

Floating Cages (Marine Culture)

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Culture principles don't differ between floating cages and other designs, But there are some positive and negative characteristics

positive characteristics

1- Fishes will be cultured in same nature environments such as Rivers, Lakes, Gulfs, Seasetc

2- There aren't any need for aeration systems or water replacing systems

**3- Fishes cultivated at very high density comparing with all other designs
Except closed systems**

4- Floating cages can be transported to other places

5- Easy to monitoring, handling, treating and harvesting

6- No need for land (no competition with other agriculture projects)

Cage or Pin



Square Pins



Circular Floating Cages



Circular Floating Cages



Conditions of Site Selection



1- Water must be clean and haven't any floating or fowling materials

2- Water velocity must be between 10-100 cm/second for aeration and water changing

3- Site must be far away from transporting and swimming animals (like Buffalos)

4- Site must be far away from different pollution resources

5- Site must be far away from strong winds

Materials of Floating Cages

1- Cages formed of woods or iron or aluminum or fiberglass or PVC

2-Floating materials are iron drums or plastic drums or foams or Pipes (PVC, iron, fiberglass) or Styrofoam

3-Floating cages nets (special factory for producing special nets treated proof ultra violet (UV)
They manufactured according to orders according to (shapes, dimensions and mesh size)

4- Anchors, Buoys, Ropes (Fixation floating cages in current water)

5- Cage covered by nets to prevent predation of birds and other animals such as otters

6- Lighting phosphoring alarms

Woods and strofoam

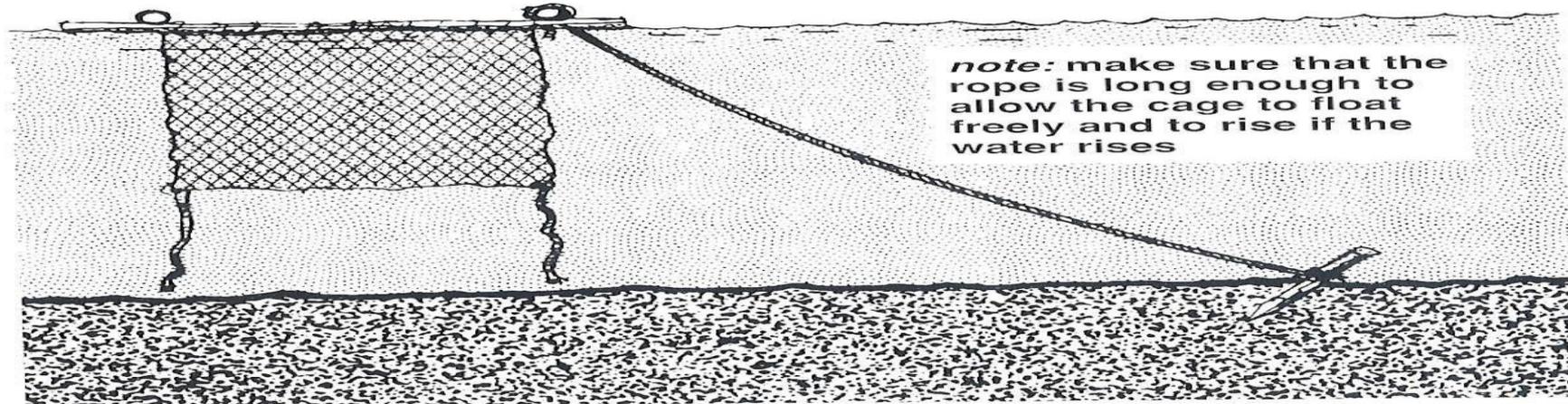


Iron with styrofoam

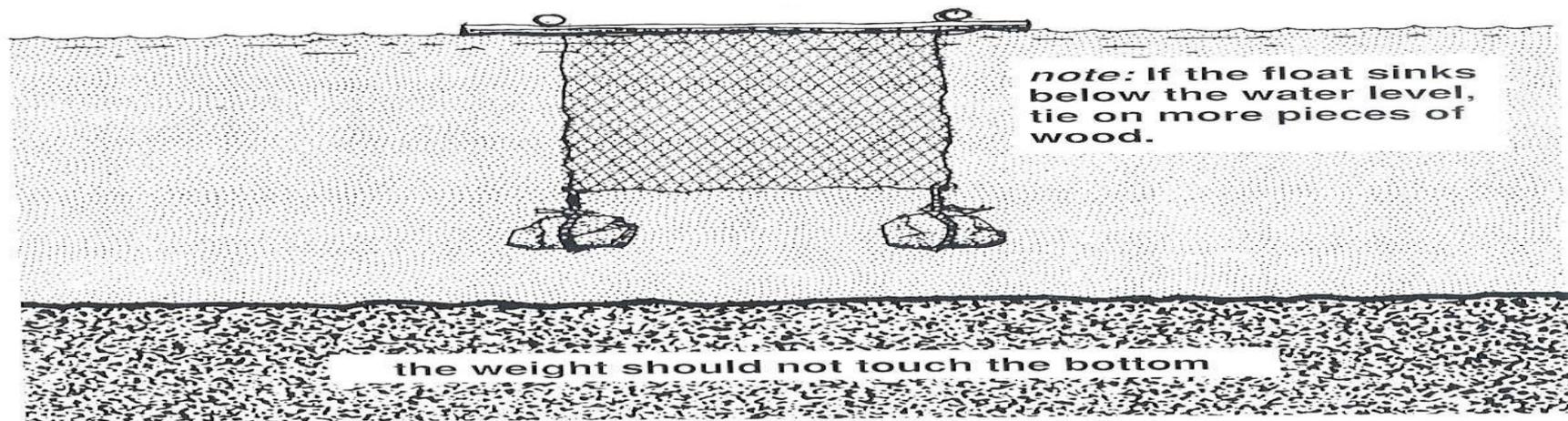


Floating Cage





note: make sure that the rope is long enough to allow the cage to float freely and to rise if the water rises



note: If the float sinks below the water level, tie on more pieces of wood.

