

Presentation on 1954 trip with *M.V. Calanus*

by John Arthur Thomson

The presentation was given three times in 1955 – once on Jan 26, 1955 to the University of Glasgow Zoological Society and once on Feb 19, 1955 at the Scottish Universities Biological Conference at the University of Aberdeen. It was also given as part of a lecture to the Royal Zoological Society in London at their meeting on the Feb 8, 1955.

Mr President, Ladies and Gentlemen:

The history of biological research in the Canadian Arctic runs hand in hand with the history of exploration. In the eastern arctic, the first date of note must be 1845 when Sir John Franklin accompanied by a naturalist set out on his last fatal voyage. The search parties that followed carried scientists such as McClintock. Other vessels such as the whalers carried men who lived in the north collecting and observing. Of these, one of the greatest was the ornithologist Kumlien who wintered on Baffin Island in 1878. From this time on, the names fall thick and fast, Rae, Boas, Baird, Soper, and many others. As the time advanced, the age of the individual in the north passed. The time of expeditions started. This stage accounted for the bulk of the material collected between the wars. But expeditions were not enough, the area was too vast and the problems too diverse for any one party to cover or to solve. In 1946, the Fisheries Research Board of Canada opened the branch of the Eastern Arctic investigations. Headed by Dr. M.J. Dunbar of McGill University, this group started work with these terms of reference:

The general investigation of the physical and biological oceanography of the Eastern Arctic area and the study of the marine resources of the area in the interests of the Eskimo population.

To assist this task, a vessel was built in the winter of 1947-48 at Halifax. She was designed with an eye to the work she would have to do and the waters in which she would sail. She was small, 49 feet long, heavily built - 49 tons, and made as safe as possible; her sides were triple thickness and curved to lift her over crushing ice floes. Launched in 1948, she was christened the *Calanus*.



The Calanus sailed up the Labrador coast in the spring of 1948 and started her work in the Button Islands and Ungava Bay. There, at Fort Chimo, she wintered. The next year she continued in this region and again wintered in Fort Chimo. The next season, the eastern section of Hudson Strait was the area chosen before her return to Chimo. By the spring of 1951, the area had been covered and the Calanus moved on to Frobisher Bay where she wintered. The next year, on north to Cumberland Sound where she finally crossed the Arctic Circle. This year was disastrous, she ran aground and broke part of her gear box. She had to limp the long voyage back to Churchill. Repaired in 1953, she moved to the western end of the straits and then returned to Churchill.

There I joined the crew in the spring of 1954. Our plan was this. To sail up the coast to Chesterfield and across to Coral Harbour, there to pick up Eskimos a hunter and proceed to Coats Island where we would leave a man to start the work on the walrus. We would then move off to sound the west coast of the bay, returning to Coats Island and thence to Churchill. However this was not to be. We were held up in Churchill waiting for parts and our leader, Dr. Dunbar. Finally we left without him and made our way to Chesterfield for fuel then set out for Coral Island. Ice forced us north into The Bay of God's Mercy and further delayed us. At Coral Harbour, we found that Dr. Dunbar had still not arrived so further delay was caused. Finally we left for Coats Island, landed our man south of Cape Perfontaine and worked the area. Storms forced us to seek shelter on the west coast but by the time we reached this point, the wind had changed and this explains this circumnavigation of the island. By this time, it was evident that the Calanus needed expert attention so plans were changed. I left the ship in late august to return by air while she made the long voyage south to Montreal and drydock. On the way she ran into the hurricanes Edna and Carol, and just at the canal entrance the engine coughed and the rest of the trip was made on three cylinders. She needed a rest and complete overhaul and now that this has been accomplished, she can return to arctic waters this spring.

I arrived in Churchill on the 20th of June 1954. Churchill is a small town attached to a large military base and surrounded by desolation. This is the grain elevator and the landmark for the ships that enter the port.



After a week's hard work, the Calanus was ready for the water; she was relaunched and moored to the dock.



On the right is the fore deck from the masthead. This black square was the entrance to the fo'c'sle, the section I called home for two months. Just aft of this is the lab where samples were analyzed in calm weather.



The mid deck with the wheelhouse and hold. Here nets were stored and samples kept until they could be worked on. One of the gallows frames for towing nets and other sampling gear is visible.



The after deck with the galley roof and lazarette. The Calanus can sleep eight - 7 men and one midget. The fo'c'sle has four bunks, the lab one and a half and the after cabin two.



We had to wait for the ice to clear so we spent time testing our new whaleboat. This craft, 26 ft long with inboard engine, was destined for walrus collection and tagging. This is our skipper in Churchill harbour.



We left Churchill on the 8th of July. The skipper, a man with five years experience on the Greenland coasts soon found that magnetic compasses were of little use. Navigation was done with the aid of a RF finder and an echo sounder.



