



# **Wetland, New, Monitor**

**July - August 2016**

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*News brief on Newly Fish, Wetland restoration, Conservation of endangered marine flora and fauna, Turtles, Pollution*



## Newly Discovered Fish off Alaska

The National Oceanic and Atmospheric Administration biologist is part of a group that uses trawl nets to survey commercially important fish species such as cod in waters off Alaska. Federal biologist Jay Orr with his co-authors has discovered 14 kinds of new snailfish, a creature that can be found in tide pools but also in the deepest parts of the ocean floor off Alaska's remote Aleutian Islands, which separate the Bering Sea from the rest of the Pacific Ocean. Orr and his colleagues measure the abundance of rockfish, flatfish and other "bottom fish" for the Alaska Fisheries Science Center, the research arm of the The National Oceanic and Atmospheric Administration's National Marine Fisheries Service. The center studies marine resources off Alaska and parts of the West Coast. Five boats with six researchers each surveyed Alaska waters in late June. The teams trawl on the Bering Shelf every summer and in either Aleutian waters or the Gulf of Alaska every other year. Their findings on fish abundance are fed into models for managing fish populations.

The scientists put down a 131-foot trawl net that captures whatever is along the ocean bottom. A ton of fish is a standard sample. Along with fish, they get clues to the seafloor habitat. Sponges, for example, indicate a hard seafloor, or substrate. He has wide latitude for giving new species both common and Latin names. A red, white and black snailfish with a big, bulbous nose struck him as funny-looking. He gave it the common name of "comic snailfish" and the Latin name *Careproctus comus*, after Comus, the god of comedy in Greek mythology.

### Source:

- <http://timesofindia.indiatimes.com/home/environment/flora-fauna/Scientists-surveying-ocean-floor-turn-up-new-fish-off-Alaska/articleshow/53194005.cms>



## News on Wetland Restoration

Andhra Pradesh government urged to protect wetlands. Several retired officials, representatives of Paryavarana Parirakshana Sangham and Human Rights Forum and other organisations asked the government to protect the wetlands of Sompeta while asking the government to desist from establishing multiple industries in the same location. The sangham organised a meeting to offer tributes to the three persons who were killed in police firing while opposing the construction of thermal power project in the 'Beela' area on July 14, 2011. Former IAS officer E.A.S. Sarma, HRF general secretary V.S. Krishna, PPS president Y. Krishnamurthy and others vowed not to allow destruction of wetlands in the name of development. They asked the government to create jobs with the establishment of eco-friendly industries in the backward region.

The announcement in the State budget stated that the Noyyal and Vaigai will be desilted which has brought cheer to environmental activists and industries at Coimbatore. According to Vanitha Mohan, Managing Trustee of Siruthuli, it is a much-awaited and a welcome move. At least the spade work should start for it immediately. The Government should take up a survey of the river at the earliest and all the stakeholders should be involved in the project. President of the Federation of Tamil Nadu Agriculturalist Associations, C. Nallasami, said be it the Vaigai or the Noyyal, desilting alone will not help. Industries that are banned in the developed countries are welcomed into the State. Further, with increase in population in urban areas, letting out of sewage into the water bodies has also gone up.

Mangrove forests are important and crucial for the coastal areas. Mangroves play a vital role in stabilising these areas. No engineering and technological solutions can be sought for stabilising this imbalance. The International Day for the Conservation of Mangrove Ecosystem was observed in Puducherry. UNESCO had declared July 26 to be observed as 'The International Day for the Conservation of Mangrove Ecosystem' towards protecting fast depleting mangrove forests. Mangrove reforestation has been enthusiastically taken up by a rural-based Aalamaram, a non-governmental organisation. The volunteers from the surrounding villages of Thyagavalli, Nochikadu, Naduthittu, Thiruchopuram, Poondiyankuppam, Rajapettai and Sothikuppam extended their co-operation in planting the seedlings, carefully nursing them and vigilantly preserving them.

Students and other people of the village take turns in groups and get into the marshy lands to plant and nurse the plants in the night hours. Their efforts since 2009 have bore fruit. Nearly 5,000 mangrove saplings were planted along the bank of Uppanar River. The industrial area of Cuddalore, SIPCOT, is located on the bank and wishing that the mangroves would purify the water and the air polluted by these industries, volunteers eagerly planted saplings of mangrove and avicennia along the river bank.



