

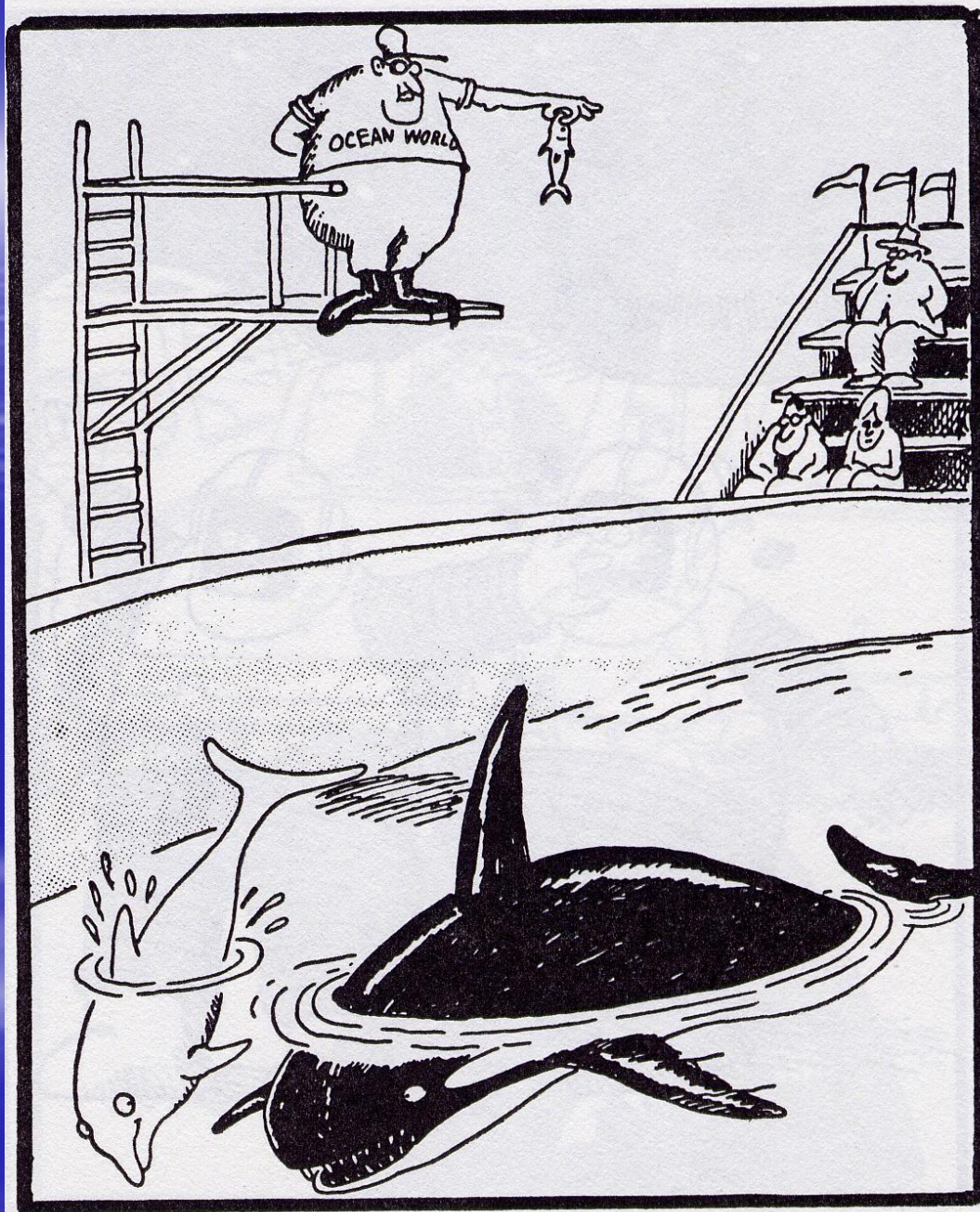
Marine Parks & Aquaria

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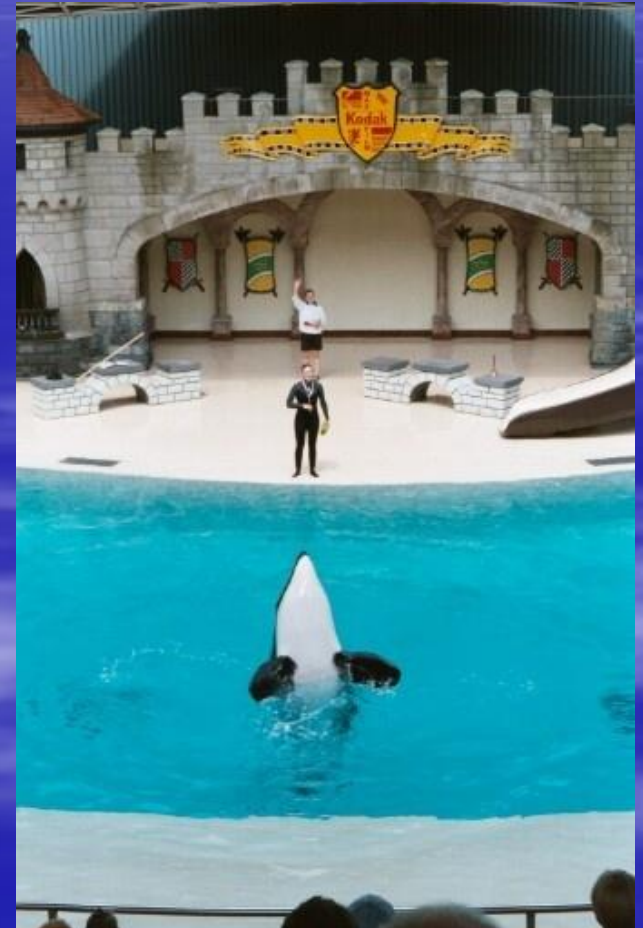
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"The herring's nothin' . . . I'm going for the whole shmeer!"

