

twelve blackish spots at regular intervals on dorsal fin, six or seven similar ones on anal. The ventral on the eyed side is marked like the anal. The colors and spots extend over on the blind side on the nasal bones, premaxillary, chin, and interopercle. The skinny flap in the mouth between the teeth and vomer is also spotted.

One specimen (26838), 16 inches in length.

This species, well described and figured by Broussonet in 1782, seems not to have been seen by any succeeding author. The specific name "*mancus*" has been wrongly transferred by Dr. Günther to the very different *Platophrys heterophthalmus* of the Mediterranean.

INDIANA UNIVERSITY, April 4, 1882.

**DESCRIPTION OF A NEW CYPRINODONT (ZYGONECTES INURUS),
FROM SOUTHERN ILLINOIS.**

By DAVID S. JORDAN and CHARLES H. GILBERT.

Zygonectes inurus sp. nov. (29666.)

Zygonectes melanops Jordan, Bull. Ills. Lab. Nat. Hist. No. 2, 52: not *Haplo-*
chilus melanops Cope, = *Gambusia holbrooki* (Agassiz).

Zygonectes melanops Jord. & Gilb. Syn. Fish. N. A. 340.

Closely allied to *Zygonectes dispar* Agassiz.

Body rather short and high, compressed, the back considerably arched; caudal peduncle deep and compressed; head small, much narrowed forwards; interorbital space twice as wide as diameter of orbit; eye rather large, $3\frac{1}{2}$ times in head—as long as snout, which equals mandible; teeth small, in villiform bands, the outer series not at all enlarged; height of caudal peduncle at vertical behind anal fin $1\frac{1}{2}$ in head; at base of caudal $1\frac{1}{2}$ in head.

Dorsal small, posteriorly inserted; distance from its origin to snout twice that to base of caudal; length of base of fin $2\frac{3}{4}$ in head; the vertical from origin of dorsal passes through middle of anal base. Distance from origin of anal to base of caudal $1\frac{1}{2}$ times in that to tip of snout; length of anal base equalling one-half that of head; its longest ray two-thirds head; pectoral broad, reaching beyond base of ventrals, $1\frac{1}{2}$ in head.

Scales in regular series, the humeral scale not enlarged; 29 oblique series of scales from scapula to base of caudal fin; 9 in an oblique series from vent to middle of back.

Head $3\frac{1}{2}$ in length; depth $3\frac{1}{2}$. D. 6; A. 9; scales 29.9.

Color: Brownish, light on belly and sides of head; sides and back with a few scattered dark brown specks, these forming inconspicuous series behind pectorals; caudal peduncle punctate with brown specks below; opercles silvery; a very decided, well-defined, brownish-black

bar through eyes and across cheeks, the bar $\frac{3}{4}$ as wide as orbit; vertical fins with irregular cross series of brown dots.

Several specimens of this species were collected by Prof. S. A. Forbes in the streams of Southern Illinois. A single specimen, 2 inches long (No. 29666, U. S. Nat. Mus.), from Cache River, serves as the type of the species.

NOTES ON BIRDS COLLECTED DURING THE SUMMER OF 1880 IN
ALASKA AND SIBERIA.

By TARLETON H. BEAN.

The collection which is the subject of the present paper was made by the writer while investigating the fish and fisheries of Alaska for the United States Fish Commissioner, in company with the Coast Survey party commanded by Mr. W. H. Dall.

Owing to the engrossing nature of the primary object of my inquiry and the limited number of days passed in port, there was little opportunity for collecting and observing birds. However, as fish were not plentiful north of the Arctic circle and birds were comparatively abundant and desirable for the Museum, much of my time was devoted to making bird skins while in that region. Especial effort was made, also, to procure a good series of skins of the species of *Melospiza*, inhabiting the mainland and islands of the Territory. The region in which *M. fasciata rufina* occurs is so interesting and rich ichthyologically that birds were necessarily neglected, and this sparrow is represented by only a few skins. The insular species (*cinerea*), on the other hand, came in for a larger share of attention.

In order to give an idea of the time which one may ordinarily devote to bird-collecting who is not sent upon that special duty, I will state here the number of days which were devoted mainly or partly to that work during the six months of our cruise: May, 2 days; June, 11; July, 11; August, 9; September, 9; October, 7; in all 49 days.

Although the number of species secured is small (less than a third of the whole number known to occur in Alaska), there are some interesting features about the collection. Many of the species here mentioned are from localities north of the Arctic circle, and some of them were not previously recorded from the Territory. The specimen of *Eurynorhynchus pygmaeus* obtained by our party in Plover Bay was the first secured for an American museum, and is in a plumage which has not yet been illustrated. Six young individuals of *Saxicola ænanthe* were found between Port Clarence and Cape Lisburne. *Empidonax difficilis* and *Buteo borealis calurus* were obtained for the first time in the Territory. The range of *Actodromas acuminata* was extended northward to Port Clarence.

Larus marinus was found to be common on Unalashka Island, though previously unknown in Alaska.

Diomedea melanophrys was seen within 1,060 miles west of Cape Men-

docino, California, and may safely be claimed for the fauna of the United States. The nests of *Hirundo erythrogastra* and *Melospiza fasciata rufina* are worthy of more extended examination than I have been able to give them.

On the 23d of October, when about 700 miles south of Unalaska Island, a small flock of geese was seen flying towards the southeast, and sometimes resting on the water. We did not sail close enough to make them out, but there is little doubt that they belonged to the genus *Anser*. Mr. Dall, Mr. Baker, Captain Herendeen, and I looked at them with a glass, and all agreed as to the identification. Owing to the distance, we could not determine the species.

So far as most of the species are concerned I have simply transcribed my hastily made field notes. In a few cases, however, I have supplemented these fragments by subsequent investigations in the Museum. Even in this small collection there still remains some material that is worthy of the attention and will, doubtless, eventually receive the notice of an ornithologist.

To Mr. Dall I owe the opportunity of joining his party, and he, as well as his assistants, contributed as much as possible to the collection; the probability of finding *Eurynorhynchus* at Plover Bay was first suggested by Mr. Dall.

I am much indebted to Mr. Robert Ridgway for aid in determining the species collected by me and for advice in the preparation of these notes.

1. *HYLOCICHLA ALICLÆ* Baird.

81334 (3493) ♂. St. Paul, Kodiak, July 13, 1880.

Found in the timber, in the vicinity of the potato fields of the St. Paul people.

2. *HYLOCICHLA UNALASCÆ* (Gmel.) Ridgw.

81333 (3236) ♀. Sitka, June 15, 1880.

81331 (3340) ♂. Chugachik Bay, Cook's Inlet, July 1, 1880.

(3341) ♂ ad. " " " " " " " "

81332 (3342) ♀. " " " " " " " "

81330 (3492) ♂. St. Paul, Kodiak, " 12, "

81692 (3428) alcoholic, Wooded Id., Kodiak, " 13, "

At Chugachik Bay this species was not uncommon in the little grove of Sitka spruce on the spit near our anchorage, associated with *Ægiothus linaria*.

3. *MERULA MIGRATORIA* (Linn.) Sw. & Rich.

I saw one of this species at Sitka, May 29, 1880, in the vicinity of Piseco Lake.

4. *HESPEROCICHLA NÆVIA* (Gmel.) Baird.

(3235) ad. ♂. Sitka, Alaska, June 15, 1880.

Found near the mouth of Indian River. The only one seen, although
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it is common. Its mouth was filled with insects and an earthworm. Measurements from the fresh bird: Length, 9.87; extent, 15.50; tarsus, 1.31; middle toe and claw, .94.

5. SAXICOLA CENANTHE (Linn.) Bechst.

81336 (3639)	♂ juv.	Cape Lisburne, Alaska, Arctic O.,	Aug. 21, 1880.
81337 (3640)	♂	" " " " " " " "	" " " "
(3641)	♂	" " " " " " " "	" " " "
81338 (3743).	Port Clarence,	"	Sept. 6, "
(3787).	Chamisso Id., Kotzebue Sd.,	Alaska,	Aug. 31, "
(3788).	" " " " " " " "	" " " "	" " " "

At Cape Lisburne this bird was found with *Anthus ludovicianus*, but was not nearly so abundant as the titlark. I saw it also 10 miles to the eastward of Cape Lisburne. Its movements are similar to those of *Anthus*. It was feeding here on grass seeds and fruit of *Saxifraga*, and was, in consequence, excessively fat.

On Chamisso Island the only two seen were secured; they were on a sand and gravel beach and the low bluffs adjacent.

Capt. E. P. Herendeen went ashore, September 1, on the east side of Choris Peninsula and reported having seen stonechats, one of which he wounded but could not get. Owing to the rain he found it useless to attempt to collect small birds.

At Port Clarence only one was seen; this was near the beach on the west side of the spit. The day was cold and windy, with a little rain and some snow. *Plectrophanes nivalis* was of more frequent occurrence, though not plentiful; *Centrophanes lapponicus* was rather common.

6. PARUS ATRICAPILLUS SEPTENTRIONALIS (Harris) Allen.

81679 (3352)	alcoholic.	Port Chatham, Cook's Inlet,	July 6, 1880.
81680 (3428)	alcoholic.	St. Paul, Kodiak,	July 13, 1880.

The Port Chatham specimen was shot with a rifle by Mr. Baker in the timber near Refuge Cove.

On Kodiak Island we found the species in the timber near the potato ground of the St. Paul people.

