## South East Greenland.

The Sixth Thule Expedition, 1931, from Cape Farewell to Angmagssalik.

## By Knud Rasmussen.

High, precipitous, and naked lies the island af Aluk northwest of Cape Farewell, like a breakwater against the Atlantic Ocean, and one has the feeling as if this solitary island stood as a picture — in fact a monument to the Eskimos' own thoughts of East Greenland. To them it was never the country's barrenness, the glaciers, the winter ice or the tremendous breakers of the ocean that clung to the mind and made them afraid. All those who have lived up there, and built a house in some sheltered cove, have never allowed their spirit to be broken by its severity; rather were they enthralled by its grand beauty — and by the idyll, the camp idyll, which seemed to become more intimate because the surroundings were so prodigious and wild.

Any one who has had merely the slightest contact with Greenland knows the legend of the old hunter from Aluk, the old man whose heart broke, overwhelmed with the joy of recognition, when, after many years of absence in richer and more luxuriant parts on the West Coast, he came back to his old dwelling-place and one morning saw the sun rising out of the sea; so sublime was the love that bound him to the coast of East Greenland.

Long before any white man, it was the Eskimos who discovered Greenland, built their settlements on the West Coast, whence they later rounded Cape Farewell and set their course northwards along the East Coast. On the Fifth Thule Expedition we were able to establish that about two hundred years before there had already been a highly-developed Eskimo culture in the regions around Hudson Bay and Baffin Land; from those regions it has travelled on to Greenland; and when Erik the Red came to what is now called the Julianehaab District, the very first Eskimos had already passed through that part of the country.

I shall not embark upon any historical survey here, but merely recall that, after the Norse colony in Greenland had perished and the country had been rediscovered, the southern part of East Greenland suddenly came into men's mouths, because there it was thought the ancient East Settlement should be sought for.

First it was Hans Egede himself — Greenland's apostle — who began the search more than two hundred years ago; but though he performed his long "konebaad" voyage from Godthaab with wonderful energy, he got no farther than to the Cape Farewell district. It was a plain man, a cooper and trader from Copenhagen, Peder Olsen Walløe, who in 1752 was to be the first to make his way from the west right round to the East Coast as far as Lindenowfjord; he fell in with East Greenlanders and wrote down reliable and authentic records of the natural and ice conditions on the East Coast. He was the great pioneer who not only explored the whole of the Julianehaab district, where now we have Greenland's largest and most fertile colony organization; he was the man who showed the way for the later "konebaad" expeditions that have such great names in history.

It is with particular pleasure that I bring the name of Peder Olsen Walløe forward, for in life he never received any recognition for his achievement, and died in most abject poverty in Copenhagen. The only reward they gave him in his old age was a bed in the Vartov Home. In witness of the value placed upon the work of Greenland voyagers in those days as compared with the present time, Dr. Louis Bobé cites the following words of Walløe, written by him when applying for a small pension — which he never received:

"Six or seven halfpence a day is not sufficient for my barest necessities, for food, clothing and cleanliness, and yet it was I who brought the news of the place where Julianehaab Colony is now, together with news of many other parts inhabited by Greenlanders and of hunting and fishing. As to the East Settlement, science has admitted that so far I have been nearest in the search for it." (cf. Det grønlandske Selskabs Skrifter V).

In the years 1828—31 Captain W. A. Graah commanded a voyage that is outstanding of its kind, sailing in a "konebaad" from the southerly West Coast round to the East Coast and, despite ice and hunger and sickness, worked his way right up past the 65. parallel of latitude and came in sight of the Angmagssalik country; only then did the field ice compel him to turn about and risk a winter among the Eskimos on the island of Imarsivik, just north of Skjoldungen.

Then came Holm and Garde's renowned "konebaad" expedition in 1883—85. It is still such a green memory that I shall simply mention

that, thanks to wise dispositions and enduring tenacity, they got up to Angmagssalik in spite of seemingly endless difficulties. There they wintered among an isolated Eskimo tribe, and brought home — apart from the geographical results — some of the most interesting ethnographic collections ever made by a Danish expedition in Greenland.

Finally, Fridtjof Nansen in the summer of 1888 traversed part of the coast of Frederik the Sixth; but as his expedition aimed at making his now famous ski-journey across Greenland, there was no opportunity of doing any particular work on the coast.

In the fifty years that had passed since Holm and Garde's expedition, the stretch from Cape Farewell to Angmagssalik had only been travelled and inhabited by Danish Greenlanders, but no Danish scientific expedition had been there; it was this facta decided me in the summer of 1931 to realise that plan from the Danish Literary Greenland Expedition. In the late summer of 1904 I had stood on the top of a mountain northeast of Cape Farewell, looking up over this East Coast for the first time; Mylius Erichsen and Jørgen Brønlund were with me; we had come from Northern Greenland and had wanted to conclude "The Danish Literary Greenland Expedition" with a visit there. Three weeks of incessant storm forced us to abandon the attempt, it being too late in the year by then. Instead, we settled down in a large tent-camp of men and women who had almost all come from the region south of Angmagssalik, and their many strange stories of life behind the field ice helped further to consolidate the resolution I had formed to go there again some day, when the opportunity presented itself. The chance only came twenty-seven years later.

Southeast Greenland is split up by a great number of large and smaller fjords, and it goes without saying that such an indented and torn region cannot be explored fully, let alone in detail, on two expeditions,, no matter how much energy and skill may be unfolded. At the same time it was also clear to me that my expedition could only be a reconnaissance, for the purpose of learning so much about navigating conditions there that special tasks could be embarked upon later, as soon as some experience had been gained. It is from this point of view, then, that the results we have achieved must in fairness be judged, and I may add that I am working towards resuming the investigations now in the summer of 1932.

I avail myself of this opportunity in Geografisk Tidsskrift to convey my heartfelt thanks to all those who have taken an interest in the expedition. There are H. M. the King, who graciously granted permission for the expedition to carry the split flag; the Minister for

Greenland Mr. Stauning; Mr. Daugaard-Jensen the director of the Greenland Administration; Mr. C. F. Lerche, manager of the Kryolite Company; the Ministries of War and Marine, the latter of which not only placed much material and many instruments at our disposal as did the Ministry of War, but gave the naval personnel of the expedition special leave to accompany us.

Like my other expeditions, The Sixth Thule Expedition, as this journey is called, had the Thule Station as its financial basis, it having defrayed the cost of motor-boat, provisions and other current expenses.

