

A vibrant, multi-colored fish, likely a Betta fish, is the central focus of the image. It has a mix of orange, red, and purple hues on its body and fins. The fish is positioned in the center-right of the frame, facing right. The background consists of blurred green vertical lines, suggesting an aquarium environment with plants or algae. The text is overlaid on the image in various colors and fonts.

A SEMINAR ON,
Breeding Of Ornamental Fishes

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BREEDING OF ORNAMENTAL FISHES [EGG LAYERS & LIVE BEARERS]



FACTORS AFFECTING BREEDING

Proper
substrate

Cover

Temperature

pH

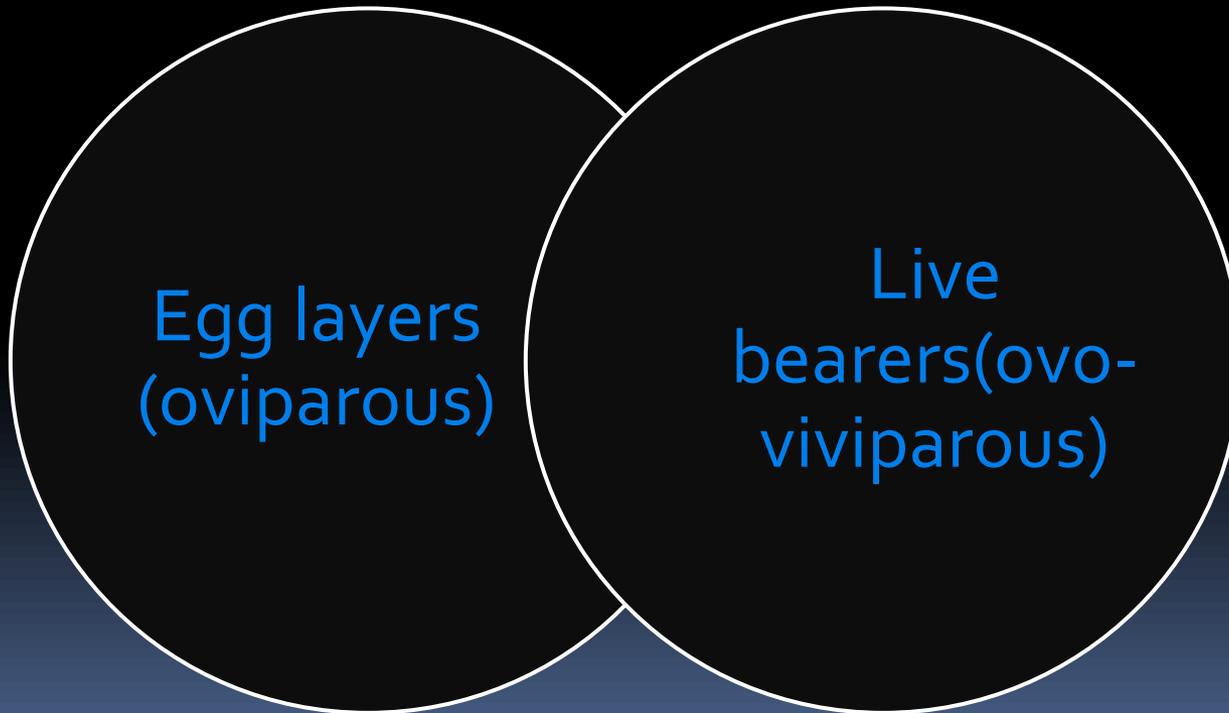
Live foods

Lighting

Number of
fish

CLASSIFICATION OF ORNAMENTAL FISHES

□ On the basis of their breeding behavior.



