

## Colours of Holi along the Tamirabarani

Editorial

The strategy in most of the past issues of Agasthya has been to provide a mix of articles from the forest of KMTR and on wildlife from the nearby human dominated landscape. In this issue, however, most of the articles are on experiences from the recently concluded wetland bird's survey. The collection of articles aims to bring out a glimpse of the colourful bird life along Tamirabarani to the reader.

Although, the numbers from the survey are encouraging, issues still persist. This landscape offers opportunities to try new conservation strategies to efficiently manage wetlands which directly and indirectly contribute to human well being. Lastly, the rediscovery of an amphibian after 136 years was too exciting to be kept out of this issue.



A glimpse of the wetland birds found along Tamirabarani. Pic: Kulashekara C S



Dr. Margaret Lowman with the first issue of Agasthya  
Pic: T Ganesh

As you would have realised Agasthya has changed hands, there is a new & young editorial team and of course a new look. When some of us first thought of kick-starting Agasthya way back in 2007 the idea was to write from field notes and even from memory and my editorial read 'Lets write and share'. The idea still remains the same and people should put pen to paper or key in their observations in a delectable style that encourages one to read. It's hard to say how far Agasthya has come but as Vivek said, it is the most read newsletter in ATREE! And that does send a good feel!

We have often received comments that 250-300 words does not convey much but we have had over 150 articles in the last 4 years all short and sweet which are read by many. People have read each Agasthya from start to end and said that they could do so because it's short and simple. It's not the number of words that matter. Rather it is what and

## Lets continue to write & share

By T Ganesh

how you want to convey a message. My suggestion for writing 250-300 words article is to write a larger article and cull the bits of exciting info for Agasthya and keep the rest for your blogs!

In terms of future, this newsletter or an 'avatar' of it should become a vehicle for people of the landscape to express their concern about environment. An active citizens group should be writing in it and circulated widely. At the same time there should be articles on natural history which of late is slowly declining and needs to be rekindled. We know very little about the natural world in our backyard and writing about it would be revealing to the people in the landscape who need to realise that they are fortunate to live next to a global biodiversity hot spot.

## Waterbird census 2011: genesis of citizen science in the landscape

By Patrick David

Waterfowl counts in India have generally been the domain of urban birdwatchers with little or no participation of the locals. This is in spite of the fact that the stewardship and knowledge that rise from the system often has generated greater conservation action and success.

Aiming to build awareness about the water-bird diversity in their back yard, and to create local stewardship and build capacities to regularly monitoring these wetlands, a water bird census was initiated on 22-23rd of January 2011 in Tirunelveli and Thoothukudi districts by Agasthyamalai Community based Conservation Centre (ACCC), ATREE. This was supported by IUCN-EGP project and further to our surprise in kind support in form transportation etc came from the citizens. A group of 13 people from 4 districts of Tamil Nadu (Madurai, Virudhunagar, Thoothukudi and Tirunelveli) interacted with 14 bird experts from



Enthusiastic volunteers participation in the wet land bird census. Pic: R Ganesan

Karnataka, Kerala and Tamil Nadu to learn about skills to identify birds and scientifically observing their behaviour and habitat.

About 32 tanks in Tirunelveli and 10 in Thoothukudi

districts were monitored during the census and we recorded a total of 32,561 birds belonging to 68 species. A whopping number of 11,051 birds were recorded in Kadambakulam of Thoothukudi and 6,227 were recorded in Vijayanarayanam in Tirunelveli. Cotton pygmy goose, a local migrant was the most abundant species and little cormorant the most widely distributed one.

Probably, this was the first large scale water bird census in this region. There was good media splash and press was closely following it. Apart from the participating citizens, it enthused the local people who watched the whole event curiously. It also amply highlighted the significance of Tamiraparani watershed as an important habitat for water birds. Demands from local folks for the declaration of Kadamba kulam as a bird conservation area is seen as a huge positive emerging from the exercise.



The hundreds of bee eaters dotting the sky was quite a sight. Pic: Dr. K Muthunayanan

Kaduvetti in Tirunelveli district was the last tank on our list during the water bird census this year and as it turned out, it proved quite difficult to locate.

## Stunned into silence

By Allwin Jesudasan

After sampling the last lake for the bird census in Tirunelveli and Thoothukudi districts, we decided to explore lakes that were not in our team's list. Some openbill storks gliding in the sky hinted that a waterbody was not too far. So when Mr. Mathibalan, a local bird enthusiast, told us about sighting hundreds of birds roosting in a lake in Thirupani Chettikulam a month back, it got us all got excited.

