[Elliott, H. W.]

The sea-horse.

E

(1881)

HARVARD UNIVERSITY.

LIBRARY

OF THE

MUSEUM OF COMPARATIVE ZOÖLOGY

54,824

BEQUEST OF

WILLIAM BREWSTER

July 9, 1920.

9 The Sea-Horse.

Elliott

(Scribner's Monthly, July, 1881; Vol. XXII, No. 3)

54,829.

THE SEA-HORSE.

NO CREATURE is so repulsive in appearance as an old male walrus, or morse (*rosmarus*); the head, large in itself, seems ridiculously small set upon the immense neck, and the ungainly body is all swollen and tremulous with the excessive deposit of flabby fat and blubber, distending the coarse, hairless, wrinkled hide into the shape and semblance of a wool-sack. No wonder that the eyes of the early Christian navigators opened wide in amazement as the sinister head of this brute amphibian rose unexpectedly from the cold green waters of the north, and then as suddenly disappeared beneath the

the one genus, and it in turn alone represents but two species. Curiously, too, while this animal is found in great numbers here and there within the waters of the Arctic Ocean, Baffin's Bay, and Behring Sea, no one has ever seen or even heard of the existence of a sea-horse in the equally frigid Antarctic seas and Southern circumpolar zone. The variation existing between the walrus of Spitzbergen and that of Behring Sea is a very sensible one, owing to the much greater size and almost hairless skin of the Alaskan adults; this difference may be due to the fact that our walrus has nothing to do

ESQUIMAUX HUNTERS CRUISING.

waves with its peculiar snort and hog-like grunt. However, soon after that, some hardy sailor put a harpoon into a "sea-horse," and its ivory teeth, and the oil found under its tough skin, at once stimulated a grand general hunting of this brute by all the seamen of northern Europe. It was a walrus-hunter who first beheld the frozen coasts of Spitzbergen and Nova Zembla, and it was a walrus-hunter also who first passed from Asia to this continent across the Straits of Behring.

Though doubt exists even now among scientific men as to the true character and appearance of the walrus, yet there is but

but to grow in comparative peace and seclusion, while the annual raids made upon the Spitzbergen branch of the family may tend to dwarf it by inculcating fearful anticipation.

From the peculiar, wicked-looking tusks that hang down over the chin from the massive upper jaw, one instinctively jumps to the conclusion that the walrus must be a terrible fighter—that these enormous dental weapons are used for tearing, cutting, and striking in conflict among themselves and with their enemies; as a matter of fact, the walrus is among the most peaceable and inoffensive of animals, and these savage-looking teeth are used almost exclusively in

ESQUIMAUX TAKING WALRUS.

the quiet service of prodding up and digging out clams and other shell-fish from their sand and mud beds in the shallow marine waters and estuaries of the north, and to grub the bulbous roots of the wild celery, and to tear juicy sea-weed fronds from their strong hold upon the rocky bottoms of rugged coasts and reefs. The walrus does not subsist upon any animal food or fish: he is a good vegetarian and has a decided taste for mollusks; he is far too clumsy as a swimmer to capture fish, and he seems to be too much oppressed with his own unwieldy bulk to fight either by land or sea, even in self-defense. Still, in some directions, awkward as he is on shore, he is capable of exerting immense muscular power and displaying unwonted agility. To give an illustration: the size and strength of a polar bear are well known, but the largest of its kind cannot knock down and drag out a full-grown walrus bull, while it could easily destroy and dispose of one of our heaviest oxen in that manner. An incident occurred under the eye of the writer, while surveying on St. Matthew's Island, in 1874, that very clearly presents the decidedly different natures of the two animals. At the base of a series of bold, high bluffs

on the north side of the island, quite a large herd of walrus were lying out from the surf on the rocks, stretching themselves comfortably in all sorts of positions, as they basked with great pleasure in the clear rays of an August sun. An old male walrus was hauled up, a little aloof from the herd, all alone, only a few hundred yards away, and enjoying himself, also, after the fashion of his kind when they come out for an air-bath. Lurking in the background, I observed a very large polar bear, as he took the scent of this old sea-horse, and watched him as he made a stealthy approach. Crouching and flattened to the ground, the bear rapidly came up to within a dozen yards of the dozing morse, when he sprang into a lumbering gallop, closed at once with him, and attempted, bear-like, to break in and crush his skull by dealing the astonished walrus a swift succession of thumping blows over the head with his heavy, powerful fore paws. The massive occipital of the walrus was, however, too thick to give way, even under the force of Bruin's immense feet; and, after the first shock of surprise, the clumsy amphibian righted himself, and, without striking back a single blow, turned and started for the water. The bear tried to head him off; but the strength of the walrus and the momentum of his bulky body, when started down grade to the surf, was more than his great white foe could overcome. So, instinctively realizing that his quarry was to escape, the infuriated bear leaped upon his broad, flabby back, buried his claws in the tough hide and his teeth in the neck of the

unhappy walrus, and actually hung on and rode down in this manner fifteen or twenty yards to the sea, where he quickly dismounted when the first wave combed over the flanks of his victim. This surf-bath, undoubtedly, cooled the bear's passion; but it did not destroy his interest, for he retreated, turned, squatted upon his haunches, and regarded the wake of the fleeing morse with great attention.

