

MEMORANDUM TO ACCOMPANY THE GROUND PHOTOGRAPHS OF THE
FUR-SEAL ROOKERIES, 1948.

The regular series, negatives nos. 1-132 inclusive was taken on St. Paul Island, July 15-19 and on St. George, July 21-24, 1948. Negatives 1, 2 and 6 were retaken on Reef Rookery, St. Paul, August 1, 1948. Sivertch Rookery could not be photographed from the ground due to weather conditions when time was available.

The equipment used was the old 5 x 7 Press Graflex and Tri-X Panchromatic Film.

In the absence of any information regarding the taking of this series since 1925, it was found advisable to add a number of new photographic stations in order to show all major sections of harem areas. The locations of these new stations are indicated in the descriptions following. Two old stations on North Rookery on St. George have been surrounded by the harem area.

On the set of photographs which will be filed for use when the series is next taken the locations of all stations which appear in the photograph are shown--old stations in black and new stations in red. Most of the new stations are located on the tripods or counting towers. The elevation thus gained gives a more comprehensive view of the harem areas.

- 1-2. Two exposure panoram. Location-Photographic Station G, near Rock No. 38 Reef Rookery, St. Paul Island, facing West, August 1, 1948. The original exposures taken July 15 were not satisfactory making a retake necessary. The location of new Photographic Station E1 is indicated on Photo 1. The locations of Photographic Stations E and F are shown on 2.
- 3-5. Location-New Photographic Station E1 on top of tripod on rocky outcropping near Rock No. 30, Reef Rookery, St. Paul Island, July 15, 1948, Photograph 3 facing East. The location of Photographic Station G is shown on 3. Photographs 4-5 make a two exposure panoram, facing West. The location of photographic Station D is shown on 5.
6. Location-Photographic Station F about 100 yards Southeast of Castle Rock, the top of which is Photographic Station E. Reef Rookery St. Paul Island, July 15, 1948.
- 7-10. Four exposure panoram. Location-Photographic Station E on Castle Rock in rear of Rocks nos. 26 and 27 on Reef Rookery, St. Paul Island, July 15, 1948.
- 11-14. Four exposure panoram. Location-Photographic station D on line between Rocks Nos. 3 and 8 on Reef Rookery, St. Paul Island, July 15, 1948.
- 15-16. Two exposure panoram. Location-Photographic station C on Rock No. 3 on Ardiguen Rookery St. Paul Island, July 15, 1948.

- 17-18. Two exposure panoram. Location-New Photographic Station B2 at top of first sandy dome west of Rock No. 1 on Gorbach Rookery, St. Paul Island, July 15, 1948. Facing East.
- 19-20. Two exposure panoram. Location-New Photographic Station B1 on top of tripod on hauling ground near Rock No. 7 on Gorbach Rookery, St. Paul Island, July 15, 1948. Facing West.
- 21-22. Two exposure Panoram. Same location and date as 19-20 above. Facing East. Between panorams 19-20 and 21-22 and directly below the tripod the seals have left a roadway or channel through the harem area to permit the bachelors to reach the hauling ground. This can be seen on the following panoram (23-24). The location of Photographic Station B is shown on 21.
- 23-24. Two exposure panoram. Location-Photographic Station B near Rock 23 on Gorbach Rookery, St. Paul Island, July 15, 1948. Facing West. The new location of Photographic Station B1 is shown at apex of tripod on Gorbach hauling ground on 24. The location of Photographic Stations D and E are shown on 23.
- 25-26. Two exposure panoram. Location-Photographic Station A at Rock No. 5 (near hauling ground at Southwest end of rookery), on Polovina Rookery, St. Paul Island, July 16, 1948. Facing Northeast. The locations of New Photographic Stations A1 and A2 are shown on 25.
- 27-30. Four exposure panoram. Location-New Photographic Station A1 on small rocky dome halfway between and to the rear of the first and second tripods from Southwest end of Polovina Rookery, St. Paul Island, July 16, 1948. The location of photographic station A is shown on 27. First tripod is near Rock No. 7, second tripod is near Rock No. 8.
- 31-34. Four exposure panoram. Location-New Photographic Station A2 on low rocky blister halfway between second tripod (near Rock No. 8) and third tripod (near Rock No. 9) but well to the rear. Polovina Rookery, St. Paul Island, July 16, 1948. The location of Photographic Station B is shown.
- 35-36. Two exposure panoram. Location-Photographic Station B on Polovina Rookery, St. Paul Island, July 16, 1948. At high tide the reef in the background at left is covered with water. The seals in the foreground are about fifty (50) feet above the reef.
- 37-38. Single exposures. Thirty seven faces Northeast and Thirty eight faces Southwest. Location-Photographic Station C but on tripod on Polovina Cliffs Rookery, St. Paul Island, July 16, 1948. The location of Photographic Station D and new station D1 is shown on exposure 37. Photographic Station B is shown on exposure 38.

