

Hello students welcome to the session of unit 2 of aquarium fish keeping module name- common characters and sexual dimorphism of blue morph, myself miss bhakti dafale from government college of arts, science and commerce quepem goa. In this module you are going to learn general characteristics of blue morph fishes, sexual dimorphism in blue morph fishes. on completion of this session the students will be able to discuss the characteristics of blue morph fish, discuss where blue morph fish is living, distinguish the sex of blue morph fish. Variation in pigmentation type is due to evolutionary radiation and there are various factors which promote and maintain variation in coloration in the population .So as we study in the evolution as the evolutionary forces acts upon the population the population tend to evolve some changes in it so the changes could be morphological or the changes could be physiological .The change in the pigmentation is a morphological change as well as it is including a physiology .So here also in this evolutionary course because of the getting best adapted to the environment the blue morph fishes have lead to the change in their coloration .Blue morphs belonging to cichlid group shows a vast variety of diversity of pigmentation pattern which has evolved in response to both sexual and natural selection so if we see a group of blue morph fishes the blue morph fishes will be having a diverse coloration in their population they will be having different colors on their bodies ,and the different colors in their body is due to sexual and natural selection. Sexual selection wherein the brighter color will be chosen by the best mate and natural selection is to best fit into the environment .Distribution and habitat- Plombardoi pseudotropheus is endemic to lake malawi having a limited natural range, Plombardoi pseudotropheus is one of the blue morph fishes which is endemic to lake malawi that means it is only found in the lake malawi and it is having a very limited natural range ,which is there in the Africa.It inhabits the intermediate zone which is characterized by large amount of sediments .the water conditions for the blue morph fish to survive again the water it needs to be maintained very very prominent so that the fishes can leave over there. it thrives in a specific water condition wherein the temperature of the water is 75 to 82 degree fahrenheit. The ph of the water should be maintained somewhere between 7.6 to 8.8. Diet -it will accept most foods offered but vegetable matter in the form of spirulina flakes or blanched spinach must be a large proportion of the diet ,it will accept any sort of food which you provide but it will be liking the spirulina flakes and the blanched peanutS. behavior they are aggressive and should not be kept with the loving species so in a aquarium we tend to see many different varieties of a fish in one tank but if we don't know the behavior of a particular fish and if we mix match any fishes they will not survive together .Some fishes are aggressive whereas some are loving species so we should know the behavior of the fish before keeping them together and with the case of the blue morph they should be kept either alone or with the any other aggressive species but not with the loving species.If we do so the loving species will not survive in that particular tank along with the blue morph. Lifespan- it ranges from 7 to 10 years, male forms a territory on a flat rock surface or simply an area of the substrate where he excavates a pit so male are having a tendency of forming a territory so territory formation has been observed in many different types of animals so here in the case of the blue morph males they also have a tendency of forming a territory and they will form it on a flat rock surface or it will choose simply an area of the substrate and there it will excavate a pit. Reproduction when female is willing she will approach the spawning site and lay eggs there, allowing the male to fertilize them before taking them into her mouth so when the female is willing for reproduction or for spawning she will approach the spawning site which has been prepared earlier and it will lay her eggs over there and it will allow the male to fertilize them before taking them into her mouth that means once the fertilization process is over the female will carry the eggs in her mouth. The female carries the eggs for around three weeks before releasing the free swimming fry. So it requires about three weeks incubation period in her mouth and once they are hatching out once they will no longer be called as eggs and they will be called as fry that time it will release them in the water she will not eat during

this period and can be easily spotted by her distended mouth. So during these entire three week periods while carrying the eggs in her mouth the female blue morph fish will not feed at all it will remain hungry, and it could be easily spotted by the distended mouth since the eggs are carried in the mouth the mouth will appear distended. If a female is overly stressed she may spit out the brood prematurely or eat them so if the female is overly stressed stress could be in any form if it is having any sort of stress it will spit out the eggs prematurely. So before the three weeks also she may spit it out or she may eat its own egg. Varieties - there are different varieties of blue morph fishes convict cichlid, electric blue cichlid, Cockatoo cichlid, peacock cichlids, oscar cichlids, etc. Here are the images of the convict cichlid and the peacock cichlid. You can see the variation in the coloration. They are different colors but they are blue morph fishes. Sexual dimorphism-males are yellow in color and have brighter egg spots on their anal fin, the yellow color ones will be the males and they have a brighter egg spot on their anal fin whereas the females are blue in color you can see over here the male blue morph fish and the female blue morph fish wherein the male is yellow bright yellow color whereas female is blue colored. Here are my references. Thank you (auto-generated) All Recently uploaded Watched.