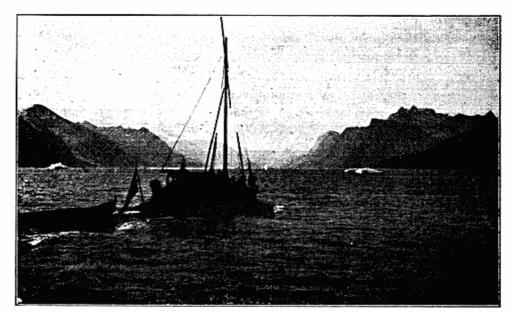


Fig. 1. The expedition's motor-boat "Dagmar" at the mouth of Lindenow Fjord.

The opinion had previously been held that this part of the coast of East Greenland could only be navigated with a "konebaad", or with a row-boat of the type used by Amdrup north of Angmagssalik. I considered, however, that if one chose the open season, August-September, a sea-going motor-boat with a reliable engine would be of great advantage. One would be able to get quickly from place to place between the localities where our work lay; what is more, it had become obvious to me through the descriptions by Holm and Garde that, even if I did use a konebaad, we would not escape the dangers that will always threaten a traveller on the East Coast. In their expedition report they say expressly:

"It is a veritable lottery-chance to travel in a konebaad along a coast like East Greenland, where on the one side one has the great ocean either full of ice or in state of uproar, without the protection of islands or skerries, and on the other side a sheer mountain wall, where one can only go ashore at certain points that lie far apart, where the shore runs out flat enough to allow the landing of baggage and hauling up the boat."

Thus for the expedition the motor-boat "Dagmar" was procured, a vessel of 10 tons, 36 feet long, with a 35 h. p. Bolinder motor. Having regard to tasks that had to be completed in the shortest possible time, it was necessary to take as many expedition members as possible, despite the small size of the boat. There were Commander Bangsbøll as navigator, Lieut. Wittrup-Hansen and Engine-room artificer Tokking as the nautical crew; there were also Johs. Olsen, M. A., who was to make magnetic surveys, Svend Nielsen as photographer, Erik Holtved as archaeologist and four Greenlanders from the Julianehaab District — among them a certain Christian Poulsen, who for a generation or more had lived as a sealer and hunter on the coast we were to travel.

The tasks of the expedition were: mapping, research into terrestrial magnetism, collecting zoological and botanical specimens, archaeology, and studies, not only of the possibilities of earning a livelihood, but — through the Southeast Greenlanders that still survived — of the ancient intellectual culture as well.

The distance from our starting point, Julianehaab, to Angmagssalik along a straight line, i. e. disregarding the fjords we were to explore, was 700 nautical miles. In the course of the eight weeks the expedition lasted, however, we sailed a total distance of 2500 miles with the "Dagmar". This is a stretch corresponding to the distance from Copenhagen, right round Iceland and back to Copenhagen.

Even an old Greenland traveller who is accustomed to the country there cannot but be impressed with the East Coast, which, compared with the West Coast, is much more wild and colossal, apparently an inaccessible cliff coast with numbers of fjords, in which the shining white inland ice tongues out and spreads quantities of calfice and icebergs out over the fairway. And between the fjords; sky-scraping promontories, glacier-shorn, wind-worn, like Cape Walløe, Tordenskjold, Moltke, Møsting and many others. And lastly, stretches where there is not even land, but only glaciers such as Puisortoq, or the one called by Captain Graah Kolberger Heide, or the shores of Køge Bay, all of them landscapes that are brilliant in sunshine, sparking with gorgeous colour, but terrifying in a storm.

The whole of this coast from Cape Farewell to Angmagssalik consists of primitive rock, and only here and there are small reefs with a haven that can provide shelter from the storms; otherwise the coast as a whole is open, with the Atlantic Ocean right in upon it. Under such conditions one has to hurry forward from harbour to harbour, and for preference in good weather. In July and August the weather seems to be quiet and fairly constant, especially in the fjords; but as early as September the northeaster, the most feared of all winds, starts to blow and sets a tremendous swell in towards the coast from Danmark Strait with its notorious storm centre, moving northeast from the western part of the Atlantic. The barometer falls are great and violent.

On the way out it was of importance for us to make a rapid survey of the coast, especially with regard to navigation conditions and shelter. The weather was fine, and we had to avail ourselves of it. After a short stay in Lindenowfjord we headed northwards without delay.

On the way up we were fortunate enough to get past Puisortoq in fine, calm weather; in former days this was the passage that was most feared. The glacier stands right out into the sea, and the Eskimos, who held the belief that the cold it radiated froze even the bottom of the sea to ice, so that every moment large hummocks of ice shot up without warning, were often held up there for weeks on end, unable to get on; and when at length they raced past in their konebaad, not a word had to be spoken. The only sound was the monotone rippling of the oars, and all the women with small children were supposed to lie in the bottom of the boat with faces covered; for they believed that the mighty spirit of the glacier would crush the boat if a woman with a child appeared before it.

Our first camping place was just to the north of this glacier, in the wild alpine country of Tingmiarmiut. Tingmiarmiut means "bird land", and in olden times many people lived there because, despite its high peaks, the region is famed for its still weather. The fearful northeaster has no power there. Our camp was pitched away in a small green-clad valley, where a variegated profusion of flowers covered the now deserted Eskimo huts. It was the first time we had really been ashore in East Greenland, and therefore we felt quite engulfed by the sharp pinnacles, which seemed to end high up among the clouds — as pillars between sky and earth — a grand but wild sight, because the landscape was chaotic in its lines; there were no smiling plains to be seen, but any number of cold glaciers, emerging from between the narrow passes like rivers of ice. And yet there was

solemnity about this petrified landscape which the Eskimos have loved so much; for high up on the top of the cliffs, with an outlook to all sides, we found near the settlement some ancient graves, whose great slabs of rock covered the mortal remains of men and women who at death had wished to be borne up to these heights, so that their souls — according to their Eskimo faith — might behold the beloved prospect even into the land of eternity, and every morning graves, with up to five interments in each.

