DOCUaENT 1
ANDREW GRAHAM'S BIRD OBSERVATIONS, WRITTEN AT SEVERN, 1768

Manuscript E.2/5, Hudson's Bay Company Archives, Provincial Archives of Manitoba
Transcribed and edited by C. Stuart Houston

Supplementary Document #1 to:
Eighteenth-Century Naturalists of Hudson Bay
by Stuart Houston, Tim Ball, and Mary Houston


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The reasons for placing this material on the world-wide web are given on p. xix of Eighteenth-Century Naturalists
of Hudson Bay. Document 1 should be read in conjunction with Document 2, the Royal Society manuscript of
Thomas Hutchins, but understanding of both will be increased appreciably if the reader first consults Chapters
5, 6 and 10 (Andrew Graham, Thomas Hutchins, Natural History) and Appendix C (The Ten HBC Manuscripts
of Graham and Hutchins) in Eighteenth-Century Naturalists.

Note to reader:
Bold face indicates material not present in HBCA manuscript E.2/12, edited by Glywnr Williams, and
published as volume 27 of the Hudson's Bay Record Society publications, titled
That volume is hereafter abbreviated as "HBRS 27."
Underlining within square brackets indicates additional material from other HBCA manuscripts, particularly
E.2/7, written by Graham at York Factory in 1770.
* after a word indicates an archaic spelling or a spelling error, which I hope is less obtrusive to the reader than
repeated use of "[sic]"
square brackets [...] and footnotes have been inserted by C. Stuart Houston

[Archithinue Indians = Blackfoot; Assinepoet Indians = Assiniboine;
Wechopowuck Indians = Chipewyan.]
DOCUMENT 1
ANDREW GRAHAM'S BIRD OBSERVATIONS, WRITTEN AT SEVERN, 1768

Observations on Hudson's-Bay by Andrew Graham, many years Chief Factor, written with no other intention than for my own amusement, and to pass away an Idle hour in this Solitary part of the world - Andrew Graham.

Book 2d Anno Domi 1768-9

Contents of this Book Page

Hudson's-Bay Indians Tribes of 1 & 2
Trading Indians
their reception at the Forts 2 6
their Calimuts [calumets] 6
their Leaders speech 6 7
Ditto in English 7 8
Factors speech &c 8 9
Observations on Trade 9 11
Arthur Dobbs Esq'
His accusations against the Company confuted &c 11 23
Indians trusting them goods detrimental 23
Castorum observations on 24 25
York Fort Trade
the failure of, the reason 25 26
Woods the burning
of detrimental 26 27
York Fort observations on 28
Author's observations regarding himself 28 30

Note:
The first thirty pages, indexed above, about Indians, the fur trade, and York Factory, are essentially the same as appeared in HBRS 27, and are not repeated here.

Beaver an account of 31 35
Otters and Musquashes 36
Martins 36 37
Jackashes

---------p2
Jackashes an account of 37
Wejacks 38
Seals 38
Wolves 38 39
Wolvereens 39 41
Porcupines 41 42
Cats 43 44
Foxes 44 46
Badgers 46
Winusks 46
<table>
<thead>
<tr>
<th>Animal</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbits</td>
<td>46 48</td>
</tr>
<tr>
<td>Hares</td>
<td>48</td>
</tr>
<tr>
<td>Ermines</td>
<td>49</td>
</tr>
<tr>
<td>Bears Black</td>
<td>49</td>
</tr>
<tr>
<td>Ditto brown and grizle [sic]</td>
<td>49 50</td>
</tr>
<tr>
<td>Ditto white</td>
<td>50 53</td>
</tr>
<tr>
<td>Squirrels</td>
<td>53 54</td>
</tr>
<tr>
<td>Mice and Skunks</td>
<td>54</td>
</tr>
<tr>
<td>Sea-horses and Goats &amp;c.</td>
<td>55</td>
</tr>
<tr>
<td>Moose</td>
<td></td>
</tr>
</tbody>
</table>

------ p.3

<table>
<thead>
<tr>
<th>Animal</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moose an account of Waskesews</td>
<td>55 56</td>
</tr>
<tr>
<td>Deer</td>
<td>58 63</td>
</tr>
<tr>
<td>Buffalo two kinds</td>
<td>63 64</td>
</tr>
</tbody>
</table>
An Account of Beasts &c.

[Beaver]

Beaver are very plenty, Their colour are brown, and some few black. An old beaver is three and a half foot long from the nose to the tip of the tail. The head six inches, the neck one inch, the head being almost close* to the shoulders. The under teeth which are two one half inch long each; the upper teeth are two, three quarter inch long. From the nose to the eyes three inches, from the ears to the eyes three inches. The ears are on the back part of the head; the head 4 inches over. The whiskers which are ten bristly hairs on each side of the nostrils, and are from one and a half to 3 inches long. The fore legs are six inches long, and the claws are three quarters of an inch, and of a horny substance. The hinder legs are ten inches long and the claws one inch, and each foot six inches wide. Its hinder feet are webbed but not the fore. The breadth over the back and shoulders thirteen inches. From the upper part of the hinder legs to the end of the rump or upper part of the tail eight inches. The rump bone three inches over. The tail twelve inches long, and six broad, being in shape of a Brick-layer’s trowel and covered with scales like a fish. And the whole creature

is covered with a fine fur only the claws, tail and the nose end. The Castorum is not the gendering stones but oil stones they lie between the flesh and the skin with a cavity in pouches; when it [word missing] itself, it forces out the oily substance. As to the proper use of Castorum, I shall refer it to the Learned. [The male has the testicles besides E.2/ 7 & E.2/12].

The Beaver harbours about creeks and small lakes where there are plenty of poplar and willows; they chiefly feed on the rind of both, only in the summer they eat another root that grows about the creeks and swamps, but not so plenty as to gather in a stock of it for the winter.

The Beaver builds a House on a creek or lake side, of willows mud and stone intermix’d. It is in the very shape of an oven-crown [inside and outside - E.2/ 7]. In thickness two foot, and has three different apartments, one they sleep in, one they feed in, and one they dung in; cleaning the house out by putting the filth &c in the creek on the lower side. Their provisions the poplar and willows is cut into proper lengths, and laid in the water before the mouth of the house, and as they take the rind off they send the wood adrift with the stream. When they rest, their heads lays to the creek ready to make off when they hear any noise. There are from three to thirteen in one house; it employs them a summer in building it

and procuring provisions for the winter. They dam the creek in the same manner as they do their house, and this preserves water for them in the winter. They also have vaults in several places on each side of the creek, where they fly to when the house is broken open. These Creatures will cut down trees 10 inches diameter with their teeth, and what is most surprising makes them fall towards the creek: One keeps watch while the others are at work. If the House be large they have slave beaver that does the drudgery work. They have their dams under such command that they can raise or fall the water at pleasure. They work in the summer mornings and the evenings. With their teeth they cut down the trees and willows & hauls them to the creek. Their tail and fore feet are employed plastering, and does fortify their dams and houses in such a manner that I think could not be done were they not strong and laborious, [that neither animals nor water can offend them --what is very remarkable, the colder the climate the thicker they make the crown of their houses - E.2/ 7] for when the rivers and creeks breaks open the ice and water comes against their dams with such force, that I have heard the noise above a mile distance, the fall being so great, and yet but seldom damaged. [At York Fort &c, they are two feet thick and inland only six inches thick - E.2/ 7 & E.2/12].

In the summer the Natives shoots the beaver by lying in wait for them, or by coming on them unawares swim[ing in the rivers and creeks &c. [In winter they are not so easily caught - E.2/ 7]. I shall give a true account how the Natives catches them in the winter; having been with them at that sport.
The House, dam and run of the creek &c being viewed before hand by an experienced Indian man, we set out next morning, being eight in number Men and Women. Our first work was to stake the creek across above and below the house, and distance 200 yards [50 yards - E.2/7]; all was employed cutting and bringing stakes to their proper places excepting two men who were employed cutting the creek across with ice chisels, and putting down the said stakes, the next work is to cut a hole a little distance from the house and set a net; and another small hole close by the house. The aforesaid work is performed with as little noise as possible for fear of disturbing the beaver. After which one or more being placed by the net to mind it [which is attended by an experienced man who orders another to strike and make a noise on the house-top - E.2/7 & E.2/12], and one by the above small hole next to the house, the rest proceeds to the house and makes a noise which starts the beaver; & no sooner are they out of their house than the Person at the small hole discovers it by the motion of the water; and gives notice to those at the net, who being upon their guard has the beaver out that instant it comes in the net, it being made to draw round the Creature like a purse, and is put down again immediately; but if one has been in the net and lost in drawing it never comes to the net a second time.

The women breaks open the house with hatchets [and watches their return - E.2/7 & E.2/12], and the men cuts holes along the creek sides, and with crooked sticks finds out their vaults which they stake up, the beaver flying from one to another until the last, where they strike the ice-chisel in him or them. They swim about till almost drowned before they will return to the house; the women having broke it open stays by it waiting their return and knocks them on the head with their hatchets. [If a large house the Natives seldom kills all - E.2/7]. If any escapes by getting the stakes put by, or by other unforeseen windings of the creek, which is often the case, they seek out new habitations until the summer, when they build themselves a new house, and a strange beaver will repair and live in the old one. [The Natives trains their dogs to dive under water, and are so expert as to kill the Beaver. Altho' often times the Beaver bites the Natives and dogs in a severe manner - E.2/7]. In the evening we returned home having caught two beaver, being no more in the house. The beaver skins belongs to the person that discovers the house, and the meat is equally divided among them. The beaver are distinguished by three sizes as whole or old beaver, three quarters and half beaver; the skins of the last belongs to the women.

The flesh of the beaver is reckoned good eating by the [Europeans* as well as the - E.2/7] Indians, either fresh or after drying it in the smock after taking out the bones; it is also esteemed good eating by the Europeans particularly the tail. They breed once a year, and have from two to seven at a time. [Beaver skins are sold by weight in England - E.2/7 & E.2/12]. An old beaver skin weighs one & a quarter pound w\(^{\text{e}}\) [36 oz. in E.2/12] & sells in England from 6 to 12 Shillings per lb. - E.2/12].

Otters are not so large here as in Great Britain, but their fur is better, and also their colour. They harbour about creeks and rivers, where there are fish, on which they feed. They are not numerous.

The Indians shoots and traps them, and eats their flesh. They breed once a year, and have from one to three at a time [two to four - E.2/7]. Their skins sell in England from 15 to 20 shillings each.

Musquamtes [or Musquarats - E.2/7] are a good deal larger than an English rat. They are very numerous, harbouring about creeks and ponds, and builds a house in form of a beaver's but considerably smaller. They feed upon grass, of which they lay in a stock for the winter. The Indians kills them by storming their house, and eats their flesh. Their skins are covered with a fine soft fur; and sell in England from five-pence to 7-pence [six pence to seven pence - E.2/7] each. They breed three or four times [twice - E.2/7] a year; and have from three to 6 at a time.
[Marten]
Martins are numerous [inland but not along the shore, being diminished by yearly trapping - E.2/7], they are caught in small log traps; numbers of their skins are brought to the Factories by the Indians who eat their flesh. They harbour in woods [burrows in the ground - E.2/7 & E.2/12], breeds once a year and hath from two to 4 [4 - E.2/7, 4 to 7 - E.2/12] at a time. [They have all the actions of a house cat - E.2/7 & E.2/12]. Mice is their common food, but they like to eat rabbits when they can get them, or partridges; the head of the last being the best bait for catching them with

p. 37
the feathers on it. The skins of the martins sell in England from 6 to twelve [7 to 12 - E.2/7; 5 to 15 - E.2/12] shillings, and are mostly used in muffins and tippets. This Animal so much esteemed for its valuable fur, is about the size and make of a ferret, and of a dark brown or orange colour. We have endeavoured to tame them and have succeeded a little, but never could keep them alive above one year. I observed they were troubled at times with a disorder that I am not capable to account for, but shall describe. The Creature would be sporting, about when all of a sudden it would lay itself down stretched out, and after giving two or three quick and short convulsive breathings appeared and continued as if dead for upwards of 10 minutes, when all of a sudden it recovers and skips about as lively as ever. This I have been a witness to several times, and different martins.