Introduction

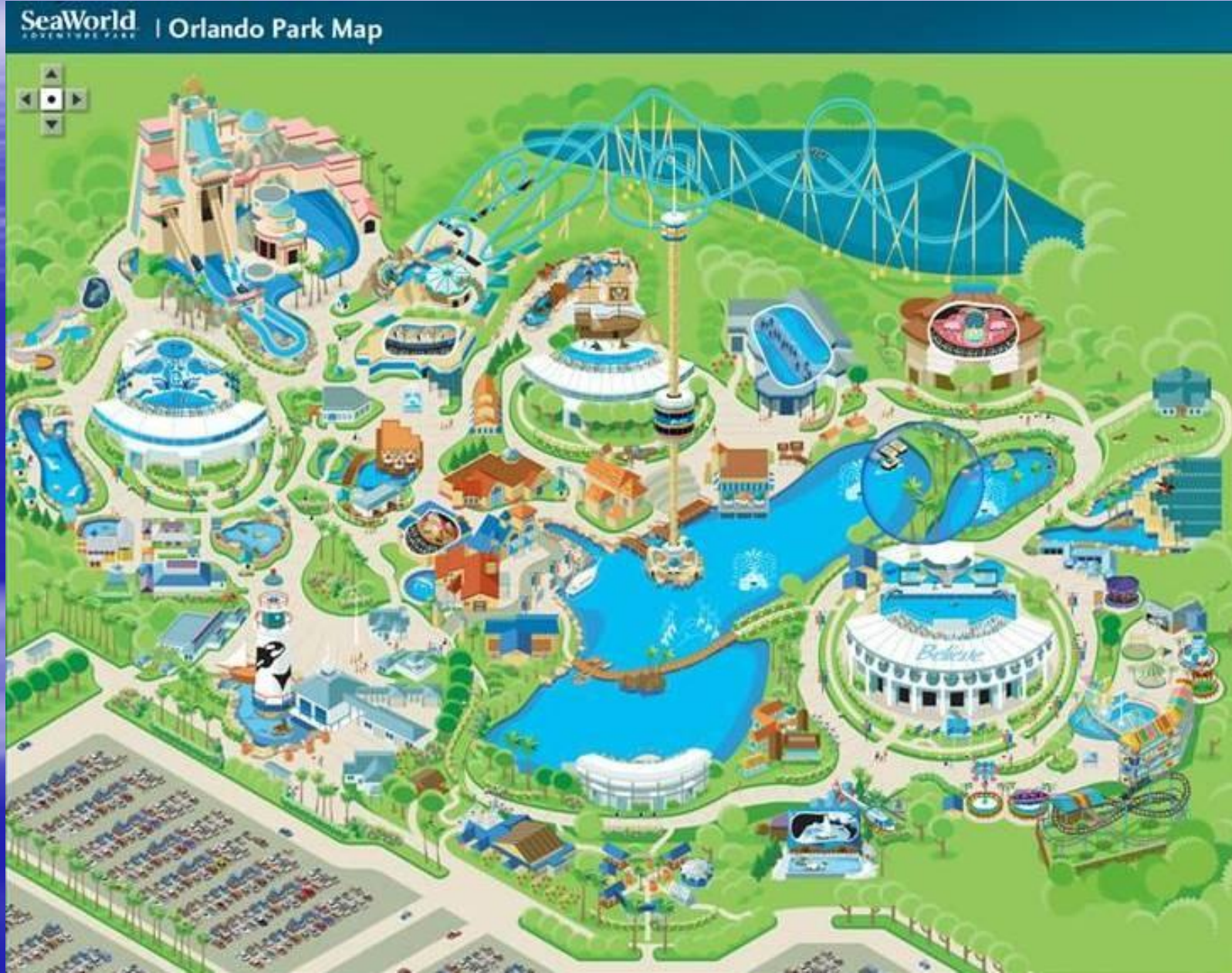
- Man-made attractions provide a variety of opportunities for tourists, e.g. sightseeing, shopping, gambling, recreation, etc.
- Amusement Parks are high-profit attractions
- Marine parks, aquaria, and oceanaria are no exception



