8RA 647 Anchorage, AK 99507 (907) 345-5583

May 23, 1983

Mr. Robert Brumsted
Protected Species Division
National Marine Fisheries Service
Washington D.C. 20235

Dear Mr. Brumsted

After reading about Sea World Inc.'s application to remove up to ten killer whales from Alaskan waters, we are supporting the application and recommend approval by the National Marine Fisheries Service.

As a charter boat operator in Prince William Sound, we often see killer whales and our passengers are thrilled to see them in their natural habitat. We realize, however, that not everyone has the opportunity to view these whales in such a setting. Sea World provides a place for the average person to view and gain an appreciation for marine mammals.

The commercial aspect of Sea World's operation helps pay for the research they conduct. We support private research of marine mammals as it provides everyone with a greater understanding of these creatures without burdening federal, state or local governments.

Our attempts to gain information on the whales in Prince William Sound from various governmental agencies have proved fruitless as very little research has been done in the area. Even the 1980/81 Annual Report of the Marine Mammal Protection Act of 1972 published by the U.S. Department of Commerce states that killer whale populations are unknown. Sea World's research in Prince William Sound may enlighten everyone as to the types of whales here, population counts and their habits in the Sound. Our observations indicate that there is a large population of killer whales in the Sound. It is our opinion that the application to remove ten over the next five years will not adversely affect the population.

We hope you will approve Sea World's application expeditiously so that research may begin without undue delay.

Sincerely

Rachael D. Meeks
President
Alaska Princess Charters, Inc.

APR 2 1983

"DISCOVERED Prince William Sound With Us."

Sea World



Lanny H. Cornell, D.V.M.
Senior Vice President/
Zoological Director

January 9, 1984

Don W. Collinsworth
Commissioner
Alaska Department of Fish and Game
Support Building
Juneau, Alaska 99811

Dear Mr. Collinsworth:

As you will recall, several of us from Sea World have visited over the last several years with you and your staff to explore the possibility of our obtaining permits from the State of Alaska and from the federal government (National Marine Fisheries Service) to collect killer whales in Alaskan waters for public educational display and captive propagation here at Sea World and to conduct benign nonharmful research on wild killer whales in Alaskan waters. As you probably already know, we have obtained from National Marine Fisheries Service permits to collect an average of two killer whales per year over a five-year period - a total of 10 whales.

We therefore would like to follow through now with our original inquiry to collect an average of two killer whales per year from Alaskan waters (Kodiak, Shelikof Straits, Prince William Sound, Southeast) over a five-year period for the purposes of public educational display at our three Sea World parks in San Diego, California; Aurora, Ohio; and Orlando, Florida, and to conduct benign, nonharmful research on an unspecified number of killer whales which would be encircled coincidental to the collecting activities. These whales would be studied at the site of encirclement and released. The studies would include such things as morphometrics, blood

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sampling for genetic determination, photography, some animals would be cryogenically marked (painless freeze branding) and approximately six animals over the five-year period would have small radio-packs attached so their movements could be monitored by satellite. All of these activities, of course, and others as your Department recommends, will be conducted in concert with your scientists as well as those from the University of Alaska. As you know, we have worked closely in the past with such eminent scientists as Dr. Robert Elsner and Dr. John Burns, among others. Previous studies in concert with the Alaska Department of Fish and Game have included work on seals, sea lions and walrus. (We have, over the last few years, rescued and returned to good health an average of six or so walrus pups per year in cooperation with your Department and various Alaskan native corporations as well as Fish and Wildlife Service.)

These proposed studies on killer whales and other marine mammals in Alaska will provide data that are currently unavailable on the natural history, physiology, population dynamics, etc. as we have discussed. In addition, locations of groups of killer whales and other cetaceans will be more exactly pinpointed to allow tourist vessels and scientists to observe them in the wild.

Although we have had reports over the last few years of large numbers of killer whales ranging from several hundred to several thousand in Alaskan waters, the literature currently indicates there are approximately 250 to 300 animals minimum in the areas we suggest. We are currently in the process of conducting field research which will give us a more concise idea of minimum population numbers. Some of these early data will be available later this year and should boost the minimum numbers.

There have been some misconceptions about this project. Some would imply it is too extensive or is

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in conflict with the U.S./IWC position. This is not the case, however. Neither the United States' position on whaling nor the IWC moratorium are threatened. Both the Russians and the Japanese are envious of the United States' capabilities with public display. These they do not now have, but they will, in time, develop them. Further, the IWC position presently allows for the aboriginal taking of whales and, as you know, the United States' position on this issue immeasurably exceeds any position on live capture for public display. We believe these "problems" are intended to divert attention from the cruth.

Our only intent at the outset was and still is to follow the IWC requests which outline coordination of science with capture for public display so as to accumulate as much knowledge as possible about marine mammals.

As you are already aware, the IWC charter currently extends only to the great whales taken for slaughter on the high seas. It was once previously extended to include bottlenosed whales, following six years of debate - a move still protested by some of the members. The IWC has not extended the charter to cover other whales and has ~~certainly~~ never studied live capture for public display as an obligation.

Some IWC killer whale management recommendations have been made: 1) The IWC asked the Soviets not to kill any more killer whales in the Antarctic after they killed over 900 killer whales in 1979-80. This request is valid, however, only until the Soviets provide more data on population and provide information on those already killed. The Soviet reply has been that they intend to slaughter no more killer whales and thus they foresee no need to supply the data requested. 2) Norway has been allowed to kill 52 killer whales each year ad infinitum, based on a minimum population of 1,115 killer whales in their waters. This quota is voluntary, but the Norwegians are complying.

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Many countries which are signators to the IWC charter also are in favor of the moratorium and also currently exhibit killer whales for public display. They are not likely to abstain from or vote against the moratorium unless it conflicts with their display of cetaceans.

There is no move at present to include live capture in the IWC charter as this almost exclusively occurs in sovereign waters, not on the high seas. And, the total numbers taken for public display are so minute as to be nonexistent compared to those in fisheries, commercial slaughter and for scientific research alone. There are in all of North America a total of approximately 1400 seals, sea lions, dolphins and whales to educate 110-120 million visitors each year to zoological parks and aquaria.

We have on several occasions attended meetings to discuss the project. In May 1983 we suggested to National Marine Fisheries Service that the appropriate site for a public hearing would be in Alaska. We have met with representatives of the University of Alaska, the Alaska Department of Fish and Game, National Marine Fisheries Service, Alaska, the Alaska Congressional delegation representatives, as well as representatives from Governor Sheffield's office. In addition we have met with Alaska charter and tourist interests and look forward to more cooperation with these groups to enhance their knowledge of wild marine mammals.

The field studies and the research alongside or aboard our collecting vessels is to be accomplished in concert with scientists from Sea World, the Hubbs-Sea World Research Institute, the University of Alaska Institute of Marine Science and the Alaska Department of Fish and Game, as well as other scientists you may designate. Several of us will be in Juneau on or about February 8, 1984 and would like to continue our discussions on this matter

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with you at that time at your convenience. We will be visiting earlier in that week with some of the people already indicated at the University of Alaska in Fairbanks.

Sea World currently maintains three killer whales in our Orlando, Florida park, three in San Diego, California and two for our Aurora, Ohio facility. Our goal would be to double these numbers for the creation of small breeding groups which would also serve to enhance our public educational displays.

Our oldest male killer whale is approximately 25 years old and has been with us for over 15 years. Other killer whales in our care have been with us for approximately 7 years and are 10-12 years old. All are doing well and are approaching sexual maturity. Thus we believe we have an opportunity which has never before been available - the captive propagation of killer whales.

To accommodate the success of our propagation program, we have designed and begun construction on huge new killer whale facilities in our Orlando park. This 5 million gallon "ocean" will be 4-5 times larger than our current facilities which are the world's largest. We also plan similar facilities in our San Diego park to be completed in 1987. We have also just finished remodeling the Ohio whale pools.

The research project, which is currently budgeted at \$250,000 per year for the five year period, a total of \$1.25 million, will be administered by the nonprofit Hubbs-Sea World Research Institute. Almost all of these funds will be spent in Alaska, as that is where the majority of the work will take place. This means an added \$5-7 million to the Alaska economy if you include a dollar multiplier of 5-7.

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We have successfully conducted many projects in Alaska without incident in the past with the cooperation of the Alaska Department of Fish and Game, and we look forward to the onset of this particularly important project with your approval and cooperation.

Sincerely,

Lanny H. Cornell, D.V.M.

LHC/lđ

cc: Robert A. Hinman

SECRETARY
of STATE



Ralph Munro

Olympia Washington 98504
(206) 753-7121

TESTIMONY OF

RALPH MUNRO
Secretary of State

BEFORE THE
NATIONAL MARINE FISHERIES SERVICE

August 16, 1983

Seattle, Washington

Mr. Chairman, my name is Ralph Munro, Secretary of State for the state of Washington. I also am a member of the newly formed Orca Rescue Coalition and may be the only public official in America who has watched a whale capture from a very close distance. Ironically, that capture was by the same individuals who request permits from the National Marine Fisheries Service today.

I defer from my previously prepared testimony to read a letter to you (read Governor's letter). I would like to enter this letter into the record.

Mr. Chairman, I would also like to enter into the record a letter from the Department of Game of the state of Washington. Rather than read the entire letter, I will only read the last two paragraphs of this letter drafted by our Game Department scientists and conservationists.

"Placing a killer whale in captivity is akin to signing its early death warrant. These animals have a long life in the natural world. Shortening that life span to a fraction of its potential is not justifiable.

Again, I want to register the Washington Department of Game's strong opposition to the issuance of a permit to Sea World for capture of 100 killer whales in West Coast waters. Sincerely, The Department of Game, Frank R. Lockard, Director."

Mr. Chairman, the state of Washington opposes permits in question for a number of reasons.

First, the international reasons. As stated so well by Congressman Don Bonker and others, we believe that these permits are seriously undermining our position at the International Whaling Commission bargaining table. How can we, in good conscience, ask Japan to cease whaling when we are issuing permits to amusement parks for animals that we know will only live 3, 4 or 5 years.

Secondly, as stated in the Governor's letter, we believe Canada and British Columbia should have the opportunity for input. There are a number of Southeast Alaska pods of Orcas that may migrate back and forth across the United States/Canada border at that location. What right do we have to take these whales without at least some input from Canada? For that reason, we call for a public hearing in British Columbia.

On the national level, we oppose the permit, also.

This permit, if granted, is an exemption from our national policy of not taking whales for commercial gain. As recently as last month, the United States Senate unanimously approved a resolution offered by Senator Bob Packwood of Oregon that urges the United States to "use all diplomatic and legal means to achieve world-wide compliance with the International Whaling Commission moratorium" on commercial whaling.

Thirdly, the permit process itself disturbs us.

It has not been made entirely clear whether we are to testify today on the original application, or the questions submitted by the Marine Mammal Commission, or on the responses to the questions. There are conflicts that have not been resolved between the three documents.

Regardless of the fact that Sea World asked that there be no public hearings on this permit application, we believe that the public's voice should be heard. The application for permit, the questions from the Marine Mammal Protection Commission, the applicant's response, and this public hearing have brought up virtually scores and scores of questions that must be answered. For this reason, we are respectfully requesting that public hearings be held in both the state of Alaska and the state of California. If, in fact, those public hearings do not answer the questions involved, then we intend to request Congressional hearings on the entire permit request.

Because of the deadline for signing up to testify, we know of many people who did not know of this hearing. We respectfully request that this be taken into consideration in granting hearings in Alaska and California.

The permit itself also raises a number of questions. The application is extremely vague about herding and harassing the whales. A number of witnesses in Puget Sound have watched these same applicants using airplanes and a flotilla of power boats to herd pods of whales half way down the Sound. Will this, or will it not, be allowed?

