George M. Dawson
1891

No. I.

July 10. 1891. Left Ottawa going west by 12.25 A.m. train.

July 11. Delayed about 5 hours at Jack Fish by engine derailed ahead against a rock fall

July 12. Arrived in Winnipeg about 2 hours late, leaving again on time at 2.20 P.m.

July 13. Travelling westward on C.P. Ry.

July 14. Travelling westward, got blankets & guns on board at Kamloops.

July 15. Reached Vancouver about 12.30. Damte waiting at wharf. Received deputation of Sealers of Vancouver at 2 P.m. Left in Damte about 5 P.m. for Victoria.

July 16. Arrived Victoria about 1.30 am & tied up at outer wharf. Deputations from Board of Trade of Victoria & Sealers association at 10 am remained talking till about noon. P.M. Called on Mr Milne at Customs House & obtained some general information from him. Saw Mr Powell & arranged with him to send out Circulars of Enquiry on Seals to Indian Agents on coast. Any Copies of replies to be sent to Care of Charles Todd, Indian Agent, Metlakatla. Dawber all ready to leave this Evening, but Captain states that leaving at 3 am. will make equally good time, reaching Sequium Narrows at right stage. Wrote letter to Hon C.H. Tupper informing him of progress etc. (see copy)

July 17. Leave wharf a little before 5 am. the Princess Louise' also for the north, leaving about same

time. Find that a ~~an Indian~~ hunter & two boat-pullers engaged with him had left, being unable to arrange with Captain in some way. Unfortunately did not know of this in time to take action in it. Pass steamer 'Queen' going South, a short distance north of Cape Mudge.

July 18. Call at Alert Bay 4 a.m. & put ashore a mail. Out through Goletas channel & across Nawitti Bay to the westward. See several small whales today.

July 19. Pass a skin boat of some kind this morning nearly submerged & very imperfectly seen but no doubt has drifted from Aleutian Islands. Engines stopped about an hour to renew packing before noon. Position at noon Lat 51° 31' Long. 134° 49'

July 20. Schooner sighted early this morning going South. Position at noon. 52° 2' Long 140° 29'. Morning with glimpses of sun. Rain.

persistently cloudy & sometimes drizzling. Water 8 A.m. 51°

July 21. Wet morning, prior in P.m. but mg occasional glimpses of Sun. At noon Lat. 52° 28'
Long. 146° 13'.
Water 8 A.m. 51°

July 22. A fine day but almost continuously cloudy, & cool throughout. Light winds & calm sea.
Water 51.5° 8 A.m.
At noon Lat 52° 49' Long 152° 2'

July 23. Cloudy & thick all day, with occasional drizzling rain. Sun scarcely seen. Schooner sighted early this am apparently going north b Shumagin Islands. Mate reports seeing a fur seal today about 100 miles S.W. of Shumagin Islands.

July 24. Made the land this morning, & after some uncertainty as to exact position, caused by

for hauging about & imperfect knowledge of Coast as shewn on Charts — not we on board having been here before — made out our position, got into Akutan Channel, & about 7.30 Pm got into Dutch harbour, Unalaska. H.M.S. Pheasant, Capt. Hadley in harbour, also Chartered Collier Costa Rica, Cutter Rush. U.S. 'prison ships' Al-Ki & some other vessels. H.M.S. Nymph expected, with some additional U.S. vessels.

Geol. Geol. S. side of Akutan Island shows bright red or grey overlying strata. Some evident beds of columnar basalt, others may be sedimentary Tertiary of some kind. Smoke hanging over volcano in middle of this island, but not very notable. Similar general appearance about Unalaska of grey inclined rather uneven strata in shapes of hills.

July 25: visited by Captains of Al-Ki & Rush, also by Capt. Turner of Nymph which got in this morning. Ashore getting odds & ends & picking up information. Up to head of Harbour looking at & photographing the schooners there beached. Intended to leave this evening, but 'Albatros' with U.S. Commrs. came in & decided that best to see them before going & to leave in the morning. U.S. steps Alert & Thetis also came in, the latter just before dark. Visited by Mr Zeigler & agreed to take him up to the islands. Secured an Aleuto & Russian interpreter who speaks very fair English. Long interview with Mr. Newman in charge here for the old or Alaska Commercial Co.

Beached Schooners

Schooners on beach above referred to lie between high & low water mark on a gravelly shore. Entirely disappointing bottoms overgrown with mussels & sea-weeds. & evident that no care whatever has been taken of them. More or less rotten & worm eaten in

planking etc & of little or no value. Capt Myers thinks would not pay the cost of floating & repairing or scavanning to repose them.

July 26. Left Unalaska 8 A.M. steaming out for St George I. Spoke U.S. Wales Bering Freeman 30 m. N.W. by W. of Shishlik. P.M. passed & communicated with U.S.S. Rotifan.

Generally overcast & often quite thick fog.

Seals seen. See three solitary fur-seals between 40 & 50 miles on course from Shishlik, one sleeping. At 8.30 P.M. see six fur-seals playing about patch of floating kelp 90 m. S.E. of St George.

July 27. Dense fog all day, with calm or nearly calm sea & overcast sky. Occasional glimpses of dim sun but horizon never visible. Tried to make St George Island some time unsuccessfully & then bore away for St Pauls Island. Steaming slowly

a good part of Rain. but dropped Kedge again in Evening & Cap. ch. anchor all night.

Seals seen

Several Seals seen this morning, though having an rouble round ship very contracted.

Near St George

Two swimming together, rest single. Also

Between St George & St Paul

probably 30 seals seen in Rain under same conditions – sometimes two together, generally singly. Playing & swimming about on surface. always rising high out of water & look at steamer & not at all alarmed, though shy. Shot fired on one occasion caused a couple of seals to dive quickly, but they soon came to the surface again. About midnight total abundance of seals swimming round. Some passed quite close to side of steamer at anchor. Popping up in all directions & known by respiration heard across the quiet sea. Did not appear to be travelling in any particular direction. This about 8 miles from St Paul (pointing out 6 miles. For S.E. of Otter I.

Memo. of Whites on Seal Islands

Jly. 28. 91.

Major W.H. Williams Treasury Agent.
Col. Joseph Murray 1st Asst. do.
S. R. Kettleton 2nd " "
Mrs Kettleton. School Teacher.
G.R. Tingle Supt. N.A.C. Co.
J.C. Redpath. Manager on Island.
C.G. Belduin Bookkeeper for Co.
Dr Herepa Res. Physician.
Ed. Hayes Cook.

St George

Capt A.W. Lavender 2nd asst Treas. Agent.
Col. Barnes " " "
(to second above)
Dan. Webster Res. agent A.C. Co.
Dr L.A. Hayes Res. Physician.
Mr Mitchell School Teacher
Mr Titchener. Labourer

Mr J. Stanley Brown. Special agent to study conditions of seal life etc.

July 28. Got under way again pretty early this morg. for Cifuny Sound, & before long made land of St Paul's & anchored on W. side of Reef Point, near the settlement, but astern & there not people in charge. Then went on Tingle out along whole length of the Reef. Dined at the Company's house. Rtn. out to Tukannon & Kelson rookeries. Evening had Major Williams & Col. Murray to dinner.

Stoley rookeries

The seals have to some extent already left their solid formation on the Rookeries, but the bulls still hold their places & the number of cows & the pups, apart from the females astore & the Killable seals, bachelors or hollustchickie (pronounced 'Holus jacks') with the area of warm ground bare of grass & hydrolium enable a very fairly accurate estimate to be formed of the general condition of the rookeries.

The preliminary examination of the rookeries today appears to indicate that no immediate danger of extermination of seals. Great numbers present & a very large crop of pups. From such observation & from statistics already received seems probable that Elliott & others much exaggerated numbers in past reports & in that of last year greatly or very considerably underrated the numbers.

pups. swimming

Noted also that the pups in great numbers swimming in the edge of the water & climbing out & in. Data much earlier that that given by Elliott & Bryant, & this notwithstanding the fact that Inglis says he believes arrival of females now to be 15 to 25 days later than formerly.

good female

Noted one female heavy with pup, landing & trying to find a place to establish herself in the rookery, unsuccessfully so far as seen,

ass. females & holes.

Largest number of females seen with any one bull on the rookeries today 20 to 30. Very variable.

Pups

Great number of pups, now podding in groups of number up to 100 & 400, crushed by females, shows that at least half females in water, bodies full of seals at moderate distance from shore, but thick enough close to shore.

females

close to shore.

July 29. Went in Govt. Boat, with silent crew & accompanied by Col. Murray & Mr Zingle to Zapadnie Rookery. Walked over this & afterwards examined from the water, slowly coasting along near by, East Zapadnie, Middle hill hauling grounds, & Zolotoi & Sagoon Rookeries. Evening met the U.S. Commissioners at Govt. House.