But when Bruin selects a young walrus, or a sick or feeble adult, then there is no

satisfactory; were it not for the subsistence furnished so largely by the flesh and oil of the morse, it is exceedingly doubtful whether the Esquimaux of North America, from Behring Straits clear around to Labrador, could manage to live. It is not to be inferred that walrus-meat is the sole diet of these simple people, for that is very wide of the truth; but there are several months of every year when the exigencies of the climate render it absolutely impossible for the hardest native to go out and procure

A ROUGH RIDER.

such failure; the skull is crushed by quick, repeated blows; then, when the stunned and quivering body of his prey lies extended, he fastens his ugly fangs upon the throat, tearing the hide and flesh until an artery is reached, when he settles down and fairly drinks out the life of the unfortunate walrus.

In looking at this uncouth animal, the most natural question at once arises—What earthly service can such an ungainly, stupid beast render? What, indeed, is the use of its existence? But the answer is swift and

food, and then the value of the *cache* of walrus-meat is appreciated, when for weeks and weeks it forms the beginning and the end of every meal. The walrus responds to as many demands of the Innuits as the camel of the Arab, or the cocoa-palm of the South Sea islander. Its flesh feeds him; its oil illuminates and warms his dark hut; its sinews make his bird-nets; its tough skin, skillfully stretched over the light wooden frame, constitutes his famous kayak, and the serviceable oomiak, or bidarra; its intestines

ESQUIMAUX SORTING AND STRINGING
WALRUS IVORY.

are converted into water-proof clothing, while the soles to its flippers are transferred to his feet; and, finally, its ivory is a source of endless utility to him in domestic use and in trade and barter.

Walrus famines among the Esquimaux have been recorded in pathetic legends by almost all of the savage settlements in the Arctic. Even now, as I write (November, 1880), comes the authentic corroboration of the harsh rumor of the starvation of the inhabitants of St. Lawrence Island—those people who live just midway between the Old World and the New, in Alaskan waters. The winter of 1879-80 was one of exceptional rigor in the Arctic, though in this country it was unusually mild and open. The ice closed in solid around St. Lawrence Island—so firm and unshaken by the mighty powers of wind and tide that the walrus were driven far to the southward and eastward, out of reach of the unhappy inhabitants of that island, who, thus unexpectedly deprived of their mainstay and support, seem to have miserably starved to death, with the exception of one small village on the north shore. The residents of the Poonook, Poogovell-yak, and Kagallegak settlements perished, *à* a soul, from hunger—nearly three hundred men, women, and children. I was among these people in 1874, during the month of August, and remarked their manifold superiority over the savages of the north-west coast and the great plains. They seemed then to live, during nine months of the year, almost wholly upon the flesh and oil of the walrus. Clean-limbed, bright-eyed, and jovial, they profoundly impressed one

with their happy subsistence and reliance upon the walrus-herds of Behring Sea; and it was remarked then that these people had never been subjected to the temptation—and subsequent sorrow—of putting their trust in princes; hence their independence and good heart. But now it appears that it will not suffice, either, to put your trust in walrus.

Walrus naturally occupy a large place in the spiritual horizon of the Esquimaux; his whole idea of paradise is bound up in finding walrus by countless herds in the spirit land, which in itself, however, does not differ at all from the one he now lives on, except that there he will be uniformly successful in the chase, and always sure of meat to eat day in and day out. When the writer attempted to argue with one of these people that we could get along very well in the next world without these unsavory animals, the emphatic response was: "Without walrus there is no heaven!"

In view of the unremitting warfare waged upon the walrus-herds of northern Europe, it is most likely that the sandy shoals and muddy bars of Bristol Bay, Behring Sea, are now the chosen resort of the largest congregations of these animals. When the ice-pack closes in solid above the straits between Asia and America, then the great mass of the walrus, which have been spending the summer on the broken ice-floes, engaged principally in breeding, return to the open waters of Bristol Bay and Norton Sound, where they spend the winter, scattered in herds from a dozen or so in number up to bodies of thousands; living in perfect peace

among themselves, and almost unmolested, though several districts are carefully hunted over by the Esquimaux of Nushagak for oil and ivory.

The shoal waters of this region and the eccentric tides have alone preserved these bands of *rosmarus* from extinction. Years ago, when the North Pacific was the rendezvous of the greatest whaling fleet that ever floated, vessels could not, nor can they now, approach nearer than sixty or even eighty miles of them.