Secondly, there is no mention in the permit about utilization of depth charges or underwater explosive devices. Will they, or will they not, be allowed? I have stood less than 50 yards away while they closed the net and watched the individual who is applying for this permit with a lighted torch on the stern of a high-speed boat dropping virtually scores of underwater explosive devices into the waters to keep the whales from escaping the purse seine. It was a horrible experience to watch. This permit makes no mention of explosive devices.

What of the populations of Orcas on the west coast of America today? Very little research has been done in the wild on this subject. Mr. Chairman, we call for a publicly funded survey of Orcas on the west coast of America. This important research should not be conducted by a private amusement park, but by a publicly funded research body.

When you read the details of the permit, you find out that Sea World has offered themselves the opportunity to recapture individual whales up to three times over a five-year period. What this means is that the permit really offers them the opportunity to capture two, three, or four hundred whales, rather than the 100 specified in the permit headlines.

Finally, the applicants themselves should answer a number of questions to the National Fisheries Marine Service. Because so much of this permit application is based on the experience and knowledge of Sea World's capture skills and collecting personnel, perhaps the Fisheries Service or the Marine Mammal Commission should obtain the answers to questions that bother us a great deal here in the state of Washington.

We would like to know the specific number of whales that have died in capture operations conducted by these same individuals. If the National Marine Fisheries Service is not interested in the answers to these questions, we as citizens of this state certainly are interested. We know of the applicant's report here in Puget Sound and we know because we are discussing animals that may or may not migrate into Washington State, these questions are valid and deserve answers to the citizens of our state.

What happened in 1970 in Penn Cove, whereby numerous citizens reports that more than 80 whales were driven into the cove, netted, and somewhere between 3 and 6 subsequently died, had their bellies slit open, chains wrapped around them, taken out to sea and sunk in order to keep the public from knowing of their deaths?

What was the problem in Yukon Harbor when 15 were captured and 3 died in the process? Who was responsible in Carr Inlet, when another whale, netted by the current applicant, died? What happened in 1969 in Penn Cove, when another animal died, and if it was not for a citizen-inspired law suit in which Sea World subsequently relinquished all rights to capture whales in Washington state waters, how many would have died in Budd Inlet and through other places in the Sound?

Of all the whales that have been taken from Puget Sound by this applicant, only one remains alive today at Sea World.

Other witnesses today will describe in detail the Budd Inlet capture. Hopefully there are some here who will describe the even more gruesome operation in Penn Cove, where many whales died.

These facts may not be pertinent except that the application is made by exactly the same people.

Finally, Mr. Chairman, I have a personal message for you that I hope you will consider in your deliberations when you return to Washington and also when you discuss this with the other staff. We appreciate this hearing very much and hope you will grant the opportunity for the public hearings in Alaska, British Columbia and California.

I was raised on a bay just 8 miles west of this room at a little spot called Crystal Springs on Bainbridge Island. My grandfather went there in a rowboat in 1889, the year of our statehood, to stake his claim and his future in America. He watched the whales every year from Crystal Springs, as have my father, who still lives there at the age of 83, and I, who have lived there all my life. The Orcas migrating down the Sound, often times pods from the ocean seeking salmon runs or seals to feed on. These migratory ocean pods, which may be same you are addressing in your permit today, have given us some of the most exciting moments of our lives.

I remember a warm summer evening when I was about 6 years old, sound asleep in our bedroom close to the beach. My father came in and awakened me and told me to listen because the whales were so close to the beach that we could hear them, and sure, enough, we could. We went out into the night to see the phosphorous as they fed inside the kelp beds near our house.

Then another occasion, just five days ago, last Wednesday afternoon, standing on a major state highway west of Port Angeles, my family and a young Makah Indian boy watched two whales feeding in the kelp beds less than 150 feet from shore. We watched them there in the wild from the edge of the highway. Cars from Florida, Ohio, California, Mississippi, all over the country, stopped and watched these whales with us.

Standing there on that occasion, I think about the three generations of my family who have had an opportunity to see these whales in the wild.

I thought about that young Makah boy who has documented evidence of more than 30 generations of his family who have watched the whales, respected and sometimes worshipped them.

As you return home to the joy of your own family, I hope you will remember that your final decision on this permit will make a major impact on the children here in the Pacific Northwest. The bottom line is simply this: Will my little boy have the opportunity to be the fourth generation of his family to watch the whales at Crystal Springs? He has that right, Mr. Chairman, and it should not be taken away from him. There is absolutely no reason in the world that the children of this state should have to go to Southern California and pay \$10.00 to an amusement park operator to see our whales. The time has come to stop this madness. Please do not issue these permits.

C. General Conditions

1. Responsibilities of Permit Holders

a. The Permit Holder, in effecting the taking and/or importing authorized by this permit, will be considered to have accepted and to be prepared to comply with the provisions of this Permit, applicable Regulations, and the Act.

b. The Holder shall be responsible for the activities of any individual who is operating under the authority of the Holder's Permit relating to the taking, importing, transportation, or maintenance and care of any marine mammals authorized to be taken or imported hereunder.

c. Under the terms of the Regulations, a violation of any of the terms and conditions of this Permit shall subject the Holder and/or any individual who is operating under the authority of the Holder's Permit to penalties provided in the Act.

d. All personnel of the Holder, including veterinarians, requiring State or Federal licenses to practice their profession shall be, and so long as employed by the Holder in that capacity, remain, duly licensed under the appropriate law.

e. As stated in Section 216.34 of the Regulations:

1. This Permit must be in the possession of the person to which it was issued, or an agent of such person, during:

- a. The time of the authorized taking or importing;
- b. The period of any transit of such person or agent which is incident to such taking or importing; and
- c. Any other time while any marine mammal taken or imported under this Permit is in the possession of such person or agent.

2. A duplicate copy of this Permit must be physically attached to the container, package, enclosure or other means of containment, in which the marine mammal is placed for purposes of storage, transit, supervision or care.

2. Requirements for Taking, Importing, and Transporting Marine Mammals

a. No marine mammal authorized to be taken or imported hereunder, as the case may be, shall be taken by the Holder or any other person, in violation of the law of any country having jurisdiction over the taking.

b. This Permit does not authorize the Holder or any other person to take marine mammals in the territorial waters of any country without the consent of such country. The Holder is responsible for securing such consent and complying with appropriate laws of that country.

c. No marine mammal may be imported unless the Assistant Administrator for Fisheries determines that the methods of taking, holding, and transporting marine mammals in the country of origin are consistent with the provisions and policies of the Act.

d. Importation of marine mammals is subject to the provisions of 50 CFR Part 14. Importers are advised to see 50 CFR Part 14 for importation requirements and information.

e. The marine mammals authorized by this Permit to be taken shall be taken in a manner determined by the Assistant Administrator to be acceptable.

f. All marine mammals must be taken in a humane manner. In the event the Assistant Administrator for Fisheries determines that any method of taking authorized herein or otherwise is not humane, taking by such method shall immediately cease and taking shall not resume until an acceptable method of taking has been prescribed by the Assistant Administrator for Fisheries. Any inhumane taking shall subject the Holder to the penalties of the Act, including revocation of this Permit. ✓

g. The Holder shall neither take nor import any mammal which is pregnant, a lactating female, or is an unwearied young mammal, unless such taking or importing is specifically authorized in Section B of this Permit. ✓

h. The Holder shall employ a duly certificated common carrier by air, water, rail, or road in the transportation of any marine mammals, except that the Holder may use a private vehicle for such transportation if such vehicle is operated by Holder's personnel and the provisions of this subsection are complied with in the course of the transportation involved.

i. All aspects of the transportation plans must be found satisfactory by a duly licensed doctor of veterinary medicine.

3. Veterinary Program

a. A doctor of veterinary medicine shall be on the staff of the Holder, or otherwise generally available to the Holder when needed, in order to:

1. ensure that the taking of marine mammals is conducted in a humane manner;
 2. provide prompt and appropriate medical treatment of marine mammals being captured, transported, or maintained in captivity;
 3. supervise medically necessary humane destruction of sick, diseased, stressed, injured, or lame animals; and
 4. provide for the development and implementation of an appropriate disease control program.
- b. In the event of the humane destruction of an animal, the Holder shall perform an autopsy on the animal and within seven days of the death of such animals, shall notify the appropriate regional office of the National Marine Fisheries Service of the death and send to such office a copy of the autopsy report.
- c. Any pregnant animals shall receive proper veterinary attention. All births involving any animal taken under this Permit shall be reported to the Assistant Administrator for Fisheries.

4. Records and Reports

- a. The Holder shall submit a report within 30 days of the taking or importing authorized herein, describing the method and location of the taking, including any problems or complications which might have arisen in connection with the taking. The Holder shall submit a report by January 1, following the date of issuance of this Permit, and annually thereafter, describing the health and condition of the marine mammals. These reports shall be submitted to the Assistant Administrator for Fisheries, National Marine Fisheries Service, U.S. Department of Commerce, Washington, D.C. 20235.
- b. The Holder shall submit a report within 30 days of the taking or importing of scientific specimen materials listing the species, type of material, method of preservation, and the disposition of the specimens. This report shall be submitted to the Assistant Administrator for Fisheries, National Marine Fisheries Service.
- c. The Permit Holder shall maintain sufficient written records regarding the marine mammals taken or imported as authorized herein, and regarding each marine mammal of the species authorized herein to be taken or imported in its possession or otherwise acquired, to allow for adequate identification of each such mammal. Such records shall include, but are not limited to, species, physical description of the animal, date and location of acquisition (whether by capture or other means), and identifying characteristics, either natural or artificially produced. Such records shall be available for inspection by a duly authorized representative of the Assistant Administrator

for Fisheries at the facility in which the animal is located.

d. In the event of mortality of these marine mammals, the Holder shall provide a report of the death within 30 days, including autopsy and clinical history, in a form consistent with accepted veterinary medical practices, and a copy of the records required in Section C-4c of this Permit.

e. In the event that any marine mammal is killed during the course of taking or importing, said marine mammal shall be considered as having been taken or imported, and the number of live animals of the kind permitted to be taken or imported shall be reduced accordingly, unless the Assistant Administrator for Fisheries determines that the death was due to causes beyond the control of the Holder, and that the remains of the mammal were disposed of in a satisfactory manner, in which case the Holder shall be entitled to take or import an additional animal.

f. If, within 30 days of taking or importing, a marine mammal dies or is determined by the Holder to be unacceptable for his purposes, the Holder shall be entitled to take or import an additional mammal provided that the unacceptable animal, or the remains of the dead animal, is disposed of in a manner satisfactory to and approved in advance by the Assistant Administrator for Fisheries and provided further that in the case of death the Assistant Administrator determines such death was due to causes beyond the control of the Holder. The foregoing replacement privilege, shall apply only in those cases in which the Assistant Administrator determines that the status of stock to which the animal in question belongs will not be adversely affected by further taking.

5. Sale or Disposition of Mammals or Progeny

a. The Holder shall not sell or otherwise dispose of (1) any mammal, the taking or importation of which is authorized by this Permit, or the progeny of any such mammal, or (2) any mammal in his possession or control on the date of the issuance of this Permit or subsequently acquired, which is of the same species as any mammal the taking or importation of which is authorized by this Permit, or the progeny of such a mammal except with the approval of the Assistant Administrator and subject to such terms and conditions as the Assistant Administrator may prescribe. All animals subject to this paragraph shall be marked or otherwise identified in a manner satisfactory to the Assistant Administrator for Fisheries.

b. In the event of the death of any marine mammal or of the species of marine mammal authorized to be taken or imported, the Holder shall make every reasonable attempt to notify the scientific community of the availability of specimen materials. The Holder may contact the appropriate Regional Director or

the Assistant Administrator for assistance in this matter.

c. The Holder is authorized to deposit specimen materials that have been taken or imported, into scientific collections which meet the minimum standards of collection curation and data recording and maintenance as established by the scientific community. The Holder is authorized to export and re-import such materials as necessary.