the weight should not touch the bottom

Some Kinds of Floating Cages

Cages constructed from PVC pipes and wood layers



Floating Cages after construction



Floating cages (5X5) meter



Automatic Feeders



Fixation of floating cages



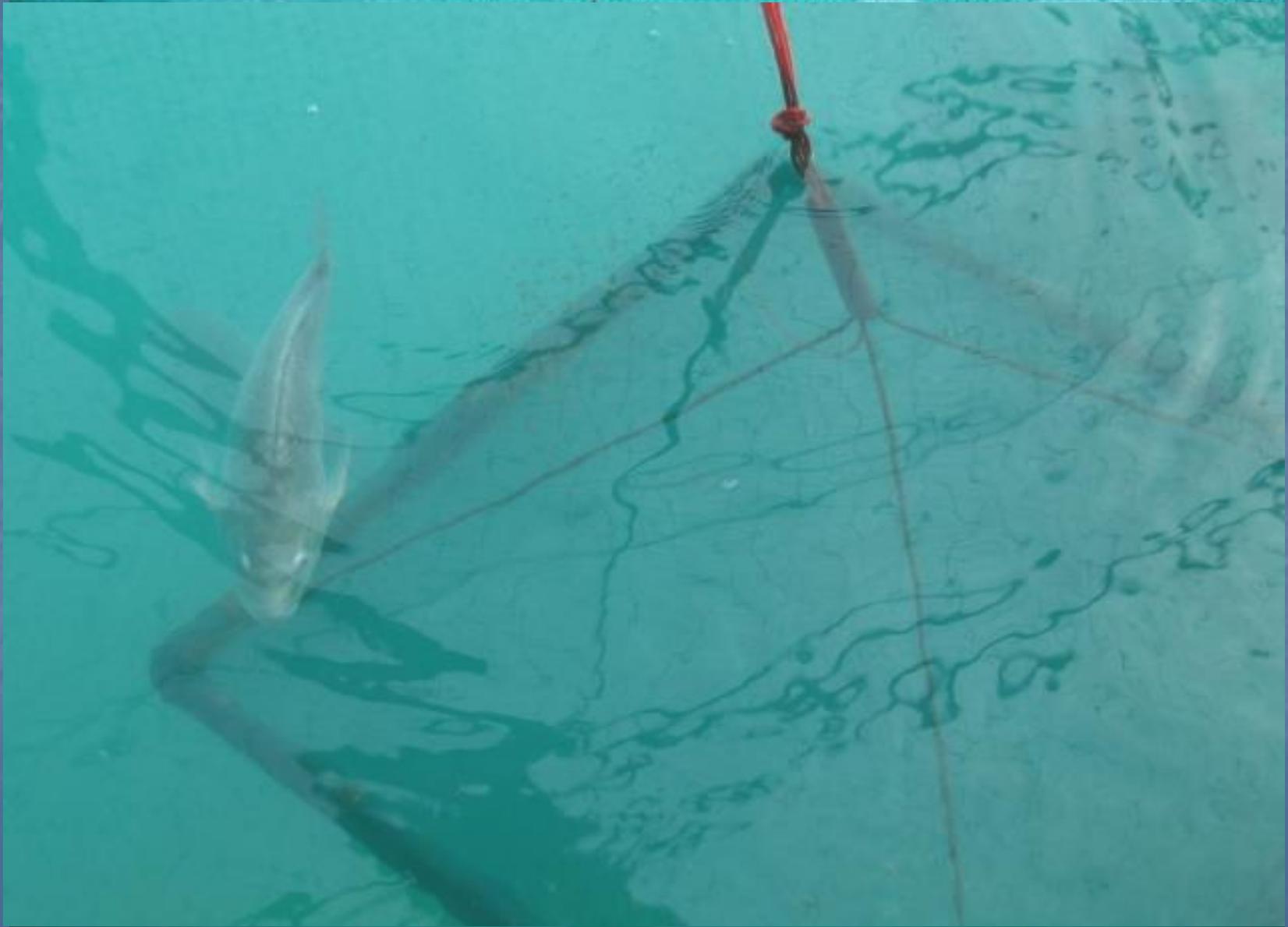
Circular F. C.



Iron F. C.



Feeders



Replacing of Nets



Transferring of F. C.



Fiberglass F. C.



Cage constructed from PVC pipes and wooden layer in (Chebaish, Nasiriya, Iraq) 2008

Materials used in construction of floating



Steps of Construction

1- Transporting materials to the selected site



2- Connecting plastic pipes together to make main frame (down frame) of cage



3- Fixing the wooden layers on the main frame to make pathways around the cage



4- Moving the main frame of cage to the water



5- Fixing the main frame of cage at selective site



6- Connecting the up frame of cage with main frame and hanging the net to the up frame

Cage now ready for fish



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Fish Transportation

Grass carp (*Ctenopharyngodon idella*) was transported by track from Marine Science Center hatchery in Basrah to Chebaish and put inside the hanging net



Fish Feeding

During five months from May to October grass carp was daily fed mainly on about nine natural aquatic plants which brought from Al-Chebaish Marsh



Fish Harvesting

At October all fish are harvested and measured (TL & W)