The walrus is born upon the floating ice-fields of the Arctic Ocean, and during the whole of the summer remains there, carefully suckled and guarded by its mother, with whom it instinctively retires to the south as the packs begin to close over the

top of the square, flat head; the nostrils open directly above the muzzle, and are vertically oval and about an inch in diameter. Like the seal, the walrus, when traveling, swims entirely submerged, rising at prolonged intervals to breathe, when it "blows" with little jets of vapor and a noise not unlike a whale; on a cool, quiet day, the progress of these creatures as they swim may be traced by the succeeding tiny white columns of vapor thrown up. As the nostrils are scarcely raised above water, nothing is seen of the animal itself, unless it pauses in the act of swimming and rises up, head and shoulders, for a survey.

The chief glory of the *rosmarus*, however, must be embodied in its long white tusks, or canine teeth of the upper jaw, that

ESQUIMAUX DRESSING WALRUS-HIDES.

sea. Following the example of its elders, it soon begins to dig clams with its tiny tushes, to pull sea-grass and celery roots, and to tear up the tender sea-weed streamers, upon all of which it fairly thrives, until it reaches maturity in its eighth or ninth year, when it will measure twelve to thirteen feet in length from the nostrils to the root of its almost imperceptible tail, and possess a girth of twelve to fourteen feet around its blubber-loaded neck and shoulders. The immense accumulation of fat in the region of the neck and shoulders makes the head and posteriors look small in proportion and attenuated. The singularly flattened head and massive, abrupt, square muzzle strongly resemble those of the African river-horse. The nostrils, eyes, and ear-spots are planted nearly on

are set firmly beneath the nostrils in deep, massive, bony sockets, which cause the distinguishing breadth and square cut front of the muzzle. These ivory teeth grow down, sometimes spreading a little as they descend; then again the tips of the tusks will nearly meet, varying in size from the six or seven inch tushes of youth to the average of two feet at maturity; the writer has seen examples over three feet in length, so large, indeed, that they might have belonged to a young mastodon. The usual weight of a good full-grown tusk is about eight pounds, but such teeth are rare: out of a herd of a hundred adult walrus, it will be very difficult to select an example which shall possess a perfect pair of tusks, because in rooting around for food they are almost

invariably broken off by their owners at the tips or even up as high as the jaw itself; when walrus ivory is perfectly white and free from cracks, it rates as high as the best elephant-teeth; but most of it has a yellow, porous core, and is badly cracked from the tips to the base.

The upper lips are thick and gristly, completely overhanging and shadowing the lower; they are set full of short, stout, grayish-white and horn-colored bristles, varying in length from a half to three and four inches; this mustache is decidedly the most sinister and peculiar in the whole animal kingdom.

A dull, wooden expression is given by the eyes of the walrus. These are small, and protrude from their sockets like those of a lobster; the iris and pupil form less than one-

the nostrils of the morse, and instantly the clumsy brute would snort in fright, and push, roll, and slide its huge bulk back into the sheltering sea. Most emphatically does the walrus aver that seeing is not believing, but smelling is!

After all, the crowning peculiarity of this creature comes with age. When an Alaskan *rosmarus* has wintered and summered for eighteen or twenty years in the chilly, desolate regions of its choice, it becomes bald, and, more than that, all of its hair, from head to tail, falls out, with the trifling exception of little sparse tufts here and there, rooted in the deep wrinkles and plications of its hide, giving a raw and naked appearance to the old veteran. The skin, bare of hair, is covered with a multitude of unwholesome, pustular-looking warts and pim-

A WALRUS BREEDING-GROUND, BEHRING STRAITS.

quarter of the exposed surface. The sclerotic bulges out from the lids, which are tinged a coffee-yellow and brown, with an occasional admixture of white in tiny spots. When the walrus is aroused, the eyes are rolled about in every direction,—forward, backward, up, down, and around,—while the head itself seldom turns, the animal only moving it, more or less stiffly, as it rears up. These odd, lobster-like optics, however, render their owners but little service out of water, and perhaps as little in. The natives have repeatedly amused the writer by going up gently to a walrus bull from the leeward, almost to within striking distance, causing that animal to make no other sign than a stupid stare and low grunts of curiosity; but did the man move a trifle to windward, so that the faintest whiff of his individuality reached

ples, deeply wrinkled and traversed with a coarse net-work of dark red venous lines, that show out in bold contrast through the thick, yellowish-brown cuticle, which in turn seems to be scaling off in places, as if from leprosy. A herd of these old stagers (they always keep together) strikes the eye of the observer in a most unpleasant manner.