These graves were very old, for we know that for many generations

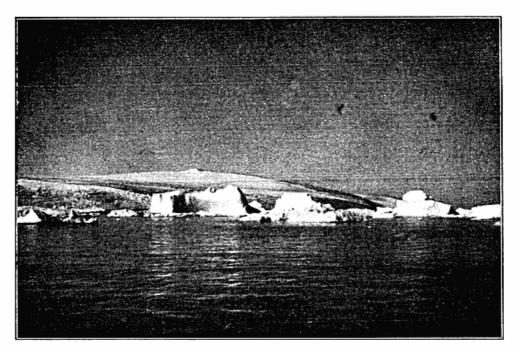


Fig. 2. View over Puisortoq glacier.

the East Greenlanders have thrown their dead into the sea. And peculiarly enough, many of these mountain graves were common graves, with up to five interments in each.

Our next camping place was on Griffenfeldt Island, a bare, bald island with scanty vegetation, because the sea fog and winter ice come right in upon it. On the south side there are two high peaks, standing opposite each other at the mouth of a fjord. They are called Umanak: the heart mountains. Quoting the local legend Christian tells about them that white men once lived there, who often fraternized with the Eskimos. There lived a man who has very fond of his wife, and the white men challenged him to prove his love by walking across a rope stretched between the two pinnacles. He accepted the challenge. He was strong and loved his wife, and it was

an easy feat to him. But when he had got half way across the white men suddenly began to swing the rope; the man held on, but the line cut so deep into his arms and legs that at last his muscles gave way, and he fell into the sea. Afterwards one of the white men married his wife, and from them descend all the pale-eyed and fair-haired men on the East Coast.

We had selected an area of exploration in behind the large island of Skjoldungen, which lies about half-way between Cape Farewell and Angmagssalik. There we arrived on August 24th and spent a week by the great salmon river in the beautiful Dronning Maria valley.

This is the one oasis on the southern part of the East Coast — a fertile, bloom-carpeted and bush-grown valley in among calving glaciers and savage alpine crags. There was a baking heat, swarms of mosquitos and brilliant summer weather throughout our stay. Having accustomed ourselves to naked, wind-blown headlands between desolate belts of cold ice, it seemed as if the earth actually overwhelmed us with this peculiar arctic luxuriance, consisting not only of flowers and greens, but also berries—black, lustrous crowberries that were crushed almost at every step, the soles of our kamiks becoming red with the flowing juice.

One day Christian and I went together up the hills where, looking out over the whole valley, he might summon up his recollections of the time when he lived there. Without comparison it had been the happiest place in all East Greenland, for it was there they gathered in the late summer when the weather was warmest, as soon as they had secured all the meat they were to live upon in the long winter night. All the camps round about arranged to meet, and life was gay down by the beach where konebaad lay by konebaad, and tent stood by tent in the thicket on the mountain slopes; laughter and joyous shouts resounded from the crags; up the valley, along by the river, stood the men catching fat salmon with their hooked spears, while the women went about gathering berries and angelica and sorrel for pickling blubber. And on really warm days one would see the men throw off their clothing and wade out into the shallow water of the fjord, where they lay cooling themselves - a remarkable and almost unbelievable picture of folk life in Greenland! Then when evening came, and the fires flared by the tents, there was a stirring of the drums, and soon their regular beating had gathered the whole village. The busy day thus ended in song, and, if there were personal accounts to settle or enmity between fellow-villagers, process was held by means of these song-meetings, when satisfaction was given and taken in the lampoons they composed of one another; or they simply amused themselves, singing the praises of all the feats of strength that held the community up and marked out the best men.

In that manner had the old pagan East Greenlanders lived their lives, a life in which Christian himself had been one of the pivots, both as a hunter and as a shaman. Now is was all the past; he had gone from East Greenland with his heathen name Autdaruta ("Konebaad"), and there he was again as a member of an expedition, and with his Danish name Christian Poulsen.

On August 30th we struck camp in order to complete our journey to Angmagssalik, where we had provisions and oil waiting. An hour after midnight we sailed out of the fjord, and, the sea being dead calm, we determined to sail throughout the night. For the first time we got out into field ice and had to keep a good way out from land, manoeuvring through the floes in the semi-light night. The full moon hung out over the ocean, its yellow glittering beams making the ice yellow too, whilst the serrated mountains ashore rose in a darkheliotrope wall behind us.

The "Dagmar" arrived at Angmagssalik on September 1st, receiving a cordial welcome from both Danes and Greenlanders. For this was the first motor-boat that had ever come there from West Greenland.

But time was precious; only five days were we able to remain in in the district, and one of these we spent on a visit to Dr. Therkel Mathiassen, who was making archaelogical excavations in Angmagssalik Fjord. We also went to the settlement of Kungmiut, where various aspects of the life and doings of the people there were filmed.

On the fifth of September we shipped oil and provisions, sailed the next day, and in the forenoon of the ninth came to the people at Umivik, the most southerly outpost people from Angmagssalik, who had put up their winter house close to the glacier from which Fridtjof Nansen in 1888 had started out on his ski-journey across Greenland. Seventeen people lived there, and not only was the whole beach covered with drying meat, but there were numbers of unflensed seals everywhere, heaped together in the rock crevices. Everybody was bright with happiness and vied with their fine, well-kept dogs in radiating delight.

Nikodemus the hunter, the oldest man in the place, told us that south of Sermilik Fjord — or Angmagssalik proper — there were ninety-five people that summer. Of these, there were forty-seven round about Inigssalik and thirty-one at Igtuk, right up at the head of the glacier-filled Køge Bay. All these "suburban" people were doing well with the hunting for common seal and bearded seal, and

indeed had caught a number of saddleback and bladdernose seals. What was more, the bear hunting usually supplied them with ready money enough to equip them with "white man"s goods for a whole year at a time, ammunition included. Nikodemus himself, together with a fellow villager named Robert, was always on hunting trips within the limits of Frederik the VI coast. These last few years he had lived in Tingmiarmiut, two years ago at Imârsivik, close to where Graah had wintered. With his base there he had caught salmon all through the winter in the great river running through Dronning Maria

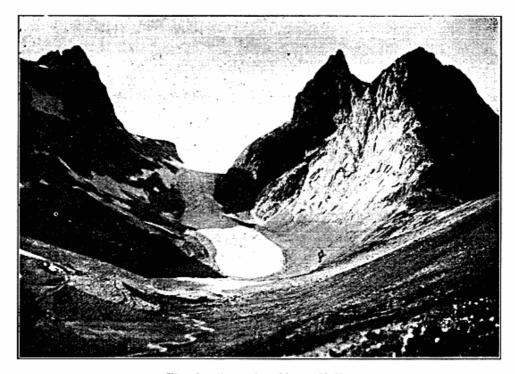


Fig. 3. Dronning Maria Valley.

valley, where salmon-trout frequented the open places in the ice. Next summer, after a trip in to Angmagssalik to trade, he hoped to go with Robert again southwards to Tingmiarmiut, where there always was good sealing with the kayak, and plenty of opportunities for bear-hunting.

