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Author(s)	INUKAI, Tetsuo
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A Preliminary Note on the Ribbon Seal, *Histiophoca fasciata* (Zimm.) Gill, from the Waters of Saghalien¹⁾²⁾

By

Tetsuo Inukai

Zoological Institute, Faculty of Science, Hokkaido
Imperial University, Sapporo

(With 2 textfigures)

This species of seal has long attracted the attention of zoologists since the publication of Pennant (1781) based on information and drawing given by Dr. Pallas who secured only the middle part of the skin of the animal from one of the Kurile Islands. Zimmermann (1783) described the seal for the first time giving the systematic name as *Phoca fasciata*, popularly known as ribbon or ribbon seal and later Pallas (1831) identified it as *Phoca equestris* (originally *Phoca Equestris*). However, there had been considerable doubt attached to the validity of the species until the appearance of Schrenck's famous report in 1859. Having examined the specimens from Kamchatka and Amur Land, Schrenck (1859) gave the first detailed description accompanied by excellent figures and thus the existence of the ribbon seal was established beyond doubt. In 1873 Gill gave again a short account of this species from the examination of 2 skins in the collection of the Smithsonian Institution and asked earnestly for more complete specimens. In 1880 Allen published a monograph "History of North American Pinnipeds" and redescribed the species from the descriptions by other authors and his own investigation. However, as to the seal under discussion no further information beyond the above was added. Thus knowledge on the ribbon seal has been left in that unsatisfactory state for a long time

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and almost nothing new has been reported in spite of the recent works such as those of Allen (1902), Sowerby (1923), Kishida (1924), Kuroda (1928, 1938), Barabash-Nikiforov (1938) etc.

During his research work on mammals of northern Japan the present author had opportunity to study marine mammals including the seal in question. The present paper is only a brief note preliminary to a future paper to give full information.

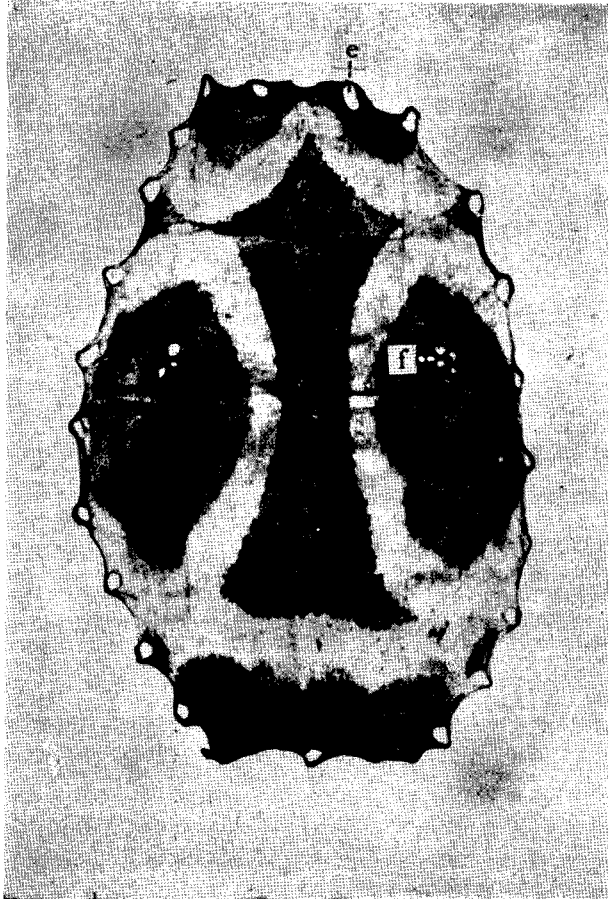


Fig. 1. A skin of the ribbon seal, *Histriophoca fasciata* opened on the belly. 160 cm male (snout removed), e, eye; f, fore limb.

Hitherto the occurrence of the ribbon seal has been known to be extremely uncommon and the habitat is reported as around the

Kuriles and in the Sea of Okhotsk (Pallas, 1831); on the eastern coast of Kamchatka, in the Gulf of Tartary north of 46°N and at Cape Romanzoff, Alaska (Schrenck, 1859; Ture, 1883) around Nemuro, Hokkaido (Kuroda, 1938); on the Lower Amur River (Allen, 1902); on the Bering coast of Alaska (Gill, 1873); on the Aleutian Islands (Sowerby, 1923); around the Commander Islands (Barabash-Nikiforov, 1938) etc.¹⁾

