



Grow mudcrab in ponds

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PHOTOS I Tendencia, M de los Santos

AQD's technology verification team has field-tested mudcrab culture. The trials were conducted at the Jalandoni and Montelibano Farms in EB Magalona and at the Gargarita Farm in Himamaylan, Negros Occidental. Below are the steps recommended by AQD in rearing mudcrab (*Scylla serrata*, *S. oceanica*) in brackishwater ponds.

1

CHOOSE A SUITABLE SITE. Make sure marine or brackishwater is sufficient year-round, relatively unpolluted or far from sources of pollution. Freshwater must be available particularly in summer. Site must be accessible and secured from poachers. Mudcrab grow best at 18-30 ppt and 25-30°C.

2

CONSTRUCT rectangular ponds of sizes 5,000 to 10,000 m². Allow for 0.6 to 1.0 m water depth. Level the pond bottom. Make the pond gates and dikes structurally strong and free of leaks. Construct shelters or small hiding places for mudcrab; use sawed-off bamboos or used PVC pipes measuring 50 cm long with 15 cm diameter opening. Place these 'hides' at strategic areas

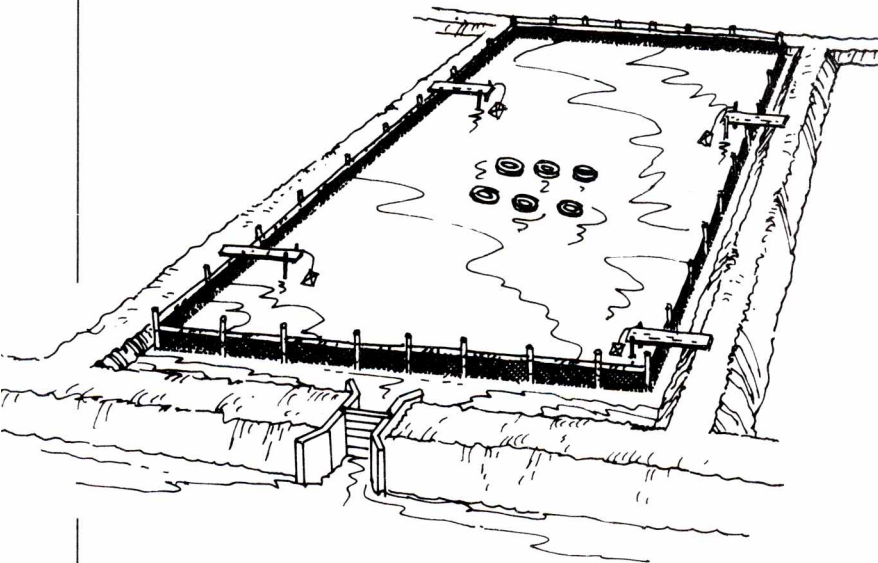
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around the pond. Canals or trenches are optional though these can serve as refuge for mudcrab and make harvest and water change easier. Catwalks are also optional though these can help facilitate feeding, monitoring, and stock sampling.

PREPARE THE PONDS. Totally drain the pond, dry for ~2 weeks until the soil cracks, and remove extraneous species (fish, weeds, others). Treat undrainable areas with ammonium sulfate and quick lime (1:5 ratio) at the rate of 0.5 kg per m². Alternatively, use derris root (5% rotenone) at 0.5-2.0 g per ton of pondwater or teaseed cake at 12 g per ton for <15 ppt or 20-30 g per ton for >15 ppt.

4

INSTALL nylon net fence using "A" net having 1-2 cm mesh close to the perimeter dike. Support the net fence vertically with bamboo or wooden posts and horizontally with bamboo splits embedded 50-70 cm along the base. Install plastic strips or sheets (50 cm width) along the top edge of the net fence



A typical mudcrab pond. Note that the nylon net fence may not be necessary for relatively steep concrete dikes.



Stacked rubber tires are used as shelters. Keep the top above water.

to prevent mudcrab from climbing over the top.

Install mounds or used tires as additional shelters in the middle of the pond, high enough so that the top portion remain above water even when the pond is flooded to its limit (60-100 cm).