Zapadnie. Zingle says that the hauling grounds here extended considerably further back when he first saw them,

but on examination find the rocks well lichened to the edge of sea and based by seals. The growth of this lichen cannot have occurred in a few years but must have taken time. This rookery seems fairly occupied & no complaint appears to be made about its condition. Today, owing partly to rain, water all in front of rookery being black with swimming seals. Dead bodies of young pups on this & other rookeries seen today. Nicoli (chief of village) says that at present very few Killables = Kolaschickie at Zapadine & that ten years ago Killings were made at Zapadinie.

lichen

few Killables

East Zapadine. Murray says he had estimated seals here at about 20,000. No complaint of decrease of this rookery but Elliott's figures of seals in 90 are much more than above. Is it possible that a previous

Elliott's figures.

consistency & an endeavour to maintain his peculiar mode of enumeration he has seen in 90. Seem too high figures? There might still be employed to show good decrease of compared with the really seemingly (?) figures in some boxes for 72-74.

E. Sep. no Killables

Nicoli Krutkoff (second chief) says that all now hulls & cows in E. Sep. & English Bay, no Killables practically.

Sealed

Length of sea front of all these rookeries seems now little if at all decreased since Elliot's old visit, though doubtless more scattered & thinner.

Middle hill.

Middle hill at East end English Bay, is a good hauling ground & not a rookery. Murray says that the decrease of seals on this hauling ground perhaps more notable than anywhere else. As seen today, however, pretty well covered with scattered pods of Killables. Some days ago Murray estimated the Killables here at about 3000.

Dead pups.

Tolstoi. Compares very well with the other rookeries, being equally well filled or perhaps better than those before visited. Observed great abundance of pups. In one place, on smooth slope see several hundred dead pups scattered about. Partly decomposed & probably killed at least ~~an~~ a week ago. Murray cannot account for them. Nicoli says undoubtedly killed by bulls running over them, but why in many in one place & few elsewhere I cannot divine unless a stampede of seals through a large pod of pups. Possible that such may have occurred in driving killers from edge of the rookery. Murray says Tolstoi is one of the best rookeries.

Lagoon Reef. This rookery like the others has its old full length. Can never have been other than a narrow strip of a rookery, but might accommodate if thickest very more seals.

The very small Rookery near the village has been altogether abandoned for several years

July 30. Walked out some miles after breakfast. Landed & had another long talk with Mr Tingle, chiefly about number & distribution of 'good skins' & work of carrying them over & shipping with following year's catch.
After lunch went out along the rep. very dull & spitting rain, but tried for a few photos. Carefully examined & walked over the Rep Rookery & Gorbatch. Seem to be more seals ashore, particularly more killables, than on former occasion. Killables podded or scattered all over the 'parade ground'.
Long talk with Mr Redpath as to general conditions of seal life on the islands. Redpath is very intelligent & has been long on the islands but is very particular to admit nothing contrary to views of company & probably writes his

Rep

Names of native settlements on the Aleutian Islands.

Atka. Nazan Bay, N.E. side.
Umnak. E. side.
Unalaska. Several settlements.
Akutan. Akutan Hr. E. side.

statements with the same object in view constantly.
Evening landed again. Gave Mr Williams a letter pointing out our view of the meaning of restriction of killing, namely that quite clearly intended that the whole number should be 7500 & no additional 'Food skins'.
Take Dr Merriam, Mr Tuyle & Mr Lavender on board for St. George with us for in the morning to utilize calm weather & get ashore there. Call from Capt. Coulson of the Rurik just after dinner.

July 31. Left anchorage at 6 am. steaming off for St George. Soon after getting away, sighted the Pheasant & spoke her. Captain Hadley having instructions to keep company & followed us. Rounded west end of island & dropped Kedge in Zapadnie Bay. Landed, Capt. Hadley & Mr Cove also landing in their own boat, & proceeded to look over Zapadnie

Rookery. Returned on board & steamed round West end of St George. Off in boat off Starry Arteel Rookery, Dannell followed by Pheasant going in & anchoring opposite village. Landed & examined Starry Arteel, then coasted close along shore examining North Rookery. Landed for a few moments at village & then back on board, leaving Zingle, Lowender & Dr Merriam ashore. Lester & Macoun had walked across island collecting &c.

Foggy & calm in morning. Showery & wet all forenoon. Wind springing up after 2 PM & blowing strong from South toward evening.

Seals seen

Noted seals carefully on way between islands. For ten miles from anchorage one or more seals almost constantly in sight within half a mile or so of vessel on either side. Beyond, single seals seen occasionally. At 32 miles from St Paul anchorage six seals seen together, apparently playing & soon thereafter a single seal.

Off west end of St George (about half a mile distant) great numbers of birds in water but no seals seen & none till within about a mile from Zapadnie Rookery. Seems to show that seals do not increase in numbers as approaching any part of coast of islands, but only as chiefly in vicinity of rookeries. None of seals seen observed to be travelling rapidly in any direction.

Rain effect

Breeding females seen today, owing to rain, are all evidently thinned out a good deal. Water in front of rookeries full of seals, most of which probably females.

Zapadnie rookery. Northern end on flats close shore, building & rough as usual. Southern half sloping up on a hill. Cannot here, any more than Elsewhere, form any correct estimate of number of seals. This may be partly due to the present scattered state of rookeries, but even if allowed could be little better than a guess. This is not a large

rookery, a Tingle thinks that it is now one of those which has stopped worst. He attributes this chiefly to the numerous raids which have been made on this rookery. Adds, however, that the disturbance of seals here may have caused them to go on to St. Paul's.
A guess at number on this rookery, counting mothers for females now worried on rookery might vary from 8000 to 10000. The ~~[illegible]~~ Holluschickie seals seen certainly less than 1000 & allowing similarly for those which may be at sea cannot be ~~less~~ more than 1500.
Starry Arteel. A rookery on a steep slope, bounded by a cliff seaward on one side. If Elliott's old plans at all trustworthy here an evident diminution, which, as now generally observed, may be measured by the lessened area of bare breeding ground.
North Rookery. This is stopped to contain about half the whole number of seals on St George Island. Spreads along a good belt of sea margin,

& when the cliffs are broken down, widens out. Here, as in all the others today, great masses of pebbs & they may seek in the water up for a short distance. Great proportion well within 1/4 mile of shore. What can be seen, with various hints & accounts seems to indicate scarcity of hollunshikie, including particularly Killobbies of 2-4 years old.

August 1. Breakfasted early this morning & landed at 8 a.m. to see killing of 20 seals for ~~[illegible]~~ food of natives. Then, accompanied by Sverdrup & Tingle, walked over the hills to Great Sorlen Rookery, examined it & the Sea Lion rookery & returned to Bill's. Lunch at Company's house. P.m. walked to Little Sorlen Rookery & returned, accompanied by Sverdrup. Dr Harrison took us with morning & evening. Returned on board. Rather strong southerly wind all day,

with mist & rain. Capt. Hadley & his Crew to Dinner.

Killing at St George. Seals driven from the Islands lying off North Rodney, but none than half a mile. On our arrival men ready to be driven down hill to actual Killing ground. Driven out Killing ground in small squads. Whole number driven 250 to 300. From each squad a "Jack" the best skins selected & Killed, others turned loose & allowed to go to the sea from the Killing ground. Though driven but a short distance & doubtless under circumstances with all care possible, evidently much alarmed & very much frightened. Seals driven chiefly yearlings with some 2 year olds & a few old bulls. Two of the seals driven were wounded on the hill. One of them Killed & the wound on examination an old one made some days ago - though perhaps by stones on occasion of a former drive. The other got up. Seals turned loose travelled in small pod each time toward sea, going a short distance

Driving.

& then resting for some time before coming again. Some completely tuckered out & not soon able to keep up with rest of pod. Saunders's attention being drawn to this he said 'Oh that is nothing, they sometimes stay here a couple of days'. On the killing ground the seals driven over the putrid bodies of those previously killed. This alone would surely be sufficient to render any animal, particularly one so sensitive as the seal, shy of the entire locality, & likely to lead to desertion of island as a breeding place. Had all the stomachs opened. In one a handfull of pebbles. Not stomachs. slimy matter or bile. In one an isopod & some fragments of fish bones. One contained brownish blood, evidently extravasated owing to some internal lesion. No food whatever in the other stomachs. In all or nearly all a few lively worms. The whole ordeal of driving evidently a very trying one, but what its precise effect may be cannot of course say. On the killing ground at present a large

Seals not used for food.

number of bodies of seals in decomposed state of which no part has been taken for food. All those killed today taken for food, being about one for each family. This will serve the natives for a week or three days.