7. ANORTHURA ALASCENSIS (Baird) Coues.

81339 (3896)	♂ ad.	Iliuliuk, Unalashka,	Oct. 13, 1880.
81340 (3897)	♀.	" " " " " "	" " " "

This was one of only eight species of land birds seen by me October 6 to 18, 1880. The other birds were *Passerculus sandwichensis*, *Melospiza cinerea*, *Corvus corax carnivorus*, *Leucosticte griseinucha*, *Arquatella Couesii*, *Heteroscelus incanus*, and *Halicæetus leucocephalus*. *Lagopus rupestris* was, of course, present, but I did not find it.

Anorthura was more abundant at Chernoffsky than at Iliuliuk. At both places I found it frequenting the rocks near the water's edge and the faces of cliffs looking seaward.

8. MOTACILLA OCULARIS Swinhoe.

81341 (3595) ♀ (†). Port Providence, Plover Bay, Siberia, Aug. 14, 1880.

Only one individual certainly seen; occurring with *Budytes flava* in the vicinity of the native summer tents; very hard to approach. Judging from the uniformly small number of specimens of this bird secured by collectors in Plover Bay, the species seems to be rare in that locality.

9. BUDYTES FLAVA (Linn.) Gray.

81342 (3594). Port Providence, Plover Bay, Siberia, Aug. 13, 1880.

81343 (3596) ♂. " " " " " " 14, "

These wagtails were present in small numbers on the spit at Port Providence, and they were exceedingly shy. They were seldom seen at the tents, but usually in the grass. They were sometimes heard in the air, chirping while in flight.

A single wagtail was seen flying towards the point of the spit at Port Providence, September 13, but I could not determine the species.

It may not be out of place here to remark that, on the 15th of September, Mr. Baker and Captain Herendeen, of the coast-survey party, walked through a divide leading from Port Providence to Moore Lake and saw no birds except ravens. The few land birds still remaining at this port were near the sea-shore.

10. ANTHUS LUDOVICIANUS (Gm.) Licht.

81665. Little Koniushi Island, Shumagins, July 16, 1880.

81344 (3776). Cape Lisburne, Alaska, Arctic O., Aug. 21, 1880.

81673 (alcoholic). " " " " " " " " "

81674 " " " " " " " " "

81682 (3647) " " " " " " " " "

The Little Koniushi Island example was found at the top of the ridge overlooking Northwest Harbor, at least 1,000 feet above the sea level.

At Cape Lisburne most of the specimens seen of this wagtail were in a little valley through which runs a small stream, and on the low plateau east of this stream. They were feeding on seeds of *Saxifraga* mainly.

11. DENDROECA ÆSTIVA (Gmel.) Baird.

81675 (1539) alcoholic. St. Paul, Kodiak Island, July 9, 1880.

Found in the Sitka spruce near the village of St. Paul.

12. MYIODIOCTES PUSILLUS PILEOLATUS (Pall.) Ridgw.

81345 (3295) ♂. Port Mulgrave, Yakutat Bay, June 24, 1880.

81676 (3432) alcoholic. St. Paul, Kodiak, July 13, 1880.

Common at Port Mulgrave around the head of the harbor; found in Sitka spruce near St. Paul.

13. *HIRUNDO ERYTHROGASTRA* Bodd.

(3533) ♂ & ♀, alcoholic. Cave Rock, Unalashka, July 28, 1890.

(3510) nest of above, with 4 young, July 28, 1890.

A pair of the above species of swallow was observed for some time circling around Cave Rock, on Amaknak Island, near Iliuliuk. In the mouth of the cave was the nest here to be described. The swallows were not seen on the nest, but there is no reasonable doubt that the pair obtained were the owners.

The nest in its present condition is $5\frac{1}{2}$ inches long; the greatest depth of the front wall is 3 inches; the grass lining, on which is placed an additional cushion of feathers, is $3\frac{1}{2}$ inches long and nearly 3 inches wide on top; the back wall of the nest contains only grasses and sea-weeds; the mud wall separates readily into only four layers. The mud in its dry state crumbles very readily, and could not have had great cohesive power originally. To remedy this defect, the pellets were intermingled with a long, narrow, red sea-weed which has considerable strength and furnishes a sticky secretion well adapted for holding them together, and the same sea-weed was employed between the layers. The mud was evidently found on the shore close to high-water mark, as it contains numerous small shells which may be always seen in such location. The grass seems to be mainly the common wild rye of the vicinity. The inner lining is ample and prettily arranged. It consists of soft feathers of young bald eagle, raven, and gull, tastefully intertwined, and forming a shallow, but luxurious, cushion.

The structure and situation of this nest are similar to what Mr. Ridgway observed at Pyramid Lake and the Ruby Mountains;* but the limited number of mud layers of the Unalashka nest and the introduction of a glutinous sea-weed to supply the defective cohesive power of the pellets forming the wall, afford a new illustration of the faculty which this swallow possesses of adapting itself to the conditions of its environment.

14. *LEUCOSTICTE GRISEINUCHA* (Brandt) Baird.

81349 (3487) ♀. Little Koniushi Id., Shumagins, July 16, 1890.

81348 (3889) ♀. Iliuliuk, Unalashka, Oct. 7, 1890.

(3890) ♀. " " " " "

Found on the low ground on Little Koniushi, near Northwest Harbor. Not common.

Abundant at Iliuliuk late in July and also in October; frequents the hillocks and cliffs, and comes into the village yards.

* Orn. 40th Parallel Surv., p. 441.

15. *ÆGIOTHUS CANESCENS EXILIPES* (Coues) Ridgw.

81678 (3679)	5 juv., in alcohol.	Chamisso, Id.,	Aug. 31,	1880.
81362 (3752)	♂ ad.	Chamisso Id.,	Kotzebue Sound,	Aug. 31, 1880.
(3753).	"	"	"	" " "
(3755)	♂ juv.,	"	"	" " "
(3756)	♂.	"	"	" " "
81365 (3757)	♂ juv.	"	"	" " "
(3758)	♀ (†)	"	"	" " "
(3759)	♀ (†) juv., first plumage.	Chamisso, Id.,	Kotzebue Sound,	Aug. 31, 1880.
81363 (3760)		"	"	" " "
(3761)		"	"	" " "

From the above list of skins, secured on Chamisso Island, it will be observed that these red polls were quite abundant there; indeed it was the only land bird found in numbers. Some grouse were seen, but not by me. A single *Passerculus* was observed and secured. Two young stone chats (*Saxicola ænanthe*) were obtained; no others were seen. On this island the land rises gradually from the sides and ends, so that a very regular curve is shown. With the exception of numerous hummocks, which greatly impede walking, there are no serious hinderances to collecting. The island is covered with grass, alder, and willow, and there is also a dwarf birch. Wild rye is present in considerable patches in some places. Salmon berries, whortleberries, empetrum, and another berry which is not edible, were all abundant. There are some little rills of tolerably good water. We found *Ægiothus* most abundant, swaying on the stalks of wild rye and in the small trees lining the rivulet banks. There are some cliffs in a tumble-down condition, and occasional deep cuts between and small stretches of sand beach. On these cliffs were immense numbers of puffins.

Many of these skins of the white-rumped redpoll show a great amount of wearing of the feathers, particularly of the tail, and in one bird the tail is finely graduated.

16. *ÆGIOTHUS LINARIA* (Linn.) Caban.

(3338)	♂ ad. breeding plumage.	Chugachik Bay,	Cook's Inlet,	July 1, 1880.
81367 (3339)	♀ ad.	Chugachik Bay,	Cook's Inlet,	July 1, 1880.
81366 (3754)	♂ ad.	Chamisso Id.,	August 31,	1880.

On the spit adjoining that portion of Chugachik Bay which is known as Ugolnoi Bay, this bird was observed sparingly in a small patch of Sitka spruce.

Out of 15 *Ægiothi* secured on Chamisso Island, only one proved to be *linaria*; *Æ. linaria exilipes* was the common form.

17. *PLECTROPHANES NIVALIS* (Linn.) Meyer.

81347 (3483)	juv.	Little Koniushi Id.,	Shumagins,	July 16, 1880.
81346 (3484)	♂.	"	"	" " "
781666.		"	"	" " "

	(3570).	Port Providence, Plover Bay, Siberia,	Aug. 14, 1880.
	(3749) ♂.	Port Clarence, Alaska,	Sept. 6, "
	(3751).	" " "	" " "
81352	(3790) ♂.	" " "	" " "
	(3784) ♂ (♀).	Point Belcher, " Arctic O.,	Aug. 27, "
	(3770) ♂.	Point Belcher, Alaska, Arctic O.,	Aug. 27, 1880.
81351	(3771) ♂.	" " " " " "	" " "
81354	(3773) ♀ (♀).	Icy Cape, " " " "	25, "
	(3592).	Port Providence, Plover Bay, Siberia,	Aug. 13, 1880.
81353	(3593) ♂.	" " " " " "	" " "
	(3570)	" " " " " "	Aug. 14, "
81355	(3826) ♀.	" " " " " "	Sept. 12, "

On Little Koniushi Island I obtained one adult male and several young birds—all of them from the top of the ridge several times referred to. The young were able to make short flights only.

At Plover Bay *Plectrophanes nivalis* was found in small numbers, generally feeding on refuse near the summer tents; difficult to shoot on that account, and when it flew away it was hard to overtake, since it remained only a few seconds in once place.