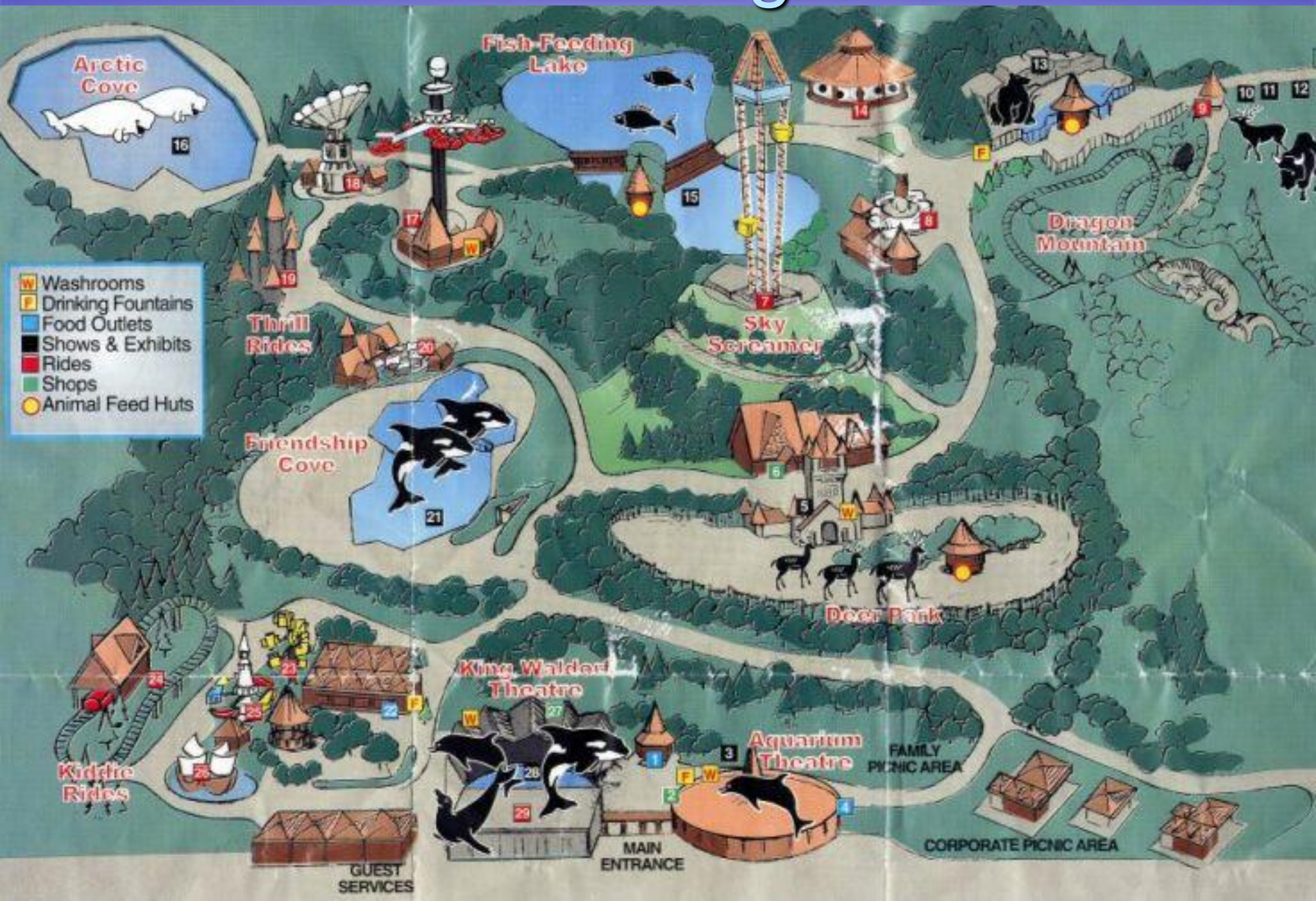
Introduction

- Examples:
 - Vancouver Aquarium
 - Total revenues of almost \$CND 15m in 2002
 - Theme parks of Anheuser Bush
 - including Sea Worlds in San Diego, San Antonio and Orlando, Discovery Cove in Orlando, Bush Gardens in Tampa Bay and Williamsburg, as well as Water Country, Sesame Place, and Adventure Island
 - 2002: 8% growth, and record earnings, despite the post 9/11 difficulties in the tourism industry