- 39-40. Two exposure panoram. Location-Photographic Station D but on tripod facing Northeast, on Polovina Cliffs Rookery, St. Paul Island, July 16, 1948. Thirty nine had to be retaken on July 18 and does not overlap 40. The location of new Photographic Station D1 is shown on 40. Note cave on line with right leg of tripod. A harem has been in this cave annually for 28 years at least.
41. Location-new Photographic Station D1 on tripod near Rock No. 15 Polovina Cliffs Rookery, St. Paul Island, July 16, 1948. Facing Northeast.
42. Location-Photographic Station E on Little Polovina Rookery, St. Paul Island, July 16, 1948, facing Northeast. The location of new Photographic Station E1 is shown.
- 43-44. Location-new Photographic Station D1 on the tripod near Rock No. 22 and the end of the cliffs on Little Polovina Rookery, St. Paul Island, July 16, 1948. Forty three faces Southwest. The location of Photographic Station E is shown. Forty four faces Northeast.
45. Location-Photographic Station F near rock no. 89 on Vostochni Rookery, St. Paul Island, July 17, 1948. The location of Photographic Station E is shown.
46. Location-Photographic Station E near Rock No. 81 on Vostochni Rookery, St. Paul Island, July 17, 1948. Hauling ground seals are visible at right center.
- 47-50. Four exposure panoram. Location-new Photographic Station D2 on ridge in rear of Rock No. 67 on Vostochni Rookery, St. Paul Island, July 17, 1948.
- 51-54. Four exposure panoram. Location-Photographic Station D in rear of Rock No. 57 on Hutchinson Hill, Vostochni Rookery, St. Paul Island, July 17, 1948. The location of the new Photographic Station D1 is shown on 54. Exposures do not overlap.
- 55-56. Single exposures, 55 facing West and 56 facing East. Location-new Photographic Station D1 halfway between Rocks Nos. 46 and 47 and to the rear, on Vostochni Rookery, St. Paul Island, July 17, 1948. The location of Photographic Station D is shown on 55.
- 57-59. Two exposure panoram (57-58). Location-new Photographic Station B2 on tripod near Rock No. 35 on Morjovi Rookery, St. Paul Island, July 17, 1948. Facing North. Fifty nine single exposure facing South. The location of new Photographic Station B1 is shown on 59.
60. Location-New Photographic Station B1 on tripod near Rock No. 25 on Morjovi Rookery, St. Paul Island, July 17, 1948. Facing North.
61. Location-Photographic Station B on Morjovi Rookery, St. Paul Island, July 17, 1948. Facing North. The location of new Photographic Station B1 is shown.

- 62-63. Two exposure panoram. Location-Photographic Station F near Rock No. 30 on Zapadni Rookery, St. Paul Island, July 18, 1948. Weather foggy.
- 64-66. Three exposure panoram. Location-Photographic Station E on Zapadni Rookery, St. Paul Island, July 18, 1948. Weather foggy.
- 67-72. Two panorams, three exposures each. 67-69 facing south and 70-72 facing north. Location-new Photographic Station D2 on tripod near Rock No. 21 on Zapadni Rookery, St. Paul Island, July 18, 1948. On 68 the locations of Photographic Stations E and F are shown. On 71 the location of the new Photographic Station D1 and the old station D (on Little Zapadni Rookery) are shown.
- 73-77. Two panorams. 73-74 two exposures facing south and 75-77 three exposures facing north. Location-new Photographic Station D1 on tripod near beach opposite Rock No. 16 on Zapadni Rookery, St. Paul Island, July 18, 1948. The location of new Photographic Station D2 is shown on 73.
78. Location-Photographic Station D on Little Zapadni Rookery, St. Paul Island, July 18, 1948. Facing south and showing north end of Zapadni Rookery.
- 79-82. Four exposure panoram. Location-new Photographic Station C1 at Rock No. 11 on Little Zapadni Rookery, St. Paul Island, July 18, 1948.
- 83-85. Three exposure panoram. Location-Photographic Station C on Little Zapadni Rookery, St. Paul Island, July 18, 1948. The location of Photographic Station B is shown on 85.
- 86-87. Two exposure panoram. Location-Photographic Station B on Little Zapadni Rookery, St. Paul Island, July 18, 1948. The approximate location of Photographic Station C is shown on 87.
88. Single exposure. Location-Photographic Station A on Zapadni Reef Rookery, St. Paul Island, July 18, 1948. The location of new Photographic Station A1 is shown.
- 89-92. Single exposures. Location-new Photographic Station A1 on tripod between rocks nos. 30 and 31 on Zapadni Reef Rookery, St. Paul Island, July 18, 1948. 89 looking east, 90 looking southeast, 91 looking southwest, 92 looking west.
- 93-95. 93-94 a two exposure panoram facing west, 95 a single exposure facing east. Location-new Photographic Station B1 near Rock No. 18 on west end of Tolstoi Rookery, St. Paul Island, July 19, 1948.

