

Year 2000 Vivisection Update:

Simon Fraser University

In the year 2000* most animals are held in the University Animal "Care" Facility on South Campus. in Burnaby, BC Biological Sciences also has the Alcan Aquatic Research Facility where there are holding facilities for "freshwater organisms including large salmonids" being subjected to toxicology experiments. Some SFU researchers also work at the BC Cancer Research Centre. Dick Jol, Former Head of the Animal Unit, always claimed that there were less invasive and less controversial experiments at SFU because it was not a medical school as is the University of British Columbia. However, there were numerous studies that we found that related to biomedical research.

The following are only some examples of vivisection at SFU:

- **NEUROKINESIOLOGY** - J.A. Hoffer has conducted long-term implant studies with "nerve cuff electrodes" in cats with severed leg nerves. However, electrodes have already been used to help paraplegics and is called "functional electrical stimulation". Kinesiology Professor P. Bawa, who used to experiment on kittens, states that "At present all experimental work (her work) is performed on human subjects." She now realizes that "questions" cannot always be answered "with animal or human experiments". Naturally occurring human maladies must be studied. Hoffer has ended these experiments but has stated that he will be seeking more cats in other experiments. For further information see Casper and Meatball.
- **BREAST CANCER** - Although experiments were not being conducted during our visit, members of the Kinesiology Faculty have induced cancer tumors in rats and subjected them to exercise to look at any effects on mammary gland development. They are not studying actual human breast cancer and the effects of lifestyles is already studied in women.
- **"BIOLOGICAL RHYTHMS"** - In the SFU Psychology Department rats, hamsters and mice are used to try to "understand how daily rhythms in mammals are regulated" by light and other "stimuli" such as exercise and feeding. **Ralph Mistleberger and Mike Antle** have implanted cannulas into the brains of hamsters in order to inject drugs. Also, in a 1999 paper they refer to "72 hour bouts of food deprivation" and in a 1998 paper Antle discusses "three hour bouts of activity stimulated by confinement to a novel wheel". During his career Mistleberger has induced sleep deprivation by forcing animals to keep moving inside of a revolving cylinder. The rats had to "continuously walk at the rate of cylinder rotation to avoid falling in water". In human "24 hour biological clock" studies it is already known that light therapy has an antidepressant effect and helps in preventing sleep disruptions due to jet lag or shift work. Effects of exercise on sleep is also studied in people in sleep clinics throughout the world.
- **TOXICOLOGY** - Numerous toxicology experiments on marine life such as fish and invertebrates are conducted to look at lethal toxic effects from the pollution of aquatic ecosystems. It is incredible, after decades of collecting data about environmental pollution harming people and animals, that researchers, businesses and government still claim that more information is needed. How many more sick and dead are needed before action is taken to heal this planet?
- **DIABETES** - A new researcher to SFU received a 3 million dollar grant in yet another study to find a cure for diabetes. The biological systems in animal models differ from that of humans. The actual human illness is not being studied and treatments for rats could injure or harm people.
- **HEART RESEARCH** - In Biological Sciences fish are used to look at coronary physiology and pathology in an attempt to use salmon models to answer human problems. The numerous differences between humans and fish is illustrated by SFU biologist, A. Farrell, who writes "a number of vascular control mechanisms are different in fishes".



In the 80s and early 90s cats were bred to produce kittens for Kinesiology experiments which have been stopped.



A rat with a cannula implanted into the brain. At SFU similar types of cannulas have been implanted into the brains of hamsters. Drugs are administered to affect biological rhythms. Some hamsters will repeatedly paw the cannula in an attempt to remove it.

*The research for this report was mainly done in 1999. On site inspections of SFU took place in late 1999. Due to various limitations, such as some researchers did not forward requested information, we have updated and presented the information to the best of our knowledge.

Year 2000 Marine Life Program Update:

An Amazing True Story About Peter and the False Killer Whale

Since 1993, Lifeforce Founder Peter Hamilton has been monitoring the health and behaviour of a False killer whale who lives in waters on the Canada/US border near Vancouver, BC and Pt. Roberts, WA. This wild dolphin continuously locates our boat and remains with us during our observation studies with her.

False killer whales are members of the dolphin family. These *Pseudorca crassidens* range in size of 5.5m - 6.1m for males and 4.9m for females. The body coloration is usually an overall black but this one has gray blotchy skin. In 1987 a pod of 12 was sighted in the Pacific Northwest when they are usually found in warmer waters. It is believed that while some died the others either died or left the area. This one remained for unknown reason(s).