Near Icy Cape, Alaska, *Plectrophanes* was again scarce, shy, and hard to shoot. One of these buntings, which was followed for a long time, but not secured, showed a nearer approach to the winter plumage than the individual brought down.

At Point Belcher *P. nivalis* was more abundant than at any of the other localities where we obtained it, although even here there were comparatively few, *Centrophanes lapponicus* being much more common.

At Port Clarence few of the species were seen; they were usually found not far from the beach, not going inland on the spit like *Centrophanes*.

As we approached Cape Upright, Saint Mathew Island, September 22, 1880, small flocks of the snow bunting from the land flew around the vessel; they were in winter plumage, or nearly so.

18. CENTROPHANES LAPPONICUS (Linn.) Caban.

81361	(3588) juv. ♂ (♀).	Belkoffsky, Aliaska,	July 23, 1880.
81360	(3589) juv.	" " " "	" " "
	(3774) ♂.	Cape Lisburne, Alaska,	Aug. 22 "
	(3775) ♀ (♀).	" Alaska,	Aug. " "
81356	(3777) ♂.	" Alaska,	Aug. 21 "
81683	(3647)	" Alaska,	Aug. 22 "
81358	(3785) ♂.	Point Belcher, Alaska,	Aug. 27, 1880.
	(3786) ♂.	" " " " " "	" " "
	(3767) ♂.	Point Belcher, Arctic O.,	Aug. 27, 1880.
81359	(3768) ♀ (♀).	" " " " " "	" " "
81677	(3671) alcoholic.	Point Belcher, Alaska,	Aug. 27, 1880.
81357	(3824) ♂.	Port Clarence,	Sept. 9, 1880.

The specimens obtained at Belkoffsky, which is on the peninsula of Aliaska, were young; the species was by no means common at the date of my collecting, but it was more abundant than any other land bird except *Passerculus sandwichensis*. The birds were on the low plateau bordering the sea-shore near the village.

At Port Clarence the bird was common in small flocks, feeding on seeds, usually near the small lagoons which are present on the spit.

At Cape Lisburne and 10 miles to the eastward I observed numerous examples on the 21st and 22d of August, feeding, as usual, on seeds of species of *Saxifraga*, and congregating in small flocks.

At Point Belcher, August 27, there were more of this species than at any other place visited by us. They were, as elsewhere, feeding on grass seeds and the seeds of flowering plants, among which *Saxifraga* was most common. Number 81358 of this lot is worthy of mention on account of the deformity of its bill; the gonys is nearly twice as long as the culmen and decidedly hooked.

19. *PASSERCULUS SANDWICHENSIS* (Gmel.) Baird.

81687 (3501) alcoholic. Belkoffsky, Aliaska, July 23, 1880.

81371 (3590) ♀ ad. Belkoffsky, Aliaska, July 23, 1880.

81370 (3881) ♀ ad. Chernoffsky, Unalashka, Oct. 1, 1880.

Moderately common at Belkoffsky as well as at Chernoffsky, on the island of Unalashka. Also common during our stay at Iliuliuk, on the same island, but no skins of it were made there.

20. *PASSERCULUS SANDWICHENSIS ALAUDINUS* (Bp.) Ridgw.

(3353) ♂ ad. Chugachik Bay, Cook's Inlet, July 1, 1880.

(3354) ♀ " " " " " " " "

(3355) ♀ " " " " " " " "

81372 (3356) ♀ ad. " " " " " " " "

(3496) ♂ ad. St. Paul, Kodiak, July 13, 1880.

81369 (3497) ♂ ad. St. Paul, Kodiak, July 13, 1880.

81368 (3762) ♂ ad. Chamisso Id., Kotzebue Sound, Aug. 31, 1880.

The spit in Chugachik Bay, on which I collected birds July 1, 1880, is low and level, its beaches higher than the interior. At some high tides the sea breaks over and carries with it immense numbers of fish, which are left stranded when the waters recede. This occurred a few days before our visit, and we saw thousands upon thousands of fishes lying uncovered on the ground. Great quantities of drift-wood are found here. Wild wheat abounds, and there are many pretty flowering plants, among which are serrana, violets, chickweed, vetch, and Jacob's ladder. There is also a little grove of Sitka spruces, in which I found the redpolls (*Aegithus*) and thrushes. *Passerculus* was quite abundant in the wild wheat. On this spit was found the young eider which I have numbered in my catalogue.

On the 2d of July we visited Glacier spit, distant 9 miles from our anchorage. Here a pair of eagles had a nest on one of the tall pines. A small plover, resembling the killdeer and with similar actions, was shot but badly mutilated and finally lost.

The specimen of *Passerculus* obtained on Chamisso Island was the only one seen there.

21. ZONOTRICHIA CORONATA (Pall.) Baird.

- 81373 (3490) ♀ ad. Popoff Id., Shumagina, July 18, 1880.
 81690 (3428) (alcoholic). St. Paul, Kodiak Id., July 13, 1880.
 81693 (3429) " " " " 9, "
 81714 (3429 bis.) " " " " 9, "
 81686 (3430) " " " " 12, "

Common on the island of Kodiak.

22. JUNCO OREGONUS (Townsend) Sci.

- 81360 (3238) ♂. Sitka, June 15, 1880.
 81681 (1404) alcoholic. Sitka, June 15, 1880.

23. MELOSPIZA FASCIATA RUFINA (Brandt) Baird.

- (3299) (1451, alc.) ♂. Port Althorp, June 19, 1880.
 81386 (3300) ad. ♀. Port Althorp, George island, June 19, 1880.
 (3251) nest containing 4 young, the young preserved in alcohol. Port Althorp,
 June 19, 1880.
 81380 (3358) ♀ ad. Graham Harbor, Cook's Inlet, July 4, 1880.
 81385 (3357) ♂ juv. " " " " " "

Common at Graham Harbor; frequently seen feeding on the beach.

The nest found on George Island (Port Althorp) is made of coarse grasses, loosely laid together below, and interlaced with strips of what appears to be the leaf of *Panax horridum*, and with the light inner bark of the same. The superstructure is of fine grasses more intimately woven. The greatest depth of the nest is 4 inches, and its diameter is from 5 to 7 inches. The inside lining is 2½ inches across the top and 2 inches deep. The nest was supported by a dead stalk of *Panax* and concealed in the tall, coarse grass which is abundant in that locality.

Number 81385 bears a wonderfully close resemblance in coloration and general appearance to number 81384 from Kodiak, which is supposed to be *cinerea*; it will be observed, however, that there is considerable difference in the measurements.

As nearly as I can determine from the material in the collection, the conclusions expressed in the History of North American birds by Baird, Brewer, and Ridgway are fully justified. There is a large series of skins of *cinerea* from Kodiak and Unalaska, but the representation of *fasciata rufina* is still unsatisfactory, and the song sparrow of the western islands of the Aleutian chain has a meager showing. A study of the collection in its present state, as already remarked, will lead us to the adoption of the views advanced in the History of North American Birds: *Melospiza fasciata rufina* is notably smaller than *M. cinerea* in its wing, tail, tarsus, middle toe, and all measurements of the bill; in coloration, also, adult birds of the two species differ greatly.

The following table of measurements deals with all the skins now accessible in the collection which have been referred to *fasciata rufina*. For convenience of reference, the average measurements of the large series of skins of *M. cinerea* are brought on the same sheet:

24. MELOSPIZA CINERA (Gm.) Ridgw.

(3494) ♂.	St. Paul, Kodiak,	July 9, 1890.
83184 (3495) ♂ juv.	" " "	" 13, "
81382 (3488) ♂ ad.	Little Koniushi Id., Shumagins,	" 16, "
81331 (3489) ♀ ad.	" " " "	" " "
81383 (3491).	Popoff " "	" 18, "
81377 (3882) ♀ ad.	Chernoffsky, Unalashka Id.,	Oct. 1, "
(3883) ♀.	" " "	" " "
(3884) ♀.	" " "	" " "
81376 (3885) ♂ ad.	" " "	" 2, "
(3886)	" " "	" " "
81378 (3887) ♀ ad.	Iliuliuk, " "	" 7, "
(3888) ♀.	" " "	" " "
(3892) ♂.	" " "	" 12, "
(3898) ♂.	" " "	" 13, "
(3899) ♂ ad.	" " "	" " "
81375 (3900) ♂ ad.	" " "	" " "
(3901) ♀.	" " "	" " "
81379 (3902) ♀ ad.	" " "	" " "
(3903) ♀.	" " "	" " "
(3904) ♀.	" " "	" " "
(3905) ♂.	" " "	" 16, "
(3906) ♂.	" " "	" " "

A nest of this sparrow containing 4 eggs was sent over from Wooded Island, Kodiak, July 11, 1880, by Nicolas Pavloff.

On little Koniushi Island it was not uncommon on the low ground bordering Northwest Harbor. Not seen on the beach, because there is none, properly speaking, and small crustacea would scarcely occur in sufficient numbers to attract these sparrows.

It frequents the sea-shore at Chernoffsky and Iliuliuk, feeding among sea-weeds.

Upon examination of the measurement tables of *M. cinerea* the peculiarities of birds from Kyska and Attu will appear; the small bill, even of the adult bird, is noteworthy, and it is to be hoped that sufficient material will soon be obtained to determine the extent and value of this divergence.