In stocking newly arrived juveniles in grow-out ponds, acclimate them first by sprinkling pond water to the crabs placed in a basin. Do this for 30 minutes, or until the juveniles are completely submerged. If the pincers are tied, cut the knots. Do not cut the pincers.

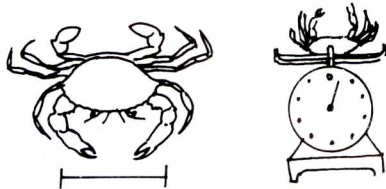


5 GROW NATURAL FOOD following the plankton method. Introduce at most 0.8 - 1.0 m water depth into the pond. Check the screens at the pond gate to prevent entry of unwanted species in the pond.

6 STOCK MUDCRAB 1-2 weeks after flooding. Use mudcrab juveniles weighing 30-40 g or measuring 5-10 cm carapace width. Stock 5,000 to 10,000 juveniles per ha.

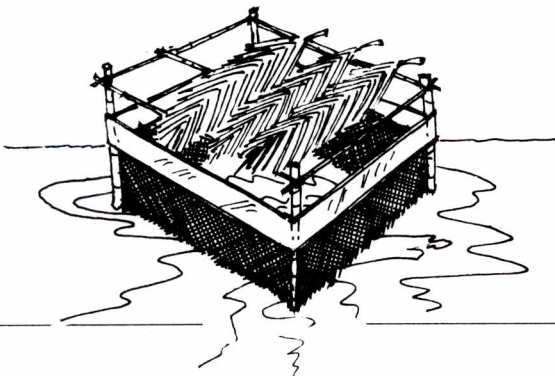


Release the juveniles evenly around the pond. It's best to stock early in the morning or late in the afternoon when it is cool.



Note that mudcrab juveniles need to be nursed for 1-2 weeks in net cages if smaller juveniles are stocked (1-2 cm carapace length). In the nursery, stocking density is 120 juveniles per m². Mudcrab juveniles are fed trash fish, *Acetes*, or green filamentous algae ("lumut"). Cover the netcages with coconut fronds to serve as shelters and to increase surface area for attachment by crabs. Sort the stock every week, and stock the 5 cm juveniles in grow-out ponds.

7 TAKE CARE of the mudcrab stock by (a) regularly changing the water (10-30% per spring tide cycle); (b) checking for leaks in the dikes and gates, and tears in the netcages and fences; (c) feeding with chopped trash fish, animal hides / entrails and snails (golden kuhol). Feed at 10% then at 6% crab body weight as culture progresses; assume 100% then 80% survival. Feed mudcrab twice a day, half of the food in the morning, half in the afternoon. Feeding trays may be used; or feed may be broadcast.





Mudcrab are fed twice a day.

Sample stock for growth once a week by using a bamboo trap ("bintol" or "taon"). Measure carapace length-width and body weight. Record the measurements.

Also monitor water pH, salinity, temperature, and weather condition daily.



A crab farmer and his bamboo crab trap.



&

HARVEST depends on market demand. Stock may be selectively harvested after 45-60 days. Mudcrab weighing 250 g and above is not uncommon by this time. To harvest, allow the stock to swim against the current during spring tide. Scoop out the bigger or fatter crab using a scoop net. (Or use net traps or "bintol" for selective harvest.)

Fat female crab have mature gonads or "aligue" forming underneath their carapace; fat male crab have massive pincers.

Total harvest may be done after 3-4 months (for *S. serrata*) or 4-5 months (*S. oceanica*). Crab are hand-picked after totally draining the ponds.

For more information, contact

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Hoping for the best?

Noe Deller, owner of a 40 ha fishfarm in the vicinity of the Amiligan River in Pontevedra, Capiz pours out recent tales of woe. Not succeeding with milkfish and tiger shrimp culture owing to the luminous bacteria, he released not lower than 30,000 newly hatched mudcrab, king crab and native crab per pond (~13 ha compartments). Expecting a harvest in July, he has found out that the crabs weighed less than he expected. One of his pond watchers attributes the problem to the kind of soil the pond has. He thinks that the ponds need to lie fallow, as these have been used constantly. - **NJD**



R Buendia