In 1992 this one was also seen around Vancouver Harbour. Although the name "Willy" was used there has not been any conclusive evidence of the sex. However, from photographs taken by Lifeforce and the size, we believe that "Willy" is probably a "Wilma". Lifeforce has been concerned that the Vancouver Aquarium would attempt to capture her under the guise of rehabilitation because of her skin discoloration.

It is truly amazing to see a wild dolphin who chooses to be with a human. Peter will head out into her territory and she will speed swim toward the boat. She will follow the boat and stay with the boat when we stop. If she wanders away or approaches other boats, as soon as Peter starts the engine she comes back to him.

Peter first thought that she was only habituated to the sound of the engine but recently she has started to raise her head out of the water to look into the boat and to make eye contact with him. Sometimes when she swims beside the boat she appears to be looking at Peter.

The reason why this dolphin behaves in this manner is unknown. Other dolphins have been known to follow boats. There have been reports of an orca in Norway, Dolphin "56" on the US East Coast and others. Theories include companionship, habit to echelon swim, enjoyment of wake riding, bubble massages and easier way to catch fish. After 20 years of studying animal behaviour Hamilton can pick up cues of what animals appear to enjoy. Reinforcing positive stimuli may well be one reason that she is attracted to us. For example, he thinks that she will porpoise beside the boat because he is going too slow. When he picks up speed she returns to her "comfort zone" immediately behind the boat.

Peter can now tell visitors to Pt. Roberts Lighthouse Marine Park and to a local waterfront restaurant a specific time that he will pass with the False killer whale. This helps education about dolphins and promotes land based whale watching.

Repeated behaviour patterns are usually related to foraging or feeding. For example, bears can be observed at predictable feeding times and locations. However, Lifeforce does not attempt to feed her - that's against the law and wild dolphins may not eat dead fish (In captivity they are starved and forced fed). So why does she continue to be attracted to Peter? Lifeforce would like to continue to study this rare situation in the hope that this dolphin could be used as a model to help this and other species in order to keep them away from threats such as pollution and oil spills. Peter can already lead this False killer whale away from boaters who harass her by repeatedly driving around and over top of her. After she follows him to a safer area he stays with her until the boats have left. Peter hopes that one day he can help other whales by leading them away from dangers facing them in the wild. **Already Lifeforce's remarkable work has provided some insight into the complex world of this amazing dolphin and may show us that a peaceful bond can be found between people and wild marine mammals.**



A wild False killer whale locates and follows the Lifeforce boat.



Orca Update

This season brought many surprises to orca watchers. First, the Southern Community (J Pod, K Pod and L Pod) went out into the Pacific Ocean for nearly five weeks when they normally spend time in Southern BC and Washington waters. Then some pods from the Northern Community came as far south as Victoria, BC. when they have not been previously identified south of Campbell River, BC. As of October 2000 the Southern Community of orcas numbers only 82. There were three deaths and only two births.

The Vancouver Aquarium started the orca slave trade in 1964 when they hired a sculptor to kill an orca to use as a model for a sculpture. An orca was harpooned at East Point, Saturna Island, BC but he did not die. He was towed to Vancouver by the rope attached to the harpoon during a 16 hour ordeal through 40 miles of rough waters. When the orca "Moby Doll" survived for 86 days the Vancouver Aquarium and others decided to capture orcas for public display and profit.

The Southern and Northern Community of orcas were "harvested". There were 67 taken. 11 died during captures, 54 were sent to aquariums and two were sold to the US Navy. An estimated 48 orcas were from the Southern Community. These captures have resulted in 48 fewer orcas and a very low birth rate in the Southern Community. The abnormal age and sex ratio will take decades to return to normal.