[Mink]
Jackashes are the size, shape and make of a martin, and of a brown colour, with poor fur. They live about creeks, and feed on fish. They are caught in traps by the Natives the same as martins; [they are little regarded by the Natives - E.2/7] they eat their flesh. They are not numerous, breed once a year, and have from two to four at a time; and their skins sell in England from three to six [2 to 4 - E.2/7; 4 to 7 - E.2/12] shillings.

p. 38
[Fisher]
Wejacks are larger than a martin [larger than a jackash - E.2/7] and are of shape and colour like a Jackash and some few quite black and coarse wire hair [and bushy tail. They harbour in the dry inland country; burrows in the ground, and lives on mice and what they can find. This Animal is remarkable for destroying the porcupine without hurting itself, with the quills, and is the only enemy the porcupine has excepting Man. They are caught in log traps - E.2/7]. They are not over-plenty [otherwise the Natives would bring more of their skins down than they do - E.2/7], harbouring about creeks and feeds on fish. They breed once a year and have from two to four at a time. Their skins sells in England from three to six shillings each and their flesh is eat by the Indians.

[Seal]
Seals are middling plenty along the Coast [especially in the eastern and northern of the Bay, and in the straits; and are the chief food and cloathing of the Esquimaux - E.2/7 & E.2/12] of different sizes, the same as those along the Coasts of Great Britain. They are not valued by the Europeans nor the Indians, who will not eat their flesh. The Esquimaux are chiefly employed killing seals, and sometimes are exposed to the most imminent dangers from these Animals; for a female seal that has young will engage a man with such rage, and bite him, or a hole in his Canoe; and if none of his Consorts in company he must be drowned.

[Timber Wolf and Coyote]
Wolves are scarce along the coast, but inland among the Buffaloe they are very numerous. They are of two sizes, distinguished by the small hunting wolf about the size of a spaniel dog, the other as large as a well grown calf [a large dog and a heifer - E.2/7; an English fox and a British mastiff - E.2/12]: Tho' they go

p.39
in herds, they do not engage the deer and buffaloe, but follow after them until they single one out and destroy it. [They are afraid of the human species. They prey upon one another, tears the natives out of the graves, but
will never attack an Indian. They are generally of a white and gray colour; and some are mottled black, white, and gray on the backs. They are caught in log traps and at set guns. They gender in March or April, and go as long as a bitch, and of the same nature, having a great many at a time, and only breed once a year. Numbers of their skins are brought to the forts by the upland trading Indians, who do not eat their flesh but in times of necessity. Their skins sell in England from twenty five to thirty shillings a piece.

[Wolverene]

Wolvereens or Quiquahacks are plenty, they are larger than a badger and very strong, of a hog kind, carrying its head low, and back high when walking. They are four foot long from the nose to the tip of the tail, and the tail ten inches long, and very bushy; the body thick, and their legs short and thick, so that they are but slow footed but very mischievous, for he will not think much to walk in peoples tracks in winter when they are a martin hunting for forty or 50 miles, and not have one trap un-pulled down, tho' the only benefit he gets for this labour is the baits, which is commonly a partridge head, or wing; for he will not eat martins, but takes them out of the traps sometimes biting them thro' the middle or tearing them to pieces; but most commonly takes them out whole and carries both broken and whole some distance from the traps, and to one side of the track where he hides them under the snow, and when people hang dead martins in a tree which they always do when going away from their tent that they may not have them to carry out and home, he will take them down and conceal them. When the owner of the traps returns the track of the rogue directs him to where the martins are hid, but should bad weather come and the track be covered with snow, or a fox come who will eat the martins, the owner is obliged to put up with the loss of the martins besides the trouble of repairing the traps, which is not inconsiderable, having every one to bait afresh with new baits and bait sticks. There are always a fox or two, follows the Quiquahack's track that must not come within reach of his claws, for they nor no creature in these parts cares to engage them. As soon as the martin hunter discovers the track of the Quiquahacks they build strong traps, and set guns with little baits of dried deer's flesh, and if not wounded before, they are not shy to take either; for which they commonly suffer. They often make the Natives go hungry in the summer by destroying their store of provisions, which are hid underground when they are absent. They also break open beaver houses, but seldom get anything by that, as the beaver takes to the water where the robber cannot go. When they find out deer they place themselves in a tree in their fare-way, and when comes near enough makes a spring on its back, and with his teeth seizes the deer by the neck, and never quits the hold till he drops down dead; on which he feasts and that very heartily. They harbour nowhere, but travels from place to place in search of food, which is chiefly mice. They are commonly pretty fat. The Indians eat their flesh, and brings their skins to the factories to trade. They are dark brown coloured with a white ring round their neck. Their fur is coarse, tho' their skins sell in England from 18 to 21 shillings. They breed once a year, and have from two to four at a time.

[Porcupine]

Porcupines are pretty plenty, especially towards the labrador, they are the nearest likeness to a hedge hog of any creature I know, but considerably larger. The head like a rabbits, their nose flat covered with short hair. They have four large teeth, two above and two below; they are strong and yellow coloured and curved like unto the beaver. With these teeth they gnaw the rind off the Juniper trees which is their food. The ears are small not appearing above the hair; their legs short and toes long and sharp, by which they hang, and goes round and round the trees feeding. The fore feet has fingers resembling a Child's hands, and the hinder feet have five toes, so that it has hands and feet like Christians, and some Europeans will not eat their flesh for
that reason. The tail is full of small quills, which is thick towards the body, and tapers to the end, from four to six inches long [3 to 5 - E.2/7]. Their body is covered over with soft fur, and the back as well as the tail is full of quills of white colour; all but one quarter inch at the outer ends which is black, having a sharp point and is barbed. *When they walk they carry their tail a little bent upwards,* and no other Animal dare discommode them upon account of their quills. They do not dart them, but leaves them in the object that touches them. They are a slow Creature, not travelling above a mile [two miles - E.2/7] in a year, and are found out by their barking the trees; and when a person comes near them they get up a tree where they sit crying like a Child till it is cut down, and then it gets a knock on the head with the hatchet which puts an end to its life. They gender in Sept* or October, and bring forth their young in April or May.

p. 43
They have only two at a litter, and one of them is brought forth dead. The skins and hair are of no service but the quills are used by the Indians for belts and garters &c. Their flesh is fat and eats as fine as pigs flesh.

[Lynx]
Cats are not plenty about the sea coast, but are very numerous inland. *It is a fierce looking Animal, yet very harmless.* They are about the size of a small sheep and of a beautiful black and white colour. [They are expert in climbing trees, otherwise they would be destroyed by the wolves and wolvereens - E.2/7]. They harbour in woods and feed on rabbits chiefly, whom they kill by sitting in trees close to the rabbits tracks, and as they pass springs upon them from the trees, seldom missing their prey, for if one tallon* catches, the rabbit is soon dispatched. What few the low country Natives kills is at set guns and traps, but they are very shy to be got that way. Inland where they are plenty the women for the most part kills them by making a noise. As soon as they see them, the Creature gets up a tree and stands stupefied till it is knockt on the head with a hatchet or stick. [The cat kills Deer by springing upon them from a tree. They cut the tree down and the dogs seizes them - E.2/7 & E.2/12]. They are fine eating for the Indians or the Europeans when they can get them. Their skins and fur are very fine, and are brought to the Factories and traded. They sell in England from 12 to 15 [15 - E.2/7] shillings apiece.

p. 44
They breed once a year and have 2 at a time. They have no tail but a scut* like a rabbit, and their legs and feet are the same as the rabbits only larger.

[Red Fox and Arctic Fox]
Foxes are plenty of different colours. They burrow in summer, but in the winter they stroll about from place to place for food, which is chiefly mice; and rest in the snow under the branches of trees &c. They are caught at setting guns &c in traps by the Indians and English. They are distinguished by the red, the mix colour and the grizle*; the red is the largest size, and the mix colour something smaller and the size of an English fox. The grizle is the smallest of the three and scarcest, and their skins sell in England from eighteen to twenty-one shilling[s] each, and the red and mix colour for eight and ten shillings. They have all a white tip at the end of their tails. They breed all about the Coast & have from two to four [three to five - E.2/7] at a time. The Indians eats their flesh [The natives near eats foxes but in times of necessity - E.2/7] and brings their skins to the Factories, but they are so shy that no great numbers of them are killed. [There are foxes of a mixed colour which proceeds from having an intercourse with one another - E.2/7]. There are another fox smaller than any of the former of a milk white colour only a small black tip at the end of the tail. They only pay us a visit once in four or five years and then it is in winter, and at the end of storms of north west winds and snow. At such times there are numbers of them almost every day killed by the Europeans at set guns and traps, for these creatures are so ravenous that when one is caught in a trap the next that comes will eat of it alive, so that we are obliged to attend our traps and guns very close when they are upon the coast. The People who looks after them often sees them take the baits, and if there are another fox near, the Man makes what haste he can and takes away the dead
one, at the same time the other is playing about not above one hundred yards off, and goes to one side of the
gun or trap and conceals himself behind a tree or bush till the other comes and takes the bait.
They come in such numbers that I have had four hundred killed at my own guns and traps from November to
March, and in a whole season I never killed above thirty coloured ones. Where the white foxes breed is
unknown to us, but am of the opinion they come from the N.ward. They are so tame I have seen them running
within the works of Prince of Wales's Fort. Their skins sell in England from three to five [2 to 4 - E.2/7; 3 to 4 - E.2/12] shillings each. [White foxes, nor no other kind of foxes, changes colour. They only shed their valuable
winter coat for a dirty summer one. I have endeavoured to tame them, also the martin and wolf; but did not
succeed. - E.2/7].

[Swift Fox]
Inland in the muscuty or Archithinue country [Blackfoot Indian territory and what is now southern Alberta and
southwestern Saskatchewan] [and Assinepoet Indians1 yearly sells to the Keskachewan Indians,2 who brings them
down to York Fort. short fur and little value - E.2/7 & E.2/12] are foxes with a whitish

p. 46
gray colour, smaller than the white. They are very numerous, and about four thousand of their skins are brought
to York Fort and Prince of Wales's Fort. The Company puts them among the good foxes and sells them off in
lots [and sells for 9 to 12 shillings per skin - E.2/7; 10 shillings - E.2/12]. I have heard much talk of a
black fox, but never seed any without a white tip at the tail and white hairs on the rump. [They all
breed once a year - E.2/7].

[Badger]
Badgers are inland but I believe not plenty, the Indians bringing but few of their skins to the Factorys. They
are of the size and colour of the English badger, and are not eat by the Indians. Their skins sell in England
from three to six shillings each.

[Woodchuck?-csh] [Raccoon incorrectly in HBRS 27, p.26;]
Wenusks so named by the Indians, they are very much like the cat only smaller. They are not plenty; they feed
on grass, and breeds once a year; having from two to four at a time. [Inhabits far inland, I dont know whether
they are numerous, but not a great many skins are brought to the Company's Forts. I shall say no more having
never examined the natives concerning the nature of this animal, - E.2/7]. Their flesh is eat by the Natives;
[the natives dislike the flesh - E.2/12] and their skins sell in England from three to six shillings each.

[Snowshoe Hare]
Rabbits are numerous but not so large as in England. They are white in winter, and gray in summer and are of
p. 47
great service to the low country Indians for food and raiment. They are caught in snares for the most part by
the English and Indians, only now and then the Indians shoots them. They do never burrow, but lays under the
wind-fall trees and harbour among young pine trees feeding on the spruce and willows. They breed twice a year,
and hath from five to eight [2 to 4 - E2.12] at a time. Their skins are of so little value we do not trade them
from the Indians, who cuts them into long slips when green, and works them mat fashion into square garments
which are very warm, serving for an outer garment in the day, and coverings for their beds in the night. The
rabbits seldom shift their ground but when the woods are set on fire, by which many of them are destroyed.
Rabbits is snared in the following manner: When the hunter has found out where they harbour, which he
knows by seeing their paths, which they commonly keep in the night time when they feed, he falls trees across

1 Assiniboine or Stony Indians

2 Plains and Wood Cree near the Saskatchewan River
their paths, and at every path branches the tree about eighteen inches, and puts a stick on each side stuck into
the snow or the ground, through between these two sticks the rab-
p. 48it is to come, and is called the doorway. In each of these doorways are set a snare of common sewing twine, so
wide that a person can just put his hand through, and is kept extended in its proper position with small twigs
of brush, that gives way when the snare is touched; the other end being fast to the small end of a pole, which is
stopt by the middle to a tree, and is ballanced in such a manner the small end being fastened down to the tree
that lies across the path with a running knot, gives way, when the heavy end of the pole falls down, and the
rabbit is tossed four or five feet from the ground.