We remained there two days. The weather had been very unsettled, varying from snow to a stiff nor'-easter; but when we turned-to early on the morning of the eleventh it was calm, and, as our experienced friend Nikodemus was sure we would be able to make harbour at Igdluluarssuit before the weather broke again, we said goodbye and weighed anchor.

From Angmagssalik we had brought presents of various kinds for

the people at this settlement, and these we distributed on taking leave. In thanks, Nikodemus delivered a thoroughly characteristic and proud East-Greenland farewell speech:

"I am pleased you have been here, pleased at all you have given us. But even if I had had to provision you from here — not only with meat but with white man's goods as well — you would have been just as welcome."

Our first goal was the large settlement north of Skjoldungen; we were to try and get there before nightfall. The weather was calm when we left, and the sky was clearing up; but at noon, just as we came opposite the great glaciers that form the coast of Kolberger Heide, the waves suddenly grew higher and the wind freshened from the northeast. Ever-increasing numbers of dangerous barriers of calfice forced us further and further out to sea. The icebergs became more and more numerous, and the "Dagmar" laboured in the foaming backwash of the waves from them. Then in this heavy sea we began to have trouble with the fairly large yawl we had in tow. A large one had purposely been chosen, for we had good use for it when lying in harbour. Now it filled with water, and often, when we were manoeuvring between the floating blocks of ice, it sheered out to the sides, on one occasion with such force that the tow-line broke and the yawl was only secured again with great difficulty.

But about five in the afternoon, just as we were endeavouring to find a channel through the outermost reef of icebergs, the boat refused to answer the rudder, and we found that the tiller and all the upper part of the rudder were broken off. Presumably the tow-line had now and then fouled the rudder, and now, with the yawl full of water, this had been too much for it. The rudder was broken at the uppermost iron.

There was nothing to do but to abandon all thought of seeking harbour and get clear of the calf-ice and the many bergs among which we were now caught, and keep out to sea. Bangsbøll manoeuvred with admirable assurance, steering by means of the sails and the engine. Meantime a jury-rudder was rigged up, a floor-plate from the engine-room being screwed on to a piece of timber we had in the boat, and this was used as a steering oar. Scarcely had this been rigged when a couple of high seas again swamped the yawl, and we had to bail it out once more. But while we were labouring to get the yawl closer, a huge wave caught it and threw it violently against the "Dagmar"s stern. Before the engine could be stopped the tow-line took a turn round the tail-shaft and broke; the yawl, now completely awash, drifted from us, and we had no means of recovering it.

Such was our position when darkness fell; we were about twentyfive miles from land, rudder useless, an engine that could not be used, and sails torn by the gale. All the eleventh, twelfth and thirteenth we lay close-hauled in a screeching gale, which carried us about 125 miles to the south and about 80 miles out from the shore. The wind grew almost to a hurricane, with a force that sometimes got up to 11 or 12.

On the morning of the twelfth we lost our jury-rudder — a single sea tearing it adrift.

Only on the thirteenth in the afternoon had the storm quietened down so much that, although the seas were still high, it was possible to cut the tow-line away from the shaft and rig up a new jury-rudder, as we found that the rudder-blade was intact. On that day about five o'clock we were able to set a course for land, and, when day broke next morning, we had the highlands round about Mogens Heinesens fjord in sight about thirty miles away.

Very early in the morning of the fifteenth of September we dropped anchor off our old camping ground by the salmon river. The sun was just topping the high mountains, and the fjord lay like a mirror, with drifting icebergs glittering in the light. We all were thankful for having been given back to life; we seemed to have grown fonder of the "Dagmar", stout sea-boat as she had proved herself to be. At the same time I realised what the expedition owed her navigator, Commander Bangsbøll and his two naval colleagues; for if the nautical dispositions had not been just the right ones, and had they not been carried out accurately as circumstances required them to be, we would not have been lying there ready to start on our work again.

It goes without saying that our accident influenced the conditions under which we now had to work. The "Dagmar" had to be sailed cautiously, for her rudder, despite a workmanlike repair, was still a patched-up one at best. That was not all, however. We had lost two kayaks and our yawl; the latter we soon substituted by means of a couple of sleeping-bag covers stretched on a wooden frame; but of course a makeshift boat could only be used in fair weather.

Autumn had now arrived, with frequent storms; the one followed the other at short intervals, and we had to be content to work at those places where conditions permitted. Still, without further adventures we got down to the West Coast on the second of October.

We had arrived at a small trading post called Augpilagtoq, which lies up the fjord behind Cape Farewell, deep down below the majestic heights that form the western outlet of Prince Christian sound. A snowstorm was coming on as we arrived just as night fell, and when at first we dropped anchor in that cosy little, sheltered harbour, the people were not quite clear as to whom we were in the darkness; but, once they knew, first one shout then gradually all the many voices in the village joined in one mighty peal of joy — their welcome. From the gleam of the windows blinking through the snowstorm we could see people running hastily in among the huts, to gather at length down by the landing place where they formed quite a guard of honour of women and children. A little to one side the men stood together in a long line, and, scarcely had we stepped

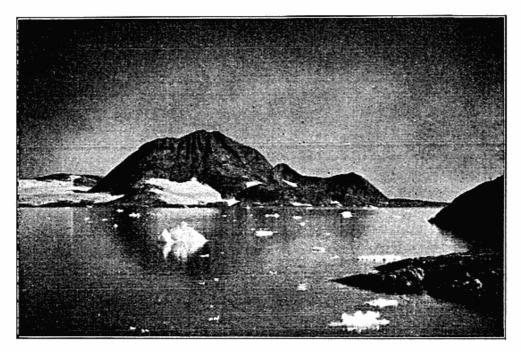


Fig. 4. View on Skjoldungen island.

ashore when they received us with a salute that ran like a regular salvo from man to man; then cordial words of welcome from the local trade manager, Christian Hammeken, followed by a many-voiced hurrah! It was peculiarly affecting to us to be given such a stirring welcome just at this village, and we understood that the general joy not only embraced our persons, but also the circumstance that the part of East Greenland to which most of these people were connected by interests so vital to their welfare, had now been successfully travelled and explored.