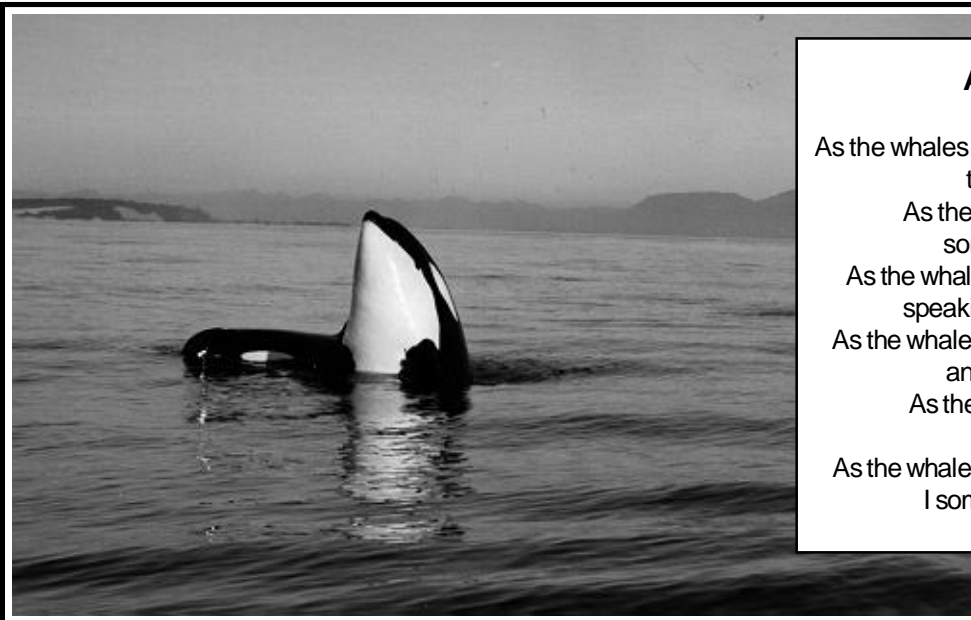
Decimation of fish stocks, noise and water pollution, climatic changes and boat collisions are other threats to their survival.

Will the orca "Bjossa" Ever be Free from Aquarium Tyrants?

The good news is that the Vancouver Aquarium will stop exploiting orcas for the immediate future but the bad news is that they will continue to perpetuate the dolphin slave trade by imprisoning other dolphin species.

The Aquarium is dumping Bjossa because they do not want another dead whale. If Bjossa dies in Vancouver she will be at least the 24th cetacean victim who has died as a result of Vancouver Aquarium captures since 1964. The 23 includes eight orcas, five belugas, seven narwhals and three dolphins.

It is very sad that Bjossa will die prematurely in captivity. Her life sentence has been cruel and unjust. She never should have been abducted from her family and home in Icelandic waters. In December 1980 the Vancouver Aquarium brought in four orcas who were approximately three years old. They were captured from the wild. The Vancouver Aquarium held two for other aquariums in Japan and the US. The US import permit wrongly claimed that the orca "Vigga" was a captive orca. The orca that went to Japan died within 2.5 years. Her companion Finna died October 6, 1997. Sadly, Bjossa did not have an orca companion for 3 years. Bjossa and Vigga, who are in the prime of their lives, should have been reunited and returned to Icelandic waters with Keiko (the orca in the Free Willy movie).



As the Whales Go By

by Peter Hamilton

As the whales approach to go by a curious crowd awaits
to experience a natural high,
As the whales go by people begin to see
something new and wonder why,
As the whales go by some become marine experts
speaking untruths that can become a lie,
As the whales go by there are feelings about captivity
and many form a long lasting tie,
As the whales go by some talk surfaces
if they will survive or die,
As the whales go by people leave and, while I remain,
I sometimes cry as the whales go by.

Thanks to our Sponsors and Supporters

Lifeforce would like to thank our Marine Life Program Sponsors. They are Canada Trust, Eden Conservation Trust, Pt. Roberts Marina Resort, Shell Environment Fund, Vancouver Foundation, WCWC and Volvo Canada. And of course we also greatly appreciate the support of Lifeforce members.

We continue to need equipment and funds to operate the programs. In addition, we desperately need trailer space where we would provide a security or custodian service for a business or home in return for allowing Lifeforce's Peter Hamilton to live on the property in the Lifeforce Research Camp Trailer.

Orca Field Guides

Lifeforce Orca Field Guides are a great educational tool that details the complex lives of killer whales. The Guides were generously printed by Canada Trust's Friends of the Environment Fund. They are available to schools and libraries for only the cost of postage. A 4th grade Teacher at Blaine Elementary School told us, "Thanks again for your support and interest in public schools - we appreciate your efforts."