[Arctic Hare]
Hares are found among the rocks at Prince of Wales's Fort, and along the coast to the northward as far as
discovered, and on the eastern coast and about the straits. They are about the size of an English hare
[smaller - E.2/12], and change colour to white in the winter. They breed once a year, and hath two at a time;
they are not plenty, not above six are killed at the above fort in one year. The English and Indians informs
me that hares [White-tailed Jackrabbit] are very plenty inland in the Ascenepoet and Archithinue
country, but not so large as in Great Britain.

p. 49
[Ermine]
Ermines or Weazels there are, but not plenty; they change colour from gray [brown - E.2/7 & E.2/12] to
white in the winter. Their chief food is mice, but now and then they get a rabbit or partridge by springing
up on them when they are at rest. They breed once a year, and hath from ten to twelve [6 to 10 - E.2/7] at a time.
Their fur is fine and would make fine muff and tippets for my fair country Women, but they are so
scarce [and difficult to be caught that they are not regarded - E.2/7 & E.2/12] that I never had so many as would
make a single muff and tippet.
N.B. The rabbit, hare, Ermine and partridge are the only Animals that changes to white in the
winter in this country.

[Black Bear]
Black Bears are plenty inland, about the size of a Heifer. Their chief food is berries, They are very harmless
creatures and are shot and trapped by the Natives, who eats their flesh. They breed once a year, and
hath two at a time. Their skins sell in England from twenty eight to thirty two shillings each [30 to 40 shillings
- E.2/12].

[Grizzly Bear]
Brown and grizle Bears are inland amongst the Buffaloe, on which they prey. They are very large, and if
wound-
p.50
ed will make at an Indian and tear him to pieces, for which reason no single person cares to attack them except
in thick woods. They breed once a year, and hath two at a time. The Natives eats their flesh, and
what few skins they bring to the factories sells in England from thirty to thirty-six shillings each.

[Polar Bear]
White Bears are of a surprizing large size, being as weighty as an English Bullock. They harbour among the
ice [in the Bay. The male keeps there all the year - E.2/7 & E.2/12] and along the shores preying upon seals &c,
but when poor times puts up with grass or sea-weed. They leave the sea-shores in the fall of the year and goes
some distance inland, and brings forth their young, which is commonly two in November, after which they
harbour under snow drifts till march, when they return to the sea-shores with their young [which in the above
month are the size of a large lamb; by easy journies - E.2/7]; they are fierce and must not be attacked by a single
person without he is near the woods or in deep snow. They are shot by the Natives and their skins brought to
the factories and sell in England from twenty-five to thirty shillings each. The Indians eat their flesh and mix the oil with berries, which is a favoured dish. The Gentlemen in the Ships kill several yearly in the Straits and Bay amongst the ice, which affords fine sport; in following them with the boat when close engaged they will turn and endeavour to get their fore paws on the boat's gunnel, which I have been an eye witness to. To prevent them from doing any mischief, the boat is manned with a proper Officer, a boat steerer, six able seamen and the Shipwright or his Mate with his broad ax to chop off his paws if ever he offers to board the boat. While the Officer is firing at him with ball, this creature swims to and fro making a frightful noise until he is dead. He does not sink but floats heavily, so that his hair is equal with the water surface. They tow him alongside the Ship and hoist him on board, and hangs the skin when stretched on the ships quarter, and the blubber, which will fill a barrel is preserved, and after the Sailors have taken of their favoured stakes, with the heart and kidneys, they throw the remains overboard. The white Bears in Hudson's-Bay will hurt no person unless close attacked, then they are fierce, and will tear the Offender to pieces. A proof of their not being the first offender happened whilst I resided at Churchill: One of the Company's Servants returning from the Fort to his tent with a loaf of bread, a two gallon rundlet of strong beer and other necessaries in a bag on his back, on his crossing a narrow thicket of willows was surprized by a white Bear lying asleep, who with great ease arose and stretched himself, and rubbed his nose, and smelled, and snuffed against the man's bag, he having the great presence of mind to take the bag from his back, and hold it with both hands before his breast. No offence being given on either side, the Animal quietly turned round, and gently walked away, leaving the man standing amazed. It was every one's opinion, as also the opinion of the Natives, that if he had in the least startled he would have been devoured in an instant. I shall mention two recent instances more of this Animal. On the 24th of August 1768 two young Indian Boys having imprudently fired at a Bear, missed and slightly wounded it; the enraged animal ran at them and caught one of them by the loose garment, which the Boy slipped, and by so doing saved his life; the Bear being busy tearing the garment to pieces. This wise practice is always used by the Indians when pursued by those animals. On the 10th February 1769 four Englishmen belonging to Severn House whom I had sent to build a gang of martin traps, fell in with a white Bear and two young cubs whom they engaged, and after firing several balls into her body which brought her down in the snow, where she lay roaring and bleeding, till one of them imprudently going too nigh her with only a hatchet in his hand, she made two leaps at him, and the man endeavouring to flee from her, she shoved him down, and with her paws tore his buttocks, and at the same instant bit one of his snow-shoes to pieces with her teeth; then immediately threwed herself backwards to her young charge, making a hideous noise, and by so doing the man made his escape.

Squirrels are of three kinds; The common squirrel the size of a Weazel and red coloured, harbours in the woods, and feeds on the pine apple, and on all along the coast. The flying squirrel, the size of a bat, and gray colour'd, having a thin flap that supports it when springing from tree to tree to the distance of ten yards at a time; they are not plentiful.

The ground squirrel is as large as a house cat, and of a red and white colour intermixed. They feed on grass and willows, and the flying squirrel feeds on Birch and poplar leaves &c.
They sleep most part of the winter, and breeds once a year having from four to 6 [8 - E.2/12] at a time. Their skins are not valued by the English. [They are all of a red colour, fine fur but so small they are not regarded. They are very brisk in summer, and affords excellent sport to English and natives when hunting them. - E.2/7].

**[Voles and Mice]**

Mice are numerous, of many different sorts harbouring in the woods and plains, feeding on grass.

**[Striped Skunk]**

Skunks are something larger than a white Fox. [larger than a Martin. They burrow in the ground - E.2/7]. They are not plenty along the western Coast, but are plenty on the southern Coast of the Bay and inland towards Canada. Their chief food is mice and frogs. The Natives catches them in traps. Their colour black and white. No other creature cares to meddle with them, they having a bag which contains a secreted matter which they squirt with great force four yards at the offender, and an Indian is very careful to avoid coming within reach until he has killed it. Several Indians have lost their eye-sight by having that poisonous liquid squirted on them unawares, and the smell is so strong that nothing can be clean that has been once touched with it. Their flesh is eat by the Indians, but their skins are of no value. They breed once a year, & have from six to ten [2 to 4 - E.2/7] at a time. [These are the animals that produces the furs yearly sent home - E.2/7].

**[Narwhal]**

The Seahorse or Unicorn fish are to be found [plenty amongst the islands in the eastern and northern parts of the Bay; are killed and eat by the Esquimaux - E.2/7] on the Eastern coast of the Bay, and are seen yearly by the Sloops people lying upon the rocks, but they kill very few. They are twenty foot long, has a smooth dark brown skin, and haired like unto a seal, their head sharp and their mouth small. From the left side of his upper lip runs straight out a double-twisted horn, from six to ten foot long, as thick as a man's wrist, hollow inside, and composed of a clearly firm bone. He feeds on sea-weed, and I don't doubt eats seals &c. They lie on the rocks basking themselves in the sun and will fight with one another terribly as they have strong teeth. Their skins are an inch thick, and their blubber five inches.

Horses, Asses, Goats and several other Animals are in the interior parts of the Country, among the Archithinue Indians.

**[Moose]**

The Moose so named by the Indians is much the same as the English elk deer; there are none along the coast, but plenty inland [beyond the lakes - E.2/7]. The Natives shoots them; they do not travel about like the common deer, but will feed in one plain a whole year if not disturbed. [The wolves dare not attack them openly. even the natives must take care how they come upon them in the rutting season - E.2/7]. Their meat is dryed by the Indians, and now and then a little brought to the Settlements, as also some bladders full of their fat. They are faster than the deer, and would be fine eating could we have it from the Natives green, but the distance inland makes it impossible. I have had two or three times in the winter a moose nose brought down by trading Indians, which is very fine eating. They feed on the white moss and birch willows in winter, and upon young grass in summer; they breed once a year; and have two at a time. Their skins sell in England from four to five shillings each, and am informed makes buff leather. [I forgot to observe that the rein-deer are plenty on the eastern and northern coasts of the Bay. The Esquimaux to the northward of Churchill are cloathed with their skins - E.2/7].

**[Elk]**
Waskeesews are as large as an English draft horse and clean made. Their horns are large and broad with many branches. They always harbour among themselves, feed on moss &c; are very plenty, swift footed, and are with the Buffalo the support of the natives in the interior parts of the country. They appear further inland than the moose, so that none of their flesh is brought to the Settlements, and no Europeans hardly ever taste of it, only those that goes inland to promote trade, and it is chiefly their food after they are got about seven hundred miles inland. They inform us they are very numerous, and their flesh is fat, and is as fine eating as any beef. The Indians shoots them with fowling pieces, but their stock of powder and shot being small and soon is expended they kill them mostly with their bows and arrows. The Natives dress their skins and wears them for cloathing, and brings a few to trade with us, but they are not encouraged to bring them in case they should neglect catching valuable furrs, as they have them so plenty. Their skins are not so thick as moose skins, tho' they are sent to England under the same name, and are sold as such.

I observed several Authors that makes mention of an Animal, which they call an "Elk found in Muscovy, Sweden and Prussia, but most commonly in Canada, and North America. It is of the size and nearly the shape of a Mule, but its snout is bigger, it has a short tail and cloven feet, and has a large horn called a Ramage, that weighs three or four hundred weight, for the sake of which and its skin 'tis frequently hunted and killed." I cannot pretend to say what may be in the three first mentioned Countries, or in the southern parts of Canada, but am certain no such Animal in and about Hudson's Bay or the Northern parts of Canada was or is to be found, as I have made it my business to find out every Animal &c in this part of North America, but can find none, but what has two horns growing out of its head.

There is no such animal in Great Britain. A pity we could not be fully acquainted with this noble animal.

[Caribou]

Deer are of several sorts, and very numerous, and are the chief support of the Europeans and Natives for food and cloathing. They pass and repass along the coast spring and fall in herds of many thousands. Towards the lower part of the neck is a small bladder full of fine hair of a flax kind, which goes round and round and parts at a vacant opening, where some of the ends are sticking out, the opening of the bladder being upwards toward the head of the beast; and is the buck deer chiefly that has such. I should be glad to know what service it does the Creature. The deer ruts in September, and casts their horns and yards at that time, when the doe is fat and the buck poor, and not fit for eating upon account of its flesh tasting musky and strong. They fawn in the beginning of June, at that time they are crossing the rivers going southward where the Indians spears a great many in the water. Sometimes we have the pleasure of seeing this hunt when there are Indians on the plantation. That instant a deer or herd is seen in the river, all the canoes are manned and goes after them, the women and children with their dogs hinders them from landing on the factory side, where they run up and down making a noise and heaving stones at the deer, and some of the canoes keeps them from landing on the other side whilst the others are killing them with spears, bayonets and knives, and sometimes the poor creatures are so spent swimming, that some of them puts ashore, where they fall into the hands of those on shore, so that seldom any escape alive. As soon as they are all dead the canoes tows them to the shore, and if the Indians are hungry, happy are they that can cut fastest without paying any regard to the skins, one taking a leg skin and all, another a shoulder, and a third a rump &c, and so on till they have devoured all. At such times it is a great favour for a Chief Factor to get a single joint for his own table, although he pays double value for it. But it is often otherwise, I have seen the
Indians bring such quantities of deer's-flesh in the summer to the Forts that we would buy no more from them after all the salt was expended, the carcasses lay spoiling

p. 60
with the hot weather in great quantities, and then the skin was only regarded, for they got as much for a buck deer skin as they do for a beaver’s. [There is seldom a year passes that less than five thousand Deer lies rotting along the sides of the rivers exclusive of what must drive out to sea; and what is still more surprising very few Deer-skins are saved. This observation with many others I thought it my duty to lay before the Board last year.] The Deer are not to be found inland beyond the great lake. When the deer are scarce the Indians hunts them in the summer in the woods and plains, and always in the winter. In the summer they discover their paths in the moss and swampy ground, and in the winter by the snow. When they see the deer they do not follow their paths, but observe which way they are going and makes what haste they can to make a compass round them and come in their for'way when they kill one, the others runs a small distance and turns round, by so doing one Indian will kill more or less before the herd makes off at full speed. Windy rough weather and keeping to leeward of them favours the hunters greatly; the first hinders the Animals from hearing, and the last prevents them scenting their enemies. The Deer are short sighted. I have been to the leeward of them when they have come within thirty yards of us. They do not continue plenty along the sea-shore only in the height of summer, they cannot rest inland for the musketoes, but are obliged to come near the sea where it is more cool, and from the month of November to April it is rare to see a deer’s track

p. 61
within ten or twenty miles of the sea. The English as well as the Indians kill numbers of deer by snaring them in the following manner viz. They rail the woods along five foot high for three four and five miles distance, leaving openings three foot wide about eighty or a hundred yards from one another. In each of these openings is set a snare of two and a half inch rope, but the Indians snares are made of thongs of leather or the roots of trees. The snare has one end made fast to a standing tree, and when there are no standing tree at the door-way they have a false one from ten to twelve foot long, and the end of the snare is made fast to the middle of it, so that when the deer is fast down it falls, and if it is not too weighty the deer hauls it till he is brought up between two trees, where he pulls and hauls and soon kills himself. The snare goes with a running loop at the other end, and so wide that a buck deer may put his horns through, tho' they are sometimes caught by the horns or legs; the lower part is just as low as a man's knee, and the sides are stop't with weak grass or bass-stuff to keep the snare extended in its proper position, so that when the deer comes into the snare the stops easily

p. 62
gives way, and the loop runs close about him. It’s all on which side of the hedge they come on, for if they are not frightened they walk along it till they come at a door way, at such times they seldom put aside the snares, but if the herd are surprized they break through the hedge and snare places without being caught. At York Fort and Severn Rivers I have known thirty deer killed in one day in one of these hedges, and at the time that the people were taking them out of the snares and skinning them the herds were breaking down the hedge on both sides of them. The deer feeds on the white ground moss, and moss from the juniper tree and willow buds and leaves. We have some of them brought to the forts alive when young, and have become so tame, that they would follow the people up and down within the Forts, and into their apartments, and eat bread, peas, oatmeal, plums and rice out of their hands. Several of our Gentlemen hath attempted to carry them to England, but all in vain, they dying on the passage; however they had better success with two young moose that went home from Prince of Wales's Fort in the year 1767; The Company presented them to the King.

