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The Accidental Death of a Great Number of Seabirds on Gamo Coast, Miyagi Prefecture

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魚網による海鳥類の事故死

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摘要: 最近日本各地の海岸に海鳥類の死体が多数打ち上げられ、話題を投げかけているが、これらのうちタンカーの遭難による油汚染など因果関係が明確なものは別として、多くのものは農薬、PCB、疾病などに基因しているのではないかとわれながらも決め手となる証拠がつかめなかった。

折しも 1972 年 4 月 15 日、宮城県蒲生海岸に打ち上げられた約 60 羽のビロードキンクロ、クロガモの死体のうち 2 羽のビロードキンクロ (雌雄各 1 羽) が死因究明のため武石全慈¹⁾、蓮尾嘉彪²⁾の両氏によって届けられた。

剖検の検果次の 7 点から推察して、海中で採餌中魚網にひっかかり溺死したものと結論づけられた。

1) 肉づきも良く、健康体と考えられる、2) 外傷がない、3) 羽毛に油汚染の跡がない、4) 後頭部と首の皮下に著しいうっ血が見られる、5) 各肺細胞に血液が充満している、これは酸素欠乏時にみられる徴候である、6) 口腔、食道、砂のうに至るまで食物 (ラフバンマメガニ) が充満している、7) 死因と直接結びつくような寄生虫、疾病などは肉眼的には認められなかった。

今後沿岸漁業との関係において、潜海性海鳥類の溺死は大きな問題となろう。

なお、ラフバンマメガニの同定の労をとられた東邦大学理学部生物学科の秋山章男助教授に謝意を表す。

Great numbers of corpses, such as the Eastern Velvet Scoter, *Melanitta fusca stejnegeri*, the American Black Scoter, *Melanitta nigra americana* etc., were washed ashore on the Gamo Coast, near Sendai City, Miyagi Prefecture, in mid-April, 1972. About 60 corpses were found during a few days. The cause of death was unknown.

I received on April 17th two dead Eastern Velvet Scoters (a male and a female), which were picked up along the coast by Mr. Zenji TAKEISHI, a member of Miyagi Branch, The Japan Wildbird Society, Sendai, April 11, and carried to my office by Mr. YOSHITAKE, Hasuo, a staff of the Japan Wildbird Society, Tokyo, for inquest.

As a result of microscopic autopsy, it is considered

that the birds were caught in a fishing net in the midst of feeding and drowned. The reasons are as follows; 1) they were well-fed (they had normal body weights), 2) no injury was found on the surface of the bodies, 3) feathers were not polluted by oil, 4) hypodermic tissues of the cervix and the neck were heavily engorged with blood, 5) typical congestive edema caused by lack of oxygen was observed in each lung cell, 6) the buccal cavities, the oesophagi and the gizzards were filled with foods (only crabs, *Pinnixa raphbuni* SAKAI were found) and 7) no parasite or pathological change which could have caused death was observed with the naked eye.

Above mentioned crabs are widely distributed around Japan. They live in water 30~40 meters deep.

Fishing nets could be a new significant problem for diving seabirds near the coast.

Measurements and the stomach contents are shown in Table 1 and 2.

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Fig. 1. A rough sketch of Gamo Coast. About 60 corpses of the Eastern Velvet Scoters were washed ashore on the coast.

Fig. 2. *Pinnixa raphbuni* from the Eastern Velvet Scoters' stomach

Table 1. Measurement of *Melanitta fusca stejnegeri*

	Male	Female
Body weight	1,667 g	1,578 g
Culmen	47 mm	45 mm
Tarsus	48 mm	46 mm
Wing	275 mm	263 mm
Tail	83 mm	80 mm

Table 2. Stomach contents of *Melanitta fusca stejnegeri*. Many fragments of crabs, more than 100 crabs were found in each gizzard.

	Male	Female
<i>Pinnixa raphbuni</i>	70 crabs	40 crabs

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