The skipper vanished up the mast and spent the best part of a day directing us through the ice pack. We reached Chesterfield without incident, refueled and started off again



This ice pack is a favourite haunt of the bearded seal *Erignathus barbatus* - they love to lie and sun themselves on the floes like this one. The Eskimo calls this seal ujuick and uses his tough hide for boot soles.



We finally reached Coral Harbour, a typical Arctic settlement. Hudson's Bay Company post, Mission, and school all surrounded by the tents and shacks of the Eskimos. There are about 400 Eskimo on Southampton Island, all living here or at the air base



Dr. Dunbar finally arrived, so we spent time collecting in the bay. Here Dr. Dunbar and Capt. Andersen are sorting the dredge haul which produced this specimen.



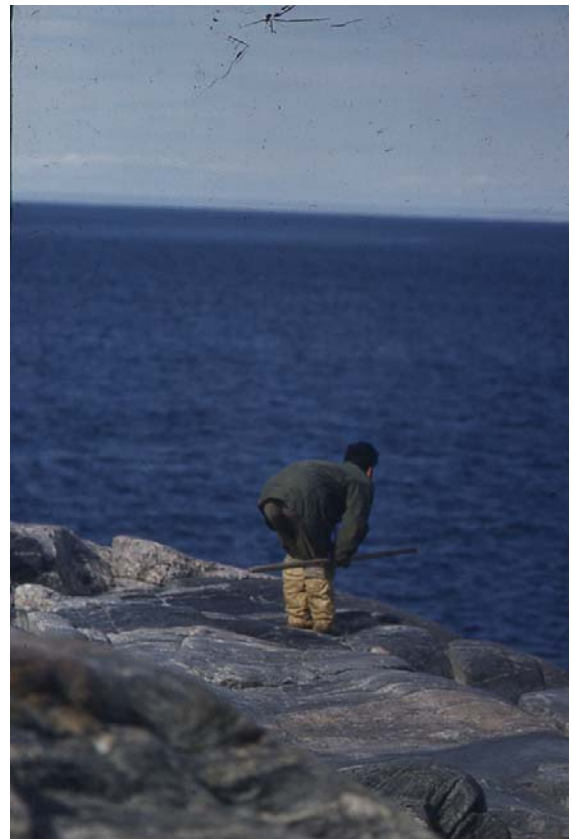
We bade farewell to Coral Harbour

The most important aspect of our work was connected with walrus. The Southampton herd, estimated at about 4000 head, supplies the natives of the island with dog food. Native and Hudson's Bay company reports told us that the herd appears each year on Walrus Island before the ice vanishes from Fisher Strait. Once they are disturbed here by hunters they leave and do not come back that season. The move to Bencas Island and the northeast tip of Coats Island. Late in the summer they move slowly north to Seahorse Point, beyond here they have never been reported but they do not winter here. To solve the problem of where the walrus go and also to find if the herd appearing in 1953 is the same as appears in 1954, as well as determining the numbers of the herd, a tagging program was started this year.

The Calanus tag, a stainless steel dart designed to fit on the end of a wooden pole and to be inserted from close range. The procedure is simple. The tag point makes a hole into the hide and stretches it. The hole then closes about the thin shaft, leaving the disk flush with the hide. The length of the shaft was determined after measurements of the thickness of the hide in adults. The shortness of the dart ensures that muscle tissue cannot be irritated. I have included a sketch of the Canadian government wildlife tag. This is placed on a harpoon in the same manner as usually used by the hunter. Two alternatives are possible. If the dart lodges in the blubber layer, there is a length of chain with the disk protruding from the animal. This is a chain for infection and also is liable to loss by the rubbing action of the animal over the rocks.

If the dart is driven into the animal so that no chain shows, then the dart is in the muscle tissue and can set up a process of infection and rotting of the flesh with subsequent loss. Also even in this case, the disk is not flush with the surface. The Eskimo himself does not like this tag, whereas he finds no objection to ours. Two final points. The government tag is too useful to the Eskimo to be turned in without some inducement. There is no reward offered as yet to compensate him for the loss of a fine harpoon head which only needs the chain removed. Ours has no such use and also has value in trade at any HBC post. The animals were all tagged in the shoulder and twenty three tags were used as an initial experiment.

We had picked up at Coral an excellent hunter to do this harpooning and to help with the collection of samples. He was called Panuk and is here seen watching the herd over the rocks.





Here are Dr. Grainger and Panuk actually tagging a sleeping walrus. This beast, after the blow, grunted and returned to his dreams. Not till later did he move away



The walrus herd. One walrus will feed a dog for a year and thus the economic importance to the Eskimo. In recent years a new factor has entered the picture. The transient pilots - Canadian and U.S. will pay up to 5 pounds for a cribbage board or other such souvenir. This is big money to the Eskimo and thus a further problem. Each year the government ships report finding carcasses floating with the heads removed. This is enormous wastage and the herd cannot long support it.



The walrus blends naturally in with the surrounding rock and one's first notice is usually by way of the nose rather than the eye.



An ugly and clumsy beast, he is nevertheless impressive in numbers such as these



Thank you