Villagers along with members of Alamaram NGO observed the International Day for the Conservation of Mangrove Ecosystem

Source: The Hindu Dt.: July 27, 2016

Motivated by the interest of the villagers, the office bearers of the Aalamaram NGO have planned to expand this project to the other nearby coastal villages too. The saplings grew almost to the heights of 5ft. More than one lakh saplings that were planted on a stretch of 15 km, and other instruments like small boats etc., used in the planting and maintaining of the mangroves, whose worth estimated more than Rs 10 crore, were pathetically destroyed during the floods. Due to non-stop rain for more than 60 days, the plants were totally immersed in fresh water for more two months. Due to the decrease in the salinity of the base water, the plants started decaying. Even the plants which were 3 feet high were immersed in water for more than 60 days



and the entire mangroves along the coast were totally ruined. Arjunan Elayaraja, Secretary, Aalamaram NGO said that the damage was estimated to reach Rs. 10 crore. They have sought support from the government to support their efforts in plant the mangroves.

**Source:**

- <http://www.thehindu.com/todays-paper/tp-national/tp-andhrapradesh/govt-urged-to-protect-wetlands/article8851822.ece>
- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/efforts-to-desilt-noyyal-vaigai-rivers-hailed/article8884081.ece>
- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/villagers-ngo-take-up-mangrove-reforestation-along-coastal-areas/article8904383.ece>

## **Brief News on Conservation of Endangered Marine Flora and Fauna**

Thoothukudi district Collector M. Ravikumar said that the fishermen should be aware of conserving endangered marine flora and fauna and improving fishery resources. They should also be aware of the importance of fighting global warming. He launched a project on ‘Management and rehabilitation of coastal habitats and biodiversity for climate change adaptation and sustainable livelihood in Gulf of Mannar,’ organised by the Department of Environment at a cost of Rs. 24.74 crore. The Collector appealed to the people to grow trees, which could reduce pollution by absorbing carbon dioxide and producing oxygen. During the last one year, 3.40 lakh saplings raised from 18 nurseries here were planted along roads and other locations in Thoothukudi district. The saplings were planted by workers under Mahatma Gandhi National Rural Employment Guarantee Scheme.

Chief General Manager, National Bank for Agriculture and Rural Development (NABARD), S. Nagoor Ali Jinnah stated that this project would give a solid foundation for fishermen. He added Coral reef, which proved to be a haven for spawning fishes, would be rehabilitated under this project and coral reef should not be disturbed. Referring to a study, he

said about 10 per cent of corals had suffered bleaching and seawater temperature rose to 10 per cent from three per cent. Coral and seagrass rehabilitation would enhance live coral cover and seagrass beds, provide a habitat for fishes and other diverse species and improve adaptation measure to climate change impacts. Earlier, Additional Director, Department of Environment, M. Jayanthi, who welcomed the gathering, said this was the first project in Coastal Area Management under National Adaptation Fund for Climate Change.



Collector M. Ravikumar addressing a workshop in Thoothukudi

Source: The Hindu Dt.: July 26, 2016

**Source:**

- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/conserved-endangered-marine-flora-and-fauna/article8900019.ece>

## Brief News on Turtle

Turtle village to become biodiversity heritage site. The coastal village of Velas, 230 km from Mumbai in the Ratnagiri district of Maharashtra may soon become a biodiversity heritage site.



The Velas beach accounts for 40% of the total Olive Ridley nesting that occurs on the 720 km-long coastline of the state. Villagers once harvested, ate and sold turtle eggs without guilt. Their nests were also vulnerable to jackals, dogs and ghost crabs. Today, the village is an example of the "Conservation for livelihood" model.

In 2002, Bhau Katdare, founder of Sahyadri Nisarga Mitra (SNM), a Chiplun-based NGO working towards wildlife conservation, initiated nest protection efforts by enlightening locals about the need for conservation; and offering egg harvesters a higher amount of money for saving a nest than they would earn by selling the eggs. The village played host to its first turtle festival in 2006. While six households offered homestays in the maiden year, the number has reached 31 this year. Tourists are offered dormitory-style accommodation and delicious meals prepared in Konkani style, served on banana leaves. Those locals who can't provide homestays help in cooking and serving meals, thus earning a share of the ecotourism re-venue.