Great Eastern Rookery. — This looks a thriving rookery enough with very large quota of pups. It may of course be reduced from its original dimensions, but scarcely fair to assume that the entire area of short grass about it was at any time simultaneously occupied as breeding or hauling grounds.

grass area.

drive

Seals are driven from here all the way to Village Killing grounds, which must be a very severe drive. Lovenskjold says not more than 2/3 probably not more than 1/2 number of seals here now that were here last year. Comparison with Elliott's work of 40 does not seem to bear out so small an estimate as show such great decrease. Many sea-lions on or near this rookery, with pups. They have hauled out here after leaving breeding

sea lions

place to seaward. Told that the sea lions stay about island all winter, not going southward like the seals. Sea-lions & seals seem to hard out together in perfect harmony.

Little Eastern Rookery. — This is a small rookery & appears to be quite up to Elliott's lines for 90. Good crop of pups & very flourishing looking. Pups swimming & diving boldly along the edge of sea. Lavender says has kept up better than any on the island. Distinctly a breeding rookery with very few Holluschickie. In consequence no driving (pick Lavender) for last 3 years except one killing of 60 this season. This exemption probably explains good state of rookery. Purple estimated whole number at about 5000. Told afterwards by Lavender that Elliott estimated that number in 90 at 4800.

pups swimming

Good number of females swimming & 'bodying' in the water off the front of rookery; many all between the shore & the inner edge of field of

females swimming

Kelp. A few in the Kelp & a few beyond it. Weather rough outside Kelp today.

August 2. Landed this morning & had a talk with Capt. Webster who has had more experience of sealing & the Seal islands than anyone. 'Corwin' came in, anchored & went off again staying a short time. Returning on board 'Demole' with Dr Merriam, followed shore of island to Eastward & round to Garden Cove. Then struck out Eastward to join of northern of two kelp patches doubtfully shown on chart. Could not find the bank with such search as we made, which was wrong. Turned up for St Paul's & anchored at Fort Anchorage at 8.45. Strong southerly wind all night & continuing this am, but gradually dying away & lightening with rather heavy swell from the Southward or Southwestward all Pm. Occasional glimpses of sun today.

Seals seen.

Seals observed in much greater numbers today than on previous days between St George & St Paul's. (See seal log.) Reason for this conjectured. Stated that after rough weather seals found going to sea in large numbers. Yesterday's blow might thus account for the numbers. Possible also that seals forced up in windy weather mostly on lee side of island which would be bottom of most of those seen today. Equally possible that seals swimming at large may collect in lee & possible that scent of walruses blowing out may partly account for this. All this is subject of hypothesis for far.

Reasons of distrib. at sea

Aug. 3. Ashore at 8 A.m. to witness killing of which we had been notified before. Took some photos. Examined stomachs of seals killed. Saw skinning & counting of skins into kendes. 118 in all killed out of drive of about 1000 or 2000 as variously estimated. Had a talk with 6 of the older natives in the

Exhausted seals.

Aug. 4. A number of the seals driven yesterday, perhaps one or two hundred, when turned loose went only as far as the edge of the grassy bank above Zeltzi Sands & are still lying there this evening, not having returned to the water. Appear to be tired out, or at least cannot otherwise explain their conduct.

Sat. House. also again with Major Williams & Col. Murray. Back on board ship. Call from Capt. Hadley & arranged approximate plans. At work writing up notes.

drive & killing

The seals for killing were driven from Zoltvi Sands to killing grounds, a short distance over rough grassy ground & consequently did not show the same evident signs of exhaustion as noted on St George — above, brown, blow, the distance was very small compared to many of the usual drives. Large proportion of drive consisted of yearlings & some old bulls were included same as at St George.

Stomachs

Of 98 stomachs examined
65 Contained nothing or in some cases a very small quantity of sand. A few notably slimy or with gelatinous matter & froth.
6. Contained nothing but a little yellow bile.
4. Contained more or less discoloured brownish blood in one or two cases clotted & probably from internal

stomach.

17. Contained stones, in a few cases but a single pebble.

The remaining sections follows.—

1. Beak of squid

1. Stones, ear-bone of fish & pieces of broken (dead) shell.

1. Beaks of squid (2)

1. Small pebbles & broken (dead) shell 1 beak of squid.

1. Very small piece of kelp.

1. Beaks of squid (2 or 3.)

weight of 3 year old.

A large fat 3 year old selected for the purpose by Williams was cut up by nature atr removed all flesh ordinarily employed for food & weighed it & other parts as follows.—

Total weight of seal carcass 85 lbs.

Skin 8 lbs.

Blubber 5. lbs.

Food. { Flesh 25 lbs.
{ Heart, liver, tongue & kidneys 5 lbs.

August 4. With Sir George & Mr Zeigle drove out in buckboard to Polarnia Rookery. Examined it & took some photos. Returned Village 1 Pm. In Pm. took macaws out on Reef Rookery endeavoring to get photos. of seals etc. Sir George & Other Island in launch with Capt. Hadley of 'Pheasant'. Evening W.S. Commissioners Zeigle & Stanley Brown to dinner on Board. A very fine day.

Polarnia Rookery. Helpway Point at that distance from village to N.E. Point. This is one of the more extensive rookeries, though by no means the largest. Seems to be in pretty good state & well stocked with seals. Zeigle thinks it is in about as good state as last year. Drives are made to a killing ground not far off & a salt house in vicinity to receive the skins. Ground occupied by seals rather flat, with exception of cliffy edge & a long low rocky flat reef off southern part. Elliotts 'Parade'

includes a wide flat of sandy land behind the breeding ground much of which may never have been much employed as a 'parade'. Nothing at least to show that it was or employed & Tingle says it was never all occupied. About southern part of Rookery see many dead pups, several hundred at least in a not very large area which we were able to examine without disturbing the seals. Do not appear to have been dead more than 10 days or two weeks at most.

dead pups.

Cf. Elliott, 'Supplement report' type written Part I. p. 66 for probable explanation of dead pups seen here.

Nor vegetation of plain behind Rookery attrib. by Elliott to seals. Seems to be naturally a sandy plain on which nothing would grow. Still bare & bare sand far behind seal edge in places & might well blow about to be drifts. Cf. op. cit. p. 67.

Polavina according to Elliott not driven from from date of Lapoorska of 34 till 82 (p. 67) village (Russian) then & old H.R. Rt. abandoned

over

a only present village kept up from date of Zaporska above. (p. 67.) according to this 82 would mark the serious decline in seal life which rendered driving from Polovina necessary to keep up Zuta. Check date given of time of establishment of Salt house at Polovina.

was built 12 or 14 years ago according to Redpath. This would be in 79 or 77.

Aug. 5. Invited by Capt Tanner, Prof Wordsworth & Dr Merriam to visit N.E. Point Rookery on the 'Albatross'. Go on board 10 a.m. & along south side St Paul to Webster's Home. Land & examine the rookery &c, walking all round the point & entering again on the Albatross about 3 p.m. Round west end of island & back to Andrews at village.

Fowler now in charge for company here, has been on island since 1879. Says that the number of skins taken by company from N.E. point has varied from 18000 to 29000 in different years. In 1890 6500 skins taken & this year could kill twice as many the number of killable seals being much greater. The number of females on this rookery he thinks the about the same this year as last.

greater no. of killables.

See very few dead pups on the south east & N.E. rookeries, & Fowler

few dead pups.

confirms this observation, a
curious fact as the raids on this
particular rookery have been most
frequent & if death of pups owing to
killing of rookeries it should be
more apparent here.

Edward of rookery

Townsend, naturalist on 'Albatross'
who was with us when we stayed
H.I. Rookery, was here here in 88.
His recollection is that seals then
covered the ground thickly up to the
outer edge of the short yellowish grass
& that they are now much decreased
in number. Thinks that in 88
much reduced as compared with
state in Russian regime but
has no particular means of proving
this which appears to be a general
impression resulting from his
enquiries. (See Webster on this, in Elliott
typed manuscript pp 78879)

Single in one place on S. side of
H.I. pt. shewed as a place where
he believed the rookery ground or
breeding area by seals, extended
about 300 feet further inland than
it now does. Did not seem, however,

Select of rookery.

to think that the Rockery was run at all in a very bad condition.

Grass Edge.

Prof. Newbutt & Dr Wenham strong recommendation in putting out Edge of lawn yellow grass as evidence of very great acute observer of Rockeries. Also the polished stones.

Polished stones.