Lifewatch

During the year 2000 boating season Lifeforce advised numerous people on land and on the water about the whale watch guidelines. There are still many problems with irresponsible boaters some of whom break the rules when in Southern BC waters where the guidelines are not adequately enforced. Lifeforce must continue this program in order to protect the orcas and other marine wildlife. This year the Whale Watch Operators' Association gave Lifewatch a grant. We thank them for their support and cooperation.

CASPER AND MEATBALL - A SAD CHRISTMAS STORY

During Lifeforce's inspection of SFU facilities 1999 it came to our attention that Andy Hoffer planned to kill two cats named Casper and Meatball by that Christmas. Lifeforce offered to provide a home for the cats. These cats and others (five cats each year) were used in kinesiology experiments at the university.

Abusive Experiments

Casper and Meatball were treated as research tools. They had electrodes implanted into their hind limbs to record and stimulate nerves. Wires from the "nerve cuffs" run under the skin to a plug that is sutured to their backs. The area where the plug is attached has become infected in some cats. The plug is connected to a computer to monitor nerve signals. In some experiments they are deprived of food until after the day long experiments (called "positive reinforcement") and forced to walk on a moving treadmill. According to a staff member, if they become "lazy" they are "stimulated" by either air blasts, electrical shock or brushes with sharp bristles.

Purpose

Hoffer states that he hopes to help paralyzed people tell when their bladders are full and move limbs. However, electrical stimulation of nerves and muscles have been used to help people for decades. Known as functional electrical stimulation (FES) the implantation of electrodes into humans has proven to improve motor function and bladder control.

Adoption Plan

Lifeforce sent a letter on November 27, 1999 to propose an adoption plan. During our meeting of November 25th the initial response by the researcher seemed positive but members of the University's Animal Care Committee (ACC) opposed it. They stated the cats are disease free and would get sick outside of the lab and histology work must be done to determine if there is any nerve damage. Lifeforce counteracted by advising them that we contacted a veterinarian who assured us that the cats, who can no longer be deemed as disease-free, would have immune systems to survive in a home. In addition, a long-term study of the effects of the cuffs on the nerves can be conducted by routine physiological observations and a necropsy following the natural deaths of the cats.

Parveen Bawa, Associate Director of Kinesiology, who now only conduct experiments on people, stated that Lifeforce plan was "ultimately a good idea". She also stated that computer modelling can replace animal tests and that scientists were "a little crazy" and not knowledgeable about mathematical equations.

Support Humane Research That Does Not Waste Scarce Health Care Funds

Refinement of FES and neural amplifiers can only be done in humans. Society owes a great debt to animals and people who serve as research subjects. Lifeforce hoped that during the Christmas holidays there will be peace on earth for all life - including Casper and Meatball. Regretfully they were killed and dissected. We hope that the toys that we gave them brightened their final days.

Lifeforce has not been deterred by this sad event. We will continue our fight to reduce the boredom and suffering of animals in research laboratories through our Animal Pals Program. And we will continue to fight against the waste of scarce health care funds and animal lives.

Worth Quoting

Terry Creighton, Shoppers Drug Mart, stated, "Please understand the Shoppers Drug Mart in no way supports or condones the use of animals in laboratory experiments" but then said "It is the discretion of the hospital's research staff to determine which projects are conducted". The Shoppers' \$100,000 went to the Vascular Biology Research Centre" where animals are experimented on.

Judy Finch, Program Manager, BC Health Research Foundation, stated "This is to inform that we are not funding Dr. Max Cynader's research." However, since 1988 they have given seven grants to members of his research team under their names.

Dr. Heather Davidson, Director, BC Ministry of Health and Ministry Responsible for Seniors said, "We do not know why animal research would still be ongoing after there is a good knowledge base, e.g. effects of tobacco smoke; we are not aware of this research." They should read the BC Health Research Fund Annual Reports.

Allan Rock, Canada's Minister of Health, told us that there were the same old "safeguards" and that "Animal models do not provide instant solutions or information that can be related directly to human conditions...". He then supported using animals by claiming that they "provide highly valuable information". How much time and money will he continue to allow to be wasted on discovering the differences between and within species? To solve human maladies we must study the actual human problem.

Penny Priddy, BC Minister of Health and Minister Responsible for Seniors, also quoted the same old "safeguards" but said, "I hope that with the growth and development of computerized research models, the use of live animals for research in the future will be eliminated." Computers and other research methods have been available for decades. The future is here.

PLEASE SEND YOUR DONATIONS AND MEMBERSHIPS TO:

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