3 Graham was on furlough in Britain in 1769-70

4 Lake Winnipeg
The deer’s pelts are dressed and dried in parchment, and we send them home to the Company under the separated denominations of buck and doe skins, and they sell from five to seven shillings each.

[American Bison]

Buffalo are numerous inland beyond the waskesews, only sometimes they come down among them in the summer, and returns upwards again towards the fall. The Archithinue Indians who feed always on buffalo follow them on horse-back from place to place, sometimes killing them with bows and arrows, and at other times driving them into pounds made for that purpose, where they destroy numbers at one time. [Asinopoet Indians make pounds and drive one hundred at one time and kill them with launces - E.2/7] after they are in they kill them with spears &c. [This plenty of beasts and the easy manner of killing them induces the Keskatchewan Indians to harbour in that country and not come down with furs to York Fort as before observed - E.2/7]. An Englishman informed me, when he was in the Archithinue Country, that he seed the Buffalo passing their tents in such droves for two days at a time that they could not see through between them. These Buffalo are as large as English cows, they have a hump between their shoulders, short curved horns, black hair in general, and a bushy tail. I have had a few of their tongues brought down by a Leading Indian as a present, but they being dried in the smoak, I, nor my Mess-mates could not eat them. The Archithinue Indians are cloathed in Buffalo skins, and will eat nothing else if they have any of their flesh, which they seldom or ever want. Some of their skins are brought to the Factories, and are sent to England as moose skins, and are of the same value.

Musk-Ox [The learned names this animal the Musk-Ox - E.2/7 & E.2/12]

Another kind of Buffalo are killed by the Wechepowuck Indians not above a hundred miles distance from Prince of Wales’s Fort, where they bring in the winter time from two to four thousand weight of their flesh upon sleds, which the English buys from them. It eats dry and musky. They are about the size of a heifer [the height of Highland Cattle - E.2/7], their legs short, and hair black and longer than the other Buffalo’s. They have short black curved horns, and a large head, the fore and upper part of which is solid bone. One of their heads will weigh from a hundred and thirty to a hundred and fifty pound weight and one sent home to England as a curiosity. The Indian name for this creature is the ugly moose: they eat their flesh and use their skins for cloathing.

[Dogs peculiar to the country are the fox and wolf breed, and like them never harks but hollows*. They are small, smooth hair’d, but strong and very serviceable to the natives in hauling their luggage, and children, also killing Beaver, Cats, and sometimes Deer. They* Esquimaux dogs are the Newfoundland breed. The English are supplied with dogs from England & are very useful for hauling fresh provisions &c in winter that are caught by the men abroad. - E.2/7]

Birds of passage viz.

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7 Plains Cree

8 Chipewyan
The Eagles an account of
Snow-Birds
Red-Birds and Black-Birds
Geese of kinds
Ducks
Swans
Cranes
Curlews &c
Pelicans
Water-Birds of kinds

Birds inhabitants

Pigeons
Whiskijohns
Partridges of kinds
Pheasants
Chipethews
Owls
Hawks &c.
Wood-peckers
Fish viz. Sturgeon &c.
Trees viz. Pine trees &c.
Shrubs &c. Wishecumpucka &c.
Berries
Scurvy-grass &c.
Insects and Reptiles
viz. Musketoes &c.
Stones &c.

---- valuable furs

pp. 2-17 re Indians
p. 18, The 70 beaver traded for his annual supply
pp. 19-30 re furs
p. 31 An Account of Beasts

[BIRDS]:

p. 65
Birds of Passage

[Bald Eagle and Golden Eagle]
  Eagles are the first that comes in the spring. They make their appearance in the month of march, and brings
forth their young in may, and goes away in the fall of the year. The Eagles are of two colours, the black,
and white; but not so large as those in England.

[Snow Bunting]
  The next that comes is the snow-birds so called by the English. They are the size of a gray
linnet; the cock bird is speckled black and white, and the hen brown. They make their appearance in
April when they are going northward, keeping in large flocks, and feeding on the seeds of grass. [They don't
breed along the coast, but somewhere to the northward in the uninhabited lands, for not one is to be seen after the first of June - E.2/7 & E.2/12. They return from the north-ward in September, and continue with us till the ice begins to drive in the rivers, then they are very fat. At that time we kill some of them with a net made for that purpose, which is put in a frame and set on the ground, one side being kept up by two sticks, and under it is scattered a little oatmeal or seeds of grass, and when they come to feed, the two sticks having a string fast to them is hauled out at pleasure, when the net falls down and all that are under made prisoners. They eat very fine in a pye. They are the last bird that goes away in the fall, and the frost comes on so suddenly that their legs are so froze that some are not able to feed standing, but lie on their breasts, and am certain can never get off the coast.

There are many kinds of small birds that visits us in the spring brings forth their young and in autumn retires to a warmer climate, but none of them remarkable for singing - E.2/7.

[American Robin]

Soon after the snow-birds comes the red, and black Birds [bastard Red birds. They make little or no noise - E.2/7; E.2/12 describes their song]. They both make their appearance so nigh one time, that it is hard to know which comes first, tho' it is said the red does; and the weather is so cold after they come, I have seen them so benumbed, that they could neither walk nor fly, and have took them up and kept them in a warm place, but they soon dyed. They are not the right red bird, being mouse colour on the backs; the cock has a red breast, and then hen a gray one. They are the size of an English thrush, and make their nests in the pine tree, the materials of which is hair, grass & mud, curiously intermixt. I have had them took out of the nests young, and they fed on flesh of any kind when it was fresh very hearty, and did also eat oatmeal and bread, yet soon after their confinement they fell of [sic=off] their flesh, and at last are nothing but bone and feathers, and the longest I could ever keep them alive was fifteen months. [In autumn they retire to a warmer climate - E.2/7 & E.2/12].

[Rusty Blackbird]

Black-birds are rather smaller than the red, their back and tail is as black as the English black-bird, but the breast and belly is of a dark gray colour. They make their nests in the pine trees the same as the red-birds, and feed on carrion. I as well as many more have endeavoured to keep these birds in cages to send to England, but failed; they after losing their flesh dyed the same as the red-birds. They are plenty at York Fort flying in large flocks amongst the woods and willows, and has a fine note when at liberty, but are scarce ever heard after confined in a cage.

[Canada Goose]

In the beginning of may comes the large gray geese in quest of food and water in the marshes, from ten to thirty in a flock; and continues untill the twentieth current when they retreat into the plains along the coast to breed, and returns again to the marshes with their feathered young about the middle of August, and continues flying to and again until the beginning of October when they make off to a warmer climate.

They have long necks and very long legs in proportion to their bodies, when in good order they weigh from ten to twelve pound w. [9 lbs. - E.2/12] The Indians destroys numbers of gray geese in the summer when in their moulting state, and the young ones before they can fly, killing them with dogs and sticks: they bring a good many of their young alive to the Factories, which we buy from them and cuts their wings and they walk about within the works in summer, and feeds on grass, and in the fall of the year they are fed with oats, on which they thrive surprizingly; and at the setting in of the winter are killed and preserved sweet by the frost, and are kept for the Masters tables being very fine eating in the
winter when roasted. Numbers of them are carried home to England in the ships where they thrive and breed.

[Snow Goose]
About the middle of May comes the white Geese called by the Indians Wawawuck, and along with them the small gray, blue, laughing, and brant geese, and divers kinds of Ducks, and numbers of different kinds of small birds. At the breaking up of the rivers and along the coast of the Bay comes innumerable quantities of water fowl, and continues untill the setting in of the winter, breeding on the Islands &c.

p.69
The white Geese comes in such numbers and flying from fifty to a thousand in a flock, that the marshes along the coast are covered with them, flying to and again till June, then they retreat to the northward to breed, but where they bring forth their young is not known, as they are not seen by the northern Natives, nor by the Gentlemen that have been on the discovery in the northern parts of the Bay. 'Tis the opinion of most of the Gentlemen in Hudson's-Bay as well as my own, that they breed in that extensive unknown track of land to the north-west of Prince of Wales's Fort. They return with their young to our marshes in the beginning of September and fly to and again until the first quarter of October when they leave us and goes southward. They are the shape and make of an English goose weighing from 4 to 5 pound wt. Their pinion feathers are black, their crown of the head of a yellowish and smells musky, their bills feet and legs like the English geese, all their other parts milk white. They are more numerous than the other kinds and their flesh, feathers and down more esteemed by us.

At Prince of Wales, York, and Severn Settlements, are killed yearly above ten thousand of these geese only.

p. 70
[Blue morph of Snow Goose]
The blue geese are the size, shape and make of the white geese, and are as numerous at Albany, Moose, and East-main Settlements as the white geese are at Prince of Wales, York Fort and Severn, but have very few white geese at the southern Settlements, and as few blue at the northern; there not being above 20 or thirty blue goose killed at Prince of Wales's Fort &c in a season. At Albany Fort only, are killed above ten thousand blue geese in one season; geese being their chief support at that Settlement and Moose Fort; deer being very scarce in that part of the Bay.

[Hutchins' Goose]
The small gray geese are the shape and make of the large gray goose, but smaller, being a size under the white geese, and with whom they pass and repass in large flocks. They are killed and stored up by us, but are not held in such estimation as the others, by reason of their tasting fishy; they always feeding on the salt water grass,

[White-fronted Goose]
The laughing geese are a size smaller than the large gray goose; light gray colour on the back, and mottled black and white on the breast, their bill, legs & web of the feet yellow.

p.71
They are not plenty, and flys along with the white and small gray geese. They eat fishy, and are not esteemed by the Europeans* but the Natives holds them in such Veneration, that they are never eat by them without singing, dancing, drumming, smoaking and talking.

[Brant]
Brant geese are numerous all along the coast, but never fly inland; always feeding about the sea shore, and brings forth their young on the islands near the shore. They stay all the summer and goes away in the autumn southward. They are the size, shape and colour of the English brants, and are neither esteemed by Europeans or natives.
The aforementioned geese are the chief support of the Europeans in Hudson’s-Bay. The Natives kills them in the following manner: They make each a stand in the marsh a hundred yards distant from one another, of willows and brush quite round, about sixteen inches high, and just room for one person to sit in. The stands are always in a direct line, and commonly across the marsh. The oldest man takes his stand next the high water mark, and so on, the youngest having the inside birth [berth]; and if any person does not like his birth he may shift along the marsh either way, but must not make another stand within two miles of the main body of hunters; the rules being to sit in a direct line, and not one before another, and by no means to stand upright. Each man has two or three fowling pieces, and they have boys about ten years old that can call the same as the geese, and when a single goose is seen flying tho’ at a great distance, and flying from them, the boys immediately calls out, and if it is within hearing round it comes and is killed; and if a flock, they call them round and round till the Men has discharged all their pieces; even when the Men are reloading, at which they are very quick the boys by continuing the call keeps the geese playing about, when the men often discharges their pieces a second time killing from one to four at a shot. An expert Hunter will kill from seventy to one hundred per day. They are salted and pickled by us in casks [We sometimes salt them round, and sometimes split - E.2/7], and will keep good for three years, but if kept longer they rust and rot. The feathers sells in England from twenty-pence to two shillings per pound w[4], and the quills from twenty to twenty two shillings per thousand.