Measurements.
Species, *Melospiza cinerea.*

Catalogue number.	Locality.	Sex and age.	Depth of bill through Wing joint	Wing joint to basal end of Tail feathers	Tarsal joint.	Middle toe.	Gonyx.	Culmen.	Bill from nostril.	Nature of speci- mens measured.	Date.
54539	Kodlak	.....	.28	2.30	1.00	.80	.41	.64	.43	Skin	Aug. 12, 1868.
70697	"	.....	.26	2.16	1.09	.78	.50	.70	.48	"	"
54536	"	.....	.30	2.35	1.10	.80	.41	.63	.43	"	Sept. 25, 1868.
52477	"	.....	.30	2.35	1.05	.73	.45	.72	.50	"	May 24, "
52476	"	.....	.....	.....	.....	.....	.....	.....	.....	"	" 27, 1867.
60161	"	.....	.26	2.10	1.10	.80	.46	.65	.48	"	Aug. 5, 1842.
52479	"	.....	.30	2.15	1.05	.79	.51	.74	.51	"	June 10, 1862.
81384	"	Juv. ♂	.26	2.20	1.00	.83	.38	.62	.40	"	July 13, 1880.
(3494)	"	"	.30	2.30	1.05	.80	.39	.61	.41	"	" 9, "
60162	"	.....	.51	2.20	1.05	.86	.42	.70	.50	"	" —, 1844.
	Average of the specimens	.....	.29	2.20	1.05	.80	.44	.67	.46		
81381	Little Koninsbl Id	ad. ♀	.28	2.20	1.08	.78	.48	.70	.50	Skin	July 16.
81383	Popoff Id	Juv.	.30	2.20	1.10	.80	.40	.70	.47	"	" 18.
62717	.....do	ad. ♂	.30	2.23	1.08	.72	.46	.70	.48	"	June 22.
	Average of the specimens	.....	.29	2.21	1.09	.77	.45	.70	.48		

Measurements.
Species. *Melospiza cinerea*.

Catalogue number.	Locality.	Sex and age.	Depth of bill through base.	Wing from carpal joint.	Tail to basal end of feathers.	Tarsal joint.	Middle toe.	Gonyx.	Culmen.	Bill from nostril.	Nature of specimens measured.	Date.
67801	Illnohuk.	ad. ♀	.31	3.30	3.20	1.10	.80	.50	.79	.56	Skin	May 13, 1874.
73497	"	ad. ♀	.29	3.40	3.30	1.05	.80	.45	.70	.48	"	June 5, 1877.
(3906)	"	ad. ♀	.30	3.25	3.20	1.10	.75	.42	.65	.44	"	Oct. 16, 1880.
(3892)	"	ad. ♀	.30	3.45	3.30	1.10	.85	.37	.64	.46	"	" 12, "
81874	"	ad. ♀	.30	3.40	3.30	1.15	.82	.46	.62	.43	"	" 13, "
79012	"	ad. ♀	.30	3.35	3.06	1.10	.80	.46	.58	.50	"	"
61320	"	ad. ♀	.30	3.40	3.30	1.10	.80	.46	.71	.50	"	Dec. 19, 1871.
67796	"	ad. ♀	.30	3.20	3.10	1.08	.83	.45	.80	.50	"	May 14, 1874.
81375	"	ad. ♀	.30	3.30	3.40	1.05	.89	.40	.79	.48	Mounted.	May 14, 1874.
78905	"	ad. ♀	.31	3.30	3.00	1.10	.80	.44	.70	.48	Skin	Oct. 13, 1880.
78910	"	ad. ♀	.30	3.32	3.10	1.04	.80	.50	.63	.50	"	"
78906	"	ad. ♀	.30	3.10	2.06	1.07	.80	.47	.71	.50	"	"
78914	"	ad. ♀	.29	3.20	3.47	1.10	.80	.40	.68	.42	"	"
78908	"	ad. ♀	.31	3.25	2.80	1.05	.80	.41	.70	.46	"	"
67707	"	ad. ♀	.28	3.20	3.40	1.12	.83	.48	.70	.50	"	"
73495	"	ad. ♀	.30	3.10	3.00	1.05	.86	.48	.70	.50	"	"
(3803)	"	ad. ♀	.30	3.20	3.10	1.05	.78	.45	.70	.50	"	May 11, 1874.
81379	"	ad. ♀	.30	3.10	3.20	1.00	.80	.44	.70	.50	"	" 1877.
(3904)	"	ad. ♀	.30	3.16	3.08	1.10	.80	.40	.70	.50	"	" "
81378	"	ad. ♀	.30	3.20	3.20	1.08	.76	.41	.65	.40	"	" 7, "
	Average of all		.30	3.26	3.17	1.07	.80	.44	.70	.48		
	Average of 9 males		.30	3.34	3.23	1.08	.81	.44	.71	.48		
	Average of 11 females		.30	3.20	3.11	1.07	.80	.44	.69	.48		

Measurements.
Species, *Melospiza cinerea*.

Catalogue number.	Locality.	Sex and age.	Depth of bill through base.	Wing from carpal joint.	Tail to basal end of tail feathers.	Tarsal joint.	Middle toe.	Gonyx.	Culmen.	Bill from nostril.	Nature of specimens measured.	Date.
81376	Chernofsky.....	ad. ♂	.30	3.40	3.20	1.06	.80	.43	.68	.49	Skin.....	Oct. 2, 1890.
81377	".....	ad. ♀	.29	3.25	3.10	1.08	.75	.40	.60	.48	".....	Oct. 1, 1890.
(30894)	".....	ad. ♂	.30	3.29	3.00	1.08	.80	.41	.62	.43	".....	" "
(30893)	".....	ad. ♀	.28	3.10	3.00	1.10	.80	.44	.60	.44	".....	" "
(30896)	".....	ad. ♀	.30	3.26	3.10	1.06	.78	.41	.63	.44	".....	" 2 "
	Average of the specimens.....		.29	3.24	3.05	1.06	.79	.42	.63	.45		
85591	Atka.....	ad. ♂	.30	3.35	3.30	1.10	.80	.38	.66	.50	Skin.....	May 9,
85598	".....	ad. ♀	.31	3.28	3.28	1.08	.84	.48	.76	.50	".....	" "
85599	".....	ad. ♂	.31	3.34	3.10	1.18	.82	.46	.63	.50	".....	" "
85593	".....	ad. ♀	.35	3.16	2.70	1.10	.75	.53	.68	.50	".....	May 8,
85594	".....	ad. ♀	.32	3.40	3.00	1.00	.80	.....	.65	.48	".....	" "
	Average of the specimens.....		.32	3.30	3.06	1.09	.80	.44	.66	.50		
85474	Kyska Harbor.....	♂ juv.	.30	3.52	3.30	1.10	.78	.40	.56	.40	Skin.....	July 7,
85476	".....	♂ juv.	.28	3.32	2.99	1.00	.80	.34	.55	.37	".....	" 15.
	Average of the specimens.....		.29	3.33	.....	1.05	.79	.37	.57	.38		
85478	Attu.....	♂ juv.	.26	3.20	2.60	1.05	.80	.36	.59	.39	Skin.....	June 20.
	General average, excluding the Attu bird.....		.30	3.25	3.10*	1.07	.79*	.44*	.67*	.47*		

* Kyska and Attu both omitted.

25. *PASSERELLA ILIACA UNALASCENSIS* (Gm.) Ridgw.

81389 (3319) ♂ ad.	George Island, Port Althorp,	June 19, 1880.
(3359) ♂.	Graham Harbor, Cook's Inlet,	July 4, "
81689 (3428) alcoholic.	Wooded Id., Kodiak,	" 13, "
81716 (3429) "	St. Paul, "	" 9, "
81387 (3498) ♂ ad.	St. Paul, Kodiak,	" 12, "
(3499) ♂.	" " "	" 13, "
81388 (3500) ♀ ad.	" " "	" " "
81688 (3458) alcoholic.	Popoff Id., Shumagins,	" 18, "
81390 (3485) ♂ ad.	Little Koniushi Id., Shumagins,	" 16, "
81391 (3486) ♀ ad.	" " " "	" " "

The afternoon of July 4, 1880, was decidedly warm for bird-collecting at Graham Harbor, and I have a lively recollection of the difficulties encountered in the timber at that place. The sound of a woodpecker tapping on a dead tree allured me to the chase. There was a lavish display of flowering plants—American cowslip, salmon berry, anemones, and a beautiful blue cranesbill. Frost had nipped the detestable wild ginseng (*Panax horridum*), but unfortunately had not destroyed the entire crop. Mosquitos were at the climax of their capacity for making life wretched. The only bird that could be approached with a degree of comfort was the song sparrow (*Melospiza fasciata rufina*), which frequented the beach and its immediate vicinity. *Passerella* hid in the recesses of the timber, and the way to him led through stinging acres of *Panax*, over legions of briar-beset, snaggy fallen trees, into numberless concealed pitfalls, and within the jurisdiction of the most relentless mosquitos known to man. Bird-collecting here was simply a painful duty, and the reward of honest labor was inadequate, because one was almost sure to lose a bird after killing it in that maze of undergrowth.

On Little Koniushi Island I found this *Passerella* associated with *Plectrophanes nivalis* and *Anthus ludovicianus* on the top of the ridge overlooking Northwest Harbor, about 1,200 feet above the sea level. Walking on this island is simply torture, especially for one who is intent on birds and takes no heed to his steps. The soil is soft and yielding, and in most places thickly covered with loose rocks, scrub alder, and a kind of wild apple—all mingled in such a way as to impede one's progress and multiply his toil. Sitka and Port Mulgrave are little better for comfortable walking than the localities just described; indeed, most of the timbered region, so far as I have observed, is a most discouraging field for pedestrianism.