It had already been an exciting day, seeing ducks in

Wetland surveys rarely fail to excite any bird watcher, especially when done in a 'biodiversity hotspot'. With its high bird diversity it constantly tests one's identification skills and in the process sharpens it too! Being assigned the tanks of Koonthakulam, Vijayanarayana, Nanguneri, it was not a surprise that our team (comprising me, Mr. and Mrs. Rajan, and Mr. and Mrs. Vijayavel) accumulated a long list of birds including flamingos, avocets and a lot of ducks. But something special awaited us in Nanguneri, the last tank that we surveyed. While we were watching bar-headed geese, suddenly something made me turn back. As a flock of glossy ibis took off and

## Wetlands along the Tamirabarani

By Abhisheka Krishnagopal

The district of Tirunelveli is one of the greenest places I have seen in Tamil Nadu thanks to the numerous irrigation tanks and dams. I have heard that these tanks and dams capture the water efficiently so much so that the river almost dries out as it reaches its mouth in the Bay of Bengal, a fact which I noticed while carrying out a survey project of tanks all along the river Tamirabarani. Although it saddened me, I tried to find consolation in the fact that if not for these tanks, the area would lose its greenness and thousands of people their livelihood.

But today, apart from the river, the tanks too are under grave threat. As I carried my survey, I noticed

After endless enquiries and confusion, we somehow reached the far end of the tank and started scanning the birds wading through waist high grass. Soon we were greeted by dozens of wood sandpipers, a pin-tailed snipe (a lifer for me), spotbilled ducks, cormorants and coots among the invasive weed, Ipomea (I had learnt about it that morning!) and we got busy counting them. Suddenly Prasanth, pointing skywards exclaimed: "watch the show!"

And what a show it was! The light was fading fast and the sky was in its glorious best, showing off its most beautiful hues of pinks, purples and yellows. And as if the light show was not enough, 'Mother Nature' started her symphony with the blue tailed bee-eater orchestra! The sky was suddenly awash with thousands of blue tailed bee - eaters and oh

their hundreds in the lakes that we had already sampled. But none of the lakes we sampled had any roosts in them. So the thought of watching some birds returning to the roosts was very enticing. But nothing prepared us for the sight that awaited us.

We were speechless! What we saw were not roosts in their hundreds, but the only signs of what once stood - stumps of trees. It took us a while to realize that most trees had been cut. The soaring birds were probably the ones who didn't know where to roost. Far away in the lake some trees were still standing being good hosts to some birds. We were



The booted killer with its catch. Pic: Seshadri K S

settled, a big raptor sitting on a kill came in my view. Peering through my binoculars I realized that it had



Lakes covered with invasive weeds is a common site in Tirunelveli. Pic: Abhisheka Krishnagopal

tanks covered with the weed *Ipomea carnea* and some of them choked with *Eichornia crassipes*

## Bee - eater blitz

By Dr. K Muthunayanan

A volunteer from Thoothukudi

my! They were coming in waves and waves and were suddenly diving into the Ipomea and then rising up en masse with tremendous noise – displaying a perfect high speed formation flying! Totally awestruck by the display I walked back to the car with a wide grin in my face and happiness in my heart wiping away all the fatigue of my body, mind and soul. It will be one of the most cherished memories of my life.

happy that in this madness to exploit every bit of this Earth, some trees were still left standing. No sooner did the sense of relief settle down, did we see three youth under the trees moving about suspiciously with a jute sack. Through our binoculars, we saw them coming to the water side and washing something when one of them noticed us and alerted the other two. Two of them went back into the trees beyond our vision and when third put something in the sack we saw what he was washing – a large white bird.

## The booted killer

By Seshadri K S

swooped on a black winged stilt, which was dead in an instant. As I slowly and noiselessly crept up to the bird, I realized that it was a booted eagle. After a few pictures the majestic bird took off to air with the stilt dangling in its legs. We saw it settle at some distance among the prosopis weeds to relish its prey quietly, away from our intruding gaze and attention. We too headed right back to the car realizing that if not the birds, a well deserved meal at Koonthakulam certainly awaited our attention.

and *Pistia*. In earlier times the village assigned duties of tank maintenance to a village person called 'Neerkattis' who would regularly check and maintain the tanks. This has vanished after PWD took on the tank maintenance. In most tanks both silt accumulation as well as garbage dumping is rampant. Only those tanks which are leased out for fishing are maintained well by the contractors. Though the locals complained about the bad status of these tanks and blamed the government for it, no one wanted to take up the responsibility of maintaining it. Can tanks rejuvenate, if community based institutions were vested with governance? Decentralised governance of natural resources had mixed response, but might be worthy to experiment at a pilot scale.

