

# Subtidal survey of the Strait of Magellan in the vicinity of the *Metula* oil spill

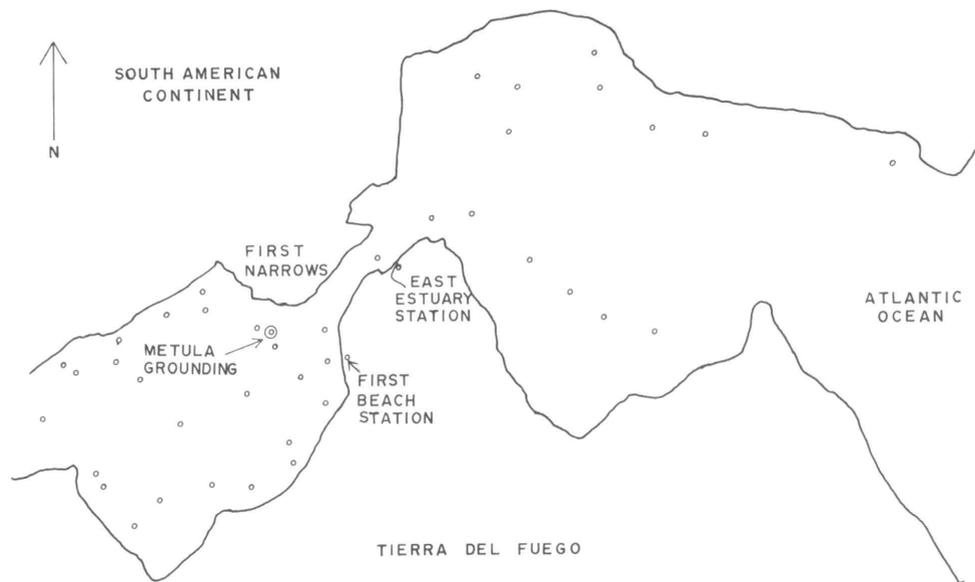
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On 9 August 1974 the oil tanker *Metula* ran aground on the Satellite Bank (52°33.8'S. 69°42.1'W.) immediately west of the First Narrows (figure) in the Strait of Magellan (Gunnerson and Peter, 1976). The ship spilled an estimated 52,300 metric tons of Arabian light crude and 2,000 tons of bunker C fuel oil into the strait. Most of the oil was rapidly driven onto the beaches. No attempt was made to disperse the spilled oil or to remove it from the shoreline.

We surveyed subtidal benthic communities and sediment oil contamination from the National Science Foundation's research ship *Hero* during 5-13 April 1976. Accompanying us in the scientific party were Jorge Castillo, Universidad de Concepción, Chile, and Italo Campodonico and Demitirio Diaz, Instituto de la Patagonía, Punta Arenas, Chile. Forty-four benthic grab, beach, and trawl stations were occupied (figure). Benthic specimens will be identified and enumerated under U.S. Environmental Protection Agency (EPA) grant R804514 to the Universidad de Concepción. Description of spatial variations in benthic community structure in the vicinity of the spill will be a collaborative effort between U.S. and Chilean scientists. Donald Baumgartner of EPA's Corvallis Environmental Research Laboratory will analyze petroleum hydrocarbon contamination of sediments.

We encountered a great diversity of subtidal benthic habitats. Sediment types ranged from clays to boulders, and benthic communities appeared to be equally heterogeneous. Quantities of oil were still on the beaches. We found a 25-centimeter-thick oil "mousse" layer 45 centimeters below the surface of the upper intertidal zone at the first beach



Site of the *Metula* grounding and benthic sampling stations in the Strait of Magellan.

station (figure). Oil in the east estuary on the southern shore of First Narrows extended from the main channel to the supralittoral zone where it affected *Lepidophylum* and *Salicornia* plant communities. The beaches and inlets appear to be a continuing source of oil pollution in the Strait.

#### Reference

Gunnerson, C. G., and G. Peter. In press. The *Metula* oil spill: environmental impact and research needs. National Oceanic and Atmospheric Administration. *MESA Report*, 2.