This lively interest in what we had discovered concerning hunting prospects and conditions of life met us wherever we went afterwards in the Julianehaab district, where, to most of the settlements, the scarcity of seals these last few years has been so catastrophic, that

the people have been hard put to it to procure footwear and the other necessary garments of skin; many of the hunters, especially those of East Greenland stock, hoped that our journey had created a possibility of establishing a few trade posts in the southern part of the east coast when conditions were favourable.

11.

Below is a brief resumé of the work which the expedition succeeded in accomplishing.

Naturally, our marine disaster was mostly to the detriment of the survey work which the naval officers were to perform. We had discovered two large now fjords just north of Skjoldungen, and they were to have been explored on our way back from Angmagssalik; instead, a whole week was spent in doing repairs, which had to be attended to by the very men who were to have done the surveying; when the repairs were finished, we had passed the middle of September, and then it was too late.

Of the cartographic work, which was in charge of Commander Bangsbøll, there is thus to be said in all brevity that it has been carried out to an extent that was compatible with nautical work and other tasks that demanded instant attention. The inner part of Skjoldunge fjord, especially the North fjord, has been surveyed, and sketch maps have been made of a number of good harbours and anchorages along the whole of the coast we travelled. But for the rest the whole character of the expedition as a reconnaissance made actual survey work tage a secondary place behind nautical knowledge.

Botanical and zoological collections were made wherever we went. The botanical collection, which may be described as very comprehensive, has been handed to the Botanical Museum in Copenhagen. The zoological result, however, was small, due to a variety of circumstances. Firstly, we were unable to carry much zoological equipment in our little boat, where space was required for so much else; secondly, at the time the journey was made there was an extremely sparse fauna on the coast with the exception of seals. Fishing was tried at several places, but without success, despite the fact that, according to Christian, the whole coast abounds in sharks, and halibut in behind Skjoldungen. And there are trout in most of the rivers. Bird-life was also sparce at the time of our visit, and our experience is that, to give any satisfactory results at all, biological work must be taken in hand as a separate object, and preferably from a permanent station, not from an expedition where one has to be constantly on the move.

In a magnetic sense the Arctic countries are among the most interesting in the world. There rage magnetic storms, that is to say magnetic changes take place that violently agitate the compass needle. These storms are caused by electric disturbances in the higher strata; but observations must be taken simultaneously at several places in order to learn something about their extent and strength.

These disturbances undoubtedly are of importance to the meteorological conditions that help to determine the climate of Europe, and also wireless reception; in fact, so great is their importance that an international movement, the so-called "Polar Year 1932—33", has been formed under Danish leadership for the purpose of studying them, by laying a net of stations all over the arctic regions.

During the Polar Year, four stations will be established in Greenland apart from the one now at Godhavn: A French one at Scoresby Sound, a Netherlands station at Angmagssalik, and two Danish: at Godthaab and Thule. On the southeast coast where we were to work, no station was to be established owing to the inaccessibility of the country; it was therefore of interest that separate investigations could be made on our journey, and, indeed, they would not be entirely separate, for they could be compared with simultaneous observations in Rude Forest in Denmark and at the magnetic station at Godhavn, which Johannes Olsen himself had conducted for six years.

Johs. Olsen's work resulted in observations being taken at 18 stations — 11 of them on the east coast — to determine the magnetic deviation, horizontal magnetic force, and inclination. Altogether about 4000 deviation observations were recorded. With this the part of East Greenland travelled by the Expedition is more completely mapped magnetically than any part of the west coast of Greenland of a similar extent.

It was also possible to make records of several magnetic storms, and since our return home we have been able to compare them with simultaneous observations made at Godhavn and Rude Skov.

In addition to these investigations of the currents in the atmospheric strata we charted the coast magnetically; these records may serve to show what minerals it contains. We succeeded in definitely ascertaining that in the northern part of the region from Tingmiarmiut and northwards there are great variations from the normal deviation. At Umivik over a distance of 6 nautical miles the deviation changed as much as it changes from Copenhagen to Stockholm. This is a sign of ferriferous minerals in the vicinity of the place of observation. Now we know this, and more thorough investigations can be undertaken later.

The section of our work that most closely approached my chief

interest, however, was of course archaeology. On the way out a station had been established at Lindenovs Fjord and put in the charge of Erik Holtved who, together with two Greenland helpers, was able to examine and excavate 25 settlements. All the finds made there have now been handed over to the National Museum for publication later.

Furthermore, wherever we found old settlements during the rest of our travels we made examinations of them whenever we could stop to do so.



Fig. 5. Wall remains in a big ruin behind Skjoldungen:

And finally, there were the tasks related to the material culture and folk-lore of Southeast Greenland, comprising not merely the occurrence of game and the technical culture especially connected with the hunting of it, but also a study of the intellectual culture as expressed in the old religious conceptions, legends and songs. And, thanks to the circumstance that I had with me a man — Christian — who not only had lived there a generation as a hunter held in high esteem, but also as a famous shaman, singer and storyteller, a lot of material was collected that will be treated later.

The game hunted comprises: the common fjord seal, the large bearded seal, the saddleback and the bladdernose; they occur everywhere, in numbers that vary, or course.

The climate is much colder than in fjords of similar width on the

West Coast, and, with the sole exception of that farthest south — Bindenow Fjord — all the fjords freeze over with smooth, good winter ice as early as the end of November or the beginning of December. The customary Eskimo method — breathing-hole hunting — is then pursued, sometimes smooth-ice hunting too; all winter operations, however, are hampered to a very perceptible degree by the stormy weather which prevails throughout the winter months. It is impossible to live without winter depots through the "dark time", which lasts from December till March. But as soon as the sun begins to increase in power — which it already does in March-April, the fjord seals crawl up on to the ice to bask, and their numbers continue to grow right up to the time when winter ice breaks up in the last days of June. The bearded seal basks on the ice too, and in this period there is always such an abundance of meat that the Eskimos can start storing up their winter supplies.

From October till May they live in winter houses, which are built in sheltered places up in the fjords or among the skerries.