Ducks

Ducks are numerous and of different kinds and sizes, as the stock duck,9 whistling duck,10 and small kind of stock duck,11 and the tail duck12 &c. They all breed in the plains and swamps along the coast, and in the fall accompanies the geese to a warmer climate. They are none killed by us but what supplies the Factors tables daily fresh, but the Indians destroy numbers with their dogs and sticks, when in their molten [moulted] state, and before their young brood can fly. In the Straits, and in the Northern, and Eastern parts of the Bay are found a large duck of a gray colour,13 and larger than an English tame duck; They are sometimes killed by the Gentlemen of the Ships and Sloops, and are allowed to be fine eating.

Swan

Swans visits our coasts in the latter end of May, but are not plenty. There are three sizes of them; the largest kind like unto an English swan, the second a size less, and the third the size of the large gray goose. They bring forth their young along the coast, and in the fall accompanies the geese to a warmer climate. They are very coarse food, so not regarded by the English. however the Indians holds them in the same veneration as they do the laughing geese, as before observed in page 71.

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9 Mallard
10 American Goldeneye
11 Green-winged Teal
12 Long-tailed Duck, previously known as Oldsquaw
13 Scoter? Eider?
This statement relates to the goose feast in E.2/5-csh.\[14\]

Cranes are of two kinds and sizes. The white crane, and blue crane.

**[Whooping Crane]**

The white crane is a fine bold bird. They are the largest. They are scarce along the coast but plenty inland. From the talons to the end of the beak ten and a half feet, The talons nine inches, The legs four feet, the body two feet, the neck two and a half feet, the beak sixteen inches, and from the tip of one wing, to the other when extended, seven feet in length; **The legs, beak, and pinion feathers are black, all the other parts milk white.** They don't attain this whiteness until they are one year old, being before that time a dirty yellow colour. **They feed on worms and frogs &c. They are not web footed, so cannot swim, however their legs are wonderfully adapted to walk in the ponds, and their beak to search for their food. They are very coarse eating, and are regarded by the English only as a curiosity.** They breed along the coast and have two young ones at a time. In the fall they retreat to warmer climates. If disturbed when bringing forth their young they will dart upon the offender; whereby several Indians have lost their lives.

**[Sandhill Crane]**

Blue cranes are of the same nature and shape as the white ones, but are one third less, and blue all over. They are plentier along the coast than the white cranes.

**[Waders]**

Curlews, plovers, stone-plovers, snipes, sand-larks, swallows of different kinds, bullfinches, hedge-sparrows, gray-linnets, hawk-eyes, lap-wings, kites, yellow-legs, and many more small Birds comes in May to breed, and in the fall retires to a warmer climate.

**[American White Pelican]**

Pelicans are among the lakes inland, and have been seen by the Company's Servants, but as they brought none down I can give but a faint description of this remarkable Bird. They are the size and colour of the white crane and nearly the same shape. They have a bag that hangs under the throat which when filled contains two gallons. **The substance of it is a thin membrane of a sky colour, and fish is found in it, as also in their stomachs. I am certain fish is their chief food. The Natives has told me they carry their young in this bag, but they are mistaken, the use of it is to keep a reserve of food. They are eat by the Natives. They come to the lakes in May, and brings forth their young on the Islands, making their nests on the most elevated rocky places. No Natives cares to engage them in open grounds when they are bringing forth their young, at such times they raise themselves aloft, and with the utmost fury and force darts down on their adversary, and seldom fails of striking him dead. [& when they miss the offender are killed against the ground - I cannot say whether or not they live about the lake in winter. But I am of opinion**
they retire southward as the lake is froze over eight weeks in winter -E.2/ 7]. In the fall they retire to a warmer climate.

Water birds are numerous and of different kinds and sizes. The principal of whom are the [Eider-fowl, Snipe, & Dunter-duck, & many kinds more that I cannot name; all with short wings & mostly broad bills. Their legs are situated commonly pretty far behind and bent backwards which makes them unskilful walkers, but so much the more expert in swimming and diving. Indeed several cannot wing from off dry ground. The Sea-fowls with long wings and bills are Gulls of different kinds and sizes. The Sea-swallow; Loon, the black-Duck, the sea-Pidgeon, the bald-Coot, the sea-Pheasant, the Willock.

Jaeger, probably Long-tailed
he dung-Bird, commonly called by the fishermen and seamen men of war, or sea-robber, from a vulgar notion that they persecute the other Gulls till they drop their excrements which they say he catches flying. But the truth is, he being no swimmer, and only resting on wood, ice or sea-grass, he tries to rob the Gulls of their prey, which they are obliged to let fall as soon they begin to cry out. This bird

has long wings, a long forked tail, a long strong bill, a blueish colour all over except a white ring round the neck. They are very active, and every way well adapted for engaging the gulls.

Gulls and Terns
There are many kinds of Gulls; the chief of whom are the large gray Sea-mew, the small white Gull, vulgarly called the black-head, and the sea-swallow. The Eider fowl are numerous, harbouring off the Rivers mouth's, and along the coast of the Bay, and many more sea fowl I can neither name nor describe. The sea fowl are not regarded by the Natives, but are one of the main supports of the Esquimaux.

Guillemot

____________________________
15 Not identifiable
16 Not identifiable
17 Tern, probably Arctic Tern
18 Probably Black Scoter
19 Probably a Guillemot or Murre
20 Possibly a Scoter, since there are few American Coots on the Bay.
21 Possibly a Northern Pintail
22 Guillemot; also used for Puffins and Razorbills - Oxford English Dictionary.
23 Jaeger, probably Parasitic Jaeger
24 Probably Herring Gull
25 Probably Bonaparte’s Gull
26 Tern, probably Arctic Tern
The Willocks affords the Gentlemen of the Company's Ships fine sport, they putting out their boats and killing a great many in the Straits. They are allowed to be the best eating of any sea fowl in the northern parts.

[Common Loon]
The lake Loon is a beautiful bird, and is the size of a turkey. Their feathers are spotted black and white, Their necks are green with a white striped ring, Their bills are straight and pointed four inches long, and one inch thick; Their length from head to tail full two feet, and from tip to tip of the wings when extended five feet; They have very long legs, but are placed behind them like unto all other water fowl, and web footed. The

p.78
Natives makes capes of their skins and ornaments themselves with their feathers. They harbour and brings forth their young in and about the lakes, and never goes near the sea.

Water fowl retreats southward in the fall of the year, and returns again in May. They are not regarded by us they being coarse oily food. Mr. David Crantz in his Account of west Greenland says, that the Moravian Brethren, and the People belonging to the Danish Settlements in St."Davies are obliged to eat the sea fowl particularly the Eider-Birds, and their down they send to Denmark, and is greatly valued.

[All the sea-birds visits us in June, and leaves us in the beginning of October - E.2/7].

Birds that are inhabitants

[Passenger Pigeon]
Pidgeons are numerous inland, and at Moose Fort; they are so plenty as to be served out to the Men for food. [They have a blueish body, whitish breast, with the top of the head & orbits red, and are considerably less than the English tame Pidgeons - E.2/7 & E.2/12]. In the winter time they come as far to the northward as York Fort, many thousands in number perching on the trees; but their coming so far northward happens but once in twenty years. They feed on berries in the summer and on willow buds &c. in winter.27

p.79
[Gray Jay]
Whiskajohn is the size of a thrush and resembles a Jay in all its notions. [a bird so called by the natives is peculiar to Hudson's-Bay. They are to be found wherever pines grows. They live in the pines throughout the year -E.2/7]. [Whiskey John. This is the Indian name and synonymous in the English language very aptly expressing the restless humour of a Bird which is continually jumping about. Great numbers are seen in the woods along the Coast ... It is a kind of mochrbird - E.2/9]. The breast, belly and round the neck is gray coloured, as also is the sides of the breast and under the mandibles. The crown of the head, back, wings, tail and legs are black; their bill strong, and black, and feet like unto a sparrow's.28. They harbour in the woods summer and winter, and are plenty along the coast and inland wherever weeds grows. They are y* first birds that breeds, and makes their nests in [on the bough of - E.2/7] the pine trees in form of a linnets. Their [three to five - E.2/7; two to three - E.2/12] young are flying about by the middle of May. They lay up a store of provisions for the winter, which is a sort of black moss and insects, and looks out daily in the winter excepting in heavy stormy weather, at such times they live on their store. A Person no where in woods can stop ten minutes but he is surrounded by them, whistling and making an agreeable noise. [Indeed nothing comes amiss to them - E.2/7]. They are very troublesome to the English [and natives - E.2/7] when tenting abroad, picking the baits out of the martin traps, and pilfering the provisions

27 Graham must have misunderstood the reports from inland. Passenger Pigeons did not winter.

28 An excellent example of the simple description by Graham; cf. technical terms such as `nucha' used by surgeon Thomas Hutchins in Document 2 and in E.2/12.
off the stages that are without the tents. **When they can get at the provisions they will pick the flesh off to the bone, and a piece of pork or bacon is their delight because it is soft.** I have known them in six hours eat and carry away [to their store-house - E.2/7] twelve pound wt of bacon, two salt geese, and two pieces of pork, whether fresh or salt provisions they love it and, they are so impudent as to go into the tents when the Men are out on duty, and examine all about; nay, they will sometimes settle on you when standing in a steady posture. When confined in cages, they, like unto most other small birds in Hudson's-Bay does not thrive, but after losing their flesh, dies.

Partridges are of three sorts, Distinguished by the willow Partridge, rock Partridge, and wood Partridge.

[Willow Ptarmigan].
The willow Partridge is something larger than the English Partridge [less than the English Heath-cocks - E.2/7]. They are speckled brown and white in summer, and all white in winter; only the quill part of the pinion feathers are black, and thirteen of the tail feathers are all black, but the tip ends; which being white and are the under feathers; so that when the tail is shut the bird appears all white. **The legs and feet are covered with a fine soft down.** This bird calls the same as the heath-Fowl, and resembles it in its rising, flight and settling; and I, as well as others are of opinion that it is the heath-Cock. In summer they bring forth their young on the dry ridges &c., and feeds on berries, and in October they gather in flocks from fifty to a thousand, and when the ground is covered with snow that they cannot get berries, they come down on the sea coast and feed and harbour amongst the willows, and feed on nothing but the finest of their tops, and **digests their food by gravel.** In the evening they bury themselves in the snow amongst the high willows or thick weeds until sun-rising; in the morning then they come out leaving a hole behind. In December, January and February they feed morning and evening, and afterwards three times per day. They pearch* on the willows but not on trees. They will harbour a long time in a small spot of willows if they can gravel nigh, and not be disturbed by the Hawks their Enemies, who, when they come amongst them, scatters the frighted innocent partridges here and there, that its some time before the flock musters again into the same spot. The Hawks seldom misses striking two or three dead in one day. In a dry summer they are numerous the ensuing winter along the coast, but twenty miles inland very scarce. Numbers of them are killed by the English in the following manner. As they are the chief game about the coast in the winter, the Servants are employed shooting them, and one Man will kill seventy in one day, which he carries in his partridge bag on his back. But sometimes they are so scarce that fifteen or twenty is thought a good hunt for one Man in a day. But I have seen them so plenty for four or five years together that the fouling pieces was never used to kill a partridge. At such times they are killed with nets [made of jack-twine - E.2/7], twenty by twenty foot square which are put into a frame of wood and laced tight all the four ways that it does not shake by the wind. One side is kept up with two sticks four feet long, and each stick has a hole within four inches of the upper end. Through each of these holes are put the end of a line about six fathoms long, which is call’d the bridle. To the bight of a bridle is fastened a small line about nin[el]y feet long, supported here and there with forked willows and hauled tight. The two side sticks of the net frame are longer than the other two by four feet, to allow the partridges to walk in at the back part. Under the net, and in the centre is laid a small quantity of gravel. The net being now ready the Men drives the Partridges

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29 A very early North American observation of food caching
towards it, who, when they observe the gravel, runs eagerly to it, and when a good many are under a Person hauls the net down and makes them all prisoners. They kill them by biting their heads, sets the net up again and takes them away and

p.83

lays them in the willows under the snow to prevent their freezing, and that the Partridges should not be frightened on their second coming to the net. In this manner will the Men get five hauls in a forenoon, from twenty to seventy at each haul [Our largest haul is from 70 to 100]. They oftentimes are wild in the mornings, and will fly to and again short flights, and will not drive; but soon becomes tame and so good humoured that they will feed and drive five hundred yards without flying. Spring and autumn when thus changing they moult the old feathers & receive new ones of another colour. The Gentlemen of England are mistaken when they say the feathers undergoes the change. Please to observe that the Partridge, Weazel, Rabbit and Hare are the only animals that changes to white in the winter in this country.