6. Display Program

a. Any marine mammal taken or imported pursuant to the terms hereof may not be displayed at any facility of the Holder other than the facility for which the permit was sought, unless specific permission is requested and obtained from the Assistant Administrator. However, the Holder may hold the mammals at another facility acceptable to the Assistant Administrator in the manner required hereunder.

b. Any display program in which any of the marine mammals taken or imported hereunder are to participate shall be designed so as not to fatigue or overwork the mammals. A duly licensed veterinarian shall certify to the Assistant Administrator that any display programs involving any mammals taken or imported pursuant to this Permit will not unduly fatigue or injure such animals.

7. Research Program

a. The Holder is authorized to conduct scientific research on any marine mammal taken hereunder provided such scientific research reasonably can be expected not to cause death or permanent injury to the animal and is approved in advance by the Assistant Administrator.

8. Inspection

Upon request by the Assistant Administrator, the Holder shall permit any employee(s) of the National Marine Fisheries Service or any other person(s) duly designated by the Assistant Administrator, to inspect the Holder's records and facilities insofar as such records and facilities pertain to activities authorized by this Permit, relate to species covered by this Permit, or pertain to the Assistant Administrator's responsibilities under the Act.

9. Transferability and Assignability

The Holder shall not transfer or assign the permit granted herein to any other person, as person is defined in Section 3(10) of the Act. This Permit is of no force and effect if transferred or assigned to any other such person.

10. Permit Amendments

a. The provisions of this Permit may be amended upon reasonable notice by the Assistant Administrator.

11. Permit Fee

a. Section 216.31(d)(9) of the Regulations provides for a reasonable fee to be charged to cover the costs of issuance of this Permit. The fee for this Permit is \$200.00.

907-486-3910 Box 991



Kodiak, Alaska 99615

June 17, 1983

Honorable Frank H. Murkowski
United States Senate
Washington, D.C. 20510

Dear Frank:

I am writing in response to your statements regarding the proposed capture of killer whales by Sea World.

The representatives of Sea World contacted my office in hopes of arranging a meeting with any interested parties. We met with them on June 9th. Attending the meeting was Lanny Cornell, D.V.M.; Vice President of Sea World, Ed Asper and Corporate Director, Don Goldsberry. Others attending the meeting were Chris Blackburn, Reporter; Jeff Stephen, Manager of United Fishermen's Marketing Association; Hank Pennington, University of Alaska, Marine Advisory Agent; Jong S. Lee, Fish Industrial Technology Center, University of Alaska and John Strahle, Enforcement Officer for N.M.F.S.

I am enclosing a copy of an article from our local newspaper. After reading this article, you will have a better understanding of what Sea World is planning. Those of us attending the meeting had no objections to their plans. We believe the whales would not be harmed by the method of capture planned. Sea World plans on keeping only ten animals over the course of five years. This would probably mean two to three animals per year. I hope this will explain and answer the questions you have regarding the killer whale project.

I am,

Sincerely,

Alvin R. Burch
Manager

APR 2 1984

"Harvesting Alaskan Shrimp and Whitefish"

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

Notice of Issuance of Permit

On March 17, 1983, Notice was published in the FEDERAL REGISTER (48 FR 11310) that an application had been filed with the National Marine Fisheries Service by Sea World, Inc., 1720 South Shores Road, San Diego, California 92109 for a Public Display/Scientific Research permit under the Marine Mammal Protection Act of 1972 to take killer whales. Sea World requested to take a total of up to 100 killer whales over a 5-year period in order to study the biology, reproduction, and population dynamics of this species. Up to 10 animals were requested to be permanently maintained for public display and captive breeding, and up to 90 were requested to be captured, some maintained up to three weeks, studied, sampled, marked and/or tagged and released. Up to 10 of these animals were requested to be radio tagged and tracked. Also, Sea World requested to recapture and reexamine some animals. These activities were requested to be conducted in the waters off Alaska and California.

The public comment period originally closed April 16, 1983, and was subsequently extended until August 26, 1983 (48 FR 16934, 22976, and 32376.) A public hearing was held on August 16 and 17 in Seattle, Washington, and the hearing record remained open until August 26, 1983. All comments and documents postmarked by that date were evaluated and considered in the final decision.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

Permit to Take Marine Mammals Permit No. 439

Sea World, Inc., 1720 South Shores Road, Mission Bay, San Diego, California 92109, is hereby authorized to take the marine mammals specified below for the purposes of public display and scientific research as described in the Permit Holder's application and subject to the provisions of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407), the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR Part 216) and the conditions hereinafter set out.

A. Number and Kind of Marine Mammals

1. Up to ten (10) killer whales (Orcinus orca), not less than 11.5 feet in length, of either sex may be taken and maintained in captivity. None of these animals shall be pregnant, nursing or unweaned. No more than two percent of the minimum population estimate for an area may be taken from that area over a two-year period. Furthermore, no more than two (2) animals may be removed from any distinct pod and no more than 1/2 of any sex/age class (immature, mature) may be removed from any distinct pod during a five-year period.
2. Up to ninety (90) killer whales (Orcinus orca) may be taken by capture and release. Animals encircled by net in the course of any authorized activity shall be considered as captured. Except for pregnant, nursing, or unweaned individuals, the following activities may be conducted on animals encircled, subject to the applicable conditions in Section B.
 - a. Up to 90 animals may be restrained, measured, photographed, and have blood samples, blowhole swabs and vaginal swabs taken.
 - b. Up to 90 that are not readily identifiable with natural markings, may be cryogenically marked.
 - c. Up to 20 may be spaghetti or streamer tagged.
 - d. Up to 10 may be radio tagged and tracked.
 - e. Up to 20 may have expired air samples taken.
 - f. Up to 20 may receive hearing tests.

- g. Up to 20 may be stomach lavaged.
- h. Up to 20 may have one tooth extracted.
- i. Up to 20 may have one liver biopsy taken.
- j. Up to 40 may be transported and temporarily held up to 3 weeks prior to release. All others shall be released as soon as possible at the capture site.

3. Animals previously captured under Section A-2 may be recaptured up to 2 times but not more than once in any calendar year. Previously studied animals may be restrained, measured, photographed, blood sampled, remarked if necessary, and have the radio pack removed or changed if necessary. All recaptured animals shall be released as soon as possible at the capture site.

B. Special Conditions

1. The animals shall be taken by the means, in the areas, and for the purposes set forth in the application unless otherwise specified in this Permit.
2. Not more than 30 animals under A-2 and A-3 may be taken per year in the Alaska areas. However, authorization from the Assistant Administrator for Fisheries is required prior to conducting any capture activities in any area. The Permit Holder shall conduct an initial survey of local abundance and shall submit a report which includes the number of animals, number of groups or pods, size of groups or pods and distribution of animals observed.
3. Not more than 4 animals under A-2 and A-3 may be taken per year in the California area. However, no animals shall be taken in California until authorized by the Assistant Administrator for Fisheries. Any request for authorization to conduct capture activities in California shall include a detailed report of at least one year's activities in Alaska, a detailed list of activities and numbers of animals proposed for California, and additional information on the population.
4. None of the animals authorized to be taken under Section A-2 shall be temporarily held beyond the time required for on-board research or beyond the time associated animals remain in the area, or transported to temporary holding facilities until authorized by the Assistant Administrator for Fisheries.
 - a. Provided the Permit Holder submits a satisfactory study design to determine whether the animals will rejoin a killer whale group or pod upon release, an initial authorization will be given by the Assistant Administrator for Fisheries, in consultation with the Marine Mammal Commission, to temporarily hold animals.

- b. Authorization to allow further temporary holdings will be based on the results of the pilot study, and the holding time will be limited to the maximum time experimental animals were held and known to rejoin a killer whale group or pod.
5. No liver biopsies, stomach lavage, tooth extractions, hearing tests or respiratory studies shall be conducted under Section A-2 until authorized by the Assistant Administrator for Fisheries, in consultation with the Marine Mammal Commission.
 6. In the event of the mortality of any animal in the field, all further capture activities shall be suspended, and a detailed report shall be submitted which includes the events surrounding the incident, necropsy results, and steps that will be taken to avoid similar problems in the future. Any animal that dies shall be considered taken under A-1 of this Permit. Authorization from the Assistant Administrator for Fisheries is required prior to resuming capture activities.
 7. Within 60 days of any capture activities, a detailed report shall be submitted which includes the dates and location of taking, numbers of animals and pods observed, composition of pods, numbers of animals encircled, numbers captured, disposition of animals captured (immediate release, held temporarily, permanently held for captivity), activities conducted on each animal, effects of the activities on the animals and any problems which may have arisen in connection with the activities.
 8. By December 31 of each year the permit is valid, an annual report shall be submitted which includes a summary of activities conducted, the results of survey and monitoring efforts designed to provide information on the population and the effects of the activities on the animals taken, and a general plan of activities to be conducted in the following year. Authorization from the Assistant Administrator for Fisheries, in consultation with the Marine Mammal Commission, is required each subsequent year to continue activities.
 9. Within 90 days of completion of the research, a final report shall be submitted which includes a summary of the results of the research.
 10. The Permit Holder shall notify the Regional Director, Alaska Region, National Marine Fisheries Service, P.O. Box 1668, Juneau, Alaska 98802 (telephone 907-586-7221) or the Regional Director, Southwest Region, National Marine Fisheries Service, 300 South Ferry Street, Terminal Island, California 90731 (telephone 213-548-2575), as appropriate, prior to conducting any field activities in order to determine the specific dates and locations of activities and if a NMFS observer is required. The Permit Holder shall consult with the Regional Director sufficiently in advance to allow for such a determination.
 11. Upon the request of the Assistant Administrator for Fisheries, the Permit Holder shall make available for study a copy of all film taken in conjunction with the authorized activities.

12. The Department of Agriculture's regulations and standards, "Marine Mammals; Humane Handling, Care, Treatment, and Transportation," shall apply and are made a part of this Permit.
 13. This Permit is valid with respect to the taking authorized herein until December 31, 1988.
- D. All General Conditions attached as Section C shall apply and are made a part hereof, except that Section C-2g, h and i are specifically waived.



William G. Gordon
Assistant Administrator for Fisheries
National Marine Fisheries Service

NOV 01 1983

Date

Notice is hereby given that on NOV 0 1 1983, as authorized by the provisions of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407), the National Marine Fisheries Service issued a permit to Sea World, Inc., subject to certain conditions set forth therein. The Permit establishes restrictions on the number and locations of animals which may be removed from the wild each year, and requires a preliminary survey of each area prior to the collection of animals. The Permit does not authorize any extended temporary removal, capture activities in California waters, or liver biopsy, stomach lavage, tooth extractions, hearing tests or respiratory studies at this time, but these activities may be authorized in the future based on additional information which may be submitted by Sea World. The Permit requires suspension of activities in the event of any mortality, and provides for annual review and required reauthorizations in order for the Permit Holder to continue activities each subsequent year.

The Permit is available for review in the following offices:

Assistant Administrator for Fisheries, National Marine Fisheries Service, 3300 Whitehaven Street, N.W., Washington, D.C.;

Regional Director, National Marine Fisheries Service, Southwest Region, 300 South Ferry Street, Terminal Island, California 90731;

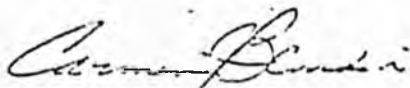
Regional Director, National Marine Fisheries Service, Alaska Region, P.O. Box 1668, Juneau, Alaska 99802;

Regional Director, National Marine Fisheries Service, Northeast Region, 14 Elm Street, Federal Building, Gloucester, Massachusetts 01930; and

Regional Director, National Marine Fisheries Service, Southeast Region, 9450
Koger Boulevard, St. Petersburg, Florida 33702; and

Regional Director, National Marine Fisheries Service, Northwest Region, 7600
Sand Point Way, N.E., BIN C15700, Seattle, Washington 98115.