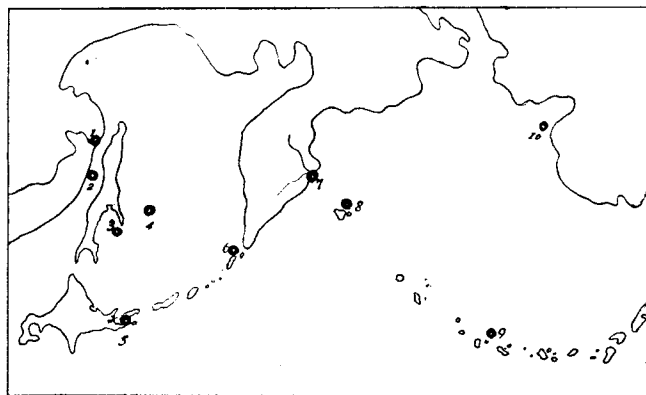


Fig. 2. Distribution of the ribbon seal so far discovered. 1, lower Amur River; 2, Gulf of Tartary; 3, off Shikka; 4, off Chirie; 5, off Nemuro; 6, Kurile Is.; 7, eastern coast of Kamchatka; 8, Commander Is.; 9, Aleutian Is.; 10, Bering coast of Alaska.

The figure (Fig. 1) accompanying this paper shows a skin secured in Shikka, Saghalien and the author has another one obtained from a furrier in Maoka, Saghalien taken from a seal captured in the waters off Chirie. The natives of Saghalien have long been acquainted with the animal calling it by names from the aboriginal languages; Alch or Alpha in Orochon and Giliyak and Urekka in Ainu. Annually from the end of May to early June the ribbon seals appear in herds in Patience Bay (Taraika Bay) off Shikka whence the present specimen was obtained and a considerable number of them are captured for skin, fat and meat by the natives.

1) According to Mr. Ishino, an eminent expert of the Bureau of Fisheries, the seal is frequent on the eastern coast of Kamchatka but is rather rare in the Kuriles. Mr. Soeda of the Central Hatchery of Hokkaido saw the seal captured in the northern Kuriles in 1935.

The species is remarkable for colour or markings as well as for structural peculiarities. The male is distinct having the pattern as shown in the figure; general colour is chocolate-brown with a band of whitish-yellow around the neck just like a ribbon leaving on the snout a mask-like marking inclosing the eye (so it has the name of ribbon or rubbon seal), an oval ring of the same colour on each side encircling the fore feet and another whitish-yellow band before the hindmost part crossing the trunk and touching the side bands. From this pattern the animal looks like an armed knight, thus corresponding to the Latin name *equestris* after Pallas (1831). The name of "Banded seal" agreeing with *Phoca fasciata* of Latin accords also with the general feature of the seal. Some call the animal "Harnessed seal" meaning the seal with striped markings. Kerr's (1792) "Harnessed seal" followed by Kishida (1924) may correctly be "Harnessed seal". However the Japanese name of the seal proposed by Kishida (1924) and adopted by Kuroda (1938), "Kurakake Azarashi", in the sense of "Saddled seal" does not properly describe the animal. Originally "Harnessed" is applied to a striped animal and there is no meaning of "Saddle" as the Encyclopaedia Britannia explains it which is usually not applied to the saddle or bridle of a riding animal. Furthermore, it is feared that the so-called "Kurakake" or saddled seal in an exact sense may be confused with the "Saddle-back" or "Harp seal", *Phoca groenlandica* Fabr. from Arctic waters.

The coloration of the female and the young differs from that of the male, being rather uniform whitish colour except for very indistinct traces of the post-median band of the female.

Taking into account the peculiar pattern of coloration as above and the conic, double-rooted molars as revealed by Schrenck (1859) differing from the ordinary seals, Gill (1873) proposed a new genus name *Histriophoca* instead of *Phoca* for the ribbon seal. This was adopted by Allen (1880, 1902) and Sowerby (1923) while Kishida (1924) and Kuroda (1938) use the old name *Phoca*.

Besides the characteristics as elucidated above the ribbon seal has distinctness in many respects. For example, in the ribbon seal the fore limbs attach to the trunk a little anterior to the middle body part while in the ordinary seal they are found at about 1/3 anterior part of the body. Exact measurement shows that the proportion of the body length anterior to the fore limbs to that of

the posterior part is in the former 1:1.2 while in the latter it is 1:2. On account of this structure the movement of the ordinary seal when landed is exactly expressed by creeping, appearing therefore something difficult. The ribbon seal, however, moves on land with much more agility going ahead sometimes with a kind of walking step and shambling gallop. The natives slaughter the common seal with a club in chase on the ice but they can not do that with the ribbon seal which becomes at times ferocious, resisting when attacked.

Among other structural peculiarities, the small sized stomach and slender and short intestine of the ribbon seal as compared with those of the ordinary seal are noted. Only a liquid content of brown colour has been found existing in the stomach of the ribbon seal when dissected instead of crabs, shells, fishes etc. in the common seal stomach. Moreover the skin of this seal is stronger than that of the ordinary ones and thus fit for leather. These and other points indicate a generic distinction of the ribbon seal from all the common forms of the family Phocidae and so the author believes *Histriophoca* valid. Detailed observations on the general habits and the precise morphology of the ribbon seal from the waters of Saghalien will be published later.

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