The Islands in and about Severn River are so conveniently situated and accomodated for harbouring Partridges, that in my residence at Severn we had five nets set, all of them within two miles of the House. In the years 1766-7-8 and 9 we destroyed by netting yearly above ten thousand of these birds. I was once present at this sport on the 27th of April 1767, when we caught seven hundred and six Partridges at three hauls, and if their other Enemies the hawks had not dispersed them, I am of opinion we should have caught as many more. Our sporting ground was a spot of willows three miles circumference, and almost covered with snow, and only one net on the spot.

p.84

The Sloop Master and myself with two or three Indian children in the month of March and April have killed above one thousand partridges, within five hundred yards of Severn House at a net which I had set there for my own pastime, and practiced it evenings and mornings in fine weather.

In the beginning of May the Partridges begins to pair, and retire to the dry grounds to breed; at which time the cock Bird has a red comb, and is very pert and stately. Their flesh is very sweet eating, makes excellent broth, and with the geese and deers flesh is the chief food of the Company's Servants and low country Natives, who kills numbers of them with the bow and arrow. Their feathers are not valued by the Company, so their Servants hath each a good bed of them.

[Rock Ptarmigan]

Rock Partridges change colour the same as the willow Partridge. They are smaller [but not any material difference otherwise in shape], and hath black eyes and call quite different. They are very plenty on the northern and eastern coasts of the Bay amongst the rocks from which they have their name. At York Fort and Severn

p. 85

they are found in the Juniper plains in winter, but not plenty. [When they make a noise they extend their necks and with a seeming difficulty croakes like a frog]. At the late Richmond Fort on Whale River they were very numerous. At East main House they have some, but none at Albany and Moose Forts. They feed on Juniper buds and berries, and their flesh is sweet eating.

[Spruce Grouse]

Wood Partridges are a size larger than the willow partridge, brown coloured intermixed with white. They don't change colour. [Neither their legs nor feet are feathered]. They harbour in the woods, and feeds on berries and pine spruce, which makes their flesh taste bitter, so they are not regarded by the Europeans*. In the night they rest in the snow about the roots of the trees, and brings forth their young on the ground amongst thicket of woods. They always harbour in the woods, and sits on

30 One of the few errors introduced in E.2/7; E.2/12 correctly says they are feathered to the toes]
the trees in the day-time, and are so tame or rather in a state of stupification*, that they will stare a person full in the face until they are knocked from off the tree with a stick. [They don't fly half a mile in the winter. They call no more than Cock Cock Cock - E.2/7]. They call quite different from any of the other partridges, and are not plenty, never above three or four couple being found together. Where they harbour is easy discovered, the tops of the pine trees being picked quite bare by them, as they will harbour in a thicket of wood a long time.

p. 86

[Sharp-tailed Grouse]

Pheasants are not so large as those in England, the same colour which never changes. They feed and harbour amongst young Juniper trees [feeding on buds - E.2/7], and are scarce at the northern Settlements, but at Albany and Moose Fort middling plenty.

[Spruce Grouse, repeated]

Chipethew31 so called by the Natives, is a Bird nearly resembling the wood Partridge only the breast is a beautiful pale red. They harbour in the woods, and feed on the pine spruce and berries. Their flesh is very coarse and disagreeable food.32

[Greater Prairie-Chicken]

[Pinnated Grouse is found about Henley Settlement in Hudson's Bay. Legs covered with soft brown feathers; toes naked & pectinated. The tufts which distinguish this species from all others are rooted high on the neck, not far from the hind part of the head &c. - E.2/9].

[Owls]

Owls are plenty and a great many kinds and sizes; As the large white, the large black and white, the large gray, and divers kinds of small gray Owls; all of which are inhabitants of the woods, and are everywhere to be found along all the coast and inland feeding on Rabbits, Partridges, Geese and Mice &c.

[Great Horned Owl]

About one hundred miles inland are found the beautiful horned owl. The Natives has brought me down several young ones whom I have sent to England [& looked on as a great curiosity. If your Honour chuses* a pair pray command your humble servant who will take pleasure to serve you - E.2/7]. I shall endeavour to describe one. The head is as large as a house Cat's, and is four inches across from ear to ear, and the same from the crown of the head to the bill or between its horns. The wings when closed measures from the tips to the ends of the quills full fifteen inches, and when extended twenty-three inches, and the depth ten inches;

From the tip of one wing to the tip of the other when extended four foot three inches. From the claws to the bill two foot. The tail nine inches long, having twelve quills in the upper part and twelve in the under part being double feathered. The bill is black, one inch thick, and one and a quarter inch long. The upper mandible hookt and over hangs the other one quarter of an inch, plain on its edges and is covered with a skin, in which are placed the nostrils, and that skin is covered with a kind of bristly gray feathers that grows round the basis of the bill. The eyes are large being one inch across, having circles round them one eight[th] of an inch broad, of a bright shining gold colour. The space round the eyes or more properly the face is of a light brown mixt

31 name is similar to the Cree name, Chepethewuck, for Greater Prairie Chicken, said in E.2/12 to belong to plains where the juniper grows.

32 Decidedly not the Ruffed Grouse which has white meat, in part because it flies only short distances.
with orange colour, gradually becoming dusky where it borders upon the eyes. Over the eyes it hath white strokes, as also under the eye lids. Above the crown of the head it has rising feathers on each side one inch longer than the rest, which comprise the horns. The ears are in one side, and pretty large. The horns are intermixed with a dusky brown & a little white, and tipp'd with black. The top of the head, neck, back, wings and upper part of the tail are of a dark brown colour spotted and intermixed with a little white and orange colour, with some confused lines of ash and reddish colours. The great feathers of the wings and tail are barr’d across with dusky bars of three eighths of an inch broad, some a little more or less. The feathers between the back and wing are orange colour tipp’d with white. A little below the bill and throat is white, and the fore part of the neck and breast are of a bright brown inclining to orange colour, and the brown is spotted with pretty large dark spots intermixed between the spots with the same dusky colour. The middle of the breast, belly and under part of the tail are white or faint ash colour, barred with dusky lines pretty beautifully, and the under part of the wings coloured in the same manner. The legs from the body to the claws nine inches and covered with light ash coloured feathers. The toes when extended four inches across, and the claws which are four, measures one and a half inch long each, and dark horn coloured.

This is the true description of the horned Owl, for I have seen many, and observed them narrowly; and find the Learned Mr Edwards in his natural History of Birds is quite out in his description of the horned Owl; where he says, the horns begins just above the bill. But from ye root of ye horn to ye bill is 4 inches.

Hawks of different kinds and sizes are plenty, also Kites, Ravens and a few small Birds are seen flying about in the Juniper plains all the winter, some I doubt not is known in England, and some not.

[Bats and Magpies are inland, & sometimes seen about the forts - E.2/7].

There are many other birds inland, some of whom only comes in the summer to breed, but by the Natives differing in their describing of them, I can only give an account of the beautiful wood-pecker from their skins stuffed and dryed that I had brought from inland by Trading Indians.

[Yellow-bellied Sapsucker]
The Cock wood-pecker is the size of a Dove: Spotted from the breast and along the belly. A black spot on the breast, a black spot under each eye, and light coloured under the throat between each of these spots. The crown of the head is adorned with beautiful red, all the rest of the head being of a brown colour. Along the back to the rump and upper part of the wings is mottled black and white. The tail which is seven feathers is forked, the upper part of which is black, and the lower part yellow, as also is the under part of the wings. It has feet like a sparrow. The under part of the bill is two inches long, and the upper part only one inch, being short and broad and as sharp as any needle at the point; and in the whole it is a beautiful Bird.

The Hen wood-pecker is much about the size of the cock but a different colour. The upper mandible is one inch long rising in the middle. The under mandible is one inch long but flat. From the upper mandible and round under each eye is a ring of white, which goes round to the upper part of the neck and breaks off upon each shoulder of the wings. Above this is a black beginning below the eye, goes round the eye on each side and joins on the back of the head. Above this, and just above each eye, is a white line of feathers which breaks off on each side of the crown of the head where is at the end of this a beautiful spot of red on each side. From the white
A roundabout way of saying that their bill tips are crossed!

lines above the root of the bill, and within the other lines, is a beautiful black which breaks off at the crown and joins the black lines from each eye. From the lower mandible along each side of the throat, is a black line of feathers which reaches along each shoulder, and each side of the back to the rump. On the middle of the back from the shoulders to the rump are feath-

p. 91
ers of a lead colour. From the under mandible along the throat, belly & under the wings are white. The upper part of the wings are spotted black and brown with some white spots. The tail which is ten feathers, when closed, appears like four; two black in the middle and one white on each side, but when extended four black feathers are in the middle, and three white on each side. In the whole worth notice tho' not so beautiful as the cock. Wood peckers are plenty all along the coast of different sizes and colours, but none so large as those described; Each has two fibres at the root of the tongue about four and a half inches long, which goes twice round the neck. The tip end of their tongues are sharp and turns up like a hook, by which, when they make a hole in the trees with their bill, they draw out the worms which is their chief food.

[White-winged Crossbill]

Ashecowecochesish, so called by the Indians, is a Bird a size less than a gray linnet. They are plenty all about the coast harbouring in the woods, and feeds on the pine buds. The Cock is of a vermilion colour on the back breast head and rump. The wings black with two white spots on the fore part of each, and three smaller on the pinion; The tail is black and forked with five small whitish spots on the upper part towards the rump;

p. 92
The legs are one and a half inch long, and covered with a black skin, as also is the toes which are four, and each about a quarter of an inch long. To each toe is a claw the same length of the toe, each is curved and sharp pointed. The upper mandible is half an inch long, and curved with the point downwards. The lower mandible is one third shorter than the upper, being curved with the point upwards, and their points are both sharp.

The hen Ashecowecochesish is nearly the size of the Cock, and the bill, legs and claws are the same. The head, back, breast and belly, are gray, black and yellow intermixed. The wings are black with two bars of white across the middle of them. The tail is forked and black with some lightish yellow and gray coloured feathers on the inner part above and below.

p. 93
Fish are numerous in the creeks, lakes and rivers, and all along the coast of the Bay, and are of great service to the English and Natives. An Account of each kind I shall give viz.

[Sturgeon]

Sturgeon are very plenty in the rivers and lakes, but not within fifty miles of the sea. One of our Sloop Master's informed me that he seed them in a lake about one hundred and fifty miles inland so plenty, that the water was in motion with them for some miles. The Indians spears and nets them and brings down some to the Forts. They are good food. I have sent home several casks soured, which proved good, and were greatly admired. They weigh from 20 to 70 pound w each [10 to 56 - E.2/7; 20 to 30 - E.2/12].

[Northern Pike]

The Pike or jack fish are numerous in the lakes and rivers, weighing from nine to eighteen [6 to pound each. They are caught by the English and Indians by netting and angling, and are good food. [By weirs the natives catches surprizing numbers - E.2/7 & E.2/12].

33 A roundabout way of saying that their bill tips are crossed!
[Lake Trout]
Trout fish of all kinds are very numerous in all rivers and creeks, weighing from two to six [3 in E.2/7; 4 to 10 under Namecush] pound each. They are caught by netting and angling, **and are good food.**

p. 94

[Lake Whitefish?]
Shad fish\textsuperscript{34} are very plenty in rivers and creeks, and weigh from five to eight pound each. The English catches them in nets, and the Natives by making weirs will catch one thousand per day. They are good food.

[Carp, shad & perch are very good & large but not plenty, being no more caught than serves the factors table - E.2/7].

Tickameg [tickomeg in E.2/12] fish \textit{[are peculiar to Hudson's-Bay - E.2/7]} so called by the Indians is a white fish with a bluish scale, and size and make of a herring. They are so numerous in the fall of the year that the English catches six and seven hundred at one haul; and in stormy weather they are drove ashore in the marshes in great quantities along the sea-shore. The Natives kills numbers of them in weirs as well as in nets. [They weigh from two to four pound weight. They are not so soft as a Whiting\textsuperscript{35} - E.2/7 and E.2/12]. They are very good food.

