

Incidental Catch of a Ribbon Seal (*Phoca fasciata*) in the Central North Pacific

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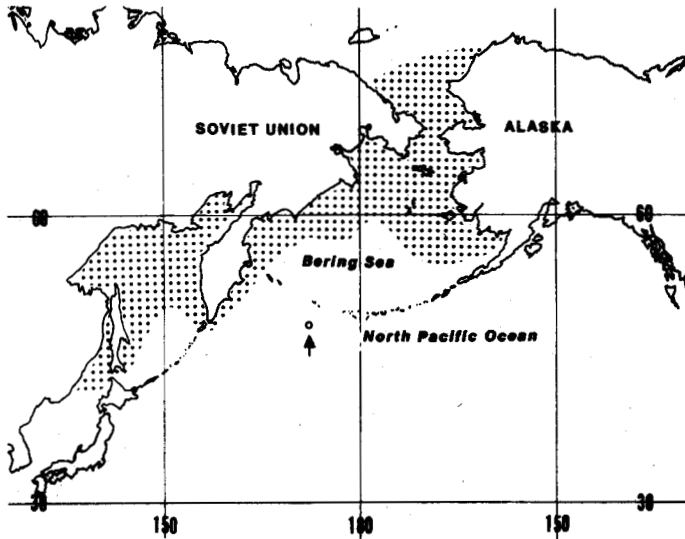


FIG. 1. Approximate location of ribbon seal (*Phoca fasciata*) caught 30 June 1981 and currently postulated range of the species (from Burns, 1981).

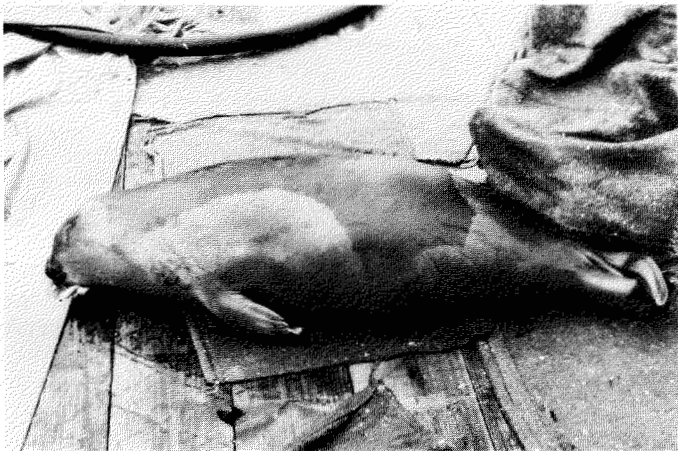


FIG. 2. Immature male ribbon seal (*Phoca fasciata*) incidentally caught in the central North Pacific.

On 30 June 1981 a juvenile male ribbon seal (*Phoca fasciata*) was incidentally caught in the central North Pacific (51°09.5'N, 172°37.5'E; Fig. 1) by the Japanese salmon fishing vessel *Hokucho Maru No. 2*. The seal had become entangled in gill-netting, drowned, and was brought aboard when the net was hauled in. Before the crew cast the seal overboard, one of us (WTE) was able to photograph it (Fig. 2), recover its baculum and measure standard length (Scheffer, 1967) and blubber thickness. The seal appeared to be in good physical condition. Ventral blubber thickness immediately anterior to the penile opening was 3 cm. Standard length and baculum

length were 103 and 5.7 cm respectively. From photos, J. Burns (Alaska Dept. Fish and Game) confirmed the species identification, and estimated the seal's age at 15 months based on pelage pattern and standard and baculum lengths.

In winter and early spring, ribbon seals concentrate along the ice front in the Bering and Okhotsk seas to whelp, nurse their young, mate and molt (Frost and Lowry, 1980; Burns, 1981). In late spring seals disperse as the ice front recedes north and the sea ice breaks up and melts. They are presumed to be solitary and pelagic in summer and autumn but their distribution then is unknown (Wilke, 1954; Naito and Konno, 1979; Burns, 1970, 1981). Burns (1981) summarized the few published summer sightings of ribbon seals in the central Bering Sea. Records south of this area have been reported from Unalaska (Allen, 1880), Cordova, Alaska (Burns, 1981), and Morro Bay, California (Roest, 1964). To our knowledge, the record we report here is only the fifth pelagic record of a ribbon seal and the first pelagic sighting south of the Aleutian Islands in the central North Pacific.

ACKNOWLEDGEMENTS

We thank J. Burns for confirming the species identification and for commenting on the manuscript. We also thank L. Lowry, K. Frost, S. Leatherwood, R.L. DeLong and L. Jones for their comments on the manuscript. W.T. Everett was employed by the National Marine Mammal Laboratory (National Marine Fisheries Service, Seattle, WA) under the U.S.-Japan Cooperative Research Program on Dall porpoise when these observations were made.

REFERENCES

- ALLEN, J.A. 1880. History of North American pinnipeds, a monograph of the walruses, sea-lions, sea bears, and seals of North America. U.S. Geological and Geographical Survey of the Territories, Miscellaneous Publication 12. 785 p.
- BURNS, J.J. 1970. Remarks on the distribution and natural history of pagophilic pinnipeds in the Bering and Chukchi seas. *Journal of Mammalogy* 51:445-454.
- . 1981. The ribbon seal. In: Harrison, R.J. and Ridgway, S.H. (eds.). *Handbook of Marine Mammals*. London: Academic Press, Inc. 89-110.
- FROST, K.J. and LOWRY, L.F. 1980. Feeding of ribbon seals (*Phoca fasciata*) in the Bering Sea in spring. *Canadian Journal of Zoology* 58:1601-1607.
- NAITO, Y. and KONNO, S. 1979. The post-breeding season distributions of ice-breeding harbour seal (*Phoca largha*) and ribbon seal (*Phoca fasciata*) in the southern sea of Okhotsk. *Scientific Reports of the Whales Research Institute, Tokyo*. 31:105-119.
- ROEST, A.I. 1964. A ribbon seal from California. *Journal of Mammalogy* 45:415-420.
- SCHEFFER, V.B. 1967. Standard measurements of seals. *Journal of Mammalogy* 48:459-461.
- WILKE, F. 1954. Seals of northern Hokkaido. *Journal of Mammalogy* 35:218-224.

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