Naturally, we were unable to visit anything like all the many former settlements; but with the help of Christian for the stretch from Lindenow to Igdluluarssuit, and Nikodemus for Umivik to Sermilik, we were able to form a very good impression of the relation of the old Eskimo settlements to one another. According to the opinion of these two experienced hunters, conditions everywhere seemed to be favourable to Eskimo life, that is to say for hunting with the kayak and using time-honoured Eskimo methods; but as there is no hinterland to any part of the coast, the country offers no chance for white men. Neither fox-trapping nor bear-hunting can cover the expense of establishing bases in the modern sense. But to the Eskimos this coast will always be of great importance, not only as a reserve, but as a kayak-hunting region, with rather scattered habitations. The old settlements are - regarding to Christian and Nicodemus - spread as follows throughout the various districts, as a rule with only two houses at each place:

Qeqertaulaq to Umîyik: 42 settlements with 62 houses; Igdlulu-arssuit-Uivfak: 30 settlements with 50 houses; Umanak-Puisortoq: 9 settlements with 15 houses; Anoritoq to Lindenow: 10 settlements with 12 houses; Lindenow fjord: 8 settlements with 25 houses; from Lindenow to Aluk: 2 settlements with 4 houses. This makes in all 101 settlements with 158 houses.

As soon as the winter ice permits, they leave the winter houses and go into tent camps, which are sited right out close to the open sea on the outer coast, where, in the principal kayak-hunting season they always have the field ice as a drifting but screening and wavebreaking reef. It is interesting to see how everything that is hostile to the white man during his voyages along the coast is the Eskimo's helper and meat-provider.

The field ice, which comes from the north, rarely appears until well into November or the beginning of December. Its density and breadth over the sea continue to grow and become greatest in March-April-May. Its significance to the kayak men, however, only begins in spring, when good weather and warm days come in May-June-

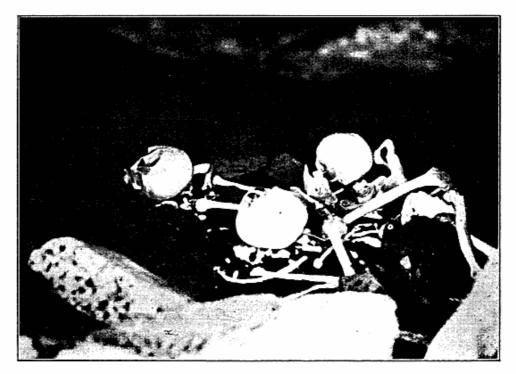


Fig. 6. Eskimo grave in Akorningnarmiut Fjord.

July; then the hunters in their kayaks lie hidden among the floes and hunt the seal, well protected from waves in the open water that is almost always to be found along the coast inside the ice belt.

The drifting ice is not merely a breakwater; it brings seals and bears with it, not to forget the timber — driftwood — which the arctic current carries from the Siberian rivers via Spitzbergen or the North Pole regions down to the shores of Greenland.

All through the summer seals are numerous; their meat is dried for the winter, or whole carcases are cached, and this continues until the field ice has passed on southwards, and variable August weather with heavy seas may be expected; then the people go salmon fishing and berry-collecting up the fjords. This late-summer period was a happy time, not only because the weather was warm and settled but also because the people used to gather at the tent camps in whole umiak crews to sing, dance to the drum, and settle personal accounts festively by means of their abusive songs.

All the old East Greenlanders hold the view that it was never necessary to suffer want, even in the times when they had no guns and all hunting was carried on with the harpoon. The only time serious danger was involved was when they had to set out on long trading journeys to procure iron or - when the fashion came - to buy guns, which were only to be had far away on the West Coast. Then they had to leave the settlement just at the time when they should be busy collecting supplies, and, after the journey, when they settled down at some place or other on the East Coast, things might very easily go wrong when the storms set in over the country and winter supplies were lacking. The danger of these long trading journeys, which had become necessary after the people had become dependent upon "shop" goods, in fact caused all Southeast Greenlanders to move to Angmagssalik and to Julianehaab district respectively. Christian tells of the following characteristic tragedy of one of these trading trips:

After wintering at beautiful Tingmiarmiut, which is just as famous for its calm, fine hunting weather as it is notorious for its deep snow in winter, it had been decided to go down to Nanortalik on the West Coast to buy guns and ammunition, iron and knives, with the skins of the bears they had caught that winter. Christian was then young and unmarried.

The settlement had consisted of four umiak crews, but only three rowed southwards; the fourth boat, which was commanded by the old shaman Kunigssarfik, went northwards to Skjoldungen. Kunigssarfik was only an indifferent shaman, but dangerous, because he had a difficult temper and was expert in the use of evil magic words. When his boat pushed off from the shore he had in farewell shouted to the others: "Those who have no powerful helping spirits have nothing to expect now but death!" And with these ill-omened words he had disappeared round a point.

The ice was difficult that summer; even the winter ice had been late in disappearing, and immediately afterwards the field ice had come right up on land. The journey in the boats had therefore proceeded only very slowly, and, by the time they reached the settlement of Anoritoq, they had had to abandon the trading trip because it was then too late in the year. Autumn came very early, and with it the

frightful northeast gales which completely stopped all hunting. The brief summer having been spent in travelling, they had no winter stores, and, in an utterly wretched condition, they tried to maintain life by eating bear skins, umiak skins and kayak skins; but though they softened the dry skins in water or tried to boil them tender, they had no nourishment in them, and one after another of the travellers died of hunger and cold.

Then suddenly one of the men remembered the old shaman's menacing farewell: "Those who have no powerful helping spirits have



Fig. 7. Nikodemus's house at Umivik.

nothing to expect now but death!" And they all realised at once that he was the cause of their misery; he had used evil words to put a spell over the settlement. Now they believed that if evil were not repaid its effects would continue. And at the settlement was a man named Avijâja, a brother of the old shaman; on him they could avenge themselves. So one day they murdered him, keeping it secret from his family.

To make sure that the murdered man should not haunt them, they parted the head from the body, put it into a kayak bladder and threw it into a lake. The eyes were taken out and placed in a soapstone lamp, where they had to remain the rest of the winter; this was to make his soul blind. Then every joint in the body was cut through, after which it was buried under stones.

Avijāja's wife suspected nothing of the murder and made a despairing search for her husband when he did not come home in the evening; next day she came wailing into the settlement, having found after which it was buried under stones.