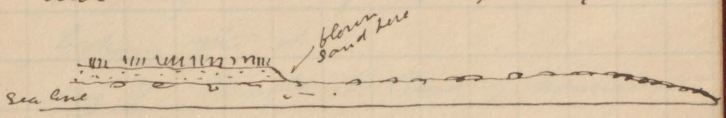
Respecting the polished stones & boulders the following may be noted here & on other Rockeries. The stones & boulders basalt or closely allied volcanic rock, where in the middle of a Rockery the surfaces fall accurately & seals very well polished, sufficiently to shine in the sun with bright surfaces when viewed at proper angle. Elsewhere, about edges of Rockeries & bordering grounds generally only Edges & angles polished – thus differing from sand drift polish. Stones so polished do not as a rule extend far beyond the limits of the ground by occupied. Thus about North End point can scarcely & only occasionally observe polished Edges as far out as the margin of the

Lindell

darker & lighter grass, giving reason to believe that ground never occupied to that limit. Referring to grass limit & admitting that it may mark limit of ground formerly occupied — it does not in itself afford proof that the occupied ground was at the time coextensive with it. Thus, looking East from Hutchison Hill today, note that the Hollischickie has in three places extended quite to limit of ~~that~~ that grass, having the ground in three 'bays' to this limit & nearly to same limit in a fourth 'bay'. Yet some change in ground occupied thus from year to year might well keep fixed limit marked to old line without increase above present number. Another point about this grass limit on North East front is that it practically coincides for much of its length with a physical difference of the ground. Higher flats characterized by long tussocky grass chiefly composed of loose sand, a

Elliott in Gyte written report (p. 73/2) says that N.E. workers letter kept up than others in St Paul. This would agree with idea of destruction & over-driving, for this society has been less severely drawn upon & more generally raided according to accounts, than any other.

few feet in thickness. This occupies much of interior of peninsula. At sides has been removed for aside tells only stone, by sea & wind, exposing stony & bouldery brown surface with soil rather than sand preponderating between boulders. This is the area characterized by stones & fallows grass & much as all get has at one time & perhaps time to time been occupied by seals.



This is specially well seen on N. side of rock to west of Hutchis on Hill.
(The 'bays' above spoken of should be shown on one of Kodak views.)

Note. Day before our arrival here Lorrimend had been shooting sea-lions for specimens on rookery!

Today a warm & sunny day & rookery probably not so well filled as it would have been in other weather.

(see opposite p.)

Aug 6. Sent mail on board 'Albatross' & ready to start, but delayed till 11 a.m. to see how weather would turn, as rather stormy North Easterly wind & spitting rain. Wind getting no worse, set off. Went outside Walrus Island close too & then shaped course for Nunivak Island. Day continued cold, rough & disagreable. Keeping seal bag till dark or looking after it.

Aug. 7. Made the land of Nunivak before 11 a.m. & shortly after saw 'Pheasant'. Communicated with her & as landing at Tendrons (Cape Etolin) would risk to difficult, crept in under South side of island. Sir Reage & McCann off to shore. Dennis took a turn to Eastward looking for settlement. Worked on board, but as I could not see anything, came back & anchored beside 'Pheasant'. Found a few Eskimo near anchorage. No fur-seals seen today or anywhere near Nunivak Island.

Aug. 8. Round Nunivak Island to westward & anchored at Cape Etolin in anchorage noted on chart. Went ashore for a time. Considerable settlement of Eskimo here from which 21 Kayaks came off, but none of the people could communicate in any way. Pleasant anchored alongside in the evening.
No fur-seals seen today.

Aug. 9. 'Pleasant' started this am early for rendezvous at St Matthew Island. 'Dauntless' got away about 7 am. in direction of Cape Vancouver, on mainland shore. Anchored on north side of this bold cape, in rather shallow water. Ashore in boat & then drove into bottom of bay to north of Cape, where find some Eskimo & a mission with three Jesuit Priests. 2 French & one from Baltimore. Returned on board. Got anchor up & left for St Matthew about 12 Am.
No fur-seals seen today & missionaries say none ever seen or obtained by the Eskimo here.

Aug. 10. Steaming southward all night. At 12.15 made land of Port Upright E. end St. Matthew Island. Took it at first for Pinnacle Island. Landed in boat & afterwards rowed round cliffs & landed again on N. shore of island to west of cliffs. Found 3 men from U.S.S. Thetis. Had been landed early this a.m. & looking for their ship. Took them on board 'Domville' & steamed round to anchorage in second bay to west. Found 'Thetis' & 'Pheasant' anchored here.

Saw no fur seals today, but Dr Wilson of 'Thetis' (one of men we picked up) reported that one fur seal undoubtedly seen by them this morg. at anchorage of 'Thetis' on south side of Island, east end. [Captain & other officers of 'Thetis' afterwards stated that this probably a mistake. That no fur seal seen]

Aug. 11. Started early with Capt. Hadley & Mr Cox of 'Pheasant' on board & steamed to Hall Island. Anchored

there & in boats along shore. Bear & walrus bunt. Bear killed but no walrus got, though some wounded. Some of party went on round island in one boat, getting another bear before evening. I returned to Danub. Landed opposite on shore, examined rocks & took a couple of photos. 'Hetis' came in & anchored beside 'Danube' in Rm. Exchanged visits with Captain Reiter. Back in evening to old anchorage.

Aug. 12. Went on board 'Pheasant' this morning by invitation of Captain Steamed round to Pinnacle S & spent afternoon there in launch & small boat, while Pheasant lay off. Another bear hunt, one old bear & two cubs killed. Also fished at a lot of sea lions, but without getting any. Back in evening to old anchorage & on board 'Danube' again. Saw & exchanged signals with 'Nymph' on S. side of island & in evening again saw

her steaming northward.

August 13. Got away 7 a.m. & steaming northward all day toward St Lawrence Island. Weather very fine & nearly Calm.

Aug. 14. Got under the lee of St Lawrence Island early this morning, as it afterwards proved, near S.W. Cape. Dense fog. Ot anchor most of day. Clearing toward evening, got off & proceeded slowly toward our rendezvous with 'Pheasant' at Cape Chibukak.

Aug. 15. Got in to anchorage to East of Cape Chibukak at about 5 a.m. & found 'Pheasant' already there. Spent an hour ashore & then followed 'Pheasant' across to Plover Bay on Siberian Coast. Anchored in Port Providence 6 P.M. Spent time till after dark going in boat to Emma Harbour & back.

Aug. 16. 'Pheasant' left early this a.m. for Unalaska. Went ashore for a couple of hours & then set off in steamer toward Pribylov Islands, intending to go S.S.W. to nearly the 100 fathom line, follow that line for some distance & eventually run in directly to St Paul.

Aug. 17. Steaming southward all day on course well to westward of St Matthew.

Aug. 18. Continuing on southerly course. Very rough this a.m. & got a terrible rolling about for some hours. P.m. smoother, but dark & dirty. Did not make the land before dark & so again hauling to & fro & waiting for daylight.

Aug. 19. Looking for St Paul all morning in dense fog. Sight the land at length & come to anchor at village about 7 P.m. To Zolotoi Rookery with Col. Murray & Col.

Barnes. Back to village & out along Rep Rookery for an hour or more. Back on board, afternoon Cols. Murray & Barnes dined with us. Got some photos. of Zolstoi Rookery etc.

change in rookeries

Rookeries have altered very considerably since last visit, have scattered out & changed distribution a good deal. Most of old nests have left their stands, though a few still remain. Some young birds now on rookery ground. Pups swimming quite strongly everywhere off edges of rookery ground the water black with them. Have apparently increased to about double weight they had when last seen. Many females on rookery ground, but evidently also many away as much fewer in number than the pups.

dead pups.

At Zolstoi see a great number of dead pups not much less in size than the living ones & therefore not very long dead, though decomposing. These are distinct from the dead

pups particularly noticed on this rookery on previous visit & very much more numerous. Where dead pups previously particularly noted are still to be seen, but more or less obliterated & scrubbed over by the running to & fro of other animals. A great additional mortality has since occurred. Must be ~~many~~ several thousand at least on this rookery in all.

Murray & Fowler who accompanied us accounted for by supposing that mothers had been killed at sea. This not satisfactory, however, as both admit that mortality at this particular rookery greater than anywhere else. Fowler says he never saw so many dead pups in all his experience. Fowler advanced a theory that females from this particular rookery had frequented some particular bank or feeding ground where many had been killed, but this rather too fine spun a hypothesis for there is no particle of evidence to show that each rookery has its own

feeding ground, nor any probability of such being the case. Might suppose that raids had been made either on this rookery in particular, but number of dead pups almost too great to account for in this way. It seems possible that the pups here are affected by some disease which either confined to this rookery or most virulent here. This, however, is so far but an hypothesis also.

On Reef Rookery some dead pups of about same age also seen, but not probably more than 1/8 certainly not more than 1/4 those seen on Zoltoi. Otherwise the present condition of both rookeries much the same.

