

Good management Practices for Brood Stock Collectors

1. Selecting Zones

- a) Dividing coastal areas as zones where brood stocks are collected. Zones must be specifically numbered for identification. When identifying zones the following must be considered.
- b) sea mouth openings, abundance of prawns in low salinity sea water
Pothuovil
Beruwela
Kaluthara
- c) From identified zones, brood stocks are collected randomly and examined for diseases. Then the brood stocks are recommended as suitable or not suitable.

2. Harvesting Brood stock

- a) Two methods are used for harvesting brood stock gillnet and trawling
- b) By these methods the animals get stressed and injured. Therefore these methods are not suitable for harvesting shrimp.

With the assistance of divers and scoop nets, the brood stock can be collected without stressing or injuring them. Therefore these methods can be considered more in the future.

- c) Continue awareness programmes for brood stock collectors in order to minimize damages due to the use of gill nets and trawling.
- d) Issue of identity cards and numbers for all brood stock collectors

3. Selection of high quality brood stock

a) Physical characters

- 1) The length of the head of the Female should be above 55mm
- 2) The length of the head of the Male should be above 45mm

b) External features

- 1) There should be no damages to antennae, eyestalk, rostrum or other appendages
- 2) There should not be pustules, (red/white/black) patches in the body of brood fish and also discolorations of gills, fin rot

Collectors should not select brooders which are affected by above features

4. Transportation of brood stock from the sea to coastal areas.

- a) The brood stock of harvested by the above mentioned techniques, prawns should be packed in separate vessels or polythene bags and should be kept aerated
- b) keep the optimum water level in the bag or vessel
- c) should not expose brooders directly to sun light
- d) As possible as, Brooders should be transported to land in the minimum period.
- e) If possible, Brooders should be transported to land by boat.

5. Supplier should achieve to following practices when brooders are received.

- a) Stock the brooders in separate labeled containers in order to be identified easily. If the brooders are kept at the beach site due to delay in transport to respective final destination, the brood stock kept in containers even if it is for a short time.
- b) Preferably the holding facility should be constructed near the beach. The interior of the facility shouldn't be exposed to direct sunlight. A dark environment is necessary to avoid stress of the brooders.
- c) Fresh and filtered water should be used in the brood stock containers and be aerated well before placing the brooders
- d) If the brooders are kept for a longer time, it is necessary to change the water. It is recommended to install a one inch pump at the premises to supply water when necessary
- e) Separate scoops net should be used to catch each brooder. When the transportation of all brooders is complete containers and equipments are used, should be disinfected with chlorine and dried in sun light before being used again.
- f) Suppliers should minimize the time the brooders are kept in the holding facility as much as possible and immediately transport brooders to hatcheries

6. Preparatory work

- a) Supplier should avoid factors which can cause stress to the brooder during transportation. Brooders should not be fed 24hrs before transportation and individual packing are encouraged (See fig 1)
- b) Water used in transporting bags should be subject to following conditions.

- i. Maintain the optimal conditions of water quality parameters such as salinity, temperature, alkalinity, pH, ammonia concentration and oxygen.
- ii. At least four liters of water per one individual is recommended for a transportation period of 4 hours.

7. Transportation

- a) As much as possible, transportation period of brooders to the destination should be minimized
- b) The most suitable time for transporting brooders is early morning and evening
- c) Adequate quantities of ice packs could be placed externally to maintain the temperature of the water. By this method the temperature can be controlled between 20-25c
- d) Appropriate action should be taken to prevent the entry of sunlight in to the vehicle and to maintain good ventilation in side the vehicle.
- e) When brooders are issued to the hatchery owners following information should be provided

- 1 .The Zone which brooders were collected
- 11. Name of the supplier and His/Her symbol
- 111. Name of the collector and His/Her symbol