

S h e l l f i s h a n d B e n t h o s C o m m i t t e e

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MOLLUSCA AND BENTHOS

Belgium

(E. Leloup)

Mytilus edulis

Observations have been made on the biology of the mussels in the "bassin de chasse" at Ostende. Observations have been continued on the distribution of Mytilicola along the coast of Belgium.

Ostrea edulis

Observations on the biology of the oyster in the "bassin de chasse" at Ostende have been continued.

Canada

(D.G. Wilder)

Crassostrea virginica

Commercially applicable methods of producing seed oysters under controlled hatchery conditions and in the field have been developed and shown to be biologically feasible.

Pasteurization is advantageous in preparing media for the mass culture of flagellates for feeding larval molluscs. Several species of flagellates have been adapted to growth in natural sunlight and a simple culture apparatus has been developed.

Selective breeding has been started in an attempt to produce oysters superior in growth, disease resistance and possibly other characteristics.

Natural spatfall near Ellerslie (Prince Edward Island) was heavy in late July and early August (warm, dry) but growth and survival later in August (cold, wet) were poor. Slow growth, silting and fouling were major factors in mortality. The planting of spawning stock in barren, early spawning areas seems important in supplying breeding potential.

The rearing of oysters on suspended strings of scallop shells to sizes suitable for planting shows great commercial promise for hatchery and natural production.

Total mortalities over 3 years of adult (11 cm) and seed oysters (6 cm) transplanted to the west coast of Newfoundland were 58% and 5% respectively. Meat condition was best in July but generally poorer than in good oyster areas. Spawning occurred in 1967 and 1968 at least.

Placopecten magellanicus

Exposure of scallops to direct sunlight for 2 and 4 hours at 21°C caused 50 and 100% mortalities respectively. An experimental hooded drag designed to catch scallops that swim over the drag proper was constructed and tested. Studies of byssus attachment were conducted for two stocks of scallops that differ in swimming behaviour. A system for determining the density of scallops from a submersible was developed. High density ($>3/m^2$) scallop patches from 200 to 1,000 m across were found on sandy bottom. These patches were interspersed with muddy areas where there was less than 0.1 scallop/ m^2 .