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FISH BIODIVERSITY IN INDIA

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ABSTRACT:

The stream Ganges is the biggest waterway in India and the fifth longest on the planet. Albeit, numerous investigations on fish biology and efficient have been directed to a great extent to improve fisheries however fish decent variety and their conveyance design from protection perspective have never been sufficiently tended to in the Ganges. In this association, ebb and flow dispersion and bounty of freshwater fishes of waterway Ganges was examined and evaluated from April 2007 to March 2009. We archived and depicted 143 freshwater fish species in the all stretches of the stream which is higher than what was accounted for before. A few animal groups were seen with move in their conveyance ranges. First time, a sum of 10 outlandish fishes, including Pterygoplichthys anisitsi, which has never been accounted for from India found in the Ganges. Changes of the hydrological design because of different sorts of hydro tasks was is by all accounts the biggest danger to fishes of Ganges. Unpredictable and illicit angling, contamination, water deliberation, siltation and intrusion of extraordinary species are likewise undermining the fish assorted variety in the Ganges and upwards of 29 species are recorded under compromised class. The investigation advocates a need to distinguish basic fish territories in the Ganga bowl to announce them as preservation stores to relieve the loss of fish decent variety from this compelling huge stream. In India, freshwater situations are encountering genuine dangers to biodiversity, and there is an earnest need for the hunt of elective procedures to advance fish biodiversity preservation and the executives. With this point, the present investigation was embraced to survey the fish biodiversity inside and outside a stream ensured region, and to assess whether the secured waterway region gives a few advantages to riverine fish biodiversity. To survey this, the example of freshwater fish decent variety was examined in stream Gerua, alongside some physicochemical conditions, from April 2000 to March 2004. For this, an examination was made between a 15km stretch of a secured territory (Katarniaghat Wildlife Sanctuary), and an unprotected one 85km downstream.

KEYWORDS : basic fish territories , freshwater situations , elective procedures.

Rohu Fish In India



Indian Cuttlefish Whole Sepia Spp

In each site some physicochemical conditions were acquired, and fish were gotten by typical riggings and the decent variety per site portrayed. Our outcomes demonstrated that water temperature came about hottest during the pre-storm season (25 degreeC) and low throughout the winter (14-15 degreeC); turbidity significantly shifted via season. In the secured territory, a sum of 87 animal categories having a place with eight requests, 22 families and 52 genera were gathered; while a limit of 59 animal groups having a place with six requests, 20 families and 42 genera were recorded from the unprotected territories. Cyprinids were observed to be the most prevailing genera and *Salmostoma bacaila* was the most various species in the asylum territory. Different various species were *Eutropiichthys vacha*, *notopterus*, *Clupisoma garua* and *bagarius*. The outcomes demonstrated more species, more prominent plenitudes, bigger people, and higher number of imperiled angles inside the haven region when contrasted with the unprotected region. Investigation on the mean wealth of imperiled and defenseless species for the assessed regions in the haven versus unprotected ones demonstrated critical contrasts in fish bounty ($p < 0.05$). These outcomes demonstrated that this riverine ensured region could be significant for protection and the board of fish assorted variety in the area, particularly for occupant and compromised species.

INTRODUCTION

Biodiversity is the premise of human survival and financial matters which envelops all living things, biological systems, and environmental procedures indicating progressive system at hereditary taxon and biological system levels. Mass elimination because of the proceeded with increment of human populace and adjustment of a few biological systems prompts the hindrance of decent variety designs. The hereditary decent variety in a populace is the aftereffect of the irregular event of preservationist replication of prior quality

structures and blends, unexpected phenotypic contrasts because of transformation and recombination, the positive or negative choice authorized by outside weights, and the arbitrary occasions influencing explicit people during the inception of the specific gathering . Choices with respect to creation and the board of different sorts of stores are probably going to be the key factors in deciding the long haul eventual fate of biodiversity. Biological unpredictability improves biodiversity through transformative and biogeographical procedures and its corruption rapidly makes the decent variety in phenotypic and genotypic attributes decay. The best effect on species cancellations will be in those frameworks where there is set number of agents of a specific practical gathering particularly if the species is a prevailing one

An assortment of records are accessible to gauge the decent variety of organic networks. These lists expect the organic decent variety which can be acceptably portrayed by two noteworthy parts, for example, the quantity of species and their relative wealth. These lists treat all species as proportional and disregard ordered, morphological, or any such natural contrasts among types of a network . In studies exploring decent variety dividing among locales, biodiversity records are solely founded on species organization despite the fact that the meaning of biodiversity incorporates different features of the assorted variety of life .