[Suckers]
Carp fish are very numerous in the rivers and creeks inland, the Indians kills numbers with their paddles on the shoals and falls as they paddle along in their canoes. We have now and then one caught in our nets at the Factories. They weigh from four to seven pound each and are good food. Succour fish [sucker - E.2/12] \textit{are of size and make of a Carp.} They are very numerous, but are not regarded by us being soft & bonny*. \textsuperscript{36} [They oftentimes fill our nets and hinders better fish from being caught; and the Indians informs me in dry summers they are lying dry on the falls in great numbers. This fish is peculiar to Hudson's-Bay - E.2/7].

p. 95

[Burbot]
Merthy fish\textsuperscript{37} so called by the Indians, are plenty in the rivers and are caught by angling, and are so little regarded by the English, that when served out to the Company's Servants (which is sometimes the case) causes grumblings and discontents. They are gray on the back and head and white on the belly. The head is like a Cod's being very large in proportion to the body, which is small like a ling; they weigh from ten to twenty [4 to 12 - E.2/7] pound each. [Their melts & roes are large & rich food - E.2/7 & E.2/12]. They are a devouring fish, swims close to the ground and hunts about for food in the night, which obliges the Indians to angle for them after sun-set. The English angles them sometimes in the fall of the year under the ice just after the setting in of the river. I have angled above forty in an hour, and have taken large pieces of deers flesh out of their maws, which they pick up about the rivers sides, putrified deer being plenty in the summer; the Natives destroying numbers when crossing the rivers, and often lets the carcasses drive with the stream.

[Arctic Char]
Salmon are caught at Churchill and to the northward among the Esquimaux, also at the late Richmond Fort on the Eastern coast of the Bay they used to kill numbers.

\textsuperscript{34} Not shad. Possibly Lake Whitefish to fit what we are told.- Allan and Jennifer Merkowsky. Tickameg, next entry, is a synonym.

\textsuperscript{35} Fallfish of Eastern Canada

\textsuperscript{36} An apparent misspelling of “bony”.

\textsuperscript{37} Burbot; also known as Loche, Ling, Methy
I have known twenty hogsheads full been cured at Churchill in one summer, and at Severn we are favoured with them fresh in the summer season. They weigh from eight to twenty pound each. They are very fat and fine eating when fresh, but when salted caused discontents amongst the Servants, not that they are then disagreeable food but the oil (which is one half pint per mess or four men) is rather small.

[Capelin]
Caplin or Capelin fish so called by the Newfoundland Men are six inches long. The back is green, and the belly silver coloured. They have no perceivable scales so can only be ranked to the class of herrings as far as they resemble them, and like the herrings swim into the Bays in such quantities to lodge their spawn on the rocks, that I have seen them on the shores in Churchill River heaped up one on another in such large quantities, that we filled several eight bushel casks of them, the sea having ebbed from them. The Servants brought two hogsheads of them into the Fort. The Men were allowed butter, and ordered to take them for their days allowance. The day following several of the Men were attacked with a violent purging, and the Surgeon judging that their disorder proceeded from making too free with this kind of fish, they were ordered to be thrown away, and the Servants prohibited from eating any more of them. Mr David Cratz in his Account of West Greenland says the Moravian Brethren duly attends the Capelin fishing in their season, and are one of their chief supports. The Capelin fish are plenty on the Eastern coast of the Bay.

Toad-fish are found plenty among the rocks at Prince of Wales's Fort. They are not half so large as those in great Britain, and are not regarded by Europeans nor Natives.

[Absence of Atlantic Tomcod]
Cod fish hath been caught in nets at the Forts, and I have heard Fishermen say that there must be cod in the Bay. Nay! I knew one Person offer to try for them at sea, but was hindered by the Chief of Prince of Wales Fort meekly* out of spite, as this Officer and the Chief were never on good terms, and a few small ones are said to have been caught at the late Richmond Fort. I shall say no more but in my twenty two years residence at Churchill, York Fort and Severn I never knew any to be caught.

[Burbot]
Land cod so called by the Englishmen that goes inland, being found plenty in the lakes in the interior parts of the Country. They resemble the cod fish in shape and colour, and weigh from 6 to 12 pound each.

[Turtle]
Land Turtle are plenty in the lakes inland. They weigh from six to twenty-four pound, and are eat by the Natives [but are not regarded by the natives].
Nenakus* so called by the Indians, is a fish found very plenty in the lakes. They resemble the toad-fish in shape. They have from each jaw three small gristles from two to four inches long terminating to small points at the ends. They are very fat fish, but not any being within a hundred miles of the sea they cannot be procured fresh at the Factories. The Natives catches them by angling. They weigh from twenty to fifty pound each.

[Namecush so called by the natives are peculiar to Hudson’s-Bay. ... great numbers are caught by the natives in the winter season. They are shaped like a ling and are very fat fine eating. - E.2/7].

[Beluga]

The white Whale, which derives its name from its colour. 'Tis only two or three fathom [12 to 18 feet] long, its nostril is only one and that in the back of its head, but underneath are two oval apertures two or three inches in diameter, which unite in one above. Its skin is three quarter of an inch thick and wrinkled. The fat is four inches thick, and yield about two or three barrels of blubber. They visit our Rivers in the spring, and are plenty in York Fort and Churchill Rivers [& a few are killed - E.2/7; many - E.2/12]. There are some blue coloured but of the same kind and shape of the white tho' smaller, it is the fat[t]est fish but not so plenty. 'Tis pretty pastime to see them blowing up and down the Rivers and their young sitting on their backs. They are caught in the following manner, having boats for that purpose built after the form of the Gre[e]nland whale fishing Boats only longer. They are manned with four Men and a harpineer* who rows out on the River where the fish is, then lay in their oars and drives with the tide amongst the fish, and when one comes up to blow alongside it is struck with a harpoon, and a large fish will run out one hundred fathoms of line, and haul the boat after it above a quarter of an hour before they can shoren in any line, always minding to play with the fish, hauling in, and veering out line according as the fish swims to or from the boat; for if it were to be brought up all at once the harpoon would lose its hold, which is often the case. When its strength fails he gathers in the line with Judgment, until he gets it within reach, then gives it another harpoon and lances it to death.

[As the Company allows Harponeer at York Fort, I think this fishing should be one of their principal concerns; which if it was would be a great help to defray the expence the Company is yearly at. I am certain that by keeping the harponeer & three Men at this duty six tun of oil might be sent home yearly. This neglect is not the Company but the Factors who will not spare four Men out of thirty six on such necessary duty - E.2/7].

[Bowhead Whale]

Black Whale are plenty in the northern parts of the Bay [where at present a fishery is carried on but as yet without success - E.2/7]. It's from fifty to eighty foot long. The head is one third of the length of the body. It has only two fins from five to eight foot long, which is situated on the nether part of the head on each side; yet with these it can row along very fast. Its tail is three or four fathom broad and turned up at both ends, and if it was not a timid fish and flies at the least alarm, it would dash to pieces the strongest boat. Its skin is smooth, and black above and white beneath. The fins and tail is marbled with all sorts of colours. Upon the head is a bunch in which are two nostrils, through which he breathes and spouts out the water with a loud noise, especially when wounded, like a strong wind that can be heard above a league [three miles]. His eyes are the size of an oxen's and are provided with eye-lids, and are situated between his nostrils and fins. He has no flaps to his ears, but on removing the outermost scalp on the head there appears two little holes behind the eyes. He has no teeth in his mouth, but has in his upper jaw which is six yards long the blades, borders or whiskers, of which is made the whale-bone. The longest of these whiskers two fathom [12 feet], least before and behind, and longest in the middle. They sink into the under jaw which is a little hollow like as into sheath. They are shaped like a scythe, where they are contiguous with the gums. They are a foot broad but runs sharper to the end, and the middle is thinner than the outside.

41 Usually spelled Nemaycus or Namaycush
They are surrounded with long hair that it may not hurt the tongue, and that the food which he sips in with a good deal of water may not wash out again. The tongue is fat and like to bacon, which will fill six barrels. They have one young at a time, and sometimes two. And when pursued they will wrap them up in the fins close to their bodys. He p.101

has two skins; the inner an inch thick, the outer as thin as parchment. Under these lays the fat from six to twelve inches thick, and about the under lip 'tis two foot thick. The bones are hard, and on the inside full of holes like a honey-comb, which are filled with oil. His swallow is not four inches broad by which he sips in the slime called his food by a strong suction, a good deal of water flows in with it but that is seperated by his whiskers, or blown out again at his nostrils. A middling black Whale produces from eight to a hundred puncheons of blubber and from ------ to ----- pounds of whale-bone.

The whales food is a white slime that swims in the sea, sometimes round, sometimes long, and other times of a serpentine form as thick as insects in ditch water, and is never seen but where whales resorts. I dont doubt but there are more sorts of Whale in the Bay if the northern parts were discovered.

[Mussels] Muscles* are small but very good. I have eat them at Prince of Wales's Fort; and on a voyage to Severn from York Anno Domini 1755 we gathered them from off the West pens (i.e.) shoals that drys about four miles from the main p. 102

in large quantities. In the lakes inland are found shells of diverse kinds [that are common in Great Britain, but nothing in them; also beautiful shells in the lakes - E.2/7] which the Indians hangs about them by way of ornaments. All along the shores and to the distance of ten miles inland in digging the ground seashells of many kinds are found interfused with the earth, and large trees appears in the banks of the rivers. Those shells and trees being found so over the lands leads the Natives to a notion their Country was formerly overflowed with water, and have talked to me on that head, and enquired if my Country was not so overflowed, also the Frenchmens Country. I told them all the Countries were overflowed, and that the Good Spirit that dwells above destroyed all living Creatures excepting an Old Man [Noah], and Family, and one of each kind of Beasts and Birds &c. And that He did it for a punishment, the People being guilty of thieving and murdering one another. p. 103

Trees growing in Hudson's-Bay are Viz. Pine trees [for another century, this term included Spruce] are very plenty [along the western coast and to a considerable distance inland - E.2/7], the red kind, and white kind. From the Latitude sixty to fifty-six they grow to thirty foot in length, and three foot [4 ft. - E.2/12] circumference ten feet from the ground. They have so little hold of the earth that the roots of the largest trees are not above two foot under ground. From Latitude fifty-six to [to, repeated] fifty-one pine trees are fifty foot high, and five foot in circumference, eighteen feet from the ground; serving us for building and firing.

Juniper trees [or bastard birch - E.2/7] are not so large as the pine trees. But groes* in great plenty every where. We make no use of them [by reason they are weighty, sparkles when burning, and rotten in the heart - E.2/7]. The Indians uses them for snow-shoe frames, sleds, ice rackets and all other utensels* that requires bending, it being a streight*, plyable wood and free from knots.

Poplar trees are plenty and as large as the pine trees. They are seldom used by us or the natives. we being strictly ordered to cut down no more wood of any kind than what serves the Settlements the ensuing winter, & at no time of the year to set fire to the woods - E.2/7]. It would make fine fire-wood for us [smooth burning - E.2/7], but it being green and heavy to carry we use very little of it.

p.104

Firr trees grows in great plenty [& large - E.2/7] about one hundred miles inland but of no great growth* spreading out into large boughs. The buds are used by the natives [as a medicine, but are not so rich as the
Pensilvania* pine-buds at present so much esteemed in England - E.2/7], they boiling them in water and drinks the liquor as a remedy against inward disorders. I have sent small quantities of these buds home to England where they sold at nine-pence per pound w^t.

Birch trees **grow very large and plenty, but none worth notice within one hundred and fifty or two hundred miles of the Sea coast.** This tree is a great service to the Natives, the rind for Canoes, and the wood for snow-shoe frames, and bows, and arrows &c.

The hasle [hazel], [ash - E.2/7], and cherry trees grows plenty in the Muscuty or Archithinue Country, **bearing plenty of fruit which comes to perfection.** Alder, asp **and several other kinds of wood are seen by the Company's Servants, who yearly winters with the inland trading Indians** in the interior part of the Country.

Willows are plenty along the coast of three kinds. The palm willow, the birch willow, and red willow, all springing from

p.105

a thick root **into twigs six foot long, and about the thickness of a Person's finger. Wherever woods are cut down these willows grows up surprizing quick.**

Shrubs of many kinds grows every where, and by the Company's order from time to time have been strictly examined by their Surgeons, and several kinds have been sent home but turned out of none effect, particularly a shrub called wishecumpucka.42 It grows in great plenty every where among the woods. The stem is sixteen inches long and the thickness of a wheat straw branching out nigh the top into small twigs on which grows leaves each an inch long and half an inch broad [shaped something resembling the rosemary - E.2/7], shaped **like a dock, and green coloured.** The leaves are dryed and used by several people in this country as tea, **and quantities of it sent home to Friends in Great Britain who use it after the same manner,** and is reckoned to be a good remedy against rheumatism. **When boiled the liquor has a bitter but agreeable taste, How ever this shrub is not regarded by the Company, great quantities having been yearly sent home along with the Cargoes, but is now disused, so by that, its quantities are of no manner of account with the Learned.**

p. 106

Cacumpucka43 is a shrub like the Wishecumpucka but one half smaller. It is found in the plains on dry spots here and there, but is not in great quantities, so that it is but scarce, and not any as yet have been sent home. But as I am to go home next year, I design to carry a pretty large quantity of it along with me, as I am of the opinion it is the same kind of shrub as that found on the Coast of Labrador, and goes home to England under the name of Hyperian tea. When made into tea it tastes nearly the same as the Wishecumpucka, and are both ever-greens.