The onset of winter in India not only brings with it chilling winds but also waves of hundreds and thousands of migratory birds from the northern latitudes beyond the Indian subcontinent. Varying in sizes between a thumb-sized bird to that of crane, their “arrive and return” falls during the Sept-Apr period. Thus the recent mid-winter water-bird survey in the wetlands of Tirunelveli and Thoothukudi districts of Tamil Nadu as expected, lead the observers into spellbound sightings of species that not only move over large distances, but also travel in “unison” in large and sometimes mixed flocks numbering over thousands.

Two such species of migrants, the gull-billed terns and blue-tailed bee-eaters which were seen by many participants in small flocks numbering 10s and 20s over the 42 tanks surveyed, were spotted in hundreds, as a couple of us chanced upon their roosts on a late evening. Apart from the 600+ bee-eaters balling up in the sky, hordes of terns in batches of 80 to 100 were seen dotting the evening sky, probably flying into a roost, leaving us observers awestruck with their excellent sense of orientation and direction. So much so, it felt as if they were mocking at us, who spent hours referring to toposheets, satellite images, route maps etc. to locate these tanks!

## Mocking migrants

By Prashanth M B



A small flock of gull-billed terns.  
Pic: Seshadri K S

## Conservation of water birds with local communities

By Vidyadhar Atkore



Apart from being the habitat for birds, tanks are also a source of livelihood for villagers such as the one above who is collecting water lilies.  
Pic: R Ganesan

water-bird census organized by ACCC not only gave me that opportunity but also helped me to hone my birding skills.

While I knew the existence of many man-made water tanks in the relatively drier parts of Tamil Nadu, the census allowed me to actually visit some of them. What came as a surprise was to see how well these tanks were inter-connected through a network of channels to ensure constant water supply to the villages most part the year without any major conflicts!

There were many threatened birds we saw notable among which were: spot billed pelican (*Pelecanus philippensis*), painted stork (*Mycteria leucocephala*), lesser adjutant (*Leptoptilos*

*javanicus*), and black-headed Ibis (*Threskiornis melanocephalus*). Some of the common birds seen were cattle egret (*Bubulcus ibis*) seen in thousand numbers in just two hours time at one of the tanks, pheasant tailed jacana (*Hydrophasianus chirurgus*) and spot-billed duck (*Anas poecilorhynchus*). But sighting yellow bittern (*Ixobrychus sinensis*) was my most exciting & special birding moment!!

Since these tanks are amidst human dominated landscape, their conservation for future becomes important. Declaring few of these tanks as Community Reserves, a category introduced under the 2002 amendment of the Wildlife Protection Act of 1972 might potentially hold the key to conserve them with active local communities' participation.

Since I joined ATREE in 2009, I wanted to visit our field station in KMTR. As a volunteer, the three day

## Changing landscapes and future of water sources

By R Ganesan

Only by removing the filter of administrative boundary between Tirunelveli and Thoothukudi districts can one visualize the seamless linkages between diverse & varied natural elements viz. forest clad mountains, toddy palm dotted arid lands, riparian habitats, ponds and lakes of different sizes embedded within the sprawling agricultural fields, and swamps among the red sand dunes. Perhaps for a better biodiversity conservation planning and execution, this varied human-nature interface along with the natural forests of the Western Ghats should be considered as a single conservation complex.

Here the Tamirabarani forms the lifeline, providing silt rich water for irrigation and potable water for quenching the thirst of millions of parched throats. Its tributaries originating from different parts of the Agasthyamalai mountain ranges ensures a seasonally staggered drainage owing mainly to staggered monsoons in different regions of the mountain slopes. This renders the rivers and its associated biodiversity and agriculture a distinct perennial characteristic in the otherwise seasonal drainage pattern of the dry landscape.