An exceptional component of the Kerala's beach front zone is the nearness of an enormous number of lasting or impermanent estuaries famously known as backwaters. Thirty backwaters happen along the 590 km long shoreline of Kerala covering an expected region of around 2, 42,000 ha. A significant element of backwaters is their natural decent variety, which alludes to the assorted variety of different types of living life forms. Such different mixes of living creatures and environmental administrations establish the characteristic asset privileges of the neighborhood networks. The wide assortment of fish and shellfish assets, aquaculture frameworks, harsh water agribusiness, mangroves, and incalculable types of microorganisms are legitimately helpful and continue the economy of neighborhood populace. Kerala is supplied with a rich decent variety of marine fishes with a numerical quality of more than 300. They speak to essentially clupeids, roosts, elasmobranchs, leiognathids, croakers, threadfin breams, level fishes, carangids, red mullets, etc. There are around 54 types of prawns and shrimps economically misused in India . The present situation of the estuarine frameworks of Kerala has been showing indications of weakened biological wellbeing due to the broad hydrological adjustment, horticultural land use, and expanding watershed improvement. So as to forestall exhaustion of biodiversity because of ecological adjustments or different ways, it is important to see how the decent variety of life especially at the species level is kept up and it is similarly important to know how the terminal eradication of species happens under regular conditions. Because of these components, the present examination intends to portray the idea of biodiversity misfortune in chose backwaters and to discover the significant reasons for biodiversity disintegration and to report these procedures in detail.

DIVERSITY OF INDO-PACIFIC SHORE FISHES

The triangle shaped by Indonesia, the Philippines and New Guinea, recently alluded to as the 'East Indies', structure the focal point of marine fish biodiversity in the Indo-Pacific (Carpenter et al. 2008), with around 2,800 fish species normally happening there. These numbers drop with good ways from this inside to, e.g., around 500 species in Hawaii and 120 species in the Easter Islands. The quantity of endemic species, i.e., angles that don't happen outside a given territory, increments with good ways from the middle, which is perfect with the theory that species advanced in the external locale and aggregated in the inside. Another theory holds that species advanced in the rich and stable territories of the East Indies and were conveyed to the outskirts by flows. Randall (1998) gives five clarifications for the high fish biodiversity in the Indo-Pacific:

Dried Fish Scales



- Sea surface temperatures in the East Indies were progressively steady during the frigid periods and therefore termination rates were lower than at the fringe;
- Shelf region in the East Indies is a lot bigger than that of the outskirts, again making annihilations more outlandish;
- Dispersal of shore fishes to remote islands happens during the planktonic larval stage (which keeps going from a few days to half a month). Be that as it may, the larval period of numerous species isn't long enough for extended lengths of vast sea water, in this manner confining their dispersion;
- Existing current examples bolster dispersal of fish hatchlings from, just as assembly of hatchlings of species that have developed in the outskirts towards the East Indies;
- During the most recent 700,000 years, there have been at any rate three ice age occasions that diminished the water level in the East Indies and isolated populaces long enough for speciation to happen.

DIVERSITY OF SCALES

The assortment of fish is generally secured with scales, which give assurance. There are four fundamental kinds of scales:

- placoid scales (pointed, analogs of vertebrate teeth, e.g., in Elasmobranchii);
- cosmoid scales (most likely developed from the combination of placoid scales, e.g., in Family Ceratodontidae);
- ganoid scales (rhomboid formed, adjusted cosmoid scales; e.g., in Family Lepisosteidae); and
- elasmoid scales, isolated into cycloid (round with smooth edges) and ctenoid (roundabout with brushed edges) scales, e.g., in Actinopterygii.



Scale size and morphology (particularly of elasmoid scales) change extraordinarily from extremely little sizes to exceptionally adjusted scales (i.e., plates). There are numerous species that have no scales (e.g., the spotted torpedo, *Torpedo marmorata*, Family *Gobiesocidae*) and in a few, e.g., flatfishes, scale type fluctuates with sex and area on the body (dorsal versus).

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