

## Mollusk Feeding in *Liparis callyodon*

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Reports on the feeding habits in the "Pacific" intertidal/subtidal liparids are basically found as summaries in Andriashev (1954) Hart (1973), and Able and McAllister (1980). The only report of mollusk feeding in *Liparis* spp. is in *L. montagui* (Dunne, 1981). Dunne reported for specimens of *L. montagui* mollusks occurring 2.5% in the diet of 84 specimens. Crustaceans and polychaetes composed the major items of the diet of *L. montagui* (Dunne, 1981). Simmenstadt *et al.* (1977) and previous works of the authors cited within reported, diagrammatically, bivalve feeding in *Ploypera greeni*. The diagram did not indicate mollusk feeding in specimens of *Liparis callyodon* examined.

While x-raying specimens of *Liparis* spp., I noticed a large mass in the stomach region of one specimen, a male, of *L. callyodon*. This spec-

imen and two others were collected in December 1967 from Wrangel I., Southeast Alaska, by Mr. Pat Clark (the only available data). Upon dissection, a mussel, *Mytilus edulis* was present in the stomach (Fig. 1). Fragments of basal filaments were present and the margin of the shell is slightly cracked. No signs of digested material were found in the stomach. The mussel's dimensions are as follows: thickness of both valves 6.45 mm, width of valves 8.75 mm, and length of valves 16.3 mm. Measurements of the fish are as follows: total length 103.2 mm, width of mouth (closed) 14.5 mm, and greatest vertical height of mouth 10 mm. If positioned and swallowed down the long axis, the fish would appear to have no difficulty in swallowing the specimen. However, there is no evidence to determine whether this was active predation or scavenging. Observations on *L. callyodon* collected in Seward, Alaska, revealed them feeding on minute crustaceans and a snail. These specimens observed in the close confinement of a collection bucket. Specimens of *L. callyodon* collected in February 1975 from Glacier Bay, Southeast Alaska were found to have gastropods in the mouth. As the gastropods (*Littorina* sp.) were collected along

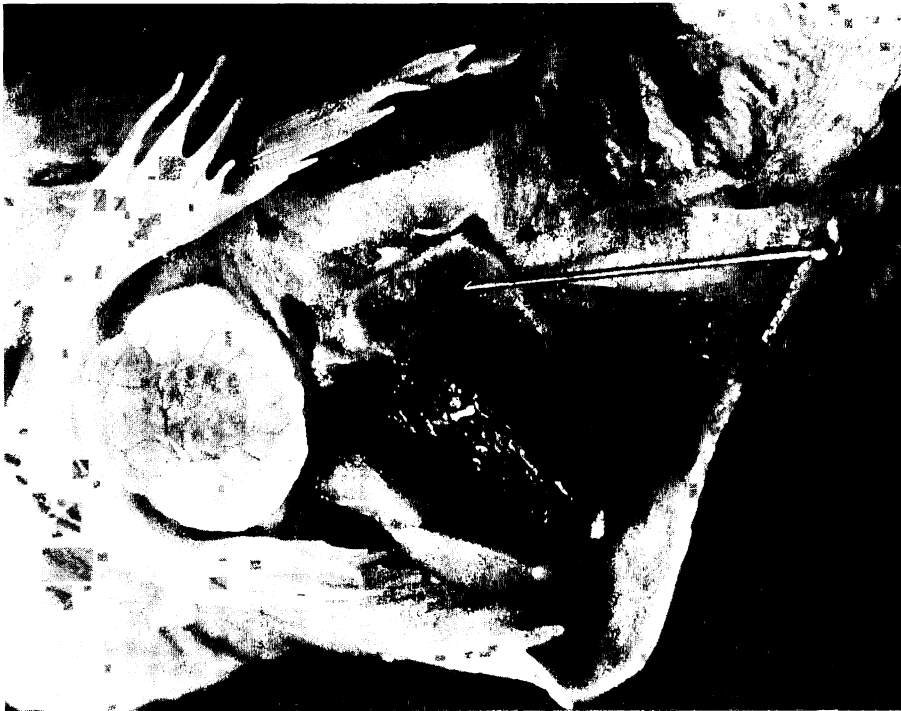


Fig. 1. Mussel, *Mytilus edulis*, in the stomach of *Liparis callyodon* (photo credit Mr. Barry McWayne).

with the fish specimen and frozen for preservation, swallowing may have been a result of collecting and close confinement. X-rays of various specimens of *L. callyodon* from the collection of National Museum of Canada, whose locations are coded so as not to bias a study in progress, reveals gastropods in the stomach regions of a few of them.

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#### Literature cited

Able, K. W. and D. E. McAllister. 1980. Revision of the snailfish genus *Liparis* from Arctic Canada.

Can. Bull. Fish. Aquat. Sci., 208: 1-52.

Andriashev, A. P. 1954. Fishes of the Northern Seas of the U.S.S.R. Zool. Inst. Akad. Nauk. SSSR, 53: 1-560. (Transl. Israel Prog. Sci. Transl. Jerusalem, 1964).

Dunne, J. 1981. A contribution to the biology of Montagu's sea snail, *Liparis montagui* Donovan (Pisces). Ir. Nat. J., 20(6): 217-222.

Hart, J. L. 1973. Pacific fishes of Canada. Bull. Fish. Res. Bd. Can., 180: 1-790.

Simmenstadt, C., J. Isakson, and R. Nakatani. 1977. Marine fish communities. In Environment of Amchitka Is., Alaska. ERDA TID, 26712: 451-493.

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#### *Liparis callyodon* の軟体動物摂餌

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アラスカの Wrangel 島から採集された *Liparis callyodon* (クサウオ科) 中の 1 個体が、ムラサキイガイを摂餌していた。また、本種の胃中には腹足類も認められ、本種は軟体動物も餌の一部として摂餌すると考えられた。