

Mussel: festivals and producers

By **E Gasataya**

Since ancient times, mussels have been gathered from the wild for food. There had been tales regarding mussel eating, and one of the earliest is from the west coast of America 2,400 years ago when the inhabitants turned to mussels because they had eaten so many abalone that the colonies were almost wiped out.

All through the centuries man has learned to raise and harvest mussels in different ways.

Cultured mussels can be harvested all year round, while mussel fisheries is defined by season. The start of a new season always calls for a celebration.

The Dutch celebrates the most popular festival each year in mid-July in Yerseke, the country's "mussel capital." All the major operators attend the event that attracts attention from the world's media. The harvest is loaded onto lorries which are lined up behind an enormous banner depicting bowls of mussels.

In Menai Strait in North Wales, there is also a mussel festival. This is supported by a Belgian mussel-and-chips chain whose chefs cook nearly 3,000 mussels. This event comprises of parades and races, mussel cooking competition and demonstrations, fairs and exhibits, and many more.

In Bantry Bay, Ireland, an annual mussel festival is also held, and is supported by the individual operators and the Irish Sea Fisheries Board. The event includes jazz festival with non-stop music, mussel eating competitions, seafood stalls, helicopter trips around the bay, boat trips and a gala seafood banquet.

Other countries have also their own mussel festival like in Europe such as Italy, France and Spain and in the other side of Atlantic in Nova Scotia and Canada.

Aquaculture production

With the worldwide popularity of mussels, it is thus no surprise that over 203,000 tons of mussels from the wild and more than a million tons of farmed mussels were landed in 1998 (FAO data).

In terms of production and consumption, the European Union plays a dominant role with 500,000 tons produced each year. Spain is the largest producer among EU countries with 130,000 tons followed by Netherlands (80,000-100,000 tons), Italy (70,000 tons) and France (70,000 tons).



A mussel farmer in the Philippines stands by his harvest

In Asia, China has become an important source, with production jumping from 100,000 tons in 1983 to 400,000 in 1995.

New Zealand on the other hand produced 16,000 tons in 1986 which increased to 67,000 tons in 1997. The company Sealord has a total farmed production of 17,000 tons, an equivalent live weight of a total of 67,000 tons. This made the company the number one producer. Sealord does not only produce but also process

and export frozen items, including: blanched mussels in half shell, blanched mussels IQF, vacuum-packed mussels in sauce (garlic butter, chilli coriander) in shell, hot smoked mussels meat in sauce (plain garlic, barbeque, Tandoori, Teriyaki sauce) and coated mussels meat.

From Basavarajappa et al. (2000) we have two examples of mussel producers -- Spain, the largest, and the Philippines, a modest one.

The case of Spain

Mussel farmers in Spain use seed collectors consisting of loosely woven and heavily tarred ropes, 12-15 cm in diameter, made of sparto grass or nylon. These ropes are 10-m long and are hung from rafts; the rafts also serve as grow-out ropes. To prevent the mussels from slipping, wooden spacers about 12 mm thick are used. If spats fail to settle, farmers resort to collecting seed from natural beds on rocky shores.

The collected seed mussels are tied around ropes in clumps using a fine, large meshed rayon netting which disintegrates in a few days leaving the mussel seed firmly attached to the ropes and then suspended from rafts floated over sunken river beds.

When the ropes become heavy, they are thinned out and distributed over a greater length of rope. The harvested mussels are then sold to canneries or placed in depuration tanks before export.

The case of the Philippines

In the Philippines, extensive bamboo structures are erected in muddy seashore areas to collect mussel seed. Since no transplantation is done once the spats settle, spat collection and grow-out

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are combined. In six months, the mussels have grown to marketable size. Divers pull out the planted poles and strip them of grown mussels which are then graded and cleaned. The stock is transported to the market rapidly.

The farmed mussels give better yield than from the natural beds. Mussel farming production rate is 8 kg per m of rope, which works out to 150 tons per ha in a 5-month period. Average edible portion of the meat in the cultured mussel is 35-40% while in natural beds, it is only 27-33% of total weight.

A community raises oyster

Oysters are farmed in some parts of the Philippines. In Bohol, an island in central Philippines known for its pristine waters, a community from Buenavista has applied for a P20 million loan to the World Bank through the Coastal Resource Management Project (CRMP), a five-year project of the (Philippine) Department of Environment and Natural Resources. CRMP was organized to help communities conserve and at the same time benefit from its natural resources.

The beneficiary of the CRMP link-up is Bry. Kambuhat, Buenavista, which has 27 households; the plan is an oyster culture project. Each household was awarded an area not exceeding 500 m² of mangrove forest. Each household fenced the area, and was provided financial and technical assistance. A family needs only about P1,000 to purchase the required production materials for the hanging method of oyster culture. The period of growing oysters is about 6 months. After which a harvest amounting to P70,000 to P80,000 is reasonably expected.

The community is also actively supported by the local government unit (LGU). The local legislators and executives have enacted ordinances protecting the local environment, including an ordinance proclaiming Brgy. Kambuhat a marine sanctuary.

The community project entails a 70% grant component and 20% loan from the World Bank, and a 10% equity in the form of equipment and other development costs by the LGU. -- EG



SEAFDEC/AQD's model of the hanging raft culture system for mussels and oysters

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thousands of individuals campaigning against animal abuse in Great Britain and around the world.

One of their targets is the treatment of shellfishes, and their website offers downloadable leaflets. The issue on shellfish is as follows --

BOILING THEM ALIVE ISN'T REALLY CRUEL, IS IT?
Compared with other animal welfare issues, the treatment of shellfish has aroused very little effective opposition. They are commonly boiled alive, though for some dishes living crabs or lobsters are cut-up, and for lobster mousse, the flesh is scraped out of the live animal. Perhaps most people see shellfish as cold-blooded creatures that cannot feel pain. This cannot be taken for granted. Crabs and lobsters in particular have a complex nervous system and there is a body of scientific research which suggests that they do feel pain and distress.

Oxford University zoologist Dr. John Baker found that lobsters dropped into boiling water showed "powerful struggling movements" for up to 2 minutes, and he concluded that these were not reflex actions but indications of pain.

Alternative cooking methods, claimed to be humane, have been put forward by animal welfare organizations. They involve precise techniques of piercing, cutting or freezing which quickly kill the animals, or stun them, so that they allegedly feel no pain, immediately before boiling or chopping up.

But even if these methods -- which some experts do not accept as humane -- were universally adopted, shellfish would still have endured often cruel forms of trapping, transport and storage. Traps lost on the seabed or washed ashore onto inaccessible beaches leave their victims trapped indefinitely. Crabs and lobsters are often transported in densely packed containers and stored in overcrowded tanks with their claws tied.

(Support guidelines) to the catering industry on avoiding cruelty to shellfish. ###