The complete record, including the application, all supplemental information
and the hearing record, is available for review in the Office of Protected
Species and Habitat Conservation. For further information, contact the Office
of Protected Species and Habitat Conservation, National Marine Fisheries
Service, U.S. Department of Commerce, Washington, D.C. 20235 (telephone 202-
634-7529).



Carmen J. Blondin, Deputy Assistant Administrator
for Fisheries Resource Management
National Marine Fisheries Service

NOV 01 1993

Date.

SJR 31

Senator Vic Fischer spoke of his growing concern about the methods of capturing whales and asked that more consideration be given to Alaska and Alaskans when issuing permits for capture.

Dennis Kelso, Deputy Commissioner, and John Burns, Chief Marine Biologist, Alaska Department of Fish and Game (ADF&G), have determined that, based on ADF&G's best estimate of orca population in the areas affected, the population can biologically sustain the harvest of two whales a year for the next five years. ADF&G made comments to the National Marine Fisheries Service (NMFS) on the permit application, but their suggestions that specific conditions be included were denied. Burns pointed out the need for more baseline data on orca populations, and stressed the importance of State control in the taking of whales.

Lanny Cornell, Senior Vice President/ Zoological Director, Sea World, Inc., spoke of his company's history of cooperation with the State, and intention to seek a State permit from the Alaska Department of Fish and Game for the capture of orcas. He objected to the charges against Sea World in SJR 31.

Dr. Robert Elsner, Institute of Marine Science, University of Alaska, Fairbanks, felt the proposed project was a worthy one and that the University of Alaska would be happy to work with the Alaska Department of Fish and Game in overseeing the research and the capture of orcas.

Vivia Boe, Greenpeace, International, related her experience with monitoring Sea World's orca captures in Washington state. She discussed the federal lawsuit against Sea World, and the capture techniques used by Sea World in the past. She urged the resolution be strengthened to ensure the safe and humane treatment of Alaskan orcas.

Richard Osborne, Research Director, Moclips Cetological Society, Friday Harbor, Washington, recommended that research be done with photo identification methods to determine accurate population data before any management decisions on harvesting orcas are made.

Jim Brooks, Deputy Director, National Marine Fisheries Service (NMFS), Alaska Region, testified that the permit contained ample safeguards and the harvest by Sea World would be biologically irrelevant to the Alaskan orca population. Hearings were not held in Alaska because of limited time and money. He said the authority to manage marine mammals, even within 3 miles, lies with NMFS.

Larry Edwards, Alaska Environmental Lobby, spoke in support of SJR 31, and the need for placing additional conditions on the issuance of a permit.

John Howard, Juneau, spoke in support of Sea World's past research efforts, and feels Sea World should be allowed to conduct further research on orcas in Alaska.

The meeting adjourned at 5:33 pm.

Alaska State Legislature

BETTYE FAHRENKAMP, Chairman
ROBERT H. ZIEGLER, SR., Vice Chairman
DICK ELIASON
PAUL FISCHER
VIC FISCHER
BOB MULCAHY
ARLISS STURGULEWSKI



POUCH V
STATE CAPITAL
JUNEAU, ALASKA 99511
(907) 465-3834
(907) 465-3835

Senate

Committee on Resources

MINUTES

January 30, 1984
3:02 pm

Beltz Room
Room 211, Capitol

MEMBERS PRESENT

Senator Fahrenkamp, Chairman
Senator Ziegler, Vice Chair
Senator Eliason
Senator P. Fischer
Senator V. Fischer
Senator Mulcahy
Senator Sturgulewski

CALENDAR

SB 349, An Act relating to recreational activities in state parks.

SJR 31, Relating to the capture of orcas in Alaska waters.

SB 349

Senator Faiks testified in support of SB 349. This bill would require the Department of Natural Resources to consider the users of horses and other animals when promulgating new regulations in state parks.

Carol Wilson, Special Assistant to the Commissioner, Department of Natural Resources, spoke in support of this bill. It would allow the department to have a consistent guideline while still making decisions on a park by park basis. She referred to an existing order that allows horses in some parts of Chugach State Park.

Senator Mulcahy moved the bill from Committee with individual recommendations. The motion passed without objection.

SJR 31 RELATING TO THE CAPTURE OF ORCAS IN ALASKA WATERS.

RESOURCES COMMITTEE SUBSTITUTE

Based on premise that Sea World will come to State Fish and Game for capture permit - would require Fish and Game to put stipulations on the state permit:

1. submit population informatio.
2. do research recommended by state agencies
3. abide by methods, times, places of capture set by Dept.
4. station Fish and Game observers aboard capture vessels
5. reimburse state for expenses incurred in observing

Plus asks Governor to assure that before future permits are issued public hearings be held in Alaska.

STATE AFFAIRS COMMITTEE SUBSTITUTE

Contends that Sea World has broken its commitment to obtain State capture permits. Asks Congress to:

1. prohibit the taking of orcas in Alaska waters

OR 2. require that an Environmental Impact Statement be done

Asks National Marine Fisheries Service to:

1. suspend Sea World's permit until an EIS is done

OR 2. require them to get a State permit

RULES COMMITTEE SUBSTITUTE

Similar to State Affairs version, but:

Removes the reference to a "broken commitment".

Removes the requirement that an Environmental Impact Statement be done

Asks the Governor to oppose the taking of orcas OR require that Sea World abide by conditions set by Fish and Game

Does ask Congress to prohibit the taking of orcas OR require a State permit.

Does ask NMFS to suspend the permit OR require a State permit.



SECRETARY
of STATE



Ralph Munro

Olympia, Washington 98504
(206) 753-7121

SJR 31

February 29, 1984

MAR 9 1984

The Honorable Bettye M. Fahrenkamp
Alaska State Senate
State Capitol
Juneau, Alaska 99811

Dear Senator Fahrenkamp:

I appreciated your taking the time to stop by my office while you were visiting the Washington State Capitol. All of us enjoyed meeting you and want you to feel free to come by any time that you are in the area.

I must apologize for lobbying you a bit on the issue of Southern California amusements parks taking whales from the Pacific Northwest and Alaskan waters. As you could tell, my feelings run very deep on this issue and I am delighted that we had a chance to talk.

Following your visit, I pulled a copy of my recent testimony to the National Marine Fisheries regarding this issue. I hope that you will take a few moments to review it because the concerns that are expressed in this testimony relate directly to you and the current pending legislation in the Alaska legislature.

My very best to you.

Sincerely,

RALPH MUNRO
Secretary of State

RM:tu

Enclosure

Mr. Chairman, my name is Ralph Munro, Secretary of State for the state of Washington. I also am a member of the newly formed Orca Rescue Coalition and may be the only public and elected official in America who has watched a whale capture from a very close distance. Ironically, that capture was by the same individuals who request permits from the National Marine Fisheries Service today.

I defer from my previously prepared testimony to read a letter to you (read Governor's letter). I would like to enter this letter into the record.

Mr. Chairman, I would also like to enter into the record a letter from our scientists and conservationists at the Department of Game of the state of Washington. Rather than read the entire letter, I will only read the last two paragraphs of this letter drafted by our Game Department scientists and conservationists.

"Placing a killer whale in captivity is akin to signing its early death warrant. These animals have a long life in the natural world. Shortening that life span to a fraction of its potential is not justifiable.

Again, I want to register the Washington Department of Game's strong opposition to the issuance of a permit to Sea World for capture of 100 killer whales in West Coast waters. Sincerely, The Department of Game, Frank R. Lockard, Director."

Mr. Chairman, the state of Washington opposes permits in question for a number of reasons.

First, the international reasons. As stated so well by Congressman Don Bonker and others, we believe that these permits are seriously undermining our position at the International Whaling Commission bargaining table. How can we, in good conscience, ask Japan to cease whaling when we are issuing permits to amusement parks for animals that we know will only live 3, 4 or 5 years.

Secondly, as stated in the Governor's letter, we believe Canada and British Columbia should have the opportunity for input. There are a number of Southeast Alaska pods of Orcas that may migrate back and forth across the United States/Canada border at that location. What right do we have to take these whales without at least some input from Canada? For that reason, we call for a public hearing in British Columbia.

On the national level, we oppose the permit, also.

This permit, if granted, is an exemption from our national policy of not taking whales for commercial gain. As recently as last month, the United States Senate unanimously approved a resolution offered by Senator Bob Packwood of Oregon that urges the United States to "use all diplomatic and legal means to achieve world-wide compliance with the International Whaling Commission moratorium" on commercial whaling.

Thirdly, the permit process itself disturbs us.

It has not been made entirely clear whether we are to testify today on the original application, or the questions submitted by the Marine Mammal Commission, or on the responses to the questions. There are conflicts that have not been resolved between the three documents.

Regardless of the fact that Sea World asked that there be no public hearings on this permit application, we believe that the public's voice should be heard. The application for permit, the questions from the Marine Mammal Protection Commission, the applicant's response, and this public hearing have brought up virtually scores and scores of questions that must be answered. For this reason, we are respectfully requesting that public hearings be held in both the state of Alaska and the state of California. If, in fact, those public hearings do not answer the questions involved, then we intend to request Congressional hearings on the entire permit request.

Because of the deadline for signing up to testify, we know of many people who did not know of this hearing. We respectfully request that this be taken into consideration in granting hearings in Alaska and California.

The permit itself also raises a number of questions. The application is extremely vague about herding and harassing the whales. A number of witnesses in Puget Sound have watched these same applicants using airplanes and a flotilla of power boats to herd pods of whales half way down the Sound. Will this, or will it not, be allowed?

Secondly, there is no mention in the permit about utilization of depth charges or underwater explosive devices. Will they, or will they not, be allowed? I have stood less than 50 yards away while they closed the net and watched the individual who is applying for this permit with a lighted torch on the stern of a high-speed boat dropping virtually scores of underwater explosive devices into the waters to keep the whales from escaping the purse seine. It was a horrible experience to watch. This permit makes no mention of explosive devices.

What of the populations of *Orcas* on the west coast of America today? Very little research has been done in the wild on this subject. Mr. Chairman, we call for a publicly funded survey of *Orcas* on the west coast of America. This important research should not be conducted by a private amusement park, but by a publicly funded research body.

When you read the details of the permit, you find out that Sea World has offered themselves the opportunity to recapture individual whales up to three times over a five-year period. What this means is that the permit really offers them the opportunity to capture two, three, or four hundred whales, rather than the 100 specified in the permit headlines.

Finally, the applicants themselves should answer a number of questions to the National Fisheries Marine Service. Because so much of this permit application is based on the experience and knowledge of Sea World's capture

skills and collecting personnel, perhaps the Fisheries Service or the Marine Mammal Commission should obtain the answers to questions that bother us a great deal here in the state of Washington.

We would like to know the specific number of whales that have died in capture operations conducted by these same individuals. If the National Marine Fisheries Service is not interested in the answers to these questions, we as citizens of this state certainly are interested. We know of the applicant's record here in Puget Sound and we know because we are discussing animals that may or may not migrate into Washington State, these questions are valid and deserve answers to the citizens of our state.

What happened in 1970 in Penn Cove, whereby numerous citizens reports that more than 80 whales were driven into the cove, netted, and somewhere between 3 and 6 subsequently died, had their bellies slit open, chains wrapped around them, taken out to sea and sunk in order to keep the public from knowing of their deaths?