Hellcats

Large number of Kittoches or Factor of Hollischickie at further end of Zeltoi Sands, where seen before, but also today scattered far back on the hill over the boulder ground in considerable numbers. Most of them we were informed, have hauled out here within the past few

days. Whole number on & about Baltic sands probably 3000 of which Murray estimates about 1/2 are killable seals.

on Reef Parade

Further out along Reef the Hollureckie scattered in large bands all over the parade & with small exceptions either occupying or have left signs of recent occupation over all ground of which any evidence that at any period occupied.

Limits of rookeries.

This scattering out & moving about of large bands of Hollureckie throws much light on the validity of evidence derived from limits of old occupation observed earlier in the season & goes to show that by no means fair to assume that all this old ground at any time compactly piled.

Character of reef rookery.

Much of Parade of Reef Rookery seems to consist of volcanic slaria bed lying compact & much in its original state, giving fine hard gravelly surfaces, considerably different from that of most other rookeries.

Grass growth.

The short pale green growth of grass marking in some places very distinctly the limits of former occupation (as hunting grounds etc) of rookeries, seems very permanent feature & to take a long time to replace by heather & rather growth elsewhere usual. Thus the whole little hunting ground of Noh Speel though completely abandoned about nine years ago (confirm) still quite distinct (said by one in evidence to have been 3 families here in 87) Also see a similar patch quite distinct still on slope of little hill behind cliff near East Sanding. According to account by seals have occupied this ground for many years (see evidence of Elliott as to date.) Not of course perfectly definite as a sign of occupation in itself for similar growth might be produced by other circumstances. Thus looking at E. slope of Village Hill from Zeltoi sands much similar appearance & colour of grass (though not definitely bounded) yet no knowledge of any occupation here.

Aug. 20. Got away about 7 am for Unalaska. Rough & blustry & very irregular sea all day. Had intended going 50 or 60 miles eastward, radically, for seal obsns. but weather so unfavorable that shaped course nearly direct for Unalaska. making such obsns. as possible on the way.

Aug 21. Got into Unalaska (Illuliuk) harbour about 11.30 am. Found Nymph, Porpoise, Pheasant, & U.S. vessels Wolcan, Marion, Yetis & Alert in harbour. Corwin came in after dark. Calls from officers, looking over mail. Ashore. Interviews with various people etc.

Aug 22. At Unalaska all day. Stormy & wet.

Aug 23. At Unalaska. Alongside wharf. Nasty day taking in water.

Aug 24. Got away at 10 a.m. for the west, intending to call at one or more places along the Aleutian chain & to meet Capt. Barr in 'Porpoise' at Atka about Friday.

Aug. 25. Steaming westward to north of Aleutian chain for Atka Island. Find we cannot make the islands before dark so slow down at about 7.30. Fur-seals seen in two places today, the last — two together — at about 10 miles N.N.E. of E. point of Amlia Island. (See Malcom's log.) Considerable quantity of floating kelp in places, particularly where seems that currents meeting or edges of currents have operated in collecting kelp in patches. Seals seen near kelp. The observation of seals at this season along these islands appears to be of interest.

Seals seen

Aug. 26. Morning fairly clear. Got in to Nazan Bay, Atka Island & anchored opposite settlement. Ashore & interviewed Mr Dirke, in charge for A.C. Co & the Aleut Chief. As nothing more appeared to be done, got away before noon. Remainder of day steaming westward, bound for Attan. Fair weather, but head wind & sea. No Seals seen.

Aug. 27. Steaming westward most of time in fog. See only Semisopochnoi Island. No Seals seen today

Aug. 28. On westward. Could not make Chichagoff Hr, Attan Isl. before dark, so stood off & on to westward.

Aug. 29. Got into harbor 8 am mustering natives on pur-seals etc. Ashore looking about. Got town

photos. 'Porpoise' came in this forenoon. Dined with Capt. Barr on board this evening.

Aug. 30. Steaming northward all day, bound for Behring Island.

Aug. 31. Stormy S.W. wind & heavy sea, rendering it evident that 'Nikolski' anchorage on W. side Behring Island would be untenable. After working south point of island, coasted East shore & came to anchor in Pr. at Starevya Anchorage, finding 'Porpoise' there. arrive pr. on tour or so in the evening. A few tents or Barrabaras, but no sign of inhabitants.

No. II

George M. Dawson
1891

No. II.

Sept. 1. 1891. Left Starey a anchorage on East Side Behring Island at 5 a.m. & in company with H.M.S. Porpoise steamed round north end of island & got slowly in to Nikolski anchorage on west coast in dense fog. Found Fur Company's steamer at anchor (Alexander II.) Called on by the Administrator of Commander Islands Nicolai Erebnitsky, by Agents Russian Fur Seal Co & Hutchinson Kohl & Co, also Captain of Alexander II. Ashore, & had long talk with these people, getting much valuable information, particularly from Mr Erebnitsky.

Sept. 2. Ashore this morning & finding still a good deal of information to be obtained, decided to spend another day here, particularly as weather is still very thick. Occupied in getting what we could in the way of evidence etc. Steamed off for Copper Island in company with Porpoise at 5. p.m.

Sept. 3. Made N.W. end of Copper Island about daylight & anchored at Elyutka, the southern anchorage in the forenoon. Found Mr Tillmann & Mr Kluge, the Russian Govt. agents for company at work. Cossack in charge did not see his way to allow us to visit the rookery on opposite side of island. Nothing to be done but to return 17 miles to northern anchorage named Preobajenski. Got there about 3 P.M. Found the gentlemen of whom we were in search & had an interview with them, obtaining some useful information. Arranged that they would go with us early tomorrow morning to see one of rookeries. To steam back in "Dawle" & walk across the island.

Sept. 4. Got up in 'Danube' about 5 a.m., with Mr Zillmann Mr Kluge, Capt. Burr & two of his officers. Reached the Southern anchorage of Glynka about 8 a.m. Landed & crossed the island to visit the rookeries on the opposite side. On return, reembarked, & back to Northern anchorage. Landed Messrs Zillmann & Kluge & put to sea in company with Porpoise with flam to steam slowly to reach North Rookery tomorrow morning & visit it.

Rookeries Copper I.

The breeding rookeries & hauling grounds are scattered along 15 or 16 miles of the south-west coast of Copper Island. They may be divided into two lots one tributary to Karabelny village, the other to Glynka, to which places the seals are driven overland to be killed. The drives are long & very hard, beginning in steep gorges leading up from the sea & crossing one or more ridges, grassy & partly stony of some

hundred feet in height. The ascent from the beach has been in a few places slightly improved artificially to render it possible to drive the seals up. At one place a rude wooden staircase has been made for a height of possibly 100 feet. (shown in photo. taken by Hillmann.) From the point reached by us a good general view was obtained of nearly the coast line from Karatelny rocks (see tracing of chart) to Poleta point, & from this & descriptions obtained, it is evident that the usual rookeries which are occupied by native are not usually well defined, but more or less connected by breeding seals along the narrow & less favorable portions of the shore. Separate accounts are, however, kept by the seals killed from each rookery, the distinction being made according to the routes up which the particular drives are brought. The whole shore is bordered by sea-cliffs of varying height & generally rough & wild looking, but intersected

by ravines & more accessible slopes. Below the cliffs & high banks flat rocky ~~bar~~ reefs run at irregular, with occasional gravelly beaches in little bays & numerous projecting rocks & rocks awash, with abundance of kelp, far off shore. In some places it is only possible to collect droves of seals at low tide, as at high water it is not possible to get between them & the sea. The Kellalle seals though more or less separate from the breeding seals, — particularly early in the season before regularity of formation is broken up — are owing to the nature of the ground not easily driven without sweeping up old bulls & breeding females, on their rookeries. At Paleta, one of the best worked & largest rookeries the seals have a steep slope completely bared of vegetation for a height of say 200 feet above the sea (& behind the rocky beach) This runs back perhaps 150 or 200 yards from the beach & is the

greatest width of ground occupied.
It is preeminently a breeding rookery,
but frequented by Kittiwakes.
Informed, however, that no lack of
good ground for occupation of seals
seen when most abundant. Plenty of
places where conditions appear to be
equally favorable, but seals generally
occupy approximately the same ground
year after year.
The drives on this island are
steeper & must be harder on seals
than any of those on Pribylov Islands.
The height of land crossed between
S.W. Coast & Glyptika is about 800
feet & in driving from the northern
rookeries to same place more than
one ridge crossed.
Very hard to estimate number of seals,
but along stretch of coast overlooked
(see above) should suppose at least twice
as many in all as on whole of
Reef rookeries of St Paul Island.