26. *CORVUS CORAX CAENIVORUS* (Bartr.) Ridgw.

(3075) ad.	Sitka, Alaska.
81394 (3076) ad.	Sitka, Alaska.
(3291) sternum.	Port Mulgrave, Yakutat Bay, Alaska, June 24, 1880.
81667 (3292) head.	" " " " " " " "

Extremely abundant at Sitka. Mr. A. T. Whitford informed me that he has seen ravens catch rats in a very expert manner; swooping swiftly

upon the victims, they carry them up into the air and let them fall from a great height. If the first fall does not kill the rat, he is captured again and carried higher. The rats are eaten by ravens.

I shot at a raven at Cape Lisburne, August 21, but failed to kill it. On the following day I heard one at a distance on one of the hills, 10 miles to the eastward of this cape.

Again, at Chamisso Island, Eschscholtz Bay, I attempted to kill a raven with small shot and failed.

I saw, but could not obtain, a fine bird of this species at Elephant Point, Eschscholtz Bay, September 2, 1880.

At Port Providence, Plover Bay, Siberia, ravens were extremely abundant September 14, and so gorged with blubber and overrun with parasites that it was too disgusting to prepare skins of them. At the head of the spit I watched their movements for some time, as they did not fear me while I sat still and made no sudden movement. They would alight close to my head and look at me with apparent curiosity, uttering now and then a hoarse call to other ravens flying near at hand. Hopping forward a step or two, they would pull off pieces of moss from the stones and jump slightly into the air in an affected sort of way, sometimes taking a good-sized stone in the beak, perhaps to see if any food might be concealed underneath. Occasionally, one would find a morsel, and then another would try to take it out of his bill, the lucky one seeming to hold out the prize temptingly, but firmly, to tantalize his covetous neighbor. In starting to fly they would strike the ground with their feet several times to gain an impetus.

27. *CORVUS CAURINUS*, Baird.

81396 (3239) ♀ ad. Sitka, June 16, 1880.

81395 (3240) ♂ " " " " "

Abundant at Sitka, May 28 to June 16, 1880, associated with the preceding. Voice variable, usually less ringing and hoarser than that of *C. frugivorus*, but sometimes an exact counterpart of it. Without some definite and reliable mode of recording the notes of this fish crow for comparison with those of the common eastern species, there must be doubt as to the relation between the voices of the two birds.

A small flock was seen at George Island, Port Althorp, June 19, 1880, perched on the rocks, and feeding on a gravel beach at low tide.

Measurements.

Catalogue number.	Locality.	Sex and age.	Depth of bill through base.	Wing from carpal joint.	Tail to basal end of feathers.	Tarsal joint.	Middle toe.	Gonys.	Culmen.	Bill from nostril.	Nature of specimens measured.	Date.
81395	Sitka, Alaska	♂	+	11.	6.50	1.87			1.83		Fresh	June 16.
81396	"	♂		10.75	6.12	1.75			1.75		"	"
(*)	"			11.25	6.50	1.87			1.75		"	May 31.
81395	Sitka	♂	.70	11.	6.50	1.85	1.20	.83	1.83	1.17	Dried skin	June 16.
81396	"		.75	10.75	6.10	1.75	1.25	.83	1.75	1.18	"	"

* Bird not kept. The two sets of measurements are from the same birds—first in the fresh state and afterward from the dried skins.

28. *CYANOCITTA STELLERI* (Gm.) Caban.

(3037) ♂. Old Sitka (mouth of river), June 2, 1880.
81392 (3068) ♂. Near Hot Springs Bay, Baranoff Id., June 5, 1880.

Measurements of number 3037 in the fresh state: Length, 13; extent, 18.37; wing, 6; tail, 6; crest, 2; testis, .37. When shot, this bird had its mouth and crop crammed full of insects.

A bird of this species was shot at Port Althorp, June 19, but was lost in a dense thicket.

29. *EMPIDONAX DIFFICILIS* Baird.

81393 (3067) ad. ♂. Near Hot Springs Bay, (Sitka), Alaska, June 5, 1880.

This individual was one of a few examples seen at the place noted. It is the first specimen of the species recorded from Alaska, and, so far as I know, the only one. From the size of the testes (.25) it is probable that this date represents very nearly the breeding time of this fly-catcher in the locality named.

The fresh bird furnished the following measurements: Length, 5.25; extent, 7.50; wing, 2.62.

30. *SELASPHORUS RUFUS* (Gmel.) Aud.

(3097) juv. Sitka.
(3098) " " "

A live humming bird, with its nest and eggs, was brought into Mr. Whitford's store at Sitka, June 9, 1880, but none of our party were present at the time, and we did not get them.

31. *NYCTEA SCANDIACA* Linn.

(3681) sternum of 81397.
81397 (3689) ♂ ad. Point Belcher, Alaska, Arctic O. Aug. 27, 1880.

Common on the gently rising ground inland from the small lake near our anchorage. I saw as many as six at one time on small grassy mounds. They were uniformly hard to approach, never allowing me to come within gun-shot, except in the one instance when I crept along under cover of the low bluff forming one of the lake borders, and rose suddenly within easy range.

32. *HIEROFALCO GYRFALCO SACER* (Forst.) Ridgw..

81398 (3838) ♀. Bering Sea, 60 miles E.S.E. from St. George Island. Sept. 24, 1880.
(3838) sternum of above.

This individual was shot while trying to alight on the vessel; it dropped into the leach of the mainsail, and from thence into the cockpit, where it was secured. Two examples of this species, according to my belief, were around the vessel between St. Mathew and St. Lawrence Islands, a few days previous to this date. One of them was shot, but lost.

The following color notes and measurements were taken from the bird : Iris brown; tarsus and toes bluish gray; bill the same at base, but black at tip; eyebrows bluish gray.

Ovaries little developed; eggs not distinguishable to the unaided eye.

Length, 21; extent, 44; wing, 14; tail, 9; tarsus, 2.37; bill, 1.12; head, 2.50; middle toe, 1.94; middle toe claw, .81.

33. *PANDION HALIAËTUS CAROLINENSIS* (Gm.) Ridgw.

81668 (3150) head. Hot Springs, Baranoff Island, Alaska, June 9, 1880.

(3151) sternum. " " " " " " " "

This specimen of the osprey was shot by Capt. E. P. Herendeen near Hot Springs.

34. *CIRCUS HUDSONIUS* (Linn.) Viell.

81401 (3720) ♀. Elephant Point, Eschscholtz B., Alaska, Sept. 2, 1880.

Several individuals of this hawk were seen flying over the marshes in the vicinity of Elephant Point. The following color notes and measurements were taken from the recently-killed bird:

Length, 21.50; extent, 47.50; wing, 15.50; tail, 10.50; bill, 1.19; head, 2; tarsus, 3.37; middle toe and claw, 2.37; middle toe claw, .75.

Iris brown. The upper tail coverts are not white, as is usually recorded of this species, but whitish, with many blotches of rufous.

35. *BUTEO BOREALIS CALURUS* (Cass.) Ridgw.

81399 (3060) ♀ (?) juv. Baranoff Id., near Sitka, Alaska, June 5, 1880.

This young hawk was shot by Lieutenant Rockwell, U. S. N., near Hot Springs Bay. I have the following notes from the recently-killed bird: Iris, very light hazel; length, 21.50; extent, 47.50; wing, 14.50; tail, 9. This species has not been previously recorded from Alaska.

36. *ARCHIBUTEO LAGOPUS SANCTI-JOHANNIS* (Gmel.) Ridgw.

81400 (3466) ♀. Popoff Island, Shumagins, July 18, 1880.

Iris hazel. Cere yellow, with a greenish tinge. Lips and feet lemon yellow. Eggs very small.

Measurements from the fresh bird: Length, 23; extent, 56.50; wing, 18; tail, 10.06; bill, 1.37; head, 2.25; tarsus, 2.94; middle toe and claw, 2.19; middle toe claw, .81.

37. *HALIÆTUS LEUCOCEPHALUS* (Linn.) Savig.

(3293) sternum. Port Althorp, Alaska, June 19, 1880.

Very abundant in the vicinity of Sitka, May 28 to June 16, 1880, usually around shallow coves in the neighborhood of the mouths of fresh water streams.

A pair of young birds of this species was seen at Iliuliuk, Unalashka, October 13, 1880.

38. *LAGOPUS ALBUS* (Gm.) Aud.

81402 (3482) ♀. Unga Id., Shumagins, July 21, 1880.

The crop was filled with leaves of a species of willow. Several of the birds were seen on low ground not far away from the ocean beach, in the vicinity of a small trout stream.

This specimen corresponds very closely in most respects with number 33548, a female from Norway, collected July 2, 1862; the claws, however, are considerably shorter than in the Norway example, and in all other specimens of *albus* in the Museum.

39. *HÆMATOPUS NIGER* Pall.

(3096). Old Sitka, Alaska, June 1, 1880.

81669 (3122) head. Sitka Bay, Alaska, June 8, 1880.

(3124) sternum of 3122.

A pair were seen at Port Althorp, June 21; they passed and repassed the vessel at anchor, drawing near when their peculiar whistle was imitated, and circling around us several times.

40. *STREPSILAS INTERPRES* (Linn.) Illig.