Volunteers patrol the beach throughout the nights during the nesting season, looking for egg-laying females coming to the shore. Upadhye, who is spearheading the conservation efforts in the village explained that they collect the eggs lest a jackal vandalize the nest, and relocate them in a pit of the same depth and size in the hatchery. Since the tourism generated by these turtles has given the village economy a boost, the Velas Gram Panchayat has become fiercely protective of the endangered Olive Ridelys. In 2012-13 it passed resolutions prohibiting water and sand sports on the beach to facilitate undisturbed nesting and hatching of turtles. It has also resolved that the beach will not be lit up at night, as artificial light is known to disorient turtles. Sea turtles ingest synthetic debris mistaking it for food, which eventually chokes them to death. To combat this hazard, the Panchayat has prohibited the use and sale of thermocol plates and cups from this year. Despite these efforts, the number of hatchlings has come down from 2700 in 2002 to 450 this year. Upadhye hopes that this decline will start reversing in the next two years.

While the village has been successful in protecting turtles on the ground, much needs to be done to safeguard the turtle in the sea. Barges loaded from nearby bauxite-mining sites sail close to the shore during high tide, disturbing nesting females swimming to the shore. Now with Maharashtra State Biodiversity Board (MSBB) planning to give the beach a biodiversity heritage

site status, locals hope that they will be better equipped to save the creature they revere as an incarnation of Lord Vishnu.



Female Olive Ridley Turtle laying eggs on the Velas beach

Source: The Times of India Dt.: July 10, 2016

**Source:**

- <http://timesofindia.indiatimes.com/home/environment/flora-fauna/Turtle-village-to-become-biodiversity-heritage-site/articleshow/53144306.cms>

## Report on Wetland Events

Students studying 4<sup>th</sup> and 5<sup>th</sup> standard in PSG Public School donated Rs. 3,193 which they managed to save in their piggy banks – for the conservation of Singanallur Lake. They gave this contribution to an NGO that is working towards the upkeep of the lake. Students said that they learnt that every human needed 18 trees to supply oxygen and they had come forward to make this contribution. The 125 students and their teachers also planted 150 palm tree seedlings on the lakh bund. Director (Community Education) at Animal Rescuers Vinny R. Peter said that they were in the process of planting 1,000 palm tree seedlings on the lake's bund to strengthen it and



prevent soil erosion. She stated that sixteen species of birds make use of palm trees around this lake. More trees will attract more birds. Head (Biodiversity Department), Institute of Forest Genetics and Tree Breeding, C. Kunhikannan and chief executive officer of Park Institutions Anusha Ravi handed over the seedlings to the students and also spoke on the importance of planting and nurturing trees.

**Source:**

- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/students-contribute-to-lake-conservation/article8833059.ece>

## **News on Wetland Pollution**

Plastic debris is a threat to marine life along Goa's coast. A study by National Institute of Oceanography (NIO) revealed that the marine organisms along Goa's shoreline are facing a threat from the huge plastic debris that gets washed ashore during the monsoon season. A research paper recently published by a team of Goa-based NIO scientists and researchers says that "plastic coupled with accidental spills from vessels during their transport through shipping routes, is posing a bigger challenge to coastal environment". The NIO has come to this conclusion after studying six beaches in the state. The paper 'Characteristics, seasonal distribution and surface degradation features of microplastic pellets (MPPs) along the Goa Coast' states that the onshore plastic, plastic debris moved in during the monsoon season and ocean-based sources, may lead to major threat to marine organisms. The research also speaks about the threat through MPPs usually spilled over from ships that pass through Goa's coast.

