shelter from wave action, freezing, or desiccation during the spring tide period. Comparison with normal rock surfaces at the edge of the area suggests that the amount of rock removed is probably of the order of 2–3 mm, but it may well be greater in some places.

Urchins, particularly the shallow-water forms Arbacia and Strongylocentrotus, are generally considered to be herbivores (Gosner 1971). But personal observation on Arbacia in the Naples Aquarium showed that if plant material were absent it regularly trapped small fish against the sides of the tank or other objects and would then devour the whole body. Similar observations in the Aquarium of the Huntsman Marine Laboratory at St. Andrews, New Brunswick, showed that Strongylocentrotus would eat Mytilus without difficulty and this has also been observed upon the shores of Passamaquoddy Bay. Physical damage to rocky shores (and especially to coral reefs) has been widely reported, though only to the limited extent of deepening existing gullies and depressions in which the urchins lodge as part of their normal rather secretive behavior. MacGinitie and MacGinitie (1968) doubt the claim that this is due to the abrasive action of spines, but consider that it is a very slow process brought about by gradual solution of clean rock by sea-water over a period of years.

Various studies have shown that lobsters are a

major predator upon sea urchins (Mann and Breen 1972) and that their declining abundance is thus a key factor in encouraging the grazing of urchins upon Laminaria and other algae. This, however, appears to be the first case where complete denudation of the sublittoral fringe has been observed. It will be a matter of concern to see whether the area described remains barren in future years.

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#### Literature Cited

Gosner, K. L. 1971. Guide to identification of marine and estuarine invertebrates. Wiley Interscience, New York. 693 pp.

MacGinitie, G. E. and N. MacGinitie. 1968. Natural history of marine animals. 2nd edition. McGraw-Hill, New York. 523 pp.

Mann, K. H. and P. A. Breen. 1972. The relation between lobster abundance, sea urchins and kelp beds. Journal of the Fisheries Research Board of Canada 29: 603-605.

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# Sight Record of Laughing Gulls (Larus atricilla) in Saskatchewan

On 9 July 1975, while driving west on the Trans-Canada Highway between Moosejaw and Swift Current, Saskatchewan, we saw numerous Franklin's Gulls (Larus pipixcan). A fresh breeze caused them to soar and wheel actively, especially over rolling ground just east of Lake Chaplin. In this area, between the northeast corner of the lake and the Trans-Canada picnic site a few miles farther east, two adult Laughing Gulls (L. atricilla) crossed the road in front of us. Both birds banked steeply after crossing to the north side of the highway, giving us excellent views of the deep gray mantle blending into the solidly black wing-tips. The appreciably larger size and the markedly different mantle emphatically distinguished the two birds from the accompanying Franklin's Gulls. Traffic conditions did not permit an immediate stop to search for possible additional birds. A few stops made later along Lake Chaplin and Reed Lake yielded no more birds; and a check of various flocks of Franklin's Gulls in the same area on 17 August was also negative.

W. E. Godfrey (1966. The birds of Canada. National Museum of Canada Bulletin 203) does not record the Laughing Gull in Canada west of Lake Erie. Godfrey tells us that he has no more recent records west of Lake Erie in Canada, or of occurrences in the northerly United States. It thus seems likely that these birds, rather than straying from the Atlantic Coast, came north in spring from the Gulf Coast with the Franklin's Gulls with which we saw them associated. Lake Chaplin is extremely saline, which might conceivably attract this typically maritime species.

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