<http://www.marinelandcanada.com/video/>



Marineland Niagara Falls



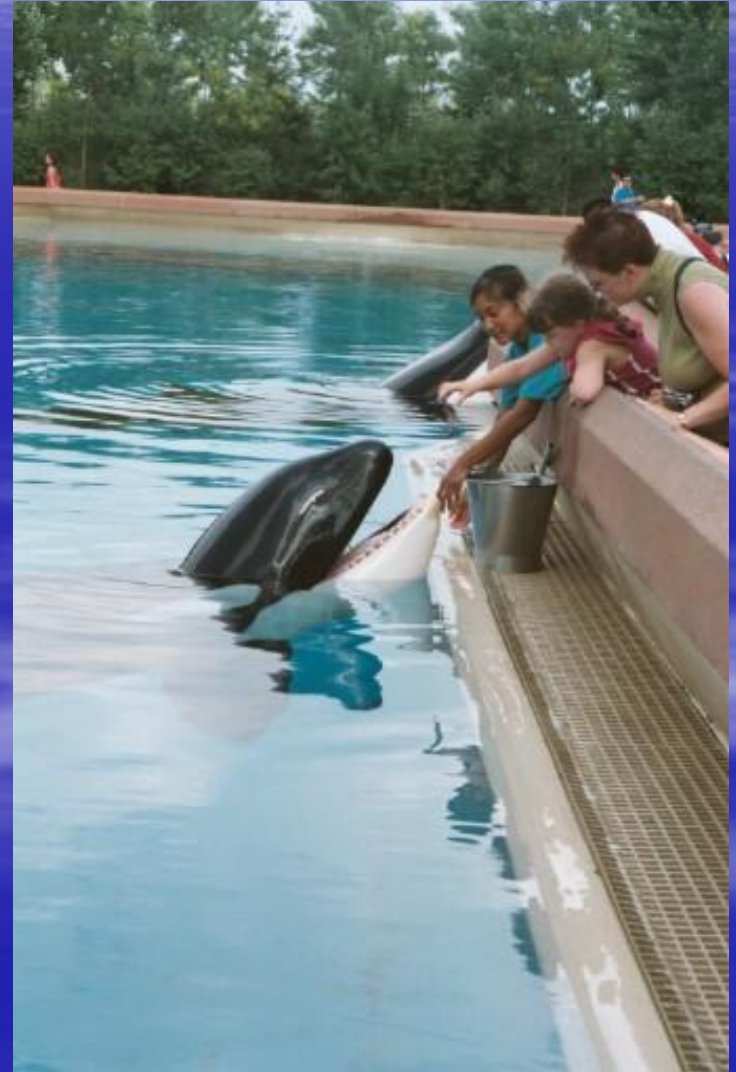
Marine Mammals as Visitor Magnets



- Primary visitor magnets are various species of dolphins, orcas (killer whales), beluga whales, and various species of pinnipeds

Marine Mammals as Visitor Magnets

- Of particular interest are highly choreographed shows with marine mammals, and petting pools
- Killer whales are most popular
- It is not uncommon that more than 500 visitors attend each show



Marine Parks and Aquaria holding Orcas

Marine Park/ Aquarium	Number of Orcas	Marine Park/ Aquarium	Number of Orcas
Miami Seaquarium, USA	1 (1)	Port of Nagoya Public Aquarium, Nagoya, Japan	1 (1)
SeaWorld Orlando, USA	9 (10)	Kamogawa Sea World, Chiba, Japan	6 (6)
SeaWorld San Diego, USA	7 (7)	Nanki Shirahama Adventure World, Wakayama, Japan	3 (0)
SeaWorld San Antonio, USA	7 (8)	Taiji Whale Museum, Wakayama, Japan	1 (1)
Six Flags Marine World, Vallejo, California, USA	1 (1)	Izu-Mito Sea Paradise, Numazu, Japan	1 (1)
Marineland Niagara Falls, Canada	5 (3)		
Acuario Mundo Marino Buenos Aires, Argentina	1 (1)		
Marineland Antibes, France	6 (5)		
Subtotal "Western World"	37 (36)	Subtotal (Japan)	12 (9)
		Total worldwide	49 (45)

Sources: (easyJet, 2001; Jacobs, 2004; Jiang, 2004b; OrcaInfo, 1999; Williams, 1996, 2001)

The Four Marine Park Myths



- Education
- Conservation
- Captive Breeding
- Research

Myth 1: Education

- Education

- Programmes with wild whales/dolphins: Orams (1993, 1994, 1995, 1996, 2000)
- On whale watch tours in Australia: Muloin (1998)