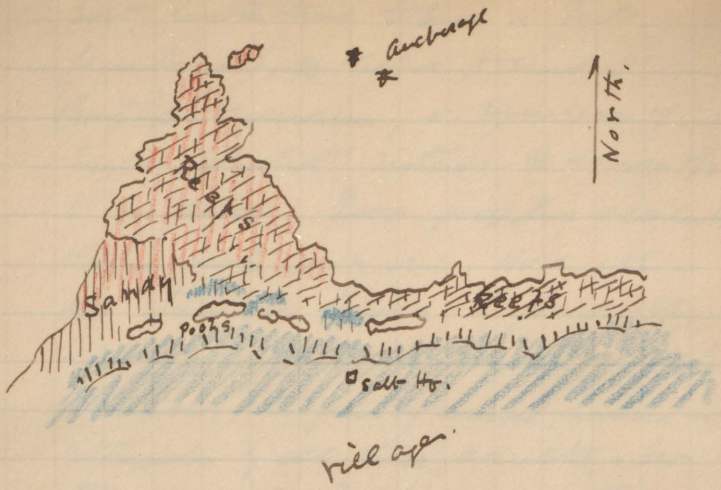
Sept. 5. Anchored opposite Salt House at North Rookery of Behring Island. Landed about 9 a.m. & remained ashore till nearly noon. Got off, with 'Porpoise' at about noon, going westward. 'Porpoise' to make direct run to Cape Ishipunskii while we take a somewhat more northern line, afterwards turning southward & meeting 'Porpoise' at the Cape tomorrow evening.

North Rookery is the largest on Behring Island. It is situated at Yushin Point on the western portion of the north coast of the island, & occupies a flat stretch of rocky reef which runs off seaward here. The reef flat is partly bared at high water, but much of it is above high water mark. Nearly all must however, be washed by surf in heavy gales. To the eastward, along the coast, the shore consists of sand as, but narrower low rocky reefs. The rookery reef is connected with the shore on the westward by a wide dry bar or beach of sand. It is

roughly triangular in form, about half a mile in length & 1/4 mile wide at base on landward side; where it is overlooked by low grass & weed covered rocky banks 20 to 40 feet in height. Between these & the rock proper are some small irregular grassy flats & salt water pools. The area of the rocky ~~proper~~ may be about 1/4 square mile or say 6,000 000 square feet. Deducting usually water-washed & partly submerged parts the rocky ground proper might be estimated at about half this. It is fairly well occupied by seals, & a guess would place the number at from 150,000 to 200,000 though possibly 250 000.

The Kellobe seals usually haul out in pools along the shore to the Westward of the Rockey proper.

One sea-lion observed on outer point, possibly (?) the same single animal noted by ~~[illegible]~~ Macdonald years ago.



Sketch of general outline of North Rookery, Behring Island.
5. Sept. 1891.

Ground more or less completely occupied by seals.
grass.

Sept. 5. Cont. Mr Erebunity having sent instructions to have a male, female & pup killed to send to British Museum, a number of seals selected of natures & dimensions to be killed. Two females accidentally killed instead of one. Had all four stomachs opened & found all empty. A little bile in one of females stomachs. A few of usual worms in stomachs of all three adults. No trace of milk in stomach of pup. All the seals were found well coated with fat, using the pup, but—then the females, which had prematurely been suckling young, & the old bull, which had according to theory been abstinency on the rookery now for many weeks.

stomachs

seals fat.

While we were ashore, some of men fishing on the Daniels' anchorage half a mile or less from the rookery, in 6 to 7 fathoms of water caught over 20 cod, & some other fish. This is the best place for such fishing that

Cod caught

we have yet found of the fur seal only confirms my theory that the fish are to be found in the vicinity of rookeries, not to Walter Elliott's exaggerated statement that the fish to be found within 100 miles of Pribylov Islands!

Sept. 6. Sighted the Kamtschatka coast early this morning, & coasted along it southward at a considerable distance. Rounded Cape Tchipanski & found 'Porpoise' anchored behind it, a Captain ashore. Anchored beside 'Porpoise'. Some of party went ashore. Stayed on board to write diy. A magnificent day.

Sep. 7. Got under way at 4 a.m. & reached Avacha Bay about breakfast time. Entered & waited a short time for 'Porpoise' off Petropaulovski Harbour, to allow her to go in first. Most of day occupied in ceremonial visits & waiting about for such.

Had a talk with Mr Lindquist of Fur Company & with the Governor & Isprawnik Mr Koniakoff; also with Captain of Russian Warship-Wolf Alent, Mr Dere, & others. Obtained some little information bearing on seal matters. Drawing Salistain not on the Porpoise's trip.

Sept. 8. Ashore this morning & again in the afternoon. Received visit from the Governor on board. Took some photographs etc.

Sept. 9. Had intended leaving this morning on return southward, this being our furthest point. Found, however, that engines would not be ready till 5 P.M. Got away finally about 6 P.M., intending to clear point for Commander Islands & sighting them if possible to keep on straight to the Pribylov Islands.

Sept. 10. Steaming Eastward all day. Very fine & nearly calm. A number of seals logged today, sleeping on water. At noon Lat. 63° 11' Long. 163° 7'.

Seals seen.

Seal log observations stopped for darkness about 7 P.M., but before that time seals became very scarce. Seems that we have run through an area of an isolated kind of say 30 miles diameter characterized by seals, all or nearly all asleep on the calm surface. Generally became alarmed & dived when steamer was say 200 yards off – doubtless from noise of screw. These seals too much scattered to be called a school being much too far apart as a rule to have any knowledge one of the next. They are therefore not here in gregarious association but because impelled by some other conditions. There might be conditions of wind or weather & these seals may conceivably be from the

Causes? distrib. of seal

Commander Island Rookeries.
They are, however, too far off to be considered as being off on feeding expeditions or bound to return. Cannot be thus female seals with pups ashore. Probably seals which have had a call to land, barren females, bullies, rocks or yearlings. If the latter would partly explain the notable absence of yearlings this season referred to by some of witnesses (see evidence). The conditions bringing the seals ashore were by abundance of food — see one small school of fish skipping the surface this pm. If again these seals have been on or have left the islands the prevailing winds or surface currents may have carried them in approximate association here together without any special volition on their part.

Sept. 11 Steaming Eastward, headed for St. Paul Island. Heavy N.W. sea & strong wind all Pm & Evening.
At Noon. Lat. 53°50 Long. 169° 3'

Sept. 12. Cruising Eastward. Heavy sea & steamer very lively all day.
At Noon Lat. 54° 32' Long. 175° 22' E

Sept 13. On toward St Paul Island.
At. Noon. Lat. 54° 51 Long. 178 37 W.

Sept. 14. On Eastward. Lat. at Noon 56° 20'. Long. 172° 42' W. Anchored at 11.50 off St Paul Isl off.
Pups. Several seals seen today & among them two pups of this year, apparently quite alone & perfectly at home here about 40 & 70 miles respectively off the islands.
(Sep. 15. Redpath says seals that these may have been yearlings. Says that this year's pups are now almost equal in size to that of yearlings)

Sept. 15. Ashore about 8 a.m., after working round to the East side of Reef Point, which is more sheltered. See Messrs Redpath, Balduzzi, Fowler & Col Barnes. Out along the Reef examining rookeries & Compolly & taking a number of Kodak shots. Start at 7 P.m. for North East Point, landing there, on South side of point, about 2.40 & spending whole P.m. late to OC inspecting rookeries all round the point & taking a few photos. From Hutchison Hill. Back on board. Remain at anchor, including to here at 6 a.m.

Reef Pt N.E. Pt. rookeries.

General changes observed on rookeries much what previously published observations would lead to expect. Organization of rookeries now broken up. Comparatively few old bulls to be seen, most having gone to sea. Notice a number staying at some distance from shore. Others resting here & there singly or in groups on sandy beaches. Still

others sleeping on the rookery or hauling grounds. Hollis chickies much as before, though perhaps somewhat more scattered, adults keeping in groups together in vicinity of old hauling grounds as a rule. Pups have increased much in size, & though most are still black, others are already beginning quite grey, from growth of hair of that colour. Note, however, much diversity in size & appearance of pups. Seals now passing through 'stagy' period & much hair, with small tufts of underfur mixed, & the pound blown about the rookeries & vicinity or puddled into the muddy surface. State of fur does not however, appear to prevent animals from taking to the water quite freely & do not notice any diminution in the great numbers now as before feeding the sea margins immediately opposite the rookeries. Pups now appear to swim as easily as the old seals. The pups scattered

far along the beaches in pods of twos & threes together, though by far the greater number shall be found on or near the old breeding grounds in company with the brothers. Saw several pups near East Landing on reef playing with or eating strips of Kelp. Redpath says the seals eat Kelp as part of food, but as seen today no very effective effort at actually eating it.