This thick, tough hide of the walrus gives a strong superficial resemblance to the pachydermata; its weight alone, divested of blubber, is more than three hundred and fifty pounds! Naturally, its grain is very coarse, especially where it is three inches in depth, as it is found to be over the shoulders and around the neck, and nowhere is the skin of an adult less than half an inch in thickness; when young, however, it is thoroughly covered with short, moderately fine

WALRUS-HERDS ON THE CLAM SHOALS AT BRISTOL BAY.

brown hair, growing coarser, thinner, and finally falling out with age.

In landing and crawling over low, rocky beaches, shelves, and bowlders, or in dragging themselves out on sand-bars, the walrus is as ungainly and as indolent as the sloth; they crowd up from the water in slow, labored movements, accompanied by low, swine-like grunts and then by a stifled bellowing, like that of oxen. The first walrus out from the water no sooner gets composed upon the ground to bask and sleep than the second one comes along, prodding and poking with its blunted tusks, demanding room, and causing the first to change its position a little farther on and up from the surf; then the second is in turn treated similarly by the third arrival, and so on; in this way, a piece of beach or shingle will be packed in the course of a day or two with hundreds and thousands as thickly as they can lie, their heads or posteriors being frequently pillowed upon the bodies of one another; and throughout the whole congregation there is nothing like ill-humor evinced. As they pass all the time when on land in sluggish basking or deep sleep, they seem to have an instinctive appreciation of the necessity of keeping watch, and guarding themselves from attack, and this is done satisfactorily by resorting to a somewhat singular though effective method; whenever a dozing herd of walrus is approached, there are always one or two stirring with their heads high up, snorting and grunting; these remain on duty only a very brief period,

usually a few minutes, when they lie down to sleep, but before doing so, they strike and poke the drowsy forms of their nearest companions with their tusks, causing them to rouse up suddenly; these stand on the alert in turn for a few minutes also, again pass the blow to the next, and resume their pleasant siesta: and thus the signal of danger is incessantly transmitted throughout the whole herd; this disturbance, evidently preconcerted among themselves, has the effect of always keeping some four or five of their number more vigilant than their drowsy fellows.

In moving on land, the walrus has no power in its hind limbs, which are always dragged and hitched up in the rear as the animal slowly and tediously progresses by a succession of short, trembling steps on the stubby fore-flippers. If in good condition and undisturbed, the herds will remain out of the water, in the summer season, and fast in great apparent comfort for a month or six weeks at a time. The *ros-marus* is monogamous, and the difference between the sexes in size, color, and shape is inconsiderable, save in respect to the teeth; the female is never found to possess as long or as heavy tusks as the male, but her ivory is generally harder and whiter. The walrus mother is devoted to her offspring, caring for and nursing it nearly a year, but her action in protecting it, as well as herself, is always passive. The writer finds it exceedingly difficult to reconcile the stories so frequently told of the

attacks made by sea-horses upon boats and their crews, with the timid and rapid dispersion which always attended the appearance of his boat among a swimming herd. Under no provocation whatever could either males or females be persuaded to show fight.

Occasionally, if you are coasting in Behring Sea, running along before a light breeze, your vessel will silently glide upon a small band of walrus sound asleep in the water; and, unless the sail flaps or the keel strikes a sleeper's form, you will pass on and leave them entirely unconscious of their dreaded visitor. They sleep grotesquely enough at sea, just like so many water-logged sticks, one end down and the other up. Nothing but the muzzle, with a few inches of the gleaming white tusks, appears to mark the position of a sleeping morse; its huge body rests vertically extended to a depth of twelve or thirteen feet below the surface of the rippling wavelets. You arouse a sleeper, and, with one short snort of surprise, it instantly tips itself back into a horizontal position and swims off, steering with its hind flippers; if not badly frightened it will re-appear, head and shoulders, after a

lapse of ten or fifteen minutes, to resurvey and grunt its amazement; but if thoroughly alarmed, it disappears entirely.

Much amusing speculation has been indulged in by various writers as to what particular animal gave rise in olden time to the weird idea of the merman and mermaid: some authorities, and one of them encyclopedic, declare it is the "*human expression*" of the *rosmarus*! Evidently that man has never seen the beast, for no matter how harshly he may feel toward mankind, he never for a moment would make this charge, could he only see his type; however, several species of the common hair seals (*Phoca vitulina*) and the dugong, as they rise from the water, have a decided suggestion in their eyes of the famous girl-fish, and these are probably the source of the suggestion. No amount of imagination can invest the uncouth head of the sea-horse with this pleasant fancy, for when the gristled muzzle of a walrus rises above the sea an observer cannot see the creature's eyes; those small, skin-colored organs are wholly undistinguishable at the distance one is compelled to keep by reason of the excessive timidity of the snorting pachyderm.

Henry H. Bennett

Gaylord Bros.
Makers
Syracuse, N Y.
PAT. JAN. 21, 1908

MCZ ERNST MAYR LIBRARY

3 2044 128 397 189