81709 (3543) alcoholic, St. Paul. Id., Bering Sea, Aug. 6, 1880.

81403 (3764) ♂. Point Belcher, Alaska, Arctic O., Aug. 27, 1880.

81404 (3602) ♂. Port Providence, Plover Bay, Siberia, Aug. 14, 1880.

No. 3602 was shot on the end of the spit. Toes semipalmate, though when the skin dries this may not be evident. Legs and feet yellow and olive brown. Bill nearly black at base and tip, the remaining portion greenish gray.

Measurements from the fresh bird: Length, 9; extent, 19; wing, 6; tail, 2.37; bill, .81; tarsus, 1.12; middle toe and claw, 1.12. Testes elongate, minute.

41. *STREPSILAS MELANOCEPHALA* Vig.

81405 (3789) ♂. Elephant Point, Eschscholtz Bay, Alaska, Sept. 2, 1880.

Only a few of these turnstones were seen here.

42. *SQUATAROLA HELVETICA* (Linn.) Cuv.

(3115) ♂ ad. Sitka, Alaska, June 8, 1880.

81406 (3828) ♂ juv. Port Providence, Plover Bay, Siberia, Sept. 12, 1880.

(3829) ♀ juv. Port Providence, Plover Bay, Sept. 13, 1880.

The single example secured in Alaska was in adult male summer plumage. It was found on a small rock in the cove near the old fish-house at Sitka. The following measurements were taken from the fresh bird: Length, 12.50; extent, 24.87; wing, 7.69.

The individuals obtained at Plover Bay were the only two of the species seen there. They were found on the spit which forms the harbor of Port Providence. Land birds were very scarce here during the

time of our second visit, September 12 to 17. Besides the *Squatarola* I saw only *Stercorarius crepidatus*, *Heteroscelus incanus*, *Corvus corax carnivorus*, *Plectrophanes nivalis*, and one wagtail in flight.

43. CHARADRIUS DOMINICUS Müll.

81407 (3772) ♂. Icy Cape, Alaska, Arctic O., Aug. 25, 1880.

Only one small flock of this plover was definitely seen, containing perhaps not more than a half dozen individuals.

44. ARQUATELLA COUESII Ridgw.

(3879) ♂.	Chernoffsky,	Unalashka,	Oct. 1,	1880.
81409 (3880) ♀.	"	"	"	"
(3891) ♀.	Iliuliuk,	"	11,	"
81408 (3893) ♂.	"	"	13,	"
(3894) ♂.	"	"	"	"
(3895) ♀.	"	"	"	"

Not uncommon on small rocks in Chernoffsky Harbor, near its head and around the shores. At Iliuliuk, also, I found it feeding on sea-washed shores, usually on small islets.

45. ACTODROMAS ACUMINATA (Horsf.) Ridgw.

81410 (3825) ♂. Port Clarence, Alaska, Sept. 9, 1880.

Found near the margin of one of the small fresh-water lagoons. Rare. This species has not previously been obtained north of St. Michael's.

46. ACTODROMAS MACULATA (Viell.) Cones.

(3765) ♂.	Point Belcher,	Alaska,	Arctic O.,	August 27,	1880.
81411 (3782).	"	"	"	"	"

Quite common, with *Pelidna alpina americana*, at small fresh-water ponds, and sometimes near tide-pools.

47. ACTODROMAS MINUTILLA (Viell.) Bp.

81715 (3501) alcoholic. Belkoffsky, Alaska, July 23, 1880.

81412 (3591) ♀ (1). Belkoffsky, Alaska, July 23, 1880.

81413 (3597) ♂. Port Providence, Plover Bay, Siberia, August 13, 1880.

It was a real pleasure to collect land birds at Belkoffsky, although few species were found—only *Centropus lapponicus* and *Passerculus sandwichensis* besides the small sand piper. Walking was comfortable and there were many small, rapid streams of delightfully cool water rushing down from the steep hill behind the village. The valley between this hill and the sea is undulating, free from alder and other impediments to travel, rich in grasses and flowers, and abounding in patches of exceedingly hard stones covered with lichens. Iris, geranium, aster, *Pinguicula*, azaleas, Jacob's ladder, painted cups, yarrow, and water willow were in bloom. A fine salmon river falls into Belkoffsky Bay, and salmon were beginning to ascend. On the low ground birds

were not abundant, but I heard more up the hillside. The volcano, Pavloff, is visible from the village, and was sending up columns of smoke during our stay.

48. *PELIDNA ALPINA AMERICANA*. Cass.

(3598) ♀.	Port Providence, Plover Bay, Siberia, Aug. 13, 1880.
(3599).	" " " " " " " "
81417 (3600) ♀.	" " " " " " " "
81415 (3601) ♂.	" " " " " " 14, "
81416 (3778) ♂.	Cape Lisburne, Alaska, Arctic O., " 21, "
(3779) ♂ juv.	" " " " " " " "
81414 (3780) ♂.	Cape Lisburne, Alaska, Arctic O., Aug. 21, 1880.
81418 (3766) ♀.	Icy Cape, Alaska, Arctic O., " 25, "
81419 (3783) ♀.	Point Belcher, " " " " 27, "

A very common species at all of the places named above. Feeding on the beach or at tide-pools and fresh-water ponds.

49. *EUBINORHYNCHUS PYGMÆUS* (Linn.) Pearson.

81434 (3795) juv. Port Providence, Plover Bay, Siberia, 1880.

Shot on the end of the spit by a native, most probably late in August. Ammunition was left with this boy on the 13th of August for the express purpose of getting this sand piper, and one month later we were rewarded by receiving from him the only specimen we saw of the species.

50. *HETEROSCELUS INCANUS* (Gmel) Cones.

(3831) ♂.	Port Providence, Plover Bay, Siberia, Sept. 14, 1880.
81421 (3832) ♂.	" " " " " " " "
81420 (3907) ♂ ad.	Iliuliuk, Unalashka, Oct. 16, 1880.
(3822)	2 sternums, of 3831 and 3832.

The Unalashka specimen was in winter plumage, the only one seen there. Its call drew me towards it.

At Port Providence no others were observed except the two here recorded. They were found standing on the rocks near the eastern border of the harbor, teetering like some of the small species of *Actodromas*.

51. *PHALAROPUS FULICARIUS* (Linn.) Bp.

(3603) ♂ (†).	Off Cape Tchaplín, Siberia, Aug. 15, 1880.
81422 (3604) ♂ (†).	Off Cape Tchaplín, Siberia, Aug. 15, 1880.
81423 (3781) ♀ (†).	Point Belcher, Alaska, Arctic O., Aug. 27, 1880.

Immense flocks of this phalarope were heard and seen off Cape Tchaplín. Their twittering was a very pleasant sound. The day was calm, clear, and pleasant, so that a fine opportunity was afforded for the use of the dredge and the pursuit of phalaropes. At Point Belcher again we saw large flocks of the same species, feeding in the swash of the tide along the beach, and drifting shoreward with the incoming current from short distances at sea. The northern phalarope, on the other hand, was observed at the margins of fresh-water lagoons.

52. LOBIPES HYPERBOREUS (Linn.) Cuv.

81424 (3791). Port Clarence, Alaska, Sept. 6, 1880.

In small flocks, feeding at the margins of fresh-water lagoons. Four individuals were shot.

The spit at Port Clarence, where I collected birds, is long, narrow, and curved. The width at the astronomical station of the "Yukon" party must have been about three-fourths of a mile. The ground is level, and walking good; there are numerous fresh lagoons of very palatable water, around which birds collect. There are no trees except the very scrubby dwarf willows. We found a few flowering plants, and many exquisite lichens. The shallow lagoons are well stocked with sticklebacks. *Centrophanes lapponicus* was common; a few *Plectrophanes nivalis* were seen and only one *Saxicola œnanthe*. A wagtail was observed on the 6th and again on the 8th of September, but too far off for identification. *Larus glaucescens* was abundant, associated with kittiwakes.

I saw here a bird which I supposed to be a small wren; it appeared unexpectedly, when my attention was fixed on other species, alighted not very far off, was marked down and diligently searched for in a place where there was no apparent chance of escape, but unfortunately could not be found.

53. GRUS CANADENSIS (Linn.) Temm.

On the 18th of August, in the vicinity of the Diomedé Islands, sand-hill cranes were seen flying towards the American shore.

On the 1st of September, Capt. E. P. Herendeen went ashore on the east side of Choris Peninsula, and here he saw a sand-hill crane.

54. BERNICLA NIGRICANS (Lawr.) Cass.

81425 (3667) ad. ♂. Near Icy Cape (Lat. 70° 13' N.), Arctic O., Aug. 25, 1880.

On the 22d of August, while at anchor 10 miles to the eastward of Cape Lisburne, we first observed brant migrating southward; great numbers of them passed us during the day. On the 25th of August we found them very abundant on the brackish-water lagoons of the spit near Icy Cape.

Measurements taken from number 81425 in the fresh state are the following: Length, 23.50; extent, 46.62; wing, 12.87; tail, 4.19; bill, 1.31; head (from base of bill), 2.50; tarsus, 2.31; middle toe and claw, 2.25.

55. MARECA AMERICANA (Gmel.) Steph.

81710 (3678) heads in alcohol. Eschscholtz Bay, Aug. 31, 1880.

Two individuals were shot at Elephant Point, Eschscholtz Bay, September 2, 1880.

56. *FULIX* sp.

81717 (3481) embryo. Unga Id., Shumagins, July 18, 1880.