The research revealed that the microplastic pellets are ubiquitous contaminants, recognised as a serious threat to the coastal, estuarine and marine environment. The scientists have studied the distribution, abundance, weathering and chemical characteristics of MPPs on the beaches of Goa, and its transport to the coast during the southwest monsoon. The team, which made several visits to the state's beaches armed with research tools, collected MPPs from six famous tropical beaches along the Goa coast during the northeast in January 2015 and



southwest in June 2015 monsoon seasons. The beaches of Keri, Vagator and Calangute in North Goa and Colva, Mobor and Galgibag in South Goa were studied.

Drinking water helps to maintain the balance of body fluids. An adequate supply of safe drinking water is one of the major prerequisites for a healthy life, but waterborne disease is still a major cause of death in many parts of the world. In Coimbatore district, the residents of Raj Nagar, Muthusamy Colony, Thillai Nagar and neighbouring areas in Selvapuram have been getting coloured, odour-filled water for potable water that is been supplied by the Coimbatore Corporation. The water is dark, carries a foul smell and is unfit for consumption, rues M. Jana, a resident of Raj Nagar. Coimbatore Corporation supplies Siruvani water from the main line.

C.H. Girija, a resident of the area reported that the residents boil the water before drinking or using it for cooking but very little changes – the odour continues and the colour continues to remain black. The residents complained to the Coimbatore Corporation but have not got relief. Before 15 days, a few workers from the civic body went to the area to identify the source of contamination and plug leak, if any. They closed a few valves and attempted to mend things but things got only worse as on the next day, the water quality was worse, the residents said. With the Corporation supplying water only once in eight days and they being forced to store for long, the residents want the civic body to repair the pipeline and stop contamination. Water supply engineers at the Corporation stated that they were yet to receive a complaint from the residents and unaware of the contamination.



Residents with contaminated water

Source: The Hindu Dt.: July 26, 2016

According to a new study, India is home to the world's largest number of stunted children due to a lack of toilets, dirty water and poor hygiene. A WaterAid report stated that despite high economic growth in recent years, India has more stunted children than Nigeria, Pakistan, China and the Republic of Congo combined, with 48 million under the age of five -- about 30 percent of the global total.

Stunting is a form of malnutrition in which children are shorter than normal for their age and is largely irreversible after the age of two. If they survive, they grow up physically and intellectually weaker than their better-fed peers. WaterAid reported that a lack of toilets and clean water are causing high levels of stunting in India. That is because high rates of open defecation lead to contamination that can spread disease and infection. Data collated by WaterAid showed that 140,000 children die every year from diarrhoea in India, while 76 million do not have access to safe water and 774 million live without adequate sanitation.

Megan Wilson-Jones, WaterAid health and hygiene analyst reported that India has the highest number of people in the world who practice open defecation, which spreads deadly



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diseases and makes children more susceptible to diarrhoea and other infections. According to UNICEF, open defecation has long been a major health and sanitation problem in India, where almost 594 million people defecate in the open. Prime Minister Narendra Modi has stressed the need to clean up India since storming to power in 2014 and has repeatedly urged every household to have a toilet within four years to end the spread of disease. Nigeria ranked second with 10.3 million stunted children while Pakistan stood third in WaterAid's study with 9.9 million.

On 26<sup>th</sup> July 2016 morning, a Swiss Government team was in Valankulam tank to study possibilities of funding a project to clean it. In the evening, a lorry load of debris was dumped there, illegally. Environment activist K. Syed said that he saw a lorry load of debris being dumped from a tipper lorry into Valankulam Tank, near the TNSTC depot in Sungam. It was atrocious that somebody could dump debris so openly in the day when efforts were on to conserve the water body. Earlier, the dumping took place at night. The Race Course Police rushed to the spot and inquired, the police let the lorry driver move the vehicle even as Mr. Syed said that he had raised the issue with the Coimbatore Corporation officials. He added that the lorry bearing Kerala registration had completed dumping the debris on the tank bund. Race Course Police said that they went to the spot and inquired into the matter. The debris was from the Uppilpalayam Police housing quarters, where cleaning activity was underway. The instruction to the driver was to dump the debris outside the city limits but he chose to dump it in Valankulam. It was an illegality on the part of the driver, the police said and added that they were willing to register a case if there were to be a complaint.