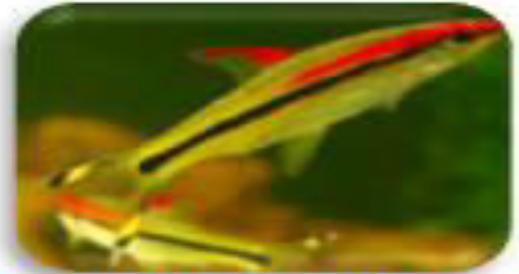
EGG LAYERS



Striped barbs



Rosy barb



Redline Torpedo barb



Rasboras



Danios



Lionhead goldfish



Angelfish



Neon tetra



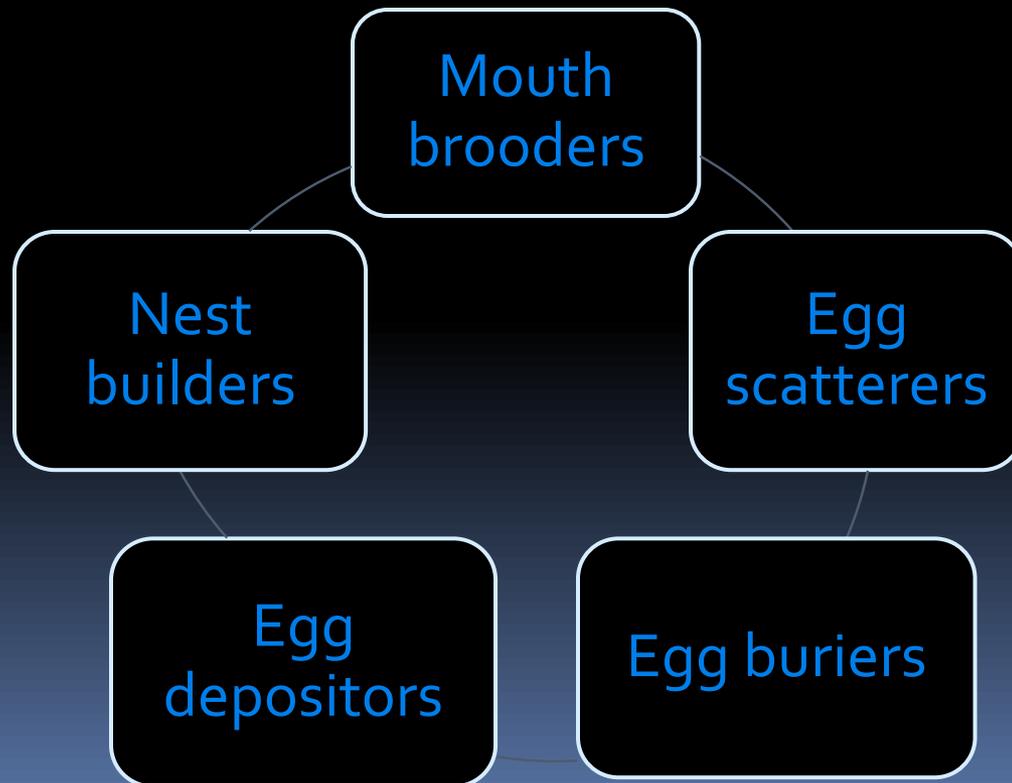
Siamese fighting fish

EGG LAYERS

- Breeding in egg layers.
- ❖ Egg layers spawn by several means.
- ❖ Breeding by external fertilization.
- ❖ Separate male & female hormone produce in fish.
- ❖ The egg are laid fertilize out side the fish body.
- ❖ Important group of egg layers are Barbs,Rasboras,Danios,Betas,Anglefish & Gouramis.

CLASSIFICATION OF EGG LAYERS

- Based on the type of incubation egg laying fishes are further classified as.



MOUTH BROODERS

- ❑ Fertilized by spawning before gathered in mouth.
- ❑ Eggs are laid in water ,then collected in mouth once fertilized.
- ❑ Held in mouth until birth.
- ❑ E.g.



Bettas



Cichlid



Cardinal fish

EGG DEPOSITORS

- ❑ Sticky eggs are laid in one spot usually on the bottom substrate or on aquarium glass.
- ❑ Male swim by & fertilized egg.
- ❑ Some depositors guard their eggs & fry.
- ❑ E.g.



Clown fish



Rainbow fish



Barb

EGG BURIERS

- ❑ Female dives in soft substrate to lay eggs.
- ❑ Eggs are buried in the substrate.
- ❑ Male dives into substrate to fertilized eggs.
- ❑ E.g.



Killifishes

NEST BUILDERS

- ❑ Nest made of plant material or bubble(foam) in substrate.
- ❑ Fishes lay eggs by spawning.
- ❑ The nest is generally build by males.
- ❑ E.g.



Siamese fighter



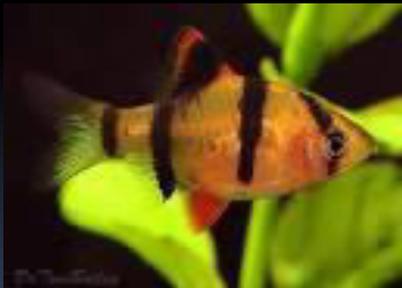
Blue gourami



Angel fish

EGG SCATTERERS

- ❑ Fertilized by spawning.
- ❑ Fishes lay sticky & non-sticky egg.
- ❑ Sticky eggs are laid within a certain area under cover & non-sticky eggs are laid in open water.
- ❑ E.g.



Tiger barb



Goldfish



Zebra danios

LIVE BEARERS



Guppy



Molly



Swordtail



Platy

LIVE BEARERS

- Breeding in live bearers.
- ❖ Fish produce by bearing live young or by laying eggs.
- ❖ Breeding by internal fertilization.
- ❖ The eggs are fertilized & hatched within the female.
- ❖ They produce only a few numbers of offspring in comparison to egg layers.
- ❖ The common live bearers are
Guppy , Black molly, Sword tail & Platy.

LIVE BEARERS



Platy



Molly



Black molly



Guppy



Sword tail



**THANK
YOU**

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