What was the problem in Yukon Harbor when 15 were captured and 3 died in the process? Who was responsible in Carr Inlet, when another whale, netted by the current applicant, died? What happened in 1969 in Penn Cove, when another animal died, and if it was not for a citizen-inspired law suit in which Sea World subsequently relinquished all rights to capture whales in Washington state waters, how many would have died in Budd Inlet and through other places in the Sound?

Of all the whales that have been taken from Puget Sound by this applicant, only one remains alive today at Sea World.

Other witnesses today will describe in detail the Budd Inlet capture. Hopefully there are some here who will describe the even more gruesome operation in Penn Cove, where many whales died.

These facts may not be pertinent except that the application is made by exactly the same people.

Finally, Mr. Chairman, I have a personal message for you that I hope you will consider in your deliberations when you return to Washington and also when you discuss this with other staff. We appreciate this hearing very much and hope you will grant the opportunity for the public hearings in Alaska, British Columbia and California.

I was raised on a bay just 8 miles west of this room at a little spot called Crystal Springs on Bainbridge Island. My grandfather went there in a rowboat in 1889, the year of our statehood, to stake his claim and his future in America. He watched the whales every year from Crystal Springs, as have my father, who still lives there at the age of 83, and I, who have lived there all my life. The Orcas migrating down the Sound, often times pods from the ocean seeking salmon runs or seals to feed on. These migratory ocean pods, which may be the same you are addressing in your permit today, have given us some of the most exciting moments of our lives.

I remember a warm summer evening when I was about 6 years old, sound asleep in our bedroom close to the beach. My father came in and awakened me and told me to listen because the whales were so close to the beach that we could hear them, and sure enough, we could. We went out into the night to see the phosphorous as they fed inside the kelp beds near our house.

Then another occasion, just five days ago, last Wednesday afternoon, standing on a major state highway west of Port Angeles, my family and a young Makah Indian boy watched two whales feeding in the kelp beds less than 150 feet from shore. We watched them there in the wild from the edge of the highway. Cars from Florida, Ohio, California, Mississippi, all over the country, stopped and watched these whales with us.

Standing there on that occasion, I think about the three generations of my family who have had an opportunity to see these whales in the wild.

I thought about that young Makah boy who has documented evidence of more than 30 generations of his family who have watched the whales, respected and sometimes worshipped them.

As you return home to the joy of your own family, I hope you will remember that your final decision on this permit will make a major impact on the children here in the Pacific Northwest. The bottom line is simply this: Will my little boy who sits in this hearing room today have the opportunity to be the fourth generation of his family to watch the whales at Crystal Springs? He has that right, Mr. Chairman, and it should not be taken away from him. There is absolutely no reason in the world that the children of this state should have to go to Southern California and pay \$10.00 to an amusement park operator to see our whales. The time has come to stop this madness. Please do not issue these permits.



Alaska State Legislature

Senate Committee on State Affairs

Vic Fischer, Chair • Pouch V

Juneau, Alaska 99811

(907) 465-4954

Official Business

MEMORANDUM

TO: Senator _____

FROM: Senator Vic Fischer

DATE: January 19, 1984

RE: Co-sponsorship of Senate resolution relating to the capture of Orcas (Killer Whales) in Alaska waters.

Attached is a copy of a resolution concerning the capture of Orcas in Alaska waters that I will introduce on Monday, January 23. If you would like to co-sponsor this resolution, please contact me or my aide, Ginger Baim, at 4954 before Friday, January 20.

Rep. Szymanski will introduce an identical resolution in the House on the same date. He has 24 co-sponsors at this time.

While the resolution is pretty much self-explanatory, following are salient points to consider:

- * Permits for capturing marine animals for research and/or public display are issued by the NMFS under authority of federal law. Without management authority for marine mammals, including Orcas, Alaska cannot restrict or prohibit capture in state waters. Because of this, Alaska has had virtually no say on whether these captures should be allowed or the conditions under which Orcas may be captured.
- * The National Marine Fisheries Service issued a permit to Sea World, Inc. to capture up to 100 Killer Whales in Southeast Alaska and Prince William Sound and to remove 10 to their stateside facilities for public display purposes.
- * Although the current permit authorizes Sea World to conduct research on the captured whales, it does not require it. As a result, if the past is any indicator, virtually all the "research" that will be done will be to assure that the 10 animals taken stateside are healthy and will have little value to the worlds scientific community.
- * This permit was issued without any public hearings in Alaska and virtually no press coverage until after the comment period had closed. The only public hearing on the permit was held in the State of Washington, where residents of that state strongly urged hearings in Alaska so that Alaskans would have an opportunity to comment.

- * The permit was issued without any reliable indicator of what the Orca population in Alaska is. Although estimates vary, there is little data to suggest that the total population of Orcas in Alaska is more than 500, and it is probably far less than that.
- * Considerable reduction in the overall Orca population of specific areas has followed Sea World, Inc. capturing attempts in the past. Evidence suggests that Orcas are reluctant to return to areas where capturing has occurred and that capturing attempts in Alaska would seriously diminish the opportunities for Alaska residents and visitors to observe Orcas in their natural setting.
- * There is evidence that Sea World, Inc. has violated terms of similar permits in the past, specifically by using underwater explosives to herd Orcas into their nets. The ADF&G was denied their request to approve or disapprove capture activities by Sea World, Inc. in order to avoid conflicts and assure compliance with terms of the permits.
- * The capturing, harassment, and public display in captivity of Orcas is offensive to the religious and cultural traditions of Native people in Southeast Alaska. The ANB passed a resolution in opposition to the permitted capture.

Because of these concerns, the resolve section of the resolution requests that future permits require that scientific research in response to recommendations of the UA, ADF&G, and other recognized scientific bodies be conducted on site (in Alaska waters) as a condition of granting the permit.

Further, it requests that public hearings be held in Alaska prior to issuing any future permits to capture Alaska Orcas, that the state have the ability to monitor compliance with the permits, and that the state be reimbursed for any losses that result from the permitted captures.

I have a great deal of information and backup on this issue that I would be happy to share. I believe it's important to keep the emotion out of this issue -- the facts are alarming enough. It's clear, through the statewide news coverage, that Alaskans are very concerned about this issue. I believe it's imperative that we address it through this resolution.



Official Business

Alaska State Legislature

SJR 31

Senate Committee on State Affairs

Vic Fischer, Chair • Pouch V
Juneau, Alaska 99811
(907) 465-4954

Clean copy?

MEMORANDUM

TO: Senator Bettye Fahrenkamp

FROM: Senator Vic Fischer *Vic*

DATE: January 19, 1984

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p. 2 - how assure?
Bachette my wording*

JAN 19 1984

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*Done have
the resolution*

Alaska State Legislature

BETTYE FAHRENKAMP, Chairman
ROBERT H. ZIEGLER, SR., Vice Chairman
DICK ELIASON
PAUL FISCHER
VIC FISCHER
BOB MULCAHY
ARLISS STURGULEWSKI



POUCH V
STATE CAPITAL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

Senate

Committee on Resources

M E M O R A N D U M

TO: Senate Resources Committee Members

FROM: Senate Resources Committee Staff

RE: January 30 Committee Hearing

DATE: January 26, 1984

On Monday, January 30, 1984, at 3:00 in the Beltz Room, the Senate Resources Committee will be hearing SJR 31, Relating to the capture of orcas in Alaska waters and SB 349, An Act relating to recreational activities in state parks.

SJR 31

On November 1, 1983, as authorized by the provisions of the Marine Mammal Protection Act of 1972, the National Marine Fisheries Service (NMFS) issued a permit to Sea World, Inc. to take killer whales (Orcinus orca) from Alaskan waters for the purposes of public display and scientific research. Under the terms of the permit, over the next five years ten killer whales may be taken and maintained in captivity; ninety killer whales may be captured and released up to three times each for the purpose of conducting research (activities such as blood sampling, hearing testing, liver biopsies, tooth extraction, and radio tagging are allowed). As a condition of the permit, authorization from the Assistant Administrator for Fisheries (NMFS) is required prior to conducting any capture activities, to resume capture activities following the mortality of any animal in the field, and at the end of each calendar year to continue activities.

There is concern over the permit process, (no public hearings were held in Alaska), and interest in assuring that the terms of the permit are complied with. There is evidence that Sea World, Inc. has violated terms of a similar permit during capture operations in the State of Washington, specifically by using explosives to herd orcas into nets. In 1976, the State of Washington sued Sea World, Inc. and their capture operation was subsequently shut down.

CS SJR 31, prepared in cooperation with the bill's sponsor, requests that the members of the Alaska Congressional Delegation persuade or require the NMFS to:

- 1) Place a NMFS observer on each vessel involved in capture activities.
- 2) Grant authority to the Alaska Department of Fish and Game (ADF&G) to approve or disapprove all capture activities.
- 3) Require that scientific research be done and that it respond to the recommendations of the University of Alaska, the Alaska Department of Fish and Game, and other recognized scientific bodies.

SJR 31 also requests that NMFS conduct a study of the impact of the capture of orcas on the ecosystem, and hold public hearings in Alaska prior to issuance of any future permits to capture orcas in Alaskan waters.

SB 349

AS 41.21.020.(6) authorizes the Commissioner of DNR to adopt regulations governing the use and designating incompatible uses within the boundaries of state park and recreational areas. SB 349 would require the department to consider the use of dogs, horses, and other animals in the adoption of these regulations.

Current regulation (11 AAC 12.120) allows the use of horses and pack stock on trails designated by the Director for that specific use. The Department has recently taken steps to accommodate the use of horses and pack animals in state parks, as evidenced by the attached Division Order No.55 which opens specific trails in Chugach State Park to the use of horses.

SJR 31

Rec 1/30/84 from
Sea World



EDUCATIONAL ACCOMPLISHMENTS OF SEA WORLD

In spite of its mere two decades as an institution, Sea World has had an unparalleled impact on public awareness of the marine environment, man's knowledge of this vast resource and our ultimate dependancy on the oceans for survival. Of the estimated over 118 million people who annually attend zoos, oceanariums and aquariums, seven percent attend Sea World parks. Since the opening of its first park in San Diego in 1964, Sea World, Inc. has hosted nearly 72 million visitors. In the last 10 years, Sea World has shown an average annual attendance increase of 10.25 percent. Assuming a modest three percent increase over the next ten years, total attendance at the three existing Sea World parks through 1992 will exceed 150 million. Marketing research shows that the largest group of Sea World visitors are young families with children.

Since the development in 1972 of "Exploration Breach", Sea World's formalized educational program for elementary through collegiate levels, over 1.5 million students have had the opportunity to directly experience and learn about marine life at one of the three Sea World parks as part of their curriculum. Other programs include: Underwater Friends, for grades K-3; Youth Awards, for campfire, scouts and youth groups; Career Explorations; Interworlds, for students K-4; and in-depth studies for high school and college students (many in cooperation with the University of California, San Diego, San Diego State University and the University of Florida system). The Sea World Shark Institute in the Florida Keys also offers a variety of educational experiences,

A program coordinator for the Orange County Public Schools in Florida wrote in recent correspondence, "We are dependent upon Sea World to provide marine biological programs. During May of 1983 alone, over 20,000 students were involved from the state's educational institutions."

Sea World also provides continuing education units which bring marine science instructors to the classroom and a preceptorship program for upper level veterinary medical students interested in marine and zoological medicine. Few similar organizations operate with an education budget exceeding \$1 million annually, which allows Sea World the freedom to conceive and construct such a wide-ranging and imaginative educational campaign.

In recent years, several very popular special programs have been developed. Gifted students' programs are presented for qualified students in grades K-6. Three special education programs are offered for mentally challenged, visually impaired and severely handicapped students. Each is a multi-sensory program designed for students who benefit from the individual approach. Sea World's Education Department also offers free curriculum aids, teacher orientation programs and inservice workshops. Sea World is committed to providing these programs at or below cost.