Marapucka44 is a shrub that spreads along the ground, having several small stalks from one root; which stalks bears leaves nearly resembling the wishecumpucka, but of a very pale green colour. **It is an ever-green and when infused in tea tastes like unto the valerian root.**

Jackashepuck45 so called by the Natives grows plenty in dry ground, spreading along the surface of the earth in many branches about the thickness of an oat straw, and about eighteen inches long each. It has a white coloured leaf in shape of the box leaf but smaller **It also bears a berry of the same**

p. 107

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42 Labrador Tea, Ledum groenlandicum

43 Narrow-leaved species of Labrador Tea, Ledum palustre

44 Not identified; not mentioned in E.2/12

45 Common Bearberry, Arctostaphylos uva-ursi
colour, and the size of a cran-berry [currant - E.2/7], but it tastes very insipid and is not eat by us nor the Natives; but the leaves are used by the Natives who mix them with brazile tobacco for smoking. [It is held in such high esteem that no native travels without a little, & all the forts are obliged to procure a sufficient quantity in autumn to serve one year. Every native that comes to trade must be presented with a handful, together with a pipe and two inches of Brazile tobacco. - E.2/7].

Askatash so called by the Natives, is a kind of wild parsnip [water Parsnip]. The [white - E.2/7] root is as thick as a Child's wrist with fibres branching out the thickness of a Person's finger from the main root, and are from six inches to two foot deep in the earth. The main root produces a hollow stem the thickness of a hemlock [hempstock - E.2/7], which bears many small green round pods, each containing one seed like a hemp seed but smaller. [The main root & fibres grows downwards. I have since found this root to be Horse parsnip and that it grows in great plenty in Lapland - E.2/7 & E.2/12]. The stalk above ground is about two foot long. The root and its fibres eats like parsnips and in summer is dug up and eat by the Natives, and is good eating when roasted.

Berries [of many kinds & colours grows wild in the woods &c - E.2/7 & E.2/12] are viz. Crow-berrys, bill-berrys, cran-berrys, red-partridge berrys, willow-berrys, straw-berrys, goose-berrys, red and black-currant berrys, hip-berrys, rasp-berrys, and Juniper berrys are all plenty, and ripens yearly. [All very fine eating excepting the Partridge and Willow-berries - E.2/7]. All but the Juniper and Willow berrys are eat by the Natives.

p. 108

Thackatuminack46 so called, is a berry in leaf and fruit like a mulberry only the fruit is yellow. Its stem is the length of a finger, and the flower white with four leaves. The berrys are greatly esteemed by English and Indians, and are a good medicine against the scurvy. They don't ripen yearly yet enough are to be found both ripe and green.

Scurvy-grass (the best medicine against the scurvy) grows every where in great plenty, and was a means of saving the lives of the Seamen when on the discovery of a passage to the Southern and Western Ocean of America by Hudson's-Bay.

Wild tansy, hedge mustard, a sort of small fern, rose-mary, thyme, mynth, dandelion, white and blue violets, chick-weed, wild rye that has ears but does not fill, angelica, sorrel of kinds, celery, ladies-mantle, daisies, scallions, nettles, colts-foot, and black moss are* the Natives eats when boiled to a jelly.

p. 109

The upland Indians that comes to trade brings down samples of Indian corn, and wild rice [Wild-currants & Black-cherries - E.2/7] grows plenty in the lakes inland, as observed in William Tomison's Journey to the great lake in Book first page 121. I am likewise informed by the other Englishmen that goes yearly inland to the Muscuty Country, that there are many kinds of fruit there, which are unknown to the Gentlemen at the Forts. Divers kinds of roots grows along the Coast, and have been brought down by the above Traders, which has been sent home, but turned out to be no value. [The Englishmen that yearly goes inland informs me that there are many kinds of berries &c that we are unacquainted with - E.2/7 & E.2/12].

Grass of different kinds is plenty [& quick growth* - E.2/7], from the Latitude 60 to 57. In the plains grows a long coarse wire grass. In the dry grounds a fine sweet grass, and in the marshes along the sea shore grows a fat feeding grass in great plenty, which is cut and made into hay in August for the sustenance of the cattle which are kept at the Forts; some of whom keeps thirty or forty head.

The gardens which are under the south side of the Factories, with good management produces excellent sallad*, and colewarts* but will not bear transplanting. Radishes, cresses, [lattice lettuce]*, greens - E.2/7], spinage* and onions turns out middling in favourable years. Turnips in the Northern Settlements answers but poorly, however their tops are acceptable to Servants especially to the Seamen when

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46 Cloudberry
our consigned Ship arrives from England. In favourable summers we do entertain the Captain of the Ship and Officers with a mess of pease and beans. Parsley, purslain, celery, carrots, parsnips, and several other kinds of seeds are sown yearly at all the Settlements, but turns out to little or no account. Barley and oats hath been sown several times in the gardens at Albany and Moose Forts, which grewed fine and high, but never advanced so far as to fill, because the frosty nights begins so soon in August. Nay! indeed in the latter end of July frosty nights are a great detriment to our gardens. In the year 1768 on June 4th I sowed barley in the warmest part of my garden, and the summer and fall proving favourable beyond common years it grew to a full length, ear’d, and fill’d, so far as would make seed, by the opinion of the Servants who understands husbandry. Tang or seagrass of different kinds grows amongst the sea rocks but smaller than in Great Britain.

p. 111
Insects and Reptiles are Viz.

Insects are a gnat called by the English Musktoes, and so plenty from the first of July to the middle of August that we can scarcely eat a mouthful of meat without having a musketoe in our mouths. Wee* are obliged to put on cloathing in the summer in the finest of weather to keep off this Vermin, that we are allmost* stifled with heat, and often wish when the wind is at south-west with a fine sun-shine for an easterly wind, which commonly brings a fog with it which in an instant brings them to the ground, where they continue harmless untill the fog is gone, when they soon rise again, and begins a fresh to persecute us with their stings which draws the blood, and caused such a violent itching that people cannot forbear scratching, which causes the flesh swell and is very uneasy. These Insects are often so bad that no duty can be done for them out of doors, and they get so plenty into the buildings that they deprive us of our natural rest for several nights together in the latter end of July. At such times smokes are made in our apartments to lay them which is very disagreeable.

p. 112
Sand-flies are as troublesome as the Mosketoes, and will get into our mouths and noses and swells us very much about the face &c like unto boils.

The blue Flie, the blowing flesh Flie &c are very plenty in the summer season, and are equally like unto the mosketoes and sand-flies; very offensive to us in blowing our provisions.

In the middle of July a large flesh Fly called here a Bulldog makes its appearance. They bite so sharp that they take the piece of flesh out where they bite. They are very troublesome to the deer, and often kills our swine and Cattle. To prevent which we have lately found out a method to preserve them which tho’ a nasty one, fully answers the purpose. It is by besmearing them over with train oil.

Musketoe-hawks* are three inches long, slender bodies, with long wings - E.2/7 are like to [ rest of line blank] long. They prey on the Musketoes and flesh-flies. I have caught one and fed it with flies, and found it to eat five large ones at a meal. Butter-flies of divers colours are plenty in summer.

p. 113
Earth-worms, Maggots, Frogs, Spiders, Bees, Caterpillars, grasshoppers, wood-lice, innumerable and many other kinds of Reptiles and Insects are found in the summer season. Snakes are plenty inland seven [six - E.2/12] foot long;48 Several of their skins I have had brought down by the Trading Indians, and sent them home to England.

The blue-flies harbours in the Buildings in the winter season. I have seen them crawling about in January in my Room occasioned by the large wood fires we keep. I have taken the worms out of rotten trees in winter when solid froze, and by laying them before the fire they came to life.

47 Dragon-flies

48 An exaggeration. The maximum recorded length of a Prairie Rattlesnake, Crotalus viridis, is five feet. (K.P. Schmidt and D.D. Davis, Field Book of Snakes of the United States and Canada (New York: G.P. Putnam's Sons, 1941, p. 311).
Frogs here are not so large as those in Great Britain. They are very numerous all over the Country hereabouts. In May they begin to croke, and continues croaking till the middle of June, when they leave off, and are no more heard till May comes again. [Ants are numerous inland - E.2/7 & E.2/12].

Stones viz. are the lime stone of different sorts, the common large blue, and gray stones, very good paving stones, with which the Company's Ship are ballasted yearly for their homeward bound passage. They are the Captains perquisite, who disposes of them to the Paviors for ten and some years twenty shillings per tun* w[t. A spurious kind of free-stone [A bastard free stone is found at Churchill - E.2/7], hone, and oil stones, and many kinds of pebbles are found lying along the Rivers sides; also a heavy stone blue coloured intermixed with small sparkling spots, some of them of an oval shape, and others quite round, and the size of a pound shot. Another kind of stones are found about the River sides of a blue colour; and square form. They are eight inches long, two inches thick, and four inches broad. They will split fair and clean into a quarter inch substance, and are excellent for setting an adze. Amongst the Islands in the northern and eastern parts of the Bay and Straits, are the bastard marble or French chalk, of a blue colour. The Esquimaux makes their boiling kettles of this stone, and stands the fire well. Along the Rivers sides are found a stone called by us iron stone or ore stone, from half a pound to two pound w[t. like iron for weight and colour. Their forms are oval and round. Where these weighty metallic stones are found, the water that runs out of the banks and gullies thereof, are of a blue colour, a rusty iron colour, and a beautiful red colour, and colours and corrodes the ground on its run to the Rivers; and what is very remarkable never freezes in the winter.

In the plains &c I have often seen several mineral springs that never freezes in the winter; nay! the snow does not get liberty to cover them. The steam that ascends from them gathers to a rime, and so forms an arched crown about eight inches above the well. The crown falls in and gathers again according to the weather. On a Journey from Churchill to York Fort I found one of those springs coloured as red as blood, and altho' we were faint from want of water it being the month of January Anno Domini 1754, the Natives would not drink of it, nor allow me to drink of it. This well was round and about four foot circumference, in a small plain.

There is an iron mine at Cape Churchill about fifty miles from Churchill River. The ore lies on the surface of the earth. A lead mine was opened at the late Richmond Fort by proper Miners, and a small quantitie sent home, but was discontinued, not on account of the badness of the ore, it being allowed by proper Judges to be very good, but by bad management &c that Settlement was laid aside as before observed in page 13. A copper mine is found in the Wechepowuck Indian Country as before observed in Volume first page 54. Inland in the Muscuty Country, the Servants who goes yearly inland to promote Trade informs me that they seed several veins of iron ore lying and running on the surface of the ground.

In the northern and Eastern parts of the Bay are found amongst the rocks crystal stones running in long veins, transparent and of divers colours. [The Voyagers mentions the amianthus or asbestos or what is commonly called the flax-stone to be in this country - E.2/7]. In the same parts are found several sorts of stones that are fire proof also the white, black and gray ising-glass kind of stones, but not large enough to make panes for windows. Mr Crantz in His Account of West Greenland mentions the Asbestos commonly called the flax stone being found there. I am strongly of the opinion it may be found in the northern parts of Hudson's-Bay and [Davies] straits [where it is plenty and sent home to Denmark - E.2/7], as the Lands resemble one another as per Ac-

counts given by the Learned M' Ellis and the said M' Crantz. I am informed the Asbestos stone has been lately brought from Scotland "It was found among the rocks in the Parish of Auchindoir,
near Strathbogie, and bordering on the Highlands of Scotland. Some years ago the Lady of the Manor had a petticoat made of it. It is described by Naturalists to be a fibrous, flexile incombustible, and elastick body, composed of single and continuous filaments. Among the Ancients, Ciampi, of Rome, was successful enough to make cloth of it, after steeping the stone in water, and afterwards carding it as wool, and then having it spun into a thread; which being wrought into a cloth by the help of other threads, and thrown into the fire, left the composition entirely of asbestos. It will neither give fire with steel nor ferment with aquafortis; and if thrown into the fire will endure the most extreme heat without the least injury to its texture.

[A white flint is found inland - E.2/7]49

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49 Inserted later in a different handwriting-csh