The past administrators, with good foresight, constructed many ponds interconnected through a network of canals to the Tamirabarani and its tributaries. Recent infrastructure growth and



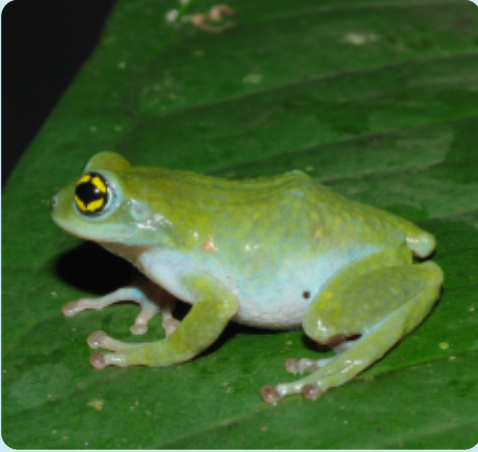
Temple between telephone towers in the backdrop of a changing wetland at Srivaikundam.  
Pic: R Ganesan

development however have grossly violated this ancient wisdom, destroying many of these vital canals and ponds to accommodate human habitations, rendering the fertile land uncultivable. The majestic temple towers, steeples of churches and domes of mosques that reflected the rich heritage of the past are now obscured by the towering apartments, windmills and telephone towers. The irrigation canals criss-crossing the Tirunelveli city that were lined with bathing ghats from the past have now become dump yards of waste being lined with stones or covered with slabs- the signature of development and in the process severely depleting its plant and bird abundance and diversity.

Understanding that the network of Tamiraparani and its tributaries, canals and ponds are the umbilical cords of millions of humans and diverse life forms, and its intimate association with Agasthyamalai, the mother of both Tirunelveli and Thoothukudi districts, is the key to conserve the life forms in this landscape.

## Bringing back from oblivion

By Seshadri K S and R Ganesan



This *Chalazodes bubble nest frog* was rediscovered in KMTR after a gap of 136 years.  
Pic: R Ganesan

KMTR has had its share of rediscoveries in the past. *Nanobatrachus indicus*, Black narrow mouthed frog was rediscovered in 2000 by a team of researchers headed by Vasudevan.K of WII. It has not however been reported after that. *Duttaphrynus beddomeii*, Beddome's toad was last seen in the same year by them. We happened to chance upon it after a decade from around the same area where it was reported. The more recent and probably the most flamboyant rediscovery which grabbed the world's attention was that of *Chalazodes bubble nest frog* (*Raorchestes chalazodes*). This frog was last seen 136 years ago and was described with only one specimen deposited at British Museum and had evaded the researchers ever since. But the frog reappeared live to the scientific world in 2009 from Upper Kodayar during an amphibian survey in KMTR. We

were proud to be in the team which re-discovered it almost after 136 years. It was one of the many intensive surveys that we and Dr. Biju from the University of Delhi carried out as part of Lost Amphibians of India Network. But even we didn't expect such overwhelming results. Before our report, the frog was thought to have gone extinct. While such rediscoveries stress the importance of frequent field surveys and expertise in taxonomy, conservation and ecology, this particular case highlights the mysteries and knowledge that KMTR still holds for those who are willing and dedicated to unravel them.

## Snippets & Sightings



Participants of the bird census in Tirunelveli and Thoothukudi districts.  
Pic: Seshadri K S

★A leopard was sighted by Seshadri, Chian, Johnson and Murthy along a stream inside Kodayar forest on 4th march 2011. On 7th March 2011, the team saw another leopard at 0830 hrs in Nalmukku tea estate.

★A communal roost of needle tailed swiftlets was located at a hill in the Kodayar valley. A flock of about 500 individuals were seen emerging from the rock-face at 6 in the morning by Seshadri on 4th march 2011.

★A solitary pied avocet was spotted in the drying up Maanur tank during the waterfowl survey.

★A black eagle in the plains opposite to the ACCC was sighted. The bird was found attacking weaver bird nests on a palmyra tree and managed to capture a weaver bird in flight and flew back to the hills.

★A pair of red-necked falcon was spotted nesting on a palmyra tree at Songaganavilai.

## Announcements

A mid-term assessment workshop of Critical Ecosystem Partnership Fund (CEPF) investment program in the Western Ghats is scheduled on 15 & 16th April at Tirunelveli.

## Publications

©M Mathivanan & T Ganesh (2010) Rodents in paddy fields: pros and cons of some indigenous ways to control them. Small Mammal Mail 2:2, pp 11-12

©C B Purushotham, K Dharmadhikari & R Vivek (2011) A comparison of hill stream anuran diversity across two habitats in Kalakad-Mundanthurai Tiger Reserve: a pilot study. Frogleg 15 Pp. 2-9

©R Vivek and T Ganesh (2011) "Birding high": Ornithological studies in the canopy. What's up? 17:2 Pp. 2-3

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