In addition to the organized education programs, trained interpreters/narrators are stationed at all major animal exhibits, including the killer whale area, to answer visitors' questions and present educational information. For those who wish additional information, guided tours are available. Other educational materials are presented in our award-winning graphic displays located in exhibit areas.

A sampling of Sea World's educational programs includes:

- Kelp Beds to Ice Berqs, K-6 educational program to premiere in Feb. 1984, designed as an out-of-park program, specifically for school assemblies, to introduce students to marine mammals and the ocean environment.
- Award-winning community outreach programs, such as: Sharks, Gigi: The California Gray Whale and Training Marine Animals, with 4600 participants in the first five months.
- Adult programs: Living World of the Sea, Marine Mammals, The Biology of Whales, The Plants of Sea World, Penguins, and Gray Whales.
- Sea World: An Educational Resource, offered in conjunction with San Diego State University as a two-day course for teachers.
- Undersea Fantasy, constituting the most sophisticated combination of film, live performance, animated characters and audience participation Sea World has ever achieved.
- Whales on the Move, a one-day session for groups of 10 or more in which half the day is spent on Sea World grounds and half at sea.
- Childrens' programs that bring out their creativity: Sea Life through Arts and Cratfs, and other learning opportunities such as Tide Pools, Birds, Oceanography and Ecology of Marine Animals.
- The rapidly expanding travelling marine education show Interworlds to the Sea, seen by over 50,000 students in five states and its in-park counterpart Interworlds, which won the AAZPA award in 1978.
- The Real World of the Scientist, a career oriented course for those seeking practical experience in science, and science internships in conjunction with the Florida Institute of Technology.

- A three credit-hour college level re-certification course offered in the Florida park to teachers wishing to stimulate students' interest in marine science.
- Sea World of Ohio's 30-week internship program conducted in conjunction with Central Michigan University's Park and Recreation Program.
- Sea World's involvement in supervising the Central Ohio Joint Vocational School District's Career Education program.

Sea World has initiated or participated in many special activities and events as well, including:

- The Young Adults Reading Olympics program for which Sea World of Florida contributes books, speakers, workshop advisors and fact sheets to approximately 50,000 students each year.
- Deaf Awareness Day, visited by 2000 people, at which sign language interpreters were provided and many video programs were translated into sign language.
- The annual Sea World Snow World Special Olympics for the developmentally handicapped, held since 1978.
- The hosting of underprivileged and handicapped children from other countries.
- The co-sponsorship with the National Art and Education Association of a national environmental art project in celebration of the Year of the Child, to increase sensitivity to the marine environment and encourage artistic expression.
- Participation in the CBS Reading program which involves approximately 45,000 students from Central Florida each year.
- Telelecturing, which is available to classes that cannot come to Sea World.

Other exceptional reflections on Sea World's educational value are:

- Its rating by the Stanford Research Institute in 1979 as "the world standard against which all others of its kind are measured" adding that it is "superior from a family perspective in every way."
- The steady stream of foreign dignitaries visiting the parks to learn about their unusual mix of entertainment, education and research.

- Students conducting research on marine science, who often find more information and books at Sea World's educational library than at their own public libraries.
- The Lake Erie Girl Scout Council's recognition of Sea World's contribution to community involvement by its granting of the 1981 "Appreciation Award".
- The National Safety Council's choice of Shamu, a Sea World killer whale, to be the "spokeswhale" for water safety.

The public display of marine mammals, the formal education programs, interpreters/narrators and graphics are indicative of Sea World's corporate belief that the public should be afforded the opportunity to personally experience the beauty, intelligence and agility of marine mammal species. Experiencing these exotic creatures only through one-dimensional photos, books and mass media cannot provide the awareness and appreciation that comes from personal observation.

Sea World has refined that talent for combining education and entertainment with a strong sense of responsibility for conveying ecologically sound, important information to the public. In this way, Sea World endeavors to promote greater awareness, understanding and appreciation of marine animals and their ocean environment with the hope of contributing to a more informed public, and thus building a more responsible society. AN INFORMED AND EDUCATED PUBLIC CONSTITUTES THE BEST PROTECTION FOR OUR MARINE MAMMAL RESOURCES.



SEA WORLD ENTERPRISES , INC.

GENERAL INFORMATION

AN OVERVIEW

Sea World Enterprises, Inc., is one of three major operating companies of Harcourt Brace Jovanovich, Inc. Harcourt Brace Jovanovich, Inc. (HBJ), one of the world's largest publishers, is a diversified company. HBJ creates instructional books, scholarly books, professional books and general books, including school and college textbooks. It publishes scientific journals as well as business and professional periodicals. HBJ distributes school and office supplies and manufactures graphic materials for school and office use. It publishes and scores educational tests. HBJ sells insurance to individuals and to corporate clients. It owns book clubs and television stations. It conducts seminars and courses in law, accounting and business.

Sea World Enterprises is organized into several groups:

- Sea World, Inc., is responsible for the operation of Sea World marine parks in San Diego and Cleveland, and the Sea World Marina at Perez Cove in San Diego.
- Sea World of Florida, Inc., operates the Sea World marine park in Orlando, the Sea World Shark Institute at Layton in the Florida Keys, Florida Festival (a food and merchandise complex adjacent to the Orlando theme park) and Florida Land Development Company.
- The Atlantis Restaurant in San Diego also is operated by Sea World Enterprises, Inc.

Principal Officers: The following are members of Sea World's Senior Management Committee:

Robert R. Hillebrecht, Chairman and Chief Executive Officer
Frank A. Powell, Jr., Executive Vice President
George J. Becker, Jr., Executive Vice President
Jan E. Schultz, Senior Vice President/Marketing
Lanny H. Cornell, D.V.M., Senior Vice President and Zoological Dir.

A Brief History

Sea World of San Diego is the company's original venture and continues to be the site of its corporate headquarters. Sea World was founded in 1963. The San Diego park was opened in 1964 on a 22-acre site.

In 1968 Sea World stock was offered to the public. In December of 1976 Sea World became a subsidiary of HBJ.

In the spring of 1970 Sea World opened Sea World of Ohio, in what was the first of several periods of expansion. Located near Cleveland in Aurora, that park continues to be operated during the summer, open to the public from the weekend before Memorial Day through the weekend after Labor Day. During the remainder of the year, Sea World of Ohio provides extensive education programs utilizing its aquariums and resident populations of marine animals. Sea World of Ohio is the only marine life facility of its kind in mid-America.

In December of 1973, Sea World of Florida was opened to the public on a site 12 miles southeast of Orlando, near Walt Disney World. Open year round, as is the San Diego park, Sea World of Florida is the anchor of a multi-million dollar family vacation development. Florida Festival, a \$7 million entertainment, dining and shopping complex was completed in late December of 1979 adjacent to the marine park. Plans call for a joint venture development of a 784-room destination resort hotel - Wyndham at Sea World - with the Trammell Crow Co.

The Sea World Shark Institute, located in the Florida Keys on Long Key in Layton, was constructed in late 1978. The 6.5 acre facility serves as an advanced shark research center for Sea World and other researchers and as a collecting station. Onsite laboratories and dormitories are available for use by selected academic and government teams. A research partnership agreement between Sea World and the Florida State University System was proposed in 1982 and signed in 1983. The program, which will be administered by the Florida Institute of Oceanography, will open the facilities of the Shark Institute to selected marine science instructors and graduate level students at all of Florida's State Universities and the University of Miami.

Throughout its history, Sea World has maintained the principle that an educated public remains the best protection for our marine environment. To this end, Sea World's goal is to present marine animals in family-oriented, entertaining shows and educational exhibits and to provide a center for quality marine research through the use of Sea World facilities and support of the non-profit Hubbs-Sea World Research Institute.

The Hubbs-Sea World Research Institute

Research has been an integral part of Sea World since its beginning. In 1963 the company participated in the founding of the non-profit Mission Bay Research Foundation, later named the Hubbs-Sea World Research Institute (HSWRI). Since then, Sea World has made its collection of marine animals and environments available to qualified research organizations for productive non-harmful research. Scripps Institution of Oceanography, Woods Hole Institute of Oceanography, San Diego State University, the Naval Oceans Systems Center and the Florida State Universities system are among institutions that have worked closely with

HSWRI. Some of the best known research projects involved "Gigi", the California Gray Whale, penguin studies and shark research.

Educational Programs

To date, more than 1.5 million individuals have participated in Sea World's educational programs at the company's three marine parks. Students experience the marine environment through a "hands on" approach to education. Programs are available for school classes, "gifted" children, disabled and other special physically and mentally handicapped students. Summer classes are open for both students and interested individuals of all ages. Special outreach projects take Sea World's education programs to the classrooms of students unable to make the field trip to a Sea World park. Included in programs are specially designed curriculum materials for use by classroom instructors prior to and following their students' visits to Sea World. More information on these programs is available by contacting the Education Department in each of the three Sea World parks.

Species Maintained

Each of the three Sea World parks maintains collections of marine mammals, freshwater and marine fishes, sharks, waterfowl and other birds. Included are: Killer whales (Orcinus orca), beluga whales (Delphinapterus leucas), Pacific pilot whales (Globicephala scammoni), Atlantic bottlenose dolphins (Tursiops truncatus), Pacific bottlenosed dolphins (Tursiops gilli), false killer whales (Pseudorca crassidens), Steller sea lions (Eumetopias jubata), California sea lions (Zalophus californianus), harbor seals (Phoca vitulina), manatees (Trichechus manatus), Pacific walrus (Odobenus rosmarus), California sea otters (Enhydra lutris), Northern elephant seals (Mirounga angustirostris) and others.

Other mammals in the collection include Malaysian short-clawed otters (Amblonyx cinerea) and American otters (Lutris caradensis).

More than 10,000 fish specimens of more than 350 species are maintained in the three parks. Nearly 100 species of reptiles, amphibians and invertebrates are also maintained by aquarium department personnel. Among the more unusual to be maintained in a controlled environment are pelagic sting rays (Dasyatis violacea), sawfish (Pristis pectinata), and chambered nautilus (A. nautilus). One of the world's largest collections of sharks includes, among others, bull sharks (Carcharhinus leucas) and brown sharks (Carcharhinus milberti).

Sea World's waterfowl (ducks, gees and swans) collection is the largest in this country and one of the largest in the world. The collection numbers nearly 200 forms and includes such endangered species as the Laysan teal (Anas laysanensis) and Nene goose (Branta sandvicensis). From 800 to 1000 waterfowl are raised each year. In addition, Sea World maintains one of the largest captive flamingo breeding colonies in the world.

Most significant of Sea World's bird collections is the Antarctic penguin collection housed in the \$7 million Penguin Encounter constructed in the San Diego park in 1983. Included in the collection are the only Antarctic penguins on display in this country, emperor penguins (Aptenodytes forsteri), and adelic penguins (Pygoscelis adeliae). The collection also includes a breeding colony of humboldt penguins (Spheniscus humboldti), the only one of the 17 species of penguins listed as endangered. Other penguin species maintained are king (Aptenodytes patagonica), rock penguin (Eudyptes crestatus), macaroni (Eudyptes chrysolophus), and gentoo (Pygoscelis papua). Additional species, such as the chinstrap (Pygoscelis antarctica), will be added to the collection shortly.

The Penguin Encounter is the result of a 10-year research project conducted by Sea World and HSWRI in conjunction with the National Science Foundation and will be the site of continuing research on these fascinating birds. Among the most significant accomplishments of the penguin project outside of the Antarctic is the hatching of emperor penguin chicks, beginning in 1980 and in each succeeding breeding season.

Attendance

By mid-1983, attendance at all Sea World parks passed the 75 million mark.

Sea World of San Diego

Sea World of San Diego is located in Mission Bay Park, a 4,500-acre recreational development owned by the City of San Diego. Commercial enterprises within the Mission Bay Park have lease agreements with the City of San Diego.

