IDENTIFICATION
SCIENTIFIC NAME
Mytilus edulis
SPECIES NAME(S)
Blue mussel
COMMON NAMES
Edible mussel, United States

STOCK IDENTIFICATION
The blue mussel (Mytilus edulis) is a widely distributed boreo-temperate species occurring in the Arctic, North Pacific, and North Atlantic Oceans. On the east coast of North America, its range extends from Labrador to Cape Hatteras, North Carolina, and is common throughout the North Atlantic and Mid-Atlantic Regions. It is most common in the littoral to sublittoral zones (<99 m) of oceanic and polyhaline to mesohaline estuarine environments; however, it has been found in deeper and cooler waters (100 to 499 m) that enable it to penetrate as far south as Charleston, South Carolina (Newell 1989).

To expand mussel production, Maine (USA) mussel producers are developing suspension culture using 12 m triple pontoon raft systems. Each raft produces 45 tonnes of mussels in an 18 month rearing cycle. In Maine, the best commercial mussel beds are found a few feet above and below MLW between Casco Bay and Jonesport. Six of the most productive areas are Casco Bay, Muscongus Bay, Tenants Harbor to Vinalhaven, Stonington to Deer Isle, Somerford to Mt. Desert Narrows, and the Jonesport area.

Currently the economics of the fishery for wild stocks of blue mussel (Mytilus edulis) and part-managed bottom culture are much better because per-unit production costs are only about one-third those for off-bottom mariculture (Clifton 1980). Although the fishery for wild stocks in New England was thought to be approaching a maximum sustainable yield (Clifton 1980), the discovery of new inshore and offshore beds in Maine and Massachusetts, as well as the development of certain management practices, such as thinning wild stocks and moving stocks between areas to improve meat quality and yields, has enabled annual harvests to increase with demand.

Blue mussels are generally gathered in the larger commercial operations by dredging and sorting aboard ship using a mechanical washer-grader; in smaller operations they may be harvested in shallow water by raking or pitchforking them into small boats before they are transferred to a larger vessel for mechanical cleaning and sorting (Newell 1988).

On the Atlantic coast, blue mussels (Mytilus edulis) are harvested commercially only from Maine to Long Island, New York but Maine has historically ranked first in mussel landings. Blue mussels are abundant, bivalve molluscs of the intertidal and shallow, subtidal zone. In Maine they are found in densely populated beds just above and below mean low water (MLW), but are restricted to the intertidal zone in many areas because of subtidal predation.

Earlier surveys estimated the size of the marketable resource at 320,000 bushels (Scattergood and Taylor, 1949) and 544,000 bushels (MARITEC, 1978), but they probably underestimated the resource at the time and the results are now outdated.

RELATED LINKS:
F Gulf of Maine Research Institute (GMRI)

FISHSOURCE
https://www.fishsource.org/fishery_page/4042

Blue mussel
Gulf of Maine
Fishery: 255 US Gulf of Maine United States Towed dredges

ASSESSMENT
No related analysis

SCORES
Management Quality: 3 management strategies
Strategy: Management Compliance Fishers Compliance
NOT YET SCORED NOT YET SCORED NOT YET SCORED

Stock Health:
Current Health
Future Health
NOT YET SCORED SCORED SCORED

FIPS
US Maine blue mussel - dredge/hale: Stage 3, Progress Rating C, Type: Fip, Evaluation Start Date: 2 Jun 2018

MSC
No related MSC fisheries

RECOMMENDATIONS
RETAILERS & SUPPLY CHAIN
This profile is not currently high on our priority list for development, and we can’t at this time provide an accurate prediction of when it will be developed. To speed up an evaluation of the sustainability status of lower priority fisheries we have initiated a program whereby industry can directly contract SFP-approved analysts to develop a FishSource profile on a fishery. More information on this External Contributor Program is available at https://www.sustainablefish.org/Programs/Science/External-Contributor-Program.