- On dolphin tours in New Zealand: Lück (2003)

Myth 1: Education

- Alliance of Marine Mammal Parks and Aquariums (2000) list the following goals:
 - Provide opportunities for visitors to expand their knowledge about marine mammal biology and natural history
 - Promote awareness of and sensitivity towards the marine environment and the relationships of marine biology and natural environments

Myth 1: Education

- Present information on marine conservation issues
- Be available as marine science and environmental information resources to interested citizens, local schools, community groups and educators
- Inspire visitors to embrace conservation behaviour

Myth 1: Education

Reasons for visitation of aquaria and marine parks

Item	Mean	Std. Deviation
Display of marine mammals and fish	3.95	1.10
Educational opportunities	3.94	1.09
Performances/shows of dolphins and whales	3.86	1.23
To learn about the natural history of the marine wildlife on display	3.82	1.17
Information on conserving the natural environment	3.81	1.11
Facilities of the aquarium or marine park	3.56	1.09
Petting dolphins and whales	3.03	1.25
Feeding dolphins and whales	3.00	1.30

Rated on a 5-point Likert scale, from 1 = very unimportant to 5 = very important
Source: Jiang (2004)

Myth 1: Education

Education is a very vital part of any attempt to help people understand an animal. But I think the best way to do that is to help them learn about the animal in its own environment. Displaying captive marine mammals teaches a negative rather than positive attitude, because people never get to witness the mammals' natural behaviour.