(3481) 3 eggs. Unga Id., Shumagins, July 18, 1880.

This nest was obtained by Mr. Marcus Baker; it contained, when found, 7 eggs.

57. *CLANGULA ALBEOLA* (Linn.) Steph.

Many small flocks were seen at Chernoffsky, Unalashka, October 1 to 4, 1880, and again at Iliuliuk, on the same island, October 5 to 18, 1880.

58. *SOMATERIA V-NIGRA* Gray.

81426 (3337) jnv. Chugachik Bay, Cook's Inlet, July 1, 1880.

(3320) 4 eggs. " " " " June 30, "

The young, not able to fly, but wonderfully expert in diving, were abundant near the head of Plover Bay, Siberia, August 12, 1880; their disappearance under water was so sudden that I failed to secure even a single specimen. One of the adult females feigned to be crippled and labored off through the water with much make-believe effort, to draw us away from the young.

59. *SOMATERIA SPECTABILIS* (Linn.) Boie.

(3733) heads in alcohol. Port Clarence, Sept. 9, 1880.

Eight of these ducks were brought to us by an Eskimo as we were leaving Port Clarence. They were moulting, and the native speared them.

60. *PELIONETTA PERSPICILLATA* (Linn.) Kaup.

(3123) sternum. Near Hot Springs, Baranoff Id., June 5, 1880.

81712 (3125) head. Sitka Bay, Alaska, June 9, 1880.

81711 (3126) " " " " " "

81713 (3127) " " " " " "

These were heads of ♂, ♀ and young.

61. *MERGUS MERGANSER AMERICANUS* (Cass.) Ridgw.

I shot a female of the above species, July 13, 1880, near the margin of a small fresh-water lake not far from the village of St. Paul, Kodiak Island.

An egg (number 3389), said to be of this merganser, was obtained from Nicolas Pavloff, at Wooded Island, Kodiak, about the same time.

62. *RISSA TRIDACTYLA KOTZBUEI* (Bp.) Coues.

(3685) 2 sternums. Cape Lisburne, Arctic O., Aug. 21, 1880.

(3605) ♀. Port Providence, Plover B., Siberia, Aug. 14, 1880.

(3673) feet of two. Cape Lisburne, Arctic O., " 21, 1880.

(3836) ♀ jnv. St. Mathew Id., Bering Sea, Sept. 22, 1880.

The species was abundant in Plover Bay, August 11 to 14 and September 12 to 17. I have the following notes of colors from number 3605:

Bill light greenish yellow; eyelids, commissure, and inside of mouth deep orange red; legs and feet black.

The feet of two individuals shot at Cape Lisburne are preserved in alcohol. There is a well-developed nail on the hind toe of one of these feet, while the rest of the nails are quite rudimentary. The pair of feet having the best developed nails had, when fresh, a mere trace of yellowish on the skin of the under surface of the toes, while the other pair had bright yellow areas on the corresponding parts.

The young female shot at St. Mathew Island was in the nest. The nests were built of sea-weeds on high, narrow ledges of the inaccessible cliffs. Abundant in this locality with *Fratercula corniculata* and *Fulmarus glacialis Rodgersi*. At St. Mathew Island we saw a great many beautiful young kittiwakes flying near Cape Upright, the black collars and wing patches making them attractive objects of pursuit.

63. LARUS GLAUCUS Brunn.

81696 (3668) head in alcohol. Cape Lisburne, Arctic O., Aug. 21, 1880
(3669) sternum. " " " " " "

The species was abundant at Cape Lisburne.

64. LARUS GLAUDESCENS Licht.

81695 (3729) alcoholic head. Port Clarence, Alaska, Sept. 6, 1880.
(3729) sternum. " " " " " "

This gull was shot on the western side of the spit, near the point. Common.

65. LARUS MARINUS Linn.

81694 (3841) juv. head. Chernoffsky, Unalashka, Oct. 1, 1880.

Abundant, feeding at the mouth of the river falling into the head of Chernoffsky Bay. The first recorded instance of its occurrence on the west coast of America.

66. STERCORARIUS POMATORHINUS (Temm.) Viell.

(3738) sternum. Point Belcher, Aug. 27, 1880.
(3670) sternum of 81427.
81427 (3690) ♀ ad. Point Belcher, Alaska, Arctic O., Aug. 27, 1880.
(3686) 2 sternums. " " " " " "
81702 (3672) head in alcohol. Point Belcher, Aug. 27, 1880.

The eggs of this bird (81427) were very small. The species was very common, with *Nyctea scandiaca*, on the rising ground, industriously feeding upon something which I could not make out because of the difficulty of approaching the birds. The flights of this jæger from seaward to the land and back again were frequent. We found *Stercorarius* very abundant in the vicinity of the whaling ships, where it fared sumptuously.

67. STERCORARIUS CREPIDATUS (Banks) Viell.

81428 (3830) ♀. Port Providence, Plover Bay, Siberia, Sept. 12, 1880.
 (3818) 2 sternums. " " " " " "
 81701 (3818) head in alcohol. " " " " " "

Common. Two examples were shot near the head of the spit.

68. DIOMEDEA NIGRIPES Aud.

(3009) ad. ♀. Pacific Ocean, Lat. 36° 32' N., Long. 126° 13' W., May 15, 1880.

The "Yukon" sailed from San Francisco May 13, proceeding to the westward several hundred miles and then laying her course for Sitka. From the time we left the bar until we neared north latitude 52 degrees on this voyage *D. nigripes* was with us every day, soaring around us when we had a good breeze and leisurely following in our wake or floating astern when the wind was light or wanting. On the above date (May 15) we caught three of these birds with a fish-hook baited with pork. Soon after taking them on deck one of them became seasick, and ejected a piece of pumice. One of the calls of this albatross is similar to the peeping sound of very young chickens. It makes a peculiar sound, too, by striking its jaws together when approached on deck, and can inflict a painful wound with its sharp hook. These gonies pick up whatever floating food is cast from the vessel, and it is surprising to see how soon after anything is cast overboard a flock of the birds will approach, although none may be in sight at the time. In alighting after rapid flight they back air with their wings, drop their legs and thrust their feet forward to back water, making a light splashing. As soon as a small flock has gathered the gonies begin to fight and scream over their floating food, watching one another to see when anything turns up, the quickest and strongest getting the most. One of the most laughable things we saw was the chase of an overloaded *Fratercula* by one of these gonies; the *Fratercula* skimmed along close to the surface of the water and sometimes apparently floundering through it, as if its body were too heavy for its wings; the gony followed in hot haste but was soon foiled, astonished, and apparently much disgusted by the unexpected diving of the little struggler.

As we proceeded northward we observed a larger proportion of old birds with the upper and under tail coverts and part of the belly white. We saw no individuals of *D. nigripes* as far north as Sitka on the northward voyage. On our homeward way late in October, we saw the species frequently when about 700 miles south of Unalashka; a few were reported within 300 miles south of this island.

Measurements of number 3009 from the fresh specimen: Length, 28.50; extent, 79.50; wing, 19.50; tail, 6; bill, 3.75; head, 2.87; tarsus, 3.50; middle toe, 4; middle toe claw, .62; iris umber; tarsus, foot, base and tip of bill black; remainder of bill plumbeous.

A second living one, caught with the last, had the bill 4.

A very large one caught May 16 gave the following record: Length, 32.50; wing, 21.50; bill, 4.31; upper and under tail coverts white; crissum with some white; iris umber or golden brown.

69. DIOMEDA BRACHYURA Temm.

(3331 alc. 1474) 4 heads. Alexandrovsk, Cook's Inlet, July 4, 1880.

(3301) ad. ♀. Cook's Inlet, June 29, 1880.

(3333) sternum of 3301.

The specimen here mentioned was shot by Capt. E. P. Herendeen near the mouth of the inlet, not far from Fort Alexander. The species was abundant. This example was moulting; some of the primaries are rudimentary. It has been extremely difficult to kill these birds because they never come near the vessel nor allow it to approach them closely. Unlike *D. nigripes*, it is extremely shy.

Measurements from the recently-killed bird: Extent, 88; wing, 21; tail, 6.75; head, 3.75; bill, 5.19; tarsus, 3.87; middle toe and claw, 5.12. Bill flesh color, with a faint purplish tinge; hook light horn color; iris dark brown.

The Kodiak native name for this gony is *Kay-mäh-ryeerk'*.

In about north latitude 51 degrees we begun to lose sight of *D. nigripes*, and *D. brachyura* took its place. From latitude 52 degrees north the latter species increased in numbers. We found it at various points around the Gulf of Alaska, but the mouth of Cook's Inlet, and the vicinity of the Barren Islands, seemed to be its favorite summer resort. Natives of the trading village Alexandrovsk frequently spear this bird from their bidarkas. I picked up four skins of this species from a pile of refuse at this village.

We saw *D. brachyura* in Unimak Pass July 25, and in Bering Sea, off Makushin, on the following day. A single individual was seen August 10 about 40 miles to the westward of the entrance to Plover Bay. Another individual was seen September 18 to the northward of St. Lawrence Island. On the 22d of September we saw a few of these birds in the vicinity of St. Mathew Island. On the 5th of October we saw a few individuals, in beautiful plumage, while under sail from Chernoffsky, along the west coast of Unalashka, to Iliuliuk.