Highly putrefied poultry litter being used as feed in fish tanks in Andhra Pradesh is generating a toxic biocycle. The litter, when added to fish tanks, contaminates the water and increases the fluctuation of biological oxygen demand (BOD). It also accentuates the ectoparasite problem, leading to ulcers in fish. To control the parasite, fish farmers use highly toxic pesticides which penetrate into the biocycle posing a serious health hazard to the end consumer.

Andhra Pradesh ranks first in poultry egg layer rearing with 4.8 crore poultry layers and Krishna and Guntur districts alone account for 1 crore layers in the commercial sector. About



1,200 poultry farmers in the State grow birds in cages allowing their litter (excreta) to accumulate at the bottom of the farms/cages. The litter is cleaned and removed once a year. Every 1,000 birds generate nearly 1.5 tonnes of litter every year. Krishna and West Godavari districts account for 4, 96,400 tonnes of litter every year and 90 per cent of this is dumped in fish farms as feed. The rest is used as manure.

Agricultural scientist R. Suresh Kumar said that the problem has been there for the last few decades but the authorities concerned have been soft-peddalling the issue. Not that the poultry farmers or fish-rearers are unaware of the serious harm involved, but both have found easy solutions - the former's concern is to dispose it the easy way and the latter sees it as a low-cost way of increasing the phytoplankton in their tanks. Poultry litter, when accumulated for a long period, releases polluted gases with bad odour causing pollution in air and ground water besides turning the place a breeding ground for housefly maggots which survive on litter and release greenhouse gases (GHG) such as ammonia, methane, carbon dioxide, nitrous oxide and hydrogen sulphide in the environment. He added that most of these pesticides are based on the organic phosphorous group and synthetic pyrethroids, which cause neuro-toxic effect on fish consumers and also these pesticides are carcinogenic.

A fresh challenge is that the fish ectoparasites have developed resistance to the existing pesticides and farmers are going for new toxic chemicals. To control housefly maggots, farmers use highly toxic pesticides which contaminate poultry litter used as fish feed. Suggesting methods to utilise the manure, Mr. Suresh Kumar says biomethanation, incineration and composting could help overcome the problem in addition to generating power.

The National Green Tribunal (NGT) has asked the West Bengal Government to furnish details on the amount of waste water and sewage released into the East Kolkata Wetlands (EKW) on the eastern fringes of the city. The order was issued after several city based activists filed a petition to the NGT expressing concern over the inadequate amount of wastewater and sewage released into the wetlands which will adversely affect the unique organic sewage treatment system and the livelihoods of nearly 1 lakh local fishermen of the area. The EKW, which spans over an area of about 125 sq km, comprises of salt marshes and meadows as well sewage farms and shallow ponds used to cultivate fish. It was recognised as wetlands of international



importance under the Ramsar Convention on Wetlands in August, 2002. The Ramsar Convention is an inter-government treaty to ensure conservation and wise use of wetlands. The NGT order stated that they direct the Respondent No.9, the Irrigation Department of the Government West Bengal to furnish the status report of Bantala Lock Gate (on the eastern fringes of the city) with specific reference to its height (level of sewage) as compared to the wetland.

The EKW plays a crucial role in refining the city's sewage and wastewater as the local fishermen channel them into shallow ponds where within a few days the organic compounds of wastewater are biologically degraded. The process takes place by means of sunlight and microorganisms living in the ponds. The microorganisms such as planktons also serve as food for the fishes cultivated by the locals. Kolkata generates about 750 million litres of wastewater and sewage every day. In the petition the activists pointed out that in order to ensure that adequate amount of sewage reaches the wetlands the level of sewage at the lock gate in Bantala under the Kolkata Municipal Corporation (KMC) need to be 9 feet but it has been "reduced to 8feet." The city sewage, through a network of 61 km of underground canals, accumulates at the Bantala lock gate and from there is released into the wetlands by two open canals.

The activists are also apprehensive that the prohibition on release of untreated wastewater into wetlands under the Central Wetland (Conservation and Management) Rules, 2010 will further aggravate the situation. Dhruva Das Gupta, a researcher on the EKW and one of the petitioners reported that there should be an exception for EKW in terms of releasing untreated sewage and wastewater into the wetlands. Otherwise the fragile ecosystem will sustain further damage. According to the Section 4(3) of the Central Wetland (Conservation and Management) Rules, 2010 "discharge of untreated waters and effluents from industries cities or towns and other human settlements" is prohibited.