- 96-97. Two exposure panoram. Location-near Photographic Station B but on end of runway on Tolstoi Rookery, St. Paul Island, July 19, 1948. Note that nearly all cows have gone to the water. When the next series of photographs are taken another new station should be established at one of the two places marked "X".
- 98-99. Two exposure panoram. Location-Photographic Station A on Tolstoi Rookery, St. Paul Island, July 19, 1948. The location of Photographic Station B is shown on 98 and the approximate location of the new Photographic Station B1 is shown on 99.
- 100-101. Two exposure panoram. Location-Photographic Station F, Lukanin Rookery, St. Paul Island, July 19, 1948. The location of Photographic Station E is shown on 100.
- 102-103. Two exposure panoram. Location-Photographic Station E, Lukanin Rookery, St. Paul Island, July 19, 1948. The location of photographic station F is shown on 102.
- 104-105. Single exposures. Location-Photographic Station D (105) on Kitovi Rookery, St. Paul Island, July 19, 1948. 104 taken from top of large rock at left center of 105 in order to get a better viewpoint.
106. Location-Photographic Station C on Kitovi Rookery, St. Paul Island, July 19, 1948. Facing south.
- 107-110. Four exposure panoram. Location-Photographic Station B on Kitovi Rookery, St. Paul Island, July 19, 1948. FWS Penguin can be seen on 110.
- 111-112. Two exposure panoram. Location-Photographic Station A on Kitovi Rookery, St. Paul Island, July 19, 1948. The location of Photographic Station B is shown on 112.
- 113-114. Two exposure panoram. Location-Photographic Station A on Staraya Artil Rookery on St. George Island, July 21, 1948. Weather rainy and foggy.
- 115-116. Two exposure panoram. Location-Photographic Station A on Zapadni Rookery, St. George Island, July 22, 1948.
117. Location-new Photographic Station A on a projecting point of cliff near the only place of descent to beach at north end of rookery. Facing south.
118. Location-new Photographic Station B on a projecting point of cliff at the south end of the rookery. Facing north.
- 119-120. Two exposure panoram. Location-Photographic Station A on East Cliffs Rookery, St. George Island, July 23, 1948. Facing southeast.
122. Single exposure same location as 119-120 but facing northwest.
121. Location-new Photographic Station A1 near Rock No. 9, facing west on East Reef Rookery, St. George Island, July 23, 1948.

123. Location-new Photographic Station A1 on a projecting point of cliff south of Rock No. 1 and forming the east bank to the hauling ground creek emptying into Village Cove. North Rookery, St. George Island, July 24, 1948.
- 124-125. Two exposure panoramas. Location-new Photographic Station A2 at cairn and navigational beacon at top of ridge above Rock No. 4 on North Rookery, St. George Island, July 24, 1948. Facing northwest. The location of Photographic Station A is shown on 124.
- 126-127. Single exposures. 126 faces east and 127 faces west from Photographic Station A on North Rookery, St. George Island, July 24, 1948.
- 128-129. Two exposure panoramas. Location-new Photographic Station A3 at cairn above Rock No. 12 facing west. North Rookery, St. George Island, July 24, 1948. Old station C lies within the present harem area and could not be used.
- 130-132. Two exposure panoramas. Location-new Photographic Station D1 on ridge above Terminal rock, facing east on North Rookery, St. George Island, July 24, 1948. Old station D lies within the harem area and could not be used. 132 facing southwest showing hauling ground seals enroute to water. This completes the regular series of rookery photographs taken in 1948.
- 133, 139, 140. Polovina Cliffs Rookery, taken August 6, 1948, 21 days after the regular series to show the expansion of breeding areas after harems break up.
- 135-138. Vostochni Rookery, Station D, taken August 6, 1948, for same purpose as above.
134. Not a fur seal rookery picture but showing drums of fur seal oil at the ByProducts Plant.