Myth 1: Education

- Education or Deceiving the Public?
 - Shamu never dies
 - Drooping Dorsal Fin
 - Longevity



- “...the aquaria managers did not believe that most visitors were interested in receiving educational information, in particular on conservation topics.”
(Evans, 1997, p. 239)

Myth 1: Education



- “...instead of providing visitors with a high quality educational experience, these critics argue that they instead entertain the crowds using dolphins and killer whales jumping through flaming hoops and balancing balls on their snouts.” (Markwell, 2008, p. 25)



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- Alliance of Marine Mammal Parks & Aquariums
- Canadian Association of Zoos and Aquariums



What's on at the Vancouver Aquarium:



New Aquarium Exhibit: Frogs Forever?

The world is facing what may be the single largest mass extinction event since the time of the dinosaurs: as many as half of the world's 6,000 known amphibian species could be wiped out in our lifetimes. The Vancouver Aquarium has joined forces with [.. more](#)



Vancouver Aquarium celebrates Earth Day

Join us Earth Day, April 22 through to the 28 as we launch a week of specialized programming leading into our 6th annual salmon release event on April 26 & 27 and receive an official certificate for naming and releasing your own baby salmon fry [\(.. more\)](#)



Night at the Aquarium

Purchase your tickets now for Night at the Aquarium - Friday, June 13. Be a part of this exclusive event, explore the aquarium, sample tantalizing fare top Ocean Wise restaurants and enjoy premium wines and cocktails. See our [web site](#) or 604.659.3572



Volunteer registration is now open!

Would you like to join a team of hundreds of volunteers committed to effecting the conservation of aquatic life through display and interpretation, education, research and direct action? Sign up for our Information Session on April 23 [\(.. more\)](#)

Web Cams

Take a peek into our world and see the belugas and otters



Adopt an Orca

The B.C. Wild Killer Whale Adoption Program.



Animal Encounters

How would you like to meet the Beluga whales?



Buy tickets online now!

AquaFact

What makes a frog a frog?

Frogs are members of the class Amphibia. Amphibians are cold-blooded vertebrate animals that lack scales and generally return to the water to breed. Frogs have squat bodies, long muscular hind legs, typically lack tails and metamorphose. True toads are frogs too. The frogs that we most commonly call toads in Canada belong to the genus Bufo.

[\(click for more\)](#)

Myth 2: Conservation

- Conservation through education
- Conservation through release programmes
 - Keiko
 - Luna
- Sustaining the orca population in captivity
- Conservation of endangered species?
- Capturing practices



Myth 3: Captive Breeding



- Of 55 known pregnancies of captive orcas worldwide since 1968, only 21 calves (38%) survived
- High mortality rates of calves *and* adult orcas
- Still a need to capture orcas to satisfy the needs of marine parks

During the process of writing and revising this Research Note, the orca “Neocia” at Marineland in Niagara Falls, Canada, died at age twelve, on August 1, 2004. Neocia was the fifth whale in as many years to die at Marineland Niagara Falls (Pellegrini, 2004). On October 20, 2004 “Hudson” (6 years old) and on December 21, 2005 “Kandu 7” (21 years old) died at Marineland. Consequently, Marineland is left with only three orcas (Jacobs, 2006). On August 29, 2004, “Ran” (15 years old), on September 18, 2004, “Kyu” (7.5 years old), and on January 21, 2005 “Goro” (19 years old) died at Nanki Shirahama Adventure World in Japan. There are currently no orcas left at this park. “Splash” died at SeaWorld California on April 5, 2004, aged 15.5 years, and “Kim 2” died at Marineland Antibes on November 23, 2005, aged 23 (Jacobs, 2006).

Myth 4: Research

- Research undertaken in marine parks
- Research funded by Marine Parks
- Increasing knowledge about the animals
 - > helps conservation
- “Dr Hermann’s work on captive bottlenose dolphins at the University of Hawai’i is amongst the most important marine mammal research being carried out” (Whitehead, 1990, p. 63)



Myth 4: Research

- No aquarium, no tank or marineland, however spacious it may be, can begin to duplicate the conditions of the sea. An no dolphin who inhabits one of those aquariums ... can be described as a “normal” dolphin. Therefore the conclusions drawn by observing the behaviour of such dolphins are often misleading when applied to dolphins as a whole.

Jacques Cousteau (1975), in Williams (2001:62)



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