**Source:**

- <http://timesofindia.indiatimes.com/home/environment/flora-fauna/Plastic-debris-a-threat-to-marine-life-along-Goas-coast/articleshow/53205763.cms>
- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/water-contaminated-say-residents/article8899342.ece>



- <http://timesofindia.indiatimes.com/home/environment/pollution/Dirty-water-stunts-millions-of-Indian-children-Study/articleshow/53393404.cms>
- <http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/debris-dumped-on-tank-bund/article8903735.ece>
- <http://www.thehindu.com/todays-paper/tp-national/tp-andhrapradesh/poultry-litter-generates-toxic-biocyte-in-fish-tanks/article8903541.ece>
- <http://www.thehindu.com/todays-paper/tp-national/tp-newdelhi/how-much-sewage-is-released-into-kolkata-wetlands-ngt-asks-state/article8913842.ece>

## General Wetland News

Assam continues to reel under the devastating impact of floods, the Brahmaputra river has submerged 60 per cent of the rhino habitat Pobitora Wildlife Sanctuary located in Morigaon district near Guwahati. Forest department officials reported that the floods have also damaged around 50 per cent infrastructure of the Sanctuary which is the world's densest habitat of the Great Indian one-horn rhinoceros. Several link roads connecting to Pobitora WLS were submerged and even washed away in some places. The sanctuary authorities have tightened security system to combat poaching in the sanctuary during the floods. However, due to non-availability of funds the patrolling mechanised boats as well as country boats used for protection of the wildlife could not be repaired. Due to non-availability of mechanised boats, it has become difficult for guards inside the flood ravaged areas of Pobitora WLS to perform their duties effectively.

Fund constraints for the last three months was also hindering repair works of its five anti-poaching camps - Kuchiyani, Kolabhuyan, Kukhari, Tuplung, and Nekera - that were destroyed by storm and flood causing the forest guards to face serious problems in anti-poaching operations. Meanwhile, according to the Assam state disaster management authority the flood situation in the state continues to remain grim with over 1.35 lakh people affected in Lakhimpur, Golaghat, Morigaon, Barpeta and Jorhat districts.



### Pobitora Wildlife Sanctuary

Source: The Times of India Dt.: July 10, 2016

Wular Lake Ramsar Site set as an eco-tourism destination to attract the tourists to the Asia's largest fresh water body. Jammu and Kashmir government is considering establishing 34.58 kilometres boulevard coming up along the periphery of Wular Lake to revamp the picturesque Ramsar Site. Official figures reveal that total perimeter of Wular boundary is 83.6km and the proposed boulevard project will begin from Garoora to Sopore, covering around 34.58km of its periphery. The project will be completely eco-friendly and only battery driven cars would be allowed to ply on the road. Under Eco-Tourism plan, various look-out points, wooden ghats, tourist information centres, parking areas, besides many other initiatives would be undertaken and developed around the lake. Massive slitting, rampant plantation, unabated encroachment, untreated sewerage and solid waste dumping have adversely affected the eco system of the lake; it is dying a silent death.

Official figures reveal that the area of the Wular Lake was 217.58 sqkm, including 58.37sqkm of associated marshes in 1911. As per the new revenue records of Jammu and Kashmir, the actual lake area excluding the associated marshes has now shrunk to 130 sqkm. Given the huge biodiversity values, the lake was declared Ramsar Site in 1990. But the conservation process started only in 2011 when the centre agreed to pay Rs 120 crore in four



installments for preserving the lake from becoming extinct. Chaudhary Lal Singh, Jammu and Kashmir minister for forests, environment and ecology said that conservation of Wular and other lakes in the state is the top priority of the Government and all necessary measures will be taken in this regard.

**Source:**

- <http://timesofindia.indiatimes.com/home/environment/flora-fauna/Assam-floods-Pobitora-sanctuary-habitat-of-one-horn-rhinoceros-under-water/articleshow/53141729.cms>
- <http://www.ramsar.org/news/wular-lake-ramsar-site-set-as-an-eco-tourism-destination>