Mailing Address and Phone Number:
Sea World of San Diego
1720 South Shores Road
San Diego, CA 92109
(619) 222-6363

Public Relations Director:
Jackie O'Connor
Opened: March 21, 1964
110 developed acres.
Six shows (seven in summer).
30 educational exhibits.

Sea World of Ohio

Sea World of Ohio is the greater Cleveland area's most popular recreational attraction.

Mailing Address and Phone Number:
Sea World of Ohio
1100 Sea World Drive
P.O. Box 237
Aurora, OH 44202
(216) 562-8101

Public Relations Manager:
Elizabeth Barry
Opened: May, 1970
85 developed acres.
Seven major shows
20 educational exhibits.

Sea World of Florida

Sea World of Florida is located in the heart of the central Florida tourist destination.

Mailing Address and Phone Number:

Sea World of Florida
7007 Sea World Drive
Orlando, FL 32809
(305) 351-3600

Public Relations Manager:

John Rutherford
Opened: December 15, 1973
250 developed acres.
Five major shows.
21 educational exhibits.

PERMIT PROCESS



On March 7, 1983, Sea World submitted a permit application to take killer whales (Orcinus orca) for scientific research and public display. The application detailed the purpose of the proposed taking and the proposed scientific research project. The application also contained extensive documentation in support of the permit request. In conformity with the applicable statutory and regulatory requirements and recommendations of the Marine Mammal Commission, Sea World was issued its permit on 1 November, 1983.

In recognition of possible public interest in the proposed taking, Sea World pursued extensive efforts to ensure that the public was well-informed about the permit application. After the publication of the first public notice on March 17, 1983, Sea World requested a 30-day extension of the comment period to allow more time for interested parties to review the application and submit comments. The period was subsequently extended to Aug. 26, 1983 to accommodate other administrative requirements and a public hearing.

Meetings Sponsored by Sea World

In addition, on May 9 and 12, and June 5-10, 1983, Sea World held informal meetings to discuss the pending application in San Diego, California, Washington, D.C. and Anchorage, Juneau, Cordova and Kodiak, Alaska. Sea World selected these locations because it concluded that these cities were easily accessible to many of the interested parties including most major conservation and animal welfare organizations.

Much of the discussion at the meetings focused on Sea World's proposed scientific research program and, in particular, the scientific research protocols Sea World intended to apply, as well as its proposed captive breeding program. Representatives from Sea World described the protocols that will be used in the program and explained that they are well-established and accepted within the scientific community and have been successfully applied in breeding bottlenose dolphins (Tursiops truncatus) and other marine mammals at Sea World. It was also explained that the proposed captive breeding program was based on the successful program conducted with Tursiops and that the proposed taking was nearly identical to the Indian River project.

Although preparing for and sponsoring the informal meetings required a significant commitment of time and resources, Sea World believes the meetings were quite productive as they provided a forum for interested parties to exchange ideas and information freely in an informal setting. Sea World has committed many resources to ensure that the public is well-informed about its project. While the taking is very similar to the previous permitted taking of Tursiops, Sea World

recognizes that, in light of the public interest in killer whales, it is important that information be disseminated to interested parties so that the public can recognize that the project complies with the mandate of Congress and is consistent with previous permitted takings. Sea World believes that this goal was aided by conducting informal meetings in San Diego, Washington, D.C. and Alaska.

Public Hearing

A public hearing was held on Aug. 16-17, 1983 in Seattle, Washington. Testimony was presented both in support of and in opposition to the proposal. While participants raised many issues, it is important to note that no new significant issues were identified during the hearing, and that the most significant issues raised had already been addressed by Sea World in its original application and subsequent written submissions to the National Marine Fisheries Service and during its informal meetings. Nevertheless, Sea World appreciates the opportunities now and then to improve the public's understanding of the authorized programs that will be conducted under its permit.

Activities Authorized

The summary of authorized activities listed below reflects various requirements and restrictions, as described:

- 1) The collection over a five-year period of an average of two animals per year (for a total of 10 animals) for public educational display and captive propagation.
- 2) The authority to conduct important, nonharmful scientific research on up to 90 additional animals encircled in the nets coincidentally during the five-year collection effort. A specific number of animals for each research activity is defined. Some studies require further review and authorization from the Assistant Administrator of the National Marine Fisheries Service in consultation with the Marine Mammal Commission.
- 3) Animals incidentally encircled for research might be examined up to two times, but not more than once in each calendar year. Previously studied animals may be restrained, measured, blood-sampled, remarked if necessary and may have radiotelemetric packs removed or changed if necessary.
- 4) The permit requires suspension of all activities in the event of any mortality. Any animal that dies will be considered taken under the 10 authorized for public educational display and captive propagation.
- 5) The permit must be reviewed and reauthorized by the

Assistant Administrator for Fisheries in consultation with the Marine Mammal Commissioner annually.

6) The permit prohibits the taking of any pregnant, nursing or unweaned animals.

7) Detailed status, annual and thorough research activity reports will be submitted.

All activities authorized under this permit will be conducted in consultation with the Alaska Department of Fish and Game.

INTERNATIONAL WHALING COMMISSION



A. Research Recommendations

In 1981 an international workshop convened in Cambridge, England by the International Whaling Commission reviewed information available on identity, structure and vital rates of populations of killer whales, Orcinus orca, world-wide (IWC 1982: 617-694). Among other things, the workshop noted the importance of observational and photographic studies of killer whales, of the sort conducted during the past decade in inland marine waters of British Columbia and Washington State; noted discrepancies in estimates of vital parameters obtained from such observational studies and those obtained from specimens taken in whaling activities; encouraged that observational studies be extended to other areas for comparative purposes; and detailed other important research needs.

For example, the workshop put forth the following specific recommendations:

"5.6: Noting that teeth for age determination have not been consistently collected for all killer whales taken commercially or found stranded, the meeting recommends that in the future every effort be made to collect and examine such materials, as well as gonads, stomach contents, morphometric and meristic data and other biological materials whenever possible."

"5.8: Noting that chromosomal and biochemical studies may yield information concerning stocks and populations of killer whales, the meeting recommends that such studies be undertaken for all killer whales currently in captivity, and, whenever opportunity exists, to conduct such studies on stranded and harvested whales and whales in the wild."

"5.9: Noting that field studies of killer whales in waters around Vancouver Island and in Greater Puget Sound have produced significant new information concerning vital parameters, as well as precise assessments of the local populations, the meeting recommends that such studies be continued in order to accurately determine: (1) at what age killer whales become adult, (2) age-specific birth and mortality rates, and (3) immigration/emigration rates for the local population, especially as they may correlate with changes in the habitat. It is further recommended that similar studies be encouraged in other areas of the world for comparative purposes."

B. Collection

The International Whaling Commission does not consider live captures as its responsibility. It has not in the past, reviewed or commented upon any capture permits or capture operations, nor is there any indication that the IWC intends to broaden its purview to include such activities. The two IWC forums in which

live captures have been considered at all (the 1981 workshop on killer whales and the 1983 meeting of the Small Cetacean Subcommittee) have restricted discussions to rates of removal and effects of those removals on populations involved. No nation has been criticized or challenged because of its endorsement of controlled, carefully managed and limited live captures.

It was in this context that the Small Cetacean Subcommittee of the IWC at its 1983 annual meeting, discussed live captures of killer whales and (a) noted that considering the relatively low levels at which killer whales have been exploited world-wide, the species cannot be considered endangered or threatened, (b) noted that little is known of the status of killer whale populations affected by live-capture operations, (c) recommended that because of the possible low rate of reproduction in at least some populations of this species, if a guideline for rate of removals is adopted pending stock assessment, as has been done by the U.S. for bottlenose dolphins, it should probably be lower than the 2% that has been used for Tursiops (this recommendation was based on the 1.8% annual growth rate reported for Puget Sound/Vancouver Island populations by Balcomb and Bigg (1983) and (d) recommended that, given the probability that populations in a given geographical area consist of localized stocks, any planned live-capture be preceded by an assessment of size and composition of populations to be affected (IWC 1983: Annex H - 42 p. and 4 appendices).

Specifically relevant to the proposed Alaskan captures, the subcommittee received and accepted a "minimum" estimate of population size of killer whales in Shelikof Strait, Prince William Sound, and Southeast Alaska as 293 individuals (Leatherwood et al. 1983; IWC 1983: Annex H, p.38). Under the management regime proposed, these minimum estimates support authorization of takes, at present of no more than 5 animals per year from these three populations combined, pending further analysis. (It is important to note that Sea World requested and received authorization to remove only two animals per year and there is no expectation that other permits for killer whale capture will be requested or granted during this time.)

Mindful of the IWC recommendations and aware that success of a captive breeding program depends on a firm basis of biological knowledge, in 1982 Sea World publicly committed to a future five-year, multi-disciplinary research program on killer whales of southern Alaska.



KILLER WHALE FACILITIES

Sea World is ranked among the world's finest zoological institutions. Facilities at Sea World for captive killer whales far exceed federal standards. Sea World research and experience with captive whales has been instrumental in assisting the federal government and animal protection groups in determining the standards by which all zoological parks must abide.

Sea World currently maintains the three largest killer whale husbandry and display facilities in the world. In Florida, construction is underway for the replacement of the current 1,000,000 gallon whale facility. Estimated to cost \$15 million and to be completed in May of 1984, this new facility will allow for the continuation of quality educational display shows and exhibits while providing a breeding research center for large killer whales. Water capacity will be in excess of five million gallons.

A similar facility is on the drawing board for our San Diego park where our whales are currently maintained in a 1.25 million gallon complex, designed and constructed in 1970. The Ohio killer whale pool has recently undergone a \$1.5 million expansion.

It should also be noted that in San Diego, Sea World has just completed the \$800,000 construction of off-exhibit facilities, providing additional capabilities for conduct of non-harmful research projects with marine mammals.

Sea World spends millions of dollars annually on facilities, not because of government rules or complaints by citizens, but because by doing so it can assure the lives and safety of the animals in its care. Sea World is a model institution for captive display and maintenance of killer whales and other marine mammals.



KILLER WHALE LONGEVITY

The average lifespan of killer whales has yet to be determined. It does appear, however, that 30-35 years is a reasonably accurate figure. Estimates of longevity in captivity of 3-7 years, presented without support by those opposing the permit are apparently based on various interpretations of data presented in Hoyt's report (1981) and differ in the extent to which they include stranded animals and earliest captures. We continue to encourage strongest reliance on analyses of data on killer whales survival published in referenced scientific journals such as the International Zoological Yearbook in 1976 and 1979.

The average longevity of killer whales reported in 1979 was 7.2 years. The animals cited in that study are still alive today, extending average longevity to 11.4 years. Furthermore, individual killer whales in at least six North American institutions including the Vancouver Public Aquarium, Miami Seaquarium, Marineland of the Pacific, Marine World-Africa USA and Sea World, have been maintained in a controlled environment since before 1970.

It is important to note that it has only been during the last 20 years that anyone has kept killer whales in a zoological environment. A continuing trend towards increased captive longevity is apparent in the record.

Sea World's mortality rates with all species range from 3.0-6.0 percent in all its parks. This is at least as good and possibly better than wild mortality rates. Sea World fully expects its killer whales to live a healthy and normal life span in captivity.



COLLECTION TECHNIQUES

Killer whales are collected using small (50-75 ft.) and medium-sized (75-100 ft.) purse seiners. The techniques are well-documented in scientific literature. They are either encircled in open water or confined in a small bay by netting off the mouth. In addition, individual animals may present themselves and be collected by hoopnet without the encirclement of a group or pod when it is obvious that that particular animal lends itself as a recruit to the project.

A number of smaller vessels of various sizes may aid the collection and restraint of the whales. The larger boat is used as the primary collecting and initial transport vessel and the smaller boats, when utilized, will aid in the laying of nets, protecting the net openings and making any necessary adjustments to the nets.