Eating Kelp

Reef Rookeries. Altogether, a very good number of seals here at present. Perhaps not more than on former visit, but now scattered in such a way as to look very numerous. Large droves lying about or travelling over all parts of Parade ground except the grassy flats to S.W. of Fort Hill, which for some reason are not occupied & show little signs of having been much occupied either this or former years. The 'Parade' is much fuller & the actual breeding rookeries are much

less continuously occupied than on former visits. At South end of Zoltoi sands a small number of hollurschickie & a few old bulls hauled out. Not so many today as on former visits. Rather heavy sea breaking in the bay. Some hollurschickie & a few old bulls stream along slopes behind Gull Hill.

See Ketavie, Lukannon & Polemna rookeries from the sea, in passing. Had a good view particularly of the last named, which in general appearance did not differ much from that found when visited before, except that the seals here as elsewhere hauled further back from shore irregularly in considerable droves. Beaches & rocks and beaches still, however, well occupied.

North East Rookeries. Landed at Sibb Home, on S. shore, & walk across neck of land through

hollow between Cross Hill & sand hills to S. of it. This hollow is largely a sandy flat, quite low & looks as though the sea waters passed into or through it in very severe storms. Observe a large lot of Hollusebickie – probably about 5000 – with a few old bulls among them hauled far up on the northern slope of Cross Hill, where none seen before. At previous visit a few old bulls & scattered smaller seals – presumably Hollusebickie – were distributed along the beach for a couple of miles west of Cross Hill. There are probably able there (though not examined) as a few old bulls scattered along beach on S. side for W. of Salt Hour.

Walked along shore just inside rocky margins & then to summit of Hutchinson's Hill. Heavy surf along beach N.E. from Cross Hill full of seals, old & young, playing.

Except the Sandy beach near to & S. west of Sea-lion Neck, which a constant resort of Hollusebickie,

the remainder of the coast, all the way round the promontory, is practically a breeding rookery, though thin & scattered in places. Natives who accompanied us say that only cows & pups now, besides a few old bulls which still remain. Proportion of old bulls remaining on Reef rookery appears to be larger than here.
Changes observed on these rookeries similar to those already noted. Cows & pups were grouped in large & rather compact herds at greater or less distance from shore, & scattered along the immediate edge of the sea. No apparent diminution in aggregate number on shore, though this of course a point hard to estimate.
Gross Point. To west of Hutchinson Hill a large area distinctly shows obvious traces of having recently been occupied by seals for some days at least. Quite out to edge of short yellowish grass, & close cover — not particular from the hill — the seals have overrun a considerable area — about 50 000

square feet — of the high tussocky grass which shows no trace of having been occupied thus in recent years. The ground occupied by seals has the grass flattened down, partly worn bare & pressed into the mud. The stunted long grass has not suffered to same extent as the short grass, & next year if not again occupied, would probably show no permanent trace. The whole of the hauling ground here described talent today.

To East of Hutchinson's Hill, the 'bays' of seals previously noted as being hauled at the edge of old hauling area — as indicated by short grass — have partly disappeared. Still, however, some herds of seals spread out to old line. One particularly notable just East of hill where a herd of perhaps 2000 seals or more (females according to natives) have established & are moving about in the long tussocky grass which shows no trace of former seal occupation. The short grass in some places where

herds of seals were observed on former visit, but having been long occupied & being since been washed by rain, has lost all evidence of occupation as viewed from the hill.

Brown's works.

Both ravines caverns of stones & boards put up by Mr Stanley Brown when surveying the rookeries this year. Some of these seemed to have been placed as showing the edge of former hauling grounds. Indeed one particular which stood on a round high grass tussock, on of several from which the circumjacent sand has been blown away. From this cairn Cross on Hutchinson Hill bears S87°W of pocket compass. This stands on one part of the edge of the inland side of a wide tract characterized by half-buried angular rocks & bare sand, with occasional tufts of grass. The boundary of this area is distinct enough but has had a less or possible connection with boundary of area now occupied by seals. Examined it carefully with

this idea in view. The rocks & stones do not show the rounded ~~edges~~ or polished edges of those on which the seals have been accustomed to travel & the intervening sand is not trodden & consolidated like that which has been occupied by seals some years ago. The loose character of the sand is in fact obviously the reason why the growth of grass is not continuous on it in the usual way.

Dead Pups.

Dead pups. On former visits to Solotoi & in visit to Polevina with Mr Triple struck by number of dead pups characterising certain parts of these rookeries (see former notes) Murray & others at first inclined to deny that the pups had met their death this year, but apparently fully convinced that this the fact later. Seemed puzzled & surprised & offered various conjectures to account for it. Eventually reached the idea that mothers must have been killed at sea. Attention of Mr Brown

was doubtless then called to this circumstance with result that he (we are now informed) has undertaken special investigation of it. We were questioned the fact, when first observed by us, that these pups were practically confined to certain areas of certain rookeries. Fowler when we visited N.I. point before stated that he had not seen dead pups. Remarked at the time that as raids had been went pregnant here this would do away with the idea that killing of workers could account for it. Now informed that Mr Brown is convinced that proportion of dead pups about the same on all the rookeries! This of course would enable dead pups to be satisfactorily accounted for by killing of workers at sea. It has evidently been considered important to render this explanation admissible. Took above facts in view carefully examine Rey Rookery, looking over them with glasses from Parade Pinnacle, Rey Pinnacle &

elsewhere. Also discussed slope of Garbotch when we had previously been with Col. Murray with the special object of comparing that place with what we had previously seen with him at Zolotoi. Result, that can see very few — scarcely any — dead pups all along the Eastern side of the Bay. At Garbotch note possibly a hundred in all, but nothing to compare with notably prevailing noted at Zolotoi.

Had similar investigation in view in examining N. E. workings. Made out a few dead pups below & to north of Hutchison Hill, but elsewhere very few. Made a special examination of ground to north of beach where Kolluschickie occupy inside (& to N. of) Sea-lion Neck, driving partly off a large herd of cows & pups which occupied it. Here & there a dead pup all over this area, but near beach, & partly where waves actually reach at high tide, were abundant. Here probably 100 dead pups in an

area of 20,000 square feet. This the greatest number anywhere seen today & again nothing to compare to that previously seen in certain parts of Jokohi. The bodies seemed for most part to have been there seen for 10 days or longer & many were broken up & mangled by birds pecking to & fro over them & had been considerably larger on the ground.

Informed that Dr Aklin (now medical officer at St Pauls) had examined some of dead pups & interviewed him. Found that he had opened 6 dead pups from Jokohi, which he stated were rotten too much decomposed for correct autopsy. Could find no evidence of disease. Pups were very thin, but fat seen in mesenteries. Stomachs were empty except in one or two cases a few pebbles. Chief Nicoli is said to have gone round the workers with Mr Brown when he was on his

dead-pups search.
Of the various modes in which the dead pups met with on rookeries may have been killed, the one reflecting on the killing of seals at sea by schooners is naturally chosen, but interesting to observe that almost without exception when the matter first spoken of, people on islands suggested overrunning by bulls or surf as causes. It appears quite possible that some sickness might be the cause. This is not the first year of Pelagic sealing but the people persons have not been any number of dead pups before.

Sept. 16. Left anchorage at 6 a.m. steaming about E.S.E. all day till dark, at 7 p.m., for purpose of noting seals. Changed course to direct line for Unalaska at 7 p.m. Day generally fine with moderate westerly wind. Spoke the whaling bark Sydia this p.m.

Seals seen

After sailing for some time into a region where very few seals struck out a

considerable patch in which seals rather abundant. This about 30 miles in diameter. The water (?) light in the middle.

Seals & Kelp

Kelp seen several times in the seal area. The frequent occurrence of seals & kelp together appears to be more than accidental. Very probably indicates that the regions characterized by both are determined by winds & currents. When a considerable abundance of floating kelp accumulates the same influences assemble the seals & probably also the surface organisms on which they may feed. Might otherwise be very broadly sporadic on the sea-surface generally.

Difficulty of policing

It will be impossible to effectively police any considerable area of this Behring Sea as long as Whaling & other fishing allowed. A protector Whaling affords all the necessary chances for sealing & the sign & construction of the Whaling ships gives very opportunity to effectively conceal the seal skins & apparatus employed. What for instance

& prevent the whales seen today from running in to St Eloye & raiding rookeries tonight, by lighting full moon? Tomorrow would be lying up & on looking for whales! Only the most careful policing of the islands & their immediate vicinity can save the rookeries permanently.

Sep. 17. Mountains of Unalaska in sight from daylight, but did not anchor in harbour till between 4 & 5 P.m. Capt. Turner came on board in evening. Barometer falling & south-easterly gale seems to be setting in. Saw a stationary signals near the U.S. vessel Nobrian outside the harbour.