70. DIOMEDEA MELANOPHRYS Temm.

On the 31st of October a single *Diomedea* was seen on the Pacific not far from the following position: North latitude 40° 30', west longitude 142° 23'. Observing that it differed greatly from the common *D. nigripes*, I made these notes concerning it: Head, neck, lower parts, and rump white; the under surface of the wings, too, shows considerable light color; elsewhere the bird is dark gray like *nigripes*; in size it is slightly less than the *nigripes* around it; the dark part of the wing of this bird is very different from the black of *D. brachyura* so far as observed; the

bill is light; a dark streak runs from the bill behind the eye; the bird could not be secured.

This description, taken while the bird was flying near the vessel, evidently indicates *D. melanophrys*, as suggested to me by Mr. Ridgway recently, and, if so, the range of that species will be extended to within about 1,060 miles west of Cape Mendocino, California, thus coming well within the limits of *D. nigripes*.

71. FRATERCULA CORNICULATA (Naum.) Gray.

81429 (3837) ad. ♀. St. Mathew Island, Bering Sea, Sept. 22, 1880.

Abundant on the cliffs near Cape Upright, where they were inaccessible except by shooting. They fairly cover the narrow ledges in company with fulmars and kittiwakes. Colors of the fresh bird: Bill red and pale lemon, with narrow stripes of black in the grooves; corners of mouth yellow; iris white; eyelids red; palpebral appendages black; feet and legs orange; lighter on the upper surface of the toes and front of the feet; worn and soiled so as to appear grayish on the under surface of feet and toes.

The corners of the mouth are *soft* and *not callous*. The palpebral appendages are also soft.

72. PHALERIS PSITTACULA (Pall.) Temm.

(3405) sternum. Little Koniushi Id., Shumagins, July 16, 1880.

Abundant. The bird whose sternum was prepared flew into a crevice in the rocks, and was caught without being injured.

73. SIMORHYNCHUS CRISTATELLUS (Pall.) Merrem.

81430 (3827) juv. Big Diomedes Island, Bering Strait, Sept. 10, 1880.

Changing to first plumage.

Great bunches of these little auks were brought to us by Eskimo at Big Diomedes. Mr. Baker secured six of the young also on the island.

74. SYNTHLIBORHAMPHUS ANTIQUUS (Gm.) Coues.

81706 (3116) alcoholic. Sitka Bay, Alaska, June 9, 1880.

81708 (3117) " " " " " " "

81707 (3118) " " " " " " "

These specimens were shot by Lieut. Com. Chas. H. Rockwell, U. S. N.; small flocks were occasionally met with in the bay.

75. BRACHYRAMPHUS MARMORATUS (Gm.) Brandt.

81431 (3069) ad. ♂. Sitka Bay, Alaska, June 5, 1880.

(3070) sternum of last.

81705 (3119) alcoholic. Sitka Bay, Alaska, June 9, 1880.

81703 (3120) " " " " " " "

81704 (3121) " " " " " " "

Not abundant; found in small flocks.

76. *URIA COLUMBA* (Pall.) Cass.

- 81700 (3128) head. Sitka Bay, Alaska, June 9, 1880.
 81698 (3129) " " " " " " "
 81699 (3289) heads. Port Althorp, " " 19, "
 (3294) sternum. " " " " " "

At Port Althorp, on the 19th of June, 1880, I saw a dozen or more of these birds feeding in a small cove on George Island. They are very graceful in their movements. While feeding they put the head under the water and paddle along with it in that position—moving rather quickly. When one sees something in the water at a little distance he makes a rush for it, and others follow to get the prize. In alighting, after a short, rapid flight, they come down on the water with a tumble. One of their calls resembles the chipping of a sparrow, and I mistook it for that several times. They have a low whistle also.

We found it very abundant in the harbor of St. Paul, Kodiak, July 9 to 14, 1880.

77. *LOMVIA TROILE* (Linn.) Brandt.

- 81697 (3303) head in alcohol. Chugachik Bay, Cook's Inlet, June 30, 1880.
 (3305) sternum of last. " " "
 (3321) 7 eggs. Chugachick Bay, " " "
 Abundant in the inlet.

Distribution of species.

	Sitka.	Port Althorp.	Port Malgrave.	Cook's Inlet.	Kodiak Island.	Little Koninski Island.	Popoff Island.	Belkoffsky.	Unalaska Island.	St. Paul Island.	Port Clarence.	Eschscholtz Bay.	Cape Lisianski.	Key Cape.	Belcher Point.	Flower Bay.
1	<i>Hylaeobla alia</i>															
2	<i>Hylaeobla unalascae</i>	X			X	X										
3	<i>Mareca nigripennis</i>				X											
4	<i>Hesperocichla nana</i>															
5	<i>Saxicola ornatrix</i>	X														
6	<i>Parus atricapillus septentrionalis</i>				X	X										
7	<i>Anorthura alasensis</i>								X							
8	<i>Melanitta ocellaris</i>															
9	<i>Budytes flava</i>															X
10	<i>Anthus ludovicianus</i>					X										X
11	<i>Dendroica aestiva</i>				X								X			
12	<i>Mniotilta pusillus pileatus</i>		X													
13	<i>Hirundo erythrogastra</i>				X				X							
14	<i>Leucosticte griseinucha</i>					X			X							
15	<i>Egialia canadensis californica</i>											X				
16	<i>Egialia linaria</i>											X				
17	<i>Plectrophanes montana</i>				X					X	X					
18	<i>Centropus japonicus</i>							X	X		X					
19	<i>Passerculus sandwichensis</i>							X	X				X		X	
20	<i>Passerculus sandwichensis alascensis</i>				X	X						X			X	
21	<i>Zonotrichia coronata</i>				X	X		X								
22	<i>Junco oreganus</i>	X					X									
23	<i>Melospiza fasciata rufina</i>		X		X								X		X	
24	<i>Melospiza cinerea</i>				X	X	X		X							X

Distribution of species—Continued.

	Sitka.	Port Altborp.	Port Mulgrave.	Cook's Inlet.	Kodiak Island.	Little Koniush Island.	Popoff Island.	Belkoffsky.	Unalaska Island.	St. Paul Island.	Port Clarence.	Eschscholtz Bay.	Cape Lisburne.	Ioy Cape.	Belcher Point.	Flover Bay.
25	<i>Passerella iliaca unalascensis</i>		X	X	X	X	X									
26	<i>Corvus corax caurinus</i>	X		X	X	X						X	X			X
27	<i>Corvus caurinus</i>	X														
28	<i>Cyanocitta stelleri</i>	X														
29	<i>Empidonax difficilis</i>	X														
30	<i>Selasphorus rufus</i>	X														
31	<i>Nyctea scandiaca</i>														X	
32	<i>Hierofalco gyrfalco sacer</i> *															
33	<i>Pandion haliaetus carolinensis</i>	X														
34	<i>Circus hudsonius</i>											X				
35	<i>Buteo borealis calurus</i>	X														
36	<i>Archibuteo lagopus sanotijohannis</i>						X									
37	<i>Haliaeetus leucocephalus</i>		X						X							
38	<i>Lagopus albus</i> **															
39	<i>Hematopus niger</i>	X														
40	<i>Streptilas interpres</i>									X					X	X
41	<i>Streptilas melanocephala</i>											X				
42	<i>Squatula helvetica</i>	X														X
43	<i>Charadrius dominicus</i>													X		
44	<i>Arquatella couesii</i>								X							
45	<i>Actodromas acuminata</i>										X					
46	<i>Actodromas maculata</i>															
47	<i>Actodromas minutilla</i>							X							X	X
48	<i>Pelidna alpina americana</i>												X	X	X	X
49	<i>Eurynorhynchus pygmaeus</i>														X	X
50	<i>Heteroscelus incanus</i>								X						X	X
51	<i>Phalaropus fulicarius</i>														X	X
52	<i>Lobipes hyperboreus</i>										X					
53	<i>Grus canadensis</i>											X				
54	<i>Bernicla nigricans</i>													X		
55	<i>Marca americana</i>											X				
56	<i>Fulix</i> sp**															
57	<i>Clangula albeola</i>								X							
58	<i>Somateria v-nigra</i>				X											X
59	<i>Somateria spectabilis</i>										X					
60	<i>Pelionetta perspicillata</i>	X														
61	<i>Mergus merganser americanus</i>															
62	<i>Rissa tridactyla kotsbuei</i>					X										X
63	<i>Larus glaucus</i>												X			
64	<i>Larus glaucescens</i>										X					
65	<i>Larus marinus</i>								X							
66	<i>Stercorarius pomatorhinus</i>														X	
67	<i>Stercorarius crepidatus</i>															X
68	<i>Diomedea nigripes</i> †															
69	<i>Diomedea brachyura</i>					X										
70	<i>Diomedea melanophrys</i> ‡															
71	<i>Fratercula corniculata</i> §															
72	<i>Phaleris ptiliacula</i>						X									
73	<i>Simorhynchus cristatellus</i>||															
74	<i>Synthliborhampus antiquus</i>	X														
75	<i>Brachyrhampus marmoratus</i>	X														
76	<i>Uria columba</i>	X	X		X											
77	<i>Lomvia troile</i>				X											

* Bering Sea, 60 miles ESE. from St. George Island.

† Lat. 36° 32' N., long. 126° 13' W.

‡ Lat. 40° 32' N., long. 142° 23' W.

§ St. Mathew Island, Bering Sea.

|| Big Diomedea Island, Bering Strait.

** Unga Island.

U. S. NATIONAL MUSEUM, May 22, 1882.