Aircraft may be used as an aid to the operation. Aircraft usually are flown no less than 50 to 100 feet from the surface of the water unless landing or taking off from the water. The purpose of the aircraft is to aid in locating and censusing animals that cannot be seen from the boats, to identify groups and help determine age and sex composition of the pods prior to a collecting attempt, thus eliminating the potential of disrupting the behavioral patterns of some groups.

During the period of encirclement as well as during the period of temporary holding, observers, both on boats and/or divers in the water, are on hand as needed to insure the animals' safety.

After animals are encircled in a net, at appropriate times the space around the animal selected for handling is gradually reduced to a manageable size. The enclosed animal is transferred to a specially designed stretcher, lifted from the net, and placed in a transport unit onboard the vessel. Proposed research procedures may be conducted in the reduced net or onboard the capture vessel. As specified in Sea World's application and permit, once procedures are completed, whales will either be released to rejoin their pod or transported to Sea World.

It is important to note that no killer whales were collected by Sea World prior to 1976. Further, collection by Sea World has never resulted in the loss or injury of a killer whale.

Alaska State Legislature

BETTYE FAHRENKAMP, Chairman
ROBERT D. ZIEGLER, SR., Vice Chairman
DICK ELIASON
PAUL FISCHER
VIC FISCHER
BOB MULCAHY
ARLISS STURGULEWSKI



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Senate

Committee on Resources

MINUTES

March 5, 1984
3:11 pm

Beltz Room
Room 211, Capitol

MEMBERS PRESENT

Senator Fahrenkamp, Chairman
Senator Ziegler, Vice Chair
Senator Eliason
Senator Mulcahy
Senator Sturgulewski

CALENDAR

SB 278, An Act establishing a waterfowl conservation stamp.
SB 366, An Act relating to protection of forested land.
SJR 31, Relating to the capture of orcas in Alaska waters.

SB 278

Senator Rodey, sponsor of the bill, explained that proceeds from the sale of stamps would be used for the conservation and enhancement of waterfowl and said the bill has the support of conservation and sport hunting groups. He supported the Committee Substitute, as it clears up any questions over dedication of funds.

Dan Timm, Regional Management Coordinator, Game Division, and Tom Rothe, Waterfowl Coordinator, Game Division, Alaska Department of Fish and Game, testified in support of the Committee Substitute, which would make the purchase of the stamps mandatory and specify that the stamp would not be required of hunters until September 1, 1985. They answered questions from members of the committee regarding the Department's administrative costs, the process of requesting proposals for design and publishing of stamps, and how the Department plans to use the revenues generated.

Jay Nelson, Executive Director, Alaska Environmental Lobby, spoke in support of the Committee Substitute, and urged the state to become more actively involved in waterfowl management.

Ron Sommerville, Alaska Outdoor Council, testified in support of the Committee Substitute.

Jim King spoke in support of the bill, urging the state to take more control over the management of its waterfowl.

Senator Sturgulewski moved to adopt the Committee Substitute. There was no objection.

Senator Mulcahy moved CS SB 278 with individual recommendations. There was no objection.

SB 366

John Sturgeon, State Forester, Department of Natural Resources, testified in support of the bill, explaining that transferring responsibility for firefighting to local service areas would remove the duplication of effort by the state and municipalities.

Ginny Chitwood, Alaska Municipal League, testified in opposition to those sections of the bill that would give municipalities primary responsibility for fire suppression within service areas, expressing concern over municipalities' capabilities and the costs they would incur.

Senator Fahrenkamp asked that Sturgeon and Chitwood work with Committee staff to prepare a Committee Substitute that would address the needs and concerns of both the state and the municipalities.

SJR 31

Senator Vic Fischer spoke in support of the Committee Substitute and moved it be adopted and moved from Committee with individual recommendations. There was no objection.

The meeting adjourned at 4:27 pm.

Rep. Michael Szymanski,
Alaska State Legislature,
Juneau,
Alaska.



ORCALAB

Re: HJR # 58

Rep. Szymanski, Committeemenbers:

Thank you for the opportunity to make these remarks concerning HJR#58. My name is Paul Spong. I am the director of ORCALAB, a 13 year-old whale research station located on Hanson Island in the Johnstone Straits region of British Columbia, Canada.

To summarize my view, may I state simply that Sea World, despite its existence as a worthy institution, is severely out of step with the times in its plan to capture Alaskan orcas. At this stage in the sorry story of human relations with the cetaceans, what is needed is enlightened state and national legislation, and world leadership in the struggle to correct the mistakes of the past, not the furtherance of a dastardly trade in bodies and lives.

Let me be quite blunt about this: the Sea World plan will kill Alaskan orcas, it will severely disrupt the social fabric of the Alaskan orca populations, and it will severely compromise the U.S. position in defense of the whales at the International Whaling Commission.

I should like to table, for your consideration, the report of a workshop on the Sea World proposal which I convened during August 1983 in order to provide input to the NMFS at its public hearing in Seattle. Those involved wish it known that they participated as individuals, not as representatives of the universities, government or private organisations to which they belong. Collectively, the group effort represents the insight of more than 80 years of scientific and other observation of *Orcinus orca*, in captivity and in the ocean. With your permission, I shall read into the record some of the principle components and conclusions of this report.

To preface with the conclusion, the Alaskan *Orcinus orca* population, being unexploited and available, represents a unique scientific opportunity which should be grasped before uninformed exploitation occurs. The Sea World breeding plan might be feasible in the future but is unlikely to succeed given the present state of knowledge.

Furthermore, the IWC has adopted a mandate to regulate the take of *Orcinus orca*; under its evolving rules a previously unexploited population should be subject to numerical determination before exploitation. Though it has been started, this has not been concluded for the Alaskan *Orcinus orca* population. Obviously, it should reach a point of scientific and statistical satisfaction before exploitation is permitted.

The permit to take 10 animals exceeds the number required for public display by Sea World (it already holds sufficient numbers of Icelandic orcas for its immediate and short term needs). Establishment of a breeding

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programme is the only justification for a large take. But:

- * Orcinus orca need experience to successfully rear calves.
- * Experienced animals will be very difficult to maintain.
- * Distantly related Orcinus orca may not be able to breed due to chromosomal incompatibility.
- * Closely related Orcinus orca may have inbreeding problems.

In British Columbia, an appropriate pair could be determined within two years. If it is politically acceptable, they could then be taken for a breeding programme. However, in Alaska, several years of study will be needed before a pair of animals could be taken that would have a reasonable chance of breeding.

The following are detailed comments concerning the proposed breeding programme:

1. Given the present state of knowledge, selection of animals will be difficult. It is not even possible to say whether they should be from the same or different pods or dialect groups. For example, Marineland's Orky and Corky, the only captive pair to produce offspring to date (4, all failed to survive infancy), are from the same dialect group. However, another pair from a single capture, Marineworld's Yaka and Nepo, did not breed or even attempt copulation.

2. Of all the combinations of haphazard captive pairings that have occurred over the past 15 years, none has resulted in successful breeding and rearing. This indicates the dimension of the problem.

3. Experiential, as well as genetic factors, seem likely to be critical. In the Marineland case, the parents do not seem to have sufficient knowledge about rearing to conduct it successfully. Although this factor might be countered by placement of mature animals in the captive group, this presents another problem: mature Orcinus orca do not survive very long in captivity.

4. Possibly the best experience/age compromise would be to take 4-5 year old animals that have younger siblings. These might have learned something about rearing and still be young enough to survive.

5. Given sufficient field effort, it would probably be possible to make selections with a fair chance of success. Once the breeding units are sorted out, this could be done. Skin and blood samples would enable determination of parents and offspring. However, this would require invasive procedures. Moreover, it is first necessary to determine pod membership, a task that requires at least two years of intensive effort.

6. Cytogenetic studies might be useful in determining blood lines. For example, saddle patch consistency between individuals very likely results from close genetic association. In Alaska, this study could possibly be done in 2-3 years.

7. If haphazard selection procedures are used, which would be the

case if the project proceeds in the absence of the required knowledge, removals could be detrimental to pod survival. For example, in B.C.'s "B" pod, there is a single female; if she were to be taken the pod would eventually terminate.

8. If transient animals are selected first, they are very unlikely to breed with other individuals from resident pods. Would this mean the breeding programme would have to rely entirely on transients? It may not be immediately apparent which pods are transient and which are resident.

9. The proposal covers a size range from birth to sexual maturity. As indicated above, mature animals may have very little chance of captive survival. Furthermore, the taking of mature reproducing members of a pod would likely diminish the reproductive potential of the pod, and as well disrupt the close-knit social structure of the pod by removing key members. Mature animals should not be taken.

10. Determination of genetic associations, using acoustics, cytogenetics, behavioural observation and other methods, is one of the most exciting aspects of current field investigations of *Orcinus orca* in British Columbia and Puget Sound. Yet, in both populations the genetic situation is clouded by the fact that these are already exploited stocks. The Alaskan population, being unexploited, therefore represents a great scientific opportunity and challenge. It would be most unfortunate if the scientific opportunity is not fully exploited before physical interference with the pods occurs.

11. To conclude, not enough is presently known about the key factors involved in *Orcinus orca* reproduction for the Sea World breeding proposal to have any real chance of success at this time. However, if the needed scientific effort is made, perhaps within a few years enough will be known to justify the attempt.

Sea World should show why their breeding programme will succeed where they and others have failed. Considerable field research needs to be done before it is seriously considered. Once the research is done, a large take might be approved, provided the population is numerically sufficient to sustain it, and once Sea World has demonstrated that they have a reasonable chance to obtain a successful breeding result.

It would be foolish to proceed with a breeding programme in the present climate of knowledge about reproduction in *Orcinus orca*. In a few years more will be known, perhaps enough to do it successfully. To proceed now would be against Sea World's own best interest. If the programme is attempted now, and fails as it almost certainly will, NMFS might be heavily constrained to refuse any further application.

I trust that this scientific summation is sufficient to convince yourselves and your fellow Legislators that the Sea World plan for the Alaskan orcas is flawed at the core. At the very most, permission should be given for only a prerequisite phase of benign field research of perhaps 2-3 years duration. However, I wish to end by making two geopolitical points. For the science is just one aspect of the question at issue here.

First is the question of jurisdiction. Whales, large and small, are increasingly becoming subject to international regulation. This is

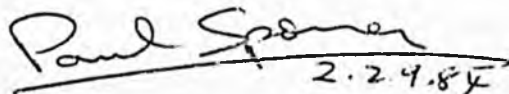
natural, as their paths often cross national boundaries, as is the case with the Alaskan orcas - obviously "Canadian" and perhaps "Russian" interests are involved here, as well as "American" or "Alaskan". Personally, I am all for any jurisdiction which adopts laws or regulations pertaining to cetaceans that set more stringent standards than those of other overlapping jurisdictions. So I urge your efforts, as Alaskans, in this direction.

But, is there not another question here? One of consciousness, and conscience. We begin to recognize the cetaceans as highly evolved social and sentient aquatic mammals. In the orcas, we see the fabric of a social order that is based, like our own, on the family unit. Beyond the families, the communities, and who's to say what social orders may lie beyond? Duration (generational continuity) and peaceful co-existence are key elements. Who knows, we may even learn something from leaving them alone that will help us in our troubles. In all the world, there is just one place where this magnificent creature can be studied and understood in its truly pristine state, and that is in the waters of the State of Alaska.

I urge you, please do whatever you can to ensure that the Alaskan human/orca relation emerges cleanly: please do not repeat the mistakes of the past.

Thank you for this opportunity to present my view.

Sincerely,


2.2.9.84

Paul Spong, Ph.D.
Director,
ORCALAB.

(604) 974-5484 (eve., w/weekend)