She knew that superstition would prevent her neighbours from helping her, and therefore elected to die together with her five children in preference to dying of starvation. She told her children of her resolve, and those who were old enough understood her, the two eldest, threw themselves into the sea, but the two next were afraid, and the mother herself had to throw them in. The youngest son, who had only just started to walk, did not realise at all what was going on. He simply cried because the others were crying; but then, when his mother explained that he was going home to his father in "the Land of the Dead", where people always were happy and always had enough to eat, he jumped into the waves himself and disappeared. The mother climbed up on a high cliff, turned her back to the sea and allowed herself to fall backwards into the depths.

Thus died Avijâja and all his family, and shortly afterwards the storm died down, so that the men were able to go out hunting again for food for their wives and children. But by that time half of the fifty-seven people in the settlement had died of hunger.

Kunigssarfik, who had tried to bring evil over the settlement, met with no better fate. Later on some young people who chanced to drive past his settlement found him and his neighbours. Inside the house they found them all lying dead on the platform; the old shaman in bearskin trousers sat by himself at the passage entrance with a clean-gnawed dog's head beside him.

It was said that their death was the result of the reaction of his evil doings; for once they had understood his evil intentions and taken revenge upon his brother, the fate he had meant for the others had reverted upon him and his nearest; that was why they had all died of starvation.

Superstition always had a great hold on them — especially when a settlement was stricken by the failure of the hunting. On such occasions they always believed that some being, some ordinary human being, stood behind the forces of nature; for it was their belief that, of all evil in this life, nothing was more perilous than the mischief that came from people themselves. The great spirits they believed in rarely did any good of their own volition — they had almost to be driven to it by man himself. The great sea spirit. "The Mother of the Sea Beasts", kept a jealous eye over the seals, and the Moon Spirit, whose task it was to see to the propagation of all things living,

was readily offended at the slightest breach of taboo. In any case they were, if anything, indifferent powers. Where human fates were concerned — and they rarely did them any good of their own free will — they were always ready with their severe punishments when man aroused their anger. There were the shamans, of course, but they, too, sometimes abused their powers to the destruction of others. Consequently, the surest way of seeking protection for life, happiness and health was by means of amulets and magic words. Still, there



Fig. 8. The hunter Nikodemus, who usually winters at Tingmiarmiut.

were other ways. Here are directions as to how a wife can win retribution if she has been forcibly parted from her husband:

First she must find a vixen with young, discovering them while they sleep and without waking them. This is most difficult, because the fox is the wariest of all animals. But should she succeed in surprising a fox family asleep she must kill the mother-fox and cut out a piece of its teat, which she must take home and hide. Then she must steal up to a ptarmigan sleeping on a large stone, seize and kill it before it has time to wake up. Of this bird she must cut out the rump, which is laid beside the teat. But now comes the most difficult part of all: with the vixen's teat and the ptarmigan's rump in her hand, she must go into her former husband at night, while he lies asleep with his new wife. If is not sufficient that they are asleep — they must be

lying face to face. If they are, she must push the vixen's teat and the ptarmigan's rump right down under their pillow, right between their heads, without waking them. And then — still without waking anybody — she must steal out of the house again. If she can do all this, the man will soon tire of his new wife and take the old one to him again.

The East Greenlanders believe they are not the only inhabitants of their country; there are many kinds of people besides themselves, but luckily "the other kind" are usually only seen by shamans.



Fig. 9. Christian Poulsen in a drum dance.

There were ignerssuit, the beach spirits, who were just like ordinary people except that they had no nose; they could suddenly grow out of the beach or spring out from a steep mountain-side facing the sea. As a rule they were friendly and greatly in demand as helping spirits.

Then there were timersit, enormous giants, who lived amay in the interior on the inland ice — perhaps a faint memory of Canada's inland Eskimos.

Inerajuvaitsiat, the moutain dwarves, small, it is true, but they assumed any size they wished when required; and, when they were in a hurry, they could crumple the ground up beneath them and stride over tremendous distances. There were isserqat, who lived down in

the ground; they inked sideways with their eyes and loved to tickle people to death as a pastime. There were tarrajârssuit, the shadow people, whose bodies were invisible, but with shadows that were fatal to any human they touched. And finally, there were erqitdlit, the most dangerous of all human-like beings, with bodies like men, but with heads like dogs; they, too, lived on the inland ice and were so bloodthirsty that nobody ever escaped once they attacked a settlement.



Fig. 10. The "Dagmar"s master, Commander Bangsbøll.

All these beings are described in legends I have collected, but they are not peculiar to East Greenland; only, it is as if they were of greater significance at the East Greenland settlements than among other Eskimos, just as the East Greenland legends usually are born of a more lively fantasy than one finds elsewhere, except perhaps in Alaska.

On hearing of all the dangers that lie in wait for these East Greenlanders one might get the impression that they were incurable pessimists, everlastingly downcast. That would be quite wrong. On the contrary, they are radiant with optimism and good homour. The dangerous forces in life never leave any permanent impression upon the Eskimo mind. Adversity leaves them pretty much the same as sickness with other people: once you have got over it, you forget you have ever been ill. Consequently, they only remember the bright side of life.

When Christian spoke of his childhood, his youth and his manhood, he could quite lose himself in a description of all the delights he remembered of life at his village on the island of Orqua, just a little north of Skjoldungen.

They always had lots of pôrusit, which is a seal skin in the form of a bag, pulled whole from the carcase so that some of the blubber remained on it. These pôrusit they filled with crowberries or spoonwort, sorrel and angelica, the latter being crushed and pickled in the blubber. There in the "blubber bag", which gradually fermented slightly, it had to lie six months or so, after which it turned into the delicious preserve that "melted on one's gums".

Then there was qajulât, a kind of blood-soup pudding: seal blood was boiled until it became quite stiff. It was then stirred, being thinned out with old, faintly-smelling seal oil, and then gobbled up — gorgeous! One could taste it all day, and it was long before one was hungry again.

There was nusúkat, large leaves of sea-weed that had first been rinsed in fresh water; these were stuffed into the mouth and washed down with blood.

Or mussels, shrimps, snails and sea-urchins, which had quite a little egg-yolk inside them; but all these were only tasty bites, not real food. Best of all were bearded seal and bottlenose, caught in the early summer and stored away whole and unflensed; they lay fermenting and rotting slightly throughout the summer, and, when they had become properly appetising and in condition for a feast, one would almost fight for the meat nearest the blubber, for there it was particularly tender and juicy! Or the raw blood, which was slightly acid—they scooped it up on to deep wooden trays and gobbled it up, eating sea-weed to it.