Sept. 18. at Unalaska. 'Danube' coaling from 'Costa Rica'. Calls from Capt. Coulson & Mr Stanley Brown, also from Mr Jarvis of the 'Bear'. Interviewed several natives about seal catching round the

Aleutian Islands. Wrote letters &c. One to Hon. C.H. Tupper, detailing proceedings. Day showery & often windy with low unsteady barometer.

Sept. 19. Writing & attending to various matters & various calls on board ~~this~~ warning. In P.M. called on Capt. Gibson of Rush & Mrs Newman. Ship coaling & afterwards hauled in at wharf for water. Blowing a gale from southward all day.

Sept. 20. Left harbour at Unalaska about 7 A.M. & shaped course for Uniniak Pass. Through the pass & then course well to southward round Leonard Rock of chart, after which changed to North Eastern course, for Kodiak. No seals seen today. Saw school of whales near Akun Island, in Uniniak Pass. Day generally fine. Beautiful moonlight & starlight night. Nymph left harbour for Sitka

by Unalga Pass not long after us.

Sept. 21. Steaming north-eastward all day on course for Kodiak Island. Hippah in sight for several hours this morning. Day thick with south-eastery & eastery wind. Engines stopped for rough chutten hours from 7.40 P.M.

Sept. 22. Rather strong S.W. blow during night & very heavy following sea all morning. Finding it would be impracticable to anchor in Alitak Bay, changed course to run down outside Kodiak Island with intention of calling at St Paul Isl. W. end of islands.

Sept. 23. Got into St Paul, Kodiak I, shortly after 7 P.M. Landed & had an interview on seals etc with Mr Washburn, agent of A.C. Co. Left harbour for the eastward at 8 P.M. Morning fine, but gradually clouding, with following barometer & rising north-easterly wind,

Sept. 24. On to Eastward, now shaping course direct to Sitka, finding that the weather too rough & unsettled to enable us to look at Middleton I. or other such exposed places. Heavy sea all day with ships rolling very much.

Sept. 25. On Eastward, toward Sitka; heavy sea & wind, but rolling the Estable.

Sept. 26. This morning off entrance to Sitka Sound. Worked our way in slowly among the various islands & rocks & anchored in harbour before noon. Capt. Maynard of Pinta who was reported on Seal Islands paid us a call. Had some conversation with him, & afterwards on shore with the Governor of Alaska Mr Lyman Knapp, Judge Dawson Capt. Morrissey (Agent for H. Liebes & Co) & others on Seals & sealing on this part of coast, getting some information of value to

expected that party would between Yakatat Bay & Dixon Entrance.

Sept. 27. Had a long talk this morning on board with 4 Sitka Indians, three of whom hunters, about fur-seal & fur sealing on this part of Coast. Called on Capt. Maynard on Rosita. P.M. ashore, called on Mr Emmons & saw part of his collection of Indian antiquities etc. Got off at 4.30 P.M., following Nymphe out. Intend to go slowly southward during night & go in morning by Summer Strait to Shakan. Nymphe now bound to Esquimalt direct.

Sept. 28. Got into Shakan & anchored opposite saw-mill & Indian village there before noon. Landed & had a talk with some Indians from Klawock, about fur-seal hunting at that place. Found a Mr Sarel & Dr Wise. Harslocher here, owners of mill.

Got away in Pm, but unable to get further before dark than Port Protection, where anchored for the night.

Sept. 29. Got off about daylight & anchored in Port Simpson about 9 Pm. Fine & very clear day.

Sept. 30. Landed early & saw Mr Clifford & Mr Lockerby of H.B.Co at Ft Simpson, also a couple of Indian hunters. Off at noon & steam to Metlakatla where arrive about 3 Pm. See Bishop Ridley, Mr Todd of Indian Dept. & others. Receive from Mr Todd refusals by himself & Messrs Guillot & Pidcock in answer to circular sent out for me by Mr Vowell Supt. of Indian Affairs.
Leave Metlakatla about 5, steering for Port Essington, on Skeena

but came to an anchor in North Channel about 7.30, the night being very dark.
Intensely carnivorous, bore almost amounting to proof, given by reports above mentioned, of supposition already suggested to my mind that fur-seals (or a large part of the whole of them) actually winter off the N.E. coast. The supposed mingling of these winter haunts may thus disappear.

Oct. 1. Got away as soon as tide served & arrived at Pt. Essington about 10.30 am. Tied up to wharf. Found that owing to tide &c we would save nothing by getting away before 2 am. tomorrow. Got some evidence from Mr Cunningham & others. Day generally overcast & some drizzling showers.

Oct. 2. Left Pt Essington about 2 am., worked down the river

& out through Edye Pass. Crossed Hecate Strait & reached Masset after a slow voyage, about 3.30 P.m. Saw Mr Alexander of H.B. Co, Rev. Mr Keen, Mr A. Mackenzie & others. Interviewed a number of Indians, with chief Edenshaw & had also a long talk with Mackenzie on seal question. Found that we would have to spend the night at anchor here.

Oct. 3. Left Masset about daylight, steamed across to Edye Pass, Captain judging that it would be better to reach Bella Bella by inside passages than to go down outside in face of South rolling stiff wind. Anchored for night in northern part of Grenville Channel. Stiff South rolling gale, thick & dark.

Oct. 4. Off before daylight. Passed steamer supposed to be City of Topeka going north, & afterwards the tug

chieftain, going south. Obliged to anchor, by dense fog, about 6 P.M. on South side of Kuss Pass.

Oct. 5. Anchor up early & got to Bella Bella boat 8.30. Landed, met Rev. Mr Hopkins, missionary. Interviewed a lot of Indian hunters of this place, & then left about 10 A.M. for Nanaitte. Crossing the open South of Fitzhugh Sd. passed S.S. Wexico & passed the Princess Sophia going north. Found the Islander anchored in Shadwell passage & anchored there beside her. Capt. Levine came on board & had a talk. Islander is bound north to Skeena &c.

Oct. 6. Anchor early & had an interview with the Indians of Nanaitti on the sealing question &c. Back on board & off about 9 A.M. for the West Coast. Fine weather, a little foggy in the morning.

Oct. 7. Left with Clayoquot band this morning after some trouble & loss of time found & interviewed some of Indians. On to Barclay Sound, anchoring about 5 P.M. Pulled up to village, which found entirely abandoned. Returned on board after dark without having seen a single Indian here.

Oct. 8. Left during the night & early in the morning called at Nootka Bay. Stayed about an hour in store, & had a talk with the Indians. Left about 9 am & reached Esquimalt at 3 P.M. Tied up to wharf. Saw admiral & others & then to Victoria by road. Quarters at Driard.

Oct. 9. Interview with sealers association this morning, & talk with Mr Milne, Collector of Customs. P.M. Saw Mr Hall of H.B.Co & others. Every direct with admiral

Hotham at Esquimalt, on warship, now in dock.

Oct. 10. Met a lot of Indians from west coast Vancouver Island at Mr Powell's office, by arrangement, & had a talk with them on fur-seal. P.M. held a long conference with Sealers assn. with special reference to measures acceptable or otherwise in regard to protection of seal o.s.

Oct. 11. Sunday. Spent much of day writing up notes. Sir George & Mr Fraser left early this morn. for Seattle, intending to return tomorrow morning. Wrote letters to A.C.Co & Mr Swazey, San Francisco about photos. of Commander Islands & Pribylov Islands respectively. Wrote Robert Hunt, Jet Report about kind of seals seen by Nootka Indians on Triangle Island.

Oct. 12. Busy making final calls & arrangements all day & meeting various people. Saw Milne, Prior, Finlayson, Crow Baker, Hawley, Judge Swan Capt. Spring, Barcroft & others. On board Steamer Yosemite for Vancouver before midnight.

Oct. 13. Landed at Vancouver about 9 a.m. To Hotel Vancouver. At 2 P.m. met Vancouver dealers & had some conversation with them.

Oct. 14. Left on train for East at 2.20 P.m., in Mr H. Abbott's private car, which he kindly gave us

Oct. 15. Changed to another private car this morning at Sicamous, & then onward through the mountains. Car set off at Canmore about midnight, as Jenny wishing to stop a day to see Canmore Mine.

Oct. 16. Started on Cannore Mine. 2 in afternoon got run down to Whitford, crack engine, then to wait for the East bound train.

Oct. 17. Traveling eastward all day on railway. Slightly behind time this evening at Wonnegan.

Oct. 18. Arrived in Winnipeg about 5 PM & on, after an hours stoppage, Eastward.

Oct. 19. On Eastward on C.P.R. 8 Cars off track, including ours, about midnight & some delay in consequence.

Oct. 20. On Eastward. at Sudbury 3h 40m late, in consequence of little accident last night.

Oct. 31. Arrived in Ottawa Security
Train late, about 8 P.M.