This was the sort of food they liked to gather round at big feasts and song-festivals.

In the description of his travels Gustav Holm says that life on the East Coast is undoubtedly the hardest struggle for existence any human being has to endure, and it is true, judged from the Danish standards. But to the frugal and hardy Eskimos it was an Eldorado. All Greenlanders who have lived on the East Coast yearn for the glaciers in the great fjords where the seals cubbed, for the field ice on summer days, glittering before their camps and giving them their

daily food; for they have the power to forget the autumn, when the breakers crash against the shores and throw huge icebergs up on land, and they can forget the dark time of winter, when the northeast gales lash and shriek over the country.

In a single exclamation they can express all their love for this land in a song that is so characteristic of their mind and their remarkable facility of description:

I came down
Where the ocean lies before the shore
And looked out over
The small lands in the north
Lying blue under the clear sky,
And I thought:

Someday, when I am tired
And lie down to rest,
Someday, when I die,
All this that I see
Will be the same to others,
And the air will arch blue
And quiver in the heat
In just the same way
To those who live when I am gone.
But I became faint
At all this beauty

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On the morning when we rounded the outer point of Skjoldungen for the first time and headed for the fjord, we saw a boat in the distance, a small motor boat puffing along the opposite shore of the fjord. We ran up our flag and sailed towards them, and saw that it contained two young hunters, Framnæs-Hansen and Knopf, members of a Norwegian hunting expedition that had just landed and had already started to build houses: Finn Devold with a companion in a fjord behind Graah's winter quarters just to the north of Skjoldungen, Framnæs and Knopf in Dronning Maria valley, Ruti, an old hunter and another in Umanak district at the mouth of Senester fjord, and a fourth group of three men right down at Cape Walløe, just in upon the hunting grounds of the Cape Farewell Greenlanders. At Finn Devold's base a wireless station has been erected and thrice daily is in

communication with Tromsø meteorological station when the men are not out hunting. As Norwegian hunters had done in the northern part of East Greenland, these men were now building small hunting lodges up through the fjords in their district, a short day's journey between each — small shelters, just large enough for one man to spend the night in. And now, in the Norwegian view of it, no one else may hunt within the territory that can be ranged from these huts.

On our travels we met only the two most northerly groups, and, during our brief intercourse, got on well with them despite the dif-

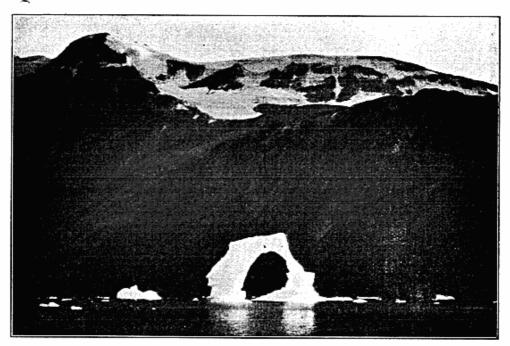


Fig. 11. Kiatak at Umivik.

ference of our views with regard to East Greenland. They were decent, skilful and brave Norwegians whom we will always remember ith pleasure.

They made no attempt to conceal that this part of Greenland had disappointed them, and that it offered scarcely any chance of fur hunting. European hunters do not go to Greenland to hunt seals; they go for foxes only, but there seemed to be no prospect of any profit worth while during the two years for which they were provisioned.

Between Cape Farewell and Angmagssalik there is no hinterland at any spot for fox trapping. Perhaps in the first year or two some furs may be taken, but the animals will soon be exterminated. The coast as a whole is so bare and barren, and the inland ice everywhere comes out so close to the sea, that there cannot be any chance

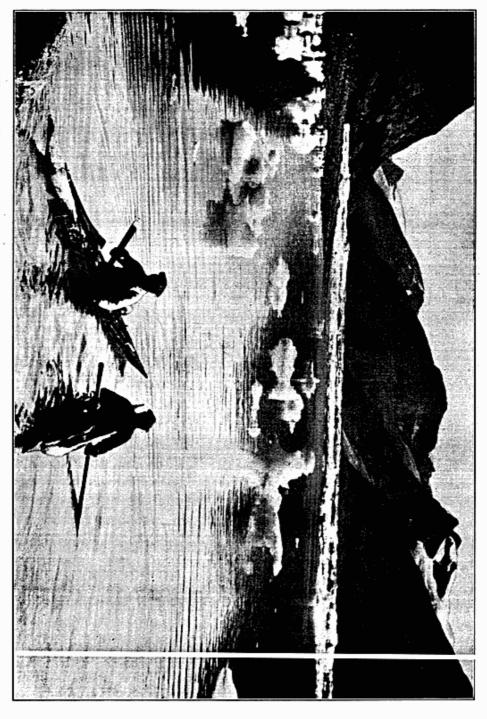


Fig 12. Hunters returning home. View from "Stendalen" in the interior of Lindenow Fjord.

of life for animals that have to live on land. There is not a single hare, for example. There are some bears, which come from the outside, but not even the hunting of these is of any economic importance if the undertaking is to be profitable. It is to be hoped, then, that the activities of these trappers will soon be abandoned, for the region

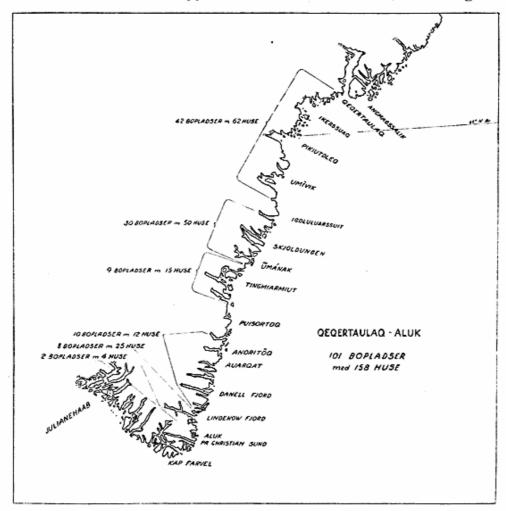


Fig. 13. Dwelling-places (Bopladser) and houses (Huse) in South-East-Greenland.

is one of those where the East Greenlanders have their regular hunting grounds.

This land is the land of the Eskimos, in the proper sense of the word. Only Eskimos can live in it. At the most, all Europeans can do is help to decimate and exterminate the game, but they will never be able to make a living there.